2021

Reducing the Rate of Physical Interventions by Increasing Staff Confidence When Using Verbal De-escalation Techniques

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This is to certify that the doctoral study by

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has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

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2021

Abstract

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MSN, University of Phoenix 2014

ADN, Florida State College 2010

Project Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Nursing Practice

Walden University

February 2021

Abstract

When working with patients who have the potential to become physically aggressive, verbal de-escalation is an important technique that can defuse a dangerous situation. At the project site in the mental health emergency department (MHED), workplace violence was on the rise based on the reported use of physical interventions (rates of brief holds and physical restraint use). The purpose of this quality improvement evaluation project was to determine whether an educational training program on verbal de-escalation techniques would increase staff's confidence in the use of verbal de-escalation and decrease the rate of physical interventions used in the MHED. The change theory of nursing guided the project. At the project site, 19 interdisciplinary staff from the MHED including 10 registered nurses, 5 patient care technicians, and 4 security personnel, participated in a learning activity and completed the Thackery Confidence in Coping with Patient Aggression Instrument. The education intervention was presented using a PowerPoint presentation and simulation exercises. Descriptive statistics were used to analyze the data to determine the differences in the mean confidence scores and physical intervention rates from the baseline to 30, 60, and 90 days posteducation. The physical intervention rates decreased over the 90 day period. The self-assessed rating of confidence showed an increase. However, these changes were not statistically significant based on the ANOVA analysis. Positive social change might occur in the mental health emergency setting by increasing staff's confidence in using de-escalation skills and thereby decreasing the need to use physical interventions when working with an aggressive patient.

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Section 1: Nature of the Project

Introduction

Workplace violence (WPV) in healthcare is on the rise, and the highest number of assaults in U.S. workplaces each year are directed toward healthcare workers (Phillips, 2016). Between 2011 and 2013, the average number of workplace assaults was 24,000 per year, of which almost 75% occurred in healthcare settings, and data suggest that healthcare workers are 4 times as likely to have missed days due to WPV and injury (Phillips, 2016). In 2014, healthcare and social assistance workers suffered injuries from WPV at a rate more than quadruple that of private sector employees overall, and they represented 52% of all such incidents reported (Halpern, 2017). At the project site, patient aggression toward hospital staff is an almost daily occurrence in one mental health emergency department (MHED) in a medium sized hospital.

All healthcare workers run the risk of being exposed to WPV, and verbal de-escalation techniques are one strategy to help mitigate that exposure. Communicating effectively in healthcare is paramount. There is evidence that supports the use of verbal de-escalation as an effective method to possibly defuse a dangerous situation when working with potentially aggressive patients (Richmond et al., 2012).

The knowledge related to violence/aggression has improved significantly as well as the use of verbal de-escalation with the help of clinical education, leading to a decrease in the frequency of incidents and the number of recurring incidents (Adams, 2017). Thus, this quality improvement (QI) project evaluated the impact of an educational class on verbal de-escalation techniques to decrease the rate of physical interventions (e.g., a

brief hold and/or restraining someone to the bed) due to physical aggression at the project site. The potential positive social change of this project is increasing the safety of the hospital environment for healthcare workers.

Problem Statement

The project site is a unit that accepts adult patients who are in a mental health crisis. This setting is a short-term unit where patients are admitted for approximately 22 to 48 hours. Patients are evaluated by a mental health clinician and a psychiatrist to determine placement for long term care. This unit is staffed by one registered nurse and one patient attendant. The problem addressed in this QI initiative is the increasing rate of physical interventions due to physical aggression in the six-bed MHED. Physical intervention use from October, 2019, through February, 2020, increased from 5% to 7%, and there was a spike from February, 2020, to June, 2020, from 7% to 21% (Figure A1).

In addition to restraint use, higher rates of healthcare violence occur in the emergency department (ED) and psychiatric settings (Brous, 2018). In a study by Aytac, Dursun, and Akalp (2016), 49%–57% of health employees have been provoked by physical, verbal, or sexual harassment at least once in their professional lives. In another study by Wei, Chiou, Chien, and Huang (2016), 67% of respondents reported witnessing aggressive behavior at their workplace during the prior year. A 3-year study also noted that 25% of nurses reported being assaulted by patients or the patient's family members (Brous, 2018).

Purpose Statement

The gap that this QI evaluation project addressed is the lack of verbal de-escalation training among staff in the MHED. In the MHED, there is no specified educational class in the use of verbal de-escalation techniques when working with an aggressive individual. The practice-focused question for this project was:

> PFQ: Will an educational training on verbal de-escalation increase staff confidence when working with an aggressive patient and decrease the rate of physical interventions used in the MHED?

The overall purpose of this QI initiative was to provide staff with a learning activity to improve nursing staff confidence on how to use noncoercive de-escalation to calm the agitated patient and gain their cooperation in the evaluation and treatment of the agitation. Knowledge and confidence in the use of verbal techniques of de-escalation are necessary when interacting with patients in crisis situations (Morken, Johansen, & Alsaker, 2015). Teaching nurses the latest evidence-based skills to manage WPV in their competency training is vital to both the patients and staff (Martinez, 2017). Staff awareness of their own body language and how to de-escalate a possibly dangerous situation are two examples of necessary knowledge needed by healthcare workers (Morken et al., 2015). Simulations in mental health nursing can augment staff confidence while practicing their communication and assessment skills (Goh, Selvarajan, Chng, Tan, & Yobas, 2016). Using simulated scenarios supervised by experienced trainers can enhance nurses' skill set to successfully manage future incidents of WPV in clinical settings (Martinez, 2017). Staff who have received verbal de-escalation training have

stated they felt better prepared due to the education and training in managing threats and violence (Morken et al., 2015).

Nature of the Doctoral Project

The project site is located in a medical hospital that also provides mental health emergency services to patients in a mental health crisis. The facility is located in Maryland. The approach was guided by Walden University's *Manual for Quality Improvement Evaluation Project* (Walden University, 2019). I conducted a literature review of evidence-based practice regarding verbal de-escalation techniques, physical intervention use, and the use of simulation in the classroom setting. Additionally, a self-assessment of staff confidence when using verbal de-escalation techniques prior to taking the educational class was compared to a self-assessment after having taken the class.

I conducted a review of the literature using the Walden University Library databases including ProQuest Research Library, PsycINFO, and PubMed. The keywords used for research purposes were *de-escalation techniques*, *workplace violence*, *aggressive patients*, *verbal de-escalation*, *talking to threatening patients*, *physical restraint use*, *simulation exercise*, *simulation in education*, and *confidence when working with an aggressive patient*.

The project was initiated in July, 2020. To evaluate the outcome of the project, I compared the rate of physical interventions used 1 month prior to the project start date to the rates of physical interventions used over the following 3 months. I also compared staff confidence in verbal de-escalation techniques using a self-assessed rating scale prior to the educational class at three 30-day intervals after the class had concluded.

Significance

Stakeholders who may be impacted by this project are the patients, patient care technicians, patient safety attendants, nurses, providers, security, and any other healthcare workers present on the unit during an aggressive event. The patient will be impacted by this project because it has the potential to lessen the need for staff to use physical interventions to de-escalate a patient in crisis. In recalling the experience of restraint, patients described a loss of freedom and personal dignity associated with dehumanization, loss of self-determination, and even mistreatment (Wong et al., 2020). A wide range of adverse effects have been reported as a result of the use of restraint ranging from patient and staff discomfort to injuries, sometimes resulting in death (Duxbury et al., 2019). There is a growing recognition of the traumatic origins of mental distress from physical intervention and the potential for coercive practices to traumatize or retraumatize individuals (Sweeney, Clement, Filson, & Kennedy, 2016).

