Impacting Nurses' Self-Efficacy in Managing Escalating Patients

Elizabeth A. Corker

College of Nursing, Michigan State University

Doctor of Nursing Project

Faculty Advisor: Dr. Jackie Iseler

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Abstract

OBJECTIVE: Violence in healthcare is an ongoing challenge nurses face across the continuum of care. Education on de-escalation techniques and safe disengagement techniques were shown to improve nurses' confidence and ability to de-escalate stressful situations. The purpose of this evidence- based practice project was to determine the impact of an educational session on nurses' self-efficacy in managing escalating patients.

METHODS: This project utilized a survey of nurses' perceptions of self-efficacy before and after an educational session. Nurses on medical-surgical and telemetry units were invited to participate in the educational session and survey. Demographic information was collected including age, role, education, experience with de-escalation training, and experience with incidences of workplace violence.

RESULTS: Thirty-five nurses were surveyed for self-efficacy before and after the educational session, and pre- and post-test values were compared, with a statistically significant improvement in self-efficacy after the intervention.

CONCLUSIONS: The results of this project indicated that education and training was effective in improving self-efficacy of nursing staff. The education that was effective included recognizing worsening or escalating behavior, appropriate interventions to reduce escalation, as well as how to manage violent behavior safely and effectively through disengagement techniques. Together these provided the knowledge and skills to empower nurses to address these stressful situations and give them the tools to prevent patients from becoming violent.

Impacting Nurses' Self-Efficacy in Managing Escalating Patients

Nurses encounter violence throughout their work so often it is an epidemic in U.S. healthcare (Honarvar et al., 2019). Violence toward nursing staff includes verbal, physical, and even sexual abuse. Violence can be perpetrated by patients, visitors, family members, co-workers, supervisors, and intimate partners. Long-term, life-changing, and permanent injuries, both the visible and invisible, result from these violent encounters. According to the National Institute for Occupational Safety and Health (2021), 20,870 workers were victims of workplace violence in 2019, and of those, 70% were healthcare workers.

Managing difficult, or escalating, patient behavior is more of a challenge than ever. Patients and nursing staff are both stressed given political, social, and economic stressors. Escalating patient behavior may start as minor outward expressions of frustration and anxiety, and if left unaddressed, can develop to more intense displays such as punching, hitting, or kicking (McKnight, 2020). Emergency department and psychiatric nurses spend hours each year learning de-escalation techniques to aid in managing difficult patients to better reduce tension and the likelihood of violence. Medical-surgical and telemetry nurses are not always required to have de-escalation training. This lack of training, coupled with incidences of violence against nursing staff, promotes feelings of "unpreparedness, frustration, moral distress, and powerlessness" (Dahnke & Mulkey, 2021, p. 229). The purpose of this paper is to discuss workplace violence in the hospital setting and explore techniques and strategies to better equip healthcare staff to respond to escalating patients, thereby increasing their self-efficacy.

Background

In a 200-bed acute care community hospital in a suburban mid-Atlantic county, de-escalation education is only required in emergency and psychiatric settings. This education is

largely passive, consisting of lecture and discussion with minimal active learning scenarios where the learner manages a simulated patient. A study by Havaei et al. (2019) found that the perception of certain settings such as the emergency department or psychiatric unit as being more violent has shifted to an overall heightened risk for violence that is hospital-wide. In addition, passive education does not provide enough support to staff to improve their confidence in handling these situations (Havaei et al., 2019). Havaei et al. suggest an active and engaging educational approach, such as mock code drills, is more beneficial for staff's self-efficacy regarding de-escalation.

Violence toward nursing staff is not limited to physical aggression, but also encompasses verbal abuse (Dahnke & Mulkey, 2021). Given the Coronavirus disease 2019 (COVID-19) pandemic, staffing crisis, and overall stress within healthcare systems, staff are increasingly vulnerable to the negative impact of violence within the workplace. Dahnke and Mulkey (2021) suggest that leadership acknowledgement of violence, in all its forms, as well as better education, encourages more reporting and job satisfaction for nursing staff. Widening the education to more settings and including dynamic education could further improve self-efficacy and empowerment of bedside nursing staff.

Significance

The cost of workplace violence in the healthcare setting is staggering. In 2017, hospitals spent an estimated "$1.1 billion in security and training costs to prevent violence within hospitals, and an additional $429 million in medical care, staffing, indemnity, and other costs as a result of violence against hospital employees" (American Hospital Association, 2018, para. 5). Healthcare workers are five times more likely to be injured due to workplace violence than any other type of worker (U.S. Bureau of Labor Statistics, 2017). "Healthcare workers accounted for

73 percent of all nonfatal workplace injuries and illnesses due to violence in 2018" (U.S. Bureau of Labor Statistics, 2017, para. 4). Not only are the financial costs high, but the impact on affected healthcare workers can be lifelong.

