

# Burnout Effects of Workplace Violence on Health Workers

## İş Yeri Şiddetinin Sağlık Çalışanları Üzerindeki Tükenmişlik Etkileri

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### ABSTRACT

**Background:** Violence against health workers; it is a condition that causes unfavourable effects in many areas such as social, emotional, psychological and quality of service. The aim of the study is to determine the risks of workplace violence and the effects of post-traumatic burnout in the victim of health workers by evaluating the awareness of violence.

**Materials and Methods:** The research was carried out with physicians and nurses working in public institutions affiliated with the Ministry of Health. The survey method was used in the study. The survey consisted of three basic sections and had a total of 37 questions. Demographic information in the first part; in the second part, the nature of the violence, the reporting of post-traumatic violence and the status of receiving professional support were questioned. In the last section, Maslach burnout inventory was included. The questionnaire was communicated to workers via their social media accounts and networks. The data was analyzed with SPSS 25 package program.

**Results:** Four hundred-fifteen health workers participated in the study. 86.9% percent of respondents said they had been exposed to violence. After the violence, 36% of employees complained and 7% received professional support. Emotional exhaustion and depersonalization were found to be significantly higher ( $p<0.001$ ) in health workers who were exposed to violence. As the age increased, scores of emotional exhaustion and depersonalization decreased and personal achievement scores increased. The emergency department was the most at risk group of burnout levels among clinical units.

**Conclusion:** Health workers are highly exposed to workplace violence. As a result, depersonalization and emotional exhaustion occur and their personal success decreases. Especially young age group health workers and emergency clinics are in the high-risk group. Awareness, sensitivity and effectiveness of the fighting violence at legal and social level should be increased. Pre-graduation medical education should also be evaluated in this context.

**Keywords:** Workplace violence, health personnel, burnout

### ÖZ

**Amaç:** Sağlık çalışanlarına yönelik şiddet; sosyal, duygusal, psikolojik ve hizmet kalitesi gibi pek çok alanda olumsuz etkiler bırakan bir durumdur. Çalışmanın amacı; iş yeri şiddetinin risklerini ve şiddet farkındalığını değerlendirerek mağdur sağlık çalışanlarında travma sonrası tükenmişliğin etkilerini saptamaktır.

**Gereç ve Yöntemler:** Araştırma Sağlık Bakanlığı'na bağlı kamu kurumlarında çalışan hekim ve hemşirelerle yürütüldü. Çalışmada anket yöntemi kullanıldı. Üç temel bölümden oluşan ankette, toplam 37 adet soru bulunmaktaydı. İlk bölümde demografik bilgiler; ikinci bölümde şiddetin niteliği, travma sonrası şiddeti bildirme ve profesyonel destek alma durumları; son bölümde Maslach tükenmişlik envanteri yer aldı. Soru formu, çalışanlara sosyal medya hesapları ve ağları üzerinden iletildi. Veriler SPSS 25 paket programı ile analiz edildi.

**Bulgular:** Çalışmaya 415 sağlık çalışanı katıldı. Katılımcıların %87'si şiddete maruz kaldığını belirtti. Şiddet sonrası çalışanların %36'sı şikayette bulundu, %7'si profesyonel destek aldı. Şiddete maruz kalmış sağlık çalışanlarında duygusal tükenme ve duyarsızlaşma anlamlı oranda yüksek ( $p<0,001$ ) bulundu. Yaş arttıkça duygusal tükenme ve duyarsızlaşma puanları düşmekte, kişisel başarı puanı ise artmaktaydı. Acil servis, klinik birimler içinde tükenmişlik boyutlarında en riskli grup idi.



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**Sonuç:** Sağlık çalışanları, iş yeri şiddetine yüksek oranda maruz kalmaktadır. Bunun sonucunda duyarsızlaşma ve duygusal tükenme meydana gelmekte, kişisel başarıları düşmektedir. Özellikle genç yaş grubu sağlık çalışanları ve acil klinikler riskli grupta yer almaktadır. Şiddete karşı farkındalık, duyarlılık, şiddetle mücadelenin yasal ve toplumsal düzeyde etkinliği artırılmalı; mezuniyet öncesi tıp eğitimi de bu kapsamda değerlendirilmelidir.

**Anahtar Kelimeler:** İş yeri şiddeti, sağlık çalışanı, tükenmişlik

## Introduction

The World Health Organization (WHO) implies violence as the intentional use of force against a person or community with a high probability of resulting in injury, death, psychological harm or developmental disability.

