Asian Nursing Research 5 (2011) 197-203



Contents lists available at SciVerse ScienceDirect

# Asian Nursing Research

journal homepage: www.asian-nursingresearch.com



# Research Article

# A Survey of Violence Against Staff Working in the Emergency Department in Ankara, Turkey

Melek Serpil Talas, RN, PhD <sup>1,\*</sup>, Semra Kocaöz, RN, PhD <sup>2</sup>, Selma Akgüç, RN <sup>3</sup>

- <sup>1</sup> Nursing Department, Faculty of Health Sciences, Ankara University, Ankara, Turkey
- <sup>2</sup> Nursing Department, Niğde Zübeyde Hanım School of Health, Niğde University, Niğde, Turkey
- <sup>3</sup> Emergency Department, Dışkapı Yıldırım Beyazıt Education and Research Hospital, Ministry of Health, Ankara, Turkey

#### ARTICLE INFO

Article history: Received 19 June 2011 Received in revised form 9 November 2011 Accepted 11 November 2011

Keywords: emergency hospital service Turkey violence workplace

#### SUMMARY

Purpose: Workplace violence in the emergency department is a significant problem world wide. The aims of this study were to identify the proportion of staff subjected to the types of violence, its sources, factors affecting violence experiences, reporting the incidence and the emotions of the victims after violence. Methods: This descriptive study was conducted between March and August 2009 in the the emergency department of six hospitals in Ankara, Turkey. Data were collected from 270 staff working in various emergency settings. The instrument was a 36-item questionnaire on types of violence, its sources, feelings, and ways to cope with violent behaviors. Descriptive statistics and chi-square tests were used for data analysis.

Results: The results showed 85.2% of participants had been subjected to at least one kind of violence: 41.1% to physical assault, 79.6% to verbal abuse, 55.5% to verbal threats and 15.9% to sexual harassment. Patients' companions (90.9%) were identified as the primary perpetrators of violence. The rates of violence types were highest towards security officers and housekeepers. The most common reactions to violence were sadness and anger. "Did nothing and keeping silent" was the coping method used most commonly by the staff. Participants exposed to physical assaults and verbal threat did not report the incidence of violence to managers were at 43.3% and 65.3% respectively.

Conclusion: Based on results of the study, it is suggested that every hospital institute reliable reporting procedures that staff members feel comfortable using, and also provide a comprehensive program of support services for staff that has been assaulted.

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# Introduction

Workplace violence is a widespread problem of modern societies, with serious health, safety and legal consequences. Recent studies and reports on workplace violence in the health sector indicate that almost a quarter of violent incidents occur in this sector and more than half of health care workers have experienced at least one incident of physical or psychological violence during their professional lifetime with reported rates of 75.8% in Bulgaria, 67.2% in Australia, 61% in South Africa, 60% in a Health Centre complex and 37% in the hospital in Portugal, 54.0% in Thailand, and 46.7% in Brazil, and with percentages of up to 70%–80% for ambulance workers, nurses and physicians. As a high-risk occupational group, workers in healthcare settings are 16 times more

E-mail address: talas@ankara.edu.tr (M.S. Talas).

likely to experience violence than other service workers (Cooper & Swanson, 2002; Di Martino, 2002; McPhaul & Lipscomb, 2004).

The highest incidence of workplace violence occurs in psychiatric wards, emergency departments (EDs), waiting rooms, and geriatric units (Kwok et al., 2006). The ED is recognized as an area at special risk of violence. The 24-hour accessibility, lack of adequately trained, armed, or visible security guards, and a highly stressful environment are some of reasons why EDs are vulnerable to violence (Ayranci, Yenilmez, Balci, & Kaptanoglu, 2006; Gacki-Smith, Juarez, & Boyett, 2009; Kowalenko, Walters, Khare, Compton, & Michigan College of Emergency Physicians Workplace Violence Task Force, 2005). The overwhelming majority of perpetrators of ED violence are patients, their family members and visitors (Ayranci et al., 2004; Lipscomb, Silverstein, Slavin, Coccy, & Jenkins, 2003). The unanticipated nature of illness such as acute illness and trauma, patient pain and discomfort, as well as the tension, stress, and anger of patients and their relatives, and adverse unexpected outcomes such as death are often compounded by cramped space, lack of privacy and intense interpersonal

<sup>\*</sup> Correspondence to: Melek Serpil Talas, Ankara Üniversitesi Sağlık Bilimleri Fakültesi, Şükriye mah., Plevne cad., Aktaş Kavşağı, No. 5/B 06340 Altındağ, Ankara, Turkey.

interactions (Gillespie & Melby, 2003), and long waiting times for consultation or admission (Kowalenko et al., 2005; Oztunc, 2006). The resulting frustration and vulnerability may incite physical and verbal abuse against ED staff (Aydin, Kartal, Midik, & Buyukakkus, 2010; Ayranci et al., 2004). In addition, verbal abuse and physical assault in the ED can come from disruptive, intoxicated patients who are sometimes accompanied by other intoxicated or disruptive individuals (Ferns. 2005: Lee. 2001).

