

DOI: 10.17986/blm.1629 Adli Tıp Bülteni 2023;28(2):151-159

# The Prevalence of Exposure to Violence Among Healthcare Professionals in Adana and Their Opinion on Violence in Health

Adana İlinde Sağlık Çalışanlarının Şiddete Uğrama Sıklığı ve Sağlıkta Şiddet Konusundaki Düşünceleri

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# ABSTRACT

**Objective:** Workplace violence is an important source of problem for employees worldwide. The present study aimed to identify the prevalence of exposure to violence among healthcare professionals, the type of violence they experienced and influencing occupational features, and to determine the healthcare professionals' opinion about the causes of violence and the potential measures to be taken against violence in health.

**Methods:** A 37-question survey was performed in 598 medical doctors and 357 healthcare assistants including nurses as well in Adana, Turkey. SPSS (Statistical Package for Social Sciences) for Windows 25.0 program was used for the statistical analysis of study data.

**Results:** Of the 955 healthcare professionals participated in the study, 48.5% were male and 51.5% were female, and 85.9% have been subjected to violence at least once in their professional lifetime. The most common type of violence was psychological or verbal attack, which stated to be most frequently committed by the patient relatives and by male gender. Male healthcare workers were exposed to statistically significantly more physical violence. There was statistically significant correlation between the number of patients healthcare professionals dealt with in a day and the rate of exposure to violence. It was found that those who had been exposed to physical violence filed a complaint more than those who had been subjected to other forms of violence.

**Conclusion:** High rates of violent behavior against healthcare workers are at worrying levels indicating that violence in health is a critical problem. Solution of this problem requires all parties', primarily the health policy makers' undertaking important tasks.

Keywords: Violence, healthcare professionals, physician, physical violence, psychological violence



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#### ÖΖ

Amaç: İşyerinde şiddet, dünya çapında çalışanlar için önemli bir sorun kaynağıdır. Bu çalışma, sağlık çalışanlarının şiddete maruz kalma sıklığını, karşılaştıkları şiddet türünü, bunları etkileyen mesleki özellikleri belirlemek ve sağlık çalışanlarının şiddetin nedenleri ve sağlıkta şiddete karşı alınabilecek önlemler hakkındaki düşüncelerini ortaya koyabilmek amacıyla yapılmıştır.

Yöntem: Adana ilinde görev yapmakta olan 598 hekim ve 357 yardımcı sağlık çalışanına ulaşılarak anket çalışması yapılmıştır. Çalışmadan elde edilen bulgular değerlendirilirken istatistiksel analizler için SPSS (Statistical Package for Social Sciences) for Windows 25.0 programı kullanılmıştır.

**Bulgular:** Çalışmamıza katılan 955 sağlık çalışanının %48,5,'i erkek, %51,5'i kadındır. Çalışmamıza katılan sağlık çalışanlarının %85,9'u meslek hayatları boyunca en az bir kez şiddete maruz kalmıştır. En sık karşılaşılan şiddet türü psikolojik ya da sözel şiddet olup şiddetin en fazla hasta yakınları ve erkek cinsiyet tarafından uygulandığı belirtilmektedir. Erkek sağlık çalışanları fiziksel şiddete maruz kaldığı bulunmuştur. Sağlık çalışanlarının bir günde ilgilendikleri hasta sayısı ile şiddete maruz kalma oranları arasında istatistiksel olarak anlamlı bir ilişki olduğu bulunmuştur. Fiziksel şiddete maruz kalanların, diğer şiddet türlerine maruz kalanlara göre daha yüksek oranda şikayetçi olduğu bulunmuştur.

**Sonuç:** Sağlık çalışanlarına yönelik şiddet oranlarının yüksekliği endişe verici düzeydedir ve sağlıkta şiddetin önemli bir sorun olduğu görülmektedir. Bu sorunun çözülebilmesi için başta sağlık politikacıları olmak üzere tüm taraflara önemli görevler düşmektedir.

