Workplace Violence: How to Care for the Caregiver.

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Abstract

Workplace violence (WPV) is a significant and increasing concern affecting healthcare workers worldwide. Much research has been conducted to examine the prevalence of workplace violence; however, fewer research studies have examined educational interventions that deal with the emotional stress associated with caring for aggressive patients. The systematic integrated literature review was completed to explore and answer the question as to whether simulation training would support employees in decreasing anxiety while working with a volatile patient population. The proposed educational project was formulated to enlighten key stakeholders in healthcare facilities that simulation training can not only support employees, but also reduce costs associated with lost time and injury. Moreover, simulation training can provide employees with knowledge and skills, practiced in a safe environment, all while gaining new perspectives on the patient's experience. Healthcare organizations experiencing workplace violence can easily implement simulation training as an effective tool and a tangible solution to mitigate the harmful effects of workplace violence.

Keywords: workplace violence, simulation training, patients, healthcare workers, emotional stress, education

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Workplace violence (WPV) among healthcare professionals is more commonplace now than ever before. International evidence demonstrates that between 25% to 67% of nurses experience some form of workplace violence either through direct contact, or indirect exposure (Havaei, 2021). Due to the considerable adverse implications, the World Medical Association deems WPV a worldwide crisis that destabilizes the foundation of healthcare systems (World Medical Association 2020, as cited in Vento et al., 2020). Workplace violence can have not only physical, but also psychological (emotional) consequences for impacted healthcare persons.

The primary objective in conducting this literature analysis is to develop a foundation of knowledge and understanding of workplace violence, its prevalence, and health consequences among healthcare professionals to support and promote the need for organizational change. The secondary objective is to acquire evidence to discern whether an educational intervention will support healthcare personnel emotionally and better prepare them to deal with the effects of WPV. The purpose of conducting this systematic integrated literature review is to develop an educational intervention using simulation to mitigate anxiety for healthcare personnel who have been subjected to workplace violence. The aim of this project is to provide other healthcare organizations and their employees experiencing WPV, with a comprehensive educational structure that can be utilized to reduce anxiety and create a work culture of safety and support.

Description

To better understand the burden of workplace violence among healthcare professionals, and create an educational intervention, it is necessary to begin with a specific inquiry based on evidence-based research designed to yield the most accurate data outcomes of the question being asked. This project is founded on the question, for healthcare professionals working in acute

care, does participation in simulation training, compared to not having simulation training decrease anxiety associated with workplace violence over a 12-month period?

Background

Within a 100-bed acute care community hospital, workplace violence occurs at a prevalence rate of approximately 40 times annually. Unfortunately, through visual observation, it has also been noted that the frequency of violent acts, as well as the severity, has increased substantially over the last two years. Most recently, a security officer was escorting a patient outside, who was leaving from the emergency department, against medical advice. When the security officer asked if he was all set, the patient turned around and proceeded to strike the officer in the head more than eight times. An additional example is of a confused woman who did not wish to return to bed, and because she was holding the certified nursing assistance's (C.N.A) arms for balance, dug her fingernails in the C.N.A's arms and removed the skin to show her frustration. Another very recent incident involved an RN caring for a male patient in the critical care unit. She was standing beside the bed to administer medication and he brought his foot up forcefully striking the nurse on the side of the head, causing her to fall. Although each employee was tended to immediately, and the events documented, there was no follow-up process to support them when they returned to work. These incidences of violence occur almost daily, and although tracked, are lost in the performance improvement software program called Medical Information Data Analysis System (MIDAS).

The MIDAS entries for the year 2022 consisted of 42 reported acts of workplace violence throughout the organization. Violent acts included scratching/digging, punching, kicking, shoving/pushing, grabbing/pulling, combative behavior, hair pulling and biting. This data is compiled from the witnessed and reported events of WPV, however, the evidence

suggests that countless acts of violence go unreported (Dadfar & Lester, 2021). It would seem preposterous that such violence would remain unknown, however, in past practice, the confidentiality of the aggressor had been protected, and minimized by healthcare administrators thus contributing to the lack of reporting (Antao et al., 2020). Furthermore, the psychological (emotional) violent acts that include verbal abuse, threatening, or bullying are not captured in the MIDAS data and this form of violence is equally as harmful.

