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Exploring verbal and physical workplace violence in a large, urban emergency department

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ABSTRACT

Background: Violence directed at healthcare workers (HCWs) is common and may be more frequent in the emergency department (ED). In addition to physical injury, other consequences of workplace violence in the ED include an increased risk of burnout, post-traumatic stress disorder, reduced job satisfaction, and feelings of avoidance and futility. Understanding behaviors underlying workplace violence is the first step to employing mitigation strategies. The objective of this descriptive study was to assess the prevalence and types of violence against HCWs in a large, urban ED.

Methods: This study took place in the ED of an urban hospital with an annual ED census of approximately 100,000. A previously existing general patient safety incident "dropbox" for HCWs was utilized to capture workplace violence reports. At the completion of the study period, all data was collated into the electronic database and each report was categorized based on the nature and severity of the abuse. Further, all events were also coded as either involving or not involving specifically racist, sexist, or homophobic content. The primary outcomes were the number of reported events over the study period, and the percentage of total events that fell into each category. The secondary outcomes were the overall prevalence and ratio of events that included racist, sexist, or homophobic language or provocation.

Results: Over the 5-month survey period, 130 reports of workplace violence were recorded, on average 0.85 per day. Perpetrators were mostly male, and most victims were nurses. Hospital security was involved in 26% of cases. At least 37% of incidents involved patients that were intoxicated and/or had history of psychiatric illness. Type I events (swearing provocatively, shouting, and legal threats) were the most common at 44% of encounters while 22% involved physical violence. Racist, sexist, and homophobic comments were involved in 8 (6%), 18 (14%), and 3 (2%) incidents respectively.

Conclusion: We found that workplace violence against HCWs was common in this study, and sometimes involved a component of racist, sexist, or homophobic bias. Consistent with previous ED literature, we found that abusive events occurred almost daily and that approximately 20% of events involved physical violence. Future efforts toward policy change to address workplace violence in health care is needed at local, state, and national levels.

1. Background

Violence directed at healthcare workers (HCWs) is common [1] and may be more frequent in the emergency department (ED) [2-4]. Most reported workplace violence events in EDs are patient violence against an employee. Research on this topic is limited in the United States but studies elsewhere report a high prevalence of violence in the ED [3,4].

In one ED-based study, 100% of nurses reported that they were subject to verbal abuse and 82% reported physical abuse while at work [5,6]. In another study 63% of ED staff reported feeling unsafe at work [7]. Among ED staff, nurses spend the most time with patients and are more likely to be targets of both verbal and physical aggression by patients [8,9]. In addition to physical injury, other consequences of workplace violence in the ED include an increased risk of burnout, post-traumatic stress disorder, reduced job satisfaction, bothersome memories, super-alertness and feelings of avoidance and futility [2,10].

Studies show that HCWs routinely underreport workplace violence to their employers [11,12]. Underreporting of violence in the ED setting is likely due to multiple factors. Lack of departmental or institutional policies, cumbersome reporting systems, feeling that verbal and physical abuse are "part of the job," as well as seeing no productive action

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taken after reported episodes can make ED staff less likely to report their experiences [13]. Also, a victim-blaming mentality where providers are considered less competent because they did not successfully prevent the incident can contribute to underreporting [14].

Understanding behaviors underlying workplace violence is the first step to employing mitigation strategies. The objective of this descriptive study was to assess the prevalence and types of violence against HCWs by patients and/or hospital visitors in a large, urban ED.

2. Methods

This study took place in the ED of an urban, county hospital which is also an academic level 1 trauma center with an annual ED census of approximately 100,000.

