Violence in the pain clinic: the hidden pandemic

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Received 26 December 2022
Accepted 31 January 2023
Published Online First
8 February 2023

To cite: Fawzy Y, Siddiqui Z, Narouze S, *et al*. *Reg Anesth Pain Med* 2023;**48**:387–391.

ABSTRACT

Workplace violence is any physical assault, threatening behavior or other verbal abuse directed toward persons at work or in the workplace. The incidence of workplace violence in healthcare settings in general and more specifically the pain clinic is thought to be underestimated due to hesitancy to report, lack of support from management and healthcare systems, and lack of institutional policies as it relates to violence from patients against healthcare workers. In the following article, we explore risk factors that place clinicians at risk of workplace violence, the cost and impact of workplace violence, how to build a violence prevention program and lastly how to recover from violence in the practice setting.

The National Institute for Occupational Safety and Health (NIOSH) defines workplace violence (WPV) as 'any physical assault, threatening behavior, or verbal abuse directed toward persons at work or on duty'.[1] The Joint Commission (JC) similarly defines it as: 'an act or threat occurring at the workplace that can include any of the following: verbal, non-verbal, written, or physical aggression; threatening, intimidating, harassing, or humiliating words or actions; bullying; sabotage; sexual harassment; physical assaults; or other behaviors of concern involving staff, licensed practitioners, patients, or visitors'.[2]

Violence in the healthcare setting is insidious, leading to underestimation by healthcare workers (HCWs), leaders, and healthcare systems. Such underestimation complicates attempts to fully comprehend the scope of the problem. The current research shows that the incidence of WPV against HCWs has significantly increased since the beginning of the COVID pandemic.[3] In addition, pain clinicians are thought to be more vulnerable to WPV due to the innate characteristics of the population they serve; for example, chronic pain patients suffer disproportionately from psychiatric diagnoses such as post-traumatic stress disorder (PTSD), depression, or substance abuse.[4–6] Within the past 2 years, there have been several high-profile shootings of physicians at pain clinics by pain patients, bringing this issue into the headlines.[7] With emerging knowledge about clinician burn-out, media coverage of the opioid crisis, and a healthcare workforce exasperated by the lack of attention paid to their vulnerability, WPV is getting renewed attention from stakeholders.[8] However, this heightened awareness has not led to widely accepted, concrete solutions on how to care for pain patients while keeping clinicians safe. In this article, we explore potential risk factors placing pain medicine practitioners at increased risk of WPV and describe the negative impact of WPV. Moreover, we outline elements of a successful WPV prevention program and provide an overview of practical solutions clinicians can incorporate into their practice to minimize harm to themselves and their staff.

RISK FACTORS

Social, environmental, clinician, and patient characteristics all play a role in the assessment of WPV risk (see table 1), and there is significant overlap and interplay among these risk factors.

Social risk factors

Since the COVID-19 pandemic emerged, misinformation about the origins of the pandemic and its treatments has increased risks for violence and harassment against HCWs.[3] Though WPV is often thought of as individual patient aggression toward clinicians in clinical settings, access to digital information has made it exceptionally easy to find HCWs beyond their clinical practices. Thus, the risk of violence extends outside the clinical environment in the form of doxxing (publicly exposing a clinician's home address and calling for violence), swatting (prank calls to emergency services to draw armed police officers to a victim's address), stalking, and other threats to clinician safety and security.[9]

Environmental and organizational risk factors

Staff working in certain environments with higher clinical acuity, such as psychiatric wards and emergency departments, are more likely to experience WPV.[10] It is also more prevalent in high stress inpatient and outpatient environments, such as chronic pain clinics or the intensive care unit.[4] In a recent national survey of chronic pain care providers, opioid management conferred the greatest risk factor for violence against clinicians.[11] Organizations with inadequately supported safety cultures such as lack of clinician and staff training in WPV prevention and de-escalation training experience higher risks of violent outbursts and present major risks for clinicians.[12 13] Finally, the local legal environment may impact the risk of WPV. For example, local and state laws intending to curb the opioid crisis may unintentionally prevent clinicians from assessing individual patient needs and reaching mutually agreed on clinical plans. This may lead clinicians toward non-consensual opioid tapering (to avoid meeting maximum opioid allowances), amplifying the risk of serious conflict between clinicians and patients.

