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The effect of healthcare professionals' approaches to malpractice on organizational commitment

Sağlık profesyonellerinin malpraktis yaklaşımlarının örgütsel bağlılığa etkisi

Meltem ORENC¹ Yunus ADIGUZEL² Itir ERKAN³

¹ Memorial Hospital, Istanbul, Türkiye.

² Istanbul 29 Mayıs University, Faculty of Economics and Administrative Sciences, Istanbul, Türkiye.

³ Istanbul Yeni Yuzyil University, Faculty of Health Sciences, Istanbul, Türkiye.

ABSTRACT

Background: The purpose of this study is to determine the relationship between the attitudes of health professionals about malpractice and their organizational commitment.

Materials and Methods: This study was conducted with 169 volunteer health workers out of 226 people working in a private hospital in Türkiye (Istanbul) in 2021 with a questionnaire study. The data were analyzed in SPSS 22.0 program using ANOVA, t-test, chi-square tests, and frequency tables.

Results: The knowledge and attitudes of the participants about malpractice differ significantly according to gender ($p=0.027$) and educational status ($p=0.037$), and having children ($p=0.022$). There is also a significant relationship between the health professionals' training to prevent medical errors and their age ($p=0.001$) and education level ($p=0.021$). Accordingly, it was determined that male participants had high errates of medical error than females. The rate of encountering malpractice was higher among the elderly participants, and the awareness of the participants increased as the level of education increased.

Conclusions: It is recommended to increase the knowledge level of health workers about malpractice, to organize training on legal responsibilities, to reduce the problems that may be experienced in medical practices. In addition, it is thought that the actions to be taken by health managers to increase the organizational commitment of the employees are important both to protect patient safety and to increase the image of the institution.

Keywords: Malpractice, Organizational commitment, Healthcare professionals

ÖZET

Amaç: Bu çalışmanın amacı, sağlık profesyonellerinin malpraktis konusundaki tutumları ile örgütsel bağlılıkları arasındaki ilişkiyi belirlemektir.

Materyal ve Metot: Bu çalışma 2021 yılında Türkiye'de (İstanbul) özel bir hastanede çalışan 226 sağlık personelinin 169 gönüllü sağlık çalışanı ile anket çalışması ile yapılmıştır. Veriler SPSS 22.0 programında ANOVA, t testi, ki-kare testleri, frekans tabloları kullanılarak analiz edilmiştir.

Bulgular: Katılımcıların malpraktis konusundaki bilgi ve tutumları cinsiyete ($p=0,027$) ve eğitim durumuna ($p=0,037$) ve çocuk sahibi olma durumuna ($p=0,022$) göre anlamlı farklılık göstermektedir. Sağlık çalışanlarının tıbbi hataları önlemeye yönelik eğitimleri ile yaşları ($p=0,001$) ve eğitim düzeyleri ($p=0,021$) arasında da anlamlı bir ilişki vardır. Buna göre erkek katılımcıların kadınlardan daha yüksek tıbbi hata oranlarına sahip oldukları belirlendi. Yaşlı katılımcılar arasında yanlış uygulama ile karşılaşma oranı daha yüksek olup, eğitim düzeyi arttıkça katılımcıların farkındalıkları da artmıştır.

Sonuç: Sağlık çalışanlarının malpraktis konusunda bilgi düzeylerinin artırılması, yasal sorumluluklar konusunda eğitimlerin düzenlenmesi, tıbbi uygulamalarda yaşanabilecek sorunların azaltılması önerilmektedir. Ayrıca sağlık yöneticilerinin çalışanların örgütsel bağlılığını artırmak için yapacakları aksiyonların hem hasta güvenliğini korumak hem de kurum imajını yükseltmek açısından önemli olduğu düşünülmektedir.

