

INCIDENCE AND COST OF NURSE WORKPLACE VIOLENCE PERPETRATED BY HOSPITAL PATIENTS OR PATIENT VISITORS

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Introduction: Workplace violence against nurses is a serious problem. Nurses from a US urban/community hospital system employing more than 5,000 nurses researched the incidence of workplace violence against nurses perpetrated by patients or visitors in their hospital system.

Methods: Survey research and retrospective database review methods were used. Nurse participants (all system-employed nurse types) completed a 34-item validated survey in electronic format. Retrospective database review provided annual nurse workplace violence injury treatment and indemnity charges. Institutional review board approval was received.

Results: Survey research participants (N = 762) were primarily white female registered nurses, aged 26 to 64 years, with more than 10 years of experience. Over the past year, 76.0% experienced violence (verbal abuse by patients, 54.2%; physical abuse by patients, 29.9%; verbal abuse by visitors, 32.9%; and physical by visitors, 3.5%), such as shouting or yelling (60.0% by patients and 35.8% by visitors), swearing or cursing (53.5% by patients and 24.9% by visitors), grabbing (37.8% by patients and 1.1% by visitors), and scratching or kicking (27.4% by patients and 0.8% by visitors). Emergency nurses (12.1%)

experienced a significantly greater number of incidents ($P < .001$). Nurses noted more than 50 verbal (24.3%) and physical (7.3%) patient/visitor violence incidents over their careers. Most serious career violence incidents (n = 595, 78.1%) were physical (63.7%) (60.8% by patients and 2.9% by visitors), verbal (25.4%) (18.3% by patients and 7.1% by visitors), and threatened physical assault (10.9%) (6.9% by patients and 4.0% by visitors). Perpetrators were primarily white male patients, aged 26 to 35 years, who were confused or influenced by alcohol or drugs. Per database review, annual workplace violence charges for the 2.1% of nurses reporting injuries were \$94,156 (\$78,924 for treatment and \$15,232 for indemnity).

Discussion: Nurses are too commonly exposed to workplace violence. Hospitals should enhance programs for training and incident reporting, particularly for nurses at higher risk of exposure, caring for patients with dementia or Alzheimer disease, patients with drug-seeking behavior, or drug- or alcohol-influenced patients.

Key words: Workplace; Violence; Nurse-patient relations; Wounds and injuries

Workplace violence (WPV) is a serious problem for nurses working in the hospital setting. Of the occupations measured in a recent study, those working in medical occupations had the third highest

proportion (10%) of WPV.¹ The 2011 US Bureau of Justice Statistics report measured a nurse WPV rate of 3.9%. They defined workplace as “a place where an employed person is working or on duty.” Workplace violence was

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defined as “a nonfatal violence (rape/sexual assault, robbery, and aggravated and simple assault) against employed persons age 16 or older that occurred while they were at work or on duty.”

WPV is also costly, with estimated charges of \$4.2 billion annually.² It accounts for 1.7 million nonfatal assaults each year; there are 900 workplace homicides each year.³ WPV results in physical, personal, emotional, professional, and organizational consequences.⁴ Furthermore, it has potentially serious impacts on job performance and productivity, job satisfaction, staff retention, and staff morale.⁵

Precipitating factors for WPV reported in emergency health care settings are large volumes of patients and chaotic, overcrowded, and noisy environments.⁶ Other WPV factors are psychiatric patient instabilities, long wait times, misperceptions of staff as uncaring, and a nursing shortage.³ Nurses are subjected to verbal and physical abuse so frequently that these events are often accepted as “part of the job.”⁷ This has also been reported in emergency, mental health, and geriatric settings.²

WPV incidents have been categorized by verbal threats (use of profanity), physical assaults (victims pushed, slapped, hit, or kicked), confrontations outside the workplace, and stalking.^{8,9}

Hospital WPV programs vary, and some offer more extensive training in non-violent crisis intervention for persons in higher-risk areas, such as the emergency department. Reporting requirements also vary; some require reporting of physical injury only. Regardless, not all employees report. Factors contributing to underreporting are lack of a standard hospital WPV definition, perceived degree of intent of the patient, staff being accustomed to violence, peer pressure to not report episodes, gender of the victim, fear of blame, and excessive paperwork.⁹ Emergency nurses have been shown to make judgments about the meaning of violent events according to perceived personalization, mitigating factors, and reasons for the violence, which also contributes to underreporting.¹⁰

Nurses researched WPV in their hospital system to address the following: incidence of hospital WPV against nurses by patient and visitor perpetrators, types of verbal and physical violence experienced, WPV causes, causes and characteristics of the most serious type of WPV over a nurse’s career, WPV reporting barriers, types of workplace prevention/de-escalation training programs, and WPV treatment and indemnity charges for incidences reported by nurses.