The local problem is an increase in the rate of physical intervention use and a lack of an educational class offering verbal de-escalation training. Any member of the healthcare team who has direct contact with a patient has the potential to face violence. Potential contributions of the project to nursing practice are increasing the safety of nurses and staff in the MHED, increasing staff confidence in verbal de-escalation techniques, and decreasing the rate of brief holds and physical restraints. In the United States between 2010 and 2013, aggressive incidents resulted in major and minor physical injury, psychological harm, temporary or permanent physical disability, and death (Occupational Safety and Health Administration [OSHA], 2015). Healthcare workers

impacted by aggressive incidents include nurses, physicians, security employees, and other healthcare workers (Wyatt, Anderson-Drevs, & Van Male, 2016).

There is potential for generalizability with this project. All healthcare workers have the risk of being exposed to WPV, and verbal de-escalation techniques are one strategy to help mitigate exposure. Staff throughout the hospital are in need of education to increase their confidence in the use of these methods. Therefore, this educational class may be used throughout the hospital on all medical units.

Staff preparation and education are essential in the prevention and management of WPV. De-escalation is an effective, patient-centered approach to reduce WPV and should play a part in all education focused on managing WPV (WorkSafe Victoria, 2015). Staff reported the main features in education were communication, de-escalation, and recognizing at-risk behaviors (WorkSafe Victoria, 2015). Implications for positive social change include safer work environments for healthcare workers, safer hospital settings for patients and visitors, and an increase in awareness of strategies to reduce violence in healthcare settings. Responding immediately to verbal assaults and threats with proper verbal de-escalation techniques can decrease the need for staff to use physical interventions on patients

Summary

In Section 1, the problem statement, purpose, nature, and significance of the doctoral project were discussed. Healthcare workers should be provided a safe work environment. The goal of this project is to provide that environment and allow staff the ability to focus on patient safety and quality care. In Section 2, I discuss concepts,

models, and theories as well as the project's relevance to nursing practice and local background and context. Lastly, I discuss the roles of the doctoral student and project team.

Section 2: Background and Context

Introduction

The primary objective of this project was to decrease the rate of brief holds and physical restraint use in the MHED by providing an educational class to increase staff confidence when using verbal de-escalation skills. Since October, 2019, the rates of physical interventions have slowly increased from 4% to 21% in June, 2020. This QI evaluation project compared the rate of brief holds and physical restraints before and after staff attended the educational class and the self-assessed confidence of staff when using verbal de-escalation. The gap-in-practice that this project addressed is the rate of physical interventions. I hypothesized that the rate would decrease instead of increase, and staff confidence in verbal de-escalation will increase.

In this section, I discuss concepts, models, and theories related to changing current behaviors and making improvements. I also address the relevance to nursing practice, local background, and context of the issue. Finally, I discuss the roles of the doctoral student and project team.

Concepts, Models, and Theories

Lewin developed the change theory of nursing (Burnes & Bargal, 2017). The theory includes three stages: unfreezing, change, and refreezing. Unfreezing is the method of making it possible for people to let go of an old pattern that was unproductive. Change involves a process of change to thoughts, feelings, and/or behaviors that are more productive. Refreezing establishes the change as a new habit (Nursing Theory, 2016). Lewin's change theory was appropriate for this project because it can be used to address

the current status (i.e., staff's lack of confidence when using verbal de-escalation), attempt to decrease or stop the use of physical interventions, and introduce a new process of staff confidently using verbal de-escalation skills. Using Lewin's theory for this project was appropriate because in the study, I address a current procedure that is not working (staff's lack of verbal de-escalation education) and hope to help decrease physical restraint of patients (staff will no longer have to respond in the current way). I also hope to introduce a new process (staff using verbal de-escalation skills) and urge the acceptance of a different, more effective process (a trained team of staff who use verbal de-escalation techniques).

The SQUIRE guidelines provide a framework for reporting new knowledge about how to improve health care (Orginc et al., 2016). SQUIRE stands for Standards for Quality Improvement Reporting Excellence. I used the SQUIRE guidelines (Ogrinc et al., 2008) to plan and report this QI initiative to evaluate the effectiveness of an educational intervention focused on increasing nurses' confidence in the use of verbal de-escalation techniques to prevent the need for physical interventions, (i.e., brief holds and physical restraints at the project site).

Terms and Definitions

In this Section, I present the definitions of terms that I use frequently throughout this document.

Aggression: A forceful action or procedure (such as an unprovoked attack) especially when intended to dominate or master (Aggression, n.d.).

Brief hold: The involuntary restriction of a patient's freedom of movement by one or more staff members (Masters, 2017).

Physical interventions: The term used in this project to describe use of both physical restraints and brief holds.

Physical restraint: The involuntary restriction of a patient's freedom of movement with straps or portable restraint boards (Masters, 2017).

Verbal de-escalation: A combination of strategies, techniques, and methods intended to reduce a patient's agitation and aggression. These can include communication, self-regulation, assessment, actions, and safety maintenance to reduce the risk of harm to patients and caregivers as well as minimize the use of restraints or seclusion (Joint Commission, 2019).

Workplace violence: Any act or threat of physical violence, harassment, intimidation, or other threatening disruptive behavior that occurs at the work site (OSHA, 2017).

Relevance to Nursing Practice

In the current state of nursing, working with aggressive patients can be dangerous and detrimental to nurses' well-being. Experiencing WPV has been associated with a higher rate of burnout, defined as "a psychological syndrome in response to chronic interpersonal stressors on the job" that is characterized by "an overwhelming exhaustion, feelings of cynicism and detachment from the job, and a sense of ineffectiveness and lack of accomplishment" (Zafar, Khan, Siddiqui, Jamali, & Razzak, 2016, p. 168). WPV, especially in the form of a direct threat to life, also can result in the development of

posttraumatic stress disorder, depression, and anxiety (Zafar et al., 2016). According to Gross, Peek-Asa, Nocera, and Casteel (2013), exposure to threats or verbal and physical abuse creates a negative association with job satisfaction and job retention, especially with reports indicating a continued shortage in nursing. Per the Emergency Department Violence Surveillance Study, 26.6% of emergency nurses have considered leaving their department for another unit or leaving the hospital setting entirely due to the violence level (Emergency Nurses Association, 2011).

Verbal de-escalation and effective communication are recommended as evidence-based practice when working with aggressive patients or family members to prevent and reduce violence (Richmond et al., 2012). In a research article published by the *Journal of Emergency Nursing*, an Institute of Emergency Nursing Research study established that EDs that demonstrated a greater commitment to safety and reporting have lower rates of violence (Kelley, 2014). This project was focused on the strategy of providing staff with education in training to increase staff confidence when using verbal de-escalation techniques and theeby reduce the need to use physical interventions (i.e., brief holds, physical restraint use) at the project site.

Local Background and Context

The institutional context addressed in this project was an MHED located in Maryland. The local evidence for the background of the problem is that since October, 2019, the rate of physical interventions in the MHED has increased from 4% to 21% in June, 2020. The practice focused question was:

PFQ: Will an educational training on verbal de-escalation increase staff confidence when working with an aggressive patient and decrease the rate of physical interventions used in the MHED?"

The state context in the project involves the Maryland Hospital Association (MHA) guidelines for protecting healthcare workers. In June of 2018, the massive turnout for the Safe Harbors: Protecting Providers and Patients summit underscored the urgency of the problem. Jointly hosted by MHA and the Maryland Nurses Association (MNA), the concerns of clinicians about WPV had never been greater (Atlas, 2018). The MHA will continue to raise awareness with hospital executives and trustees; press legislators for sensible bills and regulations; and facilitate the sharing of tools, techniques, and proven strategies (Atlas, 2018).

