

Implementation of De-Escalation Training to Medical-Surgical Nurses

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Abstract

Problem: The American Nurses Association reports only 20% of nurses' feel safe in their area of practice with patient violence towards nurses happening more frequently on medical-surgical units (Cahill, 2008; OSHA, 2004).

Purpose: To determine the effectiveness of de-escalation training on medical-surgical nurses' confidence levels in handling agitated patients.

Methods: This quality improvement project employs a non-experimental, single group, pre- and post-test design. Thackrey's (1987) Confidence in Coping with Patient Aggression Instrument (CCPAI), a 10-item questionnaire, evaluates nursing confidence levels in dealing with agitated patients before and after implementing Richmond's et al. (2012) Ten Domains of De-escalation.

Outcomes: A one-sample *t* test comparing the pre- and post-test confidence scores showed the mean as significantly different from 55, a hypothetically neutral score. The post-test mean significantly increased (68.82, 95% CI [6.84 to 20.81]) from the pre-test, $t(33) = 4.03, p = <.001$ and showed a moderate to large effect size $d = .72$ (Pilot, 2010). A paired-sample two-tailed *t* test significantly increased from Time 1 pre-test ($M = 49.82, SD = 10.11$) to Time 2 post-test ($M = 72.82, SD = 14.41$), $t(10) = 4.46, p < .001$. The mean increase was 23.00 [95% CI, 11.51 – 34.49]; $d = 1.84$ indicating a large effect size (Pilot, 2010). A sensitivity analysis (Wilcoxon Signed Rank Test) showed a median difference amongst the matched pairs with a significant increase in confidence levels post-training, $z = -2.847, p < .004$. The median score increased from the pre-test ($Md = 51$) to the post-test scores ($Md = 71$) (Pallant, 2013).

Implications: This pilot project demonstrates improved medical-surgical nursing confidence in dealing with agitated patients. Further research using a larger sample size in several nursing units would add validity to the results.

Implementation of De-Escalation Training to Medical-Surgical Nurses

Overview

Nurses care for diverse patients with complex medical and psychological problems. When providing care, even in secure and professional work environments, nurses may face patient violence. First impressions can affect nurse and patient attitudes that can trigger tempers leading to violence (Hahn et al., 2012). Workplace violence is a public health concern and an issue in the workplace for its destructiveness to the therapeutic environment (Rosen, 2013).

The United States (U.S.) Department of Labor Occupational Safety and Health Administration (OSHA) (2013), reports that nurse victimization occurred 72% more often than medical technicians and more than twice as often as other healthcare workers. In 2010, 48% of all nonfatal injuries from occupational assaults and violent acts occurred in healthcare and social service settings (OSHA, 2013). Patient initiated violence toward nurses remains a significant safety concern. Since 2004, OSHA provides violence prevention guidelines encouraging organizations to adopt zero-tolerance against aggression and violence in the workplace.

The Emergency Nurses Association (2011) surveillance studies report more than 50% of Emergency Department (ED) nurses ($n = 3,568$) experience verbal or physical aggression at work from patients and/or visitors within the past week of taking the survey, working an average of 36.9 hours. A 2008 survey from the American Psychiatric Nurses Association (2008) also found safety for nurses working in psychiatric settings a top issue. Although the majority of violence towards nurses occurs in the ED and psychiatric settings, violence towards nurses also happens in other hospital units. Medical-surgical nurses often minimize and underreport workplace violence because they view patient behavior as part of an illness or feel that patient outbursts come with the job (McLaughlin, Bonner, Mboche, & Fairlie, 2010).

In a cross-sectional survey of medical-surgical nurses from 21 hospitals in Australia, one third of the nurses ($N=2,487$, 80.3% response rate) felt emotionally abused during their last five shifts (Roche, Diers, Duffield, and Catling-Paull, 2010). Threats of violence were the lowest (14%), followed by a range of actual violence (20% to 65%) (Roche et al., 2010). The type of violence on the medical-surgical units related to deficiencies in nursing practices, which led to negative patient outcomes. Perceptions about violence were associated with the nursing work environment rather than specific patient populations.

Psychiatric units successfully defuse crises by using de-escalation techniques to prevent violence daily. However, medical-surgical nurses generally lack the education, assertiveness, confidence, and skills to handle medically compromised patients in a psychiatric crisis, and often resort to using temporary mechanical restraints (Oostrom & Mierlo, 2008; Richmond et al., 2012). Mechanical restraints increase the risk for injury and adverse outcomes such as bruises, cuts, entrapment, side-rail deaths by strangulation and suffocation, and deep vein thrombosis (Bostwick & Hallman, 2013). Medical-surgical nurses may benefit from learning how to use de-escalation with agitated patients to prevent patient violence and decrease inappropriate use of restraints (Cahill, 2008; Cowin et al., 2003; Richmond et al., 2012).

Purpose

The purpose of this quality improvement project is to determine the effectiveness of de-escalation training on medical-surgical nurses' confidence levels in handling agitated patients one month prior and within the month post intervention. The anticipated outcome includes increased medical-surgical nursing confidence in recognizing and intervening before a patient escalates into a crisis stage, similar to the positive impact of de-escalation demonstrated on psychiatric units.

Theoretical Framework

The Transtheoretical Model (TTM) of change guides this project as its theoretical framework. TTM describes relationships between the intent to change and individual decision-making that help promote health related behavioral change (Prochaska, 2008). This theory illustrates how readiness to change is central to any behavioral self-change. TTM has been applied to addictive behavioral change and behavioral change needed to manage a variety of medical conditions (Prochaska, 2008). TTM consists of the five stages of change, ten processes of change, decisional balance, self-efficacy, and temptation (Prochaska & Velicer, 1997).

The Stages of Change Model, a core construct of TTM, consists of five stages: pre-contemplation (not interested in change), contemplation (ambivalent to change), preparation (attempting for change), action (applying a behavioral change), and maintenance (commitment to sustaining a new behavioral change) (Prochaska, 2008; Prochaska & Velicer, 1997). Behavioral change occurs over time and often requires repetition of each stage before the new behavior becomes fully established (Zimmerman, Olsen, & Bosworth, 2000).

This project uses the stages of change model because application of de-escalation techniques results in behavioral change specifically related to personal verbal and non-verbal means of communication with agitated patients. Nurses need evaluate their own self-presentation as well as the patient's presentation critically in order to successfully inquire and intervene before escalation occurs. Every nurse, patient, and crisis is unique, and episodes of success and failures both occur. The level of confidence with use of de-escalation techniques, de-escalation experiences (positive or negative), and current patient rapport will impact which stage of the model the nurse will progress or cycle within. Lack of experience may cause a nurse to remain in the pre-contemplation or contemplation stage. A negative experience may motivate

a nurse to enter the preparation and action phase in order to improve safety. Positive experiences are motivators to help nurses to remain in the maintenance phase. However, a poor patient rapport or a nurse becoming a trigger for a particular patient may cause a nurse to return to the pre-contemplation phase for this particular encounter.

The ten processes of change are an additional core construct of TTM. These processes include: 1) consciousness raising, 2) dramatic relief, 3) self-reevaluation, 4) environmental reevaluation, 5) self-liberation, 6) social liberation, 7) counterconditioning, 8) stimulus control, 9) contingency management, and 10) helping relationships (Prochaska & DiClemente, 1983; Prochaska & Velicer, 1997). The medical-surgical nurses each uniquely applied the processes, decisional balance, self-efficacy, and temptation as they progressed through the stages of change during this project (Clark, 2013; Prochaska & Velicer, 1997).

Literature Review

A literature review was conducted with the Cochrane Library, PubMed, CINAHL, and PsycINFO databases for English language papers published during years 2004-2014 as well as internet search engines and hand searches of relevant journals, using the following key words: patient violence, patient violence towards nurses, patient aggression, patient aggression toward nursing, and de-escalation training. This literature review focused on best practices in using de-escalation techniques after receiving specific training about how to decrease workplace violence and help nurses to feel safe in their area of practice. From the initial 2,031 titles, 25 titles and abstracts met the search inclusion criteria. Of those, nine studies were reviewed in detail (see Appendix A).

The review revealed that only 20% of nurses' report feeling safe in their area of practice (Cahill, 2008; OSHA, 2004). Agitated patient behaviors influence nurses' perception of safety.

Agitation was defined as excessive verbal and/or motor behavior, and an agitated patient can readily escalate to verbal or physical aggression (Acute Management of Agitation, 2014, para 1). The literature defined aggression as an unprovoked, hostile behavior that can be verbal, physical, or sexual whereas, agitation as an emotional state of aggravation or restlessness, which a medical condition, such as delirium, with the potential to change to an aggressive state, can provoke (Bostwick & Hallman, 2013; Deans, 2004; McLaughlin et al., 2010).

In a thematic synthesis of the qualitative literature designed to clarify best practices when using de-escalation techniques, Price and Baker (2012) found seven emergent themes: effective de-escalator characteristics, maintaining personal control (verbal and non-verbal skills), engaging with the patient, when to intervene, ensuring safety and strategies for de-escalation, autonomy-confirming interventions, limit setting, and authoritative interventions. Although it takes time to translate the de-escalation principles, presented by these themes, into national training programs, these techniques are essential now to save lives and prevent unnecessary injuries.

