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Strategies to mitigate the risk of violence against emergency department staff: A systematic review of the literature

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ABSTRACT

Study aim: This study set out to evaluate the impact of intervention programs on the handling of violence against emergency department medical personnel. The study also examined the effects of the therapies on the emergency department staff's goal commitment, attitudes toward and confidence in managing workplace violence, and occupational coping self-efficacy. *Method:* The PRISMA statement was followed in the conduct of this study. We searched the MEDLINE, Embase, and Cochrane databases. Search terms were identified through database testing, literature study, and discussions with knowledge users. Only English-language publications released between January 2018 and September 2024 were included in the search. *Result and conclusion:* This study includes recent studies on lowering workplace violence from patients and visitors toward emergency department staff. The findings are contradictory and don't offer concise, clear advice on effective strategies. The literature has examined a variety of strategies for handling this type of workplace violence with promising results, highlighting the need for a comprehensive approach. Because of the complexity of patient care in this setting, interventions that target the emergency department environment, staff, and patients/visitors are necessary.

Keywords: Workplace violence, Emergency medical care, emergency staff, emergency department

1. INTRODUCTION

In the healthcare industry, workplace violence (WPV) is pervasive and frequently disregarded (Phillips, 2016). Emergency medical care are typically the first thing that many individuals seek when they encounter medical situations that provide an imminent risk to their health or lives. Emergency departments (EDs) offer patients all forms of essential and urgent pre-hospital medical treatment (Byon et

al., 2021). There is now a wide range of findings about the incidence of WPV in medical practice: verbal aggression/abuse affected 15–89.5% of workers, physical aggression affected 18.2–56%, and sexual harassment affected 4.7–19% of workers (Taylor and Rew, 2011). For healthcare professionals, all of these results pose a serious danger of WPV.

Numerous studies have shown that nurses are more vulnerable to exposure to violence (Byon et al., 2021; Phillips, 2016). 77% of ED personnel said they have encountered WPV (Aljohani et al., 2021). According to recent reports, a number of violence to ED medical personnel in Taiwan have garnered a lot of public interest. During a 12-month period, 49% of nurses reported experiencing violence of some kind at least once, 19% reported experiencing physical violence, and 46% reported experiencing non-physical violence (Wei et al., 2016). There was a considerable variation in the incidence of encountering any kind of violence among hospital settings; the greatest rates (55%) were observed in the critical care unit or emergency department (Chiou et al., 2013).

The origins and kinds of WPV were defined and described differently, as was previously noted. Based on the interaction between the offender and the workplace, experts have divided workplace violence into four categories (Howard, 1996). The most prevalent is the second kind, in which patients and their violently inclined guests commit violent crimes. In the last six, twelve, or twenty-four months, between 11.43 and 93 percent of respondents reported experiencing violence in some form, 22 to 90 percent reported verbal aggression, 2 to 32 percent reported physical aggression, and 12 to 64 percent reported being threatened with violence (Lanctôt and Stéphane, 2014). Underreporting of WPV or PVV is still a noticeable issue as of right now. It leads to inefficient resources and delayed staff help, which may increase the likelihood of burnout (Phillips, 2016).

Of individuals who were classified as victims of WPV, 86.1% did not disclose verbal abuse occurrences, and 65% did not report the violent episodes using hospital incident reporting systems (Shi et al., 2020). Due to decreased job satisfaction and work performance, intention to leave, and increased job stress, burnout, and impaired capacity to manage workload, WPV can jeopardize organizational functions. It also has negative effects on recruitment and the morale of nurses who have been victimized (Stowell et al., 2016). The purpose of this study was to assess how intervention programs affected the management of violence. The study also looked at how the treatments affected the ED staff's attitudes toward and confidence in handling workplace violence, self-efficacy, and goal commitment.

2. METHOD

This study was conducted according to The Preferred Reporting Items for Systematic reviews and Meta-Analyses (PRISMA) statement. We looked through the Cochrane, Embase, and MEDLINE databases. Through a research of the literature, conversations with knowledge users, and database testing, search phrases were determined. Key terms and topic headings pertaining to five major themes in the review question—WPV, de-escalation, prevention, emergency department, emergency medical services, patient, patient visitor, emergency department staff, and health personnel—were integrated in the search approach. The search was restricted to English-language papers published between January 2018 and September 2024.