It is clear from the literature that there is increasing concern amongst the public and health professionals in many countries regarding the level of violence in the hospital setting (Gacki-Smith et al., 2009; Luck, Jackson, & Usher, 2006). However, the situation of violence towards hospital staff has only recently begun receiving general attention in developing countries such as Turkey. Nevertheless, based on national literature review, it is clear that violence in the workplace against healthcare personnel is a widespread problem in Turkey. For example, findings from studies in Turkey revealed that the majority of healthcare workers have experienced verbal violence (80.3%–100%), physical violence (16%–49.4%) and sexual harassment (3%–37.1%) in the 12 months before the time each survey was performed (Acik et al., 2008; Aydin et al., 2010; Boz et al., 2006; Canbaz et al., 2008; Celik & Senol-Celik, 2007; Erkol, Gokdogan, Erkol, & Boz, 2007; Oztunc, 2006).

Although multinational studies related to the incidence and violence types against nurses, physicians or nursing and medical students have been conducted in healthcare settings, little research has been done on violence against staff working in EDs (Ayranci, 2005; Canbaz et al., 2008). Thus, this study was designed to identify the prevalence and sources of violence against staff working in EDs in Ankara, to discuss its far-reaching consequences, to identify factors affecting experiences of violence, and to offer solutions aimed at combating this problem. Additionally, this study is the first comprehensive study of its kind conducted on EDs in Ankara to our knowledge.

The aims of this current study were to identify (a) the proportion of staff who had experienced physical, verbal violence and sexual harassment while on duty in the previous year, (b) the sources of the violence, (c) whether sociodemographic and professional factors influenced the tendency towards verbal, physical violence and sexual harassment, (d) how the incident was reported and the legal process initiated, and (e) the emotional state of the victims after violence.

# Methods

### Design and sampling

The design of the study was a descriptive survey. This study was conducted in EDs of six hospitals (three university and three state hospitals) in Ankara, the capital city of Turkey. These hospitals ranged from 620 to 1,200 beds in size. Additionally, they had the biggest EDs in the city. The average number of patients presenting at state hospital EDs daily was approximately 500—1,200 and the number for university hospital EDs was 100—120.

Data collection was completed between March and August 2009. Before data collection, the necessary approval was obtained from the Ethics Committee of the Faculty of Medicine at Ankara University. Administrators of the hospitals and EDs to be studied were informed about study and its purposes. A contact nurse and physician administrators were designated at each ED and made responsible for distributing and collecting the questionnaires in a plain white envelope. Before handing out the questionnaire, the physicians, the nurses and the other staff (health officer/technician, clerks, security officers and house-keepers) were informed about the study by the contact nurse or

the physician administrators; only staff members who were willing to participate in the study were given the questionnaire. The study population was all staff members working in the ED. The sample was recruited with convenience sampling. Although 568 staff agreed to participate in the study, only about half (270, 47.5%) completed the questionnaire and returned it to the contact nurse and physician administrators.

### Instrument

The 36-item questionnaire (28 close-ended and 8 open-ended) used in this study was based on the literature (Arnetz & Arnetz, 2001; Kowalenko et al., 2005) and designed using questions adapted from Senol-Celik and Bayraktar's (2004) questionnaire.

The items in the questionnaire were discussed by the investigators and reviewed with three practicing emergency staff members (two nurses and one physician) working in EDs. The questions were then tested for structure and clarity by the investigators in a pilot study with 10 staff members who had previously worked in EDs. After the pilot study, a few necessary revisions were made to the questions for clarity. Data from the pilot study were not included in this study.