At this small, community hospital, violence is a significant problem. According to reported events, violence perpetrated against nursing staff has increased significantly, including those resulting in injury to nursing staff. The requests for de-escalation training class seats doubled over the last year to provide more access to training for staff. To provide the requested education, the number of trained instructors was also doubled to four. In addition, the behavioral health team has conducted a pilot that involves rounding on patients at risk for violent or escalating behaviors based on the nurse's assessment. Rates of violence are difficult to attribute to actual incidences due to staff hesitancy to report such events. According to staff, barriers to adequate and accurate data collection involves a mistrust in the reporting process, a perception that staff does not need to document workplace violence if the patient was ill or under the influence, and a belief that reporting does not change outcomes for staff or consequences for patients. Staff in the medical-surgical and telemetry areas are not part of de-escalation training, which staff in the emergency department and psychiatric areas receive. Violence is a problem for nurses throughout all hospital areas because it does not stop at the entrance to the inpatient elevators.

Problem Statement

Workplace violence from patients toward nursing staff is a problem across the continuum of care. While medical-surgical and telemetry staff are exposed to many of the same patient populations as other departments who receive de-escalation training, they do not receive any education or training at this facility. Would providing medical-surgical and telemetry nurses

active education and training on de-escalation techniques impact their self-efficacy in managing escalating patients?

Theoretical Framework

Jean Watson's Model of Human Care is a theory that is particularly relevant to the research regarding de-escalation of agitated patients and reduction in workplace violence. Watson's theory is based on 10 components of caring which shape the nurse-patient interaction and are essential to caring for the whole person (Marriner-Tomey, 1985). According to the theory, nurses must be aware of and express their feelings, to encourage patients to accept and do the same. De-escalation techniques require nurses to understand their own attitudes and emotions and expect patients to express their feelings without violence. Nurses must develop a "helping-trust relationship" in which being honest, warm, communicating effectively, and being empathic with the other person are crucial components of the relationship (Marriner-Tomey, 1985, pp. 167). De-escalation techniques rely on the nurses' facial expressions and body language to reflect their verbal expressions to patients to build trust and therapeutic rapport (Marriner-Tomey, 1985). For these reasons, Jean Watson's Model of Human Care is a pertinent theory to modern de-escalation planning and interventions.

Search Strategy

A search of PubMed and Cumulative Index to Nursing and Allied Health Literature (CINAHL) was completed utilizing the words "de-escalation" and "nursing" and "training." The initial search and inclusion criteria consisted of articles published between 2017 and 2022, written in the English language, and available in full text. A total of 58 articles were retrieved. Abstracts were read to determine appropriateness for inclusion. Articles not pertaining to the medical-surgical care area or acute care/hospital settings were excluded. Duplicate articles were

also excluded. After appropriate review, four articles were included, with an additional two articles identified for inclusion from source material. See Appendix A for the full PRISMA diagram.

Synthesis of Findings

The Johns Hopkins Nursing Evidence-Based practice model was used to analyze each article for levels of evidence, design, weaknesses, and strengths (see Appendix C). Subjects of focus in the research included nursing and medical students, medical-surgical nurses, and nurses working in areas at the highest risk of violence. Common themes include de-escalation training, measurement of confidence as an outcome, and restraints.

De-escalation Training

Training across all the research articles focused on recognizing escalation, interventions, steps to prevent further escalation, and techniques to manage violent behaviors (Al-Ali et al., 2016; Goh et al., 2020; Ferrera et al., 2017; Lamont and Brunero, 2018). De-escalation training utilized by Goh et al. consisted of two hours of video and lecture education, including how to recognize stages of escalation and verbal techniques to utilize, medications used to assist in chemical restraint, and how to physically manage "dangerous, aggressive, or violent patients" (Goh et al., 2020, p. 2). Classroom education was followed by hands-on instruction allowing students to practice the skills learned through the lecture portion. Ferrera et al. (2017) identified techniques utilized in behavioral health settings and adapted them to the acute care setting. In-person and online, recorded educational sessions were used to teach the Ten Domains of De-escalation. Overall, the importance of the implementation of the training led to a decrease in the violent occurrences for nursing staff when compared to pre-intervention. In the study by Lamont and Brunero (2018) subjects went to a one-day workshop to learn de-escalation techniques,

assessment and management techniques, as well as “breakaway techniques”, which specified how to disengage from an individual if they do become physically violent. Implementation of de-escalation, evasive techniques, and planning improved nurses’ confidence in addressing agitated patients in this study (Lamont and Brunero, 2018). Al-Ali et al. (2016) utilized multiple one-day sessions consisting of slide presentations, group discussions, case studies, and role playing to better teach the topics. Included in their education was defining workplace violence, approaches to address and recognize, interventions, monitoring, and reporting. All sessions were taught by the same Clinical Nurse Specialist who was trained in workplace violence prevention.

Restraints

For Goh et al. (2020), education also consisted of restraining a student volunteer and debriefing the students afterward regarding their experiences. This topic was unique to these researchers but focused on developing empathy and better understanding of the patients’ perspective and experience in being restrained. Their research hinged on the idea that knowledge about restraints and de-escalation translates into improved, more confident practice and care for escalating and violent patients after graduation. Researchers focused on the characteristics of the care team in their approach toward escalating patients and stated, “Empathy and non-judgmental attitudes are vital not only in facilitating interactions with patients, but also in reducing and eliminating the use of restraint” (Goh et al., 2020). This is a unique perspective that could prove important toward the use of restraints with escalating patients.

