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Violence experiences and solution approaches healthcare workers in emergency department

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Abstract

The study aimed to evaluate the prevalence of violence against healthcare workers in emergency departments and identify solution approaches. The research, utilizing a descriptive design, was conducted with 149 health workers employed in the emergency units of a research hospital. Data were collected using a survey form constructed based on the literature. Participants' 92.6% experienced some form of violence, with 92.8% of these individuals subjected to verbal abuse. The main causes of violence were identified as the perpetrator justifying their behaviour (42.0%), refusal of requests such as prescriptions or reports (50.0%), and dissatisfaction with treatment (41.3%). 40.6% of health workers filed a code white report, and 36.2% stated that no action was taken against the aggressor.83.9% of health workers indicated that legislation, 70.5% code white, and 55.0% reported inadequate security measures. Health workers suggested implementing deterrent penalties (18.1%) and increasing security measures (17.4%) to reduce violence. A significant difference was found between professional experience and exposure to violence, as well as the types of violence encountered. Additionally, an important significant difference was identified between the profession and the gender of the perpetrator of violence. While physicians and other professional groups are generally subjected to violence by men, nurses and midwives experience violence from both women and men, as well as both genders together ($p<0.05$). The study found that emergency department health workers face high rates of violence and existing measures are inadequate. In this context, it is recommended to review existing legal regulations, ensure continuous and visible security, and enhance the effectiveness of code white protocols.

Keywords: Emergency departmert, health workers, violence, safety

Introduction

Violence indicates the erosion or denial of fundamental human rights such as personal safety and suitable working condition [1]. Unfortunately, violence against healthcare workers continues to be an increasingly prevalent occupational threat worldwide. Healthcare workers are at risk of being both perpetrators and recipients of violence, as well as potential targets. Numerous published studies emphasize the endemic nature of this danger, highlighting its adverse effects on healthcare workers and services [2-4].

Acts of violence may encompass a wide range of behaviours, including physical assault, verbal harassment, threats, defamation, mobbing, sexual harassment, lateral violence, and workplace bullying [2,5]. The consequences of violence include physical injuries, symptoms, psychological and psychosocial distress, decreased resilience, and reduced quality of life. These outcomes negatively impact health personnel' service delivery, health outcomes, job satisfaction, and motivation to remain in their profession [2,3,6].

Healthcare workers may encounter acts of violence in all workforce environments [7]. However, emergency departments pose significant challenges for workplace safety and health of healthcare workers worldwide due to their distinct differences

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from standard healthcare settings. In emergency departments, numerous unforeseen stressors, both acute and chronic, are encountered. This situation is compounded by the presence of a more heterogeneous patient population, including substance abuse, poisoning, traumas, and psychiatric comorbidities. Increased emergency department visits bring challenges, such as prolonged waiting times and heightened stress factors [6-8]. All these challenges contribute to increasing the causes and diversity of acts of violence against healthcare workers [8-10].

A systematic review and meta-analysis determined the prevalence of violence against healthcare workers to be 70.9% in Australia, 67.3% in North America, 64.9% in Asia, 59.2% in Africa, and 48.1% in Europe. The one-year prevalence of non-physical violence among healthcare workers globally was found to be 42.5%. The most common form of non-physical violence was verbal abuse at 57.6%, followed by threats at 33.2% and sexual harassment at 12.4%. The prevalence of non-physical violence was highest in emergency departments at 62.3%. The one-year prevalence of physical violence among healthcare workers globally was identified as 24.4% [5]. According to data from studies conducted in Türkiye, 68% of healthcare professionals working in emergency departments have experienced violence in the past year. It was found that 100% of these healthcare professionals were subjected to verbal/psychological violence, 4.2% to physical violence, and 1.4% to sexual violence [11]. Furthermore, another study in Türkiye revealed that 90% of workers experienced workplace violence at least once, and 94.4% encountered verbal abuse, including insults, yelling, threats, and swearing [12]. Numerous studies published in the literature indicate that the frequency of violent incidents against healthcare workers in emergency departments is significantly high both globally and in Türkiye. These studies emphasize that violent incidents are most commonly directed towards healthcare workers such as nurses and doctors [12-16]. In this context, the use of a violence risk screening tool tailored specifically for emergency department settings could be beneficial. Including the frequency of restraints, high-risk interventions, and situational risks in the screening tool, along with evaluating risk factors such as a history of violence, cognitive impairments, and irritability, is considered helpful in preventing violence [17].

