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Walden University

College of Health Sciences

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Margaret Arotimi

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Walden University
2019

Abstract

Prevention and Management of Aggression and Violence in Mental Health Settings

by

Margaret Arotimi

MSN, Walden University 2014

BSN, George Mason University 2003

Project Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Nursing Practice

Walden University

May 2019

Abstract

Aggression and violence in healthcare settings can lead to severe psychological, physical, and economic consequences for the victims, institutions, and society in general. Empirical evidence indicated that patient-initiated physical and verbal aggression is a longstanding problem affecting nurses working in psychiatric hospital settings. At the project site, approximately 88% of the staff members reported having been assaulted by mental health patients in the admission units at some point in the provision of care between 2015 and 2017. The purpose of this project was to develop an educational program for nurses at the site to use as preventive strategies in managing aggression rather than relying solely on seclusion, medication, and restraints. The theoretical framework that guided the development of evidence-based practice was program theory and theory of change analysis. The practice-focused question examined the extent to which a revamped educational program would improve the knowledge of the nursing staff at the project site. The education was presented using an electronic format and completed by 91 staff members. The paired *t* test showed a difference of 102.34 points from pretest to posttest with a *p* value of .000. Results of the Wilcoxon Signed Ranks Test (z=-8.288, p=.000) were also significant. Positive social change might occur in psychiatric hospital settings by empowering and increasing the knowledge of the nursing staff to create a safe working environment and improve the care provided to the patients.

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Dedication

The project is dedicated to all the psychiatric nurses and technicians that always strive for excellence and making a difference in the lives of the psychiatric patients. This project is also dedicated to my son and best friend Kolawole Davies for his ongoing encouragement, unconditional support, and prayers throughout this tedious journey and to my daughter Faith Lola for your unwavering love and understanding why I could not attend your soccer games.

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I would like to thank my husband and best friend for keeping our home together throughout this study. My dear, your enduring support, prayers, and confidence kept me pushing forward throughout this incredible journey to success. To my project chair, Dr. Niedz who despite her busy schedule was amazingly quick with feedback. Thank you for providing me the opportunity to drink from the fountain of knowledge that you possess. No doubt, I benefited immensely from your depth of knowledge and expertise throughout this journey. I did not know how blessed I am until I landed in your class. I appreciate your openness, compassion, and caring spirit. You are my guiding angel, and I am forever grateful to you. Also, my gratitude goes to Almighty God who helped me to make a success of this tremendous academic journey.

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Section 1: Nature of the Project

Introduction

The prevalent and global problem of aggression and violence in care settings is frequently highlighted not only by care providers but also by researchers, the media, and healthcare organizations (Knox & Holloman, 2012). Although all health care providers are at risk for experiencing aggressive interactions with patients and their family members, researchers have indicated that nurses are in most cases the victims of physical and verbal violence in the workplace (Kynoch, Wu, & Chang, 2011). The risk of violence is not only in mental health units but also in acute care settings where aggression and violence toward nursing staff have been reported across the healthcare sector (Hills et al., 2005).

Patient aggression and workplace violence are major problems to which staff members functioning in the East Coast Inner City Psychiatric Hospital are often exposed to, as the prevalence is high. Caring for patients has its challenges and these tend to be more negatively impactful when they are directed at caregivers and are life-threatening. By nature, psychiatric patients are not of sound mind, sometimes stigmatized, and occasionally violent. Being aware of the possibility of becoming aggressive, the nurses rely heavily on control mechanisms such as restraint, seclusion, and medication as means of curbing violent attacks by the psychiatric patients. However, these methods specifically, (restraint and seclusion) are detrimental to patient and staff safety, and as such should not be relied upon in the setting that is the subject of the DNP project. Many patients at the site during post event debriefing reveal that restraint was not a therapeutic

intervention but a punitive method and acts as a catalyst for negative emotions. Moreover, nurse and patient injuries in psychiatric settings occur during the seclusion and restraint process (Mohr, Petti, & Mohr, 2003). The increasing rate of physical assault and aggressive events at the project site despite the use of seclusion and restraints suggests that other forms of intervention are needed to reduce the attacks on staff at the site. The high rates of workplace violence demonstrate inadequate experience in prevention and management of patient aggression despite the use of seclusion and restraint (Antonysamy, 2013).

The universal declaration of labor law states that employees must not be exposed to any form of risk, especially one that can be inflicted by beneficiaries of their services. Most nurses and patients would agree that the nurse-patient relationship is vital to patient healing, recovery, and compliance with treatment in psychiatry. Hence, it is important to educate nurses on aggression prevention such as risk assessment, de-escalation, emotional intelligence and interpersonal communication, to foster safety for staff and patients. According to Riehle et al. (2013), the safety of both patient and workers simultaneously will improve the quality of care delivery in a high-reliability organization (HROs).

Problem Statement

Registered Nurses (RNs), compared to other healthcare providers are at a higher risk of experiencing violence in the workplace (Heckemann, Zeller, Hahn, Dassen, Schols, & Halfens, 2015) that is initiated by patients or family members (Hills et al., 2015). Client-initiated violence and aggression in psychiatric hospital settings are serious

workplace hazards for nursing staff working in these units. According to the chief nursing officer (CNO) at the site, there were almost 700 aggressive events reported in one year, averaging almost 60 events per month and more than one event per day. Out of these aggressive behavior events, more than half resulted in physical assault and many resulted in staff and patient injury.

