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Workplace violence against emergency physicians: A cross-sectional study on the role of communication skills

Mehmet Selim Karpınar[1], Gülden Hakverdi[2], S. Ayhan Çalışkan[3,4]*

[1]Ege University Faculty of Medicine, [3]Department of Medical Education, Faculty of Medicine, İzmir University of Economics, İzmir, [2]Department of Biostatistics, Sivas Cumhuriyet University, Faculty of Medicine, Sivas, Türkiye, [4]Department of Medical Education, College of Medicine and Health Sciences, United Arab Emirates University, Al-Ain, UAE

**Corresponding author*

Abstract:

OBJECTIVES: Workplace violence (WPV) is a critical issue affecting healthcare professionals, posing significant risks to their safety and well-being. This study investigates WPV among emergency physicians in Türkiye, examining the relationship between WPV and physicians' communication skills.

METHODS: A cross-sectional study was conducted from March to June 2023, involving 63 emergency physicians recruited through a convenience sampling method. Participants completed an online survey that included demographic questions, the Turkish version of the Health Professionals Communication Skills Scale (HP-CSS-TR), and self-evaluation items on communication skills.

RESULTS: The findings revealed high WPV prevalence, with 85.7% of participants reporting verbal aggression during their residency and 90.5% during their specialty period. Physical violence was reported by 31.7% of participants during residency and 27.0% during their specialty period. Participants' HP-CSS-TR scores averaged 86.08, indicating relatively high communication skills. No significant relationships were found between HP-CSS-TR scores and demographic characteristics such as gender, age, or years of experience. A moderate positive correlation was observed between participants' self-evaluations and their HP-CSS-TR scores in the dimensions of empathy and respect, suggesting alignment between perceived and actual communication skills in these areas. Weak correlations were found in informative communication and social skills, highlighting areas for improvement in communication training programs.

CONCLUSIONS: This study highlights the critical issue of WPV against emergency physicians and its association with communication skills, emphasizing the complexities of high-stress environments such as emergency departments. It underscores the need for continued research and systemic interventions to enhance workplace safety and the well-being of healthcare professionals.

Keywords:

Communication skills, emergency departments, emergency physicians, healthcare professionals, safety measures, Türkiye, workplace violence

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ORCID:
SK: 0009-0005-0630-7905
GH: 0000-0002-8078-0451
SAÇ: 0000-0001-9714-6249

Address for correspondence:
Prof. S. Ayhan Çalışkan, Department of Medical Education, College of Medicine and Health Sciences, United Arab Emirates University, Al-Ain, UAE.
E-mail: ayhanca@gmail.com

Introduction

Workplace violence (WPV) is a pervasive and alarming issue that poses a serious threat to the safety, well-being, and health of healthcare professionals worldwide. It includes incidents where healthcare professionals face abuse, threats, and/or physical assaults in the course of their duties. WPV not only endangers those targeted but also constitutes a substantial occupational hazard, impacting healthcare organizations on a global scale.[1,2]

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Box-ED section

What is already known on the study topic?

- Workplace violence (WPV) is a significant issue in healthcare, particularly affecting emergency physicians
- Emergency departments (EDs) are high-risk environments where healthcare professionals frequently encounter both verbal and physical violence.

What is the conflict on the issue? Has it importance for readers?

- The extent to which communication skills can mitigate WPV is not well established
- While improving communication may help reduce violence in EDs, further evidence is required to confirm its effectiveness.

How is this study structured?

- This cross-sectional study was conducted among 63 emergency physicians in Türkiye to explore the association between WPV and physicians' communication skills.

What does this study tell us?

- WPV is highly prevalent, with 90.5% reporting of participants reporting verbal aggression during their specialty period. However, no significant relationship was found between communication skills and demographic characteristics
- The study highlights the need for further research to address WPV and improve safety and well-being in healthcare through individual and systemic approaches.

