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# Evaluation of Violence Against Physicians: Sivas Province Example

## Hekimlere Yönelik Şiddetin Değerlendirilmesi: Sivas İl Örneği

Gültekin Akgül<sup>1</sup>, Ali Yıldırım<sup>2</sup>, Fatma Yücel Beyaztaş<sup>2</sup><sup>1</sup>Çanakkale Mehmet Akif Ersoy Devlet Hastanesi, Adli Tıp Bölümü, Çanakkale, Türkiye<sup>2</sup>Sivas Cumhuriyet Üniversitesi Tıp Fakültesi, Adli Tıp Anabilim Dalı, Sivas, Türkiye

### ABSTRACT

**Objective:** Violent incidents in healthcare institutions are situations that negatively affect all healthcare professionals, especially physicians. This research was planned to determine the frequency of physicians' exposure to workplace violence, their reactions to violence, the causes of violence, and solutions to violence.

**Methods:** In this regard, the study group of the research consists of a total of 290 volunteer physicians between the ages of 24-72 working in the city center of Sivas. In this study, data was collected using a survey consisting of 49 questions, including the sociodemographic characteristics of physicians, information about their working status, variables related to the violence that physicians were exposed to, and physicians' thoughts about the causes, consequences, and solution suggestions of violence.

**Results:** The rate of physicians who were exposed to violence at least once in the working environment was 57.9%. Female physicians, physicians who worked in internal branches, and physicians who had a career of over 16 years were more likely to be exposed to violence. 49.4% of physicians who were subjected to violence filed a complaint. Psychological/verbal violence was the most common (82.1%) among the types of violence. The perpetrators of violence were primarily patients and their relatives.

**Conclusion:** In order to prevent violent incidents and their adverse effects, adequate security measures should be taken, legal regulations should be made to deter acts of violence, and the level of awareness of violent incidents should be increased. Healthcare workers should be given support and training on the effects of violence and coping with it, and the working conditions of physicians should be improved.

**Keywords:** Violence in healthcare, physician, physical violence, psychological violence, health personnel

\*This study was created by rearranging the Medical Specialization Thesis titled "Evaluation of Violence Against Doctors: Sivas Province Example" by the author named Gültekin Akgül.



**Address for Correspondence/Yazışma Adresi:** Gültekin Akgül, Çanakkale Mehmet Akif Ersoy Devlet Hastanesi, Adli Tıp Bölümü, Çanakkale, Türkiye  
**E-mail:** gultekin-akgul@hotmail.com  
**ORCID ID:** orcid.org/0000-0001-6541-2418

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## ÖZ

**Amaç:** Sağlık kurumlarında yaşanan şiddet olayları, hekimler başta olmak üzere tüm sağlık çalışanlarını olumsuz yönde etkileyen bir durumdur. Bu araştırma, hekimlerin işyeri şiddetine maruz kalma sıklıklarını, şiddete karşı verdikleri tepkileri ve şiddetin nedenleri ile şiddete karşı çözüm önerilerini belirlemek amacıyla planlanmıştır.

**Yöntem:** Bu doğrultuda, araştırmanın çalışma grubu Sivas il merkezinde çalışan 24-72 yaş aralığındaki toplam 290 gönüllü hekimden oluşmaktadır. Bu çalışmada hekimlerin sosyodemografik özelliklerine, çalışma durumu ile ilgili bilgilerine, hekimlerin maruz kaldıkları şiddete ait değişkenlere, hekimlerin şiddetin nedenleri, sonuçları ve çözüm önerileri hakkındaki düşüncelerine yer veren 49 sorudan oluşan bir anket kullanılarak veriler toplanmıştır. Elde edilen veriler SPSS 22.0 programı kullanılarak analiz edilmiştir. Araştırma sorularının yanıtlarını bulmak üzere anımlayıcı istatistiklerden aritmetik ortalama, standart sapma, ortanca, minimum-maksimum değerler; sayımla elde edilen kategorik değişkenler için sayı ve yüzdeler verilmiştir. Normallik varsayımı Kolmogorov-Smirnov veya Shapiro-Wilk testine göre analiz edilmiştir. Değişkenler arası ilişki için Pearson veya Spearman ilişki katsayısı kullanılmıştır.  $P < 0,05$  anlamlı kabul edilmiştir.