As reported anecdotally, staff members at the East Coast Inner City Psychiatric Hospital have low confidence in their ability to work with and handle aggressive patients (Muralidharan & Fenton, 2006). In most cases, the staff members have a higher perceived severity of the aggressive behavior leading to increased use of coercive measures such as enforced medication and seclusion (Muralidharan & Fenton, 2006). The nursing staff members working in the psychiatric settings also have inadequate knowledge to prevent aggression by mental patients in the workplace. In the year 2015, about 88% of the East Coast Hospital staff members reported having been assaulted by mental health patients in the admission units at some point in the provision of care, which was a 10% increase from the past one year. The high rates of workplace violence demonstrate inadequate experience in prevention and management of patient aggression (Antonysamy, 2013).

The situation at the focal point of reference is indicative of the fact that many of the psychiatric patients that are admitted are discharged offenders, the history of which is known to staff members. The background information available to the nurses has created a bias for fear of violence and resulted in the use of the long-trusted methods of controlling aggression which is seclusion and restraint. However, as established in the literature, seclusion and restraint approaches are doing more harm than good to the

patients as most of them get frustrated, angered and eventually aggressive while those who could not manage their feelings might take to a suicide attempt and other forms of self-inflicted injuries and attention seeking behaviors (Madan et al., 2014).

Education projects focusing on improving risk assessment, de-escalation, emotional intelligence, and communication skills for nurses in managing aggressive patients and family members have been found to be effective in improving nursing knowledge, and reducing the magnitude of patient violence in mental health settings (Guay, Goncalves, & Boyer, 2016). When workplace is unsafe, the ability of nurses to deliver safe and quality service cannot be guaranteed. Therefore, there is a need for adoption and implementation of evidence-based educational program in the prevention of aggression and violent attacks by psychiatric patients so that nurses will provide safe and quality patient care

Purpose Statement

The purpose of the project is to determine the possibility of a change in knowledge among staff members who work in a behavioral health (BH) setting related to managing patient aggression with the use of an educational program. To achieve knowledge acquisition, psychiatric mental health nurses will be taught risk assessment, de-escalation, emotional intelligence and interpersonal communication. Presently, BH staff members at the DNP project site rely on restraint, seclusion, and medication to reduce aggressive tendencies in patients with mental health illness, syndrome or disorder.

The guiding practice-focused question to be answered was: To what extent can a revamped educational program improve knowledge of nursing staff in a psychiatric

setting? It is the goal of the DNP project to provide answers to the DNP practice-focused question.

The need for the DNP project was identified by observations at one of the East Coast BH Hospital. A report indicated that in the year 2015, about 88% nursing staff working in the admission unit experienced aggressive and violent behavior by patients, despite the annual safety training provided for the nurses. The high rates of aggression and violence have negative implications for the nurses' working environment and represent an important gap in their nursing practice. According to the CNO at the DNP project site, about 76% of the admissions to the East Coast Inner City Psychiatric Hospital come from the state and federal courts and 60% of the court admissions are pretrial. Almost 40% are posttrial patients committed to the hospital as Not Guilty by Reason of Insanity (NGBRI). Of the pretrial patients involved, 75-80% have substance abuse problems. For the most part, the majority of the patients come from jail across the state for the mental health competency evaluation and treatment.

Nursing staff at the hospital have also expressed concerns about their ability and competence to handle aggressive patients from the correctional system without using restraining and seclusion practices. Aside from the fact that both seclusion and restraint are not therapeutic in the care of psychiatric patients, these twin methods have physical and psychological/emotional effects (Knox & Holloman, 2012). Some of the physical effects are injury to staff and patients, trauma, and death. Some of the psychological/ emotional effects include feelings of humiliation and loss of dignity, diminished quality of life, depression, withdrawal, anger, frustration, isolation, desolation, loss of hope,

demoralization, increased agitation, hostility, and aggression (Wisconsin DHFS Caregiver Project, 1999).

The major shortcomings of using control methods such as seclusion, restraints and medication have dire unintended consequences on the health of patients both in the short-term and long-term as well as possible negative impact on nurse-patient interaction. (Wale et al., 2011). In most cases, the staff members have a higher perceived severity of the aggressive behavior leading to increased utilization of compulsive techniques including medication, seclusion and restraint (Wale et al., 2011). However, researchers have shown that the practices of restraint use, seclusion and medication lack scientific reasoning and remain ineffective in creating aggression-free psychiatric working environment for nurses (Knox & Holloman, 2012).

Education projects focusing on improving risk assessment, de-escalation, emotional intelligence, and communication skills for nurses in managing aggressive patients and family members have been found to be effective in improving nursing knowledge and reducing the magnitude of patient violence in mental health settings (Guay, Goncalves, & Boyer, 2016). It is the expectation of the DNP student that these new skill sets can be taught to psychiatric mental health nurses and applied appropriately. Improved nursing knowledge will eventually lead to great patient outcome.

Nature of the Doctoral Project

The proposed DNP project focused on revamping an educational program on the topic of safely managing patient aggression and violence in hospital settings. The program was directed at nursing staff working in psychiatric units at the East Coast Inner

City Psychiatric Hospital. Sources of evidence that have been selected to meet the purpose of the scholarly DNP project include a comprehensive and thorough review of the literature to survey the latest evidence to revamp and redevelop the current teaching module and toolkit for staff members. Examples of literature sources included systematic reviews, primary research articles including randomized controlled trials (RCTs) in which subjects were assigned to different groups and tested for the existence or lack of a trait, descriptive, qualitative and quantitative studies. Evidence from the above sources of literature were obtained through a comprehensive and thorough search of literature.