Workplace violence prevention programs often include de-escalation techniques defined as “a gradual resolution of a potentially violent and/or aggressive situation through the use of verbal and physical expressions of empathy, alliance, and non-confrontational limit setting that is based on respect” (Cowin et al., 2003, p.65). The efficiency of de-escalation techniques relies on interpersonal and communication skills (Nau, Halfens, Needham, & Dassen, 2010; Price & Baker, 2012; Richmond et al. 2013). The American Association for Emergency Psychiatry consensus statement supports using de-escalation, and focuses on best practices for evaluating and treating agitated patients in emergency settings (Richmond et al., 2012). Their evidence indicates that non-coercive approaches are more effective than mechanical restraints and

involuntary medications. The guidelines recommend a three-step approach that first engages the patient verbally, second establishes a relationship, and third verbally de-escalates the patient from their agitated state.

Early recognition and response to agitation and aggression is one method to prevent assaultive behavior (Cahill, 2008; Deans, 2004; McLaughlin et al., 2010; McPhaul, London, & Lipscomb, 2013; Nau et al., 2010; Roche et al., 2010). A Framework for Translating Workplace Violence Intervention Research into Evidence-Based Programs by McPhaul et al., (2013) gives organizational processes that successfully prevent violence in healthcare settings. The framework suggests using workplace violence committees, safety champions, and training programs, as complements to effective regulation guidelines. Preventative frameworks and trainings increases staff competency in conflict resolution and aggressive behavior management, with subsequent reductions in the incidents and severity of workplace violence (McPhaul et al.; Rosen, 2013).

A U.S. study assessed the effect of the Assertive Communication Techniques for Scripps Mercy Aggression Reduction Training (ACT-SMART) on nurses perceived level of confidence in managing aggressive and violent patients (Cahill, 2008). ACT-SMART's eight hour training in effective therapeutic communication skills, verbal de-escalation, crisis communication, and cycle of aggression and violence management significantly increased nurse confidence in managing aggressive situations ($t(42) = -6.416, p = .001$; $t(11) = -3.307, p = .007$). In addition, Deans (2004) study specifically assessed ED nurse perception about knowledge, skills, and attitudes before and after a one-day training program on the management of workplace violence and aggression (Deans, 2004). ED nurses ($n=60$), from a major regional hospital in Australia, showed a significant increase in knowledge and understanding about handling violent situations

($F(1, 22) = 4.18, p = .04$); knowledge about own constraints ($F(1, 22) = 5.88, p = .05$); and their own physical limitations when responding to an aggressive situation ($F(1, 22) = 6.21, p = 0.01$) (Deans, 2004). Aggressive encounters by staff also decreased over a three month period (pre-test, $M = 8.39, SD = 11.3$ versus post-test, $M = 4, SD = 3.45$) (Deans, 2004).

A pilot study assessing the effectiveness of training on nursing staff attitudes and behavior towards verbal aggression in the workplace found that training increases awareness and collaboration in dealing with verbally aggressive encounters (McLaughlin et al., 2010). The investigators used the Verbal Aggression Measure (VAM) to assess a workbook educational intervention that focused on de-escalation techniques, enhanced knowledge, and encouraged critical thinking. This convenience sample ($n = 18$), found that those using the workbook had increased tolerance of verbal aggression (VAM pre-test $M = 3$; post-test $M = 6$) and nurse confidence (pre-test $M = 2$; post-test $M = 6$).

Evidence shows de-escalation training even facilitates nursing student's learning how to manage agitated/aggressive patients throughout their career. Following implementation of the De-escalating Aggressive Behavior Scale (DABS), nursing students showed significant improvements in reducing fear, providing guidance, valuing, and negotiating with the client (pre-test $M = 2.74, SD = .68$, post-test $M = 3.65, SD = .49, p < 0.001$) compared to no training (Nau et al., 2010). Cronbach's alpha (0.87) suggests the DABS instrument is reliable but further research to establish the instrument's validity is needed (Nau et al., 2010).

The overall evidence indicates de-escalation training improves self-efficacy, skills, and abilities in dealing with agitated/aggressive patients, enhances patient safety, and enhances nursing and nursing students' confidence and attitudes in managing aggression to decrease patient violence (Cahill, 2008; Deans, 2004, McLaughlin et al., 2010; Nau et al., 2010).

Researchers agree verbal aggression result from poor communication, illness, and personality factors of the perpetrator that require firm limit setting during the escalation phase of the crisis cycle in order to prevent the potential of physical violence (McLaughlin et al., 2010; Price & Baker, 2012). Researchers agree that using de-escalation interventions and training programs positively affects the quality and safety of nurses and patients (McPhaul et al., 2013, Price & Baker, 2012; McLaughlin et al., 2010; Nau et al., 2010; Cahill, 2008; Deans, 2004). Proper education and training can increase nursing work environment safety, improve patient and staff satisfaction, boost nurse confidence, and self-esteem (Cahill, 2008; Deans, 2004). Although de-escalation training holds promise to improve nursing work conditions, among others, the research conducted to date is limited by the setting and sample size.

Methods

Sample, Setting, & Design

This quality improvement project used a non-experimental, single group, pre- and post-test design using Thackrey's (1987) CCPAI to evaluate nursing confidence levels before and after the implementation of an educational session based on Richmond's et al. (2012) best practices in evaluation and treatment of agitation, the Ten Domains of De-escalation. This project took place in a large suburban medical center in Maryland on a 66 bed medical-surgical unit that used the Behavioral Health Emergency Rapid Response Team the most frequently of any unit within the organization. The sample population was derived from a convenience sample of approximately ninety ($N=90$) nurses targeting a 30% participation rate. This was determined by the nurse manager report of nurses employed meeting the inclusion criteria, and history of participation in quality improvement projects. The necessary sample size was predetermined as 57 ($n=90$, $z=1.96$, $\Sigma=0.08$, $pr=0.5$). Full and part-time nurses working day or night shift were

included. The project excluded per diem and internal staff registry nurses or nurses floating from other units.

Procedures

Two weeks prior to conducting the educational intervention, subjects were recruited by the Nurse Manager emailing an announcement, prepared by the primary investigator (PI), to all full and part-time regularly employed nurses the opportunity to voluntarily participate in an educational offering to learn more about de-escalation (see Appendix L-N). The email explained the de-escalation training intervention, and how it may improve nursing staff confidence levels in dealing with patient initiated violence. Food was provided and nurses were reimbursed for their time for participating in real-time case scenario sessions for a total monetary value of \$10 in cafeteria gift cards. The unit posted flyers announcing the educational sessions.

The educational intervention consisted of two 30 minute “lunch and learn” training sessions presenting the Ten Domains of De-escalation key recommendations and a follow up one hour session divided into four separate 15 minute case study presentations (see Appendix J & K). The four 15 minute teaching sessions were available once per shift three times per week for six weeks alternating weekly from day and night shift as reminders of patient scenarios. To measure the effectiveness of the educational intervention, the sessions employed the CCPAI.

Data Collection and Analysis

The authors of the intervention and measurement instrument granted permission to use their tool (Richmond et al., 2012; Thackrey, 1987) (see Appendix C & H). The American Association of Emergency Psychiatry’s Project Beta De-escalation Workgroup created the Ten Domains of De-escalation which included: 1) Respect personal space, 2) Do not be provocative, 3) Establish verbal contact, 4) Be concise, 5) Identify wants and feelings, 6) Listen closely to

what the patient is saying, 7) Agree to agree to disagree, 8) Lay down the law and set clear limits, 9) Offer choices and optimism, and 10) Debrief the patient and staff (Richmond et al., 2012) (see Appendix I).

This quality improvement project measured nursing confidence levels in dealing with agitated patients before and after the implementation of the Ten Domains of De-escalation by using the CCPAI. This instrument uses an 11-point Likert Scale that measures confidence in managing patient aggression (range =10-110). This measurement instrument uses a ten-item unidimensional construct with strong internal consistency (Cronbach's alpha 0.92) and precision (standard error 1.5) (Thackrey, 1987). The Cronbach alpha coefficient is .96 for this current project. Demographic measures include age, years of experience on the unit, and highest level of education (see Appendix F).

The pre- and post-CCPAI, demographic, and evaluation questions were transcribed to Survey Monkey. The pre- and post-CCPAI was administered to all eligible subjects two weeks before and two weeks after the de-escalation training intervention. Demographic and evaluation questions were administered two weeks post-implementation. All submitted questionnaires were de-identified and analyzed using SPSS version 21. Descriptive statistics characterized the sample population and reported means for continuous variables with a one-sample independent *t*-test. A paired sample *t*-test compared the pre- and post-confidence scores of matched pairs. The Wilcoxon Signed Rank Test compared the pre- and post-confidence medians for a more sensitive analysis. A Kruskal-Wallis H compared differences between categorical variables.

Human Subjects Protection

This quality improvement project obtained Institutional Review Board (IRB) approval as Not Human Subjects Research from the University of Maryland at Baltimore and the Medstar

Health Research Institute (see Appendix Q & R). All survey responses were voluntary and anonymous. Survey Monkey had no personal identifiers and the PI was the only person with access to the survey. Patient outcome measures were based on the perception of the respondents and no patient identifiers were collected.