In Türkiye, WPV is a particularly pressing concern, with studies reporting disquieting statistics. These studies indicate that a significant percentage of healthcare personnel, ranging from 44.7% to 78.1%, experience violence annually.[3,4] Over the past two decades, Türkiye has witnessed a concerning upward trend in violence targeting healthcare professionals.[4,5] WPV is a widely recognized and profoundly concerning issue in emergency medicine, disproportionately affecting physicians, nurses, and other staff working in emergency departments (ED).[6,7] Workers in high-stress environments consistently experience the highest frequency of WPV incidents, underscoring the urgent need for comprehensive preventative measures and support.[2,7] A similar pattern is observed in Türkiye, where WPV incidents are most commonly reported in EDs. The WPV incidence rates in Türkiye range between 72.3% and 78.1%, highlighting the imperative nature of addressing WPV within the Turkish healthcare system, particularly within EDs.[4,5]

Communication and interpersonal skills are pivotal in physicians' competencies, as recognized by various medical education and accreditation institutions worldwide, including those in Türkiye.[8,9] The literature consistently underscores the significance of communication skills as a defining attribute of a "good doctor."[10] As a result, medical schools worldwide, including those in Türkiye, have placed considerable emphasis on teaching and developing communication skills as a crucial component of their curricula.

Effective communication is indispensable in the physician–patient relationship, serving as the cornerstone of trust, informed decisions, accurate diagnoses, and emotional support. It plays a crucial role in improving patients' quality of life. Enhanced communication among healthcare professionals is associated with better patient outcomes, such as addressing patient concerns, promoting physical activity, setting achievable goals, and providing superior emotional support, all of which contribute to lower patient-reported depression scores.[11]

Furthermore, patient adherence to medical recommendations is strongly correlated with physicians' communication skills, with training interventions shown to improve adherence.[12] Patient-centered communication is also linked to enhanced emotional well-being and a reduced reliance on diagnostic tests and referrals. Conversely, poor communication may result in an underestimation of disease severity, particularly when patients withhold crucial information about their lifestyles.[11] Numerous studies have been conducted to date to investigate the extent and consequences of violence directed at healthcare professionals. These studies have also examined the various factors contributing to such violence. In addition to patient and family characteristics, factors such as physicians' expertise, security measures, patients' dissatisfaction with treatment, patients' perceived importance, excessive tolerance toward patients, and societal attitudes toward healthcare personnel influence the propensity for violence.[4,13]

This study seeks to shed light on WPV directed at emergency physicians, exploring the intricate relationship between WPV and physicians' communication skills.

The specific objectives of this study are as follows:

1. To determine the frequency and types (verbal and physical) of WPV experienced by emergency physicians during their residency and specialty periods
2. To assess the communication skills of emergency physicians using the Turkish version of the Health Professionals Communication Skills Scale (HP-CSS-TR)
3. To explore the association between emergency physicians' demographic characteristics, self-reported communication skills, and their HP-CSS-TR scores

4. To investigate the association between the type and frequency of WPV exposure among emergency physicians during their residency and specialty periods and their HP-CSS-TR scores.

Methods

Study design and participants

A cross-sectional study was conducted from March to June 2023 among emergency physicians in Türkiye. Participants were recruited using a convenience sampling method. Study invitations were distributed through E-mail and social media platforms, including Twitter and WhatsApp. Emergency physicians were invited to participate and encouraged to forward the invitation to their colleagues. Each participant was contacted only once and asked to complete an anonymous online survey questionnaire hosted on the Microsoft Forms platform.

Data collection tools

The questionnaire was developed by the researchers based on a comprehensive review of the literature. Its content validity was evaluated by three emergency physicians, and modifications were made based on their feedback.

The questionnaire was divided into three sections. The first section consisted of 18 structured items, covering demographics and factors related to WPV. The second section included the Turkish version of the Health Professionals Communication Skills Scale (HP-CSS-TR), a self-report instrument designed to assess the communication skills of health professionals. The original Health Professionals Communication Skills Scale was developed by Leal-Costa *et al*.,[14] while its Turkish adaptation, HP-CSS-TR, was validated by Mendi *et al*.[15]

HP-CSS-TR comprises 18 items (total score ranges 18–108) organized into four dimensions: empathy (5 items, score ranges 5–30), informative communication (6 items, score ranges 6–36), respect (3 items, score ranges 3–18), and social skills (4 items, score ranges 4–24). The corresponding Cronbach's alpha values for these dimensions were 0.79, 0.74, 0.73, and 0.72, respectively. The scale uses a 6-point Likert-type rating (1: almost never, 2: once in a while, 3: sometimes, 4: normally, 5: very often, and 6: many times), with higher total scores indicating better communication skills among health professionals.