Methods

This study was conducted in a multi-hospital system employing approximately 5,000 nurses located in an urban/

community setting in the mid-Atlantic region of the United States. The research included a survey component and a retrospective review component of existing databases. All hospital system–employed nurse types were eligible. Institutional review board approval was received. Survey research participants provided informed consent.

For the survey research component, the hospital system’s nurses received recruitment information through E-mails and flyers, providing a link for survey completion electronically. Over a 6-month period from August 2011 to February 2012, a total of 844 survey entries were initiated (16.9% response rate). Of those initiating the survey, 762 completed the survey (15.2% response rate). The response rate for emergency nurses was 19.2% (92 of 479 nurses).

The nurse researchers developed and validated the survey instrument used for this study (Cronbach α coefficient = .948). Health care professionals with experience on WPV and nurses serving on hospital research councils measured the content validity of the study survey instrument. Raters scored questions for relevance (1, not relevant; 2, somewhat relevant but unable to assess question relevance without major revisions; 3, quite relevant but needs minor revision; and 4, relevant) and clarity (1, not clearly written with no potential for revision; 2, not clearly written and needs major revision; 3, clearly written but needs minor revision; and 4, clearly written). The 34 questions retained ($\geq 80\%$ agreement for relevance and clarity) addressed the following: demographic characteristics; WPV incidents experienced over the past year and over a nurse’s career; violence type (verbal, physical, or threatened); perpetrator type (patient or visitor); reporting of WPV incidents; resource utilization due to WPV experienced; WPV employee training; and open comments.

Nurses were instructed to answer questions based on WPV incidents experienced that were perpetrated either by a patient or by a visitor. The WPV definition provided was as follows:

Workplace violence is violence or the threat of violence against workers. It can occur at or outside the workplace and can range from threats and verbal abuse to physical assaults and homicide, one of the leading causes of job-related deaths. However it manifests itself, WPV is a growing concern for employers and employees nationwide.¹¹

Retrospective database review identified annual (2010) WPV treatment and indemnity charges for nurses reporting injuries, including payments for health care services and payments made for lost work time. Retrospective data collected were nurse demographic

characteristics, job title, employment status, and injury information (type, unit in which the incident occurred, date, time of injury, day of week, activity at time of injury, and whether the incident was witnessed). Worker's compensation data provided total lost work or restricted time due to injury. Third-party administrator payment data provided payments for claims submitted by nurses for health care services and for indemnity payments for lost time due to WPV.

The sample size was based on the 2% WPV rate (22 per 1,000) among nurses when the research was designed.¹² On the basis of an estimated "at-risk" population of 5,000 nurses and a 10% expected response rate, a sample size of 500 was estimated to achieve 95% confidence in estimating the true incidence of WPV among nurses responding to the survey.¹³ Secondary analyses included contrasts in proportions and means measured for emergency nurses compared with non-emergency nurses because emergency nurses are a known population for greater WPV risk.

Data analysis was completed with Microsoft Excel, version 2003 (Microsoft, Redmond, WA). Standard tests for differences in proportions and/or means were conducted. This analysis used 95% confidence and 5% error in reporting *P* values.

Results

Demographic characteristics are provided in [Table 1](#). Of the 762 nurse participants completing the survey research, 579 (76.0%) experienced verbal and/or physical WPV over the past year. Of the 92 emergency nurses participating in the survey research, 89 (96.7%) specified WPV (15.4% of total WPV specified), a significantly greater finding than the 670 non-emergency nurses participating, of whom 490 specified WPV (73.1%; 84.6% of total WPV specified) ($P < .001$). Survey research participants were primarily female (94.1%), white (78.6%), registered nurses (73.2%), working 100% in direct patient care (35.8%). The majority had bachelor's degrees (54.5%) and more than 10 years of nursing experience (66.0%). The emergency nurses specifying significantly more violence were non-white, nursing assistants/technicians and were direct patient care providers 100% of the time or less than 50% of the time.

