Patient Safety Policies in an Acute Psychiatric Setting

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Doctor of Nursing Practice

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Abstract

This Doctor of Nursing (DNP) project focused on the problem surrounding the rising trend in patient aggression and violent incidents in an acute psychiatric setting. The purpose of the study was to identify the need for a change in policy and practice in order to prevent workplace violence in healthcare settings toward nurses, as well as to improve knowledge, awareness, and to implement a safety plan. The methods used in this study included a collaboration between nurses and key constituents to introduce the DNP project including planned strategies for safety intervention implementation. A pre-knowledge safety plan survey was given to the nursing staff and the results were used to plan trainings and in-service material regarding the new safety plan and policies. During the evaluation of the safety plan intervention outcomes, the results were determined by reviewing charts, post knowledge surveys, and data analysis interpretations. The results of the intervention indicated an increase in nurses' knowledge and awareness of the safety plan by 17% while incidents of violent behavior in patients reduced by 2%. In conclusion, the comparison between the nurses' pre-and post-intervention reviews showed an increase following the education intervention, and it resulted in a decrease in patients' violent behavior. Therefore, through changes in safety plan and policies, nurses gained insight to safely handle patients' violent behavior.

Keywords: safety, safety policy, aggressive and violent behavior, mental illness,

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Safety Policies in an Acute Psychiatric Setting

Workplace violence in healthcare settings was a complex topic in which aggression was sometimes expressed by patients toward those entrusted with providing their healthcare (Bresler & Gaskell, 2015). Psychiatric inpatients exhibit some of the highest rates of violence towards healthcare professionals, especially during forensic hospital treatment. This can be noted, for example, there was an increased risk of violent behavior by schizophrenic patients in the practice setting (Kivimies et al., 2014). Complex diagnoses, often with violent predispositions, forces healthcare workers to focus on preventing violent acts that may be intended for them or others in their care. This need often keeps healthcare workers from focusing on other aspects of patient care.

The awareness of an increased risk that may result in urgency for developing policies to safeguard healthcare workers and other patients during treatment. Therefore, collaboration efforts among healthcare workers, such as the Doctor of Nursing Practice (DNP) project, have been facilitated to provide a safe environment. The DNP project implemented quality improvement through change and development of safety policies and protocol in how to manage patient aggression and violence. According to Morrison et al. (2002), exposure to violence in the forensic psychiatric inpatient sector affects employees and has implications for the quality of care provided. Therefore, through changes in safety policies and protocols along with the DNP project, healthcare workers gained insight into safety methods and techniques for being well prepared to handle incidence of violence safely.

Background

The history of violence which can be documented in patients' medical records, and a diagnosis of schizophrenia or substance abuse, are known predictors of violence (Vaaler et al., 2011). Predictors of violence from patients' records can be reviewed prior to admission to

better prepare for potential violent incidents. Some of the common predictors of violence among forensic psychiatric inpatients can often be boredom, tiredness, or simply being in long-term inpatient psychiatric treatment. According to Bousardt, Hoogendoorn, Noorthoorn, Hummelen, and Nijman (2016), patients' inability to cope with rejection, disappointments or other undesired feelings, was also associated with a higher likelihood of becoming violent. Yet, it was the violence that often interferes with the treatment needed to help with the quality patient outcome.

Rideour et al. (2015) report that the healthcare workers are at risk of aggression and violence from patients in psychiatric settings. Hypervigilance and fear caused by experiences of violence impact the quality of care provided. Since experiencing these acts can result in the interference of care, considerable interest should thus be paid to minimizing or eliminating those variables that can cause fear and its effects (Bresler & Gaskell, 2015). It was not uncommon for those working on highly violent and unpredictable units to expresses safety concerns, by questioning what would happen to them if they were the next victim of violence. The disengagement of patient care reduces the adequate performance of job duties, which in turn, creates low staff morale (Bresler & Gaskell, 2015). Therefore, healthcare professionals have a good deal to lose, which only enforces the overarching goal of restructuring safety protocol.

Problem Statement

The problem in this DNP project was focused on the way in which healthcare workers can be instrumental in reducing the incidence of aggression and violence in the healthcare setting. Patients with psychiatric diagnosis may feel isolated. Daily routines of medication and treatment enforcement makes psychiatric inpatients more anxious and violent towards the treatment team. Patients' inability to cope with rejection, disappointment, or other undesired

feelings were associated with a higher likelihood of becoming violent while being mandated to an inpatient treatment setting (Bousardt et al., 2016). Poor sleep adds to patients' fears and frustrations and can attenuate emotional control. This can result in lack of regulation of aggressive acting out and thus, may increase the risk of impulsive, aggressive acts (PoKamphuis et al., 2014).

There was evidence that these incidents of frustration, aggression, and violence towards the staff by psychiatric inpatients may create an unsafe environment within the healthcare units at the site where this DNP project implemented, thus validating the concerns noted in literature. As previously noted, the staff who work with these patients often verbalize and report the unpredictable behavior of patients leading to a lack of safety. Through personal communication with staff on units were the DNP project implemented, unit or ward rules and structured environment schedules, such as meals, grooming and medication times, trigger patients to become uncooperative and hostile towards staff directing them (Simon, 2011). The rise in patient aggression and violent incidents reported through staff feedback has demonstrated a need for a quality improvement project to change safety policies and develop a protocol to help reduce the risk of aggression and violence towards staff and other patients.

Purpose Statement

According to Bemker and Schreiner (2016), developing an implementation plan that would be cost efficient and improved quality of outcome in the areas of patient satisfaction can reduce harm. An accurate risk prediction would facilitate the development of a violence prevention protocol that reflects policy based on current evidence preventative measures (Abderhalden et al., 2004). The purpose of the DNP project was to develop safety policies and create a safety plan which was designed to help nurses recognize common predictors related to potential aggression and violence among psychiatric patients. Empirical knowledge

of predictors of physical inpatient aggression may provide staff with tools to prevent violence or minimize its consequences (Bousardt et al., 2016).

The DNP project helped the nursing staff and other healthcare providers become familiar with current and evidenced-based practice-related safety policies and protocols. The DNP project was an effective source for healthcare worker safety, risk of violence, injury reduction, and for better patient outcomes. In addition, the DNP project benefited the staff who used the safety findings to obtain effective strategies for gaining insight into safety. The safety methods and techniques helped nursing staff and other healthcare worker to better prepare to handle violent incidents safely. The DNP project may also be helpful for future researchers about different situations and safety approaches.

Project Objectives

Objectives are measurable actions that result in goal achievement (Moran, Burson, & Conrad, 2017). The goal of this project was to implement safe practice policies and protocols within a forensic psychiatric inpatient practice setting. The following objectives are proposed in this DNP project to support this goal.

1. Develop a patient violence policy and protocol for implementation
2. Implement a safety training program for staff that address changes in policies and procedures for the management of patient violence
3. Evaluate the effectiveness of the policy, protocol, and program through chart review, surveys, randomized observation for appropriate application of the policy and protocol over the following three weeks post policy implementation.

Project Question

The project question helps the DNP student to define the phenomenon of interest. It also informs the reader about an issue, clarifies previous research or it can add to the body of knowledge already available (Moran, Burson, & Conrad, 2017). The project question was answerable using the PICOT approach. Utilizing PICOT format, originally developed to formulate answerable, researchable clinical questions, the project design, and direction became clear (Bemker & Schrinder, 2016). PICOT represents Population, Intervention, Comparison, Outcome and Time bound or timeliness. The PICOT tools were used to formulate the following project question: In the staff population (P), how does evidence-based policy and protocol (I), compare to standard care (C), and decrease the risk of violence (O), within three to four months in the project site (T)?

The project question remains unanswered until the goal attained. The DNP project question, reflects the PICOT question above: Will the implementation of an evidenced policy and protocol on handling patient violence within an inpatient forensic psychiatrist setting decrease the risk of violence? The DNP project helped with easily accessible-sources of patient information on risk of violence, and injury reduction among nurses and other healthcare workers. In addition, it better prepared for overall safety in the workplace. Hence, an identified project question needs the support of a scholarly evidence-based literature review.