**Bulgular:** Çalışma ortamında en az bir kez şiddete maruz kalan hekimlerin oranının %57,9 olduğu, kadın cinsiyete sahip olan, dahili branşlarda çalışan, 16 yıl ve üzeri meslek hayatı olan hekimlerin daha çok şiddete maruz kaldığı ve şiddete maruz kalan hekimlerin %49,4'ünün şikayetçi olduğu sonucu elde edilmiştir. Şiddet türlerinin arasında psikolojik/sözel şiddetin fazla (%82,1) olduğu, şiddet uygulayanlar arasında en fazla hasta ve hasta yakınlarının yer aldığı saptanmıştır.

**Sonuç:** Şiddet olaylarını ve şiddetin olumsuz etkilerini önleyebilmek için; etkin güvenlik önlemleri alınmalı, şiddet olaylarına karşı caydırıcı yasal düzenlemeler yapılmalı, şiddet olaylarına yönelik farkındalık düzeyi artırılmalı, sağlık çalışanlarına şiddetin etkileri ve başa çıkma konusunda destek ve eğitim verilmeli, hekimlerin çalışma koşulları iyileştirilmelidir.

**Anahtar Kelimeler:** Sağlıkta şiddet, hekim, fiziksel şiddet, psikolojik şiddet, sağlık personeli

## INTRODUCTION

Although there are many definitions of violence, the World Health Organization (WHO) defines violence as: It is defined as “the deliberate use of physical force or pressure against oneself, another person, a group or society, resulting in injury, death, psychological harm, developmental impairment or deprivation, or the use of such force in a manner that creates a high probability of occurrence” (1). Violence, which continues to exist in working life, is defined as “workplace violence”. According to the European Commission: It is defined as “any action that threatens the health and safety of the employee in situations related to his job, such as explicit or implicit (hidden) abuse, threat or attack” (2).

All forms of violence in healthcare institutions adversely affect healthcare personnel in physical, psychological, and social domains (3). Violence in healthcare is becoming an increasingly significant issue both in Turkey and worldwide (4). Physicians, who interact with patients and their families in various aspects, especially during examination and treatment, experience high rates of exposure to violence. Unfortunately, doctors whose only goal is to heal and improve the well-being of their patients not only face violence in their professional lives but also lose their lives.

Kingma's study (5), the frequency of violence experienced in healthcare institutions was 16 times higher than the violence experienced in other work areas. Health workers; they are exposed to more violence than guards, police officers and transport workers. In a study conducted in the United Kingdom, 20% of the general practitioners who participated in the research stated that they were exposed to violence in the last

month, and 63% of them were exposed to one or more types of violence during the time they were practicing their profession (5). According to similar studies in the literature; it is observed that when healthcare workers are exposed to workplace violence, they perceive only physical injury as violence and therefore report it. In the absence of physical injury, they do not care about violence and report less. In fact, it is observed that 40% of healthcare workers who are exposed to workplace violence accept the violence as a personal problem and avoid reporting violence (6,7).

In this study, it is aimed to determine the frequency of exposure to violence in the workplace by physicians working in hospitals in the city center of Sivas, the type and characteristics of violence they are exposed to, the reactions of physicians to violence, the effects of violence on physicians, the causes of violence and suggestions for solutions against violence.

## MATERIALS AND METHODS

This research is a cross-sectional descriptive study planned to determine the knowledge and solution suggestions of physicians actively working in clinical branches at Sivas Cumhuriyet University Hospital, hospitals affiliated with the Ministry of Health (MOH) and private hospitals located in the city center of Sivas, regarding workplace violence. Data to be obtained from the study; it was obtained using a survey consisting of 49 questions that included the sociodemographic and working status-related characteristics of physicians, variables related to the violence they were exposed to, and their thoughts about the causes, consequences and solution suggestions of violence.

Before starting the research, approval was obtained from Sivas Cumhuriyet University Non-Interventional Clinical Research Ethics Committee, dated 21.09.2022 and decision number 2022-09/12, and the necessary permissions were obtained from the chief physician of the hospitals where the physicians worked. A total of 290 physicians from Sivas Cumhuriyet University Hospital (n=163), MOH hospital (n=105) and private hospital (n=22) met the specified criteria and the findings were evaluated in three categories.

### Statistical Analysis

The data obtained from the study were entered into the SPSS 22.0 package program. Among descriptive statistics, arithmetic mean, standard deviation, median, minimum-maximum values are given. Numbers and percentages are given for categorical variables obtained by counting. The assumption of normality was tested according to the Kolmogorov-Smirnov or Shapiro-Wilk test. Pearson or Spearman correlation coefficient was used for the relationship between variables.  $P < 0.05$  was considered significant.