Anahtar Kelimeler: Şiddet, sağlık çalışanları, hekim, fiziksel şiddet, psikolojik şiddet

# INTRODUCTION

Violence has been a part of our lives throughout the history of mankind. Although wars, terrorist attacks, murders and similar forms of violence are frequently covered in the media, many of the acts of violence are not covered in the media as they are out of sight. While 1.6 million people worldwide die annually as the result of violence, 16 million people visit hospitals due to injuries caused by violence. In other words, more than 4000 people lose their lives every day due to violent reasons (1).

In the 2002 report of the World Health Organization (WHO), violence is defined as "a situation that results or highly possible to result in wounding, death, psychological harm, development disorder or growth retardation in the individual him/herself, in another person, in a group or in the population as the result of the individual's using his/her physical strength or influence directly or as a threat against his/her own, another person, a group or the population" (2). With regard to the types of violence, they can be grossly classified into four as physical violence, psychological/verbal attack, sexual violence, and economical violence.

Acts of physical violence are the easiest to be defined. The term violence is generally used to define physical violence (3). As the consequence of intentional behaviors and actions, temporary or permanent damages can occur in the victim, which sometimes can result in death. Behaviors such as slapping, punching, kicking and strangling are the examples of physical violence. Physical violence is often directed from the "strong" to the "weak" (4).

Psychological/verbal attack is the most common type of violence encountered in daily life. It targets to harm the individual's values and ego as well as self-esteem, to frighten the individual, cause the individual to feel weak and helpless and to keep the victim under control. Discrimination, humiliation, moral coercion, and ignorance can be considered as the examples of psychological (emotional) violent behaviors (3).

The WHO defines sexual violence as; "overall actions aiming at performing a sexual act, speaking unpleasant sexual words, making overtures about sex, or using the individual for commercial purposes through sexuality, as well as overall direct or indirect sexual acts carried out by force into the victim's sexuality in the victim's own intimate area or at workplace regardless of the relationship between the victim and the perpetrator" (2).

The aim of the assailant is not only to get sexual benefit from the victim, but also the desire to control, embarrass, coerce, hurt and subjugate the victim. Usually the children, women, elderly and the individuals with physical or mental disability are the victims of sexual violence (4). Physical violence and psychological violence as well accompany the majority of the acts of sexual violence.

Economic violence, on the other hand, is the deprivation of the individual's economic freedom as well as the use of economic resources on the individual as a threat and a tool for control (4). High levels of inflation and unemployment as well as insufficient social assistance and social security facilities can be considered as the components of economic violence (5,6).

Workplace violence is a critical source of problem for the employees worldwide. Healthcare institutions are among the high-risk workplaces in terms of exposure to workplace violence. It has been determined that personnel working in health institutions vs. other workplaces are 16 times more likely to be exposed to violence. Among the acts of violence experienced at healthcare institutions, only the physical violence attracts attention, while psychological and verbal attacks are recorded less frequently. Therefore, it is known that acts of violence at healthcare institutions is in fact higher than it is seen (7). The present study aimed to identify the prevalence of exposure to violence, type of violence and influencing occupational characteristics among healthcare professionals in Adana, as well as to determine the healthcare professional's opinion on the causes of violence and the potential measures to be taken against violence in health.

# **MATERIALS and METHODS**

#### **Study Population**

In the city of Adana, there are 14 state hospitals, 5 of which are in the center, 16 private hospitals, 14 of which are in the center, and 2 university hospitals. A total of 4.455 doctors, 5.334 nurses, 1.485 midwives and 5.163 other health workers work in Adana (8).

#### **Study Design**

The present study is a cross-sectional study conducted by stratified random sampling method with 598 doctors, 229 nurses, 44 midwives and 84 other healthcare professionals working in health institutions located in Adana city center from 1 June 2019 to 31 December 2019. In the survey, incompletely filled questionnaires and healthcare professionals that did not accept to fill the questionnaire were excluded from the evaluation.