Currently in Maryland, the Safe Care Act bill presents preventative, employer-based solutions to WPV. Unfortunately, this bill has not yet been passed in Maryland. This bill would give facilities the versatility to set their own WPV policies. There are four core pillars to the bill, all of which have been promoted by OSHA as solutions to WPV: an annual comprehensive violence risk assessment and constant recordkeeping, WPV prevention committees, a postincident response system, and annual violence prevention training and education.

The federal context of the project was legislation that addressed staff injury due to physical assaults introduced into the U.S. House of Representatives in 2018. The bill was entitled Healthcare Workplace Violence Prevention Act of 2018. This bill requires the Department of Labor to address WPV in health care facilities pursuant to the

Occupational Safety and Health Act of 1970. Specifically, the Department of Labor must issue a rule that requires certain health care employers to adopt a comprehensive plan for protecting health care workers and other personnel from WPV.

Role of the Doctor of Nursing Practice Student

Every time a staff member has to put hands on a patient or place a patient in physical restraints, there is risk for injury to the patient or the staff. As clinical educator in the facility, it is my job to see that staff are properly trained in their clinical areas to provide safe and quality care using evidence-based practice. For the past 10 years as a registered nurse, I have witnessed staff injury increase due to patient violence. I decided to dedicate my project to WPV to help prevent staff injury and promote patient safety.

My motivation for this project is my personal experience with WPV. I have witnessed many acts of violence toward coworkers, and I have been targeted several times by patients throughout my career. I have been punched, slapped, scratched, and verbally threatened as a health care worker. However, I have never taken any of these assaults personally. These attacks have come from people who are sick and frustrated. I have also witnessed attacks on peers that have been calculated. Most of these acts of aggression have led to physical interventions used by staff. I believe that by building staff confidence when using verbal de-escalation techniques, several of these acts of violence and putting hands on a patient could have been prevented. I taught the verbal de-escalation class that included a PowerPoint presentation, an informative discussion, and simulations.

The Role of the Project Team

A QI review council at the project site approved this as a QI project. I completed a QI project proposal based on the SQUIRE guidelines and met with committee members and two nurse leaders as stakeholders to gain approval for this project. The council will receive the project results and approve plans for dissemination.

Summary

In Section 2, I discussed concepts and models, relevance, local background, and the role of the student and project team. The goal of this project was to provide a safe work environment for health care workers and allow staff the ability to focus on patient safety and quality care. In Section 3, I restate the PFQ; identify sources of evidence; describe participants, procedures, and protections; and analyze all data used in the project.

Section 3: Collection and Analysis of Evidence

Introduction

Higher rates of healthcare violence are reported to occur in the ED and psychiatric settings (Brous, 2018). Staff can effectively de-escalate incidents of WPV following de-escalation training (Morphet, Griffiths, Beattie, Velasquez, & Innes, 2018). Education in WPV management strategies also positively influence staff attitudes and increase staff perception of safety (Morphet et al., 2018). The primary objective of this project was to evaluate the impact of an educational intervention to increase staff's confidence when using verbal de-escalation techniques to decrease the rate of physical interventions at the project site. Concepts, models, and theories were discussed in Section 2, along with the relevance to nursing practice, local background and context of the issue, and the role of the doctoral student. In Section 3 I reiterate the PFQ, delineate the sources of evidence on which the project relied; discuss the participants, procedures, and protections, and describe how an analysis of the data was conducted to address the DNP PFQ.

Practice-Focused Questions

The local nursing practice problem was that there was not currently an educational class on verbal de-escalation techniques and the rate of physical interventions continued to increase at the project site. The gap that this QI evaluation project addressed was the lack of verbal de-escalation training among staff in the MHED. In the MHED, there was no specified educational class in the use of verbal de-escalation techniques when working with an aggressive individual. The purpose of this project was to evaluate the evidence collected from the educational class QI data and the project site operational

data. This project was conducted as a QI evaluation. This approach aligned with the practice-focused question because it was an attempt to highlight the impact of the training to increase staff's confidence immediately after the class had been taught at a 30-day interval, a 60-day interval, and a 90-day interval. Coincident to evaluating staff confidence was the collection of data to determine the impact of training on reduction of physical interventions. The PFQ was:

PFQ: Will an educational training on verbal de-escalation increase staff confidence when working with an aggressive patient and decrease the rate of physical interventions used in the MHED?"

Sources of Evidence

Sources of evidence for this QI evaluation project were from self-confidence assessments scored by the staff and data collected from the facility's computer system. Staff were asked to fill out the self-confidence rating before the class, and at 30, 60, and 90 days after the class. The number of physical interventions were reviewed each month, as well as the census for each month, to determine the rate of physical interventions at the project site.

Archival and Operational Data

Isaak et al. (2017) emphasized teamwork and organizational learning processes related to safety procedures, which were deemed essential to ensuring that lessons learned from mistakes and successes could be effectively integrated throughout the unit. As expected, a year after an intervention, the number of aggressive incidents decreased to 18 in 2009, and the number of employees injured decreased to 12 in 2009 and to seven in

2013 (Isaak, 2017). These results are consistent with previous findings that staff-supported intervention programs strengthen safety climate and result in less violence on psychiatric units. This research showed that an intervention program aimed at enhancing safety climate is associated with fewer aggressive incidents (Isaak, 2017).

For this project, the operational data on physical intervention incidence were collected from the facility's online computer system, Epic. A report was run monthly to capture the number of physical interventions in all areas of the hospital. The census was also captured in this system. The physical intervention rates were calculated based on the number of physical interventions and divided by the number of patients per hospital days to determine the rate of physical intervention each month. These data were compared to a 30-day period prior to the educational class and three 30-day periods after the class had been taught. As an employee at the project site, I had access to the number of physical interventions that had been entered each month, as well as the monthly census in the MHED. As a student, I had approval from the project site review committee to evaluate the data for the QI initiative.

Evidence Generated During the Project

Evidence supports the need for a cohesive team, good communication, and staff support to maintain a safe work environment in this volatile setting. Research has shown that work environment safety and organizational violence-prevention policies can strengthen work safety behaviors among staff and improve the quality of work and interpersonal interactions. De-escalation is widely advocated as a simple, effective, and person centered strategy to reduce WPV and should form part of all staff education

programs focused on WPV management (Morphet et al., 2018). Research shows that training in risk assessment and de-escalation increases participant confidence to manage WPV.

The source of evidence that was drawn from QI data collected from the project site using the Thackery (1987) *Confidence in Coping with Patient Aggression* instrument (see Appendix B) to measure a self-reported confidence rating prior to and following the educational intervention. The *Confidence in Coping with Patient Aggression Instrument* was first tested in a pilot study of professional and paraprofessional mental health clinicians at a psychiatric prison and a Veteran's Administration psychiatric unit (Thackery, 1987). This 10-item tool is completed using an 11-point Likert-type scale. The measure has a range from 1 (low confidence) to 11 (high confidence). "This tool has a high level of internal consistency (Cronbach's α = .92) and precision (standard error, 1.5)" (de la Fuente et al., 2019, (p. 74). I summarized data using descriptive statistics, and I used inferential statistics to measure change over time based on an underlying assumption that certain conditions had been met. The creator of this tool, Dr. Thackrey, granted me permission to use this self-assessment instrument (see Appendix D).

Participants

All staff who work in the MHED, including nurses, patient care technicians, patient safety attendants, and security guards, approximately fifty people, were expected to attend the training at the project site as a part of the QI initiative being conducted there. No participants were recruited as a part of the DNP project. All data for this QI

evaluation were obtained as de-identified data from the project site. To maintain anonymity on pre- and posttraining instrument data, each participant was asked to provide a 6-digit code as an identifier.