### FINDINGS

Considering the distribution according to the health institutions where they work, 56.2% work in university hospitals, 36.2% work in MOH hospitals, and 7.6% work in private hospitals. 54.5% of the physicians participating in the study were male, 40.7% were under the age of 29, the average age was  $34.51 \pm 9.8$  and the age range was 24-72 (Table 1).

When we look at the frequency of exposure to violence among the participants who were exposed to violence in the work environment, the largest group is those who have been

exposed to violence 2-4 times with 44.6%, followed by those who have been exposed to violence 5-10 times with 35.1% (Figure 1). 42.1 of them (n=122) stated that they had never been exposed to violence in the work environment throughout their working life. 57.9% (n=168) of the physicians participating in the study stated that they were exposed to violence in the work environment at least once during their working life. While the frequency of participants being exposed to psychological/verbal violence is 54.8%, the frequency of exposure to physical violence is 10.3% (Table 2).

Additionally, when looking at the types of violence they were exposed to in the work environment, 94.6% (n=159) of the physicians who were exposed to violence (n=168) were exposed to psychological/verbal violence, and 17.9% (n=30) were exposed to physical violence. When the relationship between the types of violence and the gender of the participants was

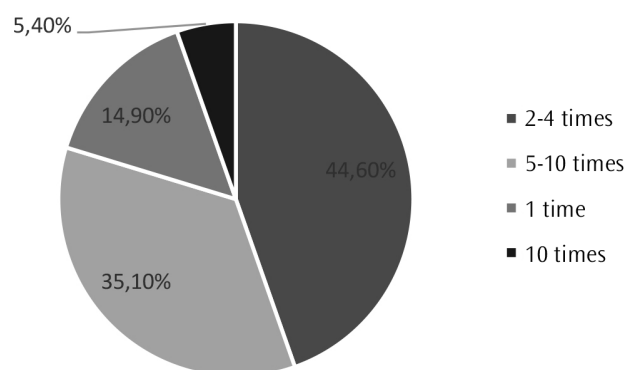


Figure 1. Frequency of participants being exposed to violence throughout their working life

Tablo 1. Sociodemographic characteristics of participants			
		n	%
Health institution	University hospital	163	56.2
	State hospital	105	36.2
	Private hospital	22	7.6
Gender	Male	158	54.5
	Female	132	45.5
Age groups	<29	118	40.7
	30-39	101	34.8
	40-49	45	15.5
	>50	26	9.0
Marital status	Married	192	66.2
	Single	98	33.8
Title	Resident	143	49.3
	General practitioner	22	7.6
	Specialist	103	35.5
	Medical faculty member	22	7.6
Total		290	100.0

**Table 2. Types of violence exposed during working life by gender distribution\***

	Those exposed to violence n=168				All participants n=290	
	Female		Male			
	n	%	n	%	n	%
Psychological/verbal violence	84	97.7	75	91.5	159	54.8
Physical violence	9	10.5	21	25.6	30	10.3

\*: More than one option is marked

examined, the rate of psychological/verbal violence among all female (n=132) physicians participating in the study was higher (63.6%) than the incidence among all male (n=158) physicians participating in the study (47.5%). While it is observed that; it was observed that the rate of physical violence (6.8%) among all female physicians (n=132) participating in the study was lower than the rate (13.3%) among all male physicians (n=158) participating in the study. It was found that there was a significant difference between the type of violence exposed and gender ( $p<0.05$ ) (Table 2).

When physicians were asked to describe the violence they were exposed to; 87.5% stated that it was yelling, 78.6% swearing/insulting, 73.8% threatening, 35.7% attacking the environment, and 15.5% pushing (Table 3).

When examining the frequency of exposure to violence in the workplace by physicians according to their gender; 65.2% (n=86) of female physicians and 51.9% (n=82) of male physicians stated that they were subjected to violence in the work environment at least once and according to the Spearman correlation coefficient analysis, there was a difference between exposure to violence and gender. It was determined that there was a positive significant relationship between (Spearman=0.134,  $p=0.023$ ) (Table 4).

When physicians' sociodemographic and working life characteristics and their exposure to violence in their work environments are evaluated together; it was determined that physicians who worked in a university hospital, worked as faculty members, had 16 years or more in their profession, were in the 40-49 age group, were married, and had no security personnel in the unit they worked in were most exposed to violence. A statistically significant relationship was found between the time physicians spent in their profession and their exposure to violence in their work environment ( $p<0.05$ ) (Table 4).