Per survey research nurse participant responses, patients were the perpetrators of more verbal and physical violence incidents (54.2% verbal and 29.9% physical) than patient visitors (32.9% verbal and 3.5% physical) ([Table 2](#)). Emergency nurses specified a significantly greater incidence of violence by patients (87.0% verbal and 50.0% physical)

and visitors (48.9% verbal and 4.3% physical). Overall, the most common verbal violence was shouting or yelling (60.0% by patients and 35.8% by visitors) and swearing or cursing (53.5% by patients and 24.9% by visitors) at nurses. The most common physical violence was being grabbed (37.8%) and being scratched or kicked (27.4%).

Nurses were asked, "Thinking back on average over the past year, approximately how often did you experience patient/visitor violence incidents in the hospital?" They were asked to respond as follows: daily, every few days, weekly, monthly, every other month, quarterly, rarely, or never. Regarding verbal violence, most nurses experienced it rarely (30.3% by patients and 34.5% by visitors) or never (26.1% by patients and 34.3% by visitors). Most nurses never experienced physical violence (47.5% by patients and 70.3% by visitors) or experienced it rarely (26.5% by patients and 23.4% by visitors). Most never experienced threatened physical violence (54.9% by patients and 74.1% by visitors) or experienced it rarely (24.7% by patients and 20.5% by visitors). The findings were similar for emergency nurses.

Nurses were asked, "Thinking back over your nursing career, how many incidents of workplace verbal violence by a patient or patient visitor do you estimate you have experienced?" Only 7.0% specified no incidents and 39.8% experienced 1 to 10 incidents (11.9% had 11-20 incidents; 8.3% had 21-30 incidents; 4.7% had 31-40 incidents; 3.9% had 41-50 incidents; and 24.3% had > 50 incidents). For physical violence, 21.9% experienced no incidents and 50.8% experienced 1 to 10 incidents (10% had 11-20 incidents; 5.9% had 21-30 incidents; 2.2% had 31-40 incidents; 1.8% had 41-50 incidents; and 7.3% had > 50 incidents).

Nurses were asked, "What do you feel are the causes of workplace violence in your hospital?" Overall, attributable causes were dementia or Alzheimer disease (49.9%), drug-seeking behavior (47.9%), and influence of alcohol (45.0%) ([Table 3](#)). For emergency nurses, primary causes were drug-seeking behavior (77.2%) and patients or visitors under the influence of alcohol (70.7%) or drugs (69.6%).

Participants providing information on their most serious nursing career WPV incident ($n = 595$) specified, overall, physical violence (63.7%) (60.8% by patients and 2.9% by visitors), verbal violence (25.4%) (18.3% by patients and 7.1% by visitors), and threatened physical assault (10.9%) (6.9% by patients and 4.0% by visitors) ([Table 4](#)). Perpetrators were patients (90.3%), male (62.4%), aged 26 to 35 years (24.4%), and white (68.9%). The violence occurred on inpatient (43.5%), emergency (17.8%), and intensive care units (16.8%). Causes were confused behaviors or delirium (41.0%), alcohol intoxication (30.1%), and persons under the influence of drugs (28.6%). For emergency

TABLE 1
Demographic characteristics by WPV incidence status over past year (N = 762)

Demographic	Nurses experiencing WPV		Nurses not experiencing WPV		Nurses experiencing WPV: All nurses	Nurses not experiencing WPV: All nurses
	Emergency nurses	Non-emergency nurses	Emergency nurses	Non-emergency nurses		
Nurses experiencing violence	89 (96.7%)*	490 (73.1%)	3 (3.3%)	180 (26.9%)	579	183
Gender						
Female	83 (93.3%)	458 (93.5%)	3 (100.0%)	173 (96.1%)	541	176
Male	6 (6.7%)	32 (6.5%)	0	7 (3.9%)	38	7
Age						
≤25 yr	6 (6.7%)	20 (4.0%)	0	2 (1.1%)	26	2
26-35 yr	21 (23.6%)	111 (22.7%)	0	25 (13.9%)	132	25
36-45 yr	20 (22.5%)	118 (24.1%)	1 (33.3%)	43 (23.9%)	138	44
46-55 yr	23 (25.8%)	149 (30.4%)	1 (33.4%)	53 (29.4%)	172	54
56-65 yr	19 (21.4%)	90 (18.4%)	1 (33.3%)	49 (27.2%)	109	50
>65 yr	0	2 (0.4%)	0	8 (4.5%)	2	8
Race						
White, non-Hispanic	80 (89.9%)	375 (76.5%)	3 (100.0%)	141 (78.3%)	455	144
All other	9 (10.1%) [†]	115 (23.5%)	0	39 (21.7%)	124	39
Role of nurse						
Registered nurse	69 (77.5%)	352 (71.8%)	2 (66.7%)	135 (75.0%)	421	137
Nurse director, manager/supervisor	10 (11.3%)	92 (18.8%)	0	14 (7.8%)	102	14
Clinical nurse specialist/advanced practice nurse	0	22 (4.5%)	1 (33.3%)	10 (5.7%)	22	11
Nursing assistant/technician or other	10 (11.3%)*	24 (4.9%)	0	21 (11.7%)	34	21
Time providing patient care						
100%	49 (55.0%) [‡]	167 (34.1%)	2 (66.7%)	55 (30.5%)	216	57
75%-99%	23 (25.8%)	132 (26.9%)	0	66 (36.7%)	155	66
50%-74%	7 (7.9%)	60 (12.2%)	0	13 (7.2%)	76	13
25%-49%	2 (2.3%) [†]	42 (8.6%)	1 (33.3%)	7 (3.9%)	44	8
<25%	8 (9.0%) [†]	89 (18.2%)	0	39 (21.7%)	97	39