Procedures

I used the *Confidence in Coping with Patient Aggression Instrument* to capture staff's self-assessed confidence when using verbal de-escalation techniques prior to the class and at 30 days, 60 days, and 90 days after the class had been taught. The number of physical interventions and the census were gathered each month as well to determine the rates of brief holds and physical restraint use in the MHED.

Protections

This was a minimal risk project. There was no harm caused by implementation of this project. Approval for this DNP project to conduct evaluation of data had been obtained, and this DNP project was approved as a QI initiative following a two-step proposal and review process. All information collected for this project was made available from the project site as de-identified, and confidentiality was maintained. There were no incentives for participation in this project. The data retention plan was to place all paperwork in a confidential shred box at the facility.

The purpose of Institutional Review Board (IRB) review was to assure, both in advance and by periodic review, that appropriate steps were taken to protect the rights and welfare of humans participating as subjects in the research. To accomplish this purpose, the IRB used a group process to review research protocols and related materials (e.g., informed consent documents and investigator brochures) to ensure protection of the

rights and welfare of human subjects of research. Approval was obtained from the Walden University's IRB prior to project implementation for evaluation at project site (approval no. 08-06-20-0730877). The approach was guided by Walden University's *Manual for Quality Improvement Evaluation Project* (Walden University, 2019).

Analysis and Synthesis

Data on physical intervention rates were extracted from the computer system used at the facility (incidents of brief holds and physical restraints), and the census for each month was collected as well. I extracted data from the confidence instrument prior to the educational class, at the 30-day, 60-day, and 90-day intervals. I entered the de-identified data made available for each learner who attended the training and completed the instrument on an Excel spreadsheet. I summarized these data using descriptive statistics, and I used inferential statistics to measure change over time using ANOVA statistical tests based on an underlying assumption that certain conditions had been met. I examined the effects of time as a variable to support a decrease in physical interventions and an improvement in staff's confidence over time and whether change was sustained following the educational class over three 30-day periods. The results of the rates are displayed on a run chart (see Appendix A).

Summary

In Section 3, I continued the discussion to support the project by illustrating evidence from established research on WPV. I presented participants and procedures in this section as well and discussed ethical protections and analysis and synthesis of the collection of data. In Section 4, the discussion focuses on the findings and

recommendations of the project. The strengths and limitations of the project will be highlighted, and a dissemination plan will be developed to continue to promote a safer work environment for all staff working in healthcare.

Section 4: Findings and Recommendations

Introduction

All healthcare workers risk being exposed to WPV, and verbal de-escalation techniques are one strategy to help mitigate that exposure. The gap that this QI evaluation project addressed was the lack of verbal de-escalation training among staff following a noted increase in the rate of physical interventions for patient aggression in the MHED. The practice-focused question was:

> PFQ: Will an educational training on verbal de-escalation increase staff confidence when working with an aggressive patient and decrease the rate of physical interventions used in the MHED?

The purpose of this project was to evaluate the evidence collected from the educational class QI data and the project site operational data.

Sources of evidence for this QI evaluation project were data collected using a self-confidence assessment tool completed by the staff who attended the educational class and data collected from the facility's computer system on incidents of use of physical interventions. Staff were asked to fill out the self-confidence rating before the class, after the class, and at 30-day, 60-day, and 90-day intervals after the class. The number of physical interventions were reviewed each month, as well as the census for each month, to determine the rate of physical interventions at the project site.

I entered the self-assessed confidence data on an Excel spreadsheet for de-identified data made available for each learner who attended the training and completed the instrument (see Appendix D for the data by learner across time). I summarized data

using descriptive statistics. I used inferential statistics to measure change over time using a one way ANOVA statistical test. The underlying assumption for this statistical test was met. The effects of time as a variable were examined to support a decrease in physical interventions and an improvement in staff's confidence over time and whether change was sustained following the educational class over three 30-day periods. The results of the self-assessed confidence ratings are displayed on a run chart (see Appendix C).

Findings and Implications

Of the 19 staff who participated in the study, 10 were registered nurses (53%), five were patient care technicians (26%), and four were security personnel (21%). Most of the staff (73%) had less than 10 years' experience working in mental health, and 11% had over 20 years' experience working in mental health. In the first 30-day period, only three confidence scores decreased and one confidence scored remained the same. Initially there was a 100% participation rate in the self-assessments at the preeducation assessment and at the 30-day period. At the 60 and 90-day, participation in the self-assessment dropped to 84%.

Self-Assessed Confidence Ratings

Analysis of variance showed no significant difference in staff's self-assessed confidence scores among staff who participated in the training, $F(2, 19) = .364$, $p = .701$ at baseline, $F(2, 19) = .346$, $p = .713$ at 30 days, $F(2, 16) = .573$, $p = .578$ at 60 days, and $F(2, 16) = 1.382$, p = .286 at 90 days (see Appendix C).

Physical Intervention Rates

Physical intervention data were collected from October, 2019, to October, 2020. During that time, physical interventions (as aggregated total rate from brief holds and physical restraints used) increased from 4% in October, 2019, to 18% in October, 2020 at the project site. However, when brief holds and physical restraints were separated, the rate of restraints decreased from 31% in the month prior to teaching the class (June, 2020) to 22% per the census in the final month of data collection (October 2020) at the project site. Brief holds increased from 69% in the month prior to teaching the class (June, 2020) to 78% in the final month of data collection. This would imply that staff are having to restrain the patients less and are able to use verbal de-escalation skills and only resort to brief holds for medication and assistance. Also, after the month of training was completed at the end of July, 2020, the rates of physical interventions went down from 26% in August, 2020, to 18% per the census in October, 2020. These numbers could imply that as staff self-confidence increased following the educational intervention; the need for restraints decreased.

Implications

Implications for positive social change include safer work environments for healthcare workers, safer hospital settings for patients and visitors, and an increase in awareness of strategies to reduce violence in healthcare settings. Responding immediately to verbal assaults and threats with proper verbal de-escalation techniques can decrease the need for staff to use physical interventions on patients.

Recommendations

It is recommended that the verbal de-escalation educational class be introduced as part of mandatory training for existing staff on medical units and throughout the facility. This will reduce the gap in practice of staff not having a specific training in verbal de-escalation techniques when working with potentially aggressive patients. Training for all staff might also reduce the need to use physical interventions hospital wide when working with aggressive patients. Studying the impact of the implementation of mandatory training may be a next step in the QI process at this project site.

Contribution of the Doctoral Project Team

A QI review council at the project site approved this as a QI project. I met with committee members and two nurse leaders as stakeholders for input and completed a QI project proposal based on the SQUIRE guidelines to gain approval for this project. The project will extend beyond the DNP doctoral project because the education on verbal de-escalation will be taught throughout the facility. All staff will be eligible to participate in the 1 hour educational class on verbal de-escalation techniques. Staff will be able to register themselves online to attend the session that will begin in 2021.

Strengths and Limitations

The major strength of this DNP project is that the QI intervention that was evaluated did not have any adverse effects on staff who participated in the education. Reaching out to only one department was also a strength because it was easier to keep in contact with most of the participants. Another strength in the training process was support for the method of teaching using simulations in the educational class. Summary

evaluations of the educational intervention noted several participants made positive comments about using simulation to practice verbal de-escalation techniques. Another strength was that after analyzing the self-confidence scores among staff, there was no statistically significant difference in the confidence scores among staff; suggesting that this training would benefit all staff members equally. Overall, the rates for physical interventions at the project site decreased after the training and the self-confidence scores increased slightly over the three 30-day periods posttraining. It is hard to determine what these numbers indicate in terms of direct cause, but it does appear that the training did result in some positive effect for working with aggressive patients over the posttraining period due to the fact that physical intervention use did decrease over time and the confidence scores of staff increased over time. Findings suggest that this training was equally effective for all staff members in improving confidence in verbal de-escalation techniques when working with an aggressive patient.