A previously existing general patient safety incident "dropbox" for HCWs, including physicians, medical students, advanced practice providers, nurses, and technologists was utilized to capture workplace violence reports. In response to a hospital-wide interest in workplace violence, ED nurses were encouraged to provide a written description of any workplace violence or abuse they encountered from patients or visitors. These written descriptions were placed in the dropbox located in the ED. Since lack of anonymity might discourage participation, HCW and patient identifiers were encouraged but not mandatory. To further encourage participation, there were no mandates on what should or should not be included in the written descriptions, nor was there any minimum or maximum length of the description. HCWs were encouraged to give as much or as little detail as they wished and describe the event in their own words. Events were reported on a pre-existing general form (provided in Appendix) used in our department for any event in which "something less than ideal happened." Periodically, the dropbox was emptied by study personnel and the information was copied verbatim, into an electronic database. Submissions were collected over the 5-month study period.

At the completion of the study period, all data was collated into the electronic database and each report was categorized using a previously utilized instrument [13]. Events were placed into one of the following 6 categories: Type 0: If the event was not felt to meet the criteria for at least a Type I or higher event; Type I: Swearing provocatively, shouting, and legal threats; Type II: Verbal threats of physical or sexual violence, sexually inappropriate language, use of abusive and offensive language such as slurs; Type III: Physical aggression such as pushing, throwing a punch, kicking, slapping, or spitting; Type IV: Physical violence causing injuries requiring medical attention (fractures, lacerations, dislocations); and Type V: Physical violence causing death or permanent disability. Further, all events were also coded as either involving or not involving specifically racist, sexist, or homophobic content. All submitted events were assessed and coded independently by 2 study personnel. In cases of disagreement, a third investigator assessed the event to determine the tiebreaker. Each comment was assigned the highest-level code (i.e., if verbal threats included swearing, the comment was coded as a Type II).

The primary outcomes were the number of reported events over the study period, and the percentage of total events that fell into each category, as described above. The secondary outcomes were the overall prevalence and ratio of events that included racist, sexist, or homophobic language or provocation. Percentages were calculated and reported as a proportion of the total events.

3. Results

Over the 5-month study period, 130 reports of workplace violence were submitted and entered into the database, an average of 0.85 events per day. Demographic information related to the individual perpetrators was available for 121 encounters and is displayed in Table 1. Perpetrators were two-thirds male, with ages relatively evenly distributed between 19 and 59. At least 37% had psychiatric illness or intoxication as a contributing factor, and 8% were under arrest or prisoners. Most victims were nurses, and hospital security was involved in 26% of cases.

Table 1
Characteristics of 121 individual patients and 130 events.

Age of patient (years)	Number of patients
19–29	21
30–39	30
40–49	27
50–59	22
60–69	10
Over 70	2
Unknown	9
Gender of patient	
Male	77
Female	40
Unknown	4
Legal status of patient	
Voluntary	89
Prisoner	9
Emergency psychiatric hold	10
Prisoner and psychiatric hold	1
Unknown	12
Contributing factors	
Alcohol/drug intoxication	34
Medical (post-ictal, sickle cell pain)	4
Psychiatric	10
Psychiatric and intoxicated	1
Unknown	72
Others involved	
Family of patient	3
Hospital security	32
Not documented	86

Person submitting report (all reports)	Number of reports
Nurse	107
Care technologist	10
Physician	1
Nurse and physician	2
Other hospital personnel	4
Unknown	9

ED location of event (accounted for incidents in different areas in same visit)	Number of events
Ambulance entrance	1
Waiting room	16
Resuscitation bay	6
High acuity	17
Low acuity	66
Holding room for prisoners	9
Observation unit	4
Multiple locations	2
Unknown	9

Some patients had multiple events and/or reports from same visit.

Classifications of the 130 events along with representative examples are outlined in Fig. 1. The most common classification was Type I events at 44%. Twenty-nine events (22%) involved physical violence. Fourteen of the 130 events were coded as Type 0, or not rising to the level of Type I or higher. Further, racist, sexist, and homophobic comments were involved in 8 (6%), 18 (14%), and 3 (2%) of incidents respectively.

