Investigation of the Relationship Between Malpractice Fear and Job Satisfaction Among Emergency Physicians

Acil Servis Hekimlerinin Malpraktis Korkusu ile İş Tatmini Arasındaki İlişkinin İncelenmesi

Derya CAN¹, Nukhet BAYER²

¹Emergency Medicine Specialist, Dr. Derya Can Clinic, Ankara, TÜRKİYE
²Lokman Hekim University, Faculty of Health Sciences, Nursing Department, Ankara, TÜRKİYE

Abstract

Background: The number of physicians sued for malpractice is increasing, and this situation causes a fear of malpractice in physicians. The aim of this study is to determine the malpractice fear and the level of job satisfaction among emergency physicians and to examine the relationship between these factors.

Materials and Methods: This cross-sectional study has been conducted with emergency physicians at four different training and research hospitals in Ankara, Türkiye. Malpractice fear and job satisfaction have been evaluated with Malpractice Fear Scale (MFS) and Job Satisfaction Scale (JSS). Questionnaire method was used in the study.

Results: The research has been completed with 143 physicians [mean age: 33.10±7.0 years, age range: 24-51 years, male: 107 (74.8%)]. It was found that 19.5% of the participants were reported for malpractice, 11.8% were sued, and no one was penalized. It has been determined that the participants scored 3.6±0.9 points on the MFS and 2.4±0.7 points on the JSS in 1-5 point range. A negative, moderate, and statistically significant correlation has been found between the MFS and the JSS (r= -0.551; p<0.01).

Conclusions: In our study, it has been found that emergency physicians have a high level of malpractice fear and a low level of job satisfaction. There is no statistically significant difference in the level of malpractice fear and job satisfaction according to the sociodemographic characteristics of the participants. Increased fear of malpractice decreases the job satisfaction.

Key Words: Emergency department, Physician, Malpractice fear, Job satisfaction

Öz

Amaç: Malpraktis nedeniyle dava edilen hekim sayısı artmakta ve bu durum hekimlerde malpraktis korkusuna neden olmaktadır. Bu çalışmada acil servis hekimlerinin malpraktis korkusu ve iş tatmin düzeylerinin belirlenmesi ve aralarındaki ilişkinin incelenmesi amaçlanmıştır.


Bulgular: Araştırma 143 hekim ile tamamlanmıştır [ortalama yaş: 33,10±7,0 yıl, yaş aralığı: 24-51 yıl, erkek: 107 (%74,8)]. Katılımcıların %19,5’inin malpraktis nedeniyle şikayet edildiği, %11,8’inin dava edildiği, ceza alınmadığı bulunmuştur. Katılımcıların 1-5 puan aralığında MKÖ'nün 3,6±0,9, ITO’nun 2,4±0,7 puan aldığı tespit edilmiştir. MKÖ ve ITO arasında negatif yönde, orta düzeyde ve istatistiksel olarak anlamli korelasyon bulunmuştur (r= -0,551; p<0,01).


Anahtar Kelimeler: Acil servis, Hekim, Malpraktis korkusu, İş tatmini
Introduction

While malpractice is defined as carelessness and negligence, medical malpractice specifically refers to acts or omissions that cause harm to the patient by deviating from the accepted standards of the medical profession during diagnosis and treatment (1). Malpractice represents a significant challenge to patient safety and requires attention and resolution in both developed and developing countries (2). Personal factors encompass fatigue, inadequate training, carelessness, inattention, and communication gaps. Institutional factors involve workplace structure, workload, patient burden, working hours, and staffing shortages. Technical factors include such as erroneous laboratory results and incomplete equipment; and all of those factors can also contribute to medical errors (3). Studies have shown that malpractice is a major concern for physicians in their professional practice (4). Fear of malpractice refers to the anxiety arising from the possibility of being sued or reported for malpractice while performing their medical duties (5). Malpractice lawsuits cause defensive medicine, loss of morale and motivation, depression, anger, and job dissatisfaction among physicians (6,7). Job dissatisfaction, on the other hand, leads to institutional and individual problems such as decreased productivity and performance of physicians, job changes and quitting, unhappiness, restlessness, dissatisfaction, as well as mental and physical problems. Consequently, it negatively affects health service delivery (5,8). When malpractice lawsuits are examined, it is observed that emergency physicians are one of the first three branches (the others are gynecology and general surgery) against which malpractice lawsuits are filed (9). Therefore, the fear of malpractice and the level of job satisfaction among physicians are important issues that need to be emphasized. However, no research has been found in the literature examining this relationship.