WPV, workplace violence.

* $P < .001$.

[†] $P < .05$.

[‡] $P < .0001$.

nurses, the causes were mental health diagnosis (43.5%), persons under the influence of drugs (42.5%), and alcohol intoxication (40.0%). Nurses reported incidents to managers or supervisors (73.4%), hospital security (31.6%), or employee/occupational health (15.5%); 17.1% did not report the most serious nursing career WPV incident (14.1% of emergency nurses).

Nurses were asked, "If you have not reported all of workplace violence incidents, what stops you from reporting an incident?" Barriers specified were not sustaining physical injury (49.5%), inconvenience (26.1%), and the perception that violence comes with the job (19.6%) (Table 5).

Regarding the number of WPV incidents reported in the participants' nursing careers, 18.2% specified all

TABLE 2

Verbal and physical WPV incident types by perpetrator type over past year (N = 762)

Type of incident	Patient perpetrator		Patient visitor perpetrator	
	Incidents specified	Total responding	Incidents specified	Total responding
Verbal incidents ^a				
Shouted or yelled at				
Emergency nurses	85 (92.4%)*	92	48 (52.2%) [†]	92
Non-emergency nurses	372 (55.5%)	670	225 (33.6%)	670
Sworn or cursed at				
Emergency nurses	81 (88.0%)*	92	39 (42.4%)*	92
Non-emergency nurses	327 (48.8%)	670	151 (22.5%)	670
Called names/something derogatory				
Emergency nurses	73 (79.3%)*	92	35 (38%)*	92
Non-emergency nurses	258 (38.5%)	670	141 (21%)	670
Ridiculed or humiliated				
Emergency nurses	45 (48.9%)*	92	26 (28.3%) [‡]	92
Non-emergency nurses	152 (22.7%)	670	112 (16.7%)	670
Threatened with physical assault				
Emergency nurses	47 (51.1%)*	92	15 (16.3%)*	92
Non-emergency nurses	161 (24%)	670	38 (5.7%)	670
Physical incidents ^a				
Grabbed				
Emergency nurses	52 (56.5%)*	92	1 (1.1%)	92
Non-emergency nurses	236 (35.2%)	670	8 (1.2%)	670
Scratched				
Emergency nurses	43 (46.7%)*	92	0 (0%)	92
Non-emergency nurses	166 (24.8%)	670	6 (0.9%)	670
Kicked				
Emergency nurses	38 (41.3%) [†]	92	0 (0%)	92
Non-emergency nurses	171 (25.5%)	670	5 (0.7%)	670
Pinched				
Emergency nurses	37 (40.2%) [†]	92	0 (0%)	92
Non-emergency nurses	160 (23.9%)	670	5 (0.7%)	670
Pushed/shoved				
Emergency nurses	27 (29.3%) [‡]	92	2 (2.2%)	92
Non-emergency nurses	132 (19.7%)	670	10 (1.5%)	670
Spat on				
Emergency nurses	31 (33.7%)*	92	1 (1.1%)	92
Non-emergency nurses	86 (12.8%)	670	5 (0.7%)	670
Punched				
Emergency nurses	16 (17.4%)	92	1 (1.1%)	92
Non-emergency nurses	77 (11.5%)	670	4 (0.6%)	670
Slapped				
Emergency nurses	17 (18.5%) [‡]	92	0 (0%)	92
Non-emergency nurses	70 (10.4%)	670	4 (0.6%)	670