In recent years, the increase of all kinds of violence in the world is remarkable. Workplace violence is one of them. It is defined as any act or threat of physical violence, harassment, intimidation or other threatening disruptive behavior that occurs at the work site. Workplace violence in health sector is psychological, physical, sexual, economic etc. abuses directed by the patient, their relatives or other individuals to health workers.

Unfortunately, violence in healthcare has become a very common phenomenon. WHO reported that 1/4 of workplace violence occurs in the health sector and more than 50% of workers are victims of violence (1,2). It is emphasized that attacks against healthcare workers are more common than guards and police (3). Surgical unit staff, nurses and general practitioners are the most exposed to violence in the sector (4).

As in other cases of violence, health providers are also negatively affected by violence. Victimization manifests itself in the workers with negative expressions and causing negativities in their social and professional life. These can have a physical, psychological, emotional, social and financial impact (5). Decrease in working efficiency, increase in burnout level and depersonalization are frequently observed.

Herbert Freudenberger implies burnout as a state of exhaustion in the internal resources of the individual as a result of wear and overload. However, depersonalization is an individual's unemotional behavior towards people (6).

Violence against health workers harms not only the victim but also the people around them and the system. It is a problem that concerns all segments of society. As medical students, we observe this and witness the increase in violence in healthcare day by day. This situation leads to our concerns about medicine and to question the choice of profession. The aim of the study is to review the risks of workplace violence and violence awareness and to

determine the effects of post-traumatic burnout in victim employees.

## Material and Methods

The research was carried out with physicians and that nurses work in public institutions affiliated with the university. The survey method was used in the study. It consisted of 3 sections with 37 questions. The first part included demographic information. These were gender, age range, marital status, worker's institution profile, occupation, clinical unit and status, clinical trial times. In the second part; whether there was violence, posttraumatic complaint and professional support, the nature of the violence (verbal, physical, time period which it occurs) was questioned. In the last section, Maslach burnout inventory was included. Turkish translation of inventory was used (7). Inventory alpha coefficient; it was 0.83 for emotional exhaustion, 0.63 for depersonalization and 0.72 for personal success. A five-point Likert scale was used to evaluate the questions.

The study was carried out on healthcare workers. Patients were not included in the sample. It was clearly stated in the survey that participation was optional. The introduction and survey form were created in an internet search engine system. Workers were communicated via social media accounts and networks. The survey was launched on The Google Forms system on January 25, 2021 and terminated on March 6, 2021.

## Statistical Analysis

Data analysis was carried out using SPSS 25 package program. Frequency and percentage values were determined for qualitative variables.

Independent sample t-test was used in comparisons between qualitative variable categories containing two categories in terms of quantitative variables. One-Way ANOVA was used in comparisons between qualitative variable categories containing more than two categories in terms of quantitative variables. If there was a significant difference as a result of the One-Way ANOVA, the categories were compared in twos with the Tukey test. In the study, the p-value was considered significant if it was found to be less than 0.05.

Ethics committee approval was obtained in the study (University of Health Sciences Turkey Hamidiye Faculty of Medicine; 29.01.2021/5444), which oversees and includes patient consent.

## Results

In total, 415 health workers completed the survey. The demographic information of the participants is shown in Table 1.

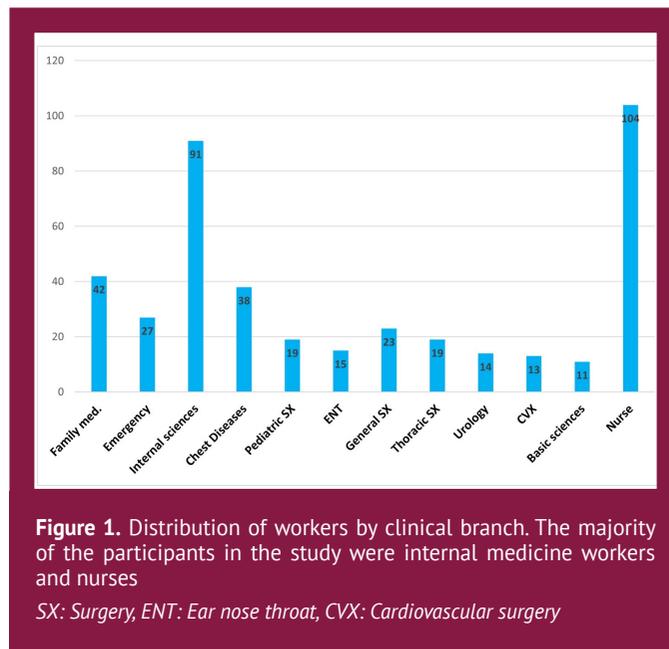
According to the profile of the health institution, 85.8% of the participants were working in the tertiary, 11.3% in the secondary and 2.9% in the primary health care institution. Internal medicine (21.9%) was the first in the distribution of physicians by clinical branch (Figure 1). Clinical distinction of nurses was not made.