Table 1 Risk factors for exposure to workplace violence (WPV)[10 16]

Organization/environment	Social
Clinical environment: inpatient vs outpatient; emergency room v pain clinic Staffing: long wait times, overcrowding, no staff training Culture: no WPV policy, lack of protocols/guidelines Legal: local and state laws governing opioid prescriptions	Culture: language barriers, misinformation/disinformation Bias: gender, race, disability Media: biased reporting on health issues
Patient	**Clinician**
Patient: male, low education, high social status, history of violence, access to weapons. Medical: mental health condition (delusions, command hallucinations), substance use (reaction or withdrawal), anger Organization: cost of service, poor previous experience Provider: dissatisfaction Other: patient isolation, family dynamics	Clinician: lack communication skills, lack of de-escalation skills, emotional (stress, anxiety, distress), fear of doxxing Demographics: female, minority, less clinical experience Practice setting: psychiatry, pain clinic, emergency room, opioid prescription

Clinician risk factors

Clinicians bring their own unique risk factors to patient encounters, including both fixed (eg, race) and variable (eg, communication, de-escalation skills) features. Edward's systematic review of aggression against nurses found female nurses experienced verbal abuse more often than male nurses, and male nurses experienced more physical abuse.[14] Similarly, Udoji *et al*'s survey with WPV found that female anesthesiologists were at higher risk of physical and non-physical violence as compared with their male counterparts.[4] In the larger social context, sexual and gender minorities face higher risk of violence in everyday life and in the clinical setting.[15]

Patient risk factors

Certain patient features are more likely to be associated with violence toward clinicians. The single most important patient risk factor is a previous history of violence.[16] However, additional factors (see table 1) also impact patient risk such as substance abuse and withdrawal. Ongoing withdrawal and anticipatory anxiety of potentially losing access to opioids, pose an additional risk in pain populations.

THE COST AND IMPACT OF WPV

WPV against HCW contributes to fatal and non-fatal trauma resulting in a myriad of negative consequences including death, missed, or reduced working hours from disability, depression, PTSD, burn-out, and increased rates of defensive medical practice.[17] The end result is substandard care, decreased patient satisfaction, increased frequency of adverse medical events, decreased access to care, diminished productivity from the healthcare team, and increased worker turnover.[17–19]

WPV and physician burn-out

HCW abuse is associated with physician burn-out or moral injury. In turn, burn-out and depersonalization have been correlated to reduced patient satisfaction scores.[18] Specifically, physician disengagement was independently associated with an increase in major medical errors, reduction in professional work effort (so-called 'quiet quitting') and scaling back clinical hours.[20] One study that assessed the cost of burn-out among US physicians from 2011 to 2014 determined that a 1% reduction in professional work effort equated to the loss of approximately seven graduating medical school classes.[20] Fiscally, it is projected that physician burn-out and turnover costs the healthcare system approximately US$4.6 billion annually in reduced productivity.[21]

Physicians who identify as female and ethnic minorities experience higher rates of discrimination and mistreatment from patients and their care partners, causing higher burn-out rates within those groups.[22] A NIOSH report from 2016 found that >70% of injured workers who suffered non-fatal trauma from WPV identified as female.[1] Female HCWs were also more likely to suffer from WPV-related trauma and were more likely to be stalked and attacked than males.[4 8 23] Studies that specifically examine effects of physician compassion fatigue, and the economic impact within pain medicine have not been performed but it is thought that these results are generalizable to those clinical settings.

Role of the opioid crisis

Numerous journal articles, news hours, and documentaries have provided the public with information about the opioid crisis. These pieces typically highlight the societal impact of opioid dependence, prior industry practices, and mainly negative portrayals of clinicians and patients from opioid prescribing and usage.[24 25] This type of coverage may reinforce stereotypes within specific patient populations and strengthen defensive medical practices begetting diminished personalization of patient care.[26 27] The end result is harm to patients who may benefit from opioid therapy.