A limitation of this project was the small number of participants ($N = 19$). This project was limited to staff from one department. Several participants who had initially signed up for the course did not attend due to a scheduling conflict, forgetfulness, or personal responsibilities. Also, approximately 16% ($n = 3$) did not complete their 60-day and 90-day self-assessment. The generalizability of the findings is limited by the small number of staff as well a lack of variability among staff who participated. This group of staff are only assigned to the ED and MHED areas.

Recommendations for future projects addressing verbal de-escalation would be to incorporate an introduction to verbal de-escalation strategies during hospital orientation

for all employees as well offer the verbal de-escalation course to the entire medical facility. Further testing of the effectiveness on increasing confidence and reducing physical intervention rates would lend more support for its effectiveness to other similar settings. The next steps for this project would be to capture a broader group of staff and increase the generalizability of this QI initiative.

Section 5: Dissemination Plan

There are two avenues for the dissemination of DNP project work relevant to the project work site. Project findings will be presented at QI committee meetings throughout the facility and added to the magnet certification process. Educational training evaluated during this QI initiative will be made available to the entire facility. Any staff who work closely with patients will be given the opportunity to register online and take the verbal de-escalation 1-hour training class. The plan is to publish in a psychiatric nursing periodical for psychiatric mental health nurses who function outside of the case study area.

Analysis of Self

As a clinical educator and someone who has worked in the mental health field for over 25 years, I found the results of the DNP project interesting. Having worked with aggressive patients for most of my career, I remember being taught different techniques regarding how to effectively and safely manage aggressive patients. The techniques I were taught included defensive skills, physical maneuvers, physical restraints, crisis prevention, and verbal aggression management techniques. Techniques involved what to do once the patient is already being physically aggressive instead of what to do to prevent the patient from becoming physically aggressive. It is a passion of mine to make the healthcare environment a safer place for employees who work with aggressive patients and give them the tools they need to prevent WPV.

This project experience has been educational for me personally and professionally. Personally, I did not realize how challenging and rewarding this project

would be. It was a challenge because there were times when I wanted to give up; writing and rewriting and having to determine how I was going to most effectively illustrate my point was exhausting. It was rewarding because I accomplished a lot in a short time; from IRB approval to my oral defense to final editing, I was proud of my persistence. It was also rewarding teaching my peers and offering them insights regarding how to safely and effectively engage with aggressive patients using evidence-based de-escalation strategies.

Professionally, I was challenged by my project site's requirements to get approval for my project. At times, I felt like I was doing twice the work of a DNP student during my project timeline. However, I succeeded and learned about the QI proposal process at my facility and am confident that in the future, I will be able to navigate the process more smoothly. Presently, I am preparing for more opportunities to offer my verbal de-escalation class to the entire facility. My long term professional goal is to continue this QI initiative by teaching this class to a larger number of participants and using the confidence self-assessment tool to determine if staff confidence increased over a 30-day period and whether confidence levels may be sustained over time.

The completion of the DNP project was arduous, yet instructive. Making sure all of my edits and grammar were corrected was time-consuming and a reminder of how practice makes perfect in writing. Throughout this experience, I listened to directions, suggestions, opinions, and criticisms regarding my work. I tried to take the input and incorporate it in the most comprehensible and meaningful way in my completed project. It was challenging at times to get my point across or explain my thought processes. It

was also challenging to find the time to organize myself and capture all information in writing.

The biggest insight I gained from this project was that people want to learn and need to process their experiences with violence. Staff were eager to take my class and discuss their experiences with aggressive patients and get a different perspective about how to best work with this population. I hope to continue this process by sharing my experiences regarding working with aggressive patients and how I can continue to make staff more confident in terms of their verbal de-escalation skills.

Summary

This DNP project involved training and education for staff in the MHED regarding verbal de-escalation techniques. I sought to decrease use of physical interventions in the MHED and increase the confidence level of staff when using verbal de-escalation techniques. Education and training are relevant to a safer and better work environment. With proper training and practice, staff will be more confident in terms of their verbal de-escalation skills when working with patients who are becoming aggressive to decrease the need to use physical interventions, thus reducing risks of harm to both patients and staff.

References

Adams, J. (2017). Assessing the effectiveness of clinical education to reduce the frequency and recurrence of workplace violence. *Australian Journal of Advanced Nursing, 34*(3), 6–15.

Aggression. (n.d.). In *Merriam-Webster's online dictionary* (11th ed.). Retrieved from https://www.merriam-webster.com/dictionary/aggression.

Atlas, B. (2018). *Changing the culture of workplace violence.* Retrieved October 30, 2019 from https://www.mhaonline.org/connect/from-mhas-president/mha's-friday-update-messages/2018/06/29/changing-the-culture-of-workplace-violence

Aytac, S., Dursun, S., & Akalp, G. (2016). Workplace violence and effects on turnover intention and job commitment: A pilot study among healthcare workers in Turkey. *European Scientific Journal, 12*(2), 458–465.

Blando, J., Ridenour, M., Hartley, D., & Casteel, C. (2015). Barriers to effective implementation of programs for the prevention of workplace violence in hospitals. *Online Journal Issues Nursing, 20*(1), 5.

Brous, E. (2018). Workplace violence: How it affects healthcare, which providers are most affected, and what management and staff can do about it. *American Journal of Nursing, 118*(10), 51-55.

Brown, A. (2015). Simulation in undergraduate mental health nursing education: A Literature Review. *Clinical Simulation in Nursing, 11,* 445-449. doi:10.1016/j.ecns.2015.08.003

Burnes, B., & Bargal, D. (2017). Kurt Lewin: 70 years on. *Journal of Change*

Management, 17(2), 91-100. doi:10.1080/14697017.2017.1299371

De la Fuente, M., Schoenfisch, A., Wadsworth, B., & Foresman-Capuzzi, J. (2019). Impact of Behavior Management Training on Nurses' Confidence in Managing Patient Aggression. *Journal of Nursing Administration, 49*(2), 73-78.

De Puy, J., Romain-Glassey, N., Gut, M., Pascal, W., Mangin, P., & Danuser, B. (2015). Clinically assessed consequences of workplace physical violence. *International Archives of Occupational and Environmental Health, 88*(2), 213-244. doi:10.1007/s00420-014-0950-9

Duxbury, J., Baker, J., Downe, S., Jones, F., Greenwood, P., Thygeson, H., . . . Whittington, R. (2019). Minimising the use of physical restraint in acute mental health services: The outcome of a restraint reduction programme ('REsTRAIN YOURSELF'). *International Journal of Nursing Studies, 95,* 40-48. doi:10.1016/j.ijnurstu.2019.03.016

Emergency Nurses Association. (2011). Workplace Violence. Retrieved May 23, 2019 from https://www.ena.org/practice-resources/workplace-violence

Ford, S. (2019, August 5). *Injuries to mental health staff during restraint on the increase.* Retrieved April 21, 2020, from https://www.nursingtimes.net/news/policies-and-guidance/injuries-to-mental-health-staff-during-restraint-on-the-increase-16-11-2017/

Gillespie, G. L., Gates, D. M., Kowalenko, T., Bresler, S., & Succop, P. (2014). Implementation of a comprehensive intervention to reduce physical assaults and threats in the emergency department. *Journal of Emergency Nursing, 40*(6), 586–

591. doi:10.1016/j.jen.2014.01.003

Goh, Y. S., Selvarajan, S., Chng, M. L., Tan, C. S., & Yobas, P. (2016). Using standardized patients in enhancing undergraduate students' learning experience in mental health nursing. *Nurse Education Today, 45,* 167-172. doi:10.1016/j.nedt.2016.08.005

Gross, N., Peek-Asa, C., Nocera, M., & Casteel, C. (2013). Workplace violence prevention policies in home health and hospice care agencies. *Online Journal of Issues in Nursing, 18*(1).