The final section of the questionnaire included four structured items designed to gather self-evaluations from participants on the four dimensions of HP-CSS-TR: empathy, informative communication, respect, and social skills. Participants were instructed to self-assess on these dimensions using a 10-point Likert-type scale, ranging from 1 (Lowest) to 10 (Highest).

Data analysis

For data analysis, IBM SPSS Statistics for Windows, Version 25.0 (IBM Corp. Released 2017. IBM SPSS Statistics for Windows, Version 25.0. Armonk, NY: IBM Corp.) was used. The normal distribution of numeric variables was assessed using the Shapiro–Wilk test ($n < 50$) and the Kolmogorov–Smirnov test ($n \geq 50$) Data were presented as mean, standard deviation (SD) and median (min–max). Spearman correlation analysis was performed to examine the relationships between numeric variables. For comparisons between two independent groups, an Independent Samples *t*-test was used when the assumption of normality was satisfied. When normality was not met, the Mann–Whitney U-test was used as a nonparametric alternative. For comparisons involving more than two groups, one-way ANOVA was conducted. Categorical variables were presented as frequencies and percentages. The relationships between categorical variables were analyzed using Pearson's Chi-square and Fisher's Exact Test. A significance level of 0.05 was accepted for all hypotheses.

Ethical approval

Data collection for this study was conducted after obtaining approval from the Ege University Scientific Research and Publication Ethics Boards, on February 23, 2023 with reference number 23-2.1T/47. All procedures in this study adhered to relevant guidelines and regulations. Participation by emergency physicians was entirely voluntary, and informed consent was obtained from all participants.

Results

A total of 63 emergency physicians were included in the data analysis. Majority of the participants were male (60.3%) with a mean age of 43.37 years (SD = 7.58). Over 77% of the participants had no certified communication skills training, and their mean work experience as emergency physicians was 11.42 years (SD = 6.74). Table 1 summarizes the main demographic and professional characteristics of the survey participants.

Overall, verbal aggression was the most commonly reported form of violence during both residency and specialty periods, with rates 85.7% and 90.5%, respectively. Verbal violence was significantly more frequent during the specialty period compared to residency ($P < 0.001$). Conversely, the rate of physical violence experienced during the specialty period (27.0%) was significantly lower than during the residency (31.7%), ($P = 0.005$) [Table 2]. Participants'

average total HP-CSS-TR score was 86.08 (SD = 12.64). No statistically significant relationship was identified between participants' demographic or professional characteristics and their HP-CSS-TR scores [Table 3].

Participants' HP-CSS-TR and its dimensions' scores are presented in Table 4. A negative weak correlation (r_s = −0.21, P = 0.097) was observed between participants' average total HP-CSS-TR scores and their age, while a negative, very weak correlation (r_s = −0.16, P = 0.222) was found with their years of experience as emergency physicians.

Table 1: Demographic characteristics of emergency physicians (*n*=63)

	n (%)/mean±SD
Gender	
Female	25 (39.7)
Male	38 (60.3)
Residency institution	
Private university	1 (1.6)
Public university	49 (77.8)
Public research and training hospital	13 (20.6)
Certified communication skills training	
Yes	14 (22.2)
No	49 (77.8)
Age	43.37±7.58
Experience as emergency physician	11.42±6.74

SD: Standard deviation

Table 2: Workplace violence frequency during residency and specialty years

Violence type	Period	Violence exposure		*P*
		No, *n* (%)	Yes, *n* (%)	
Verbal	Residency	9 (14.3)	54 (85.7)	<0.001[a]
	Specialty	6 (9.5)	57 (90.5)	
Physical	Residency	43 (68.3)	20 (31.7)	0.005[b]
	Specialty	46 (73.0)	17 (27.0)	

[a]Fisher's exact test, [b]Pearson Chi-square

Table 3: Relationship between participant's characteristics and Turkish Version of the Health Professionals Communication Skills Scale scores