WPV in the pain clinic

The primary determinant of WPV against pain clinicians was patient dissatisfaction stemming from issues with opioid management and requests for worker's compensation and disability.[8 11] In the pain clinic setting, interventions to mitigate WPV include engaging security personnel (82%) or dismissing patients from further clinical encounters (39%–85%).[8 11] Additionally, up to 25% of pain clinicians carry a weapon or personal security equipment.[8 11] Motives behind carrying a weapon/personal security equipment were not further extrapolated on in this survey; however, fears of being stalked, concern for self-protection and community protection in 'gun-free zones', indirect physical threats from patients, and sociopolitical factors may play a role in carrying weapons.[28] Unfortunately, these mitigation strategies potentially fuel patient withdrawal and isolation, which is positively associated with further aggression.[29]

Race, geography, and WPV

Racial disparities appear to exist with respect to the incidence of engaging security personnel. For instance, in the inpatient setting, Black patients were more likely to have security personnel engaged during charged encounters when compared with other races.[30] In a retrospective study by Green *et al*, black patients and their visitors were also more than twice as likely to

have security personnel engaged than patients of other races.[31] Moreover, the physical location of the pain clinic plays a role as pain clinics located in rural areas were more likely to move or close their practice as a mitigation strategy for WPV than those located in urban centers.[11]

BUILDING A WPV PREVENTION PROGRAM

A successful WPV program is heavily dependent on prevention and protection which aim to reduce the risk of violence or improve the handling of violent incidents.[17] Occupational Safety and Health Administration (OSHA) highlights five building blocks for an effective WPV program: (1) management commitment and employee participation, (2) worksite analysis, (3) hazard prevention and control, (4) safety and health training, and (5) recordkeeping and program evaluation.

Management commitment and employee participation:

To prevent WPV, hospital and clinic leadership must actively prioritize developing a robust WPV program while actively engaging with employees. Management's commitment can take many forms and should begin with acknowledging WPV as a growing issue, followed by providing resources for the creation and maintenance of a WPV program, assigning responsibility and accountability, providing support to employees after incidents of WPV, and ensuring infrastructure exists for proper reporting and analysis. Studies have reported that employees' perception of management's commitment to violence prevention was associated with less incidents of WPV.[32]

Worksite analysis

The JC requires a worksite analysis including a proactive analysis of the worksite, an investigation of the hospital's WPV incidents, and an analysis of how the program's policies and procedures, training, education, and environmental design reflect best practices and conform to applicable laws and regulations.[33] Unfortunately, The JC's Workplace Violence Prevention Standards applies to licensed and accredited hospitals but does not apply to all outpatient clinics. As a result, non-licensed space including outpatient pain management clinics may not be required to comply with these guidelines. This disparity is further compounded by significant differences in state legislature.[34]

Hazard prevention and control

In addition to a comprehensive WPV program, engineering controls, administrative controls, and training can reduce the incidence of WPV.[35] Hazard assessment frameworks differ but may include key informant interviews, staff focus groups, environmental walkthrough and assessment, staff survey, facility level administrative injury data, and program auditing.[34] After, the hierarchy of controls is a framework used to determine which actions are most effective (box 1).[36]

Box 1 Five levels of actions to reduce hazards (in order of efficiency)[36]

⇒ Elimination (remove weaponizable objects).
⇒ Substitution (make furniture heavier/harder to throw).
⇒ Engineering controls (clear signs, comfortable waiting areas).
⇒ Administrative controls (card readers, silent alarms, metal detectors).
⇒ Personal protective equipment (pepper spray, tasers).