Halpern, L. W. (2017). OSHA considers national standard to prevent healthcare workplace violence. *American Journal of Nursing, 117*(4), 15. doi:10.1097/01.naj.0000515216.84968.7c

Healthcare Workplace Violence Prevention Act of 2018, H.R. 5223, 115 Cong. (2018). Retrieved from https://www.congress.gov/bill/115th-congress/house-bill/5223

Heckemann, B., Zeller, A., Hahn, S., Dassen, T., Schols, J., & Halfens, R. (2015). The effect of aggression management training programs for nursing staff and students working in an acute hospital setting. A narrative review of current literature. *Nurse Education Today*, *35*(1), 212–219. doi:10.1016/j.nedt.2014.08.003

Isaak, V., Vashdi, D., Bar-Noy, D., Kostisky, H., Hirschmann, S., & Grinshpoon, A. (2017). Enhancing the safety climate and reducing violence against staff in closed hospital wards. *Workplace Health & Safety*, *65*(9), 409–416. doi:10.1177/2165079916672478

Joint Commission. (2019). De-escalation in healthcare. *QuickSafety, 47.*

Kelley, E. C. (2014). Reducing violence in the emergency department: A rapid response team approach. *Journal of Emergency Nursing, 40*(1), 60–64. doi:10.1016/j.jen.2012.08.008

Martinez, A. J. S. (2017). Implementing a workplace violence simulation for undergraduate nursing students. *Journal of Psychosocial Nursing and Mental Health Services, 55*(10), 39-44. doi:10.3928/02793695-20170818-04

Maryland Safe Care Act, SB943, HB1568 (2020). Retrieved from https://trackbill.com/bill/maryland-senate-bill-943-labor-and-employment-health-care-facilities-workplace-safety-safe-care-act/1884052/

Masters, K. (2017). Physical restraint: A historical review and current practice. *Psychiatric Annals, 47*(1).

Morken, T., Johansen, I., & Alsaker, K. (2015). Dealing with workplace violence in emergency primary healthcare: A focus group study. *BMC Family Practice, 16,* Article 51. doi:10.1186/s12875-015-0276-z

Morphet, J., Griffiths, D., Beattie, J., Velasquez, D., & Innes, K. (2018). Prevention and management of occupational violence and aggression in healthcare: A scoping review. *Collegian, 25*(6), 621-632. doi:10.1016/j.colegn.2018.04.003

Morphet, J., Griffiths, D., Beattie, J., & Innes, K. (2019). Managers' experiences of prevention and management of workplace violence against healthcare staff: A descriptive exploratory study. *Journal of Nursing Management, 27*(4), 781-791. doi:10.1111/jonm.12761

Nayomi, W. (2016). Workplace stress in nursing: A literature review. *Journal of Social*

*Statistics.*47-53. doi:10.1046/j.0309-2402.2003.02853.x

Nursing Theory. (2016). *Lewin's change theory.* Retrieved September 3, 2019 from http://www.nursing-theory.org/theories-and-models/Lewin-Change-Theory.php

Occupational Safety and Health Act of 1970, 29 U.S.C. 15 § 651 et seq, 84 Stat. 1590 (1970).

Occupational Safety and Health Administration . (2015). *Guidelines for preventing workplace violence for healthcare and social services workers.* Retrieved August 30, 2019, from https://www.osha.gov/Publications/osha3148.pdf.

Ogrinc, G., Mooney, S. E., Estrada, C., Foster, T., Goldmann, D., Hall,… Watts, B. (2008). The SQUIRE (Standards for QUality Improvement Reporting Excellence) guidelines for quality improvement reporting: explanation and elaboration. Quality & safety in health care, 17 Suppl 1(Suppl_1), i13–i32. doi.org/10.1136/qshc.2008.029058

Phillips, J. (2016). Workplace violence against healthcare workers in the United States. *New England Journal of Medicine 374,* 1661-1669. doi:10.1056/NEJMra1501998

Price, O., Baker, J., Bee, P., & Lovell, K. (2015). Learning and performance outcomes of mental health staff training in de-escalation techniques for the management of violence and aggression. *British Journal of Psychiatry, 206*(6), 447–455. doi:10.1192/bjp.bp.114.144576

Price, O., Baker, J., Bee, P., & Lovell, K. (2018). The support-control continuum: An investigation of staff perspectives on factors influencing the success or failure of de-escalation techniques for the management of violence and aggression in mental

health settings. *International Journal of Nursing Studies, 77,* 197–206. doi10.1016/j.ijnurstu.2017.10.002

Richmond, J. S., Berlin, J. S., Fishkind, A. B., Holloman, G. H., Jr, Zeller, S. L., Wilson, M. P., . . . Ng, A. T. (2012). Verbal de-escalation of the agitated patient: Consensus statement of the American association for emergency psychiatry project BETA de-escalation workgroup. *Western Journal of Emergency Medicine*, *13*(1), 17–25. doi:10.5811/westjem.2011.9.6864

Scoville, R. (n.d.). Run chart tool. Retrieved on May 6, 2020 from http://www.ihi.org/resources/Pages/Tools/RunChart.aspx

Sweeney, A., Clement, S., Filson, B., & Kennedy, A. (2016). Trauma-informed mental healthcare in the UK: What is it and how can we further its development? *Mental Health Review Journal, 21*(3), 174-192. doi:10.1108/mhrj-01-2015-0006

Thackrey, M. (1987). Clinician confidence in coping with patient aggression: Assessment and enhancement. *Professional Psychology, 18*(1), 57-60. doi:10.1037/0735-7028.18.1.57

Walden University. (2012). Vision, mission, and goals. In *2012-2013 Walden University catalog*. Retrieved July 2, 2019 from https://catalog.waldenu.edu/content.php?catoid=65&navoid=10668

Walden University. (2017). *Staff education manual*. Minneapolis, MN.

Walden University. (2019). *Manual for quality improvement evaluation: Doctor of Nursing Practice (DNP) scholarly project.* Minneapolis, MN: Author. Retrieved from https://drive.google.com/file/d/0B1_8mknkC0j1STRSSG5MUEF2eFk/view

Wei, C. Y., Chiou, S. T., Chien, L. Y., & Huang, N. (2016). Workplace violence against nurses—prevalence and association with hospital organizational characteristics and health-promotion efforts: Cross-sectional study. *International Journal of Nursing Studies, 56,* 63–70. doi:10.1016/j.ijnurstu.2015.12.012

Wong, A. H., Ray, J. M., & Rosenberg, A. (2020). Experiences of individuals who were physically restrained in the emergency department. *Journal of the American Medical Association.* doi:10.1001/jamanetworkopen.2019.19381

WorkSafe Victoria. (2015). *A guide for employers, preventing, and responding to work related violence.* Retrieved on April 29, 2019 from https://www.worksafe.vic.gov.au/_data/assets/pdf_file/0020/138332/Work-related.violence.pdf

Wyatt, R., Anderson-Drevs, K., & Van Male, L. (2016). Workplace violence in health care: A critical issue with a promising solution. *Journal of the American Medical Association, 316*(10), 1037-1038. doi:10.1001/jama.2016.10384