#### Design of the Questionnaire

Data collection was performed using a 37-item questionnaire, which was structured based on the samples in the literature (Annex 1). The first 11 questions inquire certain characteristics about socio-demographics (age, gender) and occupational status (profession, title, institution, working duration, department, working hours, number of assigned patients, characteristics of patient population at relevant center) of overall healthcare professionals. The questions between 11 and 29 focus on the variables about the violence that healthcare professionals are subjected to (type of violence, the last time of exposure to violence, at where and by whom the assault has been performed, reaction against violence, whether a complaint has been filed or not), and the remaining questions focus on the healthcare professional's opinion on the causes and consequences of violence, as well as on solution offers and defensive medicine.

#### Statistical Analysis

All statistical analysis was performed by using IBM SPSS (Statistical Package for Social Sciences) 20 (IBM Corp. Released 2011. Armonk, NY) program. While reporting descriptive statistics for categorical data, results were presented as n (%). Categorical data was analyzed by using chi-square test. For the risk assessment, OR or RR and confidence intervals [95% confidence interval (CI)] were reported. For all tests a value of

p<0.05 was accepted as statistically significant.

#### **Ethical Declaration**

The ethical approval for the study was obtained from the Çukurova University Clinical Research Ethics Committee (date: 08.03.2019; number: 2019/6).

#### **RESULTS**

The present survey was carried out in 955 healthcare professionals working in Adana. Of the 955 healthcare professionals participated in the present study, 48.5% were male, 51.5% female, 598 were doctor, 229 were nurse, 44 were midwife, and 84 were other healthcare professionals (paramedic, medical technician, ambulance driver). Of the doctors, 375 (62.7%) were male and 223 (37.3%) were female. Of the other healthcare professionals excluding doctors, 269 (75.4%) were female and 88 (24.6%) were male.

With regard to the distribution of healthcare professionals among the professions, it was determined that 232 (24.3%) were specialist physician, 229 (24%) were nurse, 193 (20.2%) were resident physician, and 159 (16.6%) were general practitioner. Of the specialist physicians and resident physicians, 59 have been working at the department of pediatrics, 48 have been working at the department of gynecology and obstetrics, 43 have been working at the department of internal medicine, 33 have been working at the department of general surgery, 30 have been working at the department of orthopedics, and 24 have been working at the department of family medicine. Distribution of healthcare professionals among professions is demonstrated in Table 1.

Of the 955 healthcare professionals participated in the present study, 553 (57.9%) of the healthcare professionals were exposed to violence in the last year and 820 (85.9%) had been exposed to workplace violence at least once in their professional lives. Regarding the distribution of the professions, it was determined that 538 (90.0%) of the doctors and 282 (79%) of the other healthcare professionals had been exposed to violence. A significant difference was found between doctors and other healthcare professionals in terms of exposure to violence [risk ratio (RR): 1.13; 95% CI: 1.07-1.21; p<0.001].

The present study found that 97.4% of the victims of violence had been exposed to psychological/verbal violence. The rate of psychological/verbal violence was 96.5% among male victims of violence and 98.3% among female victims of violence. Regarding the distribution of the type of psychological/verbal violence, yelling was reported by 81.2%, swearing/insulting was reported by 70.1%, threaten to be exiled was reported by 17.8%, threaten to be harmed physically was reported by 29.1%, and verbal sexual abuse was reported by 3.4% of the healthcare professionals that had been subjected to violence. The rate of exposure to physical violence was 30.1% (n=122) among

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male victims of violence, whereas it was 19.2% (n=80) among females. A significant difference was found between genders in terms of physical violence applied to healthcare professionals (RR: 1.62; 95% CI: 1.26-2.08; p<0.001). The rate of exposure to sexual violence was 4.2% in healthcare professionals. The rate of exposure to sexual violence was 7.2% (n=30) among female victims of violence, whereas it was 2.5% (n=10) among males. A significant difference was found between genders in terms of sexual violence applied to healthcare professionals (RR: 2.82; 95% CI: 1.39-5.71; p=0.003). It was determined that 13.7% (n=18) of the healthcare professionals working in a private hospital had been exposed to sexual violence at least once in their professional lives. When economic violence is examined, 12.3% of male healthcare professionals had been exposed to economic violence, which was 9.9% for females. While the rate of exposure to economic violence was 9.5% among overall healthcare professionals participated in the present study, it was 17% among those working in private hospitals/