The prevalence of workplace violence is estimated to account for 58% among nurses from English speaking regions including Canada and the US, and 38% among European nurses (Havaei, 2021). The World Health Organization (WHO) reports that the two most predominant forms of workplace violence are physical and psychological with violence of a psychological nature being most frequent (WHO, 2021, as cited in Havaei, 2021). Studies by Peng et al., 2018, as cited in Mento et al., 2020), also indicate that individuals who experience psychological violence are seven times as likely to experience physical violence and therefore have serious health implications of those impacted by WPV.

Healthcare workers who are exposed to acts of WPV are at greater risk of developing one or more of the four most common types of incapacitating mental health problems including post-traumatic stress disorder (PTSD), anxiety, depression, and burnout (Havaei, 2021). WPV has also been linked to a reduction in job satisfaction, poor engagement and performance, increased stress, sleep disturbance, burn-out and even death (Liu et al., 2019). Prevalence data of WPV is in abundance, and clearly represents its negative consequences. What is not captured in the prevalence data, or the MIDAS reports is an action plan or educational intervention to reduce these occurrences, or support and promote well-being for the individuals victimized by workplace violence. Prior to any implementation of education or training for healthcare

personnel experiencing WPV, it is essential to examine best practice for presenting education. Applying nursing theory can build the foundation on which an educational program can be created.

Utilizing learning theory can be instrumental when disseminating education as it establishes a conceptional framework that guides how learners acquire knowledge, skills, and attitudes, to alter behavior, performance, or future goals (Mukhalalati & Taylor, 2019). Adult learning theory, also referred to as andragogy, examines the internal and external factors that influence adults in their quest for knowledge. An example of an adult learning theory is Kolb's (1984) experiential learning where knowledge is acquired through interaction with a realistic environment, and that learning is facilitated through experience. Creating a simulation-based training program built on the adult learning principles will reach learners where they are, in a safe and realistic environment to support the educational process. Creating an evidence-based, theoretically rich educational program alone is not enough. It is also necessary to understand recent organizational barriers to establish strategies to optimize success.

Healthcare organizations are faced with monumental challenges since the COVID-19 pandemic began, including changes in infectious control safety measures, staffing issues, and financial constraints to name only a few. Economically, COVID-19 has been described as the worst financial crisis since the great depression of the 1930's (Yamin, 2020). In addition, time has become such a valuable commodity which all healthcare organizations are lacking. To give workplace violence the time, attention, and financial support it rightfully demands, presenting only one dimension of WPV will not suffice but rather requires a multifaceted approach submitted to key stakeholders to highlight its importance (Somani et al., 2021). The project will

convey the necessary literary evidence to examine the impact of workplace violence and defend the need for an educational support structure using simulation.

Literature Review

Search Methods

A comprehensive literature search was conducted using the academic databases of; Google Scholar, CINAHL, and MEDLINE (via PubMed) to acquire support for the established PICOT question; for healthcare professionals working in acute care, does participation in simulation education, compared to not having simulation education decrease anxiety associated with workplace violence over a 12-month period? Search terms used included: workplace violence, trauma, aggression, anxiety, education, simulation, and intervention to yield relevant data. The Boolean operators “and” as well as “or” were used to combine terms, and expand search criteria, but create specificity within the scope of research. Only research conducted between the years 2019 and 2023 was included in the search to produce the most recent literature. These search parameters produced 7 research articles most relevant to the topic.

To rigorously evaluate the quality of research, the Hierarchy of Evidence for Intervention Studies was used (Wallace, et al., 2020). According to Wallace, et al., (2022), level IV is the lowest level on the hierarchy of study design which includes translational studies and expert opinion. The hierarchy ascends until it reaches level I, which includes systematic reviews and meta-analyses studies. This literature review includes four level I studies, one level II study, and two level III studies. They are organized chronologically by level, beginning with the level I studies, and concluding with the level III studies. Research studies obtained are current, with the oldest of the studies being conducted in 2019.