Safety and health training

Workforce training is a commonly utilized prevention strategy. Components of a WPV prevention training include: de-escalation, effective communication, nonviolent crisis intervention techniques, self-defense techniques, and the application of physical and chemical restraints.[37–40] Following an 8-hour nonviolent crisis intervention training session focused on de-escalation, one emergency room reported a significant decrease in violent events that initiated emergency responses by the hospital security team when more staff were trained in the previous 90–150 days.[39] Differing success from training reported across studies may be attributed to training characteristics such as course content, course delivery, and differences in how a successful program was measured.[32] In addition to training on the aforementioned subject matters, organizations should provide training on their personal WPV program to all employees. Supplemental training should be offered widely but in the presence of limited resources, triaging high-risk departments based on risk factors is appropriate.

Recordkeeping and program evaluation

Reviewing reported incidents of WPV regularly enables a WPV prevention committee to identify patterns, develop interventions, and improve their program's effectiveness. Under-reporting of violent incidents continues to be a significant barrier and contributes to a perceived lack of support from management, variations in terminology, and tolerance for WPV.[41 42] To address these barriers, operational interventions are needed including following up with employees after reports of violence, communicating interventions and decisions after incident review to the reporter, providing job aids and training on how and where to report acts of violence, and continuing to ensure and demonstrate leadership's commitment to fostering a culture of safety.

Organizational investment in skills and space

Organizations can invest in clinician well-being by ensuring supportive service and training are embedded in the workforce. Staff needs access to high-quality, evidence-based communication training. Such training may include relationship-centered communication training, trauma-informed care training, skills in de-escalation, and emotional self-regulation. Such skills are applicable both in preventing WPV and addressing escalation events in real time. Communication skills can be incorporated into various simulation activities, such as virtual reality-based simulation for de-escalation skills.[43]

The trauma-informed care model advocates that clinicians explore not 'what is wrong with you?' but rather 'what happened to you?' from a place of care and curiosity.[44] By learning to communicate in ways that avoid re-traumatizing patients, we have the opportunity to reduce the risk of negative emotional escalations. Relationship-centered communication skills highlight building and maintaining trusting relationships between patients and clinicians. The Academy of Communication in Healthcare and Vital Talk are both highly regarded training programs, with long track records of success in systematic communication training.[45 46]

Although workforce training is critical to preventing WPV, institutions that solely hire outside agencies to deliver course content may inadvertently neglect training their workforce on facility specific plans. A review by OSHA's Office of Occupational Medicine and Nursing examined 13 vendors that deliver WPV prevention training programs in healthcare settings and reported about nine of the vendors do not provide any information on facility-specific risk assessment and only three included

attention to the client facility's policies and procedures.[47] Given facility specific details such as reporting processes, code activations for additional support, and differing resources at one's disposal, this is a significant gap in efforts to curb WPV.

Barriers to the implementation of WPV safety programs

There are significant barriers to addressing WPV in healthcare including a culture that directly challenges the prevention of WPV. In clinical settings where violence is increasingly common, it has been normalized to a detriment and prevents adequate reporting and recovery. Numerous studies have reported significant under-reporting of violent incidents.[41 42] Commonly cited factors include a perceived lack of change, self-blame, lack of support from colleagues, and inadequate time to file a report.[41] It is crucial to understand the local roadblocks to under-reporting and craft solutions accordingly; this can be spearheaded by a WPV committee in accordance with JC guidelines. Insufficient help seeking behavior is an additional downstream consequence of normalizing WPV. A study examining WPV in primary care physicians reported almost half of the respondents indicated they pretended a violent event did not occur.[47] Moreover, many individuals report coping individually or confiding in colleagues and friends rather than through employer sponsored services, therapy, or counseling. To encourage reporting and the utilization of healthy behaviors to address violent incidents, creating a culture that does not accept acts of violence and commits to process improvement is crucial.

While prevention is paramount, staff and clinicians will face escalation events where their ability to self-regulate under stress will impact effective utilization of learnt communication skills. Organizational investment in the environment is critical, rather than solely resting on individual clinicians' fortitude. Real 'wellness' and 'well-being' programs will understand that unless staff feels physically and emotionally safe at work, other investments in communication will be less effective.