The educational program was personally developed by the DNP project leader and validated by a group of three experts who have clinical leadership roles at the DNP project setting with oversight responsibility for control and management of patients' aggression in psychiatric units. The educational program was delivered through an online education to participants in the study site. The nurses and mental health technicians at the project site, who accepted to participate in the internet enabled training were required to supply their consent, demographic data and complete pretests and posttests online survey monkey. Pretests were administered to determine the baseline knowledge of the nurses while post-training feedback was obtained to establish the changes in knowledge of the nursing staff in managing patient aggression.

PowerPoint presentations and information packet, all were delivered online and developed to facilitate learning. The online PowerPoint to facilitate learning focused on the use of risk assessment, de-escalation, emotional intelligence and effective communications during interactions with patients to prevent or diminish the impact of

aggressive behavior. All of these helped in bridging the knowledge gap in psychiatric mental nurses' ability to manage aggression. Educational PowerPoint improved nurses; knowledge in the use of risk assessment, de-escalation, emotional intelligence, and interpersonal communication in preventing aggression.

Significance of the Project

The stakeholders for the scholarly project were people who may be impacted by addressing the practice problem (Zaccagninini & White, 2014). They included both internal and external people affiliated with the East Coast psychiatric inner city hospital which served as the DNP project setting. For the scholarly DNP project, the stakeholders within the organization included the chief quality officer, the nurse educator, the head of the nursing departments, the nursing staff, and the patients. The external stakeholders included The Joint Commission (TJC), Centers for Medicare and Medicaid Services (CMS), and Substance Abuse and Mental Health Services Administration (SAMHSA). Other external stakeholders included the families and members of the community who may benefit from the reduced incidence rates of patient aggression and violence. All the stakeholders benefitted through improved knowledge by nurses as well as the improved working environment and quality of care provided to mental health patients.

Summary

In Section 1, patient aggression and violence have been identified as a major problem affecting nurses working in psychiatric hospital units. Physical and verbal violence by patients have enormous effects on the wellbeing of health care providers, particularly nurses (Heckemann et al., 2015). The most common effects of aggressive and

violent behavior are debilitating psychological consequences for the nursing staff, physical harm and injury, negative relationships with the organization, negative economic consequences (e.g., worker compensation), and increased staff turnover rates (Hills et al. 2015).

Various techniques are currently being used to manage patient aggression in psychiatric settings. The techniques include use of chemical restraints, seclusion, and de-escalation techniques. Seclusion and use of chemical restraints are not evidence-based interventions useful in managing patient aggression. Instead, these are myths that have failed and should be used only in the management of violent behavior that poses an immediate risk to the patient and should be discontinued as soon as possible.

Educating nurses in prevention of aggression as opposed to control has been advocated and has taken the center stage in academic discourse as a solution to aggression and violence by psychiatric patients. The purpose of the proposed DNP project was to revamp the educational program to improve nurses’ knowledge in risk assessment, de-escalation, emotional intelligence, and interpersonal communication in an attempt aimed at preventing violence and aggression. Implementing the educational program has the potential to lead to an improved working environment at the project site.

The next section provided detailed background review and the rationale for the proposed DNP project. In addition, the next section discussed the change models and theories that will guide the development and implementation of the DNP project, while providing a supporting rationale. The section also sheds light on the role of the project leader and explains the relevance of the proposed project to nursing practice. The chapter

ended with a summary and provides a transition to connect the gap-in-practice to the subsequent section.

Section 2: Background and Context

Introduction

Registered nurses (RNs), compared to other healthcare providers are at a higher risk of experiencing violence in the workplace (Heckemann et al., 2015) that is initiated by patients or family members (Hills et al., 2015). Client-initiated violence and aggression in psychiatric hospital settings are serious workplace hazards for nursing staff working in these units. Surveys involving nursing staff show that over 75% of the nursing staff working in psychiatric units have experienced some form of patient aggression and violence at some point in their career (Iozzino, Ferrari, Large, Nielssen, & de Girolamo, 2015). The psychiatric hospital that is the subject of the DNP project has evidence of escalating patient aggression including violent behaviors, and use of outdated nursing methods of management, namely: restraints, seclusion, and various forms of chemical restraints. The guiding practice-focused question that will guide the DNP project is: To what extent can a revamped educational program improve the knowledge of nursing staff in a psychiatric setting?

The purpose of the DNP project was to revamp an existing educational program that will improve the knowledge the nurses in aggression prevention. To achieve knowledge acquisition, psychiatric mental health nurses were taught risk assessment, de-escalation, emotional intelligence, and interpersonal communication as primary tools instead of solely relying on seclusion, restraint, and medication to reduce aggression by mental health patients.

Concepts, Models, and Theories

It is imperative to scientifically define the idealistic representation of real-life scenarios surrounding how the implementation of an education program would enhance the transfer of appropriate knowledge that improved management of psychiatric patients to the extent of reducing or possibly eradicating aggression and violence attack by psychiatric patients. Researchers have purported that models, concepts, or theories simply defining and representing the ideals in a replicatable, simple, smaller, adjustable, and understandable manner (Taha, 2008). Models generally can be prescriptive or descriptive; prescriptive if the results indicate specific decision that directs optimization, while it is descriptive if it is only capable of explanation the state of nature or affair of a situation (Taha, 2008). Examples of models include: analytical or symbolic or mathematical, analogue, iconic, heuristic and simulation. The models to be used for the DNP project include: cognitive information processing and Kirkpatrick's model of evaluation of educational programs.