(continued on next page)

TABLE 2
(Continued)

Type of incident	Patient perpetrator		Patient visitor perpetrator	
	Incidents specified	Total responding	Incidents specified	Total responding
Arm twisted				
Emergency nurses	10 (10.9%)	92	1 (1.1%)	92
Non-emergency nurses	69 (10.3%)	670	4 (0.6%)	670
Hit by thrown object				
Emergency nurses	15 (16.3%) [‡]	92	1 (1.1%)	92
Non-emergency nurses	51 (7.6%)	670	4 (0.6%)	670
Bitten				
Emergency nurses	9 (9.8%)	92	0 (0%)	92
Non-emergency nurses	33 (4.9%)	670	2 (0.3%)	670
Urinated on				
Emergency nurses	12 (13%)*	92	0 (0%)	92
Non-emergency nurses	19 (2.8%)	670	2 (0.3%)	670
Hair pulled				
Emergency nurses	7 (7.6%) [‡]	92	0 (0%)	92
Non-emergency nurses	17 (2.5%)	670	1 (0.1%)	670
Slammed against wall/hard surface				
Emergency nurses	3 (3.3%)	92	0 (0%)	92
Non-emergency nurses	8 (1.2%)	670	1 (0.1%)	670
Personal property deliberately destroyed				
Emergency nurses	1 (1.1%)	92	0 (0%)	92
Non-emergency nurses	8 (1.2%)	670	2 (0.3%)	670

^a The categories are not mutually exclusive.

* $P < .0001$.

† $P < .001$.

‡ $P < .05$.

verbal violence (none in 46.7% and some in 35.0%) and 29.1% reported all physical violence (none in 45.1% and some in 25.7%).

Nurses specified minimal resource utilization over the past year as a result of WPV by a patient or visitor (primary health care provider visit, 5.1%; specialist health care provider visit, 3.0%; mental health visit, 2.6%; ED visit, 4.5%; hospitalization, 1.3%; and leave from work with pay, 5.0%).

Nurses completed workplace prevention/de-escalation training (identification of risk factors, 40.6%; verbal de-escalation techniques, 39.7%; and stress management, 22.6%). Training was also done in staff meetings (33.1%). Whereas 25.7% specified no WPV training, 61.7% felt prepared (61.7%) (48.7% felt somewhat prepared and 13.0% felt very prepared) when asked, "How prepared do you feel you are to defend against workplace violence?" Fewer (38.4%) were unprepared

(15.0% felt very unprepared and 23.4% felt somewhat prepared). When asked, "How fearful are you that you will be physically injured at your workplace?" 44.8% were not at all fearful. Most had some fear (42.5% were slightly fearful, 8.7% were fearful, and 3.5% were very fearful). Nurses specified that because of violence where they worked, 63.3% considered leaving the hospital (80.4% of emergency nurses), 8.8% considered leaving the nursing profession altogether (8.7% of emergency nurses), and 6.3% considered changing jobs (3.3% to a different unit and 3.0% to a different hospital).

Lastly, regarding the survey research, 144 nurses (18.9%) provided responses to the following statement: "Please provide any comments concerning workplace violence against nurses not addressed above." Although the survey was not designed specifically for WPV among staff, the greatest number of comments received (26

TABLE 3
WPV causes (N = 762)