	HP-CSS-TR score, mean±SD	*P*
All participants	86.08±12.64	-
Gender		
Female	85.72±8.75	0.301
Male	86.32±14.76	
Residency institution		
Private university	85.00 (-)	Excluded
Public university	85.49±13.97	0.742
Public research and training hospital	88.38±6.08	
Certified communication skills training		
Yes	85.94±12.74	0.728
No	86.57±12.74	

SD: Standard deviation, HP-CSS-TR: Turkish Version of the Health Professionals Communication Skills Scale

Participants' self-evaluations in the empathy and respect domains revealed statistically significant moderate correlations with the corresponding HP-CSS-TR dimensions. However, very weak and weak correlations were observed in the informative communication and social skills dimensions respectively [Table 4].

In addition, the analysis revealed no statistically significant differences in the frequency of verbal or physical WPV exposure and healthcare providers' HP-CSS-TR scores during both residency and specialty periods [Table 5].

Discussion

Violence against healthcare workers is a pressing issue, particularly in EDs where staff often encounter volatile situations. This study investigates the prevalence of verbal and physical violence experienced by emergency physicians throughout their careers, both during residency and while working as specialists. It also examines the potential influence of demographic factors and communication skills on the likelihood of encountering such aggression. Our findings indicate that up to 90% of emergency physicians reported experiencing some form of violence during their training. Participants experienced a significantly higher rate of verbal violence as specialists compared to their residency years. In contrast, the rate of physical violence was significantly lower during their specialty period than during residency.

The findings of this study are consistent with previous research in Türkiye, which has reported WPV rates against emergency medicine physicians and medical doctors ranging from 58.2% to 87.3%.[3,4,16-19] Multiple studies have shown that emergency medicine physicians are the most affected by WPV among medical professionals, and verbal abuse is the most commonly reported type of violence which aligns with our findings.[3,17,20-23]

A 2022 systematic review reported a wide range of WPV rates in healthcare settings globally, ranging from 40% to 90.3%. Among these, EDs had higher violence exposure rates, ranging from 60% to 88%.[1] Similar violence rates reported from different countries around the globe.[24] This global perspective highlights the consistency of our findings with international trends.

The prevalence of violence against healthcare workers, particularly in EDs, is a significant concern that requires immediate attention and action. The high levels of violence reported by emergency physicians in this study are consistent with previous research identifying the EDs as a high-risk environment for WPV.[25,26]

Table 4: Relationship between respondent's Turkish Version of the Health Professionals Communication Skills Scale scores and self-evaluations

	Score, mean±SD	Self-evaluation, mean±SD	r_s	*P*
HP-CSS-TR	86.08±12.64	-	-	-
Empathy	25.33±4.52	8.14±1.03	0.438	<0.01[a]
Informative communication	27.713±4.10	8.62±1.17	0.191	0.133
Respect	15.653±2.77	9.17±0.79	0.536	<0.01[a]
Social skills	17.383±2.76	8.60±0.94	0.241	0.057

[a]Correlation is significant at the 0.01 level. HP-CSS-TR: Turkish Version of the Health Professionals Communication Skills Scale, SD: Standard deviation

Table 5: Association between respondent's Turkish Version of the Health Professionals Communication Skills Scale scores and workplace violence type/frequency in residency and specialty periods

Period	WPV type/frequency	Score, mean±SD	*P*
Verbal			
Residency	1–4 times (*n*=11)	86.28±5.15	0.450[a]
	5–9 times (*n*=11)	89.45±9.10	
	10 or more times (*n*=32)	84.94±11.60	
Specialty	1–4 times (*n*=17)	86.53±8.61	0.327[a]
	5–9 times (*n*=11)	89.73±7.56	
	10 or more times (*n*=29)	83.07±16.22	
Physical			
Residency	1–4 times (*n*=17)	88.59±8.75	0.396[b]
	5–9 times (*n*=3)	74.00±23.58	
	10 or more times (*n*=0)	Excluded	
Specialty	1–4 times (*n*=14)	85.07±10.80	0.833[b]
	5–9 times (*n*=1)	Excluded	
	10 or more times (*n*=2)	78.50±34.65	