Table 1. Distribution of healthcare professionals amongprofessions (n=955)		
Profession	n (%)	
Specialist physician	232 (24.29)	
Nurse	229 (23.98)	
Resident physician	193 (20.21)	
General practitioner	159 (16.65)	
Midwife	44 (4.61)	
112 (ambulance) personnel (paramedic, driver, technician)	59 (6.18)	
Academician	14 (1.47)	
Medical secretary	25 (2.62)	
Results were presented as n (%)		

clinics. A significant difference was found between healthcare professionals working in private hospitals/clinics and other healthcare professionals in terms of exposure to economic violence (RR: 2.09; 95% CI: 1.38-3.19; p=0.001). Exposure to the violence according to the personal characteristics were reported in Table 2.

The distribution of health workers who are exposed to violence by workplace is shown in Table 3.

The present study found that the most common source of violence is the patient relatives followed by the patients (86% and 37.4%, respectively). It was determined that 656 of assailants were male (80.1%). With regard to the assailant's characteristics defined by the healthcare professionals as the explanation of the assailant's violent behavior, 72.8% of the healthcare professionals that had been exposed to violence defined the assailant as an ordinary people, 11.8% stated that the assailant might have psychiatric problems, 9.4% stated that the assailant might have been under the influence of alcohol or drug, whereas 16.3% had no idea. The assailant's characteristics that might explain the violent behavior towards healthcare professionals are demonstrated in Table 4.

In the present study, 30.8% of the healthcare professionals, who reported exposure to violence at least once in their professional lives, stated that they filed a complaint for the violence they had been exposed to. Regarding the distribution of the professions, it was determined that 31.9% of the doctors and 28.8% of other healthcare professionals have filed a complaint; 39.6% of the victims of physical violence and 22.5% of the victims of sexual violence have filed a complaint for the violence they had been exposed to. A significant difference was found between exposure to physical and other violence types in terms of filed a complaint (RR: 1.47; 95% CI: 1.16-1.87; p=0.002). When the

Table 2. Exposure to the violence ac	cording to personal charact	eristics			
	Subjected to violence	Not subjected to violence	RR (95% CI)	р	
Doctors	538	60	1.13 (1.07-1.21)	-0.001	
Other healthcare prof.	282	75	Ref.	<0.001	
	Subjected to physical violence	Not subjected to physical violence			
Male	122	241	1.62 (1.26-2.08)	-0.001	
Female	80	412	Ref.	<0.001	
	Subjected to sexual violence	Not subjected to sexual violence			
Female	30	462	2.82 (1.39-5.71)	0.003	
Male	10	453	Ref.		
	Subjected to economic violence	Not subjected to economic violence			
Healthcare prof. working in private hospitals/clinics	26	127	2.09 (1.38-3.19)	0.001	
Other healthcare prof.	65 737 Ref.				
RR: Risk ratio, CI: Confidence interval					

reasons put forward by healthcare professionals who did not make a complaint after the violence they were exposed to were examined, 68% stated that filing a complaint would be useless, 45.6% stated that legal procedures of filing a complaint are long and exhausting, and 20.1% stated that the violence was not considered important.

Regarding distribution of the results of complaints filed by

Table 3. Distribution of the type of violence that the healthcare professionals were exposed to (n=820)		
Type of violence*	n (%)	
Yelling	666 (81.22)	
Swearing, insulting	575 (70.12)	
Threaten to physical violence	239 (29.15)	
Attack around	162 (19.76)	
Threaten to be banished	146 (17.80)	
Physical assault (bashing around, punching, slapping)	103 (12.56)	
Economic threat	67 (8.17)	
Physical assault (using a tool)	19 (2.32)	
Verbal sexual abuse	28 (3.41)	
Sexual abuse with physical contact	12 (1.46)	
Results were presented as n (%).*More than one item can be chosen for this question		

# Table 4. Distribution of the assailant's characteristics that may explain the attack according to the healthcare staff (n=820)