Review Coverage & Justification

The goal of a literature review obtained a representative sample of the literature that describes the concepts related to the phenomenon of interest (Moran, Burson, & Conrad, 2017). In this search, various databases were used for the evidence review in order to support the project topic. The terms selected were safety, safety policies, safety practices, aggression

violence, and assault. The electronic databases for this search included CINAHL, EBSCOhost, ProQuest, Cochrane, PubMed/MEDLINE, as well Google internet/Google Scholar. The initial search yielded over 56 articles that appeared relevant to the project topic.

These articles clearly articulate adverse impact of aggression and violence by psychiatric inpatients, which raised safety concerns for nurses, healthcare workers, and the environment in which they work. When considering the topics of adult patient's self-injurious behavior, medical conditions and various psychiatric illnesses, behaviors not normally noted on the psychiatric units where the DNP project implemented were excluded. Therefore, terms that were not part of the literature review search include designations such as, skin lacerations, burns, rashes, weight gain or loss and eating disorders.

The focus of this search was to find scholarly literature that provides evidence that related to safety and the risk of violence and injury to the staff members when providing care for psychiatric inpatients. The literature review, directed toward the project topic, was helpful in developing safety policies and protocols for the nursing staff and other healthcare workers at the practice setting. In order to reach this goal, systematic reviews and previous research studies were evaluated for their content and appropriateness to this project. A comprehensive literature review provides evidence to defend a logical argument supporting the need for the value of the proposed scholarly project (Moran, Burson, & Conrad, 2017).

Review Synthesis

Research by Stevenson, Jack, O'Mara, and Legris (2015) described the experience of registered nurses with violent patients on acute care, psychiatric, and inpatient units. Data taken from a 12-month period demonstrated that almost one-third (29%) of the nurses in the study were physically assaulted, nearly half (44-55%) were emotionally and verbally abused, while others (19.5%) experienced sexual abuse. Psychiatric nurses report the highest violence

victimization rates for all types of nurses (Jonker, Goossens, Steenhuis, & Oud, 2008). Psychiatric nurses described patient violence through their personal experiences within the context of their inpatient work, and the information was gathered from semi-structured interviews thus providing a more holistic description that could support implementation of safety strategies in future clinical practice and policy (Stevenson et al., 2015).

Gross (2016), when citing the work of Seager, reviewed statistical information through state public records related to aggressive incidents, violence, and assaults that were reported in five state hospitals in California. Over 42% of the assaults reported, 11,000, were documented to be directed toward hospital staff. In addition, the data indicated that the violence toward staff was rising, as evidenced by workers' compensation claims in these facilities jumping from 289 to 519 when, comparing statistical data between the years 2013 and 2014. In many incidents, these noted assaults were reported and no immediate medical help was available. The Department of State Hospitals, updated safety training methods for new employees. In addition, laws have been updated to improve safety for healthcare workers. One noted change, as a result of these measures, was that healthcare workers now have the right to access patient's criminal history for violence risk assessment (California Legislative Information, 2014; Stahl et al, 2014).

According to Gross (2016), the focus was to bring awareness, in an effort to provide information supporting employees, to organizational administration of risks associated with the care of violent patients. This awareness could be used to support recommended improvements for decreasing the risk of violence and improve hospital safety. Gross (2016) indicated that injured and disabled health care workers usually do not return to work on the same units where the injury occurred. The Department of State Hospitals in California proposed such initiatives, having indicated plans to build enhanced treatment facilities, pilot

programs on measuring and monitoring of healthcare workers' aggression exposure, and develop policy and training for healthcare workers (Iennaco, Whittemore, & Bowers, 2013).

According to Iozzino et al. (2015), a meta-analysis on the behavior of 23,972 psychiatric inpatients was described in 35 studies. Of those considered in this investigation, 17% of a collective population of patients, have committed at least one act of violence. Almost one in five psychiatric patients admitted to acute psychiatric units, were more likely to commit an act of violence than a stable patient. A violent history, as a predictor at an individual level, could be a reason for a longer admission, longer period of violent risk, longer stay after admission, and may be associated with potential and exhibiting more serious forms of inpatient violence (Nielssen & Large, 2012). This in turn can increase the potential impact to healthcare workers, as their exposure to violence form these individual increases. As previously noted, the potential outcome from health care workers being exposed to patients with these tendencies can exacerbate negative emotional consequences, such as fear, anxiety and sleep disturbance (Bresler, & Gaskell, 2015).

In a study conducted by Short et al. (2008), a team of clinicians at Ohio Department of Mental Health, developed guidelines for injury-free management of psychiatric inpatients in pre-crisis and crisis situations. The guidelines focus on best practices of effective communication. The healthcare workers are not to use the word "no" when talking to patients, all responses need to be framed in a positive way, and need to be utilized while patients appear calm and controlled.

According to The Joint Commission's publication, National Patient Safety Goals for Hospitals Standards (2008), sound treatment design, intrinsic delivery of safe high-quality inpatient services supports the goals to decrease and eliminate staff injuries. By offering specific insights into policy and protocol related to violence noted in the healthcare

environment, this review of scholarly literature identifies methods and techniques in supporting the project topic and its aim (Moran, Burson, & Conrad, 2017).

Review of Study Methods

Stevenson et al. (2015) conducted an interpretive descriptive study on 12 Canadian registered nurses' experiences of patient violence on acute care psychiatric inpatient units. This qualitative study included face to face interview, surveys, and telephone interviews with the participants, which provided a rich description of nurses' narrative experiences (stories) with a violent patient. Thematic analysis assessment provided specific themes identified in this investigation. Key thematic representations include power and control, stigma, part of the job, and role conflict. For consistent findings linked to rise in aggression and violence, constant comparative criteria were used for analysis; specifically, the analysis of data was conducted utilizing criteria that included participants had past psychiatric history of employment.

Iozzino et al. (2015) conducted their study on prevalence and risk factors associated with violence in psychiatric, acute, inpatient, locked wards of general psychiatric hospitals in high-income countries such as Switzerland, Italy Sweden, the UK and USA. This meta-analysis reviewed approximately 17% of the collective population within 35 studies related to the topic. The study methodology conformed to preferred reporting of items for systematic reviews and meta-analysis guidelines such as exclusion of unpublished studies, abstracts from proceeding conferences etc.

Studies were identified through accepted search engines, such as PubMed and Scopus. Terms used for this search included, "violence" "aggression", "aggressive behavior" or "assault" other psychiatric illness, in psychiatric inpatient wards. The data were extracted on average beds in wards, lengths of stay, the number of patients committed to violence,

involuntary admission, psychiatric diagnosis, alcohol and drug abuse, and history of violence identified and included with higher representative of those noted rate of violence. The staff Observation Aggression Scale-SOAS was used for reporting aggression of verbal, physical and number of episodes by each patient. This study identified devised strategies to prevent and manage violence in psychiatric wards. Findings confirm some important considerations when evaluating potential aggression among the patient population for whom the staff are caring. Key variables to consider include patient age, diagnosis, the degree of psychiatric impairment, history of violence, and longer wait on being admitted.

Short et al. (2008) conducted a study at a behavioral health center located in the Midwest. The healthcare workers achieved a culture of safety through the implementation of positive and effective communication methods. The participants in the process were healthcare workers who directly interacted with psychiatric in-patients. These healthcare workers were interviewed and surveyed frequently and at least weekly for their input for effectiveness to update the guidelines. This descriptive methodology for investigation of the information and the criteria was established which was needed for the safety guidelines used in the psychiatric facilities with aggressive patients. The safety guidelines were based on eight elements of care associated with positive communication practice by all nursing staff and other healthcare workers over a four-year period, in a psychiatric patient setting. The outcomes of the safety guidelines resulted in a paradigm shift where the staff no longer found getting hurt on the job acceptable.

The evidence from this investigation indicated that overall violence and aggression decreased and reduced incidents by 90% (from 91 to nine; Short et al., 2008). The incidents recorded by the Occupational Safety and Health Administration (OSHA) decreased by 70% (from 40 to 9 incidents); loss of workdays decreased by 77% (from 22 to five incidents); use

of restraint and seclusions decreased by36% (from 301 to 191incidents); patient complains decreased by 37% (from 291 to 181incidents); and psychiatric codes decreased by 25% (from 346 to 259 incidents). The findings noted here support that safety guidelines reduced a rate of violence and aggression of psychiatric patients towards the healthcare workers. The review and synthesis of scholarly literature, methods, and techniques discussed above support and are clearly relevant to the project topic after the new practices were initiated (Short et al., 2008).