This study aimed to determine the malpractice fear and the level of job satisfaction among emergency physicians and to examine the relationship between these factors.

Materials and Methods

Study population

This cross-sectional study was conducted between May 16-20, 2023 at four different training and research hospitals in Ankara, Türkiye. Ethics committee permission was obtained from Lokman Hekim University Scientific Research Ethics Committee (Code No: 2023068, Date: 16.05.2023, Decision No: 2023/75). The necessary permissions to use the scales were obtained via e-mail from the responsible authors who developed the scales and conducted the Turkish adaptation studies. The study was conducted in accordance with the ethical rules of publication and research.

Inclusion criteria were as follows: (1) being a physician, (2) working in the emergency department, and (3) volunteering. Exclusion criteria were as follows: (1) not volunteering to participate in the research, (2) not completing the questionnaire completely.

Physicians working in the emergency department constituted the study population. There were a total of 169 physicians, and no sampling calculation was performed as the aim was to reach the entire population. The study was conducted with 143 participants who voluntarily agreed to take part, resulting in a participation rate of 84.6%.

Data collection method

Questionnaire method was used in the study. The data were collected face-to-face or electronically via e-mail/WhatsApp (WhatsApp Inc. Menlo Park, CA) according to the availability status of the participants. The questionnaire consists of three parts. The first section included the "Sociodemographic Characteristics Form", the second section included the "Malpractice Fear Scale (MFS)", and the third section included the "Job Satisfaction Scale (JSS)".

Sociodemographic characteristics form

In this section, there are 11 questions prepared by the researchers about age, gender, marital status, status, length of service, involvement of themselves and their close relatives in malpractice lawsuits and complaints.

Malpractice Fear Scale (MFS)

The MFS was developed by Katz et al. in 2005 to measure the level of physicians’ fear of malpractice. In the original study, Cronbach’s Alpha was found to be 0.88 (5). The Turkish adaptation study was conducted by Ugrak and Isik in 2020 ($\chi^2$: 1.809; NFI: 0.981; IFI: 0.991; CFI: 0.991; RMSEA: 0.057; GFI: 0.984; SRMR: 0.030, Cronbach’s Alpha: 0.86) and the scale was found to be valid and reliable (10). Cronbach’s alpha was 0.83 in this study.

The MFS consists of 6 items. All items are on a 5-point Likert scale with a score of 1 for Strongly Disagree and 5 for Strongly Agree. All statements are coded flat. A score between 6 and 30 is obtained from the scale. A high score indicates a high fear of malpractice. The level of fear of malpractice is considered as low if it is 15 and below, moderate if it is between 15-20, and high if it is 20 and above (5). However, there are studies in the literature that evaluate the level of the fear of malpractice between 1 and 5 (11-13).

Job Satisfaction Scale (JSS)

The JSS, initially developed by Brayfield and Rothe in 1951 with 18 items and later shortened to a 5-item form by Judge et al. in 1998, is used to determine the level of job satisfaction among employees. Cronbach’s Alpha value of the scale was found to be 0.87 in Brayfield and Rothe study and 0.88 in Judge et al. study (14,15). The Turkish adaptation study of the 5-item short form was conducted by Keser and Ongen Bilir in 2019 and it was found that the scale was valid and reliable ($\chi^2$: 23.0, RMSEA: 0.05, NFI: 0.90, CFI: 0.92, GFI: 0.91, SRMR: 0.058, Cronbach’s Alpha: 0.85) (8). Cronbach’s alpha was 0.77 in this study.
All items are on a 5-point Likert scale, with a score of 1 for “Strongly Disagree” and 5 for “Strongly Agree”.