Prior to screening, duplicates were eliminated. Two members of the study team separately examined abstracts and titles for pertinent papers. Discussions were used to settle disagreements. The same two team members then independently reviewed the whole articles while adhering to the study's qualifying requirements and settling disputes through dialogue. A form for pre-designated data extraction was prepared. First author, publication year, nation, research design, study site and population, sample size, kind of intervention and description, outcome and measurement details, and findings were among the retrieved data for the various studies.

Furthermore, information on the search technique, including the date of the search, the number of databases, the inclusion of gray literature, and whether the authors performed a critical appraisal, was extracted from the review articles. Data extraction was carried out by two team members, who each retrieved data for half of the articles before reviewing and validating the data extracted from the remaining articles.

3. RESULT AND DISCUSSION

We included 5 studies in this review (Figure 1) which were carried out in the United States (Campbell et al., 2021). Taiwan Chang et al., (2022), Canada Geoffrion et al., (2018), Pakistan Baig et al., (2018), and Iran (Soheili et al., 2014). Baig et al., (2018) study used a sample size of more than three thousand, with 1473 and 1550 in the comparison and implementation groups respectively, to gather data on patient restraints from the incident reporting system and electronic health record. Following implementation, there was a statistically

and clinically significant drop in restraint, according to a chi-square test. According to the findings, the usage of patient restraints in the ED may decrease if the Violence and Assaultive Behavior Management clinical guideline is used.

According to Chang et al., (2022) the secret to an intervention is a suitable preventative orientation that focuses on appropriate indicators and outcomes. This approach may also extend to active goal outcomes. The purpose of their multidimensional intervention was to enhance self-efficacy, goal commitment, confidence and attitudinal changes through workplace professional training violence management and prevention (Table 1). Nurses who received intervention showed statistically significant improvements in their outcomes, but not those who only attended normal in-service training. The encouraging results show that the intervention is well welcomed and contributing in a clinically significant way in this field.

Some of the cognitive dimensions, including confidence and attitudes, goal commitment, and beliefs in self-efficacy, shown notable gains in the Chang et al., (2022) intervention when compared to the control. The beneficial impacts on these outcomes aligned with results from prior research carried out in hospital settings Al-Ali et al., (2016) and emergency departments (Gerdtz et al., 2013). Additionally, nurses in the intervention group felt more confident about their ability to evaluate and handle aggressive situations. Additionally, these encouraging findings align with earlier research (Al-Ali et al., 2016; Gerdtz et al., 2013). The Geoffrion et al., (2018) investigation demonstrated decreases in the frequency and length of isolation and restraint.

This result illustrates how effective the Omega program is in preventing patients from hurting themselves or staff physically or emotionally, as well as at preserving a friendly and trustworthy environment between patients and staff in the unit. It's also important to note that there were no statistically significant variations in the emergency unit's incidence or length of seclusion and restraint (Geoffrion et al., 2018). To better comprehend the results, it is important to take into account the unique characteristics of emergency units. In fact, the literature has found that certain factors, including psychosis, severe disruptiveness, or insight impairment, bipolar mania or mixed episodes, arriving in the ED in restraints, referrals that were not initiated by the patient, and arrival in the early hours of the night, are linked to an increased risk of restraint and seclusion (Migon et al., 2008; Simpson et al., 2014).

Additionally, the emergency unit does not provide a bedroom for patients to withdraw to when unit bustle gets too much, and it offers less opportunity to build rapport with the nurses over a number of days than inpatient facilities. Additionally, the number of hospitalizations and discharges is consistently high and severe (Knox and Holloman, 2012). When compared to the control, Baig et al., (2018) discovered that healthcare professionals in the de-escalation training group reported feeling more confident and having better coping mechanisms to handle aggressiveness. They found no statistically significant changes between the control group and the de-escalation training group in terms of the frequency of patient aggressiveness seen by healthcare staff.