Significance of Evidence to Profession

The project focuses on the incidents of the risk of aggression, violence, assaults, and injuries towards nurses and other healthcare worker in a psychiatric inpatient setting. Safe care has always been a concern within the profession of nursing. Safety for both staff and patient remain a priority in relation to the work environment. As previously noted, this was especially true when addressing safety needs in a psychiatric facility (Stevenson et al., 2015). The literature clearly identifies the prevalence of aggression of psychiatric inpatients and the need for prevention was clearly indicated. According to Iozzino et al. (2015), there was a significant potential for violence within the psychiatric inpatient setting. Exposure to a violent environment can directly affect physical and mental health of nurses and other healthcare workers. Due to the nature of the problem, the safety of healthcare workers was a priority.

According to Bader and Evans (2016), existing literature on aggression in psychiatric hospitals suggests that treating an aggressive patient's symptoms could be complemented by (a) milieu environment that mitigates violence, and (b) hospital-wide policies and procedures that focus on creating a safe environment for self and others. This DNP project was used for quality improvement, through development, implementation, and assessment of policy related

to staff safety. The project was based on evidence, and the implementation of such was the foundation for positive change in health care and safety policies and development of a protocol to help reduce the risk of aggression and violence towards staff and other patients were the desired outcome (Bader and Evans, 2016).

Theory Identification & Discussion of Historical Development of Theory

Theoretical frameworks help in understanding forces that maintain current behavior and identify those that need to be modified in order to bring about change (Smith, 2001). The theoretical foundation that supported this project was that of Kurt Lewin (Lewin, 1992). The historical dynamics key to this theory was as follows. After the World War II ended, Lewin established The Research Center for Group Dynamics at the Massachusetts Institute of Technology (MIT) with an aim to investigate all aspects of group behavior, especially how it could be improved (Lewin, 1992). Being a strong humanitarian, he believed in resolving social conflict, whether it be religious, racial, marital or industrial; a human condition should be improved (Smith, 2001).

Lewin was focused on his theoretical perspective based on the interests noted in his doctoral degree and later his teaching efforts. His strong interest in groupings and social dynamics led to him developing a research center focusing on group dynamics at MIT. The overall aim of this research center was to investigate group processes and behavior. His theoretical perspective on learning and change evolved from this research. Lewin believed that by resolving social conflict, facilitate learning, enable individuals to understand and restructure their perceptions of the world around them. Group dynamics action research and the 3-step model of change are often treated as separate themes of his work. Lewin saw them as a unified whole with each element supporting others to understand and bring about

planned change, whether it be individual, group, organization, or even society. This belief led Lewin to develop the 3-Step Model of Change (Schein, 1999).

Grove et al. (2013) explain that theory consists of an integrated set of defined concepts, existence statements, and relational statements that can be used to describe, explain, predict, or control the phenomena. Lewin's Theory of Change affirms the understanding that it was possible to predict and provide basis for changing the behavior of individuals and groups (Burnes, & Cooke, 2013). Lewin's theory played a central part in his work by allowing him to understand undesirable behaviors, and to identifying those forces that would need to be either strengthened or weakened in order to bring about desired change in behaviors (Lewin, 1948). The role of this theory was to understand how particular social groupings were formed, motivated, and maintained. The role of action research and the 3-step model of change was to change the behavior of individual participant or social groups (Burnes, & Cooke, 2013).

The use of a change model may become an important tool for continuing education for evaluators or organizations as the beginning of a journey toward evidenced-based practice (EBP) demonstrating through projects in clinical settings. Lewin's Theory of Change was a classic or fundamental approach to managing change in a healthcare setting (Cummings, Bridgman, & Brown, 2016). Manchester et al. (2014) discusses the mechanism for EBP planners to anticipate the contextual effect as programs unfreeze their host settings, create movement, and become refrozen. Therefore, planning for contextual change appears equally important as planning for the actual practice outcomes among providers and patients. Lewin's theory was a positive impact directed towards nurses at practice site, via policy change and educating nurses.

Applicability of Theory to Current Practice

In the change process, relearning cognitively restructures one's thoughts, perceptions, feelings, and attitudes. The three components of this change theory are: Stage 1: becoming motivated to change (unfreezing); Stage 2: changing what needs to be changed (unfrozen and moving to a new state), and Stage 3: making the change permanent (refreezing). Lewin's Basic Change Model of unfreezing, changing, and refreezing was a theoretical foundation upon which change theory could be built solidly (Schein, 1999). For Lewin to apply the change model, the key concept was to accomplish human behavioral change among individual or group. According to Lin and Lee (2005), from the impacts of Lewin's change theory in current research healthcare institutions have constantly changed through application of Lewin's theory as a means to improve their quality of patient care.

There are complexities that arise, in part, from a health care culture resistant to the notion that health care providers are at risk for patient-related violence combined with complacency in healthcare settings (McPhaul & Lipscomb, 2004). The dangers arise from exposure to violent individuals combined the gap in strong violence prevention programs and protective regulations in current practices in healthcare settings. Such factors together within organizational realities, such as staff shortages and increased patient acuity, create an environment where lack of training, organizational support, and clear directions can lead to substantial barriers in today's healthcare workplace**.**

Lewin's change theory aided in understanding the enigma of the perpetrator and victim's relationship and barriers with preventing or successfully managing undesired behaviors. The DNP student devised changes to improve policies and protocols which eliminate practices that foster workplace aggression and violence among psychiatric inpatients utilizing Lewin's model as a frame of reference.

Discussion of Major Tenets of the Theory

Moran et al. (2016) state that a conceptual and theoretical framework was similar to a map. The conceptual framework guides all the important aspects of the project. The choice of theoretical framework was a key factor to the clinical experience (McPhaul & Lipscomb, 2004). When looking at Lewin's model from this perspective, it was important to note that Lewin developed a change model involving three steps: unfreezing, changing, and refreezing. The change process was understood through a represented and simple practical model. For Lewin, the process of change entailed creating the perception that a change was needed, then moving toward the new, desired level of behavior, and finally, solidifying that new behavior as the norm (Cummings et al., 2016).

Before a change can be implemented, it must go through the initial step of unfreezing. (Cummings et al., 2016). People can naturally resist change, and the goal during the unfreezing stage was to create an awareness of how the status quo, or current level of acceptability, was hindering the organization in some way. Former ways of thinking and behaviors, processes, people, and organizational structures must all be carefully examined to show employees how necessary a change was for the organization. Employees can become informed about the imminent change during the unfreezing stage and understand the logic behind its benefit. Therefore, the idea was that the more we know about a change and the more we feel it was necessary and urgent, the more motivated we are to accept the change.

Change was a process where the organization must transition or move into this new state of being (Cummings, Bridgman & Brown, 2016). This changing step, referred to as transitioning or moving, was marked by the implementation of the change. This was when the change becomes real. Subsequently, the following stage was when most participants struggle with the new reality. Uncertainty and fear, makes it the hardest step within this process.

During this phase, the participants begin to learn the new behaviors, processes and ways of thinking. The more they embrace the previous step the easier it was to complete the second one. Therefore, education, communication, support, and time are critical for participating employees as they become familiar with the change. Change was carefully planned and executed. Throughout this process, employees should be prompted of the reasons how the change benefited them once it's fully implemented (Cummings, Bridgman & Brown, 2016).

The third phase of the change model, referred to as freezing or refreezing, also symbolizes as the act of reinforcing, stabilizing, and solidifying the new state after the change. The changes made to the organizational processes, goals, structure, offerings, or people are accepted and refrozen as the new norm. The refreezing step was especially important to ensure that people do not revert back to their old ways of thinking or doing prior to the implementation of the change. Efforts must be made to ensure the change was bolstered into the organization's culture and maintained as the acceptable way of thinking or doing. Positive rewards and acknowledgment of individualized efforts are often used to reinforce the new state; positively reinforced behavior was likely be repeated (Cummings, Bridgman, & Brown, 2016).