ED staff members were asked to recall experiences of violent behavior directed at them in the previous year through the use of the form. The information was defined as follows: verbal abuse, verbal threats, physical action with or without injury, and any form of sexual violence. The questionnaire consisted of five main sections: Section I pertained to the sociodemographic characteristics of the participants such as age, education level, gender, profession, total working years and working years in the ED, hospital type, shifts and station in the ED, and whether any type of training or instructions about how to deal with violence had been received. Sections II, III, IV and V included close-ended questions on physical, verbal violence types and sexual harassment types, sources, feelings, results, reporting and open-ended questions on reporting physical harm and coping methods after violence or harassments had occurred. Physical violence was defined as a kick, smack, push or being repelled; a pinch, scratch or being beaten; cutting and piercing with a weapon or shooting; throwing objects or being spat on. Verbal abuse was defined as being yelled or shouted at; inappropriate, offensive, rude, or hostile behavior; being belittled or humiliated; being verbally threatened with beating, kicking, killing, cutting and piercing, hanging and firing, being assigned to a remote area, being fired, and fighting outside later. Sexual harassment was defined as being subjected to unwanted sexual jokes, stories, questions, or words; being unwillingly asked out; receiving unwanted mail or telephone calls; being shown someone's body sexually; having their body touched; or experiencing an attempted assault.

Participants were asked to check the listed verbal abuse and threats, physical assault and sexual harassment behaviors and whether they had experienced any of the listed behaviors from 10 different sources: patients, patients' relatives, physician administrator, nurse administrator, physician, nurse, medical officers and emergency medicine technicians, officer, security officers and housekeepers. In addition, the participants were asked how often they experienced any type of violence or abuse.

# Statistical procedure

Data analysis was performed using SPSS (Version 15.0; SPSS Inc., Chicago, IL, USA) for Windows. Descriptive statistics and chi-square test were performed. A level of p < .05 was considered statistically significant.

#### Results

Sociodemographic data and professional characteristics of participants

Participants varied between 18 and 49 years of age, and 45.2% of the participants were in the 28–34-year age group. More than half of the participants (54.8%) were male and 58.5% had graduated from a university. Physicians made up 27.0% of the participants, the nurses 22.6%; 78.5% had less than 5 years of ED experience; and 45.2% worked in the inspection room, patient admission or resuscitation room of the studied EDs. More than half of the staff (56.7%) worked at a university hospital (Table 1).

Types of violence experienced and associated sociodemographic and professional characteristics

In all, 85.2% of the respondents reported having been subjected to at least one kind of violence: 41.1% to physical assault, 79.6% to verbal abuse, 55.5% to verbal threats and 15.9% to sexual harassment. Some of the most common types of physical violence were being kicked, "slapped," "pushed or "repelled," as experienced by 73.9% of the respondents. A total of 82.3% of the participants who experienced verbal abuse stated they had experienced "being yelled/shouted at" and "being belittled or humiliated," respectively. "Having the person fired (87.3%) was the most important verbal threat. Unwanted sexual jokes, stories, questions, or words were

**Table 1**Self-reported Workplace Violence Exposures of Study Participants According to Sociodemographic Characteristics.