Cause type ^a	Emergency nurses (n = 92 [12.1%])	Non-emergency nurses (n = 670 [87.9%])	All nurses (N = 762)
Patient with dementia or Alzheimer disease	42 (45.7%)	338 (50.4%)	380 (49.9%)
Patient with drug-seeking behavior	71 (77.2%)	294 (43.9%)	365 (47.9%)
Patient/visitor under alcohol influence	65 (70.7%)	278 (41.5%)	343 (45.0%)
Patient/visitor with unrealistic expectations	43 (46.7%)	285 (42.5%)	328 (43.0%)
Patient/visitor under influence of drugs	64 (69.6%)	239 (35.7%)	303 (39.8%)
Nurse shortage	21 (22.8%)	183 (27.3%)	204 (26.8%)
Patient/visitor with staff behavior misconception	27 (29.3%)	172 (25.7%)	199 (26.1%)
Prolonged wait times	34 (37.0%)	152 (22.7%)	186 (24.4%)
Cultural aspects	12 (13.0%)	164 (24.5%)	176 (23.1%)
Grieving families/visitors	6 (6.5%)	169 (25.2%)	175 (23.0%)
Patient/visitor with perception staff is uncaring	17 (18.5%)	148 (22.1%)	165 (21.7%)
No or poorly enforced visitor policy	13 (14.1%)	111 (16.6%)	124 (16.3%)
Patient/visitor felt not being kept informed	8 (8.7%)	116 (17.3%)	124 (16.3%)
Crowding/high patient numbers	24 (26.1%)	93 (13.9%)	117 (15.4%)
Patient/visitor illiteracy/language problem	9 (9.8%)	91 (13.6%)	100 (13.1%)
Perceived prejudice from nursing staff	12 (13.0%)	85 (12.7%)	97 (12.7%)
Holding/boarding patients	19 (20.7%)	67 (10.0%)	86 (11.3%)
Lack of patient privacy	4 (4.3%)	72 (10.7%)	76 (10.0%)
Insufficient number of or no quiet rooms	7 (7.6%)	60 (8.9%)	67 (8.8%)
No smoking policy	12 (13.0%)	47 (7.0%)	59 (7.7%)
Staff removing personal items from patients	7 (7.6%)	36 (5.4%)	43 (5.6%)
Critically ill children	2 (2.2%)	29 (4.3%)	31 (4.1%)
Violent crime rates	10 (10.9%)	21 (3.1%)	31 (4.1%)
Limited or no access to food and beverages	1 (1.1%)	29 (4.3%)	30 (3.9%)
Physician shortage	3 (3.3%)	25 (3.7%)	28 (3.7%)
Collecting cash payment	3 (3.3%)	23 (3.4%)	26 (3.4%)
Mental health issues	5 (5.4)	17 (2.5%)	22 (2.9%)
Confusion/delirium	1 (1.1)	14 (2.1%)	15 (2.0%)
Other	0 (0.0)	45 (6.7%)	45 (5.9%)

^a The categories are not mutually exclusive.

addressed verbal abuse among nurses and doctors or surgeons. Nurses specified that they needed more support by management when caring for abusive patients (21), formal WPV education with information on how to respond (13), better legal protection when reporting WPV (3), and better security (5). Other themes were as follows: violence comes with the territory (11); confused patients (10) and those with mental health exacerbations, including alcohol detoxification, are violent (9); WPV results in nurses leaving bedside care (7); nurses are discouraged to report WPV to the police (6); there should be no toleration of verbal abuse (3); and patients lack

sufficient support systems to manage anxiety inherent with hospitalizations (3).

Per retrospective database review, a total of 106 (2.1%) of the 5,016 hospital system nurses reported WPV injuries by patients or visitors to the hospital's employee health department. Those reporting were primarily female (78.3%), registered nurses (52.8%) who worked full time (75.5%) and provided direct patient care (91.5%). Most injuries occurred on psychiatric (24.5%), inpatient (21.7%), emergency (14.2%), or intensive care units (14.2%) and on Tuesdays (19.8%) and Fridays (17.0%). Physical injuries reported (0 verbal injuries reported)

TABLE 4

Characteristics of most serious career workplace violence incident (n = 595)