According to healthcare professionals, the assailant may*	n (%)	
Have psychiatric problems	97 (11.83)	
Have senile dementia/ intellectual disability	14 (1.71)	
Be under the influence of alcohol or drug	77 (9.39)	
Be under the influence of medicines	11 (1.34)	
He/she is an ordinary people 597 (72.8)		
No idea 134 (16.34)		
Results were presented as n (%).*More than one item can be chosen for this question. Seven victims of violence did not answer this question		

healthcare professionals after being exposed to violence, 50.5% of the healthcare professionals stated that they could not get a satisfactory result, whereas 13.4% stated that they got satisfactory result. Distribution of the results of the complaints filed by the healthcare professional is demonstrated in Table 5. Regarding the relationship between the number of patients that a healthcare professional examined or gave care in a day and the rate of exposure to violence, a significant difference was detected. While the healthcare professionals giving care to  $\leq 25$  patients/day were less frequently exposed to violence. healthcare professional giving care to more than 25 patients/ day were exposed to violence more frequently than their colleagues. Proportional comparison revealed that, exposure to violence were higher among healthcare professional giving care to more patients/day. Distribution of the rate of exposure to violence and number of patients that healthcare professional gave care in a day is demonstrated in Table 6.

With regard to the healthcare professional's opinion about the causes of violent behaviors; it was observed that 74.3% thought that rejection of the patients' and patient relatives' unfair requests such as unnecessary prescription or sick report enhance the violence experienced in healthcare institutions, 72.7% thought that addressing the doctors as the reason for the negativities in health system and 69.1% thought that negative

Table 5. Distribution of the results of the complaints filed by healthcare professionals (n=307)			
Result of filing a complaint	n (%)		
I got a satisfactory result	41 (13.36)		
I did not get a satisfactory result 155 (50.49)			
I regretted that I filed a complaint 19 (6.19)			
I am waiting for the result 64 (20.85)			
Other* 5 (1.63)			
Results were presented as n (%).*Other results of filing a complaint were; "they found a friend in court and dropped the case; a decision of non-prosecution was issued; I withdrew my complaint; when I charged the situation as white code, I			

found a friend in court and dropped the case; a decision of non-prosecution was issued; I withdrew my complaint; when I charged the situation as white code, I received an answer that the hospital policlinic is not considered within the scope of white code; dear prosecutors closed the files without opening them or, if opened, they have always deferred the announcement of verdict or considered the acquittal appropriate."

Table 6. The relationship between number of patients that healthcare professional give care in a day and the violence they are exposed to

chposed to					
Number of patients/day	Subjected to violence (n=820)	Not subjected to violence (n=135)	OR (95% CI)	р	
>25	603	74	2.29 (1.58-3.33)	-0.001	
≤25*	217	61	Ref.	<0.001	
>50	367	45	1.62 (1.10-2.38)	0.014	
≤50*	453	90	Ref.	0.014	
>75	207	21	1.83 (1.12-2.99)	0.010	
≤75*	613	114	Ref.	0.016	
****	25 50 1 75 1 1 (				

\*Number of patients/day <25, <50 and <75 were accepted as references and OR's were calculated, OR: Odds ratio, CI: Confidence interval

Table 7. Distribution of the healthcare professional's opinionabout the causes of violence (n=955)		
The causes of workplace violence in health according to the healthcare professionals*	n (%)	
Long waiting time for examination	461 (48.27)	
Long waiting time for laboratory analyses	294 (30.79)	
Dissatisfaction with the treatment applied	286 (29.95)	
Lack of place, equipment, personnel, etc.	388 (40.63)	
High analysis and treatment fees	134 (14.03)	
Rejection of unfair requests	710 (74.35)	
Personal reasons	314 (32.88)	
The assailant's being under the influence of medicine/alcohol/drug	261 (27.33)	
Health policies	610 (63.87)	
ddressing the doctors to be responsible for the egativities in health system 694 (72.67)		
Biased and negative influence of media	660 (69.11)	
Communication deficiencies of healthcare professionals with patients and their relatives	290 (30.37)	
Prejudice against educated people in society 407 (42.62)		
Results were presented as n (%).*More than one answer is allowed		

and biased attitude of the media about healthcare professionals enhance the violence in health. Distribution of the healthcare professional's opinion about the causes of violence in health is demonstrated in Table 7.