In the physicians, 33 were general practitioners, 101 were assistants, 6 were chief assistants, 82 were specialists, 48 were associate professors and 41 were professors. The number of head nurses was 1 and the number of nurses was 103 (Figure 2).

It was determined that 361 (87%) health workers were exposed to violence. Types of violence and exposures were explained along with time periods (Figure 3). Five people were exposed to only physical violence during their working

life. 3 people were exposed to only physical violence in the last 5 years.

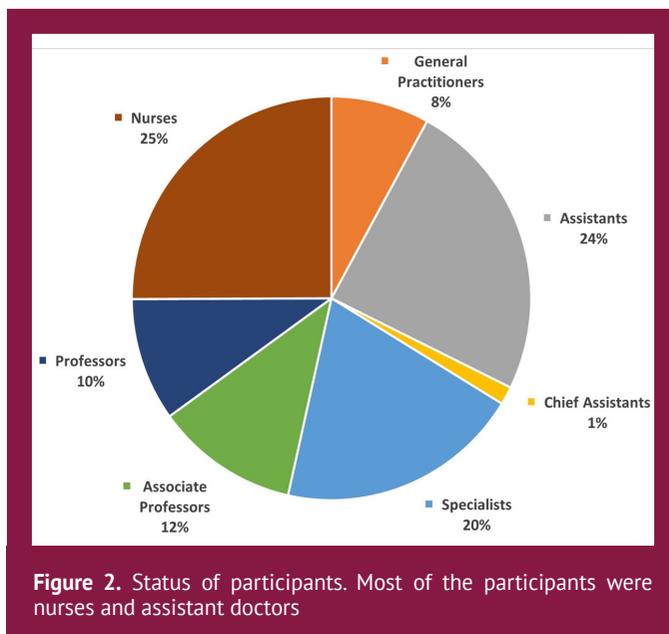
To date, 81% of the workers exposed to violence were exposed to only verbal violence, 1.3% to only physical violence and 16.8% to both verbal and physical violence. In the last 5 years, 87.4% of the workers exposed to violence were exposed to verbal violence, 0.9% to physical violence, 11.6% to both verbal and physical violence. In verbal violence, 11.8% shouting, 11.5% hostile attitude, 10.5% swearing, humiliation, threats to life and complaining to higher authorities were detected. 66.1% of workers did not want to specify the nature of the violence. It was found that



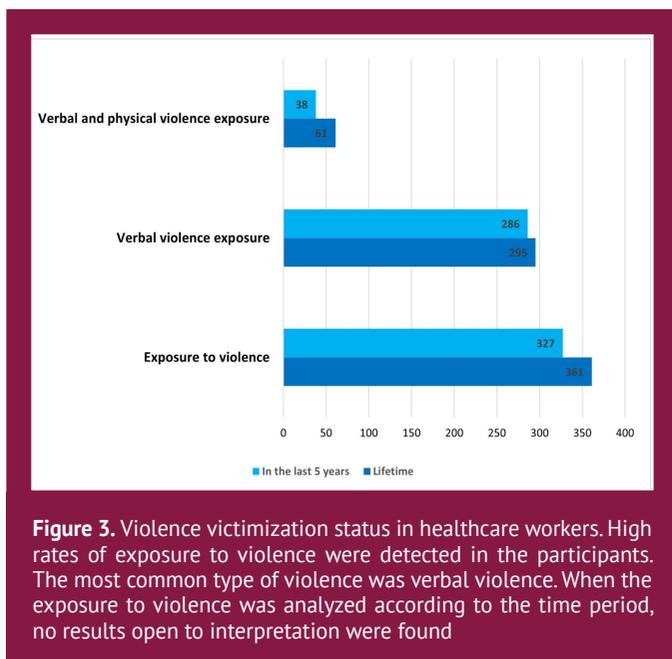
**Figure 1.** Distribution of workers by clinical branch. The majority of the participants in the study were internal medicine workers and nurses