Application of Theory to DNP Project

The theory that served as the framework for this project was Lewin's Theory of Change. According to Batras, Duff, and Smith (2014), changing behavior requires an understanding of the influences on behavior in the context in which they occur. This DNP project focuses on developing safety policies and protocols appropriate for the workplace in question. Specifically described here was a workplace's violence prevention measures with clear goals and objectives for preventing workplace violence. The existing safety components require standard reassessment and adjustment to changes occurring within an organization,

such as expanding a facility, changes in managers, patients, and employee training procedures. When developing workplace violence measures project, the DNP checked for applicable state requirements that address workplace violence.

This project leader learned from statistical data, daily reports, and meeting participation, the progressing trends and incidents of patient aggression and violence which impacts employees at the site for this DNP intervention. The project leader observed employees through daily healthcare practices and examine trends of perpetrator's relation to victim's possible complacency, under desired behavior, low morale, and unsafe patient care practices. The project leader observed for any knowledge gap in safety policies regarding safe practices while observing safety practices. Full support from leadership for the development of the safety policies combined with workers' involvement was critical for the success of the project. The DNP collaborated with leadership and spent time unfreezing the employees' beliefs through identify in the issues (Lin & Lee, 2005).

The project leader discussed with management any current indication of complacency, low morale and negative attitude toward change, and increasing trend in patient violence toward staff currently reported through reports, statistical data, records and staff surveys. Communication was one of the most important tools that can be utilized by management. Organizations can implement key communication strategies via team formation. The end result was the hope for an increased overall staff performance (Bucata & Rizescu, 2017). The management team can communicate the perceived benefits of the change in safety methods through policy changes. These changes were specifically focus upon identifying and eliminating and knowledge gaps in this area.

The staff understood the revised policies and protocols for violence prevention, and the rationale clearly delineated in the staff meetings to address these changes. Effective safety

policies support communication and understanding between management and employees (Bucata, & Rizescu, 2017). This change comes about when action was involved in the creation and operation of a workplace violence plan and achieved through regular meetings where dissemination and reinforcement of the new policies and procedures can be addressed as a team or via appropriate committee before and after this policy change. Staff comments and input was collected. Effective change begins when management and staff recognizes the need for workplace safety and health hazard prevention policies and protocols, using Lewin's model as a guideline for (Lewin, 1992).

This project leader ensured staff's awareness of workplace violence and of potential hazards through communicating current information. This was further reinforced through engagement in staff education and training regarding key elements of the new safety standards within the organization, and specifically how staff can protect themselves and their coworkers through established policies and procedures. The success of the safety policies implementation includes an evaluation plan. An ongoing, annual review of the outcome of safety policy and protocols its content, methods and the frequency of training was to build into the procedural assessment of this policy, and this was included in the executive summary to the organization. During the refreezing step, the DNP ensured the employees do not revert back to their old ways of thinking or doing as prior safety practices after the implementation of the change. Efforts were made to maintain safety change within the organization's culture including revising the weaker areas of service and quality (Kenward, Whiffin, & Spalek, 2017). Positive reinforcement was activated using verbal and certificate acknowledgment was provided for participation of individual or group.

Employers have the responsibility of reducing workplace violence and providing occupational health and safety standards to their employees (Stefanski, 2012). The employers

continued to evaluate employee safety and security measures as a means to determine such, as part of the overall successful outcome evaluation. The higher-level management reviewed the implemented interventions regularly and, with each mitigation of violent incident, to evaluate its success. Other responsible parties (including managers, supervisors and employees) also reevaluated policies and procedures on a regular basis to identify deficiencies and take corrective action. The unit management effectively communicate and share workplace violence prevention evaluation reports with all staff (Bucata & Rizescu, 2017). Any changes in the policies and protocols shall be discussed at regular meetings of the safety committee, or other employee groups. This was support ongoing review and utilization of the most current evidence to sustain these safety policies.

Aggression and Violence Prevention Plan

A workplace violence prevention plan offers effective approaches to employees to reduce or eliminate the risk of violence in the workplace (McPhaul & Lipscomb, 2004). The building blocks for developing an effective workplace violence prevention program includes within the guidelines noted in this work include, as applicable to the organizational, project site, the following:

(1) Management commitment and employee participation

a) Open communication

- New staff on the unit-orientation and mentorship as necessary
- Partnership on treatment decisions- strong communication bridge between staff working different shifts
- Team building activities-regular plans

b) Timely feedback

- Discussion on new safety policies-requires feedback on

standardized template in target time

(2) Worksite analysis

a) Predictors to aggression of violence checklist on

- Medication mismatch to diagnosis- reporting inconsistency
- Disagreement during group therapy- report any targeted threats or a plan
- Anniversary of crime- report as an alert
- Holidays frustration- report as an alert
- Loss of peer or friend support-report as an alert
- Return from court or conditional release program-report as alert
- Loss of rights or privileges-report as alert

b) Staff distribution and assignment during work hours

- Working alone with predictive patient/s-coordinate activities
- Escorting patient/s for appointments-coordinate with other units
- Staff on break, training, medicating, treating- reassign patient activities

(3) Hazard prevention and control

a) Searches

- Random searches of living and storage regularly-report outcomes

b) Safety alerts

- Communicate safety level-use figures magnets-report alerts

c) Media privileges

- Television shows, movies on violence- prevention and control

d) Health and safety rounds

- Consistency on rounds and report outcomes

(4) Safety and health training

a) Safety training

- Competency and compliance- remediation plans

b) Posters and signs

- New guidelines postings-rotate regularly

(5) Recordkeeping and program evaluation

a) Records and reports

- Safety outcomes and incidents-reviewed regularly

b) Committee meetings

- Verbal feedback through meetings- by attendance

c) Agenda and minutes-by reviewing

- Surveys and personal interactions
- Verbal responses on the safety plan benefits
- Pre-and post-survey questionnaires (see Appendix B)

Description of Project Design

The choice of design selected for this DNP project was quality improvement (QI) in nature and was based on a descriptive methodology of safety guidelines used in the psychiatric facilities with aggressive patients (Keys, Silverman & Evans, 2017). QI projects in health care encompass those efforts that seek to improve services for the future (Moran, Burson & Conrad, 2017). The choice of a quality model that was used in the DNP project was the Plan, Do, Study, Action (PDSA) model which includes the following.

Plan

In the practice setting, aggression and violence among psychiatric patients has been on the rise. The nursing staff provides direct care to these patients. Some of these nursing staff have been injured due to violent behavior of the patients. As a QI project, safety awareness and assault prevention training, and safety policies were reviewed and implemented with the nursing staff during an in-service training. The DNP student plans to change practice from perceived deficient planning to safety strategies planned to mitigate incidences of patient agitation and aggression.

The current patient care indicates increasing trend of aggression and violence among psychiatric patients towards the nursing workforce in the practice setting. The review of data on aggression and violence indicates 63 incidents or episodes of aggressive acts by psychiatric inpatients toward nursing staff reported within the last year, which was nine more incidents compared to previous year. The nursing supervisors of the units, the safety committee manager of the facility and stakeholders have validated on increasing violence in the facility.

In this practice setting, there was growing number of young and active patient population ranging in ages from early 20s to mid 40s, admitted for mental health treatment and rehabilitation. The monthly safety alert report indicates multiple incidents or episodes of aggressive acts and assaults by psychiatric patients toward the nursing workforce (Bader & Evans, 2016). There are number of reasons for increased incidents of patient assaults towards staff. First, there has been increased number of admissions of more aggressive and assaultive patients this year than the last year. Secondly, through random observations, newly hired nursing staff are often afraid of agitated patients because of lack of experience, fearing that they may be attacked and injured when handling such incidents. Other contributing factors

include: few patients are on long acting psychotropic, units are understaffed, lack of strategic patient stabilization planning antiquated and unsafe practices (such as interviewing violent patients alone), and staff who escort violent patients independently.

The nursing staff assessed for patient predictors, precipitating factors, triggers and safety alerts of the agitated patients. Often when a patient was agitated there was a lack of coordinated planning because the staff has minimal understanding of the patient's history due to the patient's chart and or computer station being occupied. The nursing staff reviewed safety policy; therefore, an easily accessible safety plan was designed to provide additional comprehensive safety tips for the staff. This helped the nursing staff learn ways to prevent assault and injury while taking care of aggressive and assaultive patients. The plan was to promote utilization of the safety plan including strategies identified for safety awareness and safe patient care practices. Introduction of a safety plan through safety policy design was for improving safety awareness among nursing staff (see appendix A).