# DISCUSSION

People that have been exposed to workplace violence suffer from various disorders such as anger and insomnia, headache, apprehension deficiency, depression, hyperactivity, burnout, despair and fear. Serious economic losses as well occur because of reduced commitment to work, non-productiveness and sick leaves, which are common among people subjected to violence. In addition, resignation from job is encountered as the result of reduced commitment to work among employees that are consistently exposed to violence, and this also results in economic losses (9,10).

Of the 955 healthcare professionals participated in the present study, 85.9% (820) had been exposed to workplace violence at least once in their professional lives. Similar to the present study, a study carried out among doctors from Istanbul reported that 82.7% of the participants had been exposed to violence for at least once in their professional lives (11). In a study investigating violence against physicians in emergency services, it was reported that 8.1% of the participants were exposed to violence in every shift, while 28.2% were exposed to violence in almost every shift (12).

Consistent with the similar studies, 57.9% (n=553) of the healthcare professionals participated in the present study were exposed to violence in the last year. A study from Istanbul

reported that 58.4% of the doctors were exposed to violence in the last year (11). In the present study, it was determined that 90% (n=538) of the doctors and 79% (n=282) of the other healthcare professionals had been exposed to violence. With regard to the distribution of violence towards healthcare professionals according to the professions, there was significant difference between the doctors and other healthcare professionals (p<0,001). In a study conducted in Kocaeli, Çamcı ve Kutlu (13). found that 82.1% of the nurses had been exposed to violence, which was consistent with the present study. Kitaneh and Hamdan (14) carried out a study in Palestine and, similarly, they stated that 85.4% of the doctors and 77.8% of the nurses were exposed to violence in the last year.

The rate of exposure to physical violence was 30.1% (n=122) among male victims of violence, whereas it was 19.2% (n=80) among females. Similar with the present study, a study from Istanbul stated that 30.1% of male healthcare professionals and 16.4% of female healthcare professionals were exposed to physical violence (11). In Australia, Forrest et al. (15) reported that exposure to physical violence is significantly more common among male (7%) vs. female (3.8%) healthcare professionals. Higher rate of exposure to physical violence among male healthcare professionals than females can be explained by the assumption that assailants think that applying physical force to a woman they do not know is not approved by other people (16).

The present study found that 97.4% of the victims of violence had been exposed to psychological/verbal violence. The rate of psychological/verbal violence was 96.5% among male victims of violence and 98.3% among female victims of violence. The study conducted by Aydin et al. (17) comprising 48 provinces in Turkey determined that 92.6% of the female victims of violence and 87.5% of the male victims of violence had been exposed to verbal violence (17). Shi et al. (18) conducted a study among 1656 doctors from Shanghai and found that 92.7% of the participants had been exposed to verbal attack, 88.1% had been threaten to violence and 81% had been exposed to physical attack. As expected, this indicates that verbal violence is more common than physical violence.

Of the healthcare professionals participated in the present study, 4.2% had been exposed to sexual violence. Among female and male victims of violence, the rate of exposure to sexual violence was 7.2% (n=30) and 2.5% (n=10), respectively. Similar with the present study, a study conducted among healthcare professionals from Australia reported significantly higher rates of sexual violence among female healthcare professionals (10.1%) than males (2.5%) (15). Higher rates of sexual violence among female healthcare by the fact that sexual violence, because of its nature, targets women not only in health institutions but also in all sections of society. It was determined that 13.7% (18) of the healthcare

professionals working in a private hospital had been exposed to sexual violence at least once in their professional lives. A study conducted among nurses from Adana reported that 10.5% of the nurses had been exposed to verbal sexual abuse (19).