Cognitive Information Processing

To measure the success of the training program and determining the extent of knowledge transfer that has taken place, Cognitive Information Processing (CIP) was used (Schunk, 1996). Schunk's theory (1996) focused on how people:

1. Attend to environmental events.
2. Encode information to be learned and relate it to knowledge in memory.
3. Store new knowledge in memory.
4. Retrieve it as needed.

Information processing is metaphorically used to explain how human brain manages information in the same manner as the computer system. In order to use CIP for the DNP project and make its application meaningful and relevant, the educational approach built on psychiatric mental health nurses' prior knowledge of aggression management (seclusion, restraint, and medication) and connected this with aggression prevention approaches such as risk assessment, de-escalation, emotional intelligence and interpersonal communication. In the course of using CIP, an effort was made to encourage selective attention on the part of the learners. Thus, the content of the educational PowerPoint presentations reflected the ways to make psychiatric mental health nurses select and process information relating to risk assessment, de-escalation, emotional intelligence, and interpersonal communication while simultaneously ignoring information on seclusion and restraint. To influence psychiatric mental health nurses' attention in my desired direction, detailed information was provided on the aggression prevention methods, specific to their meaning, how to apply them, advantages in their application and consequences of not using them rightly. Information was also provided on similarities between aggression control and aggression prevention, with a view to presenting the pros and cons of the two approaches with the support of empirical data that showed simply the superiority of aggression prevention over aggression control.

Osborne (2014) suggested four different submodels of CIP that could be used in evaluating participants and measuring outcomes of a training program. These submodels include: Career Thought Inventory (CTI); Career Planning Confidence Scale (CPCS); Depression Anxiety Stress Scale (DASS); and Self-Directed Search (SDS). According to

Osborne (2014), all the measures, except SDS, are recommended to be administered at the completion of the group protocol to assess treatment outcomes. Osborne (2014) posits that CIP assists individuals to acquire knowledge needed for solving career problem and decision making. It further identified the following thematic areas in the intervention drive of CIP: that it gives self-knowledge, transfers occupational knowledge, increases gains in solving career problems and making informed decisions; it further increases the acquisition of metacognitive knowledge in the executive processing domain.

Kirkpatrick's Model of Evaluation in Educational Design

Donald Kirkpatrick developed the evaluation model in 1994 for assessing the effectiveness of training (Winfred, 1999). According to Kirkpatrick's model, there are four levels of evaluating training effectiveness, using the ideology that each successive evaluation is built on the information from the lower level. The four levels are in the order: reaction, learning, transfer, and results. Following this model, evaluation begins with reaction level, and then as time and budget allows, should move sequentially through learning, transfer to results. Therefore, different segments of the educational program have specific and definitive focus upon which their level of appropriateness is to be determined. However, transferring the knowledge acquired into practice will likely occur out of the scope of the DNP project.

In order to design, develop, operationalize and assess the DNP project's educational program, three key steps are expedient: planning, implementation, and evaluation. The planning stage included activities such as: need assessment for educational program; development of PICO practice-focused questions; informal

discussion with institutional leadership; seeking and securing leadership commitment; development of specific learning objectives for each module of the training; situating of the training in the context of existing studies; development of training content and its delivery methodology, conduct of formative evaluation of the educational program; appraise the educational program relative to results of formative evaluation; presentation of reviewed educational program with all stakeholders without compromising content validity and program applicability sourcing for resources to operationalize the educational program; put finishing touches to the educational program through administration of single-blind questionnaire to stakeholders, contacting Walden and project site IRB for ethics approval.

To implement the educational program, I developed case studies to simulate a practice environment using actual examples. I requested institutional support for the implementation of the educational program and requested an evaluation from participants in the educational program. In the course of evaluating the educational project, I proposed that the following steps be taken: an online completion of an end-of-training form, one which does not include participants' identity; analysis of the impact evaluation; communication of results to organizational leadership and other stakeholders and documentation of findings in the final manuscript.

Aggressive and Violent Behavior in Psychiatric Patients

Lanctôt and Guay (2014) identified 68 studies addressing the various effects of patient aggression in healthcare settings. The most commonly reported outcomes were debilitating psychological consequences for the staff members, physical harm, negative

relationship with patients and the organization, as well as negative economic and social implications. A positive and significant relationship between workplace violence and psychological harm has been established by various studies investigating effects of workplace violence in the healthcare sector (Demir & Rodwell, 2012; Versola-Russo, 2006). Several researchers have also confirmed a negative association between workplace violence and self-efficacy in coping with patient aggression in psychiatric settings; that is, as self-efficacy declines in nurses, workplace violence escalates (Allen & Tynan, 2000; Martin & Daffern, 2006).