Healthcare workers are fundamental components of the healthcare system, and the effectiveness, efficiency, and quality of healthcare systems in countries are directly related to healthcare workers [5]. Therefore, it is of vital importance to take measures against violent incidents targeting healthcare workers and to improve working conditions [18]. Insufficient tolerance to stop or reduce violence, lacking incident reporting mechanisms, low reporting rates, and ineffective policies contribute to the inability to prevent or mitigate violence, leading to the continued escalation of the problem [2-4].

As highlighted in the literature review above, incidents of violence against healthcare workers are on the rise globally and in Türkiye. Emergency departments, in particular, are frequently the settings where such incidents occur most often. Therefore, it is crucial for emergency healthcare workers to continue sharing their experiences of violence and discussing these incidents to provide a broader perspective that can help prevent future occurrences [19]. This study aims to evaluate the incidents of violence experienced by emergency department workers and the solution approaches to address them. Reducing or preventing acts of violence requires a comprehensive understanding of the severity of the situation and emphasizing its importance. This can enhance the awareness of the public and policymakers. Such awareness is critical to protecting the rights of emergency department workers, reducing their perception of occupational threats, and thereby preserving and maintaining public health. This study aims to comprehensively examine the acts of violence faced by emergency department workers and evaluate effective approaches to addressing these acts. For this purpose, the following questions have been addressed:

- What is the frequency of violence exposure among healthcare workers in emergency departments, and what is the most common type of violence?
- What are the primary reasons for the exposure of emergency healthcare workers to violence?
- What strategies and recommendations exist to prevent violence against emergency healthcare workers?

Material and Methods

Study Design and Participants

In this research, an exploratory descriptive design was employed. The study was carried out among healthcare workers who were employed in adult and pediatric emergency departments of a research hospital located in Türkiye. In the study, data were collected from a total of 149 healthcare workers in the emergency department, including physicians, resident physicians, nurses, midwives, health officers, secretaries, and patient care staff who volunteered and completed the data collection forms in full. Healthcare workers who were on leave, such as maternity leave, unpaid leave, or annual leave, and thus not actively working during the data collection period, were excluded from the study. Data were collected through face-to-face interviews that were conducted between September and October of 2022.

Data Collection

The 'Information Form' created based on researcher experiences and literature review was utilized for data collection. The data for the study were collected through face-to-face interviews. The purpose of the research was explained to the participants, and verbal consent was obtained from them. Participants who

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expressed a willingness to participate were ensured to fill out the questionnaire completely. For shift workers, the departments were visited after shift change hours. Additionally, for participants who expressed a desire to participate but could not immediately fill out the questionnaire due to workload, surveys were left with clinical supervisors and in rest areas. Completed surveys were collected from clinical supervisors and rest areas.

Information form; the form consists of 29 questions that cover the socio-demographic characteristics of individuals, such as gender, age, and profession; experiences of violence, including the type of violence, the perpetrator, the location of the incident, responses to the violence, and the psychological impact of the violence. Additionally, there is one open-ended question aimed at identifying solution approaches to prevent or reduce violence [5-7,10,20-25].

Data Analysis

The data collected from the study underwent analysis using the Statistical Package for the Social Sciences (IBM SPSS Corp., Armonk, NY, USA) version 25.0. The normal distribution of the data was confirmed using the Shapiro-Wilk test. The analysis involved reporting descriptive statistics such as frequency, percentage, mean, standard deviation, minimum, and maximum. Differences between groups were compared using the chi-square test, and a P-value of less than 0.05 was considered statistically significant.

Ethical Consideration

This study was approved by the İnönü University Non-Interventional Clinical Research Ethics Committee (Decision Number: 2022/3753). Institutional permission was obtained from the hospital where the research was conducted. Verbal consent was obtained from participants to participate in the research. The study was conducted in accordance with the Helsinki Declaration.