These results are in line with those of a 2015 systematic review that included research releases from 2000 to 2011. Health care personnel who attended des-escalation of violence trainings reported increased confidence and coping abilities to cope with aggression, but the incidence of patient aggression episodes did not alter, according to a systematic review of nine research (Heckemann et al., 2015). In addition to de-escalation of violence training, multifaceted approaches are needed to reduce the prevalence of aggressiveness and violence in healthcare settings. Improved safe working conditions for healthcare professionals, media campaigns promoting respect for healthcare professionals, legal protections for healthcare professionals, and, most importantly, raising the general public's literacy level are all examples of these tactics (Gillespie et al., 2010; Shaikh et al., 2017).

We discovered that healthcare professionals in the intervention group admitted that de-escalation training had changed their disposition and attitude toward patient and attendant hostility. These results are in line with research done by (Collins, 1994; Grenyer et al., 2004). After completing violence management training, health care personnel' comprehension of aggression and violence management techniques increased statistically significantly, according to the (Grenyer et al., 2004). Training improved nurses' attitudes, according to Collins' review of the Aggressive Behavior Program Prevention and Management (Grenyer et al., 2004).

The findings of the Sharifi et al., (2020) study indicate that nurses' responses to violence shifted from self-defense prior to the intervention to multiple actions following the intervention. According to a different research by Alyaemni and Hana, (2016), telling other officials and coworkers about the violence was the most typical response. According to Soheili et al., (2014), the most typical response was to react while keeping quiet. By taking many steps, nurses can apply them in different situations if they are aware of the various approaches and techniques to combat violence.