Statistical Analysis
The research data were analyzed using the SPSS 23.0 statistical program. The normality of the data was evaluated by Kolmogorov-Smirnov test. The Mann-Whitney U test was used to compare the variables that did not fit the normal distribution between the groups. For normally distributed data, Independent T test was used to compare three or more groups, and Pearson Correlation analysis was used to determine the relationships between variables. A value of p<0.05 was accepted as statistically significant.

Results
The research was completed with 143 physicians [mean age: 33.10±7.0 years, age range: 24-51 years, male: 107 (74.8%)].

Table 1. Sociodemographic characteristics of the participants

<table>
<thead>
<tr>
<th>Age (Year)</th>
<th>Mean ± SD=33.10 ± 7.0 (min-max= 24-51)</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>Female</td>
<td>36</td>
<td>25.2</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>107</td>
<td>74.8</td>
</tr>
<tr>
<td>Title</td>
<td>General practitioner/ assistant</td>
<td>87</td>
<td>60.8</td>
</tr>
<tr>
<td></td>
<td>Specialist</td>
<td>32</td>
<td>22.3</td>
</tr>
<tr>
<td></td>
<td>Faculty member</td>
<td>24</td>
<td>16.9</td>
</tr>
<tr>
<td></td>
<td>Married</td>
<td>102</td>
<td>71.4</td>
</tr>
<tr>
<td>Marital status</td>
<td>Single</td>
<td>41</td>
<td>28.6</td>
</tr>
<tr>
<td></td>
<td>Income equals expense</td>
<td>33</td>
<td>23.1</td>
</tr>
<tr>
<td></td>
<td>Income more than expenses</td>
<td>59</td>
<td>41.3</td>
</tr>
<tr>
<td>Working time in the profession</td>
<td>Median (IQR 25-75): 9.0 (5.0-12.0)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2. Malpractice experiences of physicians

<table>
<thead>
<tr>
<th>Malpractice experiences</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have you been the subject of a complaint for malpractice?</td>
<td>Yes</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>115</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>17</td>
</tr>
<tr>
<td>Have you been involved in any malpractice case?</td>
<td>No</td>
<td>126</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>53</td>
</tr>
<tr>
<td>Have there been any physicians in your environment who have been complained about malpractice?</td>
<td>No</td>
<td>90</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>53</td>
</tr>
<tr>
<td>Have you been involved in any malpractice lawsuits in your environment?</td>
<td>No</td>
<td>90</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>9</td>
</tr>
<tr>
<td>Have any physicians in your environment been penalized for malpractice?</td>
<td>No</td>
<td>134</td>
</tr>
</tbody>
</table>

Harran Üniversitesi Tip Fakültesi Dergisi (Journal of Harran University Medical Faculty) 2023;20(2):340-345.
DOI: 10.35440/hutfd.1320376
Malpractice Fear and Job Satisfaction

Table 3. The averages of the responses of physicians to the scale questions

<table>
<thead>
<tr>
<th>MFS</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I have had to make significant changes in my practice pattern because of recent legal developments concerning medical delivery.</td>
<td>3.1</td>
<td>0.9</td>
</tr>
<tr>
<td>2. I am concerned that I will be involved in a malpractice case sometime in the next 10 years.</td>
<td>3.9</td>
<td>1.1</td>
</tr>
<tr>
<td>3. I feel pressured in my day-to-day practice by the threat of malpractice litigation.</td>
<td>3.6</td>
<td>1.2</td>
</tr>
<tr>
<td>4. I order some tests or consultations simply to avoid the appearance of malpractice.</td>
<td>3.4</td>
<td>1.0</td>
</tr>
<tr>
<td>5. Sometimes I ask for consultant opinions primarily to reduce my risk of being sued.</td>
<td>4.1</td>
<td>1.1</td>
</tr>
<tr>
<td>6. Relying on clinical judgment rather than on technology to make a diagnosis is becoming riskier from a medicolegal perspective.</td>
<td>3.6</td>
<td>1.1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>JSS</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I feel fairly satisfied with my present job.</td>
<td>2.4</td>
<td>1.0</td>
</tr>
<tr>
<td>2. Most days I am enthusiastic about my work.</td>
<td>2.5</td>
<td>1.2</td>
</tr>
<tr>
<td>3. Each day at work seems like it will never end. (R)</td>
<td>3.1</td>
<td>1.1</td>
</tr>
<tr>
<td>4. I find real enjoyment in my work.</td>
<td>2.3</td>
<td>0.9</td>
</tr>
<tr>
<td>5. I consider my job to be rather unpleasant. (R)</td>
<td>2.8</td>
<td>0.7</td>
</tr>
</tbody>
</table>