Results

The age of the participants ranged from 21 to 54 years old, with a mean age of 33.32±7.613. 53.7% were male, and 53% were nurses or health officers. Among them, 35.6% had professional experience of 11 years or more, and 57.7% worked an average of 8-12 night shifts per month (Table 1).

It was determined that 92.6% of the participants experienced violence, with 92.8% subjected to verbal violence, 43.5% to psychological violence, 36.2% to physical violence, and 4.3% to sexual violence. Additionally, it was found that 41.7% of the participants experienced 7 or more violent incidents. When the violent experiences of emergency department workers were examined, no statistically significant difference was found between gender, profession, average number of shifts per month and exposure to violence, encountered types of violence, and number of violent incidents ($p>0.05$). Furthermore, there was no statistically significant difference between the number of violent incidents and professional experience ($p>0.05$). However, a significant difference was found between professional experience and exposure to violence, as well as the encountered types of violence ($p<0.05$; Table 2).

When the experiences of emergency department workers regarding the most recent violent incident they were exposed to were examined, no statistically significant difference was found between the perpetrator of violence, gender of the perpetrator, location of violence, and time interval of violence and gender, professional experience, and average number of shifts per month ($p>0.05$). Additionally, there was no statistically significant difference between the perpetrator of violence, location of violence, and time interval of violence and professional experience ($p>0.05$). However, a significant difference was observed between the profession and the gender of the perpetrator of violence ($p<0.05$; Table 3).

Emergency healthcare workers indicated that the main reasons for violence were the perpetrator justifying their behavior (42.0%), refusal of requests such as treatment, prescription, and report (50.0%), perceived neglect (37.7%), dissatisfaction with treatment (41.3%), and dissatisfaction with overall healthcare policies (33.3%). However, emergency department workers stated that high examination and treatment costs (97.8%), receiving bad news (92.0%), deficiencies in facilities, equipment, and personnel (81.9%), poor communication (81.2%), being under the influence of alcohol and drugs (78.3%), excessive workload (76.8%), and long waiting times (70.3%) were not reasons for violent incidents. 83.9% of emergency healthcare workers expressed that legislation to prevent violence in healthcare, 70.5% indicated the white code system, and 55.0% mentioned security measures in the workplace as insufficient. Emergency healthcare workers suggest implementing deterrent punitive measures (18.1%) and increasing security measures (17.4%) to reduce violent incidents (Table 4).

41.3% of emergency service workers continued their work without responding when exposed to violence, while 40.6% reported the incident using the white code system. 36.2% of emergency service workers stated that no sanctions were applied to the perpetrator, while 13.0% mentioned receiving verbal warnings. 81.2% of emergency healthcare workers knew where to seek help when exposed to violence, and 50.0% indicated that a white code report was made in the event of a violent incident. 76.8% of emergency service workers stated that the violent incident they encountered hindered their work, 47.8% considered quitting their job after experiencing violence, 85.5% returned to work after the violence, 48.6% mentioned that security personnel were not present at the scene on time, and 50.7% did not feel safe even after the white code was activated (Table 5).

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Table 1. The socio-demographic characteristics of emergency department workers (n=149)

Demographic variables	Characteristics	n	(%)
Mean age = 33.32±7.613 (Min=21, Max=54)			
Gender	**Female**	69	46.3
	Male	80	53.7
Profession	**Nurse/health officer**	79	53.0
	Doctor	30	20.1
	Other#	40	26.8
Professional experience	**0-1 years**	20	13.4
	1-5 years	35	23.5
	6-10 years	41	27.5
	11 years and above	53	35.6
Average monthly shifts*	**1-4 shifts**	28	18.8
	7 shifts or fewer	22	14.8
	8-12 shifts	86	57.7
	13 shifts and above	13	8.7

ATT, secretary, patient care assistant, * Shifts are scheduled from 08:00-16:00, 16:00-24:00, and 16:00-08:00

Table 2. Information on violence experiences of emergency department workers (n=149)