Anahtar Kelimeler: Malpraktis, Örgütsel bağlılık, Sağlık çalışanları

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Corresponding Author / Sorumlu Yazar: Itir ERKAN, Istanbul Yeni Yuzyil University, Faculty of Health Sciences, Istanbul, Türkiye.

e-mail: itir.erkani@yeniyyuzyl.edu.tr

INTRODUCTION

Malpractice cases occur due to the health professionals' behaviors, such as carelessness, imprudence, inexperience in the profession, lack of care, and non-compliance with the regulations, negatively affecting the patient's health (Schaffer et al., 2021). Negative situations experienced by patients with healthcare professionals negatively affect the reputation of the healthcare institution where healthcare services are provided. This situation can also reduce the trust of the health professional in the institution (Kirca et al., 2020; Hoff et al., 2021). Studies have shown that communication failures are strongly positively correlated with medical malpractice litigation (malpractice increases as communication failures increase). Healthcare professional's inability to clearly communicate with their patients, to disclose risks and benefits, and to answer their questions, are common predictors of medical malpractice claims (Durand et al., 2015).

Organizational commitment is defined as 'the relationship that a person develops with the organization and the level at which they internalize the organization and feel that he/she is a part of it (Schermerhorn et al., 1994; Cho et al., 2021). The concept of organizational commitment, which emerges with the bond of the institution and the employee, is an indicator of the individual's feeling towards the organization where he/she continues his/her work (Eren & Demirgoz, 2015; Neves et al., 2022). In this context, institutions aim to keep the organizational commitment of the employees high in order to achieve success. Based on the perspectives of Reason and Donabedian regarding quality and errors in health care, factors such as system design, organizational culture, and lack of management or training can create 'latent' upstream errors that, in the end, cause 'active' patient harm. The factors involved can be external factors that are not under the control of a medical institution (e.g., geographical, political or cultural issues) or organizational factors (structure, organizational culture, working conditions) (Harbitz et al., 2021). Studies show that there is a positive correlation between organizational commitment and organizational success (organizational success increases as organizational commitment increases).

In this study, the effect of health professionals' knowledge and attitudes about malpractice on their organizational commitment was researched.

MATERIAL AND METHODS

The questionnaire method was used for data validity in the study. While creating the survey text, the literature was scanned; In addition, expert opinion on the subject was also obtained. Before the preparation of the questionnaire, a preliminary questionnaire

was conducted, and as a result of the preliminary questionnaire, it was tried to determine how the hospital staff perceived the issue and what kind of questions they could answer. Before starting the field study, a pilot study was conducted with a group of 25 people, and the questionnaire was finalized by determining whether the questionnaire questions were understood in line with the answers received.

The population of the research consists of 169 volunteers (from 226) health workers (doctor, nurse, medical secretary, laboratory, intensive care, pharmacy, unit workers) working in a private hospital in Istanbul. A questionnaire consisting of 14 questions was applied to the participants in order to measure their knowledge and attitudes about malpractice. In addition, the Organizational Identity Scale consisting of 9 questions was applied to measure organizational commitment levels. The questions that make up the scales are statements that have been previously validated in the literature.

In the data related to the scales used in the research, Cronbach's Alpha value for the reliability analysis of the organizational identity scale was 0.90, and Cronbach's Alpha value for the scale of the effects of organizational identity on organizational commitment was 0.91. The internal consistency of the questions is quite high.

SPSS 22.0 (Statistical Package for the Social Sciences) program was used for the statistical analysis of the obtained data. ANOVA, t-test and chi-square tests, frequency, and percentage analyzes were used to determine the factors that cause perception and attitude differentiation.

In order to understand whether the variables constituting the two scales we used fit the normal distribution, we looked at the Kolmogorov-Smirnov test results instead of the Shapiro-Wilk test (OIS: .042; OISEOC: .000) since our sample number was more than 50 (Sipahi, Yurtkoru, Cinko (2010). Although it does not seem to be normally distributed as a result of this test (Generally, 5 It is very natural to encounter this problem in variables measured in a 'Likert, etc.) Since the skewness (kurtosis) and kurtosis (skewness) values are between -1 and +1 for the normal distribution (OIS skewness: .061 and kurtosis: -.797; OISEOC skewness: -.050 and kurtosis: -.607), we accepted that our variables in the last question are normally distributed (Hair, Black, Babin & Anderson) (2013) and we decided to apply parametric tests.

RESULTS

ANOVA and t tests were not included because they were not statistically significant. It was determined that 64.5% of the health professionals in the study did not receive training on malpractice. Although 35.5% of the participants stated that they received training, 58.3% stated that the training they received was not at a sufficient level.