MFS: Malpractice Fear Scale, JSS: Job Satisfaction Scale, SD: Standard deviation, (R): Reversed items.

Table 4. Descriptive statements for MFS and JSS

<table>
<thead>
<tr>
<th></th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>MFS</td>
<td>6</td>
<td>30</td>
<td>21.7</td>
<td>6.1</td>
</tr>
<tr>
<td>JSS</td>
<td>1</td>
<td>5</td>
<td>2.4</td>
<td>0.7</td>
</tr>
</tbody>
</table>

MFS: Malpractice Fear Scale, JSS: Job Satisfaction Scale, SD: Standard deviation, Min: Minimum, Max: Maximum.

Discussion

Alongside with the increased workload in emergency departments, there is an increase in malpractice complaints against emergency physicians. Emergency physicians are expected to diagnose and treat patients promptly and without causing harm, while also adhering to medical rules, fulfilling their medical legal responsibilities, and abiding by the law (17-19). It is thought that this situation will cause the physician who wants to provide effective and qualified health service to live with the fear of malpractice and decrease their level of job satisfaction. In this study, it was aimed to determine the fear of malpractice and the level of job satisfaction among emergency physicians and to determine the relationship between fear of malpractice and job satisfaction.

In our study, it was found that the level of malpractice fear of physicians was high. It was determined that 65.7% of the participants had a high level of fear of malpractice, 24.5% had a moderate level and 9.8% had a low level of fear of malpractice. In a study conducted by Katz et al. with emergency physicians in the United States of America (USA), it was found that 39.7% of the participants had a high level of fear of malpractice, 37.7% had a moderate level, and 33.7% had a low level of fear of malpractice (5). In studies conducted by Franks et al. and Fiscella et al. with internal medicine physicians in different branches in the USA, and by Benbassat et al. with medical students and physicians in Israel, it was found that physicians had a high level of fear of malpractice (11, 13, 20, 21). In a study conducted by Ugrak and Isik with physicians working at a training and research hospital in Turkey, it was determined that the level of fear of malpractice was high and 59.3% of the participants had a high level of fear of malpractice, 28.2% had a moderate level, and 12.5% had a low level of fear of malpractice (10). Another study involving Turkish doctors and nurses revealed that the participants experienced malpractice anxiety more than inadequate education, future anxiety and financial concerns (4). The results of our study are similar to previous studies. These results align with our study’s findings. Additionally, an examination of decisions by the Supreme Court of Appeals, the highest authority of the Turkish judicial courts, in 2021 revealed that physicians were the most sued group in 93 case files, with the majority being surgical branch physicians (56.7%), and approximately 20% of expert reports found physicians at fault due to lack of attention and care (8). It is thought that the increase in malpractice claims and lawsuits day by day causes the physicians to experience an increased fear of malpractice.

In our study, no significant difference was found between the groups in MFS scores according to the sociodemographic characteristics of the participants. The results of the study are consistent with some previous studies (5, 10, 11, 21). In the study of Carrier et al. a difference was found according to gender and tenure and it was determined that females had a lower fear of malpractice than males and those with less tenure had a lower level of fear of malpractice than those with more tenure (22). In the study by Reed et al. it was found that young physicians experienced more fear of malpractice than middle-aged and older physicians (13). It is evaluated that the results of the study vary according to the characteristics of the institution where the study was conducted and the population.