[a]One-way ANOVA, [b]Independent samples *t*-test. SD: Standard deviation

Similar to our findings, most studies from Türkiye have reported no significant differences in the prevalence of violence based on demographic characteristics such as gender, age, years of experience, or institution type.[4,16,19,21] However, some studies have suggested that female healthcare workers, younger staff, and those employed in state hospitals may be at a higher risk of experiencing violence.[3,4,21]

The pattern of WPV against healthcare workers reported across various global studies is mixed. While some studies have identified differences in the prevalence of violence based on factors such as gender, age, and years of experience, others – similar to our findings – have not observed significant variations suggesting that the specific context and setting may influence these differences.[24,27,28]

WPV against healthcare workers arises from a complex combination of factors, including workplace and policy issues, factors related to healthcare providers or patients, challenges in doctor–patient communication, as well as broader sociocultural influences.[1] In high-stakes settings such as EDs, where tensions run high, emotions are heightened, and resources are limited, the risk of violence can be amplified. In environments where individuals from different backgrounds must collaborate to make decisions in burdensome and stressful situations, effective communication is critically important. A qualitative study identified health literacy and communication challenges as the two leading causes of violence.[29] Similarly, another study found that unmet patient needs were the most common reason for violence.[7] These findings may provide context for our study, where no statistical difference was found between physicians' communication skill scores and the frequency of verbal or physical assault. This result suggests that while communication remains essential, other factors – such as systemic issues, patient expectations, or environmental stressors – may play a more significant role in WPV, warranting further investigation.

In our study, the majority of participants (77.8%) reported not receiving certified communication skills training. Despite this fact, their average HP-CSS-TR total scores were nearly 80% of the maximum possible score indicating relatively high levels of communication skills even without formal training. Furthermore, participants' HP-CSS-TR scores in the empathy and respect dimensions showed moderate correlations with their self-reported perceptions in the very same domains.

To achieve the best possible outcome for the patient, the physician and patient must share and integrate their knowledge. The patient's personal insights about their own health should be combined with the physician's medical expertise to develop the most appropriate treatment plan.[30] Effective communication is essential to this process and play a crucial role in facilitating it. In our study, participants' self-reported perceptions in the informative communication and social skills domains showed weak correlations with their HP-CSS-TR scores.

The weak correlation between self-reported perceptions of informative communication and HP-CSS-TR scores may reflect a disparity between participants' perceived abilities and their objective skills.

This may indicate a need to enhance communication training programs to better bridge the gap between self-perception and actual communication skills.

Limitations

The generalizability of our findings requires careful consideration. The study sample, drawn from a convenience sampling of emergency physicians in Türkiye, may not fully represent all emergency physicians, either nationally or globally. Türkiye's healthcare system, societal attitudes toward healthcare

workers, and cultural norms may influence the prevalence and characteristics of WPV. Consequently, our findings are most relevant to similar high-stress emergency medicine environments but may not extend to settings with differing healthcare infrastructures or societal dynamics.

Conclusions

This study explores the critical issue of WPV against emergency physicians and its association with communication skills. It emphasizes the complexity of workplace dynamics in high-stress environments, such as EDs. By addressing these challenges, this research contributes to a deeper understanding of factors that may influence professional interactions and workplace safety. It underscores the importance of continued research to examine the multifaceted nature of WPV and its implications for healthcare professionals. This work provides a foundation for future studies aimed at enhancing both individual and systemic approaches to improving safety and well-being in healthcare settings.

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Author contributions statement

MSK: Conceptualization, Methodology, Data curation, Project administration, Writing – original draft, Writing – review and editing.

GH: Conceptualization, Methodology, Data curation, Formal analysis, Writing – original draft, Writing – review and editing.

SAÇ: Conceptualization, Methodology, Data curation, Project administration, Supervision, Writing – original draft, Writing – review a006Ed editing.

Conflicts of interest

None Declared.

Ethical approval

The data collection in the present study was conducted after the approval of Ege University Scientific Research, and Publication Ethics Boards dated February 23, 2023 Ref. #23-2.1T/47. We confirm that all methods used in this study were carried out in accordance with relevant guidelines and regulations.

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