Do

Nurses of the pilot units were given a pre-knowledge survey regarding their baseline understanding on the management of the combative patient. The safety plan was distributed on the units through a safety policy handout. The safety policy was reviewed through 20 to 30 minutes of formal in-services to the Registered Nurse (RN), Licensed Vocational Nurse (LVN) and Psychiatric Technician (PT) on the pilot units. The synopsis of safety policy was extracted into a safety plan and create wall posters was created and posted for easy access of safety tips to promote and maintain safe environment for the staff on the pilot units. The safety policy review, training and education was also implemented through formal in-services during new employee orientation and annual mandatory education.

Study

The result of the safety plan and in-services was reviewed using the information from technology support services. The project lead reviewed the outcome for the number of incidents of patient aggression and violence towards nursing staff. Pre-and-post knowledge on the safety plan and formal in-service was reviewed through conducting survey with the unit nursing staff. During the implementation and evaluation phases, the privacy of information for the participants shall be maintained.

The project lead collaborated with the safety and IT departments to access the current data. The evaluation was conducted on the safety progress by reviewing the reported number of aggressive and violent incidents reported toward the nursing staff. The incidental reports were reviewed to determine improvement in the reduction of episodes of aggression and violence toward nursing staff. The safety committee's monthly agenda was reviewed for progress development. The project lead utilized statistical analysis of the quantitative information collected. The project mentor continued to guide and support with project development. The Touro University Nevada statistician assisted with statistical techniques and outcomes.

Act

Safety outcomes indicated that the DNP project has been effective for improvement in safety for the nursing staff. The improvement action plan was continuously maintained by posting laminated safety posters on each unit as well as encouraging staff to review risk assessments and safety policies. The goal of this project was to improve employee safety without interfering with therapeutic milieu and reduce employee injuries during care of violent patients. The safety policy and plan information was disseminated to the stakeholders through weekly project committee meetings. The plan was executed with the help of the

stakeholders and logging reports on the number of violent incidents. The in-services helped the nursing staff become familiar with the current and evidenced-based, practice-related safety policy. The safety methods and techniques helped nurses to be better prepared for safely handling of violent incidents. Incidences of aggressive acts and violence towards unit staff are documented on special incident reports which are uploaded on the practice setting intranet where the data was collected and analyzed. The project leader collaborated with the IT department for assistance in accessing incident reports to review the categories on verbal and physical assaults towards others.

The primary goal of the safety plan was to establish and maintain an optimum level of safety in the workplace. The following safety plan was included in the safety policy. The project lead provided the updated safety policy to the unit managers and nursing mentors and was reviewed with unit staff. The unit staff signed an attendance sheet upon completion of the safety policy review and 20 to 30 minutes of formal training. A laminated copy of the safety plan was also distributed in the units. Upon completion of review of safety policy and plan, the data on patient aggression and violence through incident reports were reviewed again in four to six weeks to determine the safety plan effectiveness. This safety plan implementation helped unit nursing staff by providing them a uniform approach to assessment, intervention, and treatment when handling violent psychiatric inpatients.

The aims of Lewin's change theory in application are improving safety, relearning of thoughts, perceptions, feelings, and attitudes (Lewin, 1992). There are three components of this change theory. Stage one was becoming motivated to change (unfreezing); Stage two: changing what needs to be changed (unfreezing and moving to a new state); and Stage three: making the change permanent. During stage one, the safety policy was reviewed and completed with formal in-services with nursing staff completed. For stages two and three the

nursing staff actively followed this safety plan during care of all patients. The stakeholders (unit managers, mentors, and trainers) assisted, supported and encouraged staff to continue to review the safety information from the safety policy and the laminated posters.

The healthcare workers embraced a culture of safety through implementing positive and effective communication methods to reach their desired outcome (Short et al., 2008). The safety guidelines should be associated with proactive and positive communication practices and care by all nursing staff. The outcomes of the safety guidelines were resulted in a paradigm shift when the team no longer found getting hurt on the job as acceptable. The standards compliance auditors and stakeholders uploaded the incident report data on the electronic database, which assisted in the evaluation review process and the time needed to be actively involved in the change processes (Hughes, 2008). The DNP student met with the policy committee regarding the safety policy and obtain administration approval for implementation on the units of the practice setting.

The DNP project promoted the safety plan through safety policy which was designed to help nurses recognize common predictors related to potential aggression and violence, be aware of patient's history of trauma and enhance effective communication (what, when, when, how, who and why) with patients. The project also helped them communicate with the clinical staff, locate psychiatric emergency equipment and collaborate with the treatment team. An empirical knowledge of safety plan provided staff with tools to prevent violence and minimize its consequences.

Population of Interest

The population of interest in the DNP project was the nursing staff which includes RNs, LVNs and PTs who provide direct patient care on the units for over six to seven hours a day. Incidents of patient aggression and violence are higher among nursing staff. The focus of

the safety policy was reviewed with the population of interest on each unit. Nursing staff on the pilot units was an inclusive population because they are working with patients around the clock. The safety policy was a QI initiative for the pilot units and the in-service and training was mandatory for the nursing staff.

Setting

The healthcare setting selected for the safety plan was a state psychiatric hospital. The patient population consists of forensic psychiatric inpatients. An expected time frame of stay for patient treatment in this setting varies. Patients in this setting are mainly admitted for psychiatric evaluation and treatment and trial competency training. There are 50 patients on each unit. The unit space for 50 patients was considered "crowded" according to the patients and expert agencies (Bader & Evans, 2016).

Stakeholders

Engagement of facility stakeholders creates knowledge in certain conditions mainly related to the management style of the project manager with his or her experience and expertise (Lehmann & Rousseau, 2016). The project leader met with the psychiatric nursing director and standards of compliance department regarding permission to implement the DNP project in the practice setting. The results from the meeting have been productive, and the outcome of the meetings was to move forward with the plan. The project leader actively collaborated with stakeholders through various methods, such as individual meetings, group contact, email, phone calls, letters, and discussion, around the importance of the safety plan and progress of the DNP project to help improve safety in the units. The stakeholders included administrative staff, nurse educator, mentors, auditors, nursing professionals, project mentor, unit managers, unit nursing staff and the safety department.

During the project implementation and evaluation phase, the data gathered for such events was considered highly personal and sensitive. Careless handling can cause a loss of privacy and affect personal data (Costa, Andrade, & Novais, 2013). The project leader met with the project mentor, stakeholders, course instructor, and academic mentor to seek guidance when conducting activities, while maintaining privacy and confidentiality of participants' data information and technology procedures. Responsible methods were exercised to protect the confidentiality and privacy of the participants (Smith et al., 2017). The following individuals are considered to have an interest in this DNP project and are stakeholders of this project helped with advertisement of the safety plan using inter-hospital intranet, email and standard mail. These individuals include, administrative departments such as the Psychiatric Nursing Director, Standards Compliance Manager, Project Mentor, Safety Manager and Information Technology Director. The safety policy was distributed by the assistance of the managers and mentors on the units. The project leader was conscientious of appropriate incentives, when indicated. According to Taylor-Piliae and Froelicher (2007) providing incentives, creates excellent communication, personal attention, encouragement, and attendance of the audience.

The major aim of this DNP project improved the management of violent patients which was implemented through updated safety policies. The administration forwarded the plan to the unit management through inter-hospital mail and electronic services. The unit management with the help of mentors and lead nurses reviewed the new safety policy with the unit nursing staff. After the evaluation, the project lead aligned with the respective departments to provide a certificate of achievement to the pilot units. Any additional incentives, cost, food or snacks was taken care of by the project leader.

Tools/Instrumentation

Various studies suggest that it was beneficial to develop instruments and protocols that are tailored to the unique needs/experiences of collecting data (Simmons, Whalley, & Beck, 2014). A variety of tools and instruments were used for implementation and evaluation of the following project. The updated safety policy was distributed through inter-hospital mail and intranet. During training the nurse educator provided a hand out on safety plan to each member of the nursing staff. The safety plan in-services were conducted using handouts and PowerPoint presentation. During the DNP project development, various data bases have been used to collect pertinent data related to incidences of violence. The pre-and post-knowledge questionnaire were conducted with unit nursing staff.