WPV RESPONSE AND RECOVERY

Despite a robust prevention plan, incidents of WPV will occur. The response to such incidents can drastically alter the outcome. In most hospitals, privately contracted security are called on to assist in potentially violent situations. While hospitals have security onsite, smaller private practices or outpatient clinics that are not considered licensed space may not. Additionally, some county hospitals use armed police officers from local law enforcement agencies in lieu of private security which may play a role in the approach to violent patients.

Early identification

Early identification allows for immediate intervention for disruptive patients and may mitigate the resultant damage. Involving security or your institution's response team for violent incidents once a patient begins to display concerning behaviors may prevent the behavior from escalating to physical acts of violence. Behavioral precursors to violence are described by the acronym STAMPEDAR, which stands for Staring, Tone and volume of voice, Assertiveness, Mumbling, Pacing, Emotions, Disease process, Anxiety, and Resources. Equipping employees with the tools to identify concerning behaviors allows for increased awareness and provides a platform for the use of de-escalation.[48]

Early response and alert systems

Institutions should agree on an efficient manner to notify the appropriate response team for incidents of WPV. In many hospital systems, a code system is used and is overhead paged across the hospital to alert security that assistance is needed at a specific location. Panic buttons are used to activate security or law enforcement assistance in dangerous situations. A key barrier to the utilization of panic buttons is a lack of staff awareness and training on the use of panic buttons. Although many individuals are aware their hospital system may have panic buttons, many may not know when to use the panic button and what resources will be summoned. The use of panic buttons and any alert system should be outlined in a WPV facility specific training and at the time of new employee orientation.

Recovery

Following a violent incident, assessment of the mental and physical health of staff involved should occur and debriefing and treatment procedures should be initiated if indicated.[49] In order to address the downstream effects of violent incidents, providing employees with adequate medical and psychological support and debriefing opportunities are crucial. The Employee Assistance Program is a free and accessible resource that can be considered and provided.

Reviewing incidents of WPV and evaluating gaps in the WPV prevention program are necessary to improve and address changes. Infrastructure should be developed to allow for regular meetings with key stakeholders that review reported incidents of WPV. Specifically, an after action review process whereby individuals or teams systematically review and discuss a recent event, has been shown to produce positive outcomes.[50] These reviews should include performing a root cause analysis which aims to understand what happened, why it happened, and what can be done to reduce the likelihood of a recurrence should be done for all incidents.

CLOSING

In a society with an ever-increasing propensity toward violence, escalating rates of WPV contribute significantly to clinician burn-out. The COVID-19 pandemic and the current cultural milieu of controlled-substance prescribing in the context of the opioid epidemic unfortunately presents significant challenges for pain physicians and chronic pain patients, and specific interventions and mitigation strategies for reduction of WPV in pain clinics need further study. One particular area that warrants increased study is how to accurately quantify the incidence of WPV. We are of the opinion that without action on the part of our legislators or accrediting bodies, healthcare systems and hospitals will not be inclined to develop easily accessible reporting tools or invest in robust WPV prevention programs. With more accurate data in hand, studies may consider examining the incidence of WPV after developing a threat management program that addresses inappropriate patient behavior through targeted interventions. Additionally, given that outpatient pain clinics are more likely to treat the same patients for extended periods of times, there are unique opportunities to investigate the impact of a WPV program or the impact of a trauma informed care approach during initial patient encounters on the incidence of WPV.

Considerable efforts from administrators and clinicians alike to encourage WPV reporting with associated incentives or education (as well as more defined responses to WPV reports) have the potential to improve reporting among HCWs. Greater communication can contribute to a culture of safety and a higher level of engagement from all parties involved.

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Contributors The authors confirm contribution to the paper as follows: Design and outline (SN, SP, AMB, YF and MU); Draft manuscript creation and editing (YF, ZS, SN, SP, AMB and MU). All authors reviewed the results and approved the final version of the manuscript. MU is responsible for the overall content as guarantor.

Funding The authors have not declared a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

Competing interests SN is on the editorial board of the Regional Anesthesia and Pain Medicine Journal.

Patient consent for publication Not applicable.

Provenance and peer review Not commissioned; externally peer reviewed.

Data availability statement No data are available.

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