4. Discussion

HCWs in the ED frequently endure aggression from patients. This study provides a snapshot of the verbal and physical abuse experienced by staff at an academic, urban county hospital. We found, on average, that violence against HCWs in this setting is a near-daily occurrence. Systematic reviews have found that a majority of HCWs have experienced workplace violence (WPV), and 20–25% have experienced physical violence [1,15]. Among ED HCWs, these numbers are even higher, with most events being perpetrated against nurses [8]. It has been

VIOLENCE	N	%
VERBAL ABUSE I	57	44%
VERBAL ABUSE II	30	23%
PHYSICAL ABUSE III	29	22%
NO ABUSE	14	11%
DISCRIMINATION		
RACIST	8	6%
SEXIST	18	14%
HOMOPHOBIC	3	2%
NO DISCRIMINATION	101	78%

REPRESENTATIVE COMMENTS

VERBAL ABUSE I	• Refusing to remain NPO - “stupid white fucking racist bitch” • Fourth visit in 48 hours, refusing testing/treatment - then allowing. “Get the fuck out of my room, I'm not talking to you until I eat.”
VERBAL ABUSE II	• “I'm going to take my dick out and slap the shit out of you, you Mexican shit.” “You dumb motherfucker, I will kill you.” • Threatening to staff and staff’s families. “Fuck you Bitch.” “I will remember your face, I won’t forget this, you will regret this.”
PHYSICAL ABUSE III	• Grabbed RN’s arm, jerked it back and forth, had to have assistance to get away from patient. Grabbed second nurse and wouldn’t let go. • Punched Dr. (last name) in the face.

Fig. 1. Classification of workplace violent events.

reported that approximately 1 in 275 ED patients is violent during their ED visit [16]. Concordant with our findings, this would be consistent with approximately 1 violent patient per day at an institution with an annual census of approximately 100,000 patients. In reality, the number of incidents may be higher due to underreporting for a variety of reasons, including time constraints in a busy ED, concern for patient retaliation, loss of anonymity, and a lack of confidence that any punitive or corrective actions against perpetrators would result.

The frequency of biased (sexual, racist, or homophobic) abuse toward HCWs is less well-studied, though sexual harassment is likely common [1]. While the number and nature of biased incidents in this study are disturbing, it is consistent with what has been reported elsewhere [1,7,15]. We found a relatively high prevalence of such bias. Abuse with biased language and actions warrants further investigation as institutions strive to implement mitigation strategies and support diverse workforces.

Workplace violence in healthcare is a significant problem that contributes to burnout and attrition, likely more so for nurses, who are the most common victims of abuse in the healthcare setting [8,9]. In the current environment of staffing shortages, retention challenges, and recruitment difficulties, decreasing workplace abuse of staff should be considered an essential part of a strategy to retain experienced and qualified HCWs. The impact of biased abuse toward minoritized, female, and LGBTQ+ HCWs is unknown and warrants further study and intervention as institutions seek to promote a more inclusive and diverse workplace. Our form for recording events could serve as a template for future studies, including work on microaggressions and verbal abuse of HCWs by their co-workers which is not addressed in this study.

Workplace violence in the healthcare setting, and especially the ED, is complicated by the fact that perpetrators are frequently suffering from medical illness, dementia, delirium, mental health emergencies, and/or substance use disorders that contribute to their inappropriate behavior. Typical measures of deterrence or fear of consequences are less likely to impact these types of offenders. In addition, the Emergency Medical Treatment and Labor Act (EMTALA) requires that all patients presenting to the ED undergo a medical screening examination (MSE). Exceptions for violent or abusive patients are not written into the law. In at least 14% of the incidents we captured, the abusive event occurred prior to an MSE. Policies or procedures to address the problem of workplace violence must account for EMTALA requirements to comply with federal law. In addition, the ethical principles of beneficence, nonmaleficence, autonomy, and justice must be at the forefront of any policy or procedure changes that affect patients seeking emergency care.

