

The Relationship Between Violent Behavior in Healthcare Settings and Communication Skills: An Empirical Study on Provincial Hospitals in Ankara

ABSTRACT

Objective: Violence in the health care is a multifaceted and complex social phenomenon that attracts the attention of researchers and policymakers in many countries around the world. Violence against healthcare workers has several factors, but there are limited data on the association between violence against healthcare workers and the communication skills of healthcare workers. In this study, we examine the relationship between healthcare professionals' communication skills and violent incidents experienced or witnessed by healthcare workers.

Methods: The sociodemographic and professional data of 296 healthcare professionals were obtained. All participants were assessed using a communication skills inventory. The total and categorical scores of the communication skills inventories were compared between participants who had been exposed to violence and those who had not.

Results: It was found that the emotional score of individuals who had suffered more than one physical attack was lower than that of others ($P = .037$). In addition, nurses were found to have more verbal violent behavior experience than their counterparts. Other comparisons were found to be insignificant.

Discussion: Healthcare professionals should not only evaluate complex problems such as violence in the health care but also emphasize the role of patients and their relatives. Violence against healthcare professionals cannot be based on a simple factor. We believe that there are many factors that lead to violence. The causes of violence in the health care should be examined by future studies.

Keywords: Violence, health personnel, communication

Introduction

Violence in healthcare is a complex, multifaceted social phenomenon that attracts the attention of researchers and policymakers in many countries around the world.¹ Violence in healthcare refers to abusive, threatening, or assaulting incidents that involve an overt or implicit challenge to healthcare workers' safety and health in the workplace, including when traveling to or from the workplace.² Violence is a general term that includes all kinds of abusive behaviors that are threatening, degrading, or insulting to one's well-being, dignity, or values.

The issue of violence in healthcare has been investigated in several studies so far.^{3,4} Long waiting periods, unmet treatment demands, a lack of actual hospitals, easy access to weapons, and alcohol or drug abuse have come to the fore as the primary causes of violence in the healthcare sector.^{5,6} However, interpersonal communication is also a critical factor behind the violence in the health care.⁷

Communication is a very important tool to understand others and gain insight into their thoughts and feelings by identifying with them, leading to more sympathetic awareness.



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Communication skills play an essential role in many occupational groups, but they become more important in occupational groups, such as health care, in which interpersonal interactions play a crucial role. A certain skill set is necessary in all helpful relationships: one-on-one personal contact and attention, an open invitation to communicate, minimal encouragement, and reflection of emotions as a summarized description.⁷

Most studies examine the causes of violence and ways to protect against it. However, the studies in Turkey in this field have only been conducted on a limited scale by examining the level of violence that can be observed.⁸⁻¹⁰ The relationship between communication skills and violence in the healthcare sector has not been fully elucidated.

In this study, we aim to examine the relationship between healthcare professionals' communication skills and the violent incidents experienced or witnessed by healthcare workers.

Methods

Design and Setting

This study was carried out between June 1, 2019 and August 31, 2019 across several locations: Ankara Doctor Sami Ulus Obstetrics, Pediatric Health and Diseases Training and Research Hospital Emergency Department, Ankara Dışkapı Yıldırım Beyazıt Training and Research Hospital Emergency Department, Ankara 29 Mayıs State Hospital Emergency Department, Ankara Gazi Mustafa Kemal State Hospital Emergency Department, and Ankara Yıldırım Beyazıt University Yenimahalle Training and Research Hospital Emergency Department. This cross-sectional study was performed through face-to-face interviews with healthcare workers currently working in these hospitals. However, this study was also conducted at Ankara Sami Ulus Maternity, Child Health and Diseases Training and Research Hospital between June 1, 2019 and August 31, 2019 because of difficulties to reach medical staff in other centers mentioned earlier. Ankara Sami Ulus Children's Hospital employed 803 healthcare workers during the study period. At least 258 participants were required to achieve a 5% confidence interval and a 95% confidence level. The study targeted 284 people, adding a 10% loss share, so a questionnaire was sent to 296 people. Those who had completed < 90% of the questionnaire as well as those who did not agree to participate in the study were excluded. In total, 296 subjects were selected; all of the data belonging to the subjects were put into the statistical package program. The subjects were then categorized according to the department in which they worked.

Measures

Subjects were asked to self-report demographic data. These data included age, sex, how many years they had been employed in the

healthcare sector, job title, unit in which they worked, whether they had received communication training or not, and their opinions about the contribution of communication to their profession. The prepared questionnaire was sent to subjects' e-mail addresses, and subjects signed written informed consent forms before answering the questionnaire. Those who gave their consent were included in the study. The questionnaire took approximately 20 minutes to complete.

