



# Evidence-based approaches to mitigate workplace violence in emergency departments: A rapid review

## Summary

A rapid review addressed the question, “What interventions have evidence regarding effectiveness for addressing workplace patient/visitor violence towards health care professionals in the emergency department?”. The review was conducted by a team that included researchers, a librarian, knowledge users, and patient partners. We found that despite a large body of related literature, there is little guidance on successful strategies to mitigate Workplace Violence (WPV) in Emergency Departments (EDs).

The 24 studies (21 individual studies, 3 reviews) included in the rapid review implemented a variety of interventions to reduce violence, with limited evidence to support their effectiveness. Overall, the studies were of weak to moderate methodological quality. Articles offered limited descriptions of the interventions and/or lacked robust data to demonstrate effectiveness. No study demonstrated a robustly effective approach to reducing violence in the ED, however, a number of insights from across the studies could be used by knowledge users to inform the development of a comprehensive approach.

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## What is the current situation?

Workplace violence (WPV) is a common challenge in EDs, and is problematic in the ED at St. Michael's Hospital (SMH) in Toronto, Ontario. To address this challenge, leadership at SMH ED initiated a review to assess evidence-based approaches to mitigate WVP in the ED.

## What is the objective?

The objective was to address the question: What interventions have evidence regarding effectiveness for addressing workplace patient/visitor violence towards health care professionals in the emergency department?

## How was the review conducted?

The review followed Cochrane Rapid Reviews Method Group recommendations. Researchers and an academic librarian co-designed the search strategy and conducted the final searches. Knowledge users and patient partners were engaged in developing the search process including reviewing and refining the search terms and strategy.

The search strategy combined keywords and subject headings related to five key concepts: workplace violence (e.g., “aggression”); intervention/outcome (e.g., “de-escalation”, “prevention”); emergency department (e.g., “emergency medical services”), patient/visitor (e.g., “patient”, “patient visitor”), and emergency department staff (e.g., “health personnel”). Five electronic databases MEDLINE (via PubMed), Cochrane Central, Embase, PsycInfo, and CINAHL were searched on April 22, 2022, and limited to entries from January 1, 2012 onwards. Google Scholar was searched on April 24, 2022 using the same key concepts, search terms, and limitations, and the first 100 results were extracted. Two reviewers independently screened for relevant studies based on pre-defined criteria. Data extraction from the included studies was completed by one reviewer and verified by a second reviewer.



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## Implications

The review identified a variety of strategies to mitigate WVP in EDs.

A comprehensive approach should take into account the progression of violence, and focus on prevention, de-escalation, and follow-up, and also address WVP with multiple groups (e.g., leadership and policy, interdisciplinary care providers, and patients and families). Strategies to mitigate WVP include education (for both staff and patients/visitors), screening patients/visitors for risks of violence, staffing modifications, and environmental changes to the ED setting.

Education-focused interventions should address the affective domains of learning and preventative measures, in addition to more conventional training on responding to violence. Overall, efforts to mitigate violence should take into account the perspectives of patients and families, and consider the characteristics of populations that may experience marginalization and discrimination.

The review findings indicate more rigorous research is needed. The effectiveness of interventions should be assessed using multiple data sources collected over time, including incidence of WVP, patient and provider perspectives, and secondary measures such as wait times, staff turnover, and days and times that WVP is most prevalent.

## What did the review find?

The review included 24 studies (21 individual studies, 3 reviews). While a variety of interventions were implemented to reduce violence in the ED, there is limited evidence to support their effectiveness.

Many studies used education or multi-component interventions, e.g., a combination of education/training, screening for risk of violence, staffing changes, and/or environmental changes within the ED. Education interventions were commonly delivered using a variety of strategies such as online modules, classroom learning, and simulation training that varied in length from a single 4-hour session to multi-day training. Studies that implemented screening to assess patients/visitors for risk of violence used different screening tools, which required training to support the use of those tools.

Most frequently, interventions targeted nurses, although some interventions took interdisciplinary approaches and/or involved non-clinical staff (e.g., security, administrative). A smaller collection of studies considered the perspectives of patients in their interventions, improving information and supports available to waiting patients. Issues of cognitive impairment or inequities such as racial violence were rarely considered.

Studies drew on varied sources of data such as the incidence of violence or proxy measures (e.g., restraint use, violence codes, staff reports of WPV), as well as perceptions from staff about safety (e.g., self-reported confidence in addressing violence). The review indicated further research that demonstrates highly effective comprehensive interventions is needed, specifically studies with greater methodological rigor.

Note: Assessing the effects of pharmacological interventions was excluded from this review, as this was deemed beyond the scope of health service research, and more appropriate for a clinically-focused meta-analysis.