Variable	Total n (%)	Physical assault n (%)	Verbal abuse n (%)	Verbal threat n (%)	Sexual harassment n (%)
Response rate	270/568 (47.5%)				
Age group (yr)					
≤27	88 (32.6)	34 (38.6)	64 (72.7)	43 (48.8)	12 (13.6)
28-34	122 (45.2)	51 (41.8)	104 (85.2)	79 (64.7)	30 (24.6)
≥35	60 (22.2)	26 (43.3)	47 (78.3)	23 (38.3)	1 (1.7)
$\overline{\chi}^2$	` ,	0.369	5.019	7.697	6.120
p		.831	.081	.021	.047
Gender					
Male	148 (54.8)	70 (47.3)	120 (81.1)	83 (56.0)	19 (12.8)
Female	122 (45.2)	41 (33.6)	95 (77.8)	67(54.9)	24 (19.6)
$\chi^2$	122 (1012)	5.177	0.425	0.037	2.333
r, p		.023	.514	.848	.127
		.023	.511	.6.16	1127
Educational level	10 (2.7)	6 (60.0)	0 (00 0)	4 (40.0)	0 (0 0)
Elementary school (8 yr)	10 (3.7)	6 (60.0)	9 (90.0)	4 (40.0)	0 (0.0)
High school (11 yr)	102 (37.8)	59 (57.8)	84 (82.5)	60 (58.8)	14 (13.7)
University (15 or 17 yr)	158 (58.5)	46 (29.1)	122 (77.2)	86 (54.4)	29 (18.3)
$\chi^2$		22.662	1.697	1.502	2.259
p		.000	.428	.472	.228
Professions					
Physicians	73 (27.0)	23 (31.5)	63 (86.3)	42 (57.5)	14 (19.2)
Nurses	61 (22.6)	8 (13.1)	43 (70.5)	29 (47.5)	13 (21.3)
Health officer/technician	47 (17.4)	28 (59.6)	33 (70.2)	24 (51.0)	4 (8.8)
Clerk	24 (8.9)	7 (29.2)	17 (70.8)	12 (50.0)	4 (16.7)
Security officers	32 (11.9)	24 (75.0)	29 (90.6)	24 (75.0)	5 (15.6)
Housekeepers	33 (12.2)	21 (63.6)	30 (90.9)	19 (57.6)	3 (9.1)
$\chi^2$		52.658	13.831	7.341	4.992
p		.000	.017	.196	.417
Time in ED (yr)					
≤5	212 (78.5)	81 (38.2)	170 (80.2)	116 (54.7)	34 (16.0)
>6	58 (21.5)	30 (51.7)	45 (77.6)	34 (58.6)	9 (15.5)
$\geq$ 6 $\chi^2$	()	3.437	0.190	0.281	0.009
p		.064	.663	.596	.924
Work station in ED					
Inspection room, patient admission & resuscitation room	122 (45.2)	59 (43.3)	100 (81.9)	72 (59.0)	19 (15.6)
Caring units	47 (17.4)	18 (38.3)	36 (76.6)	24 (51.0)	9 (19.1)
Working all units in ED	75 (27.8)	31 (41.3)	67 (89.3)	45 (60.0)	13 (17.3)
Diagnostic units & emergency intensive care units	26 (9.6)	3 (11.5)	12 (46.2)	9 (34.6)	2 (7.7)
$\chi^2$	20 (3.0)	12.196	22.994	6.193	1.803
λ. p		.007	.000	.103	.614
					*
Working shifts  Morning shift (8 a.m., 4 n.m.)	99 (22 C)	42 (49 9)	70 (70 5)	E2 (E0.0)	15 (17.0)
Morning shift (8 a.m.—4 p.m.)	88 (32.6)	43 (48.8)	70 (79.5)	52 (59.0)	15 (17.0)
Evening or night shift (4 p.m.—8 a.m.)	182 (67.4)	68 (37.7)	145 (79.6)	98 (53.8)	28 (15.4)
$\chi^2$		3.241 .072	0.001 .981	0.661 .416	0.122 .727
p		.072	.901	.410	.121
Hospital type					
University	153 (56.7)	57 (37.3)	111 (72.5)	73 (47.7)	17 (11.1)
State	117 (43.3)	54 (46.2)	104 (88.9)	77 (65.8)	26 (22.2)
$\chi^2$		2.169	10.913	8.796	6.113
p		.141	.001	.003	.013

*Note.* ED = emergency department.

the most frequent types of sexual harassment (51.2%). Additionally, most staff members (78.5%) stated that they had not received any type of training on how to deal with violence (Table 2).

There was a significant relationship between the frequency of physical violence and gender, educational level, profession and work station in the ED. Male respondents reported exposure to physical violence more frequently than females (47.3% versus 33.6%) ( $\chi^2 = 5.177$ , p < .05), and security officers (75.0%) reported higher rates than other professions working at the EDs  $(\chi^2 = 52.658, p < .0001)$ . The rates of physical violence were lower among staff members who graduated the university ( $\chi^2 = 22.662$ , p < .0001). The participants working at the inspection room/patient admission/resuscitation room reported higher rates than those working at other ED units ( $\chi^2 = 12.196$ , p < .01). Exposure to any form of verbal abuse was highest among housekeepers (90.9%) and security officers (90.6%) ( $\chi^2 = 13.831$ , p < .05). The results indicated that staff members who worked at "all units" and the "inspection room/patient admission/resuscitation room" in the ED were more likely to face verbal abuse ( $\chi^2 = 22.994$ , p < .0001). As for hospitals, a higher percentage of verbal abuse took place in state hospitals (88.9%) than university hospitals (72.5%) ( $\chi^2 = 10.913$ , p < .001; Table 1). We found that staff in the 28-34 years age group and working at state hospitals (65.8%) experienced verbal threats more commonly ( $\chi^2 = 8.796$ , p < .01). Sexual harassment (15.9%) was the least common type of abuse experienced by participants. Most