Confidence as Outcomes

All the authors measured confidence of nursing staff as an outcome and compared pre- and post-implementation (Al-Ali et al., 2016; Goh et al., 2020; Ferrera et al., 2017; Lamont and Brunero, 2018). Al-Ali et al. (2016) indicated that post-intervention, nurses’ attitudes toward

their ability to address physical and verbal violence was enhanced. Goh et al. (2020) measured confidence utilizing a questionnaire targeting specific skills taught including verbal de-escalation skills, managing physical escalation, and physical and chemical restraints. Ferrera et al. (2017) measured utilizing the Confidence in Coping with Patient Aggression Instrument. Lamont and Brunero (2018) evaluated their activities using the Continuing Professional Development Reaction questionnaire and the Confidence in Coping with Patient Aggression Instrument. Across all studies, researchers reported a statistically significant increase in participants' beliefs about their abilities in responding to aggressive, verbally abusive, and even physically aggressive patients (Al-Ali et al., 2016; Goh et al., 2020; Ferrera et al., 2017; Lamont and Brunero, 2018).

Methods

Project Site and Population

The implementation setting was a small community hospital in a suburban mid-Atlantic county. The intervention implementation included participants that work on medical-surgical/telemetry inpatient units of the hospital. This population is approximately 300 individuals, and a convenience sample of volunteers was included in the project. All staff nurses and certified nursing assistants (CNAs) on several medical-surgical telemetry units were invited to participate in this project. Opportunity was given to nurse leaders to participate in the training as well. Nurses include licensed practical nurses (LPNs), as well as Registered Nurses (RNs) prepared at the associates', bachelor's, master's, and doctoral level. A power analysis using G*Power 3.1.9.7 (Faul et al., 2009) indicated the inclusion of 34 participants was expected to have 80 percent power to detect an effect size of 0.5 standard deviations based on a five percent 2-sided significance level for statistical analysis of within-subject differences pre- and post-survey.

The key stakeholders in this project were the nursing personnel, as well as hospital leadership, clinical education department, patients and families, all of whom benefit from education, skills in de-escalation, and enhanced self-efficacy of nursing staff.

Ethical Considerations/Protection of Human Subjects

This DNP project was reviewed by Michigan State University and the organization's Internal Review Board (IRB) deemed it non-human research. The educational session was completely voluntary, and details of the session were provided prior to starting. Through an informational flyer, (Appendix I) posted on the units, emails, and through unit huddles and other meetings, any nursing personnel was invited to attend the educational session.

The benefits of participation include increased knowledge and confidence. The risks to participants were minimal and largely related to loss of confidentiality. No personal health information was collected, and any information collected was de-identified. The survey completed by hospital staff was both optional and anonymous. All data collected was protected within a password-secured laptop, stored within a locked cabinet, within a locked office. Participants are not identifiable in any publications or reports on the project or data.

The topic may be upsetting to some participants, though none experienced this during the project period. If a participant expressed feelings of distress, the contact information for the system's Employee Assistance Program would have been provided. Participants were instructed they may end their involvement in the project at any time without penalty or employment implications, though no participants chose to end the project early.

Setting Facilitators and Barriers

One anticipated barrier to the project was funding for staff to attend training. After approaching nursing leadership, it was decided that participants in the educational program were

able to attend the training using the organization's strategic training budget cost center. This budget request was approved by senior leadership.

Educational Session

The educational session started with an introduction to an understanding of what crisis, or an escalating patient, looks like (see Appendix F). By defining certain behaviors those in crisis may exhibit, corresponding appropriate behaviors were also taught to help de-escalate the situation. Core concepts such as empathetic listening, rational detachment, situational awareness, and therapeutic rapport were established. Communication skills were highlighted, with significant focus on verbal communication, and how to specifically address issues such as shouting, cussing, and confrontational questions. Discussion of the crisis response within the hospital setting also occurred, including when and how to call a 'code green' or behavioral emergency, security's role in those emergencies, and the importance of debriefing with both the patient and staff. Definitions of workplace violence were also covered, along with appropriate reporting instructions and resources. Finally, safe disengagement techniques were demonstrated and taught to the participants. Return demonstration was incorporated. This education was developed based on the effective strategies described in the literature and based on knowledge acquired from resources on the topic (Al-Ali et al., 2016; Goh et al., 2020; Ferrera et al., 2017; Lamont and Brunero, 2018, McKnight, 2020).

Timeline

The total timeline to complete the intervention was expected to be 8-10 weeks, and the project met this expectation. The project required this span of time to ensure inclusion of an adequate number of participants accommodating for staffing challenges and to obtain classroom space.