Zafar, W., Khan, U., Siddiqui, S. A., Jamali, S., & Razzak, J. (2016). Workplace violence and self-reported psychological health: Coping with post-traumatic stress, mental distress, and burnout among physicians working in the emergency departments compared to other specialties in Pakistan. *Journal of Emergency Medicine, 50*(1), 167-177. doi:10.1016/j.jemermed.2015.02.049

Zicko, J. M., Schroeder, R. A., Byers, W. S., Taylor, A. M., & Spence, D. L. (2017). Behavioral emergency response team: Implementation improves patient safety, staff safety, and staff collaboration. *Worldviews on Evidence-Based Nursing,*

14(5), 377-384. doi:10.1111/wvn.12225

Appendix A: Run Chart of Mental Health Emergency Department Rates of Physical Interventions

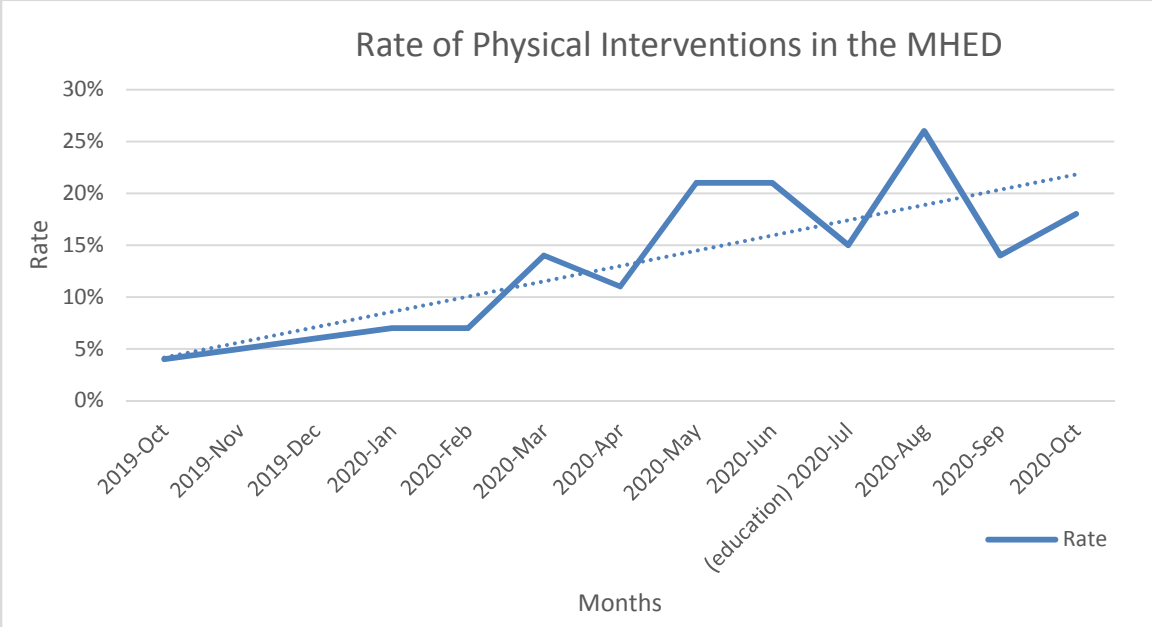


Figure A1. Run chart rates of physical interventions used at Mental Health Emergency Department from October, 2019, to October, 2020.

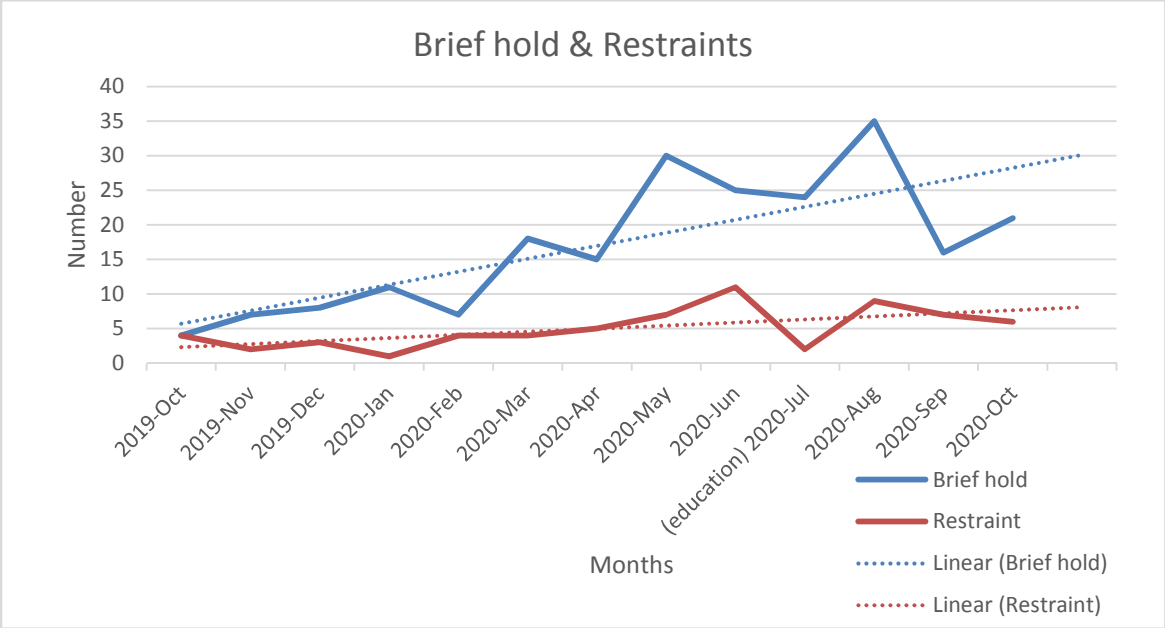


Figure A2. Run chart of data on rates for brief holds and restraints used at Mental Health Emergency Department from October, 2019, to October, 2020.

Appendix B: Confidence in Coping With Patient Aggression Instrument

Therapeutics for Aggression 6 digit code: _____
"Confidence in Coping With Patient Aggression Instrument"
Date: _____

SELF-ASSESSMENT INSTRUMENT

Circle the number that best describes you:

1. How comfortable are you in working with an aggressive patient?
   1 2 3 4 5 6 7 8 9 10 11
   very uncomfortable very comfortable

2. How good is your present level of training for handling psychological aggression?
   1 2 3 4 5 6 7 8 9 10 11
   very poor very good

3. How able are you to intervene physically with an aggressive patient?
   1 2 3 4 5 6 7 8 9 10 11
   very unable very able

4. How self-assured do you feel in the presence of an aggressive patient?
   1 2 3 4 5 6 7 8 9 10 11
   not very self-assured very self-assured

5. How able are you to intervene psychologically with an aggressive patient?
   1 2 3 4 5 6 7 8 9 10 11
   very unable very able

6. How good is your present level of training for handling physical aggression?
   1 2 3 4 5 6 7 8 9 10 11
   very poor very good