63.9% of physicians working in internal medicine branches, 52.6% of physicians working in surgical branches, and 47.4% of physicians working in emergency departments stated that they were exposed to violence in their work environment at least once during their working lives. A significant relationship was found between the fields in which physicians work and the violence they were exposed to ( $p<0.05$ ). In addition, when the relationship between the way physicians work and exposure to

**Table 3. Participants exposed to violence's description of the violence they were exposed to\***

	Participants exposed to violence n=168	
	n	%
Yelling	147	87.5
Profanity/insult	132	78.6
Threatening	124	73.8
Attack on the environment	60	35.7
Pushing	26	15.5
Manhandling	12	7.1
Verbal sexual harassment	5	3.0
Punching	5	3.0
Slapping	3	1.8
Stabbing	1	0.6
Object throwing	1	0.6

\*: More than one answer was given

violence in the work environment is examined, the group most exposed to violence is 100% of physicians who work overtime, followed by 60% and 57% who work weekday shifts (8-17). It was observed that it was followed by physicians who were on duty during the day with 8%, and the lowest rate was followed by physicians who worked in shifts during the day and night, with 37.9%. This was not found to be statistically significant ( $p>0.05$ ) (Table 4).

When the participants who were exposed to violence were asked when they were last exposed to violence, it was observed that 60.7% of the participants stated that they were exposed to violence in the last year (Table 5).

When the places where the participants were exposed to violence were examined, it was determined that they were most frequently exposed to violence in the outpatient clinic (39.3%) and the emergency room (33.1%) (Table 6).

It was observed that physicians were subjected to violence by patient relatives at a rate of 85.7% and by patients at a rate of 50%, and the age of those who committed violence was most frequently between the ages of 31-40 with 39.6%, followed by the age range of 41-50 with 24.7%. 63.1% of physicians stated that they were subjected to violence by a male aggressor, 26.8% by both men and women, and 10.1% by a female aggressor.

**Table 4. Sociodemographic and working life characteristics of physicians and their exposure to violence in work environments throughout their working life**

Sociodemographic and working life characteristics		Exposure to violence					p
		There is		None		Total	
		n	%	n	%	n	
Age	<29	51	57.3	38	42.7	89	0.083
	30-39	71	54.6	59	45.4	130	
	40-49	32	71.1	13	28.9	45	
	>50	14	53.8	12	46.2	26	
Gender	Female	86	65.2	46	34.8	132	0.023
	Male	82	51.9	76	48.1	158	
Marital status	Married	112	58.3	80	41.7	192	0.847
	Single	56	57.1	42	42.9	98	
Institution of employment	University hospital	97	59.5	66	40.5	163	0.517
	State hospital	58	55.2	47	44.8	105	
	Private hospital	13	59.1	9	40.9	22	
Title	Resident	79	55.2	64	44.8	143	0.765
	General practitioner	9	40.9	13	59.1	22	
	Specialist	59	57.3	44	42.7	103	
	Medical faculty member	21	95.5	1	4.5	22	
Time worked in the profession	1-5 years	76	51.4	72	48.6	148	0.004
	6-10 years	33	61.1	21	38.9	54	
	11-15 years	18	64.3	10	35.7	28	
	≥ 16 years	41	68.3	19	31.7	60	
Department/branch	Departments of internal medicine	99	63.9	56	36.1	155	0.024
	Departments of surgical medicine	51	52.6	46	47.4	97	
	Emergency medicine	18	47.4	20	52.6	38	
Working time frame	Working weekdays from 08:00 to 17:00	63	60.0	42	40.0	105	0.554
	Normal working hours + on-call duties	85	57.8	62	42.2	147	
	Day-night shift	11	37.9	18	62.1	29	
	Normal working hours + overtime	9	100.0	-	-	9	
Security personal	There is	34	47.9	37	52.1	71	0.168
	None	134	61.2	85	38.8	219	

When the gender of the attackers and the types of violence they used were compared, it was determined that psychological/verbal violence was seen at a higher and similar rate in both genders compared to physical violence, and no statistically significant difference was found between the gender of the attacker and the type of violence applied ( $p>0.05$ ). When doctors who were exposed to violence were asked the question, "The attacker may have any illness or situation that could affect his use of violence?" 69% of physicians answered, "He did not have any disease/he was an ordinary person" (Table 7).