There is limited evidence in the literature regarding mitigation strategies to decrease workplace violence against HCWs. Most studies have evaluated interventions such as educational workshops or seminars, and their effectiveness is unclear [13,17]. In many workplaces, employees receive training on recognizing and preventing microaggressions, often at the hands of coworkers, which are detrimental to an inclusive work environment [18]. Our study highlights some of the “macroaggressions,” typically perpetrated by patients, that HCW's commonly face and are detrimental to employee morale and effectiveness. Training for “bystanders” who witness abuse of their coworkers is a strategy that may empower staff to safely intervene in real time. “Upstander training” workshops are an evidence-based strategy used in educational environments to encourage witnesses to recognize and intervene on behalf of a victim of aggression or bullying [19]. Similar training may be effective in addressing incidents of HCW abuse by patients, especially when bias is a component of the abuse.

Very few studies evaluate organizational or environmental interventions to reduce workplace violence in healthcare and this is an area that warrants further investigation [20]. Examples of environmental interventions include controlled access to the ED, adequate lighting, comfortable waiting areas, panic alarm systems, surveillance cameras, and

the removal or securing of furniture and other items that could be used as weapons [20].

Organizational interventions include ensuring that provider, nursing, and security staffing is adequate, as well as implementing systems to flag charts of patients who have had previous violent or other negative behavioral issues so that caregivers are aware of the need for additional vigilance and possible security personnel presence during patient care interactions [20]. In addition, behavioral contracts may be used to formally communicate with difficult patients regarding behavioral expectations. The data collected during this study contributed to our institution adopting a "zero tolerance" policy of violence toward HCWs. Signage with clear language (Appendix) is posted in visible places which outlines expectations of behavior toward HCWs. Consequences may include criminal charges, removal from the premises, development of a behavior contract and/or visitation restrictions. If criminal charges are filed, the affected employee will be formally assisted through the process and efforts will be made to protect the identity of the employee if they desire.

Successful implementation of strategies to reduce workplace violence requires a multidisciplinary team including experts in patient care, hospital leadership, education, law, risk management, security, and public relations for development and implementation at a hospital level. Finally, employer support of victims is crucial. Creating formal support systems within the hospital that normalize victim experiences and encourage them to seek post-incident assistance is important to provide ongoing care for victims of workplace violence.

There are several limitations to our study. We had no way of capturing events other than when staff submitted a report into the dropbox. It is likely that events went unreported, especially since over 80% of our reports were from nurses. Additional limitations of this study include incomplete data on patients, incidents, and reporters which is not surprising given the open-ended nature of the reports. We prioritized ease of reporting to maximize capture, but this resulted in limited details in some cases. Coding of event types, severity, and inclusion of bias is not entirely objective. To attempt to maximize accuracy, all events were coded by at least 2 different study personnel.

5. Conclusion

We found that workplace violence against HCWs was common in our ED, and sometimes involved a component of racist, sexist, or homophobic bias. Consistent with previous ED literature, we found that abusive events occurred almost daily and that approximately 20% of events involved physical violence. Future efforts toward policy change to address workplace violence in health care is needed at local, state, and national levels.

CRediT authorship contribution statement

Marla C. Doehring: Writing – review & editing, Writing – original draft, Visualization, Validation, Supervision, Project administration, Methodology, Formal analysis, Data curation, Conceptualization. **Hanan Curtice:** Writing – review & editing, Writing – original draft, Visualization, Project administration, Methodology, Formal analysis, Data curation, Conceptualization. **Benton R. Hunter:** Writing – review & editing, Writing – original draft, Visualization, Validation, Supervision, Project administration, Methodology, Formal analysis, Data curation, Conceptualization. **Derrick M. Oaxaca:** Writing – review & editing, Formal analysis, Data curation, Conceptualization. **Ashley Satorius:** Writing – review & editing, Writing – original draft, Visualization, Methodology, Formal analysis, Data curation, Conceptualization. **Kyra Reed:** Writing – review & editing, Methodology, Formal analysis, Conceptualization. **Andrew Beckman:** Writing – review & editing, Methodology, Formal analysis, Conceptualization. **Tabitha Vaughn:** Writing – review & editing, Formal analysis, Data curation, Conceptualization. **Megan Palmer:** Writing – review & editing, Writing – original draft, Visualization, Validation, Supervision, Project administration, Methodology, Formal analysis, Data curation, Conceptualization.