Variables		Victims of violent n (%)	Types of encountered violent n (%)				Number of violent incidents n (%)			
		Yes	**Physical**	**Verbal**	**Sexual**	**Psychological**	**I don't know**	**1-3 times**	**4-7 times**	**7 times**
Total values	**136 (92.6)**	50 (36.2)	128 (92.8)	6 (4.3)	60 (43.5)	27 (19,6)	40 (29.0)	14 (10.1)	57 (41.3)	
Gender	**Female**	64 (92.8)	18 (28.1)	57 (89.1)	4 (6.3)	31 (48.4)	13 (20,3)	20 (31.3)	6 (9.4)	25 (39.1)
	Male	72 (90.0)	32 (43.2)	71 (95.9)	2 (2.7)	29 (39.2)	14 (18,9)	20 (27.0)	8 (10.8)	32 (43.2)
	X^2	0.353	3.395	2.419	1.038	1.194		0.460		
	P	0.553	0.065	0.187	0.416	0.274		0.928		
Profession	**Nurse/health officer**	73 (92.4)	24 (32.9)	67 (91.8)	6 (8.2)	36 (49.3)	17 (23.3)	15 (20.5)	9 (12.3)	17 (23.3)
	Doctor	25 (83.3)	8 (29.6)	26 (96.3)	0	9 (33.3)	7 (25.9)	11 (40.7)	1(3.7)	7 (25.9)
	Other #	38 (95.0)	18 (47.4)	35 (92.1)	0	15 (39.5)	3(7.9)	14 (36.8)	4 (10.5)	3 (7.9)
	X^2	3.200	2.905	0.631	5.585	2.391		10.175		
	P	0.202	0.234	0.730	0.061	0.303		0.117		
Professional experience	**0-1 years**	15 (75.0)	4 (23.5)	15 (88.2)	0	5 (29.4)	6 (35.3)	8 (47.1)	0	3 (17.6)
	1-5 years	33 (94.3)	10 (30.3)	30 (90.9)	2 (6.1)	19 (57.6)	6 (18.2)	9 (27.3)	3 (9.1)	15 (45.5)
	6-10 years	41 (100.0)	10 (24.4)	38 (92.7)	2 (4.9)	14 (34.1)	8 (19.5)	12 (29.3)	8 (19.5)	13 (31.7)
	11 years and above	47 (88.7)	26 (55.3)	45 (95.7)	2 (4.3)	22 (46.8)	7 (14.9)	11 (23.4)	3 (6.4)	26 (55.3)
	X^2	11.418	11.589	1.309	1.034	5.703		16.715		
	P	**0.010**	**0.009**	0.727	0.793	0.127		0.053		
Average monthly shifts	**1-4 shifts**	26 (92.9)	10 (38.5)	23 (88.5)	1 (3.8)	11 (42.3)	3 (11.5)	4 (15.4)	4 (15.4)	15 (57.7)
	7 shifts or fewer	22 (100.0)	7 (31.8)	19 (86.4)	2 (9.1)	10 (45.5)	6 (27.3)	8 (36.4)	4 (18.2)	4 (18.2)
	8-12 shifts	76 (88.4)	27 (34.6)	74 (94.9)	2 (2.6)	31 (39.7)	15 (19.2)	25 (32.1)	6 (7.7)	32 (41.0)
	13 shifts and above	12 (92.3)	6 (50.0)	12 (100.0)	1 (8.3)	8 (66.7)	3 (25.0)	3 (25.0)	0	6 (50.0)
	X^2	3.118	1.314	3.507	2.261	3.118		12.645		
	P	0.374	0.726	0.320	0.520	0.374		0.179		

ATT, secretary, patient care assistant, X^2; Chi-square

Table 3. Information on the latest violence experienced by emergency department workers (n=149)