Measurement Instruments/Tools

Self-efficacy refers to an individual's belief in his or her capacity to execute behaviors necessary to produce specific performance attainments (Bandura, 1977, 1986, 1997). Self-efficacy reflects confidence in the ability to exert control over one's own motivation, behavior, and social environment. The measurement instrument was used to determine if implementing a two-hour educational session, covering de-escalation training and disengagement techniques, improved nurses' confidence in managing escalating patient situations was the General Self-Efficacy Scale (GSE) (Schwarzer & Jerusalem, 1995). The GSE was developed by Schwarzer and Jerusalem and is a valid and reliable tool used by a variety of disciplines and across 26 languages to measure self-efficacy across the adult population (Schwarzer & Jerusalem, 1995). The GSE is 10 questions that are scored with a Likert scale and given a number value from 1 through 4. All the question responses are totaled to give a final score from 10 to 40, with a higher score indicating greater self-efficacy of the respondent.

Demographic information including participants' age, nursing role, education, experience, experience with de-escalation training, and exposure to workplace violence within the past year was also gathered. See Appendix G for the full survey utilized.

Surveys including the GSE and demographic information were collected from participants at the start of each educational session. After the education, the question on workplace violence experience and the GSE were surveyed again. Each survey was coded so that the pre- and post-implementation scores within participants could be matched and measured.

Cost-Benefit Analysis

Development of the educational session and carrying out the DNP project required no cost to the organization. Training material consisted of the use of classroom space, PowerPoint

slides, and handouts. Staff participation in the project was budgeted for by senior nursing leadership, who recognized the need for a WPV prevention educational program for staff, and to ensure participants were paid for their time to attend the class. Participants were paid to attend using the organization's strategic training budget cost center.

In the future, to meet Joint Commission standards, the organization will have to determine funding for employees to participate in annual training on WPV. The educational session is one option to fulfill Joint Commission requirements in support of accreditation. The salary of one Clinical Nurse Specialist (CNS) would be sufficient to ensure the organization can continue to teach the course. The organization would benefit from other work done by the CNS, including quality improvement and evidence-based practice projects driven by the CNS throughout the rest of the year. Cost savings potential arises from prevention of harm and improvements in proficiency, not just for this project, but also through ongoing work by the CNS. Additionally, there is potential cost savings through the reduction in incidences in workplace violence. Improving the work environment by decreasing WPV may lead to increased retention and decreased nurse turnover, positively impacting the organization's personnel costs. According to the Occupational Safety and Health Administration, or OSHA, (2015) one estimate of annual costs relating to workplace violence injury treatment and lost wages was $94,156. If the CNS can improve these costs to the organization, it would provide additional financial benefit.

Analysis

The statistical package used for data analysis was SPSS 29. Data was entered into SPSS 29 and double-checked for accuracy manually and statistically. Means and standard deviations were calculated for all continuous variables. Descriptive statistics were used to describe the

sample as collected on the demographic survey, including age, nursing role, education, experience, experience with de-escalation training, and exposure to workplace violence within the past year.

To address the question; Would providing medical-surgical and telemetry nurses active education and training on de-escalation techniques impact their self-efficacy in managing escalating patients?, differences in the mean scores on the GSE pre- and post-intervention were analyzed using a paired-samples t-test. Relationships of experiences with de-escalation training, and exposure to workplace violence in the past year with other sample characteristics were explored.

A sample of 35 staff members were recruited. Eighty-nine percent of those surveyed were RNs, and 11% were CNAs. Mean age of participants was 37 years (SD = 11.2). Of those that participated, 9% had a high school diploma, 9% had an Associate's degree, 74% had a Bachelor's degree, 5% had a Master's degree, and 2% had a Doctorate. Most nurses were an RN 2, which is a nurse with at least 1 year of experience; this is the second step on a 4-step clinical ladder.

Both before and after the intervention, which included the definitions of WPV, 77% of participants indicated they had experienced WPV. That the same number of staff indicated they experienced WPV pre- and post-intervention suggests that staff had a good understanding of what WPV is, and that the intervention provided no new insight to participants.

If knowledge of the definition of WPV is not an issue, underreporting may be part of the problem and organizational culture. According to staff, there is a mistrust in the reporting process, a perception that staff does not need to document WPV if the patient was ill or under the influence, and a belief that reporting does not change outcomes for staff or consequences for

patients. Knowledge of WPV could be related to first-hand experience, since more than three-quarters of participants reported that they experienced WPV. Perhaps those who chose to attend the class did so because of their experiences . Some staff participated at the encouragement of their leadership because of experiencing a particular act of WPV.

A paired samples t-test was performed to compare pre- and post- GSE scores. There was a significant difference in total GSE score between pre-intervention (M=[31.66], SD = [3.48]) and post-intervention groups (M=[34.66], SD=[4.47]); t(34) = [-6.77], p<.001]. Statistical significance was revealed in the difference between the pre- and post- intervention analysis, indicating the education improved nurses' perception of self-efficacy. See the tables in Appendix K for further details and breakdown of data analysis.

Sustainability Plan

Ongoing planning is underway regarding how best the organization will continue to provide the education in the intervention. Currently, the plan is that all nursing personnel at orientation will be receiving the education provided during this project. This presents an exciting opportunity to continue collecting data on the intervention and its' effectiveness on related outcomes. Additionally, staff will need ongoing, annual training, which will likely fall to the Clinical Education staff or a Clinical Nurse Specialist, or both.