Results

In total, 43 nurses participated in this quality improvement project to determine if training in the implementation of the Ten Domains of De-escalation affected the nurses' confidence in handling agitated patients on a medical-surgical unit. Descriptive statistics of baseline demographics showed 71% of participants in their current position for five years or less, and 50% between the ages of 30 and 49 (See Table 2 in Appendix S). The highest educational degree findings showed Associates (50.0%), Bachelor's (44.1%), and Master's Degree (5.9%). Table 3 presents the responders' experience of violence with 35.6% experiencing violence one month prior to the de-escalation training and 35.5% within the past month post de-escalation training (see Appendix S). Participants completed a pre-test (time 1) and post-test (time 2) after the implementation in order to compare confidence scores, and analyze the impact of the results. Additionally, volunteers completed a demographic and evaluation survey. Missing data consisted of 9 (20.9%) respondents that did not complete the post-test, and 12 (27.9%) did not complete the demographic and evaluation survey.

The exploratory data analysis conducted with the Kolmogorov-Smirnov test for normality verified confidence scores as normally distributed (Pre-test: $D = .11$, $p = .200$, Post-test: $D = .12$, $p = .200$) (see Appendix T). The pre-test result showed a slight positive skew (.68) and Kurtosis (.64). A slight negative skew was noted for the post-test results (-.633) and Kurtosis (-.203).

A one-sample t test comparing the pre- and post-test confidence scores showed the mean as significantly different from 55, a hypothetically neutral score. The post-test mean significantly increased (68.82, 95% CI [6.84 to 20.81]), from the pre-test, $t(33) = 4.03$, $p < .001$ and showed a moderate to large effect size $d = .72$ (Pilot, 2010). Table 4 (see Appendix U) represents the distribution of confidence scores. The paired-sample two tailed t -test evaluated matched pairs ($n=11$) of nurses' confidence scores. Scores increased significantly from Time 1 Pre-test ($M = 49.82$, $SD = 10.11$) to Time 2 Post-test ($M = 72.82$, $SD = 14.41$), $t(10) = 4.46$, $p < .001$. The mean increase was 23.00 [95% CI, 11.51 – 34.49]; $d = 1.84$ indicating a large effect size (Pilot, 2010). Furthermore, a sensitivity analysis (Wilcoxon Signed Rank Test) showed a median difference amongst the matched pairs with a significant increase in confidence levels post-training, $z = -2.847$, $p < .004$. The median score increased from the pre-test ($Md = 51$) to the post-test scores ($Md = 71$) (Pallant, 2013).

A Kruskal-Wallis H test assessed differences in confidence scores between groups of participants within age groups, highest degree obtained, and years of experience in current position. Distributions of age, highest level of education, and years in current position were similar for all groups, per visual inspection of a boxplot. No significant differences existed in the median confidence scores between groups (Pallant, 2013).

The CCPAI pre-implementation ($n = 43$) and post-implementation ($n = 34$) question results are shown in Table 5 (see Appendix V). Responses were recoded from a 1-11 Likert Scale to a 1-5 Likert Scale. Post-test results for question 1, the comfort level of working with an aggressive patient, ranged from 8-11, and increased to 53% from 18.7% in the pre-test results. Question 2, the quality of present training for handling psychological aggression, post-test scores ranged from 8-11 and increased to 50% from the pre-test 11.7% results. Question 3, the ability

to intervene physically with an aggressive patient, ranged from 8-11 and increased to 35.3% compared to 13.9% in the pre-test. Question 4, level of self-assurance in the presence of an aggressive patient, post-test ranged from 8-11 and increased to 29.4% from 16.3% in the pre-test. Question 5, the ability to intervene psychologically with an aggressive patient, showed post-test increased to 44.2% from the 16.3% pre-test results. Question 6, the quality of training for handling physical aggression, post-test results increased to 44.1% from 9.3% in the pre-test. Question 7, the level of safety felt around an aggressive patient, increased to 35.3% from 14% in the pre-test. Question 8, the rating of effectiveness, which is currently known, for dealing with aggression, also increased in the post-test to 44.1% from 11.7% in the pre-test. Question 9, the ability to meet the needs of an aggressive patient, increased to 52.9% compared to 14% in the pre-test. Question 10, the ability to protect yourself physically from aggressive patient, post-test results increased to 61.8% compared to 11.6% of the pre-test results. The comparison of pre-test post-test median and mode results increased for each question except question 4 and 5 where the median and mode remained unchanged.

Overall, 93.2% of participants ($n=31$) that completed the evaluation reported positive satisfaction for the presentation by combination of agree and strongly agree Likert items. Additionally, 96.9% ($n=32$) of respondents gave positive ratings for ease of the Ten Domains of De-escalation one page tool. Qualitative data revealed satisfaction with the Ten Domains of De-escalation condensed to a one-page user-friendly tool. However, one comment suggested the one-page tool gave too much information. One additional comment requested to add the Behavioral Health Emergency Rapid Response Team contact information to the Ten Domains of De-escalation tool.

Discussion

The purpose of this quality improvement project was to determine the effectiveness of de-escalation training by using the Ten Domains of De-escalation evidence based practice tool. Medical-surgical nursing confidence levels in handling agitated patients one month prior and within the month post-intervention measured by the CCPAI. The educational intervention used the Ten Domains of De-escalation and provided a quick one-page guide of key recommendations for medical-surgical nurses to use for agitated patients to prevent behavioral crises. The intervention focused primarily on the importance of communication, and empowering patients to regain control of their behavior, while simultaneously building trust (Richmond et al., 2012). According to these domains, the ability to recognize and respond to verbal and non-verbal communication while establishing a relationship, helps to de-escalate patients quickly and effectively (Richmond et al., 2012). The Ten Domains of De-escalation even includes scripting with therapeutic communication, making the use of this tool as simple as possible.

The effect showed statistical differences associated with improved confidence in dealing with patient aggression and violent behaviors by various tests for this small pilot for this specific unit. The results support the conclusion that medical-surgical nurses' confidence scores with handling aggressive patients will increase post-implementation of de-escalation training. Regardless of age group, highest level of education, or years of experience in current position were not factors in differences of confidence scores. Confidence levels improved for every question of the CCPAI. This emphasizes the benefits of de-escalation training even within a short six-week period. This medical-surgical unit specifically requested de-escalation training. Most nurses were quite receptive to the training and engagement of role-play scenarios. Some barriers included the few medical-surgical nurses that had the opportunity to use the de-escalation domains outside from role-play scenarios and the few numbers of agitated patients

during the time frame of the pilot. A few medical-surgical nurses showed some hesitancy and avoidance.

The incidences of violence remained unchanged post-implementation. This could be due to inexperience of the medical-surgical nurses. De-escalation is different with every single episode, patient, and nurse. This reflects back to the theoretical framework, The TTM of change and the Stages of Change Model. Medical-surgical nurses learning de-escalation techniques may need to change some of their nursing practice behaviors. Mastering de-escalation requires readiness to learn and a commitment to change, as well as repetition to build confidence while using techniques to avert violence towards the nursing staff. Medical-surgical nurses trying to adopt the techniques described in de-escalation training may cycle through the process of change outlined in The Stages of Change Model. Some nurses may cycle through the pre-contemplation to the action stage depending on their level of nursing confidence, and patient response may influence how successful the nurses are in adopting this new practice behavior. The level of challenge and the type of outcomes may also affect how the nurse progresses through The Stages of Change model.

Limitations

This quality improvement project has several limitations. This project did not meet the power sample size to show the statistical difference. Even though the effect sizes were moderate to large the significance was unit specific. This sample size limits the ability to generalize results. Further research using a larger sample size with multiple units simultaneously would be more appropriate to evaluate the significance of the results. Although the de-escalation training was offered in a variety of opportunities, only 20 out of 34 reported that they attending the “lunch and learn” or on-line training session, and only 17 out of 34 report attending the fifteen-

minute real case scenario trainings. These numbers were based on survey results and the actual number of real case scenario trainings was not obtained. This may have provided more insight into the level of participation. Participants provided a unique identification of their choice to use to compare pre- and post-data results. Participants reported having difficulty remembering their unique identification when it was time for the post-test. This limited the number of matched pairs' results. Using a unique identification such as last five digits of cell phone may have helped solve this issue. Few males work on this medical-surgical unit. To protect the identity of the males, the study did not assess gender differences. Future research in larger samples could compare differences in the challenges males versus females face when dealing with agitated patients. Furthermore, the survey requested the participant's age according to age group versus actual age in years. Moreover, the number of years' experience on the unit was a categorical variable limiting the ability to measure correlations between variables. Continuous variables for age and number of years of experience would have added better information about means.

Conclusion

This quality improvement project demonstrates the effectiveness of providing de-escalation training and its positive impact on nursing confidence levels. Future studies using the Ten Domains of De-escalation tool may benefit from measuring its effect on inappropriate restraint use, patient satisfaction, and nurse retention on multiple medical units in order to meet the power sample size and determine if there is clinical and statistical significance.