In the present study, 12.3% of male healthcare professionals had been exposed to economic violence, which was 9.9% for females. While the rate of exposure to economic violence was 9.5% among overall healthcare professionals participated in the present study, it was 17% among those working in private hospitals/clinics. The facts that salary of the healthcare professionals working in private health institutions are not paid in time/regularly, doctors failing to achieve targeted turnover are threaten to dismiss, and precarious working conditions as well are the most common examples of economic violence.

Consistent with similar studies, the present study determined that the most common source of violence is the patient relatives followed by the patients (86% and 37.4%, respectively). Wu et al. (20) conducted a study in China and reported that the patients' relatives accounted for 60.8% and the patients accounted for 33.4% of the violent behaviors. In Istanbul, likewise, Usluoğulları (11) stated that, 81.1% of the doctors that had been exposed to violence were attacked by the patients' relatives and 53.1% were attacked by the patients. Because of the social dynamics in our country, patient relatives accompany the patients to help them with overall requirements including taking queue number for examination and the analyses, as well as supporting them spiritually. It is assumed that the patients' relatives display violent behavior believing that healthcare professionals are responsible for any negativity in health system.

In the present study, 30.8% of the healthcare professionals, who reported exposure to violence at least once in their professional lives, stated that they filed a complaint for the violence they had been exposed to. In the present study, 31.9% of the doctors and 28.8% of other healthcare professionals have filed a complaint; 39.6% of the victims of physical violence and 22.5% of the victims of sexual violence have filed a complaint for the violence they had been exposed to. Similar with the studies in the literature, it is seen that the rate of filing a complaint is higher among healthcare professionals that had been subjected to physical violence. Usluoğulları (11) stated that the rate of filing a complaint is 39.2% among those exposed to physical violence in Istanbul. Another study from Canada reported the rate of filing a complaint to be 34% among healthcare professionals that had been exposed to verbal violence, 46% among those not injured after physical violence and 56% among those injured after physical violence (21). The results of many studies performed in our country or in other countries reveal that the rate of filing a complaint is low (13,14,22,23).

In the present study, of the healthcare professionals that have not filed a complaint after the violence they had been exposed to, 68% stated that filing a complaint would be useless, 45.6% stated that legal procedures of filing a complaint are long and exhausting, and 20.1% stated that the violence was not considered important. Likewise, a study from Aydın conducted by Önde (24) demonstrated that 64% of those subjected to verbal violence had not filed a complaint thinking that they would not get any benefit, whereas 23% have not filed a complaint because they considered the violence they had been subjected to unimportant.

Substantial proportion of the healthcare professionals believe that violence towards healthcare professionals cannot be overcome by filing a complaint and that the assailant will not be punished by a deterrent legal action taken as the result of the complaint. Healthcare professionals that have been constantly exposed to workplace violence believe mistakenly that violence is inherent in this profession. Although it is understandable to consider filing a complaint unnecessary because the attack is not serious, it will encourage the assailant to repeat this behavior. The assailant, who insult the healthcare professionals or threaten to violence, will repeat this behavior encouraged by the impunity and will probably take the violence to the next level. The healthcare professionals that had been exposed to violence do not want to be involved in legal procedures after filing a complaint such as testifying and dealing with lawsuit process in addition to impaired working routine because of violence, so they frequently do nothing but continue working. This may be explained by the deficiencies in legal regulations about violence in health as well as lack of healthcare professionals' education about coping with and struggling against violence.

In the present study, 155 of the healthcare professionals, who filed a complaint because of the violence they had been subjected to, stated that they got no satisfactory results for the complaint they filed and 41 stated that they got satisfactory result, whereas 19 stated that they regretted filing a complaint. Consistent with our results, Karaca (5) reported that 57.4% of the doctors that had filed a complaint did not get the impact they intended. These outcomes together with the ratio of the professionals that have not filed a complaint thinking that complaining would be useless indicate that healthcare professionals agree on a point whether they filed a complaint or not.