The project leader selected a tool with 12 questions in the original format, and all 12 items were used in the questionnaire on administrative policy and procedure for assessing pre-and-post knowledge of the nursing staff regarding workplace violence prevention program in a practice setting. The author's permission to use the pre-existing tool has been secured. In discussion with Peek-Asa et al. (2009), through email, the validity and reliability of the tool were assessed to ensure fidelity and trained staff until less than a 5% error rate before using the tool. The site assessors were trained on the tool until they had a consistent and replicable interpretation of the items. The training was completed before the tool was used in the study because the assessment was against a gold standard metric which was the objective.

The project lead provided in-services training on the safety policy and safety plan. The project leader met with an auditor to collect data from the incidental reports for the number of incidental episodes of patient aggression and violence towards staff on the units. Additional data was reviewed by project leader in the patient charts where a patient's current

progress was documented as an ongoing treatment and evaluation. The course instructor, academic mentor, and project mentor continued to guide the project lead and support the project development. The Touro University statistician assisted with statistical techniques and actual outcomes.

Data Collection Procedures

During the evaluation phase, the project lead maintained privacy of information by de-identifying names of participants, date of birth, and other personal information when collaborating with training department, standards of compliance departments, and electronic services using intranet and wellness and recovery model support system (WaRMMS) for updated data from incident reports at the practice setting. On-going progress and the positive impact of the safety plan was reviewed and any pertinent information was collected from the stakeholders by meeting with them weekly and as needed. Gathering research data following these methodologies often requires preparing situations, tasks, or activities that engage participants to interact with a specific theme or to mobilize specific communication skills (Canals, 2017).

The objective of the project was to encourage the use of institutionally-endorsed solutions to promote a safety and violence prevention plan. Based on outcomes shared in meetings of a team of stakeholders, preliminary results indicate that attitude was the crucial element which was addressed in designing intervention strategies to modify behavior (Hickson et al., 2016). When evaluating the results of this safety plan, the project lead met with nursing professionals weekly and as needed, to communicate progress, impact, and outcomes of the implementation and evaluation. The project lead reviewed and collect progress reports by attending safety committee.

The project leader maintained privacy information of the participants, and collaborate with the safety department and technology departments to access the current data. The evaluation was conducted on the safety progress by reviewing the number of incident reports. The inclusive categories of patient aggression and violence review included physical, verbal and written be on aggressive acts. The review and analysis of the data disclosed positive outcomes. Implementing the safety plan (Appendix A), the DNP project outcomes on the safety of the staff increased and the objectives of the DNP project was met.

Intervention/Project Timeline

Managing a DNP project includes the guiding of the participants and stakeholders, processes, time necessary to complete the project, and answering the project question (Bemker & Schreiner, 2016). The DNP project conducted at a psychiatric hospital with a focus on implementing safety measures to staff members that provide patient care. The project timeline activities include: building close working relationships with key stakeholders, obtaining IRB approval, weekly project team meetings, implementation of new safety program and continual evaluation and a staff communication plan. The anticipated project timeline was approximately four to six weeks. The week by week plan was as follows.

Week 1

The project leader set up a meeting with the key stakeholders to introduce the DNP project and plans for the intervention implementation. The project leader arranged meeting with key stakeholders, including administrative director and explain the details of the project. During this week, the project lead began initial preparations on data gathering tools. Maintaining confidentiality and protection of the personal and private information of the participants, the safety plan was distributed to the stakeholders for review.

Week 2

The project leader reviewed feedback provided by stakeholders and complete a final revision of the safety plan. A weekly update was coordinated to discuss the project status with project team which includes project mentor, content expert, academic mentor and the project instructor. Emphasis was placed on incorporating input and feedback from the project team and stakeholders and discuss the importance of inclusions and exclusions of elements in the safety plan.

Week 3

The project leader set up a meeting with the managers of pilot units, nurse mentor, nurse educator and information technology director to discuss safety plan details and in-services. The project leader conducted pre-knowledge survey on safety plan with the nursing staff. During this week, the project lead finalized the safety plan PowerPoint presentation, prepare handout materials, display wall posters, and began providing 20 to 30 minutes in-services of the safety plan to the nursing staff of the pilot units.

Weeks 4-5

The project leader observed interaction with nursing staff to determine if training provided was being practiced. The project leader also monitored incidental reports involving patient violence to determine factors leading to violence and actions taken by staff members. Reports of unit observations and incident reports were presented to the project team for analysis and recommended actions or modifications to safety program. The project leader continued to conduct unit observations and incident report audits and report findings during project team meetings for recommended actions or modifications. The project leader conducted post-knowledge survey on safety plan for the nursing staff.

Week 6

The final evaluation of the safety plan dissemination, intervention, and outcome, and results determined the effectiveness of the intervention through reviewing charts, post knowledge survey, and data analysis interpretations. The safety policy was reviewed through in-services on the pilot units to promote awareness of safety for nursing staff during patient care.

Ethics/Human Subjects Protection

The project leader has taken precautions to ensure ethical standards and human subject protections are in place. The role of the nurse leader was to protect ethical project implementation as one of the core competencies in nursing practice (Chao et al., 2017). During the project implementation, the project leader ensured the rights and welfare of the participants as well as meet ethical and regulatory requirements of the practice setting. The project leader protected all participants' information by using code numbers or aliases. According to Tsan and Tsan (2015), institutions conducting research involving human subjects establish protection programs essential to determine research to achieve these objectives.

The institutional review board (IRB) was determine the variability of the project for less than a minimal risk. The current project was a QI initiative and was designed in a manner which excludes direct patient population involvement. The following QI initiative was achieved through implementing a safety policy for the nursing staff in the practice setting. The IRB was important for guidance of the investigators and reviewers to improve the efficiency with which the DNP project would facilitate this type of practice-based clinical outcome (Tzeng, Wu & Hsu, 2015).

The participants perceived multiple benefits from the implemented project through learning new techniques and strategies for safe work practices. This implementation enhanced safety awareness and prevent potential staff assault and injuries. The review of safety policy ideally created a safer working environment during management of assaultive patient care.

The project leader determined an appropriate level of compensation or incentives to motivate participation. The QI project implementation, preferred level of compensation and incentives were achieved through offering snacks and beverage cards for the supporters and the nursing staff for completing the safety policy review, in-services and completing surveys (Turnbull et al., 2015). The plans for compensation or incentives may be useful in capturing respondents' attention and engage them to participate actively and reap the benefits from the safety training and intervention. The project leader ensured privacy preservation in the practice setting by utilizing unique identifiers to replace any identifiable information of the persons to fully protect sensitive information confidentiality (Schmidlin, Clough-Gorr & Spoerri, 2015). This method was suitable not just for incidental reports but also for any of the participants.

Plan for Analysis/Evaluation

The statistical analysis test selected to evaluate the impact of the interventions on safety of the nurses with high scores and the statistical significance of safety awareness, safety preparation, practitioners commonly see this particular behavior in (a) those patients who became violent, and (b) those who did not become violent. A non-parametric t-test such as the Mann-Whitney test comparing those who became violent from those who did not. The behaviors with a significant difference ($P<0.05$). The intended outcomes would indicate decrease in reduced assaultive incidents and improved confidence and job satisfaction among

psychiatric nursing staff, promoting positive and effective patient care as a response to the interventions.

The pre-and post-knowledge survey scores within the individual to control for the variations among individuals. This was analyzed using a Mann-Whitney test, which also refers to repeated measures used when group of independent and dependent variables indicate data output on two different occasions or under two different conditions (Pallant, 2016). Using statistical analysis, the project leader for the DNP project was implement interventions to support the nursing staff in reducing patient related aggressive and assaultive incidents and promoted safety improvement during patient care.

Significance/Implications for Nursing

The systematic quantitative review was identified current knowledge and effects of training interventions for managing patients' challenging behavior. According to Young et al. (2017), the process evaluation results provided contextual information about intervention implementation and delivery with which to interpret other aspects of the program. The evidence-based training interventions that focus on safely managing the challenging behavior of patients were observed and evaluated.

The significance of the DNP project intervention was assessed for the participants' attentiveness to education and training on the safety policy and safety plan. The nursing staff from the pilot units were followed through with in-services and completion of safety policy training. The participants also self-reported on instances of improvement in patient care as a function of their training and experience. The findings on the incidental reports included changes in the number/types of patients' interpersonal interactions during care and counseling practices. The project leader observed for significant results of nursing staffs'

frequent and safer involvement in patient education, team collaboration, documentation, and other service changes.