Characteristic	Emergency nurses (n = 85 [11.1%])	Non-emergency nurses (n = 510 [66.9%])	All nurses (n = 595 [78.1%])
Incident type			
Physical violence by patient	61 (71.8%)	301 (59.0%)	362 (60.8%)
Verbal violence by patient	13 (15.3%)	96 (18.8%)	109 (18.3%)
Verbal violence by patient visitor	2 (2.4%)	40 (7.8%)	42 (7.1%)
Patient threatened physical assault	4 (4.7%)	37 (7.2%)	41 (6.9%)
Patient visitor threatened physical assault	1 (1.2%)	23 (4.5%)	24 (4.0%)
Physical violence by patient visitor	4 (4.7%)	13 (2.5%)	17 (2.9%)
Relationship of perpetrator			
Patient	82 (96.5%)	455 (89.2%)	537 (90.3%)
Visitor of patient	3 (3.5%)	55 (10.8%)	58 (9.7%)
Perpetrator gender			
Male	47 (55.3%)	324 (63.5%)	371 (62.4%)
Female	30 (35.3%)	134 (26.3%)	164 (27.6%)
Both male and female in 1 incident	8 (9.4%)	52 (10.2%)	60 (10.1%)
Perpetrator age			
26-35 yr	32 (37.6%)	113 (22.1%)	145 (24.4%)
>65 yr	15 (17.6%)	114 (22.3%)	129 (21.7%)
36-45 yr	16 (18.8%)	107 (21.0%)	123 (20.7%)
46-55 yr	7 (8.2%)	72 (14.1%)	79 (13.3%)
56-65 yr	3 (3.5%)	71 (13.9%)	74 (12.4%)
≤25 yr	12 (14.1%)	33 (6.5%)	45 (7.6%)
Perpetrator race			
White, non-Hispanic	57 (67.1%)	353 (69.2%)	410 (68.9%)
Black or African American	21 (24.7%)	110 (21.6%)	131 (22.0%)
Spanish, Hispanic, or Latino	2 (2.4%)	15 (2.9%)	17 (2.9%)
Asian	1 (1.2%)	6 (1.2%)	7 (1.2%)
Other	4 (4.7%)	26 (5.1%)	30 (5.0%)
Incident location			
Other inpatient unit	6 (7.1%)	253 (49.6%)	259 (43.5%)
Emergency department	73 (85.9%)	33 (6.5%)	106 (17.8%)
Intensive care unit	2 (2.4%)	98 (19.2%)	100 (16.8%)
Surgical services	1 (1.2%)	46 (9.0%)	47 (7.9%)
Inpatient behavioral health unit	3 (3.5%)	41 (8.0%)	44 (7.4%)
Pediatrics	0	15 (2.9%)	15 (2.5%)
Other outpatient unit	0	7 (1.4%)	7 (1.2%)
Lobby/waiting area	0	5 (1.0%)	5 (0.8%)
Other	0	12 (2.4%)	12 (2.0%)
Causes of incident^a			
Confused behavior/delirium	26 (30.6%)	218 (42.7%)	244 (41.0%)
Alcohol intoxication	34 (40.0%)	145 (28.4%)	179 (30.1%)
Under influence of drugs	36 (42.4%)	134 (26.3%)	170 (28.6%)

(continued on next page)

TABLE 4
(Continued)

Characteristic	Emergency nurses (n = 85 [11.1%])	Non-emergency nurses (n = 510 [66.9%])	All nurses (n = 595 [78.1%])
Mental health diagnosis	37 (43.5%)	123 (24.1%)	160 (26.9%)
Dementia or Alzheimer disease	13 (15.3%)	141 (27.6%)	154 (25.9%)
Grief	2 (2.4%)	35 (6.9%)	37 (6.2%)
Cultural differences	1 (1.2%)	6 (1.2%)	7 (1.2%)
Other	2 (2.4%)	22 (4.3%)	24 (4.0%)
Incident-reporting characteristics ^a			
Manager/supervisor	56 (65.9%)	381 (74.7%)	437 (73.4%)
Hospital security	40 (47.1%)	148 (29.0%)	188 (31.6%)
Employee/occupational health	9 (10.6%)	83 (16.3%)	92 (15.5%)
Police	19 (22.4%)	28 (5.5%)	47 (7.9%)

^a The categories are not mutually exclusive.

included being kicked or scratched (23.6%), being punched (17%), and being grabbed (15.1%). The average patient care provider lost time was 11 days (n = 6, 66 total days) and restricted time was 55.3 days (n = 8, 442 total days); 97 (91.5%) had no lost time. All injuries resolved with no further worker's compensation benefits and full duty return.

Of the 106 nurses reporting injuries, the total charges for the 30 (28.3%) requiring treatment were \$94,156 (treatment charges of \$78,924 [range, \$89-\$29,883; mean, \$2,631] and indemnity charges of \$15,232 [range, \$6,517-\$8,716; mean, \$7,617]). The total emergency nurse treatment charges were lower (\$7,394 [range, \$89-\$3,937.61; mean, \$1,056] and \$0 for indemnity).

Discussion

The literature reports variances in WPV rates, as was found in this study (76.0% of nurses based on survey research [specifying verbal abuse by patients in 54.2%, physical abuse by patients in 29.9%, verbal abuse by visitors in 32.9%, and physical abuse by visitors in 3.5%] and 2.1% of nurses based on retrospective database review), and the national average has been reported as 3.9%.¹ Consistent with the literature and this study was underreporting of WPV.^{9,10} Reporting barriers, such as not sustaining physical injury (36.0%) and the perception that violence comes with the job (13.8%), decrease the ability to understand WPV experienced by nurses.²

Although some states within the United States have protections and provisions offering legal recourse for nurses experiencing WPV, more needs to be done to help nurses. Nurses completing the survey research suggested more support by management when caring for abusive patients, better legal protection when reporting WPV, and more workplace training including how to respond. Enhanced hospital security is of utmost importance to protect nurses in the hospital, an environment prone to violence.