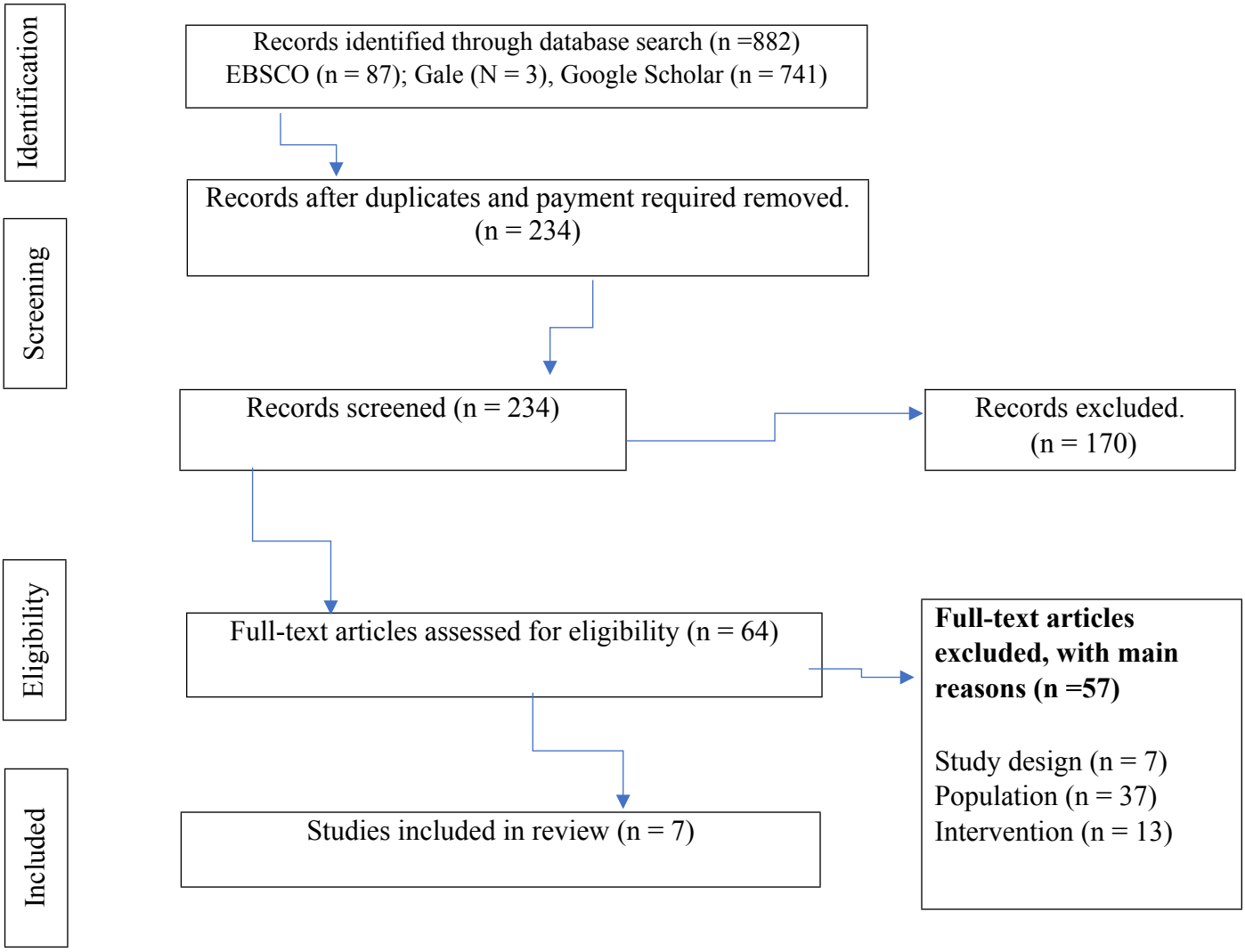


Figure 1. Flow chart of the study selection process

Prospective Studies

Bordignon and Monteiro (2019), recognized the significance and detriment workplace violence has in the clinical setting. The authors appreciate how aggressive patients could instill fear and anxiety in the workers who interacted with them. Therefore, the authors conducted research to examine how the use of simulation might support nursing students and health care professionals deal with the causes and effects of workplace violence. An integrative review of the literature was conducted in four sequential stages to answer the question based on the research objectives. By utilizing reputable databases including CINAHL, MEDLINE (via PubMed) and ProQuest Central databases produced 184 studies from Germany, Canada, the United States, and the United Kingdom. Of those 184 studies, nine were selected and demonstrated that the use of simulation provided nursing students and healthcare workers with real setting dynamics and emotions, which allowed participants to improve skills related to dealing with workplace violence. In addition, the studies established that using simulation training on violence in the workplace increased confidence, and knowledge of the participants, thus decreasing anxiety and stress. Finally, the literature review by Bordignon & Monteiro, (2019) also recognized that workplace violence can be sporadic, random, and unpredictable consequently suggesting the difficulty in gauging whether general simulation training will meet all employee's needs.

In a randomized control trial conducted by Stephen et al., (2022), the researchers sought to evaluate the effectiveness of a virtual, simulated code white education platform in dealing with workplace violence. By utilizing pre and post test measures regarding knowledge and attitudes about the causes of workplace violence evaluated against a simulation intervention, researchers discovered themes within the research, that simulation improved knowledge, skills,

and attitudes of the participants. Despite the small sample size of 24 fourth year Canadian nursing student participants, and not providing a population thus weakening the study, the data supported virtual simulation as an effective educational intervention. The results showed that those in the virtual simulation intervention group, as opposed to the control group with regular educational curriculum, obtained greater knowledge of the many factors which contribute to workplace violence, and a better understanding on how to deal with the effects of such aggression. Participants agreed that being able to practice techniques when dealing with simulated aggressive scenarios provided emotional resilience and built confidence. Researchers also surmised that using both virtual simulation and in person simulation would provide the best benefit to nursing students about to enter the workforce.