**Table 2**Characteristics of Reported Violence Events of Study Participants.

Characteristics of Reported Violence Events of Study Farticipants.		
Characteristics of violence	n	(%)
Exposure to any kind of violence in last 12 mo Yes No	230 40	85.2 14.8
Exposure to physical assault Kicked, slapped, pushed or repelled Scratched and beaten Assaulted with a weapon (knives or sharp/blunt objects) Objects thrown at Spit on To be walked upon, have clothes ripped	111 <sup>a</sup> 82 21 2 9 50 4	41.1 73.9 18.9 1.8 8.1 45.0 3.6
Exposure to verbal abuse Were yelled or shouted at Experienced inappropriate, nasty, rude, or hostile behaviour Were belittled or humiliated Were interrupted or not listened Were cursed at or sworn at Were distained or ignored	215 <sup>a</sup> 205 168 177 131 141 127	79.6 94.3 78.1 82.3 60.9 65.6 59.0
Exposure to verbal threat Beating Killing Cutting Hanging or choking Assignment to a remote area Having the person fired Fighting outside later	150 <sup>a</sup> 93 80 52 28 125 131 25	55.5 62.0 53.3 34.7 18.7 83.3 87.3 16.7
Exposure to sexual harassment Were subjected to unwanted sexual jokes, stories, questions, or words Were subjected to allusive sexual behaviours	43 22 16	15.9 51.2 37.2
with the eye, hand, or face Were unwillingly asked out Received unwanted mail or telephone calls Were shown someone's body sexually Were touched on the body Experienced any attempt to assault	17 8 6 12 0	39.5 18.6 13.9 27.9 0.0
Received training about the management of violence Yes No	58 212	21.5 78.5

<sup>&</sup>lt;sup>a</sup>More than one response has been provided.

(88.4%) of the sexual harassment episodes occurred during the evening or night shifts (Table 1). We found that those in the 28–34 year age group (24.6%) ( $\chi^2=6.120,\ p<.05$ ) and participants working in state hospitals experienced the highest percentage of any type of sexual harassment ( $\chi^2=6.113,\ p<.05$ ) (Table 1).

When asked about the identity of the perpetrators of physical violence (90.8%), verbal abuse (98.8%), verbal threats (98%) and sexual harassment (100.0%), the participants identified patients' companions as the most common perpetrators (Table 3).

Methods of coping with violence and emotions after violence

"Doing nothing and keeping silent" was the most common coping method among participants (37.2%–59.5%). The other important coping method for physical assaults was to report to a manager (56.8%), but this method was the least commonly used coping method by participants experiencing verbal abuse (35.8%), verbal threat (34.7%) and sexual harassment (34.9%), respectively (Table 4).

When asked about their reactions to the four types of violence, the most commonly reported reaction in this study was sadness at a rate of 86.0% for sexual harassment, 82.9% for physical assault and 82.0% for verbal threats. The other reactions were anger for physical assault (83.8%), disappointment for verbal threat (79.3%) and disgust for physical assaults (69.3%) (Table 5).

#### Discussion

Types of violence and associated sociodemographic and professional characteristics

In this study, the majority (85.2%) of staff members indicated that they had been exposed to some kind of violence; the type of violence was physical in 41.1%, verbal abuse in 79.6% and verbal threat in 55.5% of the total reported cases. The incidence of verbal abuse or verbal threat experienced by ED staff in the literature varies between 57.0% and 95.5%, and can even be 100.0%. Our findings are in line with previous studies (Adib, Al-Shatti, Kamal, El-Gerges, & Al-Raqem, 2002; Aydin et al., 2010; Boz et al., 2006; Erkol et al., 2007; Gulalp, Karcioglu, Koseoglu, & Sari, 2009; Kowalenko et al., 2005; Kwok et al., 2006; Oztunc, 2006), but our ratio of physical assaults is higher (Ayranci et al., 2006; Lin & Liu, 2005).