Although health professionals stated that they received training on malpractice in courses such as health law legislation, medical ethics, etc. that they took during their university education, the rate of those who did not have sufficient knowledge on this subject was determined as 64.5%. 14.4% of the participants stated that they received training from the institution they work at, 14.9% during their university education, 6.6% stated that they received training in their own research and the cases they faced, and 1.2% in the Turkish Medical Association (TTB).

The fact that the participants received education about malpractice was determined by age

($p=0.003$), marital status ($p=0.020$) and educational status ($p=0.000$), while considering the education as sufficient, age ($p=0.002$) and marital status ($p=0.021$) differ significantly. It is shown in Table 1.

Analysis of participants' socio-demographic information

71% of health professionals stated that they have not encountered any malpractice cases during their working time. Health professionals stated that malpractice cases were mostly caused by carelessness, inexperience and documentation errors.

To the question of 'the most common causes of medical errors in Türkiye, 40% of the participants were asked about a large number of patients, 21% due to professional and personal inadequacies of health workers, 14% due to the attitudes and behaviors of patients, and 13% insufficient medical education. 12% of health professionals stated that it was due to insufficient use of technology.

Table 1: Chi-square analysis by demographic information.

		p-value
Gender	1- Errors in the field of health in Türkiye are of an important dimension.	0,027
	6- Have you encountered any Malpractice incidents during your working life?	0,01
	9- Have you ever made a medical mistake in your working life?	0,04
	14- Have you undergone a criminal investigation arising from your profession?	0,007
Age	3- Have you received any training on malpractice?	0,003
	4- If you did, do you think it was enough? (If your answer is yes to the third question)	0,002
	6- Have you encountered any Malpractice incidents during your working life?	0,000
	9- Have you ever made a medical mistake in your working life?	0,000
Marital Status	10- Have you received training to prevent medical errors?	0,001
	3- Have you received any training on malpractice?	0,020
	4- If you did, do you think it was enough? (If your answer is yes to the third question)	0,021
	9- Have you ever made a medical mistake in your working life?	0,002
Status of Having Child	14- Have you undergone a criminal investigation arising from your profession?	0,001
	6- Have you encountered any Malpractice incidents during your working life?	0,022
	9- Have you ever made a medical mistake in your working life?	0,003
Education	14- Have you undergone a criminal investigation arising from your profession?	0,02
	1- Errors in the field of health in Türkiye are of an important dimension.	0,037
	3- Have you received any training on malpractice?	0,000
	6- Have you encountered any Malpractice incidents during your working life?	0,031
	10- Have you received training to prevent medical errors?	0,021
	12- Have you received training on your "Legal and Criminal Responsibilities" regarding your profession?	0,025

The distribution of knowledge and attitudes of healthcare professionals about malpractice is shown in Table 2.

Table 2: Distribution of health professionals' knowledge and attitudes about malpractice.			
		n	%
Have you ever made a medical mistake in your working life?	Yes	23	13,6
	No	146	86,4
Have you received training to prevent medical errors?	Yes	81	47,9
	No	88	52,1
Do you report any medical errors you encounter?	Yes	117	69,2
	No	52	30,8
Have you received training on your "Legal and Criminal Liabilities" regarding your profession?	Yes	64	37,9
	No	105	62,1

It was determined that the level of awareness of the legal and criminal liabilities arising from malpractice in medical intervention and treatment of the health workers participating in our study was moderate level with 46.7%. In the Organizational Identity Scale questions, the participants were asked to state their opinions between 1 (Strongly

Agree) and 5 (Strongly Disagree). The distribution of the responses given to the Organizational Identity Scale is shown in Table 3, and the distribution of the responses given to the Scale of the Effects of Organizational Identity on Organizational Commitment is shown in Table 4.