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APPENDIX A: JOHNS HOPKINS EVIDENCE-BASED INDIVIDUAL EVIDENCE SUMMARY, Implementation of De-Escalation Training, 2/2014

#	Author/ Date	Evidence Type	Sample & Sample Size	Results/ Recommendations	Limitations	Level & Quality Rating
1	Cahill, 2008	Quasi-experimental	In a convenience sample: <ul style="list-style-type: none"> experimental group (n = 56) control group (n = 9) 	<p>The Assertive Communication Techniques for Scripps Mercy Aggression Reduction Training (ACT-SMART) focuses on nurses perceived level of confidence toward managing the aggressive and violent patients (Cahill, 2008). ACT-SMART provides education primarily on effective therapeutic communication skills, crisis communication, and the management of the cycle of aggression and violence (Cahill, 2008). Findings show that after participating ACT-SMART, the ED experimental group (n = 56; 12) significantly improved their confidence in managing aggressive situations ($t = -6.416$, $df = 42$, $p = .001$; and $t = -3.307$, $df = 11$, $p = .007$). The control group (n =9) consisted of nurses who participated in basic trauma education showed no significant difference in mean scores (2.4 versus 2.4, respectively, $p = .602$). 25-30% of participants reported verbal aggression weekly. ACT-SMART improves nurses' confidence in managing aggressive situations and may be useful for improving the overall patient care</p> <p>Proper education and training provides potential to increase safety of nursing environment, improve patient and staff satisfaction, increase nurse confidence and self-esteem, and reduce moral distress associated with workman's compensation</p>	<ul style="list-style-type: none"> Small sample size, non-randomization Nonemergency nurse respondents' attempting to answer questions designed specifically for the emergency nurse 	III B
2	Nau et al., 2009	Cross Sectional and longitudinal pretest-posttest	Convenience sample N=78 (mean age=22) (10th to 28th month of nursing education)	Performance levels increased significantly from 2.74 to 3.65 as by trained students managing scenario A (untrained 2.50, trained 3.70; $p < .001$), and for Scenario B (untrained 3.01, trained 3.61; $p < .001$). No significant differences noted from pretest results irrespective to students' previous nursing education or age	<ul style="list-style-type: none"> First use of the DABS tool No control group 	II B
3	Roche et al., 2010	Cross sectional	2004 and 2006 Sample from 2 Australian	During the last 5 shifts worked approximately 1/3 nurses report they perceived emotional abuse. Variation with reports of threats (14%) or actual violence (20%), some	<ul style="list-style-type: none"> Self-reports of violence and measures of tasks not done or delayed 	II B

#	Author/ Date	Evidence Type	Sample & Sample Size	Results/ Recommendations	Limitations	Level & Quality Rating
			states consisted of 94 med-surge units in 21 hospitals selected at random (N=2,487) 80.3% response rate	wards reported rates as high as 65%. Violence was associated with unit operations, unanticipated changes in patient mix; and unit instability (lack of leadership; difficult MD, and RN relationships). Fewer reported perceptions of violence noted by higher skill mix of RN's with BSN degrees. Intent to resign from job position was associated with emotional violence but not with threats or assaults.	<ul style="list-style-type: none"> 7-day data collection period -may have missed some instances of falls or medication errors Patient adverse outcome rates low, which limited statistical power Data not analyzed on exact mix of case types by unit 	
4	Rosen, 2013	Expert Opinion	<input checked="" type="checkbox"/> N/A	Patient and visitor violence: what do we know? What can we do? <ul style="list-style-type: none"> Severity of workplace violence across a broad spectrum of healthcare settings Violence is unpredictable 16 homicides reported in 2011 113 occupational fatalities (U.S Bureau of Labor, 2012) 20 years of research demonstrate workplace violence requires a preventative framework within occupational safety and health in order to decrease the severity of workplace violence 	n/a	VA
5	Cowin et al., 2003	Quasi-experimental	ED participants Time 1 (n=30) Time 2 (n=33) Mental health care unit (MHU) Time 1 (n=21) Time 2 (n=19)	MHU within group differences over time: Results revealed a significant increase in de-escalation knowledge & awareness for MHU. A positive effect from the intervention of de-escalation poster & in-service education was evidenced by the total scale mean score increase from 48.07 to 49.73. ED within group differences over time: Overall a non-significant increase in de-escalation knowledge & awareness. Total mean score rose slightly from 41.18 to 42.43 indicating less change. A full time security officer was employed during the time of this study making it easier for nurses to have support during their shift. Sustaining and maintaining de-escalation and awareness over time is significant for future nursing research	Small sample size	II B

#	Author/ Date	Evidence Type	Sample & Sample Size	Results/ Recommendations	Limitations	Level & Quality Rating
6	McPhaul et al., 2013	Expert Opinion	<input checked="" type="checkbox"/> N/A	Addressing violence in healthcare must be a very specific and purposeful organizational process and emphasize the importance of workplace violence committees and workplace safety champions, as complements to effective regulation. Workplace Violence Prevention Frameworks based on national guidelines allows individuality if healthcare organizations to establish policy and procedures based on their own strategies for handling workplace violence.	n/a	VA
7	Richmond et al., 2012	Expert Opinion	<input checked="" type="checkbox"/> N/A	Agitation is referred to as an acute behavioral emergency requiring immediate intervention. Verbal de-escalation is considered best practice in evaluation and treatment of agitation per the American Association for Emergency Psychiatry Project Beta De-escalation Workgroup. Verbal de-escalation of an agitated patient can be effective within five minutes or less according to the best practices for the evaluation and treatment of agitation in the emergency setting as outline by the American Association for Emergency Medicine workgroup	n/a	IVA

#	Author/ Date	Evidence Type	Sample & Sample Size	Results/ Recommendations	Limitations	Level & Quality Rating
8	McLaughlin et al., 2010	Experimental Pilot Study	Convenience sample (n=18) Pre & post intervention of a verbal aggression workbook	Pre-Intervention focus group: Team feelings about verbal aggression include anger, humiliation, and powerlessness. It is believed verbal aggression occurrences are a result of poor communication, illness, and personality factors of the perpetrator. Most effective strategies for managing verbal aggression include ignoring it, offering a medication for agitation, and de-escalation. M=6 episodes of verbal aggression noted weekly by participants. Tolerance of verbal aggression (M=3) pre-intervention. More tolerance noted within the group (M=6) post intervention. Confidence in handling verbal aggression (M=2) pre-intervention. More confidence noted within the group (M=6) post intervention. Attitudes considering verbal aggression a part of your job shifted from M=7 to M=4. Training and use of verbal aggression de-escalation techniques can help staff become more aware of personal factors influencing verbal aggression situations allowing for more of a collaborative stance.	Small sample, Verbal Aggression Measure (VAM) Questionnaire is not a validated too but evaluation is in process	I B
9	Deans, 2004	Non-Experimental One group Pre-test post-test research design	N=30 ED nurses N=24 (80%) female N=6 (20%) male	Results show the workshop was significant for increasing participant's knowledge and understanding about the code of practice for managing aggressive situations in the emergency department (1, n=22) =4.18, p=0.04. Assisting participants to be 'aware of constraints that physical limitations have on own abilities to respond to aggressive situations (1, n=22) =5.88, p=0.05], and own physical limitations (1, n=22) =6.21, p=0.01]. It was not significant for 'team response to aggressive situations', p=0.30 and 'duty of care' p=0.54. In the past 3 months, aggressive situations encountered by staff was decreased from pretest (M=8.39, SD=11.3) to post-test (M=4, SD=3.45). This was not statistically significant [t(df=48) = 1.94, p 0.06] but is clinically significant. Results reveal a one-day training program can contribute to a decrease in violence episodes enhance nurses' ability to manage aggressive behaviors, and increase staff confidence. Violent episodes in the workplace may be decreased by 50%.	Small sample	III B

(Newhouse, Dearholt, Poe, Pugh, & White, 2005)

Appendix B: Permission Request

Hello Dr. Thackrey,

My name is Kim Ferrara and I am currently a student in the Doctor of Nursing Practice program at University of Maryland School of Nursing in the United States. Dr. Needham was kind enough to provide your email address. My scholarly project involves measuring nursing efficacy and attitudes with managing aggressive patients with de-escalation training. I found a survey in your journal article that would be an appropriate tool so I am requesting permission to use the Confidence in Coping with Patient Aggression instrument. May I please have a copy of the actual instrument? I am unable to get a copy of your actual article:

Thackrey, M. (1987). Clinician confidence in coping with patient aggression. Assessment and enhancement. *Professional Psychology: Research and Practice*, 18, 57–60.

I have only seen the instrument used in other articles such as:

Needham, I., Abderhalden, C., Zeller, A., Dassen, T., Haug, H., Fischer, J., & Halfens, R. (2005). The effect of a training course on nursing students' attitudes toward, perceptions of, and confidence in managing patient aggression. *Journal of Nursing Education*, 44(9), 415-420.

Thank you so much for your time,

Kim Ferrara, RN-BC, MS

Email: kferr002@umaryland.edu

Appendix C: Permission Granted

The screenshot shows an email client interface for the University of Maryland. The top left features the university logo and name. A search bar is located at the top right. Below the search bar is a notification banner: "Click here to enable desktop notifications for University of Maryland Mail. Learn more Hide". The main header area includes a "Mail" dropdown menu and several action icons (reply, forward, delete, etc.).

The left sidebar displays a list of folders: "COMPOSE", "Inbox (17)", "Starred", "Important", "Sent Mail", "Drafts (2)", "784 Informatics", "792 Teaching", "802 EBP", "804 Theory", "805 statistics", "807 Informatics", "810 policy (1)", "811 Capstone", "834 Translation", and "890 Practicum".

The main content area shows an email titled "Requesting permission" in the "Inbox" folder. The email is from Michael "Misha" Thackrey, PhD, dated Jun 10. The recipient is Kimberly Ferrara. The email body contains the following text:

Hello Dr. Thackrey, My name is Kim Ferrara and I am currently a student in Jun 10

to me

Thank you for writing.

You have my permission to use this instrument in the manner you have described.

Please do let me know of your findings.

Best,

Michael "Misha" Thackrey

Appendix E: Instrument (Thackrey, 1987)

Instructions:

This questionnaire is a series of questions about your personal levels of confidence with incidents of aggression and use of de-escalation techniques within the past month. Please be truthful about your answers for what your confidence really is, not what you would like for it to be. There are no wrong answers. All answers are anonymous and results will be compiled into a group verses individually.