Discussions/Implications of Nursing

Staff who participated in a 2-hour de-escalation and workplace violence course had a statistically significantly and higher self-perception of self-efficacy. Since 2022 and the early inception of this project, Joint Commission instituted standard HR.01.05.03, requiring organizations to provide staff ongoing WPV education and training (The Joint Commission, 2021). This indicates the ongoing need for education across all disciplines within hospital

organizations, reinforcing the idea that WPV occurs anywhere, and all staff need to be prepared to address it safely. The current sustainability plan is for all nursing personnel to receive WPV prevention education at orientation, as well as part of ongoing education for staff already in the organization. Continuing to collect data on the intervention and its' effectiveness on related outcomes, including rates of WPV and reporting, could present a potential future research study. While participants in the intervention had a good understanding of what WPV is, 77% reported experiencing WPV in the past year, and many stated during the class they did not report it. It is likely that WPV is still underreported, not just in this organization, but nationwide. Therefore, continuing to provide education on reporting and removing barriers to reporting may improve staff's willingness to report incidences of WPV and better capture WPV in the healthcare industry.

Conclusion

Based on the available evidence and strength of that evidence, further research is needed on de-escalation education and training for medical-surgical nurses, as well as across nursing disciplines. The results of this project indicated that education and training was effective in improving confidence of nursing staff. The education that was effective included active elements of recognizing worsening or escalating behavior, appropriate interventions to reduce escalation, as well as how to manage violent behavior safely and effectively. Together these provided the knowledge and skills to not only empower nurses to address these stressful situations and also the tools to prevent patients from becoming violent.

Future research is needed to determine if these improvements and changes persist after the educational session, perhaps at the six- and 12-month mark post-intervention, and whether this medium of ongoing education continues to be effective.

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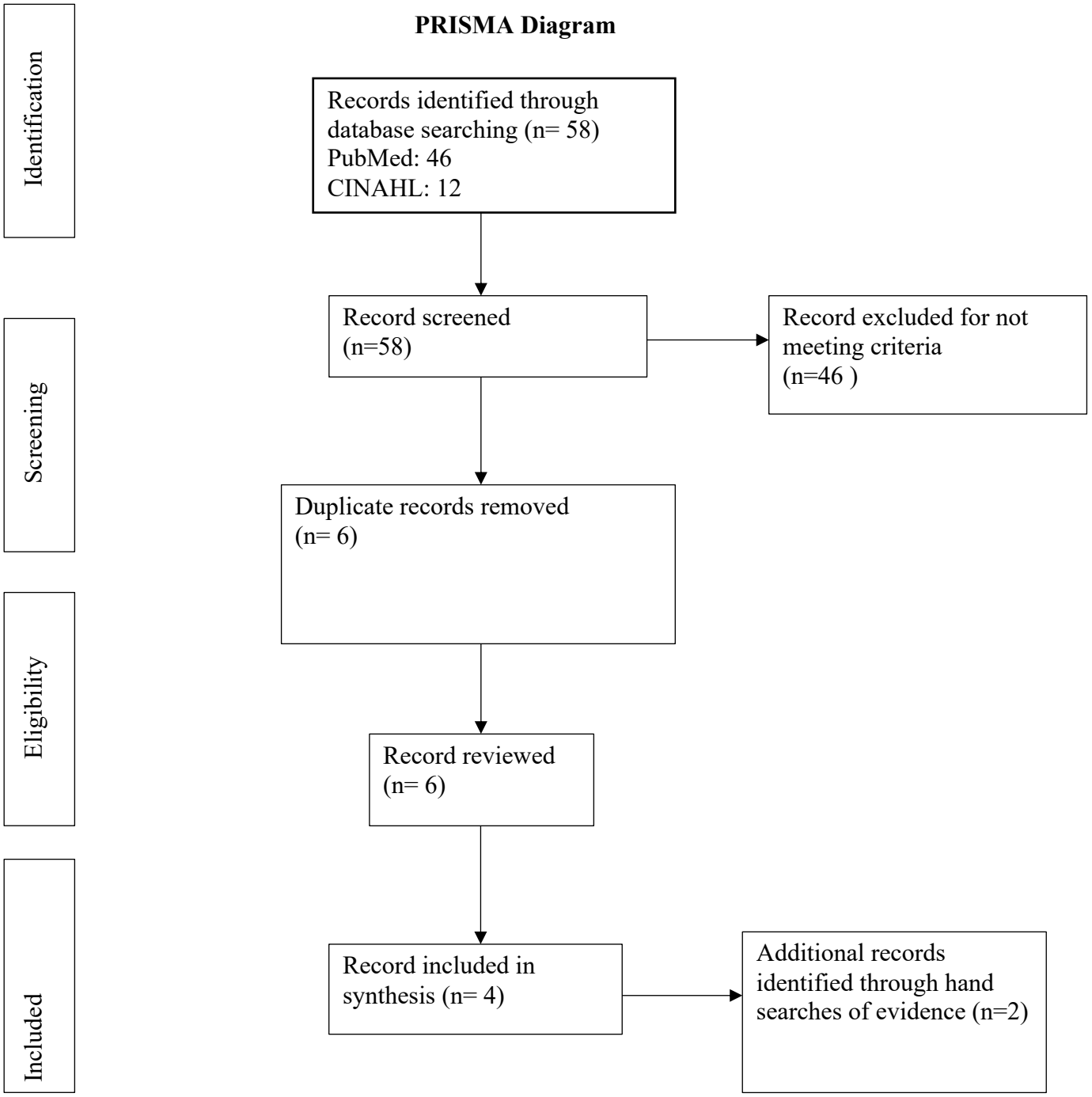
Appendix A