When we asked the healthcare professionals about the causes of violent actions in healthcare institutions, 74.3% addressed the rejection of the patients' unfair requests such as unnecessary prescription or sick report, 72.7% addressed the fact that doctors are deemed responsible for the negativities in health system, 69.1% addressed the biased negative impact of the media, 63.9% addressed the health policies, 14% addressed high analyses and treatment fees, 30.4% addressed the deficiencies in the communication skills of healthcare professionals, and

29.9% addressed dissatisfaction from given treatment. In the study conducted by Önde (24) in Aydın, the causes of violent behaviors were reported to be inadequate information by 44%, long waiting period by 37%, and the assailant's being under the effect of alcohol or substance by 24% of those exposed to physical violence. In Canada, Fernandes et al. (21) reported that 46% of healthcare professionals addressed the long waiting period, 15% addressed dissatisfaction from treatment, and 10% addressed dissatisfaction from the doctor as the causes of violent actions. In Istanbul, Usluoğullları (11) reported that 57.9% of the healthcare professionals in primary care institutions consider the rejection of the patient's unfair requests as the most common cause of violent behavior. Doctors who do not accept unfair requests or, in other words, who do not want to be a party to the crime that has been existing in our country for years and the society is accustomed to such as trying to take sick report because of missing school days or having no annual leave days left, taking medicines from pharmacy without prescription and then trying to get prescription after using the medicine, or trying to take the firearm license from the primary care units can be the victims of violence. Statements that address the doctors as the sources of problems in health system reduce the value of doctors in society. In order to enhance the view or click-through rates, media institutions can turn the health institutions and the doctors into targets by means of the news they make based only on the allegation of the patients and their relatives and launching such news as a health scandal without need for investigation.

It was determined that 47.4% (n=453) of the healthcare professionals participated in the present study have been giving care to 50 or less patients during daily working hours, whereas 12.9% (n=123) have been giving care to more than 100 patients. While the rate of exposure to violence was 78.1% among health care professionals giving care to less than 25 patients, it was 95.7% among those giving care to more than 150 patients. Exposure to violence was 2.29 times higher among healthcare professionals giving care to more than 25 patients during daily working hours as compared to those giving care to lower number of patients, whereas exposure to violence was 1.83 times higher among healthcare professionals giving care to more than 75 patients than the healthcare professional giving care to lower number of patients (p<0.01). Similar to the present study, the study carried out by Alioğlu (25) in Mersin revealed significant correlation between the average number of patients per day and verbal violence, and it was stated that doctors giving care to <50 patients/day are less commonly subjected to violence than the doctors giving care to >50 patients/day (25).

#### CONCLUSION

In our country, the patient burden in many policlinics and emergency rooms is more than physicians can handle. Economic threat of the performance system on physicians as well contributes to the physician's workload, which is already high. At least 20 minutes is required to take the patient's medical history properly, to make requests for analyses, and to inform the patient about diagnosis and procedures. Nevertheless, physicians with a high patient burden examine the patients in a much shorter time. Not sparing enough time for the patient prevents the patient and the physician from communicating properly, and the patients who are not informed sufficiently about their disease and health status because of the lack of time are doubtful about the diagnosis and the treatment given to them, and therefore, they exhibit aggressive attitudes towards healthcare professionals whom they believe are responsible for the problems they experience.

The results of the present study indicate that the workplace violence healthcare professionals are exposed to give damage not only to the healthcare professionals but also to the healthcare system. Such frequent exposure to violence among healthcare professionals impairs their interrelationship with the patients, reduces their productivity and motivation, wastes their energy that needs to be spent for public health, and most importantly, causes the patients not to be cured. In order to solve this problem, the major task falls upon the society and media as well as the ministry of health, which determines the health policies.

### Ethics

**Ethics Committee Approval:** The ethical approval for the study was obtained from the Çukurova University Clinical Research Ethics Committee (date: 08.03.2019; number: 2019/6).

Peer-review: Internally peer-reviewed.

#### **Authorship Contributions**

Concept: K.K., A.H., Design: K.K., A.H., Data Collection or Processing: K.Y., A.H., Analysis or Interpretation: K.Y., K.K., A.H., Literature Search: T.A.Ö., Writing: K.Y., T.A.Ö.

**Conflict of Interest:** No conflict of interest was declared by the authors.

**Financial Disclosure:** The authors declared that this study received no financial support.

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