Mitchell et al., (2020), designed and registered a study protocol for a systematic review of studies to specifically address whether simulation-based training is an effective method in increasing de-escalation knowledge skills for those healthcare workers subjected to workplace violence in acute care settings. Comprehensive studies from acute care settings within Australian hospitals were evaluated from January of 1980 to an undisclosed future date. Databases of PubMed, MEDLINE, PsycINFO, CINSHL and the Cochrane Library were utilized. The study design included randomized controlled trials, controlled non-randomized controlled trials, quasi-experimental studies as well as study designs to safeguard that outcomes that are compared over time or with a group that did not receive intervention opportunities. The simulation-based intervention strategy utilized people as simulated patients to provide health care workers an opportunity to teach the prevention and management of aggression. The authors acknowledged that publication bias may have limited this review and were prepared to highlight these concerns to mitigate any bias. Regardless, Mitchell et al., (2020), are confident that this systematic review

protocol will provide substantial support that simulation training in the acute care setting will provide workers with the necessary de-escalation skills and knowledge to better deal with the harmful effects of workplace violence.

Wirth et al., (2021), conducted a systematic review to encapsulate the evidence on workplace violence prevention strategies, implemented in emergency departments, across the United States, Europe, and Australia, to reduce violent acts. The secondary purpose of the review was to collect evidence on educational interventions that increased the knowledge and skills of the healthcare workers in emergency departments to create an environment of safety and reduce the feelings of anger, frustration, and anxiety. Researchers began with a literature search using MEDLINE (via PubMed), Web of Science, Cochrane Library, CINAHL and PsycINFO on the 14th of September 2020. After inclusion and exclusion criteria were utilized, screening measures completed, and duplicates extracted from 1965 potential studies, 15 full-text studies were included in the review. Two studies implemented virtual simulation trainings displaying the management of violent persons to medical students during their emergency medical clerkship. Both studies supported an increase in knowledge after this intervention. Six studies reported on classroom and in-service training sessions to teach de-escalation techniques; however, the results did not support any significant difference in the confidence of the participants in de-escalation and self-protection. Three additional studies defined a hybrid approach including both virtual simulation training and classroom and found the results favorable with increasing knowledge of this training approach. The last four studies examined the emergency department environment in conjunction with virtual and classroom education and again, the results favored the multifaceted approach. The results outlined that organizational and environmental causes of workplace violence cannot be reduced through training. However, virtual simulation as well as in-person

education showed great promise in the reduction of violent acts, and more importantly providing greater knowledge to the employees caring for these persons. Lastly, the literature review supported greater employee knowledge and skills, resulting in increased confidence in dealing with workplace violence, thus reducing fear and anxiety. Fear and anxiety are emotions found in the employees who care for violent patients, but also the patients themselves who may become violent because of these volatile emotions.