The risk factors for violence vary from hospital to hospital depending on location, size, and type of care provided or the

**Table 3**Details of Reported Violent Incidents According to Perpetrator.

•		U		
Variable	Type of violence			
	Physical assault n (%)	Verbal abuse n (%)	Verbal threat n (%)	Sexual harassment n (%)
Total	111 (41.1)	215 (79.6)	150 (55.5)	43 (15.9)
Patient	63 (56.7)	138 (64.2)	106 (70.7)	35 (81.4)
Patient's companions (relatives or friends)	101 (90.9)	206 (98.8)	147 (98.0)	43 (100.0)
Physician	6 (5.4)	29 (13.5)	23 (15.3)	6 (13.9)
Nurses	5 (4.5)	13 (6.0)	7 (4.7)	6 (13.9)
Managers of nursing	4 (3.6)	6 (2.8)	4 (2.7)	1 (2.3)
Managers of physician	6 (5.4)	17 (7.9)	14 (9.3)	5 (11.6)
Medical officer and emergency medical technician	4 (3.6)	3 (1.4)	2 (1.3)	2 (4.6)
Clerks	4 (3.6)	4 (1.8)	4 (2.7)	2 (4.6)
Security officers	4 (3.6)	5 (2.3)	4 (2.7)	3 (6.9)
Housekeepers	4 (3.6)	0 (0.0)	0 (0.0)	0 (0.0)

**Table 4**Coping Methods Identified by Participants.

Coping method <sup>a</sup>	Physical assault ( $n = 111$ ) $n$ (%)	Verbal abuse (n = 215) n (%)	Verbal threat ( $n=150$ ) $n$ (%)	Sexual harassment ( $n = 43$ ) $n$ (%)
Do nothing and keep silent	66 (59.5)	90 (41.9)	63 (42.0)	16 (37.2)
Put up barriers	23 (20.7)	19 (8.8)	13 (8.7)	6 (13.9)
Pretend not to see the abuse	22 (19.8)	13 (6.0)	10 (6.7)	2 (4.6)
Report violence/abuse to a manager	63 (56.8)	77 (35.8)	52 (34.7)	15 (34.9)
Report to police	1 (1.6)	0 (0.0)	0 (0.0)	0 (0.0)
Show similar behaviour	0 (0.0)	7 (3.2)	5 (3.3)	0 (0.0)
Distancing oneself and leaving the scene	0 (0.0)	46 (21.4)	34 (22.7)	16 (37.2)
No response	0 (0.0)	36 (16.7)	23 (15.3)	2 (4.6)

<sup>&</sup>lt;sup>a</sup>More than one response has been provided.

working shifts. In this study, the rate of any kind of violence in state hospital EDs was higher than the university hospital EDs and the violent episodes mostly occurred between 4 p.m. and 8 a.m. Senuzun-Ergun and Karadakovan (2005) showed that most verbal and physical violence occurred during the evening and night shifts (4 p.m.-8 a.m.). Shoghi et al. (2008) demonstrated that most verbal abuse occurred during morning shifts, and most physical violence occurred during night shifts. The reason for the high rates for any kind of violence (especially physical violence) between 4 p.m. and 8 a.m. at state hospitals EDs in this study could be the restriction of the study with emergency service workers and the high number of daily patients seen in the departments included in our study. The average number of patients presenting at state hospitals EDs daily was approximately 500-1200 while the number for university hospital EDs was only 100-120. A physician and nurse saw 10-40 patients on average during each 8-hour shift in the EDs in this study. These physicians and nurses usually worked two or three shifts at a time. This may have led to insufficient healthcare service and staffing or excessive waiting time for examination and treatment, and lack of adequate explanations by the physician and nurses to patient relatives due to the limited time, leading to increased anxiety and stress. Studies from Turkey have shown the most important causes of violence towards healthcare staff to be long waiting time for admission, treatment and consultations and the heavy workload of the healthcare staff members (Ayranci et al., 2004, 2006; Boz et al., 2006; Canbaz et al., 2008; Erkol et al., 2007).

The current study showed that exposure to physical violence was the greatest among male staff and the rate of physical violence towards nurses was very low. In Turkey, male students have been admitted to the nursing schools only since September 2007 and emergency nurses were therefore all female in this study. As

reported in the literature, violence against emergency nurses does not suggest gender-specific risk assaults (Aydin et al., 2010; Jones & Lyneham, 2001; McPhaul & Lipscomb, 2004). However, Adib et al. (2002) and Shoghi et al. (2008) reported that verbal and physical abuse were experienced more often by male staff members than did their female counterparts. Showing disrespect to women is not a culturally accepted situation in most Arabic societies. This difference in result may be attributed to cultural and religious difference. Internal studies performed by Ayranci (2005), Erkol et al. (2007) and Aydin et al. (2010) reported that females were generally exposed to verbal abuse/threats instead of physical violence, as physical violence towards women is traditionally not tolerated in Turkey. Therefore, it is most probable that patients and/ or relatives restrain themselves from being physically violent toward a woman, and prefer to express their anger or frustration towards them in the form of verbal abuse.