Table 3: Organizational identity scale.						
		1	2	3	4	5
When some one criticize our organization, I take it as an insult to myself.	n	19	24	55	45	26
	%	11,2	14,2	32,5	26,6	15,4
What other people think about the organization interests me.	n	32	39	48	31	19
	%	18,9	23,1	28,4	18,3	11,2
When speaking of the institution, I usually say "we" rather than "they".	n	50	37	36	29	17
	%	29,6	21,9	21,3	17,2	10,1
I consider the success of the institution as our own success.	n	41	39	45	27	17
	%	24,3	23,1	26,6	16,0	10,1
When someone praises our organization, I take it as a personal compliment.	n	25	28	49	51	16
	%	14,8	16,6	29,0	30,2	9,5
I feel bad when there is a news in the media that criticizes the institution.	n	34	34	57	27	17
	%	20,1	20,1	33,7	16,0	10,1

Table 4: Scale of effects of organizational identity on organizational commitment.						
		1	2	3	4	5
Other people's opinions about the organization affect our commitment to the organization.	n	16	38	51	44	20
	%	9,5	22,5	30,2	26,0	11,8
The success or failure of the organization affects our commitment to the organization.	n	16	42	57	36	18
	%	9,5	24,9	33,7	21,3	10,7
The appearance of a news in the media criticizing the Institution affects our commitment to the organization.	n	17	36	56	36	24
	%	10,1	21,3	33,1	21,3	14,2

DISCUSSION

In this study, the awareness and attitudes of health professionals working in a private health institution about malpractice were analyzed and its effect on organizational commitment was examined. 36.1% (n: 169) of the participants are in the 20-24 age group, and 73.4% of them have been working in the institution for 0-5 years.

In the study of Gallagher et al., 64% of physicians think that errors are a serious problem and 50% of them think that errors are not usually caused by system errors (Gallagher et al., 2006). In our study, 56.2% of healthcare professionals stated that medical errors are important, and 50.3% of them stated that these errors are caused by the inadequacy of the health system. The opinions expressed by the participants differ significantly according to gender ($p=0.027$) and education level ($p=0.037$). When we examine it in terms of educational status, it has been determined that the knowledge level of the participants with postgraduate education on malpractice is higher than the participants with high school education.

In 2020, a study was conducted by Durmaz and Dogan with students from the nursing department of a university. From this study, it was concluded that the tendency to make medical errors is low. It was concluded that students with new knowledge and at the educational stage have a lower tendency to mistakes made during drug and transfusion applications, female students have less tendency to malpractice than male students, and as the level of satisfaction with the profession increases, the tendency to malpractice decreases ($p=0.05$). It was concluded that students with new knowledge and at the educational stage have a lower tendency to mistakes made during medicine and transfusion applications, female students have less tendency to malpractice than male students, and as the level of satisfaction with the profession increases, the tendency to malpractice decreases ($p=0.05$) (Durmaz and Dogan, 2020). In our study, although 35.5% of the participants stated that they received training, 58.3% of them stated that the training they received was not at a sufficient level. It has been determined that health professionals do not receive adequate training on malpractice during their university education. Considering that malpractice cases are experienced in health institutions, medical ethics and health law courses should be included in the education programs of health-related education departments in order to avoid such situations. It is recommended to support such cases to get her with case presentations in order to better understand such cases in the training program.

In the study carried out by Ersun et al. with pediatric nurses in 2013, 61% of nurses stated that they encountered medical errors, and 51.5% of these errors were made by physicians and 48.5% by their

colleagues (Ersun et al., 2013). In another study published in 2016, 36.6% of the participants stated that they encountered malpractice cases (Er and Altundas, 2016). In the study conducted by Ozen et al. in 2018, 89.5% of the participants observed that their colleagues caused malpractice cases (Ozen et al., 2018). 29% of the participants in our study stated that they encountered malpractice cases. The incidence of malpractice among health professionals participating in our study differs by gender ($p=0.01$), age ($p=0.000$), educational status ($p=0.031$), and having children ($p=0.022$). It has been determined that the rate of encountering malpractice cases among female health workers is higher than that of males. It has been determined that participants in the age group of 30 and over are more likely to encounter malpractice cases. When examined in terms of education level, it was determined that the rate of encountering malpractice among the participants with postgraduate education was higher than the participants with high school, associate degree, and undergraduate education. This can be explained by the high level of knowledge of the participants with a high level of education in evaluating the case and identifying the problem.