			Gender n (%)		Profession n (%)			Professional experience n (%)				Average monthly shifts n (%)			
		n (%)	Female	Male	Nurse/ health officer	Doctor	Other #	0-1 years	1-5 years	6-10 years	11 years and above	1-4 shifts	7 shifts or fewer	8-12 shifts	13 shifts or above
Perpetrator of the violence	Patient	20 (14.5)	10 (15.6)	10 (13.5)	11 (15.1)	2 (7.4)	7 (18.4)	1 (5.9)	4 (12.1)	7 (17.1)	8 (17.0)	4 (15.4)	2 (9.1)	14 (17.9)	0
	Patient's relative	69 (50.0)	34 (53.1)	35 (47.3)	37 (50.7)	14 (51.9)	18 (47.4)	8 (47.1)	17 (51.5)	25 (61.0)	19 (40.4)	9 (34.6)	14 (63.6)	38 (48.7)	8 (66.7)
	Colleague	1 (0.7)	1 (1.6)	0	1 (1.4)	0	0	1 (5.9)	0	0	0	0	1 (4.5)	0	0
	Hospital management	3 (2.2)	2 (3.1)	1 (1.4)	2 (2.7)	0	1 (2.6)	0	2 (6.1)	0	1 (2.1)	1 (3.8)	0	1 (1.3)	1 (8..3)
	Patient and their relative together	45 (32.6)	17 (26.6)	28 (37.8)	22 (30.1)	11 (40.7)	12 (31.6)	7 (41.2)	10 (30.3)	9 (22.0)	19 (40.4)	12 (46.2)	5 (22.7)	25 (32.1)	3 (25.0)
	X^2		3.357			3.753			16.705				16.388		
	P		0.524			0.879			0.161				0.174		
Gender of the perpetrator	Female	22 (15.9)	13 (20.3)	9 (12.2)	17 (23.3)	2 (7.4)	3 (7.9)	3 (17.6)	6 (18.2)	9 (22.0)	4 (8.5)	3 (11.5)	6 (27.3)	11 (14.1)	2 (16.7)
	Male	82 (59.4)	32 (50.0)	50 (67.6)	35 (47.9)	18 (66.7)	29 (76.3)	10 (58.8)	17 (51.5)	24 (58.5)	31 (66.0)	11 (42.3)	13 (59.1)	51 (65.4)	7 (58.3)
	Female and male together	34 (24.6)	19 (29.7)	15 (20.3)	21 (28.8)	7 (25.9)	6 (15.8)	4 (23.5)	10 (30.3)	8 (19.5)	12 (25.5)	12 (46.2)	3 (13.6)	16 (20.5)	3 (25.0)
	X^2		4.448			10.661			4.274				10.514		
	P		0.108			0.031			0.640				0.105		
Location where the violence occurred	Waiting room	7 (5.1)	1 (1.6)	6 (8.1)	2 (2.7)	1 (3.7)	4 (10.5)	0	3 (9.1)	2 (4.9)	2 (4.3)	0	3 (13.6)	2 (2.6)	2 (16.7)
	Examination/ treatment room	106 (76.8)	50 (78.1)	56 (75.7)	57 (78.1)	24 (88.9)	25 (65.8)	14 (82.4)	22 (66.7)	31 (75.6)	39 (83.0)	20 (76.9)	13 (59.1)	65 (83.3)	8 (66.7)
	Corridor	14 (10.1)	7 (10.9)	7 (9.5)	9 (12.3)	1 (3.7)	4 (10.5)	1 (5.9)	6 (18.2)	5 (12.2)	2 (4.3)	4 (15.4)	4 (18.2)	4 (5.1)	2 (16.7)
	Counter	6 (4.3)	3 (4.7)	3 (4.1)	4 (5.5)	0	2 (5.3)	1 (5.9)	1 (3.0)	2 (4.9)	2 (4.3)	0	2 (9.1)	4 (5.1)	0
	Staff room	4 (2.9)	3 (4.7)	1 (1.4)	1 (1.4)	1 (3.7)	2 (5.3)	1 (5.9)	1 (3.0)	1 (2.4)	1 (2.1)	1 (3.8)	0	3 (3.8)	0
	Outside the hospital	1 (0.7)	0	1 (1.4)	0	0	1 (2.6)	0	0	0	1 (2.1)	1 (3.8)	0	0	0
	X^2		5.047			11.169			9.749				23.197		
	P		0.405			0.345			0.835				0.080		
Time interval of the violence	During shift	72 (52.2)	40 (62.5)	32 (43.2)	39 (53.4)	13 (48.1)	20 (52.6)	9 (52.9)	15 (45.5)	21 (51.2)	27 (57.4)	22 (84.6)	10 (45.5)	34 (43.6)	6 (50.0)
	During duty	96 (69.6)	37 (57.8)	59 (79.7)	50 (68.5)	18 (66.7)	28 (73.7)	10 (58.8)	25 (75.8)	25 (61.0)	36 (76.6)	13 (50.0)	14 (63.6)	59 (75.6)	10 (83.3)
	Off duty	1 (0.7)	0	1 (1.4)	0	1 (3.7)	0	1 (5.9)	0	0	0	0	0	1 (1.3)	0
	X^2		0.460			0.451			4.050				7.501		
	P		0.928			0.798			0.256				0.058		