PRISMA Diagram



Appendix A. 2009 PRISMA flow diagram. *From:* Moher, D., Liberati, A., Tetzlaff, J., Altman, D.G., & The PRISMA Group. (2009). Preferred reporting items for systematic reviews and meta-analyses: The PRISMA statement. *PLOS Medicine,* 6(6).

Appendix B
Evidence Review Table

Utilized the Johns Hopkins Evidence Level and Quality Guide (Appendix C)

Problem Statement: Would providing medical-surgical and telemetry nurses training on de-escalation techniques impact their self-efficacy in managing escalating patients?						
Article Citation	**Design/ Purpose**	**Sample/ Setting**	**Measurement and Instruments**	**Results**	**LOE and Quality; Strengths and Weaknesses**	**Relevance to Problem**
Al-Ali et al. (2016)	Quasi-experimental pre-test, post-test survey of training. A Clinical Nurse Specialist trained all groups, and training occurred in a one-day session for each group. Training included education on workplace violence, approaches to manage escalating/violent patients, recognition of violent patients, interventions available in the workplace, and monitoring of violence. This utilized slide presentations, group discussion, a case scenario, and role play.	100 nurses across critical care units (28.9%), medical-surgical wards (51.5%), emergency department (13.4%), and outpatient areas (6.2%) at a large hospital in Jordan	Utilized "The Framework Guidelines for addressing workplace violence in the health sector" for training An Arabic version of "The Attitude toward Patient Physical Assault Questionnaire by Poster and Rayan was utilized by the team	Significant difference between staff performance before and after the training program, no statistically significant difference between legal, safety	IIB; strengths: training applied to multiple nursing units and settings, shows possible generalizability for training regardless of setting. Utilized multiple training methods, not just a slide presentation. Weaknesses: this study was completed in a military hospital in Jordan, so question as to its' applicability across settings	As the authors note (p. 87), the training measures the confidence of nurses to address violent/escalating scenarios, but authors did not measure outcomes such as events where nurses are injured or harmed.

Goh et al., (2020)	Pre-test post-test, quasi-experimental design Mental health nurses and psychiatrist provided education on signs of aggression, de-escalation techniques, restraint methods, and concluding with a student volunteer who was restrained, complete with debriefing	249 nursing students and 50 medical students undergoing mental health training, a university offering medical and nursing programs	Measured students' confidence in utilizing de-escalation, physical, and chemical restraints; satisfaction with the learning process/content, as well as empathy	Empathy and confidence significantly improved after the intervention	II B Strengths: focus on empathy as a motivator for improving the quality of care, increased familiarity with restraints and the impact of restraints to reduce their use Weaknesses: assumes that learning these aspects translates directly into later practice-students have a gap between acquiring the knowledge and putting it into practice	"Empathy and non-judgmental attitudes are vital not only in facilitating interactions with patients, but also in reducing and eliminating the use of restraint" (Goh et al., 2020).

Ferrara et al. (2017)	Small, non-experimental, single-group, pre- and post-test design Measuring confidence in de-escalation techniques with medical-surgical nurses dealing with agitated patients	N=11 Medical-surgical nurses	Measured confidence via Thackrey's Confidence in Coping with Patient Aggression Instrument after utilizing the Ten Domains of De-escalation by Richmond et al, 2012.	Confidence levels post-training ($p < 0.004$) Medical residents requested the training based on experiences and effectiveness with patients, so this inter-disciplinary approach could be seen as an additional result	III B Strengths: design of the study helped to incorporate both hesitant and early-adopter nurses Weaknesses: small sample size, non-experimental design	Implementation of the training led to a decrease in the violent experiences when compared to pre-intervention.