The Communication Skills Inventory (CSI) is a Likert-type inventory developed by Eranlı and Balcı¹¹ that consists of 45 items and 3 categories. These categories are defined by their content: cognitive (mental), affective (emotional), and behavioral. There are 15 items within each category. Questions in the mental category are 1, 3, 6, 12, 15, 17, 18, 20, 24, 28, 30, 33, 37, 43, and 45. Questions in the emotional category are 5, 9, 11, 26, 27, 29, 31, 34, 35, 36, 38, 39, 40, 42, and 44. Questions in the behavioral category are 2, 4, 7, 8, 10, 13, 14, 16, 19, 21, 22, 23, 25, 32, and 41.¹¹ Participants were also asked whether they had been subjected to physical or verbal violence, whether they were witnesses to violence or not, and their thoughts on the reasons behind violence in the healthcare sector.

Statistical Analysis

The data were transferred to the Statistical Package for the Social Sciences (SPSS) version 20 (IBM Corp.; Armonk, NY, USA), and any data that were suitable for normal distribution were tested with Shapiro-Wilk test. A Chi-square test was used to compare categorical data. In comparing means, a *t*-test and analysis of variance were used for normal distributions, and Mann-Whitney U and Kruskal-Wallis tests were used for parameters that were unsuitable for normal distribution. *P* < .05 was considered to be significant.

Results

A total of 296 participants were included, and 67 of them were male. The mean (SD) age of the participants was 34.79 (SD = 9.30) years, and the mean (SD) duration of service was 11.43 (SD = 8.94) years. Regarding communication, 63.9% of the participants were educated in communication, and 96.6% of the participants believed that effective communication will contribute to improving the profession. A total of 203 (68.6%) respondents said that they had been subjected to at least one verbal or physical attack, and 75.9% of the attackers were reportedly male. The percentage of those who had been exposed to physical violence was 15.2%, and 26.7% had been exposed to > 1 instance of violence. The percentage of healthcare workers who were subjected to patient complaints was 21%. Of these, the percentage of those who had > 1 patient complain about them was 29%, and 18 participants (6.1%) had been taken to court by patients (Table 1).

The average scores in the CSI were 152.41 (SD = 11.04) for the entire inventory, 53.24 (SD = 4.74) for the mental dimension, 45.76 (SD = 5.51) for the emotional dimension, and 53.42 (SD = 4.95) for the behavioral dimension. In terms of how much communication education participants had received, there was no statistically significant difference in CSI scores (Table 2 and 3). It was found that the emotional scores of individuals who had suffered > 1 physical attack were significantly lower than the scores of others (*P* = .037, Table 4).

MAIN POINTS

- Present study investigated associations between being exposed violent behavior and communication skills.
- Violence against healthcare professionals cannot be based on a simple factor.
- Communication skills of healthcare professionals are not main factor for being exposed to violent behavior.

The total and categorical scores of the CSI were compared on the basis of gender. In women, the total scores, mental scores, emotional scores, and behavioral scores were 153.32 (SD = 21.03), 51.84 (SD = 6.72), 52.78 (SD = 8.77), and 51.12 (SD = 9.13), respectively. In men, the total scores, mental scores, emotional scores, and behavioral scores were 149.22 (SD = 19.16), 49.66 (SD = 8.18), 50.89 (SD = 9.17), and 49.89 (SD = 8.76), respectively. This shows that both men and women were similar in terms of their total and categorical CSI scores ($P = .27$, $P = .16$, $P = .23$, and $P = .43$, respectively). The rate of women participants who were exposed to verbal violent behavior was 58.57%, and this rate in men was 61.40%. There was not any significance between groups according to gender. The exposure

to physical violent behavior was also found to be similar between genders ($P > .05$).

CSI scores were also compared according to participants' duties. The participants were categorized as physicians, nurses, and other health care workers. In the physician group ($n = 89$), the total scores, mental scores, emotional scores, and behavioral scores were 152.11 (SD = 12.21), 50.66 (SD = 11.24), 53.99 (SD = 8.18), and 49.77 (SD = 5.99), respectively. In the nurse group ($n = 114$), the total scores, mental scores, emotional scores, and behavioral scores were 149.11 (SD = 8.13), 49.34 (SD = 6.73), 48.13 (SD = 7.16), and 43.63 (SD = 4.91), respectively. In the other healthcare workers' group ($n = 93$), the total scores, mental scores, emotional scores, and behavioral scores were 150.45 (SD = 11.64), 51.43 (SD = 11.24), 53.99 (SD = 8.18), and 48.63 (SD = 4.26), respectively. These scores were found to be similar between the physician and other healthcare workers groups ($P > .05$). The percentage of nurses exposed to verbal violence was 88.59% ($n = 101$), whereas in physicians, it was 56.17% ($n = 50$), and in other healthcare workers, it was 56.98% ($n = 53$). So, the percentage of nurses exposed to verbal violence was significantly higher than those of the other groups ($P < .001$). The percentages of those exposed to physical violence were similar between all the three groups ($P > .05$).