Research is warranted on WPV intervention programs that successfully decrease verbal and physical violence incidences experienced by nurses by patient or visitor perpetrators and that result in effective WPV reporting. Ideally, with more effective WPV interventions and reporting programs, this information can provide the evidence to guide safer work environments, resulting in fewer injuries and treatment-related expenses. Research is also warranted on effective interventions/programs to decrease lateral violence between nurses and doctors or surgeons.

Limitations

Inherent to self-selected convenience samples, as with the survey research component of this research, there may be selection bias, resulting in more nurses who experienced WPV disproportionately completing the survey. In addition, although WPV definitions were provided, survey research nurse participants may perceive verbal and physical violence differently. Because these findings are from a large

TABLE 5
Workplace violence incident-reporting barriers

Barrier type ^a	Emergency nurses (n = 92 [12.1%])	Non-emergency nurses (n = 670 [87.9%])	All nurses (N = 762)
Did not sustain injury/no proof of injury	63 (68.5%)	314 (46.9%)	377 (49.5%)
Inconvenient/time-consuming	35 (38.0%)	164 (24.5%)	199 (26.1%)
Violence comes with the job	29 (31.5%)	120 (17.9%)	149 (19.6%)
No one reports/nothing will be done	29 (31.5%)	109 (16.2%)	138 (18.1%)
Unclear reporting policies	7 (7.6%)	74 (11.0%)	81 (10.6%)
Did not want to draw attention to myself	10 (10.9%)	62 (9.2%)	72 (9.4%)
Perceived as a sign of weakness	7 (7.6%)	40 (6.0%)	47 (6.2%)
Fear of retaliation from unit management	5 (5.4%)	31 (4.6%)	36 (4.7%)
Fear of retaliation from patient or visitor	4 (4.3%)	32 (4.8%)	36 (4.7%)
Fear of personal humiliation	2 (2.2%)	30 (4.5%)	32 (4.2%)
Fear of retaliation from hospital administration	4 (4.3%)	28 (4.2%)	32 (4.2%)
Perceived as a sign of incompetence	4 (4.3%)	24 (3.6%)	28 (3.7%)
May impact patient satisfaction reports	1 (1.1%)	19 (2.8%)	20 (2.6%)
Fear of retaliation from physicians	1 (1.1%)	16 (2.4%)	17 (2.2%)
Fear of retaliation from nursing staff	1 (1.1%)	15 (2.2%)	16 (2.1%)
Other	8 (8.7%)	24 (3.6%)	32 (4.2%)

^a The categories are not mutually exclusive.

metropolitan urban/community hospital setting, they may not be generalizable to other settings. We note that the survey was designed to survey all nurse types, and thus the findings are not always specific to emergency nurses.

Implications for Emergency Nurses

Emergency nurses experienced a significantly greater number of incidents of verbal and physical violence by patients or visitors when compared with non-emergency nurses. Emergency nurses often care for patients more likely to be perpetrators of violence, including those under the influence of drugs or alcohol, and those with mental health diagnoses. Nurse administrators should facilitate effective WPV training and reporting programs and environments supportive of nurses experiencing verbal or physical violence by patients or their visitors.

Conclusion

Per survey research, 76.0% of hospital system nurses experienced verbal and/or physical violence by a patient or visitor over the past year, and emergency nurses experienced significantly more incidents. The reasons for underreporting

include not sustaining physical injury, inconvenient/time-consuming reporting processes, and the perception that violence comes with the job. Per database review, for the 2.1% of nurses reporting WPV injuries to the employee health department, annual treatment and indemnity charges to the hospital system were \$94,156.

Hospital WPV prevention/de-escalation training programs need to be enhanced to decrease the incidence of verbal and physical violence incidents against nurses while caring for patients or interacting with their visitors. Programs should also be expanded to the hospital nurses more prone to WPV, that is, those nurses caring for patients with dementia or Alzheimer disease, patients with drug-seeking behavior, and patients under the influence of alcohol or drugs. In addition, hospital reporting structures need to be enhanced to facilitate all nurses reporting all cases of WPV and, in particular, all cases of physical injury regardless of treatment requirement.

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