Implementation of a Comprehensive Intervention to Reduce Physical Assaults and Threats in the Emergency Department

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Introduction: The purpose of this study was to test the effectiveness of a comprehensive program to reduce the incidence of workplace violence (WPV) against ED providers by patients and visitors.

Methods: An intervention study was conducted with 3 intervention and 3 comparison emergency departments. Participants completed monthly surveys during an 18-month period to measure violent event rates before and after the WPV intervention implementation. Descriptive statistics were used to describe violent events. Analysis of variance was used to assess if the emergency departments participating in the WPV intervention experienced a significant reduction in violence rates compared with nonintervention emergency departments.

Results: On average, participants experienced more than 6 incidents of violence during the 18-month study period. Although the study hypothesis was not supported, 2 intervention sites had a significant decrease in violence.

Discussion: This study emphasizes the risk of WPV to ED workers and highlights the need for prevention programs. Future research needs to be conducted to test additional comprehensive WPV prevention interventions.

Keywords: Workplace violence; Violence prevention program; Intervention

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Violence against health care workers has been recognized as a serious and growing problem by several professional, regulatory, and licensing organizations.[1] In fact, the Occupational Safety and Health Administration has been proactive in this area by fining health care employers when workplace violence (WPV) was recognized and nothing was done to prevent these events from occurring.[2]

Growing research shows that WPV in health care settings has negative consequences for employees, employers, and patients.[3-5] The negative consequences of WPV include physical injuries, acute stress reactions, or even posttraumatic stress symptoms. Not surprisingly, researchers found that the level of care provided after a health care worker has been threatened with physical harm or assaulted is often compromised.[3] Employers may be adversely affected by violence as a result of decreased productivity, staff turnover, worker's compensation claims, legal liabilities, and fines by professional and regulatory organizations.

WPV risk varies across health care occupational groups and work settings. ED workers have consistently been found to have one of the highest rates of workplace assaults.[5-7] Despite the risk of WPV and the increased regulatory and professional group attention to the problem, few emergency departments have comprehensive programs

that include the triad of policies, procedures, and environmental approaches.[8,9] Although a growing body of literature supports the need for WPV prevention training, studies are lacking regarding the implementation of comprehensive WPV prevention programs to reduce violence against ED workers.[10]

The primary aim of this study was to test the effectiveness of a comprehensive program to reduce the incidence of assaults and physical threats against ED workers. The study hypothesis was that ED workers receiving a multifaceted intervention would have a significant decrease in assaults and physical threats compared with ED workers not receiving the multifaceted intervention. Secondary aims were to describe the rate of WPV by participants' gender, occupation, and type of emergency department where they work; perpetrators' chief complaints, age, and gender; time of events; and reporting rates of WPV. Findings from this study can be used by ED leaders as they develop and implement their own WPV programs.

Methods

A quasi-experimental, repeated measures design was used to collect survey data from ED workers for 9 months before the intervention and 9 months after the intervention. The study was approved by university and hospital Institutional Review Boards.

SETTING AND SAMPLE

The settings included 2 emergency departments verified by the American College of Surgeons as level I trauma centers, 2 urban tertiary care emergency departments, and 2 community-based suburban emergency departments. The sites were matched by type and then randomly assigned as intervention or comparison sites.

A stratified sample with a minimum of 160 participants was needed to obtain sufficient power (80%) to test the effectiveness of the intervention. All employees meeting inclusion criteria—that is, being a direct patient care provider and working at least 20 hours per week— were invited to participate. A total of 220 employees volunteered and were screened for eligibility; 213 met the inclusion criteria and completed a baseline survey. Four participants were lost to attrition, and thus data from 209 participants were used for the statistical analyses.

INSTRUMENTATION

Data were collected using 3 surveys developed for this study: a Baseline Demographic Survey, Monthly Survey, and Violent Event Survey. The Baseline Demographic Survey was used to collect information about participants' occupation, age, gender, and previous experience with WPV. The Monthly Survey was used to determine the number of assaults and physical threats experienced during the previous month. Assaults included hitting with a body part, slapping, kicking, punching, pinching, scratching, biting, pulling hair, hitting with an object, throwing an object, spitting, beating, shooting, stabbing, squeezing, and twisting. Physical threats included actions, statements, and written or nonverbal messages conveying threats of physical injury, which were serious enough to be unsettling, as well as expressions of intent to inflict pain, injury, or punishment. For 9 months before the intervention (September 2009 to May 2010) and 9 months after the intervention (September 2010 to May 2011), participants received an e-mail message asking them to complete the Monthly Survey. Reminder e-mail messages were sent as needed.

For each assault or physical threat identified in the Monthly Surveys, participants were asked to complete a Violent Event Survey. This survey asked for the date of the violent event, whether the perpetrator was a patient or visitor, the patient's chief complaint, the perpetrator's gender and age, if the participant recorded the incident with his or her department (via an incident report or another mechanism), and if he or she received a formal or informal debriefing after the event.

THE INTERVENTION

The researchers partnered with employees, managers, and hospital administrators at the 3 intervention emergency departments to develop the WPV intervention.[11] Partners included nurses, physicians, security officers, social workers, registrars, risk managers, and psychologists. The intervention had 3 components: environmental changes, policies and procedures, and education and training. Implementation of the intervention took place over a 3-month period (June 2010 to August 2010). The 3 comparison emergency departments agreed to not implement new WPV-related policies, procedures, training, or environmental changes during the study period. The research team met with intervention hospital employees and managers regularly during intervention planning and implementation. The researchers conducted walk throughs with the hospital personnel and recommended environmental changes.

The research team drafted initial policies and procedures for each hospital based on stakeholder discussions. The policies and procedures were reviewed and revised several times based on feedback from employees, managers, and administrators. All policy and procedural changes were ultimately reviewed and approved by the chief nursing