The delivery of staff training to address current patient-related violence and aggression identified needs for additional training for the nursing staff. According to Tölli et al. (2017) the individuals need to evaluate staff competence in managing challenging patients' behavior. In relevance to clinical practice, the nursing staff who received adequate training would consider the training relevant to their working situations. The nursing staff who frequently care for assaultive patients were address the lack of staff safety to the organization and management and suggest safety policy review and training needs (West, Galloway, & Niemeier, 2014). The review of updated safety policies promoted safety awareness, staff confidence, and staff support during care and incidents of aggressive, assaultive acts directed by psychiatric inpatients.

Analysis of Results

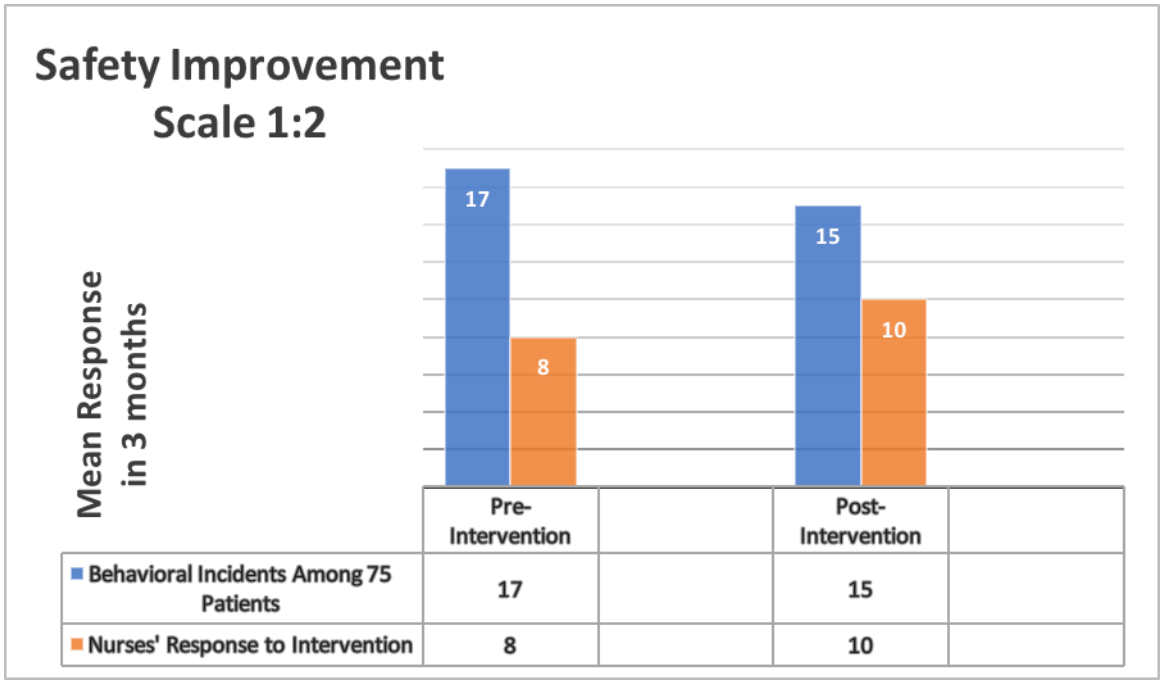
The QI project was expected to promote safety and awareness at a practice site by implementing a safety policy and a training in-service to staff. The data analyzed included knowledge questionnaires, and electronic health records. Both parametric (t-test, Pearson) and nonparametric (Mann-Whitney U, Chi Square) statistical were used to analyze the data. According to Bemker and Schreiner (2016) descriptive statistics consisted of raw proportions for each of the variables pre-and post-interventions. Questionnaires were stratified by individual categories. The post questionnaires were used to assess the data which was consistent with changes in behavior, knowledge and attitude of the participants (Fernández-Morano et al., 2015). The evaluation of the intervention used qualitative and quantitative data to analyze the findings.

Based on the findings there was a total of 17 incidents of patient violence directed toward other individuals; with 11 of those incidents reported on Unit A and six incidents reported on Unit B. A pre-and post-questionnaire was used to measure the understanding of safety plan policy. The analysis of variables used a Wilcoxon signed rank test to evaluate the effect of the training intervention. The results of the pre-and post questionnaires linked the pre-test scores with the post-test scores to control for variation among individuals.

There was a total of 15 reported incidents of violence directed toward other individuals, in which 10 of those incidents are reported on Unit A and five reported on Unit B, which was also indicated on table-1. The reported incidents of violent behavior reduced from 22% to 20% following an educational intervention. This was a decrease by 2%. The pre-and post-questionnaire was completed by 12 participants. The results from the questionnaires indicated that there was an increase of knowledge, awareness and training among 10 participants on the safety policy and safety plan from 66% to 83%, with one participant scheduled off work and unable to attend and one participant was a no-show. The results of the pre-and post- questionnaire showed an increase of 17% following the implementation of the safety policy and safety plan. Based on the pre-and post chart reviews the following table showed that there was an increase of the nurses' knowledge and awareness of the safety following the education intervention.

Table-1 Safety Improvement

Pre-and post intervention over 3 months	**Behavioral Incidents of among 75 patients**	**Safety Policy Updates**	**Knowledge & Awareness of Among 12 Nurses**
Pre-Intervention	17 (22%)	2014	8 (66%)
Post-Intervention	15 (20%)	2018	10 (83%)
Improvement	2 (2%)		2 (17%)



The data analysis used IBM Statistical Package for Social Sciences (SPSS), version 25.0 software to evaluate outcomes of the awareness questionnaire results regarding the familiarity of the safety plan and preparedness for patient violence (Appendix C). The administrative components data of WVP program knowledge, awareness, and training were analyzed using Pearson chi-square tests. Scores for each WVP program category were compared using Mann–Whitney U tests, and correlations of scores by category were examined using Spearman correlation coefficients (Pallant, 2016). The statistically significant findings indicated an improved staff knowledge in pre-intervention score of 8 and a post-intervention score of 10. The number of violence incidents rates decreased from a pre-intervention number 17 to a post-intervention number of 15.

The statistical analysis tests selected evaluated the impact of the interventions on the safety of the nurses with high scores and the statically significant difference of safety awareness, safety preparation, and safety management during patient care (Young et al., 2017). The expected outcomes of the project include a reduced number of violence incidents and an improved safety awareness among psychiatric nursing staff. This QI project expected

to improve a population health care system according to (AACN) American Association of Colleges of Nursing (AACN, 2006). The project emanates from the DNP students' clinical and professional nursing practice and collaboration with an organization (AACN, 2006). The project was an evidence-based practice innovation to promote a change process in the project setting.

Discussion of the Findings

The findings of this project included data that was collected from twelve participants that had completed the pre-and-post workplace violence questionnaire. The pre-implementation chart audit indicated that there were a number of patient incidents which included aggressive and violent behavior that was reported through staff feedback and incidental reports (Appendix D). The results totaled 17 incidents of violence directed toward other individuals with 11 of those incidents reported on Unit A and six reported on Unit B. A quality improvement project was implemented and included a change to the safety policies and the development of protocol that aimed to reduce the number of incidents and risk of aggression and violent behavior towards staff and other patients. Individuals can naturally resist change, and the goal during the unfreezing stage was to create an awareness of how the status quo, or current level of acceptability, was hindering the organization in some way (Cummings et al., 2016). The former ways of thinking and behaviors, processes, people, and organizational structures were examined and it was determined there was a need for change.

The findings included the results of a 12 question pre-and post-questionnaire which was selected from a pre-existing workplace safety program (Appendix B). The findings included analyzed data measurement of familiarity with the patient's history of violence, enhanced effective communication with patients, communication with the treatment team, located psychiatric/behavioral emergency equipment, and collaboration with the treatment

team and competence. The findings showed that there were eight participants that answered the knowledge, awareness and training competence questions and four participants that did not respond to six or more questions.