SX: Surgery, ENT: Ear nose throat, CVX: Cardiovascular surgery

Table 1. Demographic information of participants		
	n	%
<b>Gender</b>		
Female	263	63.4
Male	152	36.6
<b>Age</b>		
20-30 years	142	34.2
31-40 years	97	23.4
41-50 years	86	20.7
51 and older	90	21.7
<b>Marital status</b>		
Married	259	62.4
Single	156	37.6
<b>Job</b>		
Nurse	103	24.8
Doctor	312	75.2
<b>Clinical work time</b>		
Less than 1 year	57	13.7
1-5 years	166	40.0
6-10 years	50	12.0
More than 10 year	142	34.2



**Figure 2.** Status of participants. Most of the participants were nurses and assistant doctors



**Figure 3.** Violence victimization status in healthcare workers. High rates of exposure to violence were detected in the participants. The most common type of violence was verbal violence. When the exposure to violence was analyzed according to the time period, no results open to interpretation were found

86.3% of them who were exposed to physical violence were victims of manual assault and/or injury.

The rate of those who witnessed any violence in their working life was 80.5% in the last 5 years.

36.2% of the victims of violence reported that they made a complaint after the attack. 7.7% of the victims received professional support after the violence.

The results of Maslach emotional exhaustion, depersonalization and personal achievement sub-dimensions in healthcare workers are shown in Table 2.

Workers who were exposed to violence had higher scores of emotional exhaustion and depersonalization than those who were not exposed to violence.

Emotional exhaustion and depersonalization scores were significantly higher in the younger age group, emergency unit workers, unmarried workers and those who had served for five years or less workers. However, independently of each other; workers who met the criteria of advanced age, being married, working longer than 10 years and being a surgical unit staff had a significantly higher personal accomplishment score.

Significant differences in burnout sub-dimensions were found in violence exposure, exposure to violence in the last 5 years or before, age group, marital status, clinical working time, filing complaints, receiving professional support and clinical unit. The findings are listed in Table 3.

## Discussion

The exposure rate of health workers to workplace violence in Turkey and around the world is in the range of

44.7-83.3% (8,9). In our study, the rate of 415 healthcare workers who were exposed to violence at least once in their lifetime was 87%.

The study found that despite a high rate of violent exposure, only 36.2% of victims reported it to the upper authority or initiated legal action. The length or weariness of the complaint process may explain this. The high level of depersonalization scores of workers who have reported violence supports this. Additionally, the sense of revenge that may occur on the opposite side at the end of the process can be deterrent to reporting violence. However, perceiving violence as part of the profession may explain the tolerance of it (10,11,12,13).

Violence against health workers has negative effects in many important areas like social, emotional, psychological, socio-economic and quality of service (5,14). However, it is being suggested that the negative effects of violence are mostly manifested in psychological and emotional areas (5). Studies shows that health workers who violence experience high rates of post-traumatic stress disorder, anxiety, discomfort, disappointment, lack of motivation, anxiety of being violent again and these effects extend to quit the job (15,16,17). Despite all this, small rate of workers apply for professional support (5). A parallel result was seen in the study. This is due to the victim's assessment of violence as a usual situation.

As showned by the research; workplace violence causes emotional burnout and depersonalization in health workers and reduces personal success of workers. Burnout caused by violence is the most important factor leading to both negative and positive defensive medicine (18).

Especially in young age group victims, the high rates of emotional burnout and depersonalization was remarkable. This is a result of relatively inexperienced health workers being at a bigger risk for violence (19). Decreased emotional exhaustion and depersonalization and increased personal achievement in the older group also support this (14,20). Older age group with more experience can be thought to manage stress better (4,14). Additionally, it can be said that the decrease in routine contact with patients in seniors reduces the risk of violence and therefore affects personal success positively.

Single health workers are reported to be more exhausted than married ones (20,21). The results of our study also support this. As a result, a family structure, which can share work-related stress and receive emotional support, affects workers positively.