50.6% of those who were exposed to violence did not complain after the violent incident, 88% of the physicians who complained after the violence gave a code white, 10.8% ( $n=9$ ) did not give a white code and one physician (1.2%). It was determined that there was now hite code system at the time he was working.

When the types of violence that physicians are exposed to and whether they file a complaint after a violent incident are compared; 66.7% of physicians who were exposed to physical violence and 50.3% of physicians who were exposed to psychological/verbal violence stated that they complained

after the violence, and a statistically significant relationship was found between the type of violence and complaining after the violence ( $p<0.05$ ) (Table 8).

4.8% of physicians who were subjected to violence received psychological support after the violent incident, 2.4% had physical injuries due to the violent incident, 50% of physicians with physical injuries received out patient treatment, and 50%

did not receive any treatment. It was determined that he did not see it.

It was determined that 22.6% of the physicians who were exposed to violence stated that they received support from the institution administrators after the violent incident, and 65.8% of them ( $n=25$ ) did not specify what kind of support they

**Table 5. When was the last time physicians were exposed to violence**

	Participants exposed to violence n=168	
	n	%
≤1 month	36	21.4
1-6 months	42	25.0
6-12 months	24	14.3
1-2 years	15	8.9
2-5 years	33	19.6
5-10 years	11	6.6
≥10 years	7	4.2
Total	168	100.0

**Table 6. Places and rates where physicians are exposed to violence**

	n*	%
Policlinic	94	39.3
Emergency department	79	33.1
Service	33	13.8
Hospital corridor	12	5.0
Waiting room	9	3.8
Intensive care	9	3.8
Operating room	2	0.8
Hospital garden	1	0.4
Total	239	100.0

\*: Since more than one option was selected, the number n exceeds the sample size

**Table 7. Characteristics of people who perpetrate violence**

	n	%	
Who is violent*	*	**	
	Patient	84	50.0
	The relatives of the patient	144	85.7
	Administration/managers	13	7.7
	Healthcare worker	5	3.0
Age*	*		
	<18	5	2.1
	19-30	44	18.7
	31-40	93	39.6
	41-50	58	24.7
	>65	7	3.0
Gender	Male	106	63.1
	Female	17	10.1
	Both gender	45	26.8
Person who perpetrates violence according to you*	*	**	
	He might have a psychiatric disease	35	20.8
	Senile dementia/mental might be retarded	7	4.2
	May be under the influence of alcohol or drugs	16	9.5
	May be undertheeffect of anesthesia/medication	1	0.6
	He didn't have any disease/an ordinary person	116	69.0
I don't know	36	21.4	

\*: Since more than one option was selected, the number n exceeds the sample size  
 \*\*: Participant percent ages are taken

received. No statistically significant relationship was found between receiving support ( $p>0.05$ ) (Table 9).

Four physicians (2.4%) who were subjected to violence stated that a study was carried out to investigate the cause of violence in their workplaces after the violence (Table 10).

When the participants' answers to the question of whether they had received any training on workplace violence in healthcare settings were examined; it was determined that 6.6% ( $n=19$ ) had received training on violence in healthcare environments.

When the participants' answers to the question of whether there are measures taken to prevent violent incidents in the institutions they work in are examined; a total of 49 physicians, including 31.8% ( $n=7$ ) of physicians working in private hospitals, 21.9% (23) of physicians working in MOH hospitals and 11.7% ( $n=19$ ) of physicians working in university hospitals. They stated that there are measures to prevent violent incidents and that all of them have security guard measures.

When participants were asked whether violence-related situations in the media (news, events, films, TV series, documentaries, etc.) fuel violence in healthcare; it was observed that 87.2% ( $n=253$ ) of the participants stated that they fueled it, 12.1% ( $n=35$ ) stated that they partially fueled it, and only 0.7% ( $n=2$ ) stated that they did not fuel it.

When the participants were asked about their thoughts on the work stoppage of healthcare workers who were subjected to violence, all participants responded at similar rates, regardless of whether they had been subjected to violence before, and as a result, 89.3% supported the work stoppage of healthcare workers who were subjected to violence, 9% partially supported it and 1% supported it. It was observed that 7% did not support it.