Sexual harassment rate was 15.9% in this study group. Although male workers might also be subjected to sexual harassment, women reported more sexual harassment in the workplace than men did. The literature indicates that nurses are the ones most likely to experience sexual harassment, either because their duties require working closely with patients, or because nursing is seen as a female profession (Aydin et al., 2010; Kwok et al., 2006). The Kisa, Dziegielewski, and Ates (2002) study in a different city in Turkey found sexual harassment rate to be 62.5% in women. In this study, we found a lower rate. Various reasons might account for the difference. For example, this study was performed on participants of both sexes and professionals with different characteristics. However, the sample in the study of Celik and Senol-Celik (2007) and Senuzun-Ergun and Karadakovan (2005) only included female nurses.

**Table 5**Emotions Experienced by Participants After Workplace Violence.

Emotions <sup>a</sup>	Physical assault ( $n = 111$ ) $n$ (%)	Verbal abuse ( $n = 215$ ) $n$ (%)	Verbal threat ( $n=150$ ) $n$ (%)	Sexual harassment ( $n = 43$ ) $n$ (%)
Disappointment	83 (74.8)	154 (71.6)	119 (79.3)	32 (74.4)
Sadness	92 (82.9)	166 (77.2)	123 (82.0)	37 (86.0)
Powerlessness	54 (48.6)	81 (37.7)	66 (44.0)	17 (39.5)
Low self-esteem	38 (34.2)	57 (26.5)	43 (28.7)	10 (23.2)
Anger	93 (83.8)	167 (77.7)	123 (82.0)	35 (81.4)
Fury/ hate	72 (64.8)	125 (58.1)	92 (61.3)	31 (72.0)
Animosity	50 (45.0)	85 (39.5)	67 (44.6)	18 (41.8)
Anxiety	74 (66.7)	114 (53.0)	85 (56.7)	25 (58.1)
Helplessness	67 (60.3)	98 (45.6)	79 (52.7)	19 (44.2)
Despair	59 (53.1)	88 (40.9)	62 (41.3)	16 (37.2)
Failure	62 (55.8)	88 (40.9)	77(51.3)	16 (37.2)
Shock/astonishment	69 (62.1)	125 (58.1)	100 (66.7)	24 (55.8)
Feel lowly	38 (34.2)	59 (27.4)	47 (31.3)	10 (23.2)
Guilt or shame	27 (24.3)	45 (20.9)	33 (22.0)	9 (20.9)
Fear	57 (51.3)	97 (45.1)	77 (51.3)	22 (51.7)
Disgust	77 (69.3)	133 (61.8)	102 (68.0)	27 (62.8)

<sup>&</sup>lt;sup>a</sup>More than one response has been provided.

We also found that sexual harassment prevalence was higher (18.3%) among participants who had graduated from university. Several studies have shown that the more educated and experienced the nurses are, the more likely they are to report sexual harassment or other types of violence (Arnetz & Arnetz, 2001; Senuzun-Ergun & Karadakovan, 2005). Participants with the lowest level of education may have been more hesitant or reluctant to report sexual harassment because of their lower working status and responsibilities in patient care (Celik & Senol-Celik, 2007). Also, the sample of our study included staff working in six different hospitals, and the rate of participants who had only graduated from elementary school was very low (3.7% of the sample). These might account for the difference of our findings.

The other findings of this study was a statistically significant relation between staff age and the reported rates of verbal threat and sexual harassment. Staff members aged 28-34 years were exposed to more verbal threat and sexual harassment than others, and staff members aged 35 years and over were exposed to physical assaults more often. As Ayranci (2005), Senuzun-Ergun and Karadakovan (2005) and Shoghi et al. (2008) discuss, nurses aged 30–39 and 31–43 years are vulnerable to abuse. Boz et al. (2006) and Oztunc (2006) showed in their study that older staff members experienced more abuse than others. In the studies of Adib et al. (2002), Ayranci et al. (2004) and Kowalenko et al. (2005), the opposite result was reported: younger staff members were more vulnerable to abuse. These investigators believed that younger staff members' lack of ability in dealing with these issues is the reason for abuse; however, other variables may come into play as well.