**Table 2. Maslach burnout sub-dimension scores in healthcare workers**

Parameters	Emotional exhaustion	Depersonalization	Personal achievement
<b>Exposure to violence</b>			
No	1.22±0.72	0.57±0.72	3.19±0.68
Yes	<b>2.06±0.93</b>	<b>1.27±0.91</b>	3.03±0.56
<b>Violence exposure in the last 5 years</b>			
No	1.34±0.81	0.67±0.70	3.19±0.67
Yes	2.11±0.91	1.31±0.92	3.00±0.54
<b>Violence exposure before the last 5 years</b>			
No	2.00±0.94	1.22±0.93	3.03±0.57
Yes	1.50±0.87	0.77±0.66	3.20±0.63
<b>Gender</b>			
Female	2.11±0.86	1.20±0.86	3.01±0.56
Male	1.97±1.04	1.39±0.99	3.07±0.57
<b>Age range</b>			
20-30 years old	<b>2.39±0.77</b>	<b>1.63±0.92</b>	2.84±0.52
31-40 years old	2.05±0.97	1.27±0.95	2.96±0.55
41-50 years old	1.92±0.98	1.01±0.75	<b>3.17±0.56</b>
51 years and older	1.67±0.87	0.91±0.76	<b>3.25±0.52</b>
<b>Marital status</b>			
Married	1.96±0.89	1.12±0.81	<b>3.05±0.53</b>
Single	<b>2.23±0.96</b>	<b>1.52±1.01</b>	2.98±0.60
<b>Profession</b>			
Nurse	2.18±0.79	1.00±0.75	3.10±0.51
Doctor	2.02±0.96	1.35±0.94	3.00±0.57
<b>Clinical trial time</b>			
Less than 1 year	2.08±0.88	<b>1.46±0.82</b>	2.86±0.57
1-5 years	<b>2.27±0.92</b>	<b>1.51±1.00</b>	2.93±0.57
6-10 years	1.95±1.00	1.09±0.87	<b>3.07±0.50</b>
More than 10 years	1.82±0.86	0.96±0.71	<b>3.18±0.53</b>
<b>Complaint status</b>			
No complaints	2.00±0.90	1.18±0.89	3.02±0.54
Made a complaint	2.16±0.97	1.42±0.92	3.03±0.59
<b>Professional support</b>			
Did not apply	2.04±0.92	1.25±0.89	3.04±0.55
Applied	2.38±1.04	1.57±1.15	2.67±0.56
<b>Clinical units</b>			
Internal units	2.08±0.96	1.33±0.94	2.94±0.60
Emergency	<b>2.64±0.83</b>	<b>2.14±1.00</b>	2.88±0.46
Surgical units	1.67±0.86	1.13±0.75	<b>3.20±0.50</b>

**Table 3. Maslach burnout subdivision p-values in healthcare workers**

Parameters	p		
	Emotional exhaustion	Depersonalization	Personal achievement
Exposure to violence	<0.001	<0.001	0.058
Violence exposure for the last 5 years	<0.001	<0.001	0.017
Violence exposure before 5 years	0.001	<0.001	0.068
Gender	0.176	0.060	0.324
Age	<0.001	<0.001	<0.001
Marital status	0.007	<0.001	0.252
Profession	0.187	0.001	0.167
Clinical trial time	0.001	<0.001	0.001
Complaint status	0.111	0.014	0.859
Request for professional support	0.142	0.157	0.008
Clinical unit	<0.001	<0.001	0.004

It is known that women are more targets of violence than men (1,22). However, the study did not find any significant difference in the negative effects of violence, contrary to expectations. In this case, it should be discussed that violence does not recognize sexism.

Emotional exhaustion and depersonalization are higher in emergency room workers compared to other clinics; associated with their greater exposure to all forms of violence (4,15,23). Surgical units are the group with the lowest emotional exhaustion and depersonalization. Likewise, the group with the highest personal success is the surgical unit. However, in surgery, which is one of the places where violence is most common (15,24), workers burnout is expected to be higher. Their frequent encounters with workplace violence can help them manage pressure and stress better.

### Study Limitations

There are some limitations in the research. The survey could not be carried out face-to-face due to the conditions of the lockdown of the Coronavirus disease-2019 pandemic. The online survey spread through the participants' social media accounts. Therefore, the true size of the research universe is unclear.

### Conclusion

As a result, health workers are highly exposed to workplace violence. Consequently, depersonalization and emotional exhaustion occur and their personal success decreases. Especially, young age health and emergency workers are in the high-risk group. All forms of violence turns into a chronic progressive form that is difficult to deal with. Those who work to raise awareness, sensitivity and fight against violence should be encouraged. The fight

against violence should include pre-graduation medical education as well as legal and social level.

### Ethics

**Ethics Committee Approval:** Ethics committee approval was obtained in the study (University of Health Sciences Turkey Hamidiye Faculty of Medicine; 29.01.2021/5444).

**Informed Consent:** Informed consent was obtained.

**Peer-review:** Externally peer-reviewed.

### Authorship Contributions

Concept: N.B.B., Design: Ö.S.E., Data Collection or Processing: Z.K., Ö.S.E., Analysis or Interpretation: K.N.B., H.N.Ü., Literature Search: B.Ç., Z.K., M.Ç., N.B.B., Ö.S.E., Writing: B.Ç., Z.K., M.Ç., N.B.B., Ö.S.E., H.N.Ü.

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

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