### DISCUSSION

57.9% ( $n=168$ ) of the 290 physicians who participated in this study stated that they were exposed to violence in the work environment at least once during their working life. When we

**Table 8. Types of violence exposed to by physicians and incidents of violence experienced comparison of whether or not to complain after wards**

		Have you filed a complaint?				Total	
		Yes		No		n	%
		n	%	n	%		
Type of violence experienced*	Physical violence (n=30)	20	66.7	10	33.3	30	17.9
	Psychological/verbal violence (n=159)	80	50.3	79	49.7	159	82.1
Total		83	49.4	85	50.6	189	100.0
						168	100.0

\* Since more than one option was selected, the number n exceeds the sample size

**Table 9. After the violent incident experienced by physicians according to the institutions they work for whether or not they receive support from institutional administrators**

			Institution of work						Total		n	%	
			University hospital		State hospital		Private hospital						
			n	%	n	%	n	%	n	%			
Have you received support?	Yes	Unspecified	8	8.2	13	22.4	4	30.8	25	14.9 (65.8%)*	38	22.6	p>0.05
		Social support	8	8.2	-	-	-	-	8	4.8 (21.1%)*			
		Legal support	3	3.1	1	1.7	1	1.7	5	2.9 (13.1%)*			
	No		78	80.5	44	75.9	8	61.5	130	77.4			
Total			97	100.0	58	100.0	13	100.0	168	100.0			

\*: The percent ages of the group that said yes are given

**Table 10. Whether studies have been conducted to investigate the causes of violent incidents according to the institutions worked in**

		Has a study been conducted to investigate the cause of violence?							
		Yes		No		I don'tknow		Total	
		n	%	n	%	n	%	n	%
Institution of work	University hospital	1	0.6	77	45.8	19	11.3	97	57.7
	State hospital	3	1.8	38	22.6	17	10.1	58	34.5
	Private hospital	-	-	7	4.2	6	3.6	13	7.7
Total		4	2.4	122	72.6	42	25	168	100.0

look at the literature, we see that there are similar studies in different provinces and more than half of the participants have been exposed to violence at least once during their working life. In the study conducted in Adana in 2020, 85.9% of a total of 955 healthcare personnel, 598 of whom were physicians, stated that they were subjected to violence in the work environment at least once during their working lives (8), while 496 healthcare professionals working in Sivas between 2013 and 2014 stated that they were subjected to violence in the work environment at least once during their working lives. In a joint study, 95.5% of them stated that they had been subjected to workplace violence at least once during their working life (9). While 72.1% of 383 physicians in Ankara in 2023 were subjected to violence (10), in a study conducted with physicians in Istanbul in 2019, 82.7% of physicians stated that they were subjected to violence in the work environment at least once during their working life (11<sup>th</sup>).

It was found that 65.2% of the female physicians and 51.9% of the male physicians participating in our study were exposed to violence, and a positive significant relationship was found between exposure to workplace violence and gender ( $p < 0.05$ ). It has been found that female physicians are exposed to more violence than male physicians. When the literature is examined, it is stated that 70.3% of female healthcare workers and 63.5% of male healthcare workers were exposed to violence in the study conducted in Erzurum (6), while in the study conducted in Istanbul, female physicians (86.2%) were more likely than male physicians (6). It was determined that they were exposed to more violence than others (78.5%) (11).

Consistent with the literature, 60.7% ( $n=102$ ) of the physicians who participated in our study were exposed to workplace violence in the last year (Table 5) Ayrancı et al. (12). It was observed that 50.8% of the healthcare workers who participated in the study conducted by A.Ş. in 2002 were exposed to workplace violence in the last year. In a study conducted with physicians in Istanbul, it was stated that 58.4% of physicians were exposed to workplace violence in the last year (11). In some studies conducted on healthcare workers who have been exposed to workplace violence in the last year,

the rate of exposure to violence is higher in the last year. In a study conducted with physicians working in Istanbul in 2023, 68.2% of the participants were exposed to violence in the last year (13).

Of the 168 physicians who were exposed to violence in the workplace throughout their careers, 159 (94.6%) were exposed to psychological/verbal violence and 30 (17.9%) were exposed to physical violence (Table 2). Aydın et al. (14) in their study with 522 physicians working in 41 provinces in 2009, 82.8% of the physicians were exposed to workplace violence, and when the type of violence they were exposed to was considered, 89.3% reported verbal-psychological violence, 7.9% reported physical violence, It was determined that 1.1 percent of the population were exposed to sexual violence. Açık et al. (15) in a study conducted with 1,712 assistant physicians, it was concluded that 68% were exposed to workplace violence, and when looking at the type of violence they were exposed to, 67% were exposed to verbal-psychological violence, 16% to physical violence, and 3% to sexual violence. Additionally, it is observed that the frequency of exposure to violence increases as the time spent in the profession increases (16).