Barlow et al. (2001) studied aggression in inpatient psychiatric hospital nursing units for about 18 months; during the study timeframe about 1269 patients were hospitalized with about 174 (13.7%) of them developing aggression. It was also seen that patients diagnosed with bipolar affective disorder and schizophrenia gave 2.81 and 1.96 critical t tabulated significant values both having ($p < 0.00$ and respective confidence interval of 0.434 and 0.721) increased risk of aggression, respectively, while depression and adjustment disorder had a considerably lower risk. Aggressive episodes most likely to occur within two days of admission and the length of stay were greater for aggressive patients than the nonaggressive patients. It was reported that the more significant number of incidents occurred on the day shift. Most aggressive patients had one episode while a small number of total psychiatric patients (6.0%) were responsible for greater figure in the incidence scale (71.0%). The high-risk for aggressive events were less than 32 years of age and actively psychotic, detained, prior history of aggression or substance abuse. The most common form of aggression was physical aggression towards the staff. It was,

therefore, concluded that there is a pattern of aggression in the psychiatric setting to which management must develop strategies and at the same time periodically identify and assess the level of exposure of various health workers, especially the nursing workforce.

Amore et al. (2008) previously aimed to determine violence risk factors in acute psychiatric inpatients. Violent behavior in the month prior to admission was associated with male gender and substance abuse. Amore et al. noted that the history of aggressive behavior is the most significant risk factor for physical violence. The persistent physical assault before and during hospitalization was related to higher Brief Psychiatric Rating Scale (BPRS) total scores and more severe thought disturbances. Higher levels of hostility–suspiciousness BPRS scores predicted a change for the worse in violent behavior, from verbal to physical. It was, therefore, concluded that a thorough assessment of the history of aggressive behavior and psychopathological variables have a significant impact on the prediction of violence in psychiatric settings.

A total of 1,625 patients were attended to while 259 patients were taken-in for observation; 16% of the patients were engaged at observation level while 9.4% were admitted. From the list of eligible patients, 13 patients were discharged prior to the visit of the researcher. Therefore, only 110 patients were involved in the final sample of the study, convenience sampling method was used. Statistical analysis was done using PASW version 17. The greatest numbers of admitted patients were Caucasian whose level of education was low. On interrogation, most adults were young never gave birth. For the female, most of them fell within age group 30 to 50 years, were married and had two or more children. Proportionately, male and female were the same statistically as the

p value is greater than the level of significance thus signifying that there is no significant difference in gender composition (X2= 0.582; $p = 0.446$ and $\alpha = 0.05$). Most patients in the sample presented had psychotic symptoms, such as delusions and hallucinations.

Vladimir et al. (2015) focused on delineating the new cases and demographics relationship between aggressive tendencies in admitted cases of schizophrenia. One out of three patients with schizophrenia (31%) became aggressive and violently attacked nurses when the presentation was done. Sociodemographic variables (such as gender, age, duration of illness, and the number of hospitalizations) were poor determinants of aggression in schizophrenia. The level of aggression was not associated with the clinical presentation and manifestation of aggression and violent attacks in admitted cases of schizophrenia. It was equally found that there was a week correlation between aggression level in relation to Positive and Negative Syndrome Scale PANSS ($p < .01$). The researchers concluded that biodata of patients as well as their prognosis could not be regarded as strong determinant of aggression especially among schizophrenic patients. The conclusion, nonetheless, did not remove the fact that results from the study succeeded in making meaningful contribution to existing stock of knowledge with respect to determinants as well as management of schizophrenia.

Vladimir et al. (2015) also found that both male and female patients were equally aggressive, both old and young patients have equal disposition to aggression, chronic patients and newly diagnosed patients were equally likely to become aggressive. Also, patients' diagnoses clearly indicated differential in aggression and violence possibility among psychiatric patients (Vladimir et al., 2015).

Use of Restraints and Seclusion in Psychiatric Hospitals

Rolf (2009) conducted a study using questionnaire as data collection instrument on knowledge, attitude, and practice of psychiatric mental health nurses on seclusion, restraints, and medication in a Norwegian University Psychiatric Hospital. Rolf found that most of the staff members appropriately utilized the controlling methods. There was high application of seclusion and restraints in the wards, with male nurses being more critical on the usage. Despite the fact that physical restraints offered little or no benefits to patients, it was nonetheless used by most psychiatric mental health nurses. The highly educated employees were less critical of the use of restraint and seclusion when compared to other employees. According to Kong and Evans (2012), there exists three kinds of education that discourages nurses from using physical restraint; these are practical education, professional development education and family education. They are of the opinion that nurses with these types of education are less predisposed to physical restraint. In acceptance of wrong approach to managing aggression, psychiatric mental health nurses were non unaware of the dangers in using seclusion and restraint as they alluded to the fact that the practice is a violation of patients' integrity, may be harmful to the cordial relationship expected between nurses and patients and could scare other patients. Kong and Evans (2012), suggested higher and better education in these areas make for a minimum of 35% increase in nurses' aversion for restraint and seclusion in aggression management. In defense, seclusion and restraints were considered potent enough to save nurses from threats and violent attacks while psychiatric patients themselves are protected against (James et al., 1990)

Myths, Misconceptions, and Staff Attitudes Towards Workplace Violence

Staff members in the psychiatric setting have a wide range of beliefs and attitudinal disposition towards their exposure to and being attacked while performing their professional duties. The situation had led to many misconceptions about safety or lack of it in the psychiatric setting. That nurses held on to the belief that seclusion and restraint control aggression is a myth and misconception as it had been reported that rather than controlling aggression, they remained significant causes of it. James et al. (1990) had earlier posited that the experience of psychiatric nurses with respect to violent attacks, self-harm and threats made them led to strongly held beliefs that seclusion, restraint and medication were their best option to suppress the seemingly risky working environment in which they practice.