ATT, secretary, patient care assistant

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Table 4. Emergency department staff views on violence (n=149)

Variables	Characteristics		n	(%)
Causes of violent incidents*	Perceiving one's own behavior as justified	Yes	58	42.0
		No	80	58.0
	Rejecting unreasonable demands (for treatment, prescription, reports, etc.)	Yes	69	50.0
		No	69	50.0
	Feeling neglected due to illness psychology	Yes	52	37.7
		No	86	62.3
	Dissatisfaction with treatment	Yes	57	41.3
		No	81	58.7
	Dissatisfaction with overall health policies	Yes	46	33.3
		No	92	66.7
	Poor communication, misunderstanding	Yes	26	18.8
		No	112	81.2
	Excessive workload	Yes	32	23.2
		No	106	76.8
	High costs of examinations and treatments	Yes	3	2.2
		No	135	97.8
	Insufficient facilities, equipment, and staff	Yes	25	18.1
		No	113	81.9
	Long waiting times	Yes	41	29.7
		No	97	70.3
	Being under the influence of alcohol or drugs	Yes	30	21.7
		No	108	78.3
	Receiving bad news	Yes	11	8.0
		No	127	92.0
Perceiving legislation on preventing violence in healthcare as sufficient		Yes	24	16.1
		No	125	83.9
Perceiving the white code system as sufficient		Yes	44	29.5
		No	105	70.5
The presence of any measures against violence in the workplace		Yes	64	43.0
		No	85	57.0
Perceiving security measures at the workplace as sufficient		Yes	21	14.1
		No	82	55.0
		Partially	46	30.9
Measures recommended for reducing violence	No suggestions		51	34.5
	Education- Public awareness campaigns		14	9.5
	Implementation of deterrent penalties, enforcement of punitive measures		27	18.1
	Changes in healthcare policies		13	8.8
	Implementation and enhancement of adequate security measures		26	17.4
	Restriction of patient visitors/companions		4	2.7
	Healthcare services should be made fee-based or access should be restricted for perpetrators of violence		13	8.7

*Multiple selections were allowed in this question

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Table 5. Emergency department staff's actions in case of violence

Variables	Characteristics		n	(%)
The action taken when exposed to violence	I continued my work without responding		57	41.3
	I responded with violence		13	9.4
	I reported it using the "white code" system		56	40.6
	I responded verbally		12	8.7
The fate of the assailant	Nothing was done		50	36.2
	A verbal warning was issued		18	13.0
	It was reported to the police		15	10.9
	The patient was discharged		8	5.8
	Security intervened		16	11.6
	A lawsuit was filed		15	10.9
	I don't know		16	11.6
Knowing where to report when exposed to violence		Yes	121	81.2
		No	28	18.8
Considering quitting the job after experiencing violence		Yes	66	47.8
		No	72	52.2
Was a white code report made in the violence incident?		Yes	69	50.0
		No	69	50.0
The violence incident hindered me from doing my job		Yes	106	76.8
		No	32	23.2
Ability to return to the job after the violence incident		Yes	118	85.5
		No	20	14.5
The presence of security guards at the scene on time		Yes	71	51.4
		No	67	48.6
Feeling safe after the white code was issued		Yes	68	49.3
		No	70	50.7