Thompson et al., (2019), sought to understand more about the factors associated with workplace violence including patient frustration, fear, and anxiety about their care, and/or a medical diagnosis. Mental illness may also impact patient behavior independently or in conjunction with those other influences. To better understand the potential connection between nurses' attitudes surrounding the causes of workplace violence, and how it is managed, Thompson et al., (2019), conducted a mixed methods study to explore this question. The first part of the research began with a literature review using Google Scholar, Ovid Medline, Embase, ProQuest, and CINAHL, to examine the prevalence and management of workplace violence within the United States, United Kingdom, Hong Kong, Turkey, and Australia. The search yielded 14 relevant studies. In addition to the literature, researchers used surveys and interviews pre and post educational interventions. The study included two groups of subjects. The first group was a convenience sample of 71 med/surge nurses who were to partake in the educational intervention. The second group consisted of a convenience sample of four nurse managers who were also to attend the educational intervention and then participate in a semi-structured interview 10 weeks later. The educational intervention consisted of digital versatile disc (DVD) simulation scenarios including managing patients with alcohol withdrawal, dementia, acute confusion, fear, pain, and distressed families. The MAVAS tool was used for measuring the

nurses' attitudes to the management of aggression before the intervention, directly after the intervention and again at 6 weeks. Despite not having a population, and a significant difference in sample size, the results of the study supported that a simulation intervention geared to appreciate the factors related to workplace violence, increased understanding, and promoted support from management, thus decreasing the incidence of violence.

Ming et al., (2019), conducted a quasi-experimental study with 66 nursing participants enrolled via convenience sampling in a nearly 3000-bed national medical center in Taipei, Taiwan. The purpose of the study was to examine the effectiveness of situational simulation in improving employees' perception and self-confidence in coping with aggressive patients. The simulation training was applied based on the data obtained from nine studies from a systematic literature review and the results of focus group interviews. Structured questionnaires included (1) baseline characteristics, (2) perception of aggression scale (POAS); and (3) confidence in coping with patient aggression, to be completed both pre and post education. Education included simulation-based communication, real case scenario discussion, videotaped simulation of real case scenario, coping strategies, and discussion sessions after watching the videos. The results of the study were incredibly positive regarding simulation as an effective strategy to support staff dealing with workplace violence. The findings highlighted an improved perception and confidence of coping with workplace aggression, as well as indicating that the higher the nursing level, the higher the positive correlation. Ming et al., (2019) recognized that with only using single pre and posttests it was difficult to project the longevity of learning effects, however, it has provided a path for future research. Although the study did not specify the population of the sample, it was supportive and encouraging that utilizing simulation as a training method "had a positive impact on the overall quality of life and working style of employees" (pg. 8).

An additional study conducted by Lui et al., (2022), also highlighted research interest in perception, attitudes and self-efficacy regarding employees exposed to workplace violence after an educational intervention. In a quasi-experimental study, consisting of 190 Chinese healthcare participants, Liu et al., (2020), set forth to examine the effect of simulation-based medical education (SBME) independently, and simulation-based medical education in conjunction with behavioral economics (SBME + BE) interventions compared to a control group. The Haddon matrix proposed by William Haddon 1980, as cited in Lui et al., 2022), was used as a theoretical framework applied in conjunction with the theory of behavioral economics by Richard Thaler, 1980, as cited in Lui et al., 2022). Behavioral economics is the theory that combines economics with psychology to give credence to how individuals think, choose, and decide (Baddeley, 2019). Together they provide the building blocks for greater understanding of workplace injury prevention and control. Haddon's (1980) matrix consists of two axes. The first axis includes the elements of the epidemiological triad, host (healthcare workers), vector (patients), and environment, and suggests that much like a disease, injury functions in a similar fashion. The second axis includes the three intervals of time including before the event, during the event, and after the event. These time intervals are important as they suggest a predictability of injury within the time limit that can be agreeable to study within populations. Using this framework, the sample was divided into three randomized groups for educational intervention and evaluation. The control group, consisting of 64 of 190 participants received education on workplace violence prevention which was based on systematic reviews. The second group, consisting of 66 of 190 participants, received comprehensive simulation training on workplace violence instructed by highly trained professors. The third group, consisting of 60 of 190 participants, included both behavioral economics of workplace violence and comprehensive simulation education. The