Another misconception was the opinion that several mental illnesses correlate positively with assault (National Institute of Mental Health, 2001). Thus, the viewpoint gave the nurses the impression that every patient with severe mental illness was likely to be violent, because of their specific diagnoses. The misconception was negated by the fact that severe mental illnesses are rare and could not significantly contribute to the spate of violence in psychiatric settings. According to Friedman (2006), severe mental illnesses such as schizophrenia, major depression, or bipolar disorder contributed very little to general violence rate in population.

Also, there is a misconception of gender disposition towards violence. Tardiff et al. (1997), in separate studies, found that men perpetrate more violence compared with women. In a different study, they found that female patients are just as violent as male

patients. Thus making psychiatric mental health nurses tend to pay more significant attention to male patients in aggression control than female patients. In the like manner, there appears to be the difference in susceptibility to violence among age groups.

Strategies and Solutions

The strategic focus of the DNP project is the use of an educational program to change the management style of the psychiatric patient from the old control approaches which include seclusion and restraint. The strategy is a way of altering past beliefs, myths and misconception surrounding proper management of psychiatric patients, one that is devoid of aggression and violent attacks on psychiatric mental health nurses. The paradigm shift from control to prevention remained the cardinal point in management of aggression and violence in a psychiatric setting. The use of education, as a strategy to improve knowledge in aggression prevention, remains the primary intervention in the DNP project and includes: risk assessment, de-escalation, emotional intelligence and interpersonal communication.

Increased staffing awareness, improved the nurse-patient therapeutic relationship and close monitoring was cited as essential strategies for reduction in restraint and seclusion usage. There is a need for staff awareness about the adverse effects of restraint and seclusion on staff and patients and more training on managing and preventive measures for aggressive and violent patients. The practice of restraint puts both patients and staff at risk of injury and death. According to Okanli, Yilmaz and Kayak (2016), about 142 deaths in mental health settings were connected to the use of physical restraint from the 1998 Hartford Courant investigation between 1988 and 1998. Some of the

deaths were due to improper restraint use, choking, physical injury during application, circulation insufficiency, skin problem, dehydration, strangulation, asphyxia, and cardiac arrest.

Anderson and West (2011) observed that most clinicians suffer violent attacks earlier in their career. Therefore, they recommended that psychiatric residency programs should include a curriculum on de-escalation, a prominent method of preventing aggression in psychiatric setting. According to Sheridan et al. (1990), seclusion, restraint and medication may give the desired result immediately after application but may be ineffectual after a long period of time; it is far more beneficial to adopt change in behavioral pattern in order to truly prevent aggression in psychiatric setting. They further stated that patients who are chemically and physically restrained would normally perceive violence as a way to display feelings of frustration and anger.

Change Theory

The theoretical framework that guided the development of the EBP is the program theory and theory of change analysis that was developed by Menon, Snilstveit, and Davies (2014). The theoretical framework purports that the project has an educational focus. According to Walden University's prescribed rubric, staff education is often used to help inform and improve knowledge and skills related to best clinical practice. The rubric further presupposes that staff education is usually developed to meet a need identified by an organization or clinical practice setting to improve patient care, achieve standards of practice, or meet regulatory guidelines. In the DNP project setting, the problem is a high rate of aggression/violent attacks on psychiatric mental health nurses. A

knowledge gap has been identified in the approach to managing psychiatric patients, the need to prevent as against control of aggression.

The current state of affairs indicates the availability of knowledge in such approaches as restraints, seclusion, and medication with a dearth of skill in areas such as risk assessment, de-escalation, emotional intelligence and interpersonal communication. These improved knowledge sets were taught through education using program theory and theory of change analysis. Applying the concept of program theory and theory of change is indicative of an educational strategy that intends to give psychiatric mental health nurses the needed knowledge for better management of psychiatric patients specifically in the area of aggression prevention. The educational program is evidence-based practices using intervention such as risk assessment, de-escalation, emotional intelligence and interpersonal communication. Upon completing the learning process, it was expected that a change in the management of psychiatric patients would be seen to address violent attacks on psychiatric mental health nurses specifically.

Program Theory and Theory of Change revolve around the principle of continuous and comprehensive evaluation which derives from the Right to Education Act (2009). Frequent and broad-based feedback on trainees' performances; assessment of academic and professional performances and variety of techniques to assess performances are also important, and will occur at the site outside of the scope of the DNP project. As concepts, Program Theory and Theory of Change hold that process monitoring is needed. Process monitoring helped in the collection of data along the causal chain; process monitoring is important for implementation; it helped to answer the

question of ‘why’ the program worked or did not work, and the Theory of Change maximizes the value of research for policy and practice. A dedicated utilization of this theory will ultimately lead to behavioral change from control methods of seclusion, restraints, and medication to prevention methods of risk assessment, de-escalation, emotional intelligence and interpersonal communication.

The choice of the Theory of Change model was based on clinical needs, organizational structure, and available resources. Reiterating the purpose of this educational program, it was to help inform and improve knowledge related to best clinical practice which culminates in better patient management and improved healthcare. Keeping patients safe at the psychiatric hospital is fundamental to achieving high-quality healthcare for all the individuals served in the DNP project setting. The project aimed to increase patient safety through prevention of aggressive events and violence from patients to staff and other patients. According to Riehle et al. (2013), the safety of both patients and workers simultaneously would improve the quality of care delivery in a high-reliability organization (HROs). Patient safety is crucial and integral part of quality nursing care. Nursing staff is responsible for ensuring that patient care is safely delivered and that no harm occurs to patients and reducing the aggressive events fulfill this requirement and it will improve the quality of care provided by the nursing staff.