Table 1 *Confidence in Coping with Patient Aggression Instrument*

Item											
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

Appendix F: Demographic Questions

1. Which category below includes your age
 - a. 18-20
 - b. 21-29
 - c. 30-39
 - d. 40-49
 - e. 50-59
 - f. 60 or older

2. Number of years of experience as a registered nurse on the unit
 - a. Less than 1 year
 - b. 1-5 years
 - c. 6-10 years
 - d. 11-15 years
 - e. 16-20
 - f. 21 years and greater

3. Indicate the number of years in current position
 - a. Less than 1 year
 - b. 1-5 years
 - c. 6-10 years
 - d. 11-15 years
 - e. 16 years and greater

4. Highest degree obtained
 - a. Diploma
 - b. Associate degree
 - c. Bachelor's degree
 - d. Master's degree
 - e. Doctorate

5. Please enter the number of violent episodes that you have personally experienced within the past month_____.

6. Did you use the Ten Domains of De-escalation tool
 - a. Yes
 - b. No
 - c. N/A (please choose N/A if this is the pretest)

If yes, please enter the number of how many times you used the Ten Domains of De-escalation tool _____.

7. Please choose each item that you have completed: (May have multiple answers)
 - a. Pre-test
 - b. Demographic Questions
 - c. Lunch and learn
 - d. Pre-recorded teaching session on-line
 - e. 15-minute real-time case scenario session. Number attended _____.
 - f. Post test
 - g. Evaluation

Appendix G: Permission Request

Hello Ms. Richmond,

My name is Kim Ferrara. I am a Doctor of Nursing Practice Student at University of Maryland in Baltimore, Maryland. I am currently preparing a scholarly project on de-escalation training for medical-surgical nurses. I am writing to you requesting permission to use the information provided in the following journal article for teaching of de-escalation techniques:

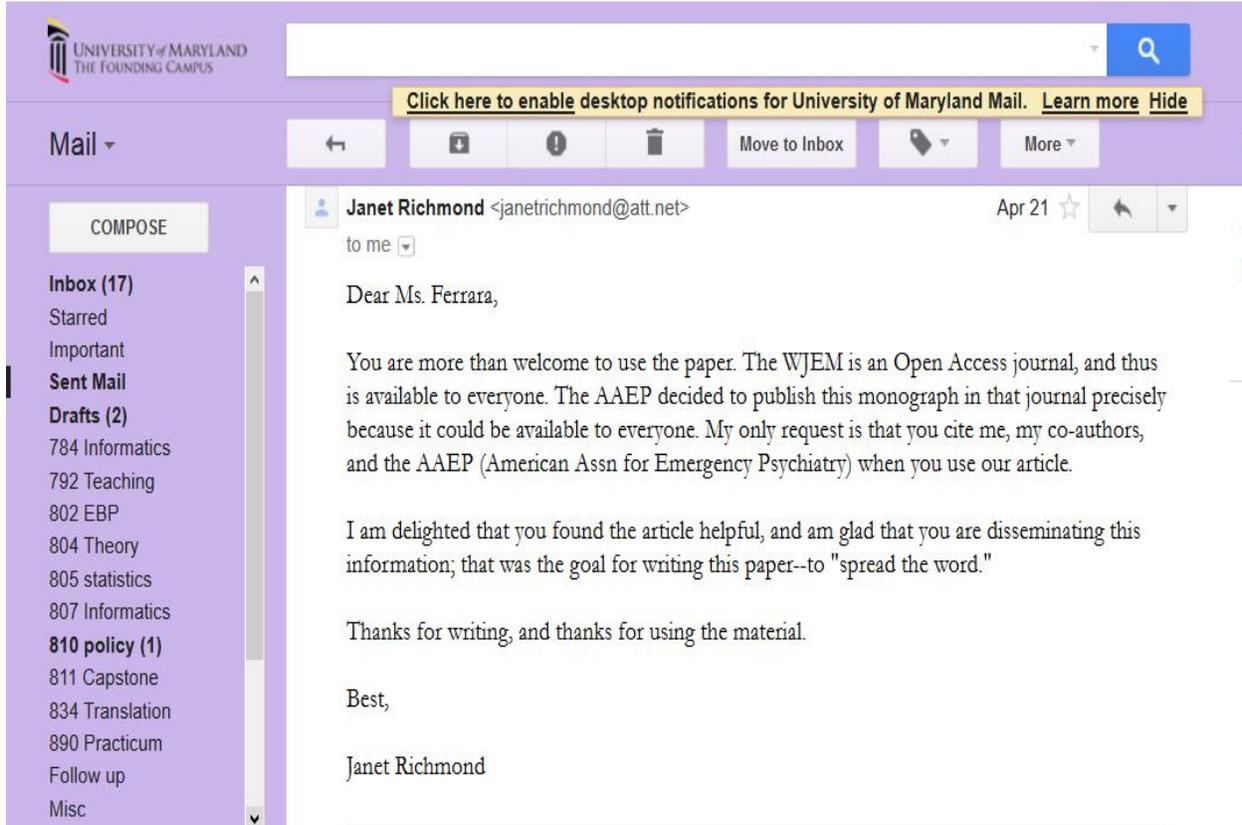
Richmond, J., Berlin, J., Fishkind, A., H, Zeller, S., Wilson, M., & Ng, A. (2012). Verbal de-escalation of the agitated patient: consensus statement of the American Association for Emergency Psychiatry Project BETA de-escalation workgroup. *Western Journal of Emergency Medicine*, 13(1), 17-25. doi:10.5811/westjem.2011.9.6864

Thank so much for your time and assistance,

Kim Ferrara, RN-BC, MS

Email: kferr002@umaryland.edu

Appendix H: Permission Granted



The screenshot shows an email client interface for the University of Maryland. The header includes the university logo and name, a search bar, and a notification to enable desktop notifications. The main content area displays an email from Janet Richmond to the user, dated April 21. The email text discusses the availability of a paper in the WJEM journal and expresses appreciation for the user's dissemination of the article.

UNIVERSITY of MARYLAND
THE FOUNDING CAMPUS

Click here to enable desktop notifications for University of Maryland Mail. [Learn more](#) [Hide](#)

Mail ▾

COMPOSE

Inbox (17)
Starred
Important
Sent Mail
Drafts (2)
784 Informatics
792 Teaching
802 EBP
804 Theory
805 statistics
807 Informatics
810 policy (1)
811 Capstone
834 Translation
890 Practicum
Follow up
Misc

Janet Richmond <janetrichmond@att.net> Apr 21 ☆ ↶ ▾

to me ▾

Dear Ms. Ferrara,

You are more than welcome to use the paper. The WJEM is an Open Access journal, and thus is available to everyone. The AAEP decided to publish this monograph in that journal precisely because it could be available to everyone. My only request is that you cite me, my co-authors, and the AAEP (American Assn for Emergency Psychiatry) when you use our article.

I am delighted that you found the article helpful, and am glad that you are disseminating this information; that was the goal for writing this paper--to "spread the word."

Thanks for writing, and thanks for using the material.

Best,

Janet Richmond

Appendix I: The Ten Domains of De-escalation (Richmond, 2012)

1. Respect personal space
 - a. Key recommendation
 - i. Respect the patient's and your personal space-at least 2 arm's lengths of distance away
 - ii. Hands visible and relaxed and stand in the supportive stance in the direction of an exit door for safety
2. Do not be provocative
 - a. Key recommendation:
 - i. Pay attention to your own body language
 - ii. A calm demeanor and facial expression are crucial
 - iii. A clinician must demonstrate that he/she will not harm the patient
 - iv. That he/she wants to listen, and wants everyone to be safe
3. Establish verbal contact
 - a. Key recommendation:
 - i. Only 1 person verbally interacts with the patient
 - ii. Multiple people interacting confuses the patient
 - iii. Introduce yourself to the patient and provide orientation and reassurance
4. Be concise
 - a. Key recommendation:
 - i. Keep it simple
 - ii. Repetition is essential to successful de-escalation
5. Identify wants and feelings
 - a. Key recommendation:
 - i. Use free information to identify wants and feelings from the things a patient says, body language, and/or past encounters with a patient
6. Listen closely to what the patient is saying
 - a. Key recommendation:
 - i. Use active listening (Give your full attention)
 - ii. Repeat back what he said to his satisfaction
 - iii. Use clarifying statements "Tell me if I have this right"
 - iv. Use Miller's Law: "To understand what another person is saying, you must assume that it is true and try to imagine what it could be true of"
7. Agree to agree to disagree
 - a. Key recommendation:
 - i. Agree with the truth: "Yes, she has stuck you 3 times. Do you mind if I try?"
 - ii. Agree with the principle: Patient complaining he was disrespected by the police...One should then state "I believe everyone should be treated respectfully"
 - iii. Agree with the odds: "There probably are other patients who would be upset also"
8. Lay down the law and set clear limits
 - a. Key recommendation:
 - i. Establish basic working conditions