When the places where physicians were exposed to violence were examined, it was determined that they were exposed to violence in more than one place, and that they were most frequently exposed to violence in the outpatient clinic (39.3%) and the emergency room (33.1%). In a study conducted with 704 medical specialty students, physicians were most frequently exposed to violence in the emergency room (86.9%) and outpatient clinics (55.8%) (17). Particularly in polyclinics and emergency services, the burden that doctors can carry prevents a healthy examination process. In addition, the applied performance system increases the workload of physicians. The lack of ideal time required for a healthy examination (e.g. WHO recommendation, 20 minutes) due to patient density also prevents communication between the patient and the physician. With these obstacles, patients and their relatives may exhibit aggressive reactions (8,18).

When doctors were asked who the people who used violence were; information has been obtained that the age of people



who commit violence is most frequently between 31-40 years old, with 39.6%, and that they are mostly exposed to violence by men who are male and who do not have any illness or condition that may affect the use of violence. When the literature is examined and the gender ratios of the attackers are examined, it is seen that the attackers are mostly men and between the ages of 31-40, and they do not have any illness or condition that could affect the use of violence (6,8,11,18,20).

When doctors who were exposed to violence were asked about the reasons for the violence; the most common answers given by the participants as the reasons for violence were unconscious patient-patient's relative/failure to comply with the rules, attributing problems arising from the system to the healthcare worker, and the length of the waiting period. According to the study conducted with healthcare professionals in Adana, who were exposed to violence; it has been observed that this is due to reasons such as rejecting unfair and inappropriate requests of patients and their relatives, attributing problems in the healthcare system to physicians, biased health policies and media, and targeting healthcare professionals (8). As seen in the media, "If the patient doesn't live, you can't either, save him!" Targeted representations, such as lines or false information such as "He was given the wrong injection, his arm was cut off", fuel violence in healthcare (18). The most common situations in our country are unjustified requests for reports, which have been going on for years, asking for prescriptions for drugs purchased and used from pharmacies, and pressure to obtain a health report in cases such as a gun license or driver's license. In the study conducted by Usluoğlu with physicians working in İstanbul, it was concluded that the most common causes of violence were the rejection of inappropriate requests of patients and their relatives (11). In Pehlivan Barış's (21) study with physicians in Ankara; physicians think that the most common cause of violence in health is the health policies implemented. Some of the reasons why the prestige of the profession has decreased compared to the past; it is stated that easy access to health services, insufficient penalties after violence, insufficient security measures, and low education level of the society increase the incidents of violence in health institutions (18,21).

It was observed that 50.6% of the physicians who were exposed to violence did not complain after the violence they experienced, and 88% of the physicians who did complain gave a white code. When the types of violence that physicians are exposed to and whether they file a complaint after the violence are compared; 66.7% of physicians who were exposed to physical violence and 50.3% of physicians who were exposed to psychological/verbal violence stated that they complained after the violence, and a statistically significant relationship was found between the type of violence and complaining after the violence ( $p < 0.05$ ). When the literature is examined, it is seen that the majority of

physicians who are subjected to violence do not complain, and the reasons for this are that many physicians do not know how to initiate the white code application, do not know the legal procedure to be applied after violence, and think that sufficient punishment will not be given or no results will be obtained as a result of the complaint (18,21). In a study conducted in Sivas province in 2022, it was observed that the motivation of the participants exposed to violence was broken, and 44.2% of them continued their work without giving any response (22). Many studies show that violence in healthcare is not reported at a high rate.

Most of the physicians who participated in our study who were subjected to violence and did not complain think that complaining would be useless. They stated that they did not complain because they did not feel safe or were ashamed because legal procedures were long and tiring, and because they believed that violence was not very important, it could also have negative consequences. The inadequacy of penalties supports the failure of victims of violence in healthcare to file complaints in the current system; it is thought that the most common reason for the increase in violence in healthcare is politicians, media and administrators (8,17,21).