Relevance to Nursing Practice

The DNP evidence-based practice project is relevant to nursing by reason of showcasing the importance of educational strategies in improving quality of care through preventive rather than controlling approaches. A brief chronicle offers a historical outline

of the use of restraints and seclusion methods to manage aggressive patients. There have been conflicts over the use of seclusion and restraint interventions in most of health care debates. Social, political, economic, and ethical disagreements have emerged over the use of seclusion and restraint practices (Paterson & Duxbury, 2007). The validity of coercive interventions in the management of patient aggression in mental health settings has been recurrently questioned (Muralidharan & Fenton, 2006).

Risk assessment, de-escalation, remaining assertive, and effective communication have been recommended as evidence-based practice means of interacting with patients and their family members to prevent and reduce aggression (Richmond et al., 2012; Spencer & Johnson, 2016). The educational PowerPoint developed for the DNP project in conjunction with the hospital existing program was used as a template to guide nurses on how to manage patient aggression in psychiatric units through de-escalation and effective communication techniques. The educational program empowered the nursing staff with knowledge on how to reduce patient aggression and violence in psychiatric settings. Thus, the DNP project did in turn, advance nursing practice by improving the working environment in psychiatric care units.

Local Background and Context

The East Coast Inner City Psychiatric Hospital is about 290 bed psychiatric hospital with about 223 nurses. The monthly average census for the hospital is about 272 patients. As many as 76% of the admission to the East Coast Inner City Psychiatric Hospital comes from the state and federal courts, and 24 % are civil admissions from the general and surgical hospitals around the hospital. About 60 % of the court admissions

are pretrial and 40 % are post-trial patients committed to the hospital as Not Guilty By Reason of Insanity (NGBRI). Between 75 -80% of the pretrial patients have substance use abuse problems. For the most part, the majority of the patients come from the jail across the country for the mental health evaluation and treatment. As most of the patients on the admission units are from jail, the nurses are afraid and have low confidence in their ability to work with and handle aggressive patients (CNO, 2017, January 15). In part, this is due to the nurses' experience in the adoption of restraint, seclusion, and medication; these approaches have not succeeded in curbing aggression and violent attacks.

According to the Performance Related Information for Staff and Managers (PRISM) report on the East Coast Inner City Hospital, in the words of the Chief Nursing Officer, there were 682 aggressive events reported from May 2017 to April 2018, averaging 56 events per month and more than one event per day. Out of the 682 aggressive behavior events, 486 resulted to physical assault, and 289 resulted in staff and serious patient injury. The current educational provision for the nurses has not slowed the rate of aggression in the hospital. Majority of the patient population are admitted directly from the correctional system into the psychiatric hospital that is the setting for the DNP project. As a result, this fact has created fear of the patient and it may hinder effective communication. Also, psychiatric mental health nurses at this hospital believe so much in the old order of managing aggression which can be attributed to (a) what they were taught as student nurses, (b) poor prevention skills and (c) poor interpersonal communication skills and (d) long tenured staff who have had few continuing education

updates on the prevention of aggressive behavior in psychiatric patients (CNO, 2018, March 16).

Here are some of the state and federal regulation and standards for the use of seclusion and restraints (CMS, 2006):

- The patient has the right to be free from seclusion and restraints, of any form, imposed as a means of coercion, discipline, convenience, or retaliation by staff.
- Seclusion or restraint can only be used in emergency situations if needed to ensure the patient's physical safety and less restrictive interventions have been determined to be ineffective.
- The use of a restraint or seclusion must be selected only when less restrictive measures have been found to be ineffective to protect the patient or others from harm.
- The use of a restraint or seclusion must be by order of a physician or other licensed independent practitioner permitted by the State and hospital to order seclusion or restraint.
- Providers must have restraint and seclusion policies and train staff in the safe use of restraint and seclusion and able to demonstrate competency.
- A comprehensive assessment of the patient must determine that the risk of not using it outweighs the risks associated with the use of the restraint. Alternative interventions should be considered. Besides thorough education and training for nursing staff, several practice precautions seem prudent with the use of seclusion and restraints during an aggressive and violent event.

Federal regulations developed by CMS govern the use of restraint and seclusion practices in the management of patient aggression. According to CMS, restraints and seclusion should only be used if the patient's behavior would put him or her in immediate danger that would threaten his or her safety. Seclusion and restraint should only be used after less restrictive interventions have failed to prevent or manage aggression by patients and should be discontinued as soon as possible (CMS, 2006). Joint Commission and Centers for Medicare and Medicaid Services also suggested that organizations need actions to prevent an assault against employees. One of the suggestions is to provide training to employees on early recognition and de-escalation of potential violence (CMS, 2006).

Role of the DNP Student

As the principal investigator for the DNP project, I was responsible for conducting the project in the most scientific manner. Professionally, I chose the path of psychiatric mental health nursing and as a prospective holder of an advanced degree in nursing; it is intended to provide a policy direction in the management of psychiatric patients to the extent of preventing aggression and violent attacks on psychiatric mental health nurses. Thus, practice is replicable and can be given general applicability in all psychiatric settings for the purpose of service improvement. The doctoral project was personal to me and is in pursuit of my advanced terminal degree in the field of nursing.