Table 1. Descriptive Data of Study (N = 296)

	n (%)
Gender	
Female	229 (77.4)
Male	67 (22.6)
Age, years, mean (SD)	34.79 (9.30)
Time of duty, years, mean (SD)	11.43 (8.94)
Working place	
Health services	267 (90.2)
Official	29 (9.8)
Status of communication skills education	
No	107 (36.1)
Yes	286 (96.6)
Communication Skills Inventory scores	
Mental dimension, mean (SD)	53.24 (4.74)
Emotional dimension, mean (SD)	45.76 (5.51)
Behavioral dimension, mean (SD)	53.42 (4.95)
Total score, mean (SD)	152.41 (11.04)
Experienced physical violence	
No	251 (84.8)
Yes	33 (11.1)
More than one time	100 (33.8)
Experienced verbal violence	
No	92 (31.1)
Yes	104 (35.1)
More than one time	100 (33.8)
Being witness to physical violence	
No	133 (44.9)
Yes	94 (31.8)
More than one time	69 (23.3)
Being witness to verbal violence	
No	51 (17.2)
Yes	121 (40.9)
More than one time	124 (41.9)
Application of complaints by the patients	
No	234 (79.1)
Yes	44 (14.9)
More than one time	18 (6.1)
Admission to the court	
No	278 (93.9)
Yes	18 (6.1)
Gender of violent behavior	
Female	49 (24.1)
Male	154 (75.9)

Table 2. Comparison of Violent-Related Issues According to Receiving Communication Skills Education

	Receiving communication skills education		P
	Yes (n = 189) n (%)	No (n = 107) n (%)	
Gender			
Female	141 (74.6)	88 (82.2)	.172
Male	48 (25.4)	19 (17.8)	
Experienced physical violence			
No	158 (83.6)	93 (86.9)	.357
Yes	21 (11.1)	12 (11.2)	
More than one time	10 (5.3)	2 (1.9)	
Experienced verbal violence			
No	55 (29.1)	37 (34.6)	.549
Yes	70 (37.0)	34 (34.8)	
More than one time	64 (33.9)	36 (33.6)	
Being witness to physical violence			
No	79 (41.8)	54 (50.5)	.066
Yes	69 (36.5)	25 (23.4)	
More than one time	41 (21.7)	28 (26.2)	
Being witness to verbal violence			
No	29 (15.3)	22 (20.6)	.298
Yes	83 (43.9)	38 (35.5)	
More than one time	77 (40.7)	47 (43.9)	
Application of complaints by the patients			
No	155 (82.0)	79 (73.8)	.139
Yes	26 (13.8)	18 (16.8)	
More than one time	8 (4.2)	10 (9.3)	
Admission to the court			
No	179 (94.7)	99 (92.5)	.615
Yes	10 (5.3)	8 (7.5)	

Table 3. Comparison of CSI Scores According to Receiving Communication Skills Education

	Receiving education	n	Mean (SD)	Median	Min.	Max.	P ^a
Age (years)	Yes	189	34.93 (9.26)	35	9	65	.595
	No	107	34.55 (9.41)	33	19	60	
Duration of duty (years)	Yes	189	11.83 (8.79)	10	10	42	.176
	No	107	10.73 (9.20)	8	0	37	
Mental dimension	Yes	189	53.57 (4.92)	53	41	68	.131
	No	107	52.66 (4.37)	53	37	66	
Emotional dimension	Yes	189	46.01 (5.60)	45	32	63	.420
	No	107	45.31 (5.33)	45	35	69	
Behavioral dimension	Yes	189	53.66 (4.97)	54	40	69	.240
	No	107	52.98 (4.90)	52	44	75	
Total score	Yes	189	153.24 (11.20)	153	130	191	.081
	No	107	150.95 (10.64)	150	128	210	

Abbreviations: CSI, Communication Skills Inventory; SD, standard deviation; Min., minimum; Max., maximum.

^aMann-Whitney U test.