The majority of physicians who were subjected to violence experienced negative consequences such as a decrease in job satisfaction, the thought of quitting their job or changing their branch, the worry of "constant violence", insecurity, anxiety or stress, deterioration in interpersonal relationships, depression, sleep problems, and change of duty location after the violence. When the literature on violence in health is examined, physicians consider leaving the profession after violence, worry about "constantly being subjected to violence" and enter burnout syndrome (8,19,21). In a study conducted with physicians in İstanbul, a significant relationship was found between the level of violence experienced by physicians and the likelihood of suicide. At the same time, it was found that physicians who were exposed to violence in the last year had high emotional exhaustion scores (11). Nart's (23) study also contains similar results to our study. It has been observed that exposure to violence at work increases emotional exhaustion and depersonalization.

In our study, when physicians were asked how their relationships with patients were affected after the violence they were exposed to; the majority of physicians stated that they felt the need to take precautions against the possibility of violence, that their tolerance for patients' demands decreased, that they tried to see fewer patients as possible, that they reduced verbal communication with patients, and that they avoided off-duty physician responsibilities. They even tried not to keep items that could be used as attack tools in the environment where they worked, tried to take precautions to make them more accessible to security personnel, and stated

that they started carrying materials such as pepper spray to protect themselves. It is obvious that physicians do not feel safe in the environment. Participants who stated that there are no security measures taken in the institution they work for (61.2%), want basic security measures such as the presence of a security guard to be at an adequate level. In studies on violence in health, it is determined that the security measures are not at a sufficient level and precautions are taken, legal sanctions after the violence are made at an adequate level, a database of aggressive patients is created, healthcare workers are given the right to speak when determining health policies, the number of healthcare personnel is employed in proportion to the workload, the density of hospitals is unnecessary. It has been concluded that entrances should be restricted, spatial conditions should be improved, working hours should be regulated, healthcare workers should be given training such as communication skills, personnel working hours alone should be reduced, and public informative studies should be carried out using the media (8,14,20,21).

Only 22.6% of the participants received support from institutional managers after the violence, and only 2.4% stated that a study was carried out to investigate the cause of violence in the workplace after the violent incident. The physicians who participated in our study reveal that they think that an effective reporting and monitoring system should be established at the national level, which is among the recommendations for preventing violence. In Beder's study (6); after healthcare workers informed managers after violence, it was observed that 60.8% of them did not have any support from managers (6). This situation concludes that physicians' negative emotional states may be triggered after violence.

## CONCLUSION

Violence is a subject researched by many disciplines. Cases of violence in healthcare, which have increased especially in recent years, have become one of the issues that need to be addressed in the field of forensic medicine. As the results of our study show, the negative effects experienced after violence not only affect the individual's physical health, but also their social relationships and psychological state. In addition, the entire society within the health system is affected and therefore the health system is damaged. It is known that managers, politicians, the media, and most importantly the society, have great responsibilities in order to ensure that healthcare professionals work safely within the system and avoid being exposed to violence.

With the findings of our research and the contribution of research in the literature, our suggestions for preventing violence in healthcare are as follows:

Providing training for healthcare professionals on patient psychology, communication skills, legal procedure after violence, white code and rights,

Giving deterrent penalties to attackers who commit violence against healthcare workers, and enacting a separate law for violent incidents in healthcare institutions,

Including the opinions of healthcare professionals when discussing policies related to the healthcare system,

Active use of visual media such as public spots and posters to increase social awareness to prevent violence in healthcare,

Prohibiting studies targeting healthcare professionals in the media,

Improving conditions such as spatial conditions and weekly working hours of healthcare workers,

Submitting identity information to the systems in all public institutions to ensure that attackers who inflict violence on healthcare workers are identified,

Managers provide support to healthcare workers exposed to violence and direct them to the necessary institutions to receive psychological support,

Increasing the number of security guards in health centers and providing defense technical training,

Implementation of security systems such as X-ray, which are even in shopping malls, in health institutions, prohibiting all entrances to hospitals that can be used as a damaging attack tool, such as firearms and non-firearms, piercing and cutting tools, and tightening their controls,

Providing physical conditions (different exit door to the patient, another room where the patient can feel safe) where physicians can immediately leave the environment and feel safe in case of possible violence in places where patients and their relatives are contacted.

## ETHICS

**Ethics Committee Approval:** Since this study is a compilation article, ethics committee approval is not required and the criteria of the Declaration of Helsinki were taken into account.

## Authorship Contributions

Concept: G.A., Design: G.A., Data Collection or Processing: G.A., A.Y., F.Y.B., Analysis or Interpretation: G.A., A.Y., F.Y.B., Literature Search: G.A., A.Y., F.Y.B., Writing: G.A.

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