- ii. Injury to self or others in unacceptable (consequence of arrest or prosecution may take place- communicate as a matter-of-fact way not as a threat)
 - iii. Limit setting must be reasonable and done in a respectful manner
- 9. Offer choices and optimism
 - a. Key recommendation:
 - i. Coach the patient in how to stay in control
 - ii. Use gentle confrontation: “I really want you to sit down; when you pace, I feel frightened, and I can’t pay full attention to what you are saying, I bet you could help me understand if you were to calmly tell me your concerns”
 - iii. Offer choices: Be mindful choices must be realistic offer things perceived as acts of kindness as well (i.e. blanket, cup of water, phone access, magazine, etc.)
- 10. Debrief the patient and staff
 - a. Key recommendation:
 - i. Restore the therapeutic relationship
 - ii. Explain rationale for the intervention
 - iii. Explore alternatives for managing aggression if it happened again: “What works when you are very upset as you were today? What can we/you do in the future to help you stay in control?”
 - iv. Teach the patient how to request a time out and express anger appropriately
 - v. Explain how medication can help prevent aggressive behaviors
 - vi. Debrief the patient’s family
 - vii. Debrief the staff

Appendix J: De-escalation Training

- 1) Managing Aggression
 - a) Aggression
 - i) is not tolerated
 - b) What is aggression?
 - i) An unprovoked attack
 - ii) Hostile behavior
 - iii) Can be verbal, physical or sexual
- 2) Why are we talking about aggression?
 - a) Healthcare settings are not immune from violence
 - b) Every department in the hospital is at risk
- 3) Staff Factors
 - a) What do you bring to the situation?
 - b) Are you the trigger?
- 4) Contributing Staff Factors
 - a) Tolerance of negative behaviors
 - b) Disrespectful attitude
 - c) Judgmental attitudes
 - d) Personal issues or prejudices
 - e) Job or life stressors
 - f) Emotional or family problems such as:
 - i) divorce
 - ii) depression
 - iii) substance abuse
- 5) Assessing the Risk for Violence
 - a) Does the patient....
 - i) engage in conversation
 - ii) follow directions
 - iii) respect boundaries
 - iv) have an anti-authoritarian attitude
 - v) have a history of violence
 - vi) respond to internal stimulus
 - vii) contract to act safely
 - b) If person is unable to be redirected or follow directions this is a Red Flag
- 6) Ten Domains of De-escalation
 - a) Respect personal space
 - i) Key recommendation: Respect the patient's and your personal space-at least 2 arm's lengths of distance away
 - b) Do not be provocative
 - i) Key recommendation: Pay attention to your own body language. A calm demeanor and facial expression are crucial. A clinician must demonstrate that he/she will not harm the patient, that he/she wants to listen, and wants everyone to be safe. Hands visible and relaxed and stand in the supportive stance in the direction of an exit door for safety.
 - c) Establish verbal contact

- i) Key recommendation: Only 1 person verbally interacts with the patient. Multiple people interacting confuses the patient
- ii) Introduce yourself to the patient and provide orientation and reassurance
- d) Be concise
 - i) Key recommendation: Keep it simple. Repetition is essential to successful de-escalation
- e) Identify wants and feelings
 - i) Key recommendation: Use free information to identify wants and feelings from the things a patient says, body language, and/or past encounters with a patient
- f) Listen closely to what the patient is saying
 - i) Key recommendation: Use active listening
 - ii) Repeat back to the patient what he said to his satisfaction
 - iii) Use clarifying statements as “Tell me if I have this right...”
 - iv) Use Miller’s Law
 - (1) “To understand what another person is saying, you must assume that it is true and try to imagine what it could be true of”
- g) Agree or agree to disagree
 - i) Key recommendation: There are 3 ways to agree with a patient
 - (1) Agree with the truth- “Yes, she has stuck you 3 times. Do you mind if I try?”
 - (2) Agree with the principle-Patient complaining the police disrespected him. One should then state “I believe everyone should be treated respectfully”
 - (3) Agree with the odds-“There probably are other patients who would be upset also”
 - (4) For hallucinations and/or delusions- Acknowledge you have never experienced what the patient is experiencing, but you believe they are having that experience
 - (5) If there is no way to honestly agree with the patient then agree to disagree
- h) Lay down the law and set clear limits
 - i) Key recommendation: Establish basic working conditions
 - ii) Injury to self or others in unacceptable (consequence of arrest or prosecution may take place- communicate as a matter-of –fact way not as a threat)
 - iii) Limit setting must be reasonable and done in a respectful manner
- i) Offer choices and optimism
 - i) Key recommendation: Coach the patient in how to stay in control
 - ii) Use gentle confrontation- “I really want you to sit down; when you pace, I feel frightened, and I can’t pay full attention to what you are saying, I bet you could help me understand if you were to calmly tell me your concerns”
 - iii) Offer choices-Be mindful choices must be realistic offer things perceived as acts of kindness as well (i.e. blanket, cup of water, phone access, magazine, etc.)
 - iv) Broach the subject of medication-
 - (1) “I see that you are quite uncomfortable. May I offer you some medication?”
 - (2) It’s important for you to be calm in order for us to be able to talk. How can this be accomplished? Would you be willing to take some medication?”
 - (3) “Mr. Smith, you’re experiencing a psychiatric emergency. I’m going to contact your doctor to order you some emergency medications”
 - (4) “I can’t let any harm come to you or anyone else” or “I need to protect you from hurting yourself or someone else, so I need you to take some medication to help you stay in control”

- (5) “Would you like to take the medication by mouth or a shot?”
- (6) “I feel medications can help you, would you like to take a pill you can swallow, a pill that will melt in your mouth, or liquid? If you agree to take a pill by mouth you can avoid taking a shot”.
- v) Be optimistic and provide hope
 - (1) Things will improve, they will be safe and regain control
 - (2) When a patient states “I want to get out of here” the clinician can respond “I want that for you as well; I don’ t want you to have to stay here any longer than necessary ; how can we work together to help you get out of here?”
- j) Debrief the patient and staff
 - i) Key recommendation: Restore the therapeutic relationship
 - ii) Explain rationale for the intervention
 - iii) Explore alternatives for managing aggression if it happened again
 - (1) “What works when you are very upset as you were today? What can we/you do in the future to help you stay in control?”
 - iv) Teach the patient how to request a time out and express anger appropriately
 - v) Explain how medication can help prevent aggressive behaviors
 - vi) Debrief the patient’s family
 - vii) Debrief the staff
- 7) Appropriate Interventions for Manipulative Individuals
 - a) Identify manipulative behaviors
 - b) Confront the patient with the manipulative behavior
 - c) Help patient accept responsibility for his actions
 - d) Set limits on inappropriate behaviors
 - e) Teach more effective ways to get needs met
 - f) Allow the patient to have some control, as much as possible. The more choices the better, the less need to manipulate
 - g) Be aware of your counter-transference so the patients’ care will not be compromised
- 8) Points to Remember
 - a) DO:
 - i) Be aware of your own feelings and reactions
 - ii) Be able to hear criticism without taking it personally
 - iii) Avoid condescending attitude or tone
 - iv) Be assertive but non-judgmental
 - v) Use rational detachment
 - vi) Allow silence
 - vii) The only thing you can control is your own behavior
 - viii) Your rapport or relationship with the person is the most valuable tool you have
 - ix) Always offer choices
 - x) Use “what if” thinking
 - xi) Take all threats seriously
 - b) Don’t:
 - i) Meet anger with anger
 - ii) Over react or under react to the situation
 - iii) Get into power struggle -argue
 - iv) Challenge or call their bluff

- v) Become defensive or insist you're right
- vi) Accuse the person of lying
- vii) Personalize statements
- viii) Make false promises

Appendix K: Case Study

Case Study 1

GF age 46 Caucasian male was admitted 2 days ago to the medical-surgical unit with broken femur status post motor vehicle accident. This patient has a medical history of ETOH abuse, HTN, esophageal varices, and chronic renal failure. Each nursing shift report indicates slight restlessness and anxiety. Routine pain medications have been given for comfort. During your shift, GF's restlessness and anxiety worsens to a panic state. Significant hand tremors and diaphoresis is noted despite the cool room temperature. GF has gotten out of bed, is yelling, "There are bugs on me", is swinging his arms in the air, and threw his food tray.

What do you suspect about this patient?

Acute Alcohol withdrawal syndrome

How could the Ten Domains of De-escalation been applied?

Case Study 2

ND age 26 African American female was admitted 3 weeks ago to the medical-surgical unit with a sickle cell crisis. Nurses were routinely giving pain medication for comfort; however, this was not meeting the needs of the patient. ND was frequently verbally abusive and verbally aggressive to the nurses (i.e. cursing, threatening). ND would threaten to give the poorest satisfaction surveys and is writing to the president of the hospital about how poorly she is treated in this hospital. ND would record each nurse's name in her journal each shift. In addition, ND would become physically aggressive by throwing her drink cups across the room when her needs were not being met. During her stay, she developed pseudo-seizures in hopes to gain negative attention from the nurses. Each time a nurse went into her room with her pain medication, after the medication was given the patient would have a pseudo-seizure after watching the nurse. ND was able to demonstrate that she had control over the pseudo-seizures because they would stop when nurses communicated to the patient that other patients needed to be attended to as well and warned of a behavioral plan.

How could the Ten Domains of De-escalation been applied?