Declaration of Competing Interest

The authors do not have any declarations of interest or conflicts of interest to report.

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Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.ajem.2023.01.036.

References

[1] Sahebi A, et al. Prevalence of workplace violence against health care workers in hospital and pre-hospital settings: an umbrella review of meta-analyses. Front Public Health. 2022;10:895818.
[2] Schablon A, et al. Risk of burnout among emergency department staff as a result of violence and aggression from patients and their relatives. Int J Environ Res Public Health. 2022;19(9).
[3] Alnofaiey YH, et al. Workplace violence toward emergency medicine physicians in the hospitals of Taif city, Saudi Arabia: a cross-sectional survey. BMC Emerg Med. 2022;22(1):59.
[4] Alshahrani M, et al. Incidence and prevalence of violence toward health care workers in emergency departments: a multicenter cross-sectional survey. Int J Emerg Med. 2021;14(1):71.
[5] Phillips JP. Workplace violence against health Care Workers in the United States. N Engl J Med. 2016;375(7):e14.
[6] May DD, Grubbs LM. The extent, nature, and precipitating factors of nurse assault among three groups of registered nurses in a regional medical center. J Emerg Nurs. 2002;28(1):11–7.
[7] Querin LB, Beck Dallaghan GL, Shenvi C. A qualitative study of resident physician and health care worker experiences of verbal and physical abuse in the emergency department. Ann Emerg Med. 2022;79(4):391–6.
[8] Aljohani B, et al. Workplace violence in the emergency department: a systematic review and meta-analysis. Public Health. 2021;196:186–97.
[9] Stafford S, et al. What is the impact of patient violence in the emergency department on emergency nurses' intention to leave? J Nurs Manag. 2022;30(6):1852–60.
[10] Baydin A, Erenler AK. Workplace violence in emergency department and its effects on emergency staff. Int J Emerg Ment Health. 2014;16(2):288–90.
[11] Song C, Wang G, Wu H. Frequency and barriers of reporting workplace violence in nurses: an online survey in China. Int J Nurs Sci. 2021;8(1):65–70.
[12] Arnetz JE, et al. Underreporting of workplace violence: comparison of self-report and actual documentation of hospital incidents. Workplace Health Saf. 2015;63(5):200–10.
[13] Kumari A, et al. Workplace violence against doctors: characteristics, risk factors, and mitigation strategies. J Postgrad Med. 2020;66(3):149–54.
[14] Cao James Dazhe, Sachs Carolyn J, Polansky Robin. Workplace Violence Remains a Part of the Emergency Department; 2012.
[15] Liu J, et al. Prevalence of workplace violence against healthcare workers: a systematic review and meta-analysis. Occup Environ Med. 2019;76(12):927–37.
[16] Nikathil S, et al. Review article: workplace violence in the emergency department: a systematic review and meta analysis. Emerg Med Australas. 2017;29(3):265–75.
[17] Okubo CVC, et al. Effectiveness of the interventions against workplace violence suffered by health and support professionals: a meta-analysis. Rev Lat Am Enfermagem. 2022;30:e3638.
[18] Calardo SJ, et al. Realizing inclusion and systemic equity in medicine: upstanding in the medical workplace (RISE UP)-an antibias curriculum. MedEdPORTAL. 2022;18:11233.
[19] York M, et al. Becoming active bystanders and advocates: teaching medical students to respond to Bias in the clinical setting. MedEdPORTAL. 2021;17:11175.
[20] Wirth T, et al. Interventions for workplace violence prevention in emergency departments: a systematic review. Int J Environ Res Public Health. 2021;18(16).