The findings from the post implementation chart audits showed that there was a decreased number of patient incidents when compared to the pre-implementation chart audits. The pre-implementation data showed there were 17 (22%) incidents when compared to post-implementation findings of 15 (20%) incidents. The violent incidents were decreased by 2%. The findings of the post implementation knowledge questionnaire showed a mean number of responses to the questions, and indicated number of incidences of violence over four to five weeks. The findings to determine if there were a significant difference were analyzed and used descriptive statistics and correlations between independent and dependent variables using Spearman's r. For this project, p values of <0.05 were considered. The results showed a significant difference of less than 0.05. In addition, the results indicated that there was an improvement in staff knowledge and the pre-implementation score was 8 (66%) and post-implementation score was 10 (83%). This was an increased awareness by 17%.

The findings were demonstrated on a run chart and showed trends in variables over time. The findings showed there was a reduction in the number of violent incidents towards others following the project interventions which included the implementation of the safety policy and staff training. The findings included a Wilcoxon signed rank test which was used to evaluate and analyze the results of the pre-and post-tests questionnaire scores and showed the effect of training among participants. The goal of this project was to implement safety practice policies and protocols within a forensic psychiatric inpatients practice setting. Therefore, the findings showed that the project goals aligned to the project interventions. The findings showed that the pre-implementation and post-implementation chart audits indicated

that the number of violent incidents rates decreased from a pre-intervention number 17 (22%) to a post-intervention number 15 (20%). The findings also indicated an improvement of staff knowledge and an increase in awareness of the safety plan and policies by 17%. The pre-implementation score was 8 (63%) and a post-implementation score was10 (83%).

Significance/Implications for Nursing

This project demonstrated change in the practice setting using evidence-based practice research. The use of a DNP project providing change in an organization contributed toward improved patient outcomes. The project translated and shared critical information regarding evidence-based practice with front-line clinical staff and researchers influenced and advocated for the needs of the patients and healthcare providers in the ever-changing and complex health system.

Limitations of the Project

There were several limitations to the project. The limitation to this project included: project team disagreements, informational gaps, dissatisfaction in committee outcomes, software and IT delays, small sample size, and unreported data. The imitations to the project occurred through variations in the project design. One limitation was the disagreements among team members on how to access the information and resources.

In addition, another limitation was that the software design and methodology was not adopted immediately to meet the project's desired implementation and data collection needs. The software limitations gradually got smoother after repeated intervals of communication throughout the process. The IT department communication was improved over time to provide the needed support and effectiveness.

Another limitation of the project was the small sample size. A small sample size was used as the smaller size was due to the limited number of nursing units available at the practice site. Another limitation of the project was the small sample size. A small sample size was used as the smaller size was due to the limited number of nursing units available at the practice site. The literature evidence was discussed in various studies, and the reported methods chosen to gather data, were similar (Jonker, Goossens, Steenhuis, & Oud, 2008). Other studies that had similar problems and possible limitations also occurred. During the overall project implementation and data, interpretation indicated a small size improvement in staff knowledge gain and a reduction of patient violence in the practice setting. The project impact improvement plan explains how applying different or a more robust methodology might address the research problem more effectively in any future study.

Dissemination and Project Sustainability

Dissemination of the QI project was an integral part to applying additional research as well as improving strategies to be carried out by other nurse leaders. The project team and stakeholders were of key support to the project leader in the development of a dissemination strategy. The project was considered at the practice site for further dissemination by consideration of the significance of sustainability, and a comprehensive analysis of the social, economic, legal, cultural, educational, and political environments for further adoption as part the process at the practice site. The project philosophy, mission, vision, values, goals, and objectives would be articulated and stated in the sustainability plan. The involvement of stakeholders and advocates in this process was important.

In addition, the dissemination of the project information would be through a podium presentation or a poster presentation at the upcoming nursing conference. According to Moran et al. (2016), conducting brief and concise podium PowerPoint presentations and also

poster presentations was useful in the dissemination of the information. The use of these strategies assisted in further knowledge, awareness, and training to nurses and other professionals that provide care to the forensic or psychiatric patients.

Conclusion

The rising trend in patient aggression and violent incidents reported through staff feedback demonstrated a need for a quality improvement project to change safety policies and to develop a protocol to help reduce the risk of aggression and violence towards nursing staff. The strong evidence-based results of the review of synthesis indicated this model could be used in similar healthcare settings and provide a positive impact. The comparison of results from pre-and post-chart reviews following the education intervention showed an increase of the nurses' knowledge and awareness of safety procedures and overall improvement care, including a reduction in violent incidents by patients towards the nurses.

The DNP leader implemented necessary changes in the safety policies and safety plan by providing safety methods and techniques in order to prepare nursing staff to safely handle patient related incidents of aggression and violence. This project illustrates the direct relationship between knowledge and performance. When staff are knowledgeable regarding policies and expectations are clearly outlined, their performance was enhanced leading to favorable outcomes.

Funding

No funding was used during the inception and implementation of this project.

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Appendix A

Safety Improvement Plan:

Goal:

To familiarize with the safety improvement plan to enhance safety at workplace all the time.

Action Plan:

1) **Familiarize self with patient's history of violence**
2) **Enhance effective communication with patients**
3) **Communicate with the treatment team**
4) **Locate psychiatric/behavioral emergency equipment**
5) **Collaborate with the treatment team**
6) **Maintain competence**

Description

1. **Familiarize self with patient's history of violence,** *by reviewing his/her Preference Plan, alerts on Kardex, current treatment plan and current safety policies in place.*

2. **Enhance effective communication with patients** *By using interview techniques (e.g., who, what, when, where, how & why)*

3. **Communicate with the treatment team** *when any changes in the patient's baseline behavior (e.g., intimidation, threatening and or challenging)*

4. **Locate psychiatric/behavioral emergency equipment,** *by locating psychiatric emergency equipment in my work area (restraint bag, spit mask, backboard, gurney, and stabilization blanket)*

5. **Collaborate with the treatment team** *By enhancing each one's role in effectively delivering the treatment plan*

6. **Maintain competence** *By learning proper de-escalation procedures, application of seclusion/restraints and other related equipment*

Appendix B

PRE-AND-POST KNOWLEDGE QUESTIONNIER

Psychiatric department administrative procedures and policies to prevent workplace violence (WPV)

1. Psychiatric department has written WVP policies
    - Yes
    - No

2. Among departments with policies, policies addressed violence against personnel, patients, and visitors
    - Yes
    - No

3. Psychiatric department has a written safety plan
    - Yes
    - No

4. Safety plan was based on Cal/OSHA's or OSHA's guidelines
    - Yes
    - No

5. Safety plan included safety for personnel, patients, and visitors
    - Yes
    - No

6. Safety plan included ongoing assessment of the following:
    - Physical layout
    - Staffing
    - Security personnel availability
    - Policy and training related to violence

7. Individuals in charge of the safety plan were trained in the following:
    - Role of security in hospital operations
    - Hospital organization
    - Security equipment and procedures
    - Handling of disturbed patients, visitors, and employees
    - Emergency preparedness
    - Reporting of incidents of violence
8. Hospital had a safety committee that includes psychiatric department staff
    - Yes
    - No
9. Psychiatric department had procedures for communicating patient’s risk of violence
    - Yes
    - No

10. Hospital has policy requiring reporting of violent events
    - Yes
    - No

11. Hospital tracked violent events
    - Yes
    - No

12. Hospital reported assaults and batteries to law enforcement within 72 hours
    - Yes
    - No

Appendix C

Observation & Interview Checklist For Data Analysis

Code___

1) Is there a history of violence documented in patient's chart? (Y I N)
2) Is a nurse familiar with patient's history of violence and trauma documented in the chart? (YI N)
3) Does the nurse communicate and collaborate with the treatment team? (Y I N)
4) Does the nurse communicate therapeutically with the patients? (Y I N)
5) Is the nurse familiar with the location of psychiatric/behavioral emergency equipment? (YI N)
6) Does the nurse maintain training competence? (Y I N)

Appendix D

INCIDENTAL REPORT AUDIT TOOL

Number___

Safety data software information review on incidental reports and charts for the following categories:

A. Number of reported episodes and type of aggression or violent episode:

   - Aggressive act to another person-physical
   - Alleged criminal act
   - Alleged sexual abuse
   - Homicide attempt

B. Number of reported episodes and type of physical impact related to aggression or violence:

   No treatment
   - First aid
   - Medical Treatment
   - Hospitalization