In a study conducted in 2009, when the sample consisting of 172 newspapers was analyzed, it was determined that the operating room surgery department was the area where medical errors were encountered the most, with a rate of 43.6%. It was stated that 11.6% of these errors were caused by carelessness, 10.5% by wrong diagnosis, 17.4% by wrong treatment, 19.2% by imprudence, and 8.7% by wrong medicine application (Ertem et al., 2009). In the study in which 19 hospitals were included in 2020, and medicine-related errors were examined, it was observed that missed doses and prescription errors were as common as medication errors (wrong dose). It was stated that the reason for this situation was reflected in the results of a lack of knowledge and skills and an excessive workload (Cottell et al., 2020). According to the health professionals in this study, it has been observed that most of the errors encountered are preventable medical errors. The reason for this can be listed as factors such as carelessness, imprudence, and lack of care. In this context, it is recommended that health managers determine the current situation concretely by applying risk analysis methods such as error mode effects analysis (FMEA), root-cause analysis, Ishikawa diagram, and quality circles, and carry out studies to prevent the occurrence of medical errors (Liu et al., 2019).

In the studies carried out, reasons such as overtime, fatigue, number of patients per health, length of working hours, an insufficient workforce, heavy workload, and exhaustion are emphasized as the cause of medical errors (Yiğitsoy, 2014; Ustüner & Cam, 2016).

Approximately 40% of health professionals stated that the most important reason for medical errors in our country is the excessive workload caused by caring for a large number of patients during the day. In order to prevent malpractice cases, it is recommended that health managers make the necessary arrangements regarding workload planning and the number of personnel (Çakmak et al., 2018).

In a study conducted in 2015, 28.5% of the participants stated that they made 19 medical errors (Sahin & Ozdemir, 2015), and in another study, 22.1% of the participants stated that they made 11 medical errors. In the study we conducted, when the answers given to the question "Have you ever made any medical mistakes during our working life" were examined, it was determined as 13.6%. It is thought that the reason for the low rate of medical error compared to previous studies, although the health workers did not receive enough in this regard, is the result of their individual efforts and the effect of the discussions on patient rights and malpractice. In addition, 69.2% of health professionals stated that they prefer to report the medical errors they encounter. Despite this, the fact that 30.8% do not prefer to notify shows that they do not have sufficient information about their legal and criminal liabilities. The fact that the participants received training on their legal and criminal liabilities differed according to their age ($p=0.029$) and educational status ($p=0.025$), while the fact that they had undergone a criminal investigation differed according to their gender ($p=0.0007$), having children ($p=0.002$) and marital status ($p=0.001$). It has been determined that as the age and education level of the participants increase, their level of knowledge on this subject is higher, and they become conscious of their responsibilities. It was found that while the seniority of the participants in the institution affected their organizational commitment negatively, it was determined that the age and educational status of the participants did not have an effect on their organizational commitment (Özdemir, 2020). In our study, when the answers given by the participants in the organizational commitment scales were evaluated, it was determined that their organizational commitment was at a moderate level. While the majority of health professionals do not think that they can have a share in the success of the institution, whether they internalize the criticisms made by external stakeholders towards the institution differs from individual to individual. No significant relationship was found between the participants' gender, age, marital status, education level, having a child, and organizational commitment.

In a study conducted in 2020, it was seen that a well-executed organizational culture would positively affect nurses' participation in the process, their commitment to their institution, and their attitudes toward medical errors (Levine et al., 2020). In our study, however, there was no relationship between the organizational

commitment of the participants and their approaches to malpractice.

The role of health managers is very important in reducing malpractice cases in health institutions. It is recommended to employ qualified and sufficient personnel in the institution to organize training on medical ethics, malpractice, and legal and criminal responsibilities of health workers in order to prevent possible problems. It is thought that as a result of the actions to be taken to increase the organizational commitment of health professionals, the communication between management and employees will increase positively, malpractice cases will decrease, and motivation to report possible errors will increase (Caykoylu et al., 2011; Orenc, 2021).

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Author Contributions

Idea/Concept: Meltem ORENC, Itir ERKAN; **Design:** Meltem ORENC, Itir ERKAN; **Supervision/Consulting:** Itir ERKAN; **Data Collection and/or Processing:** Meltem ORENC; **Analysis and/or Interpretation:** Yunus ADIGUZEL, Itir ERKAN; **Literature Review:** Meltem ORENC, Itir ERKAN; **Writing of the Article:** Itir ERKAN; **Critical Review:** Yunus ADIGUZEL, Itir ERKAN

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