Table 4. Comparison of CSI Scores According to Experiencing Physical Violence

		n	Mean (SD)	Median	Min.	Max.	P ^a
Age (years)	No	251	34.78 (9.48)	34	9	65	.578
	Yes	33	35.67 (8.33)	35	24	51	
	More than one time	12	32.58 (8.34)	22	22	42	
Duration of duty (years)	Yes	251	11.17 (8.87)	9	0	42	.432
	No	33	12.80 (9.38)	10	0	32	
	More than one time	12	13.17 (9.25)	16	2	25	
Mental dimension	No	251	53.47 (4.67)	53	41	68	.330
	Yes	33	53.06 (4.14)	53	45	65	
	More than one time	12	48.92 (6.05)	49	37	58	
Emotional dimension	No	251	45.96 (5.61)	45	32	69	.037
	Yes	33	43.85 (4.51)	43	33	61	
	More than one time	12	46.67 (5.00)	47	40	56	
Behavioral dimension	No	251	53.51 (5.03)	53	40	75	.672
	Yes	33	52.64 (4.47)	52	46	63	
	More than one time	12	53.58 (4.48)	53	49	65	
Total score	No	251	152.94 (11.26)	152	128	210	.290
	Yes	33	149.55 (9.55)	151	130	167	
	More than one time	12	149.17 (8.83)	149.5	134	164	

Abbreviations: CSI, Communication Skills Inventory; SD, standard deviation; Min., minimum; Max., maximum.

Participants were grouped in terms of verbal violence exposure, and it was found that the categorical scores on the communication scale (mental, emotional, and behavioral) were similar between each group (Table 5).

Participants were questioned about what they thought the reasons were behind the violence in health care. Whereas 73.4% of the participants perceived that communication problems were the cause of violence in health care, 24% reported that violence could be caused by insufficient knowledge of healthcare personnel.

Discussion

In this study, we investigated the relationship between exposure to violence and healthcare workers' communication skills. It was found that exposure to any kind of violence at least once was quite frequent, but no significant relationship was found between communication skills and violence except for lower emotional scores

in participants who had experienced a violent behavior at least once. The results showed that 15.2% of the participants had been exposed to physical violence at least once, and 68.9% had been exposed to verbal violence at least once. In addition, 203 (68.6%) of the participants stated that they had been exposed to at least one verbal or physical attack.

Violence is defined as the use of force, physical restraint, or threats toward a person, group, or community for the purpose of causing death, physical or mental injury, or a developmental disorder.¹² It is examined under two main headings: physical violence, including physical, sexual, or psychological violence to another person or community, and psychological violence, including verbal violence, defamation, mobbing, threats, and harassment. Violence in healthcare facilities is defined as physical or sexual assault or any threatening behavior that healthcare workers are exposed to by patients, patients' relatives, or any individual.¹³

Table 5. Comparison of CSI Scores According to Experiencing Verbal Violence

		n	Mean (SD)	Median	Min.	Max.	P ^a
Age (years)	No	92	33.58 (10.38)	33	19	60	.054
	Yes	104	36.07 (9.38)	35.5	9	65	
	More than one time	100	34.59 (8.01)	34	22	54	
Duration of duty (years)	Yes	92	10.13 (9.72)	8	0	42	.033
	No	104	12.07 (8.72)	10.5	0	41	
	More than one time	100	11.97 (8.34)	9.75	1	35	
Mental dimension	No	92	53.15 (5.42)	54	37	66	.415
	Yes	104	53.69 (4.35)	54	44	66	
	More than one time	100	52.85 (4.46)	53	41	68	
Emotional dimension	No	92	45.77 (5.36)	45.5	35	61	.391
	Yes	104	46.36 (5.72)	45	32	69	
	More than one time	100	45.12 (5.39)	44.5	33	63	
Behavioral dimension	No	92	53.38 (4.71)	53	45	63	.753
	Yes	104	53.80 (5.29)	53	44	75	
	More than one time	100	53.05 (4.81)	53	40	68	
Total score	No	92	152.30 (10.82)	151	131	186	.220
	Yes	104	153.85 (11.89)	153	130	210	
	More than one time	100	151.02 (10.22)	150	128	191	

Abbreviations: CSI, Communication Skills Inventory; SD, standard deviation; Min., minimum; Max., maximum.

^aKruskal-Wallis Test.

Grouped by occupation, violence is most frequently experienced by nurses, followed by general practitioners and other healthcare workers.¹⁴ In addition, it is known that the reporting rate of violent incidents in healthcare institutions is very low; only serious incidents, such as those that cause injuries, are perceived as violent, and other incidents are not reported.¹⁵

It has been found that men cause violence more than women.¹⁶ In a study conducted by Çamcı and Kutlu¹⁷ in similar groups in 2011, it was concluded that physical violence (12.2%), verbal violence (59.7%), bullying/psychological abuse (12.8%), and sexual abuse (3.6%) were investigated mostly by men.