Lamont & Brunero (2018)	Quasi-experimental study of nurses using pretest-posttest Subjects went to a one-day workshop to learn de-escalation techniques and managing difficult patients	Nurses from units/wards deemed 'high risk' for violence from a 440-bed tertiary hospital in Sydney, Australia	Evaluation of the educational day was completed with the Continuing Professional Development Reaction questionnaire and the Confidence in Coping with Patient Aggression Instrument	Statistically significant increase in participants' beliefs about their ability scores in these categories: creating a risk assessment and management plan, use of de-escalation techniques, use of evasive techniques, confidence in dealing with an agitated patient	II B Strengths: power analysis yielded a sample size of 71 nurses, which the authors met Weaknesses:	Implementation of de-escalation, evasive techniques, and planning improved nurses' confidence in addressing agitated patients

Appendix C

Evidence Level and Quality Guide

Johns Hopkins Nursing Evidence-Based Practice

Evidence Levels	Quality Guides
Level I Experimental study, randomized controlled trial (RCT) Systematic review of RCTs, with or without meta-analysis	**A High quality:** Consistent, generalizable results; sufficient sample size for the study design; adequate control; definitive conclusions; consistent recommendations based on comprehensive literature review that includes thorough reference to scientific evidence **B Good quality:** Reasonably consistent results; sufficient sample size for the study design; some control, fairly definitive conclusions; reasonably consistent recommendations based on fairly comprehensive literature review that includes some reference to scientific evidence **C Low quality or major flaws:** Little evidence with inconsistent results; insufficient sample size for the study design; conclusions cannot be drawn
Level II Quasi-experimental study Systematic review of a combination of RCTs and quasi-experimental, or quasi-experimental studies only, with or without meta-analysis	
Level III Non-experimental study Systematic review of a combination of RCTs, quasi-experimental and non-experimental studies, or non-experimental studies only, with or without meta-analysis Qualitative study or systematic review with or without a meta-synthesis	

Appendix D

Literature Synthesis

Study	Design	Level of Evidence	Education on de-escalation techniques	Restraint use and empathy	Confidence as outcome measure
Al-Ali et al., (2016)	Quasi-experimental	II B	x		x
Goh et al., (2020)	Quasi-experimental	II B	x	x	x
Ferrara et al. (2017)	Non-experimental	III B	x		x
Lamont & Brunero (2018)	Quasi-experimental study	II B	x		x

Appendix E

SWOT Analysis

Strengths • Organization is actively seeking WPV education • Classroom space available • Staff eager for knowledge, training	Weaknesses • Ongoing education may create additional educational needs/demand
Opportunities • Recent Joint Commission requirements changed to reflect need for WPV prevention • Training can create savings if it improves outcomes	Threats • Costs of ongoing education beyond the project for the hospital may be a burden

Appendix F

Course Outline

I. Definition of Workplace Violence

II. Introduction of the crisis model

   a. Define patient's behaviors within the crisis continuum

   b. Define appropriate corresponding staff behaviors to de-escalate the crisis behaviors

III. Key concepts of de-escalation

   a. Empathetic listening

   b. Rational detachment

   c. Therapeutic rapport

IV. Communication Skills

   a. Nonverbal

   b. Paraverbal

   c. Verbal

      1. Additional techniques to address verbal escalation, such as limit setting

V. Key tips in the crisis response

   a. Code Green

   b. Security's role

   c. Situational awareness

   d. Debriefing

      1. For both the patient and staff

VI. Disengagement techniques

Appendix G

Pre and Post Implementation Survey

Pre-Survey

Age: _____ years

I am a(n): ❑LPN ❑RN ❑CNA

Education (if applicable):

❑Associate's ❑Bachelor's ❑Master's ❑Doctorate

Role:

❑**CNA** ❑Nurse Resident/RN I ❑RN II ❑RN III ❑RN IV ❑Charge Nurse ❑Manager

❑Clinical Specialist/CNS ❑Other:_____

How many years of experience do you have practicing in your role?

_____ years_____months

Have you had de-escalation training in the past?

❑Yes ❑No

Have you experienced workplace violence (WPV) in the last year?

❑Yes ❑No

Please think about the following questions especially as they pertain to your ability and confidence to deal with a situation at work where a patient or family member is escalating or violent.

	Not at all true	Hardly true	Moderately true	Exactly true
1. I can always manage to solve difficult problems if I try hard enough	❑	❑	❑	❑
2.If someone opposes me, I can find the means and ways to get what I want.	❑	❑	❑	❑
3. It is easy for me to stick to	❑	❑	❑	❑

my aims and accomplish my goals.				
4. I am confident that I could deal efficiently with unexpected events.	❑	❑	❑	❑
5. Thanks to my resourcefulness, I know how to handle unforeseen situations.	❑	❑	❑	❑
6. I can solve most problems if I invest the necessary effort.	❑	❑	❑	❑
7. I can remain calm when facing difficulties because I can rely on my coping abilities.	❑	❑	❑	❑
8. When I am confronted with a problem, I usually find several solutions.	❑	❑	❑	❑
9. If I am in trouble, I can usually think of a solution.	❑	❑	❑	❑
10. I can usually handle whatever comes my way.	❑	❑	❑	❑

Post-Survey

Now that you know more about Workplace Violence, please answer these questions.

Have you experienced workplace violence (WPV) in the last year?

□Yes □No

Please think about the following questions especially as they pertain to your ability and confidence to deal with a situation at work where a patient or family member is escalating or violent.