results of the study yielded statistically significant support that SBME + BE and SBME education alone promote greater perception, attitude, and self-efficacy in coping with workplace violence. Despite the confined geographic area of study, and the sociodemographic homogeneity limitations, the statistical significance of the results remains a positive predictor of outcomes (Lui et al., 2020).

In summary, the literature consistently supports the use of an educational intervention using simulation to support healthcare personnel in developing skills, improving attitudes and decision-making, and therefore improving mental well-being when exposed to workplace violence. Specifically, of the seven studies included in the literature review, three studies provided support in increased understanding of workplace violence, and therefore allowed healthcare staff to gain confidence and mental resilience in managing aggressive patients. Two more studies provided staff with real life experiences allowing them to work through the scenarios thus decreasing anxiety and stress, and the last two studies created greater knowledge of the factors associated with workplace violence, thus reducing incidence, and improving outcomes. However, the literature did not adequately explore or support the specific connection between using simulation education and evaluating anxiety pre and post education for healthcare personnel who have experienced workplace violence, and therefore requires further research.

The finding of this integrated literature review substantiates this project and the need for continued education surrounding workplace violence, its mitigating factors, and potential interventions. It will be necessary to establish a systematic approach to education to capture interest of not only healthcare employees but also key stakeholders to ensure buy-in and sustainability of any future educational implementation.

Implementation of Education

The anticipated implementation of education will include a PowerPoint presentation with voiceover to thoroughly cover and highlight key factors, causes and the utilization of simulation as an intervention when dealing with workplace violence. The presentation will be informative and visually appealing to capture the attention of the intended audience, as well as leaving an impression for maximum information retention. The rationale in choosing a PowerPoint presentation is to provide an opportunity to present the information and give viewers an opportunity to receive, reflect, and obtain immediate feedback post questions session, thus supporting a thorough educational process. Emphasizing Mezirow's (1978), adult learning theory model utilization, transformative learning provides a foundation for maximum learning potential for the project.

According to Mukhalalati and Taylor, (2019), Jack Mezirow's (1978) transformative learning theory, also referred to as reflective learning occurs in three stages. The first stage involves experiencing an event that is either confusing or problematic, and reflecting on previous perspectives about the event. In following this construct, when presenting the education about workplace violence, it is important to start with the prevalence and significance of how workplace violence affects healthcare personnel. Next, is to explore any preconceived notions about knowledge, and attitudes surrounding the culture of workplace violence. The second stage in transformative learning is to engage in critical thinking and reflection on the experiences. This project presentation will then bring to light how workplace violence contributes to employee stress, anxiety, and patient fear when employees are unaware of how and why patient aggression is occurring. In addition, it will be important to allow the audience an opportunity to reflect on how an employee support solution like simulation might contribute to a decrease in lost work

time and employee injury claims. The third and final stage is finding solutions to the issue or problem, based on previous understanding and reflection (Mukhalalati & Taylor, 2019). If people with previous experience of workplace violence had notions that patient aggression was something to be tolerated instead of finding resolution, this final stage of learning will be instrumental. Allowing learners to put previous assumptions aside and transform with heightened awareness that with simulation training, employees can build understanding, skills and confidence and patients may have a better care experience resulting in a positive and productive educational experience.