Although there is an inverse relationship between nurses' education levels and violent incidents no significant relationship has been found between exposure to violence and health care workers' education status.¹⁸ In a study conducted in Europe, it was found that nurses with low levels of education were more likely to be subjected to violence.¹⁹ The fact that violence is seen more frequently in graduates of associate degree programs and vocational schools may be due to a lack of communication skills, low educational status, and a lack of professional knowledge, skill, and maturity, which are not highly developed so shortly after graduation.

In a joint report on the severity of global healthcare violence, published by the World Health Organization, International Labour Organization, and International Council of Nurses in 2002, 27-67% of healthcare workers were found to have been exposed to verbal violence, 10-23% to psychological violence, 3-17% to physical violence, 0.7% to sexual violence, and 0.8-2.7% to ethnic violence.²⁰ In a multicenter study conducted in Turkey, 51.5% of the healthcare employees who participated in the study had been exposed to violence from patients or patients' relatives, and 60.4% of those who had been subjected to violence were women. The rate of verbal violence was 72.4%, and the rate of physical violence was 11.7%. In the same study, it was seen that most practitioners had been exposed

to violence, and the violence had mostly been experienced in public hospitals, especially in the emergency department.²¹ In another recent study, more than one third of healthcare workers reported experiencing some kind of violent behavior. Verbal violence was the most commonly reported.²² Baig et al²³ reported a similar rate of exposure to violent behavior in healthcare workers. Spelten et al²⁴ reported that nurses accepted that violence was a major issue for them and had a considerable personal impact. Viottini et al²⁵ found that the majority of assaulted workers were female (77.5%), had worked for 6-15 years, and were nurses (64.3%). In a Serbian survey, it was reported that the rate of violence in healthcare settings was 52.6%, and the percentage of healthcare workers who had been exposed to more than one type of violence was 25.4%.²⁶ In a Chinese study, 459 criminal cases involving patient-initiated workplace violence against healthcare workers were reported.²⁷ Hamzaoglu and Türk²⁸ reported that 36.7% of participants had been exposed to physical violence and 88.8% had been exposed to verbal abuse at least once during work in healthcare settings. A recent meta-analysis documented that the overall prevalence of workplace violence in healthcare settings was 69%. In this study, significant factors for violent behavior were determined to be working in remote healthcare areas, under-staffing, the mental or emotional stress of patients and visitors, insufficient security, and a lack of preventative measures.²⁹ On the basis of the results of this study, we can say that our research is in line with previous literature in terms of the prevalence of violent behavior, with the highest rate of verbal violence and the higher prevalence of violent behavior being toward nurses than toward other healthcare professions.

Many healthcare professionals suggest and evidence has shown that improving communication between patients and healthcare workers is not an effective strategy to deal with health care violence. It is difficult to obtain evidence supporting the notion that violence in health care only results from poor training or skills in health care personnel. In the study, healthcare workers were asked to examine the causes of

healthcare violence. Factors related to patients were more frequently mentioned, and problems related to health care were thought less likely to be the cause of violence. In a study by Li et al,³⁰ health care workers attributed violence to attackers' low education levels, failure to meet attackers' wishes, long waiting times, and dissatisfaction with treatments. This is one of the first studies to shed light on the relationship between violence and communication skills in health care. Even when assessing communication skills with objective scales, we did not find any association between communication skills and exposure to violence.

This study is one of the first studies conducted in Turkey to shed light on the relationship between violence in health care and communication skills. Selecting participants with an appropriate sampling method and measuring communication skills in reliable ways can be considered as strengths of this study.

The limitations of this study are that it was conducted in a single center, it contained only one main outcome, and the measurements were based solely on participants' statements and not validated by forensic or hospital records.

Healthcare professionals should not only evaluate the complex problem of violence in health care but also emphasize the role of patients and patients' relatives. Violence against healthcare professionals cannot be based on a single factor, rather there are many factors behind the violence. The causes of violence in health care should be examined by future studies.

Ethics Committee Approval: Ethics committee approval was received for this study from the Ethics Committee of Health Sciences University Ankara Dr. Sami Ulus Training and Research Hospital (Approval Date: May 15, 2018; Approval Number: 4922).

Informed Consent: Informed consent was obtained from the individuals who participated in this study.

Peer-review: Externally peer-reviewed.

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