Discussion

Violence remains a complex and serious issue in the healthcare field. In this study, it was found that 92.6% of emergency service workers have been repeatedly exposed to one or more types of violence, including verbal, psychological, physical, or sexual violence. Particularly, the most common types of violence encountered by the workers are verbal violence (92.8%), psychological violence (43.5%), and physical violence (36.2%). Research in the literature indicates that incidents of violence against emergency healthcare workers are widespread globally, with verbal violence being particularly prevalent [10,22,25-27]. Aljohani et al. [10] conducted a systematic review and found that out of 9072 violence incidents in the emergency department, 72.5% were verbal violence, 18.1% were physical abuse, and 9.5% involved persistent harassment and sexual harassment. Studies by Davey et al. [28] and Iqbal et al. [20] in the literature also demonstrate that healthcare workers are most commonly confronted with physical violence. The exposure of emergency service staff to verbal and physical violence varies significantly across studies. These findings underscore the severity, complexity, and diversity of violence in emergency departments. Furthermore, it indicates that effective intervention strategies have not yet been developed to ensure the safety and well-being of healthcare workers. These findings underscore the need to address violence as a serious and enduring issue in the healthcare sector.

Liu et al. [5] reported in their meta-analysis that incidents of violence against healthcare workers show variability in terms of gender, workplace, timing of violence occurrence, differences across professions, prevalent types of violence, and associated risk factors. In our study, no statistically significant difference was observed between exposure to violence, encountered types of violence, and incidents of violence and gender, profession, and average monthly number of shifts. Binmadi and Alblowi [29] report variable findings regarding the relationship between gender and exposure to violence in their systematic review. The

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study demonstrates differing outcomes in violence cases based on gender, indicating that women may experience more violence than men, men may experience more violence than women, or there may be no significant difference between them. Carey and Hendricks [30] indicate that men have higher rates of intentional injury related to violence compared to their female counterparts, while Habib et al. [31] report that men experience more physical violence and abuse, whereas women are more likely to experience verbal abuse. Our research revealed a significant difference between professional experience and exposure to violence, as well as the types of violence encountered. Ewen et al. [32] found no association between physical and verbal violence and professional experience. However, studies by Iqbal et al. [20] and Carey and Hendricks [30] showed that individuals with less experience and younger age groups are more likely to encounter violent incidents. These contradictory findings highlight the complexity of violence and the influence of various factors. It is believed that increasing professional experience leads to a numerical increase in the frequency and types of encountered violence incidents. On the other hand, inexperienced and young workers may not have adequately developed crisis management and coping skills, and their efforts to become professionals can make managing the process more difficult. As a result, they are thought to be at greater risk of violence. Additionally, it should be noted that professional experience enhances crisis management and coping skills in challenging situations.

In our study, when examining findings related to the most recent exposure to violence, it is noteworthy that there is a significant difference only between the profession and the gender of the perpetrator of violence. Accordingly, it was found that those who perpetrate violence against nurses/midwives/health officers are independent of gender, whereas it was determined that men predominantly perpetrate violence against doctors and other healthcare workers. The predominance of nurses and midwives, who often interact closely with patients, is thought to potentially make them vulnerable. Similarly, another study has determined that the majority of violence is perpetrated by men, with a minority perpetrated by women [20]. In our study, it was found that incidents of violence are predominantly carried out by patients' relatives, which is consistent with other studies in the literatüre [25,28]. Additionally, our research identified that most incidents of violence occur during shifts or rotations. The prevalence of violence perpetrated by patient relatives suggests the need for strategies and security measures directed towards them in emergency department settings. Additionally, our study revealed that most incidents of violence occurred during shifts. Consistent with our study, Quinn and Koopman [33] have determined that the frequency of violent incidents is higher during late evening and early morning hours. These findings suggest that late evening and early morning hours pose a risk for healthcare workers and that security measures should be increased during these time periods to provide a safer environment.