	Not at all true	Hardly true	Moderately true	Exactly true
1. I can always manage to solve difficult problems if I try hard enough	❑	❑	❑	❑
2.If someone opposes me, I can find the means and ways to get what I want.	❑	❑	❑	❑
3. It is easy for me to stick to my aims and accomplish my goals.	❑	❑	❑	❑
4. I am confident that I could deal efficiently with unexpected events.	❑	❑	❑	❑
5. Thanks to my resourcefulness, I know how to handle unforeseen situations.	❑	❑	❑	❑
6. I can solve most problems if I invest the necessary effort.	❑	❑	❑	❑
7. I can remain calm when facing	❑	❑	❑	❑

difficulties because I can rely on my coping abilities.				
8. When I am confronted with a problem, I usually find several solutions.	❑	❑	❑	❑
9. If I am in trouble, I can usually think of a solution.	❑	❑	❑	❑
10. I can usually handle whatever comes my way.	❑	❑	❑	❑

Appendix H
GANTT Chart

Task	August	September	October	November	December	January	February	March	April
Project proposal approval			x	x					
Education development	x	x	x	x					
Advertising, recruitment			x	x					
Education offered, pre- and post-education surveys, data collection					x	x	x		
Data and outcomes analysis						x	x		
Completion of paper								x	x

Appendix I
Cost-Benefit Analysis

Benefits	Costs
CNS practicing in Maryland annually: able to practice beyond just development/teaching WPV training program	Averages $118,564 or ~$57/hr (Salary.com, n.d.-b) 2 hours of education, 2x month=**$228 for 4 hours of education by the CNS/month**
Potential savings: cost of WPV to the organization annually (estimate)	[$94,156] (Occupational Safety and Health Administration, 2015).
2 hours of educational time meets Joint Commission standard for the year	2-hour educational time for nursing staff, to include RN at approx. $37/hr. (Gillette, 2023), and CNA at approx. $19/hr. (Salary.com, n.d.-a) Per RN: estimate $74/yr for WPV education Per CNA: estimate $38/hr for WPV education

Appendix J
Educational Session Flyer

Recruiting Email

Dear Clinical Nurses,

You are invited to participate in an evidence-based practice project on self-efficacy of nurses in addressing escalating patients.

The purpose of this project is to assess self-efficacy of nursing staff, especially as it relates to de-escalation skills, and to provide education on how to address escalating patients and family members safely within our care.

Educational sessions will be scheduled for 2 hours on several days and times throughout the upcoming weeks and months. Before and after the education, the nurse's sense of self-efficacy as it relates to addressing escalating situations will be assessed using a survey.

No personal identifying information will be collected, so I hope that you feel comfortable to share your honest perspective and feedback.

Please consider taking the time to participate in this evidence-based practice project that will assist us in ensuring education provided on topics of interest meet the needs of our nursing teams.

If you wish to participate in the project, please contact Liz Corker at ecorker@frederick.health or 240-566-3225.

Regards,

Liz Corker BSN, RN, CCRN, CEN
DNP Student, Michigan State University

Recruitment Flyer

ATTENTION CLINICAL NURSES

CALL FOR PARTICIPANTS!

You are invited to participate in an evidence-based practice project on self-efficacy of nurses in addressing escalating patients.

This study is being conducted by Liz Corker, a DNP student at Michigan State University.

The purpose of this project is to assess self-efficacy of nursing staff, especially as it relates to de-escalation skills, and to provide education on how to address escalating patients and family members safely within our care.

Educational sessions will be scheduled for 2 hours on several days and times throughout the upcoming weeks and months. Before and after the education, the nurse's sense of self-efficacy as it relates to addressing escalating situations will be assessed using a survey.

No personal identifying information will be collected, so I hope that you feel comfortable to share your honest perspective and feedback.

Please consider taking the time to participate in this evidence-based practice project that will assist us in ensuring education provided on topics of interest meet the needs of our nursing teams.

If you wish to participate in the project, please contact Liz Corker at ecorker@frederick.health or 240-566-3225.

Appendix K
Data Analysis Tables

Table 1. Paired Samples T-Test

	Mean	N	Std. Deviation	Std. Error Mean
Pre-total	31.66	35	3.48	.59
Post-total	34.66	35	4.47	.756

	t	df	Two-sided p
Pre- total & post-total	-6.765	34	<.001

Table 2. Descriptive Statistics

	N	Range	Minimum	Maximum	Mean	Std. Deviation
Age	35	43	18	61	36.6	11.2
Experience Years	34	37.6	1	38.6	9.1	9.4

Table 3. Demographics

	N	Percent
License		
RN	31	88.6
CNA	4	11.4
Education		
HS or Less	3	8.6
Associate's	3	8.6

Bachelor's	26	74.3
Master's	2	5.7
Doctorate	1	2.9
Role		
RN 1 Nurse Resident	1	2.9
RN 2	21	60
RN 3	3	8.6
Charge Nurse	2	5.7
Manager	1	2.9
CNS	1	2.9
CNA	4	11.4
Hospital Supervisor	2	5.7

Table 4. Workplace Violence Personal and Educational Experience

	N	Percent
De-escalation Education in the Past		
No	16	45.7
Yes	19	54.3
Workplace Violence Experience Past Year		
Pre-Intervention		
No	6	17.1
Yes	27	77.1
Post-Intervention		
No	8	17.1

Yes	27	77.1