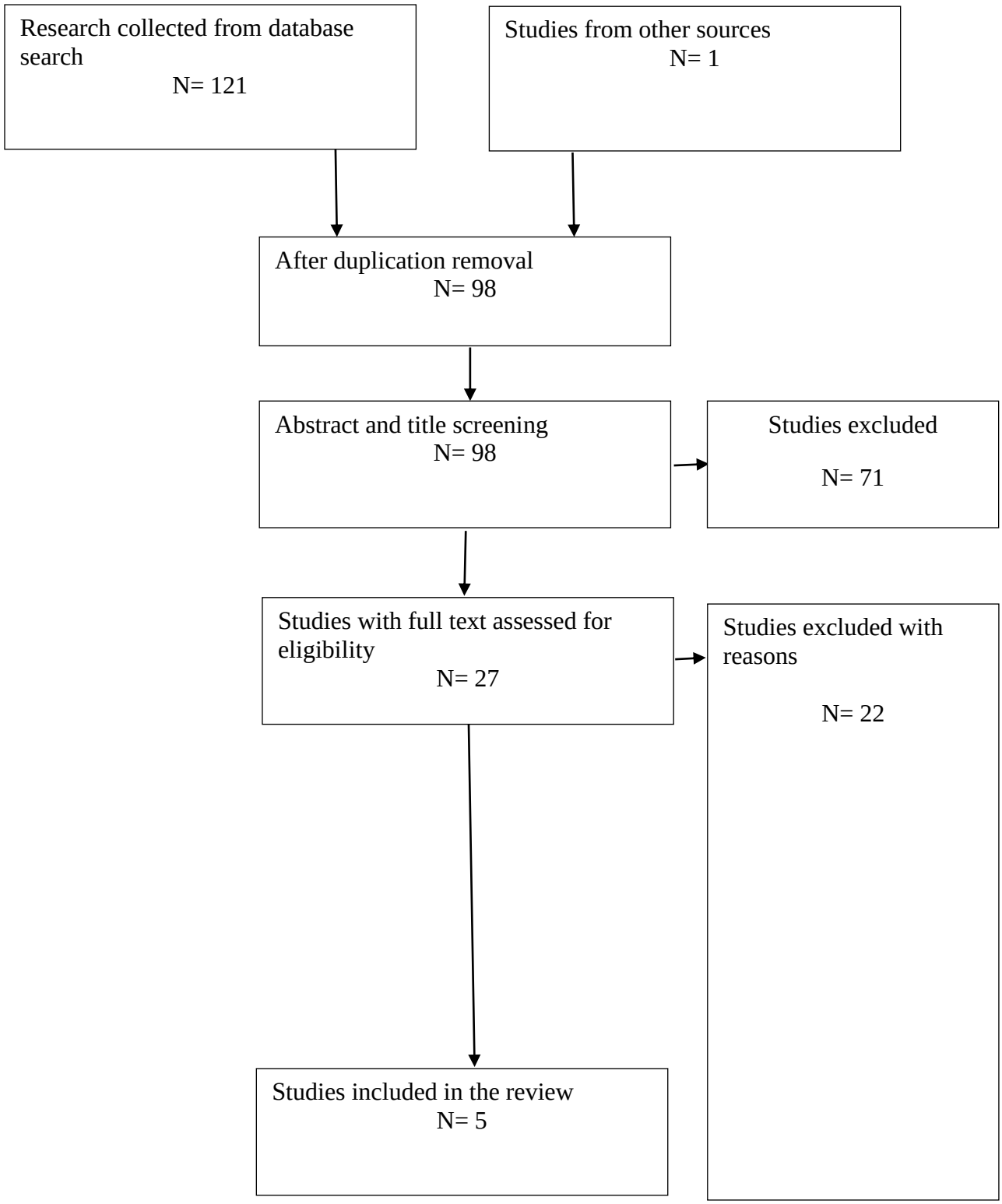

Figure 1 PRISMA consort chart of selection process

Table 1 Included studies characteristics

Citation	Study design	Study aim	Intervention	Population	Findings
Campbell et al., 2021	Quality improvement	Create, deploy, and assess the viability of an ED-specific tool that will assist nurses in better documenting aggressive and violent patient events, proactively identifying and intervening with patients' increasing behaviors, and minimizing the use of restraints.	Five degrees of violence were used by the Emergent Documentation Aggression Rating Tool (EDART) to categorize particular behaviors. The EDART was to be used to evaluate every patient, both during admission and after they were discharged.	Patient visits and nurses	Decrease in restraint use
Chang et al., 2022	Randomized controlled trial	Analyze how patient and visitor violence is affected by a new integrated WPV and management training program.	Twelve components were addressed in the 12-session course. The one-hour sessions were conducted by video conference. Role-plays, scenarios based on real WPV, and communication exercises were among the teaching strategies used.	Nurses	The coping self-efficacy of nurses in violent settings significantly increased, as did their confidence in handling violence.
Geoffrion et al., 2018	Quasi-experimental	Analyze how patient and visitor violence is affected by a new integrated WPV and management training program.	Employees get four days of Omega training from security peer trainers, which focuses on skills and intervention techniques to lessen patients' harmful behaviors toward themselves or others.	Restraints and Seclusion	Intervention at the emergency room may not have an impact on seclusion and the use of restraints.
Baig et al., 2018	Quasi-experimental	Evaluate how well violence prevention, de-escalation, and management training works in healthcare environments.	The four modules of the four-hour de-escalation program included a variety of instructional techniques.	Physicians, medical students, nurses	The intervention group's confidence in handling violence was noticeably higher. There is no variation in the incidence of violence between groups.
Sharifi et al., 2020	Quasi-experimental	Assess the impact of a risk assessment checklist, education program, and preventive measure on violence against emergency department nurses.	A four-hour course on the use of the risk assessment checklist and the violence-prone person's preventative protocol At admission, a 6-item risk assessment checklist is completed, and the result is used to establish a preventative regimen.	Nurses	There was a notable decline in reported violence exposure. The violence severity score dramatically dropped.

4. CONCLUSION

Recent research on reducing WPV from patients and visitors toward personnel in emergency departments was compiled in this review. The results are inconsistent and do not provide clear, succinct guidance on successful approaches. Numerous approaches to dealing with this kind of WPV have been tested in the literature with encouraging outcomes, indicating the necessity of a multifaceted strategy. Interventions that focus on the ED environment, personnel, and patients/visitors are required due to the complexity of patient care in this setting. To assess the efficacy and durability of strategies for reducing WPV in the ED, additional research using more exacting

methodology is required. Incorporating the viewpoints of patients and their families is also essential, as is taking into consideration the many pressures connected to obtaining emergency treatment.

Ethical approval
Not applicable.

Informed consent
Not applicable.

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Conflict of interest
The authors declare that there is no conflict of interests.

Data and materials availability
All data sets collected during this study are available upon reasonable request from the corresponding author.

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