Action Plan

Recognizing behaviors are because in pain

Address own biases

Identify patient's needs

Time consuming

Behavioral Plan

Case Study 3

MM age 89 Caucasian female was admitted for a change in mental status from an assisted living facility. The patient had become agitated and assaulted staff at the facility. This was new behaviors for this patient. The patient was sent to hospital awaiting a Geri-psych consult. During the first hour of her hospital stay, she became agitated on the floor. She kicked, hit, spit, grabbed hair, and threw water on her nurse. The charge nurse then called the psych department requesting help. The psych department immediately called security to report to the unit in need of help. When psych staff arrived to the patient's room, approximately 15 staff members were in the room (i.e. floor nurses, techs, charge nurse, and security). Some were laughing. The patient was already placed in 2-point restraints. Staff members continued to hold her legs and feet. Staff members reported that they did not want the patient to be in 4-point restraints because a sitter would be needed. The psych nurse took charge and directed staff members out of the room, the patient started to respond to the psych nurse's voice. One staff member got too close to the patient and was almost kicked in the head while in restraints. A second request for staff members to leave the room was made. Staff members would pop their head in the door to look at the patient from time to time. Once staff members were removed and the patient was medicated with Ativan 1 mg IV, the patient was able to calm down.

What could have been done differently?

How could the Ten Domains of De-escalation been applied?

Appendix L: Introductory Letter

Introductory Letter

To: All full and part-time Tower 1 RN's

From: Amy Alsante MSN, RN, CCRN, CHEP, Tower 1 Nursing Manager

Invitation to Participate in Implementation of
De-Escalation Training to Medical-Surgical Nurses

Dear Colleague,

As a clinical registered nurse, I would like to invite you to participate in a quality improvement project, using evidence-based practice De-escalation training techniques to help you in caring for agitated patients.

Description of the Quality Improvement Project

The purpose of this quality improvement project is to determine the effect of de-escalation training on medical-surgical nurses' self-efficacy in handling agitated patients. Although the positive impact of de-escalation has been demonstrated in psychiatric settings, the intent of this quality improvement project is to transfer those findings to clinical nurses who work on medical-surgical units.

Your involvement in the project will include attendance at education sessions to learn about de-escalation techniques and completion of a 10-question survey before and after the de-escalation training, a demographic survey, and an evaluation. These surveys will take approximately 10-minutes to complete.

The educational intervention consists of two 30 minute "lunch and learn" training sessions and 4 (15-minute) role-play sessions of patient case scenarios three times per week for six weeks alternating weeks for night and day shift. A recording of the lunch and learn presentation will be available to view on-line if you are unable to be present for the live lunch and learn session.

The lunch and learn sessions will be held on November 18th, 2014 on Tower 5 at 1100 and 2300.

This project is being conducted as a requirement towards completion of my doctorate in nursing practice (DNP) at the University of Maryland School of Nursing.

Risks and Benefits of Participation

The potential risk of participating in this project is the risk of psychological discomfort using the de-escalation techniques.

The personal benefits for participation in this project include the opportunity for you to gain confidence in handling agitated patients and the training may increase patient and staff safety. Refreshments will be served during the lunch and learn session and \$5 cafeteria cards will be provided for participation in the case scenarios. You may receive up to \$10 dollars in cafeteria cards for your participation in the case scenarios.

Confidentiality

Participation in this study is voluntary and you may withdraw at any time. You may leave the teaching sessions at any time. Your decision to not participate will not affect your employment or care offered by Medstar Health.

Demographic data related to your nursing experience will be collected without personal identifiers. We will ask for you to create a unique identifier (in Survey Monkey) to use for each survey in order to compare results pre and post de-escalation training. Your individual responses will be anonymous and confidential. No identifiers will be used when analyzing the data or in publications. Only group information will be prepared from the survey results. Survey Monkey has no personal identifiers and the investigator will be the only person who has access to the survey. Patient outcome measures are based on the perception of the respondents, no patient identifiers will be collected.

Consent to Participate

Attending and participating in any of the teaching sessions is interpreted as implied consent to participate in this quality improvement study.

Study Findings

The quality improvement findings will be shared with your unit once available.

Instructions for Participation

Please take the survey only once within the **next 2 weeks**. The surveys are available through the following links on Survey Monkey:

Pre- de-escalation training survey: <https://www.surveymonkey.com/s/L39HCM5>

Please complete all surveys before and after de-escalation training, participate in at least one lunch and learn session or watch on-line, and participate in at least one 15-minute session (you are welcome to participate in as many case scenarios as you would like. You will be reimbursed for your time for two case scenario sessions or for a total monetary value of \$10 in cafeteria gift cards).

An email will be sent out with the final surveys to be completed within 2 weeks of the final role-play session. This will take approximately 10-minute to complete.

Contact Information

If you have any questions about this quality improvement project, please contact Kim Ferrara at 443-506-5893 or kim.ferrara@medstar.net . Questions or concerns about research participants' rights may be directed to the Medstar Research Institute at 6495 New Hampshire Avenue, Suite 201 Hyattsville, MD 20783; (301) 560-2912.

Thank you in advance for your time and participation in this important survey.

Thank you for your consideration,

Kim Ferrara, RN-BC, MS, Doctor of Nursing Practice Student
Lead Investigator
Behavioral Health Service Line
Medstar Franklin Square Medical Center

Appendix M: Reminder Letter

Reminder Letter

To: All full and part-time Tower 1 RN's

From: Amy Alsante MSN, RN, CCRN, CHEP, Tower 1 Nursing Manager

This is a reminder that due to the frequent use of the Behavioral Health Emergency Rapid Response Team calls, this letter is requesting your voluntary participation to complete a 10-question survey pre- and post-de-escalation training and a demographic survey. The survey will take approximately 10 minutes to complete. Your individual responses will be anonymous and confidential. Only group information will be prepared from the survey results.

The de-escalation training will be provided by Kim Ferrara, RN-BC, MS Behavioral Health Service Line staff member who is currently a doctoral student in the Doctor of Nursing Practice (DNP) program at the University of Maryland School of Nursing. The educational intervention consists of two 30 minute "lunch and learn" training sessions using "The Ten Domains of De-escalation" key recommendations and 15 minute case study presentations. A recording of the lunch and learn presentation will be available to view on line if you are unable to be present for the live lunch and learn session. In addition, there will be one hour divided into four 15-minute teaching sessions available in the middle of the shift for reminders and role-playing of patient case scenarios once per shift 4 times per week for 6 weeks alternating weekly from day and night shift. A schedule fitting the unit needs will be posted.

Please take the survey only once within the **next 2 weeks**. The surveys are available through the following links on Survey Monkey:

Pre- de-escalation training survey: <https://www.surveymonkey.com/s/L39HCM5>

Thank you in advance for your time and participation in this important survey.

Thank you for your consideration,

Kim Ferrara, RN-BC, MS, Doctor of Nursing Practice Student
Lead Investigator
Behavioral Health Service Line
Medstar Franklin Square Medical Center

Appendix N: Post-Intervention Survey Letter

Post-Intervention Survey Letter

To: All full and part-time Tower 1 RN's

From: Amy Alsante MSN, RN, CCRN, CHEP, Tower 1 Nursing Manager

Thank you to everyone who participated in the de-escalation training sessions. This letter is requesting your voluntary participation to complete a 10 question post-de-escalation training survey and an evaluation of the content and presentation. These surveys will take approximately 10 minutes to complete. Your individual responses will be anonymous and confidential. Only group information will be prepared from the survey results.

Please take the survey only once within the **next 2 weeks**. The survey is available through the following link on Survey Monkey:

Post-De-Escalation Training Survey: <https://www.surveymonkey.com/s/W3YZYKZ>

Demographic Questions: <https://www.surveymonkey.com/r/B6PKMTR>

Evaluation: <https://www.surveymonkey.com/s/LFH27T8>

Thanks again for your time and participation in this important survey.

Thank you for your time,

Kim Ferrara, RN-BC, MS, Doctor of Nursing Practice Student
Lead Investigator
Behavioral Health Service Line
Medstar Franklin Square Medical Center

Appendix O: Evaluation

Thank you for participating in the training. In order to evaluate your experience and to plan for future nurse development and support, please take a few minutes and complete this evaluation form. We will use your comments as a guide for planning future trainings of this nature.

Using the following scale of 1 = strongly disagree and 5 = strongly agree, please evaluate the following statements:

	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
Content					
The presentation was pertinent to my personal or professional development.					
Time allotted for discussion was adequate.					
I learned something new and/or learned to think newly about this topic as a result of this training.					
The content will influence my actions in caring for patients.					
Presentation					
The presenter was well qualified and knowledgeable about the topic.					
The visual aids were used effectively and appropriately, carefully prepared.					
The role-playing contributed to my learning the necessary skills.					

EBP Tool	Extremely Dissatisfied (1)	Dissatisfied (2)	Neutral (3)	Satisfied (4)	Extremely Satisfied (5)
Please rate the ease of the Ten Domains Of De-Escalation Tool					

Additional Comments:

Appendix P: Time Line

Time line

Submit Capstone Proposal to committee members by 8/2014

Present Capstone Proposal to committee members by 9/2014

Submit project proposal to Institutional Review Boards for review by 7/2014

Conduct educational intervention and pre/post testing from 10/2014 to 11//2014

Analyze and evaluate data by 3/2015

Submit final Capstone report to Capstone committee for review by 4/2015

Present final Capstone report to committee by 5/2015

Appendix Q: University of Maryland IRB Exemption

From: CICERO@som.umaryland.edu [mailto:CICERO@som.umaryland.edu]

Sent: Monday, August 04, 2014 1:35 PM

To: Davis-Ajami, Mary Lynn

Subject: Research is Not Human Subjects Research

Not Human Subjects Research (NHSR) Confirmed

To: Mary Lynn Davis-Ajami

Link: [HP-00060997](#)

An IRB Analyst has reviewed the information provided and has determined that the project meets the definition of *Not Human Subjects Research* (NHSR). IRB oversight is not required and no further actions are required.