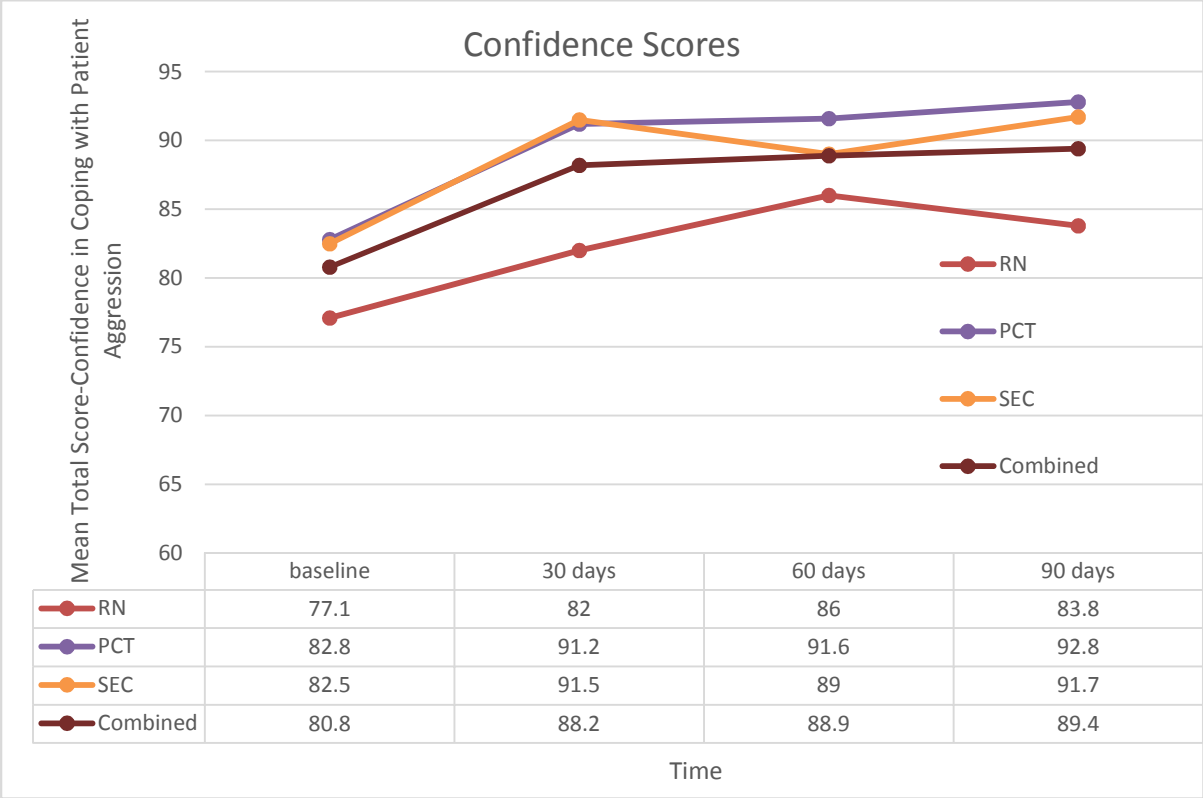
7. How safe do you feel around an aggressive patient?
   1 2 3 4 5 6 7 8 9 10 11
   very unsafe very safe

8. How effective are the techniques that you know for dealing with aggression?
   1 2 3 4 5 6 7 8 9 10 11
   very ineffective very effective

9. How able are you to meet the needs of an aggressive patient?
   1 2 3 4 5 6 7 8 9 10 11
   very unable very able

10. How able are you to protect yourself physically from an aggressive patient?
    1 2 3 4 5 6 7 8 9 10 11
    very unable very able

Appendix C: Confidence in Coping With Patient Aggression Scores



	baseline	30 days	60 days	90 days
RN	77.1	82	86	83.8
PCT	82.8	91.2	91.6	92.8
SEC	82.5	91.5	89	91.7
Combined	80.8	88.2	88.9	89.4

Figure C1. Staff confidence in coping with patient aggression by job title as a function of training and time.

ANOVA

		N	Sum of Squares	df	Mean Square	F	Sig.
baseline	Between Groups	19	146.984	2	73.492	0.364	0.701
30 days	Between Groups	19	131.234	2	65.617	0.346	0.713
60 days	Between Groups	16	102.925	2	51.462	0.573	0.578
90 days	Between Groups	16	299.971	2	149.985	1.382	0.286

Figure C2. ANOVA test for staff confidence as a function of training and time.

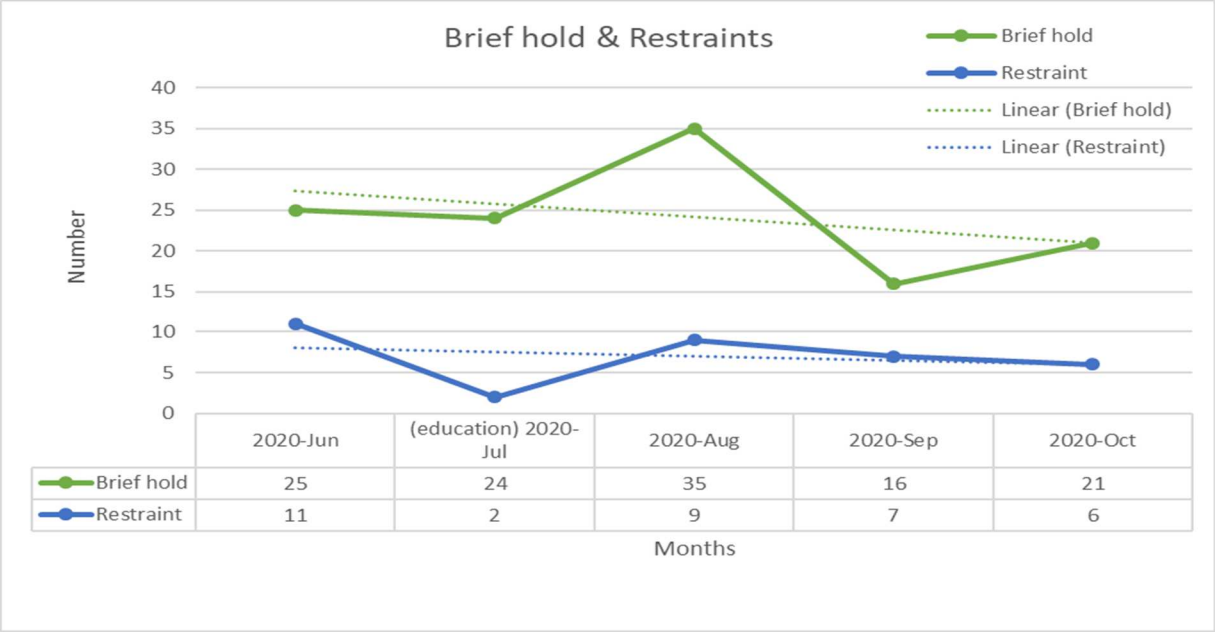


Figure C3. Run chart rates of physical interventions used at Mental Health Emergency Department from June 2020 (preeducation) to October 2020 (90 days posteducation).

Appendix D: Letter of Permission

Re: Confidence in Coping with Patient Aggression Instrument

Michael Thackrey <misha@mail.fresnostate.edu>

Sun 5/3/2020 11:14 AM

To: Elizabeth Pavlesich <elizabeth.pavlesich@waldenu.edu>

5 attachments (4 MB)

Thackrey scale c 1985.tif; Thackrey article 1987 p3.jpg; Thackrey article 1987 p4.jpg; Thackrey article 1987 p2.jpg; Thackrey article 1987 p1.jpg;

Limited Permission to use "Clinician Confidence in Coping with Patient Aggression" scale

You are hereby granted limited permission to use my

"Clinician Confidence in Coping with Patient Aggression" scale

subject to the following conditions:

This scale is to be used **for research purposes only**, pending further validation.

This scale must **not be altered**.

The **wording of each item must not be changed**.

The **11-point anchored response scale must not be changed**
(e.g., different number of scale points, omission or alteration of anchors).

To ensure fidelity, any non-English language translation must first be translated from English to non-English and then independently back-translated from non-English language back to English.

You forward to me a copy of your research results.

By using this instrument you agree to these conditions.

Limited permission to use this scale is automatically withdrawn if you do not meet each of these conditions.

note: this instrument is designed to yield **a single overall score** (sum of individual item values) - analysis of individual items alone will truncate reliability.