In our study, emergency healthcare workers listed the main reasons for violence as the perpetrator justifying their behaviour, refusal of unreasonable demands, patient psychology, dissatisfaction with treatment, and healthcare policies. However, research findings in the literature highlight factors such as impatience of patients and their relatives, long waiting times, high patient volume, communication problems, staff shortages, lack of security measures, errors in the healthcare system, indifferent healthcare staff, misinformation from the media, and lack of health literacy as prominent causes of violence [25,28,34-36]. Different definitions of the causes of violent incidents may be attributed to various factors. These include intercultural differences between regions, working conditions within institutions, perceptions of employee safety and legal procedures, and situational risks.

Most violent incidents often go unnoticed or unrecorded due to either not being detected or the victim not filing a complaint [5]. Therefore, existing methods for reporting violence do not accurately reflect the actual violence occurring [37]. According to our study results, half of the emergency room workers reported that no action was taken against the aggressor in cases of violence, more than half reported issuing a "code white," and incidents of violence increased intentions to leave work. Additionally, it was found that security personnel were not present at the scene promptly. The relevant literature has similarly highlighted findings akin to our study, indicating that healthcare personnel commonly refrain from filing complaints in cases of violence and often attempt to defend themselves [24,25,29,35]. Among the reasons for this situation, factors such as cumbersome reporting processes, the belief that reporting will yield no results, fear of reprisal from the perpetrator, perception that the incident is not serious enough, and lack of administrative support stand out [24,33,37,38]. Our research findings underscore the impact of these factors and emphasize the seriousness of violence in the healthcare sector. Additionally, they draw attention to the inadequacies in current complaint and reporting processes. This situation can isolate healthcare workers who experience violence, diminish awareness of the issue, and consequently lead to various occupational hazards.

In our study, the majority of emergency healthcare workers indicated that legislation on preventing violence in healthcare, the white code system, and security measures in the workplace were inadequate. Therefore, emergency healthcare workers recommend the implementation of deterrent punitive measures and increasing security measures to reduce violent incidents. Therefore, it is imperative to adopt effective and appropriate approaches towards addressing acts of violence. These approaches may include implementing effective security strategies and deterrent punitive measures, enhancing communication skills, ensuring staff competency, and promoting health literacy among patients and their families [34]. These steps are crucial for preventing violence in the healthcare sector and ensuring the safety of healthcare workers. Initiating relevant pilot studies could be the first step in this regard. This way, the effects of various measures and regulations can be evaluated, leading to effective and sustainable solutions.

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Limitations

There were several limitations to the study. One of the main limitations was the inability to ensure the participation of all employees due to the busy nature of emergency departments. Another limitation was the inability to conduct face-to-face interviews with some employees due to their shift work hours. Furthermore, this research was conducted only in the emergency departments of a specific hospital, which may not be representative of other hospitals. In addition, the memory factor may have impacted participants' ability to recall past experiences accurately, and the use of self-report surveys could have been subject to response bias.

Implications for Practice

Healthcare institutions and authorities need to create better strategies to prevent or decrease violence. To achieve this goal, it is essential to provide healthcare workers, particularly emergency service personnel, with access to training programs that enhance their skills in dealing with violent incidents. Additionally, healthcare workers should be encouraged to report violent events. These measures can create a safer working environment for healthcare workers and enable them to provide better service to patients.

Conclusion

The findings of the study indicate that healthcare personnel working in emergency departments are exposed to high levels of violence, with violent incidents being repeated in various forms and predominantly manifesting as verbal and physical violence. The existence of some conflicting results associated with gender, professional experience, and other factors highlights the complexity of violence and the various influencing factors. Additionally, it was determined that the measures taken to prevent or reduce violence are inadequate, the white code system is not sufficiently effective, the level of reporting of violent incidents is low, and employees do not feel safe after experiencing violence. Therefore, it is recommended to increase security measures, review legal regulations, enhance institutional support, and implement regulations to effectively utilize the white code system to reduce or prevent violence against healthcare workers. Furthermore, future research focusing on testing violence prevention strategies, investigating the feasibility of legal regulations, and analyzing the situations following the implementation of the white code system would be beneficial.

Conflict of Interests
The authors declare that there is no conflict of interest in the study.

Financial Disclosure
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Ethical Approval
This study was approved by the İnonu University Non-Interventional Clinical Research Ethics Committee (Decision Number: 2022/3753).

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