Description:

Submission Title: De-Escalation Training

POC: Mary Lynn Davis-Ajami

Please contact the HRPO at 410-706-5037 or HRPO@umaryland.edu if you have any questions.

Appendix R: University of Maryland IRB Exemption



6525 Belcrest Road
Suite 700
Hyattsville, MD 20782
301-560-7300 PHONE
301-560-7348 FAX
medstarresearch.org

Exempt Determination Notice Initial Review

24-Oct-2014

9000 Franklin Square Drive
Baltimore, MD 21237

Protocol Number: **2014-223**

PI Name: **Kimberly Ferrara RN-BC, BSN, MS**

Protocol Title: **Implementation of De-Escalation Training to Medical-Surgical Nurses**

Dear Kimberly Ferrara RN-BC, BSN, MS,

The above-referenced **Initial Review** submission was reviewed by **IRB # 2 Baltimore** in accordance with expedited review procedures on **22-Oct-2014**.

It has been determined that your study meets the criteria set forth in **[45 CFR 46.101(b), Category (2)]** and qualifies for exemption from the requirements of **[45 CFR 46]** federal regulations. In the event changes are made to the protocol, which may affect this determination, please submit documentation of this change for review prior to implementation.

Please refer to the Office of Research Integrity website to review the **Principal Investigator's Responsibilities** as a MedStar researcher on <http://www.medstarresearch.org/Body.cfm?id=243>.

If you have any questions, please contact me at 301-560-2979.

Thank you,


Ashlee Tidwell
Office of Research Integrity

Enclosure: IRB Stamped Recruitment Material
IRB Stamped Letter of Invite Consent Waiver
IRB Stamped Participant Education/Information Material

Appendix S

Table 2 *Demographic characteristics of participants (N=43)*

Demographic	<i>N</i>	%
Age (years)	34	
18-29	14	41.2
30-49	17	50.0
50+	3	8.8
Number of years in current position		
5 years or less	24	70.6
6-10 years	5	14.7
11+	5	14.7
Highest Degree		
Associate's Degree	17	50.0
Bachelor's Degree	15	44.1
Master's Degree	2	5.9

Note: 9 (20.9%) missing data from each demographic.

Table 3 *Violent Experience of Participants (N=31)*

Question	<i>N</i>	%	Range	Mean (<i>SD</i>)
Violent experiences in past month pre-implementation	31		0-5	.84 (1.44)
0	20	64.5		
1	4	12.9		
2	3	9.7		
3	2	6.5		
5	2	6.5		
Violent experiences in past month post-implementation				.61 (1.12)
0	20	64.5		
1	7	22.6		
2	2	6.5		
3	1	3.2		
5	1	3.2		

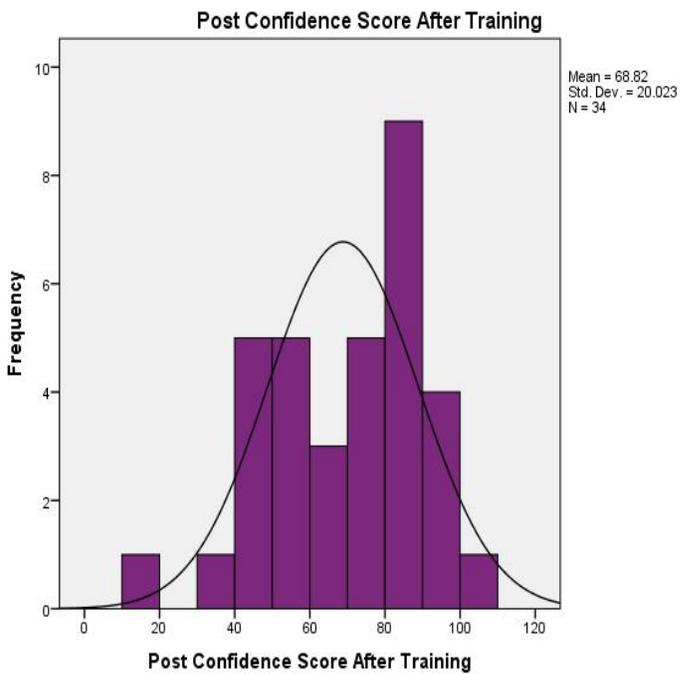
Note: 12 (27.9%) missing data from each question.

Appendix T: Pre- and Post-Test Confidence Histograms

Figure 1: *Pre-Confidence Histogram*



Figure 2: *Post Confidence Histogram*



Appendix U

Table 4 *Pre and Post-Test One-Sample T Test Results*

	<i>N</i>	<i>M (SD)</i>	<i>t</i>	<i>p</i>	95% Confidence Interval of the Difference	
					Lower	Upper
Pre-Test Confidence Score	43	54.53(20.03)	-.15	.880	-6.63	5.70
Post-Test Confidence Score	34	68.82(20.02)	4.03	.000	6.84	20.81

Appendix V

Table 5 *Confidence in Coping with Patient Aggression Instrument Scores*

Questions	Scale	Pre-Implementation (N=43)			Post-Implementation (N=34)		
		n (%)	Mode	Median	n (%)	Mode	Median
1. How comfortable are you in working with an aggressive patient?	1-3 Very Uncomfortable	8 (18.6)	3	3.00	2 (5.9)	4	4.00
	4-5	10 (23.3)			6 (17.6)		
	6-7	17 (39.5)			8 (23.5)		
	8-9	6 (14.0)			14 (41.2)		
	10-11 Very Comfortable	2 (4.7)			4 (11.8)		
2. How good is your present level of training for handling psychological aggression?	1-3 Very Poor	6 (14.0)	3	3.00	1 (2.9)	4	3.50
	4-5	15 (34.9)			6 (17.6)		
	6-7	17 (39.5)			10 (29.4)		
	8-9	2 (4.7)			13 (38.2)		
	10-11 Very Good	3 (7.0)			4 (11.8)		
3. How able are you to intervene physically with an aggressive patient?	1-3 Very Unable	7 (16.3)	2 ^a	2.00	2 (5.9)	3	3.00
	4-5	15 (34.9)			8 (23.5)		
	6-7	15 (34.9)			12 (35.3)		
	8-9	1 (2.3)			10 (29.4)		
	10-11 Very Able	5 (11.6)			2 (5.9)		
4. How self-assured do you feel in the presence of an aggressive patient?	1-4 Not Very Self-assured	7 (16.3)	3	3.00	3 (8.8)	4	3.00
	4-5	13 (30.2)			7 (20.6)		
	6-7	16 (37.2)			10 (29.4)		
	8-9	5 (11.6)			12 (35.3)		
	10-11 Very Self-assured	2 (4.7)			2 (5.9)		

Questions	Scale	Pre-Implementation (N=43)			Post-Implementation (N=34)		
		n (%)	Mode	Median	n (%)	Mode	Median
5. How able are you to intervene psychologically with an aggressive patient?	1-4 Very Unable	2 (4.7)	3	3.00	2 (5.9)	3 ^a	3.00
	4-5	15 (34.9)			6 (17.6)		
	6-7	19 (44.2)			11 (32.4)		
	8-9	4 (9.3)			11 (32.4)		
	10-11 Very Able	3 (7.0)			4(11.8)		
6. How good is your present level of training for handling physical aggression?	1-4 Very Poor	9 (20.9)	2	2.00	3 (8.8)	4	3.00
	4-5	18 (41.9)			7 (20.6)		
	6-7	12 (27.9)			9 (26.5)		
	8-9	1 (2.3)			12 (35.3)		
	10-11 Very Good	3 (7.0)			3 (8.8)		
7. How safe do you feel around an aggressive patient?	1-4 Very Unsafe	9 (20.9)	2	2.00	6 (17.6)	4	3.00
	4-5	15 (34.9)			8 (23.5)		
	6-7	13 (30.2)			8 (23.5)		
	8-9	3 (7.0)			11 (32.4)		
	10-11 Very Safe	3 (7.0)			1 (2.9)		
8. How effective are the techniques that you know for dealing with aggression?	1-4 Very Ineffective	11 (25.6)	2	2.00	2 (5.9)	3	3.00
	4-5	18 (41.9)			6 (17.6)		
	6-7	9 (20.9)			11 (32.4)		
	8-9	3 (7.0)			10 (29.4)		
	10-11 Very Effective	2 (4.7)			5 (14.7)		
9. How able are you to meet the needs of an aggressive patient?	1-4 Very Unable	7 (16.3)	2	2.00	2 (5.9)	4	4.00
	4-5	17 (39.5)			6 (17.6)		
	6-7	13 (30.2)			8 (23.5)		
	8-9	4 (9.3)			15 (44.1)		
	10-11 Very Able	2 (4.7)			3 (8.8)		

Questions	Scale	Pre-Implementation (N=43)			Post-Implementation (N=34)		
		<i>n</i> (%)	Mode	Median	<i>n</i> (%)	Mode	Median
10. How able are you to protect yourself physically from an aggressive patient?	1-4 Very Unable	8 (18.6)	2	2.00	3 (8.8)	4	4.00
	4-5	16 (37.2)			7 (20.6)		
	6-7	14 (32.6)			3 (8.8)		
	8-9	1 (2.3)			17 (50.0)		
	10-11 Very Able	4 (9.3)			4 (11.8)		

a. Multiple modes exist. The smallest value is shown.