The intended population for education includes all healthcare personnel working in acute care, aware of, exposed to or working directly with aggressive patients. Specifically, within the 112-bed acute care hospital in Bangor Maine, which would incorporate 224 nurses of 640 total employees working in the emergency department, medical/surgical units, cardiac and critical care units. Personnel from the emergency management and education teams will conduct the education as they are responsible for required certification renewal and maintenance and highly qualified to conduct this education. Each simulation educational session will allow for learners to participate in real-life scenarios with many opportunities to practice de-escalation and effective communication skills, ask questions, and receive feedback regarding the simulated interactions. Each session will require approximately two hours of the participants' time and can accommodate 6 people during each session. Sessions can be held 3 times a week 3 times a day, until all willing participants are able to benefit from the education. Educational sessions can then be incorporated into yearly competency training to ensure learners are supported and skills progress and improve over time.

In addition, key stakeholders would include personnel from risk management, case management, senior leadership, and representatives from the organizations Workman's Compensation board. The goal in choosing such a diverse audience of healthcare professional representatives is to create awareness, and capture interest in those capable of implementing change. Specifically, providing education and potential solutions, intended to reduce employee injury claims, and prevent lost time and wages to enhance employee wellness is a powerful, and meaningful strategy. Once the education is complete, it is essential to allow for questions, concerns and to explore any barriers that may impede the formulation of a simulation education program.

It is reasonable that key stakeholders might anticipate finances as a potential barrier to implementing a simulation educational program for workplace violence. However, most if not all organizations have funds available to offset financial burdens related to patient safety. Safe patient handling funds are insurance monies specifically allocated to healthcare organizations to support any measures intended to prevent or reduce the incidence of employee injury. The purchase and formation of a simulation lab, although ideal, is unnecessary to provide the required education for employees. Much like a cardiopulmonary resuscitation (CPR) class, the necessary equipment involves mannequins as potential patients, although using employees is optimal. In addition, a workspace for teaching is necessary to create a safe learning environment where learners can feel free to explore the simulation area and learn from the experience. The workspace does not need to be excessively large, and therefore should not be viewed as a barrier to the implementation of the educational project. Simulation material of workplace violence can be utilized from organizational experience to make each educational experience personal, relevant, and true to life. Learners can contribute to the scenarios to offer the emotional

experience as an opportunity to work through the process for increased knowledge and skill development. Given the allocation of funding, the minimal space contribution and the significant potential for positive outcomes, resistance from key stakeholders is unlikely, as any perceived barriers are easily addressed and rectified.

Workplace violence is such a significant global issue, and therefore, it is reasonable that this educational format be implemented in other community-based healthcare organizations for the betterment of the employees and patients alike.

Summary/Recommendations/Conclusions

Workplace violence is a worldwide crisis which requires a systematic approach to identifying contributing factors and potential solutions for maximum employee and patient safety systems (World Medical Association 2020, as cited in Vento et al., 2020). The literature review revealed valuable research supporting the need for an educational intervention to support healthcare personnel in dealing with and building knowledge and skills to reduce the negative consequences of workplace violence (Wirth et al., 2021).

The literature more specifically supported the use of simulation training as a viable option to provide real life scenarios to help reduce the feelings of stress and anxiety as the result of working with aggressive patients (Bordignon & Monteiro, (2019). In addition, simulation also offered learners an opportunity to perceive fear, uncertainty, and potentially mental illness from a patient perspective to increase understanding and potentially reduce the incidence of violence (Thompson et al., 2019).

Key stakeholder support is an essential component of implementing a simulation education program and therefore the proposed program must provide adequate information about increased employee safety and reduced injury all while anticipating perceived barriers to offer

tangible solutions. The proposed simulation training program will outline how employees will have an opportunity to learn strategies in dealing with workplace violence and be able to build confidence, coping strategies and reduce anxiety while working with a potentially aggressive patient population. Simulation training is simply implemented with minimal financial resources as it is supported by safe patient handling funding programs. Simulation has many positive implications including safer employee practice including a reduction of lost employee time due to injury.

Regarding future recommendations, the project lays a solid foundation for future research for how simulation educational can contribute to the reduction in anxiety response pre and post education. Moreover, simulation training is a vital educational intervention for all organizations experiencing workplace violence and the capstone project provides supporting evidence of its credible effectiveness (Ming et al., 2019).

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