In our study, it was found that the participants had a low level of job satisfaction. There are also different studies in the literature that reveal that the level of job satisfaction of physicians is at moderate and high level (23-27). In the
study conducted on the factors affecting the level of job satisfaction of physicians; it was stated that factors such as establishing healthy communication with patients and their relatives without time pressure, maintaining healthy relationships with colleagues and other health personnel, being respected in the society, having a high level of income, appropriate working hours, having a safe and appropriate physical environment where health care is provided, having the necessary health equipment, being autonomous in clinical decision-making without bureaucratic obstacles, and being able to develop oneself and use one's skills became prominent (28,29). Therefore, it is thought that the inadequacy of some of these factors may be effective in the low level of job satisfaction among the emergency physicians participating in our study.

In our study, no statistically significant difference was found in the level of job satisfaction among the participants based on sociodemographic characteristics. These findings are consistent with some previous studies (26,30). In some studies conducted with physicians, differences were determined according to characteristics such as public-private sector, working time, branch, and income level (23-25,31).

In a study conducted by Li et al. with emergency physicians, it was found that those who lived in developed cities, had advanced age and high level of income had higher level of job satisfaction, while those who spent more time on night shifts, worked with insufficient personnel and were sued for malpractice had lower level of job satisfaction (32). It is important to note that there are conflicting results in the literature regarding the relationship between job satisfaction and various factors.

When the literature is reviewed, there are studies examining the relationship between job satisfaction of physicians and factors such as job stress, life satisfaction, organizational commitment, burnout and depression (25,33-35). This study, which examines the relationship between fear of malpractice and job satisfaction for the first time, found that job satisfaction decreased as the fear of malpractice increased. Although there has been a significant increase in the number of malpractice lawsuits in recent years, the number of lawsuits that are accepted or result in penalties is low and the majority of them result in favor of the physician. This creates fear of malpractice in physicians and affects their decision-making processes and attitudes (10). There are studies showing that fear of malpractice leads physicians to defensive medicine (36,37). Within the scope of defensive medicine, physicians avoid performing risky procedures and surgeries even when necessary, while increasing the workload by applying additional diagnostic and treatment methods that have no medical value, which leads to job dissatisfaction (7,37). Another finding that the fear of malpractice is experienced intensely by physicians and negatively affects job satisfaction while performing their profession is that they prefer branches with a low incidence of malpractice in their preferences for specialization (3,38).

The strength of the study is that it examines the relationship between fear of malpractice and job satisfaction in emergency medicine. The limitation of the study is that it was conducted only in Ankara and at tertiary education and research hospitals operating under the public sector.

In conclusion, in our study, it was found that emergency physicians had high level of fear of malpractice and low level of job satisfaction. There was no statistically significant difference in malpractice fear and job satisfaction levels according to the sociodemographic characteristics of the participants. A negative, moderate and statistically significant correlation was found between fear of malpractice and job satisfaction. It is recommended that future studies should be conducted comparatively in different cities (big-city, small-city), in public and private sector hospitals, and with different specialties.

Acknowledgements

We thank the emergency physicians who participated in the study.

Ethical Approval: Ethics committee permission was obtained from Lokman Hekim University Scientific Research Ethics Committee (Code No: 2023068, Date: 16.05.2023, Decision No: 2023/75).

Author Contributions:
Concept: D.C.
Literature Review: D.C., N.B.
Design : D.C.
Data acquisition: D.C., N.B.
Analysis and interpretation: D.C.
Writing manuscript: D.C., N.B.
Critical revision of manuscript: D.C.

Conflict of Interest: The authors have no conflicts of interest to declare.

Financial Disclosure: Authors declared no financial support.

References
7. Gocen O, Ilyaz A, Aslanhan H, Celepkolu T, Tuncay S, Dirican E. Assistant physicians knowledge and attitudes about defen-