The rates of physical assaults, verbal abuse or verbal threat were highest towards security officers and housekeepers in this study. Previous investigators have stated that those most commonly exposed to violence are general practitioners, resident physicians, and nurses (Aydin et al., 2010; Ayranci et al., 2006; Jones & Lyneham, 2001). There could be two reasons for this study finding. First, those working in these professions are not trained regarding hospitals and patients. Second, they usually work at the ED entrance or patient admission and the first intervention unit. These people therefore also make up the groups that are in direct communication with people, which makes them vulnerable to violence. This may result in the higher reported rate of violent incidents.

The present study showed that relatives or friends accompanying the patients were most often responsible for the violence, and this confirms what Acik et al. (2008), Aydin et al. (2010), Ayranci (2005), Boz et al. (2006), Erkol et al. (2007), and Shoghi et al. (2008) concluded in their studies. Adib et al. (2002), Jackson, Clare, and Mannix (2002) and Lin and Liu (2005) demonstrated that the majority of violent actions are by the patients or their companions. These differences may have resulted from differences in culture or communication structure among family members. For example, the family structure of people living in Turkey has not converted from traditionalism to the structure of a nuclear family. The family bonds of people living in Turkey are therefore traditionally strong. This means that all the family members go to the hospital as if they were also patients when someone is ill, and generally they wait beside their patient until recovery. However, the family structure is broken down into units in other societies and people have to solve their problems by themselves (Ayranci et al., 2006; Erkol et al., 2007).

Methods of coping with violence and emotions after violence

We found that 212 respondents (78.5%) had not received training to cope with violent incidents. Even at the current

perceived level of aggression, most staff members are aware that they lack many of the communication skills necessary to defuse a potentially violent situation (Celik & Senol-Celik, 2007; Jones & Lyneham, 2001). The results regarding coping methods showed that more than half of the staff who had experienced any form of violence "did nothing" and/or "kept silent". This finding indicates that many incidents of abuse are not reported and that ineffectual coping methods are used by ED staff (Jones & Lyneham; Oztunc, 2006).

In this study, more than half of the participants stated that they had never reported an incident of violence. It has been reported that ignorance, education, and regulations or legislation, as well as uncomfortable and inappropriate working conditions might also be other reasons for lack of action taken against abuse. Violent acts are not reported for a number of reasons (Adib et al., 2002; Crilly, Chaboyer, & Creedy, 2004; Erkol et al., 2007). No system for reporting any kind of violence or abuse existed in the hospital where the research was conducted, and the majority of the participants in the study stated reports not being considered and authorities not finding a solution. These findings suggest that there is something wrong with the integrity of the facilities, which needs to be addressed.

The most commonly reported reaction in this study was sadness at a rate of 86.0% for sexual harassment, 82.9% for physical assault and 82.0% for verbal threats. Violence may have significant psychological as well as physical and organizational consequences (Jones & Lyneham, 2001; Lee, 2001). These findings were consistent with that from Ayranci et al. (2006), Crilly et al. (2004) and Uzun (2003) studies. Our results are therefore not surprising as healthcare workers in every country have their own adaptive styles.

# Conclusion

The results of the study suggest that violence is a major problem among ED staff and serious measures need to be taken in order to avoid the growing number of violent incidents. Training on abuse should be available as part of on-the-job training for staff working in ED. Every hospital should institute reliable reporting procedures that staff members feel comfortable using, and also provide a comprehensive program of support services for staff who have been assaulted.

Results of this study indicate the need to recognize that workplace violent events are observed frequently. We recommend that training to deal with violence in the workplace be specifically targeted at members of ED staff and that policies and procedures for reporting violent events be developed together with increasing the number of staff working in emergency departments.

## Limitations

This is an exploratory study conducted in six hospitals in Ankara. The relatively small number of respondents could be a limitation. Consequently, further research incorporating larger numbers of participants is required. The study is also limited by fact that data were collected by means of retrospective self-report in a questionnaire. This inevitably relies on participants' memory of events, which may not always be accurate. Ideally, future studies should include analysis of the formal reporting system for the staff's experience of violent incidents. However, this will be dependent on such reporting mechanisms being in place at the participating hospitals.

# **Conflict of interest**

Authors have no conflict of interest regarding this study.

#### **Acknowledgments**

This study was presented as poster presentation at Second International Conference on Violence in the Health Sector in Amsterdam, Netherlands and its abstract was published Second International Conference on Violence in the Health Sector Report Book. 27–29 October. 2010.

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