The topic for the doctoral project was thought-out by me and is based on my area of interest and competency as a psychiatric mental health nurse. Also, I had considered

the time available as well as the ability to source for requisite materials before embarking on the DNP project.

The categories of participants that I related with in the course of the project are nurses and mental health technicians. The psychiatric mental health nurses and technicians, with whom I related were in two distinct areas: (a) as a developer of course curriculum on the content of the educational PowerPoint that was presented to them for the purpose of introducing them to prevention of aggression and (b) as an investigator who developed, designed and implemented the use of teaching module, and used cognitive information processing to assess how much of the knowledge is internalized by the nurses and technicians.

Potential biases in the study included the possibility of researcher's and sample selection bias. To address researcher's bias, concept operationalization followed relevant variables in the study and was subjected to proper scrutiny through validity and reliability considerations. In order to avert selecting the wrong sample, proper computation of sample size using power test and taking into cognizance level of significance and margin of error was used.

As a DNP student, role definition included data collection on primary and secondary bases and a relationship that was devoid of all forms of biases. The study was motivated by the need to improve nursing practice in the management of psychiatric patients and the need to complete an all-important DNP degree program.

Several studies had attempted to find the mental health professionals that are most susceptible to violent attacks by mental health patients. Erdos and Hughes (2001)

reported that exposure to aggression or violent attacks is a function of how much time health care professionals spend with mental health patients. They found a positive correlation between these two variables. It, therefore, concluded that nurses are at the highest risk of experiencing violent attacks as they spend the most time with patients. Furtherance to their study, they equally asserted that nurses are found to sustain minor injuries leading to missed days of work, and few nursing staff members sustained multiple and life-endangering injuries including fractures, lacerations, bruises or a loss of consciousness.

Definition of Terms

The subsection presents the definition of the terms that have been used frequently throughout this document so that the reader can appreciate their meaning in the context of the proposed project.

*Aggression***:** Hostile or violent behavior or attitudes toward another; readiness to attack or confront or the action of attacking without provocation, especially in beginning a quarrel (Webster, 2016).

Restraint: The Center for Medicaid and Medicare Services (CMS) defines restraint as “any manual method, physical or mechanical device, material, or equipment that immobilizes or reduces the ability of a patient to move his or her arms, legs, body, or head freely” (CMS, 2006, p. 71383).

Seclusion: is defined as the “involuntary confinement of a patient alone in a room or area which the patient is physically prevented from leaving” (CMS, 2006, p. 71404).

Violence: The World Health Organization (WHO, 2016) describes violence as the intentional use of physical power or force against another person or oneself with a high likelihood leading to psychological harm, injury, deprivation, or death.

Summary

In this chapter, the degree of exposure to aggression by psychiatric mental health nurses was compared with that of other health workers. It was seen that nurses are more exposed due to their prolonged stay with psychiatric patients (Heckemann et al., 2015). Also, the section discussed various models for representing real-life situations using the ideal and such models as analytical, iconic, analogue, and heuristic. A twin model of CIP and Kirkpatrick's were selected to evaluate the proposed educational project. The next section discussed the anticipated purpose of the project in greater details by restating the practice focus question, exploring the sources of evidence for the study, identification of the participants to be involved in the project, and an explanation of the procedure for conducting the project.

Section 3: Collection and Analysis of Evidence

Introduction

The purpose of the DNP project was to determine if there was a change in knowledge related to managing aggression with the use of an educational program. To achieve this, psychiatric mental health nurses were taught risk assessment, de-escalation, emotional intelligence, and interpersonal communication as against solely relying on restraint, seclusion, and medication to reduce aggression by mental health patients. Other major areas selected for discussion in this section include Practice-focused Questions, Sources of Evidence, and Analysis and Synthesis of Evidence. Section 2 included an exposition of the extent to which nurses are exposed to aggression and the knowledge gap in their ability to manage such aggression from psychiatric patients. As a solution, it was discussed in the section the modality for impacting knowledge to nurses on aggression prevention methodologies such as risk assessment, de-escalation, emotional intelligence, and interpersonal communication. Articles on seclusion, restraint, medication, and nurses' attitudinal disposition to these aggression control mechanisms and self-protection were reviewed. The next section explores the following major topics: Practice-Focused Questions, Design of Education Packet (How to deliver, Curriculum description, Training Content Evaluation of Knowledge; Sources of Evidence; and Analysis and Synthesis.

Practice-Focused Question

The practice-focused question for the DNP project was: To what extent can educational program help psychiatric mental health nurses in developing knowledge for preventing aggression? The educational PowerPoint significantly improved psychiatric

mental health nurses' knowledge in preventing aggression among psychiatric patients. Risk assessment, de-escalation, emotional intelligence, and interpersonal communication significantly reduced aggression towards psychiatric nurses.

Currently, psychiatric nurses use aggression control approaches such as seclusion, restraint, and medication, which stems from the lack of knowledge of other aggression prevention methods. Hence, the knowledge gap was bridged through an educational program that transferred the necessary knowledge that engendered aggression prevention.

Sources of Evidence

The source of the evidence for the project was credible because of the significance of aggression and workplace violence in the healthcare. The DNP student reviewed some of the tools currently used methods that are evidenced-based such as the Broset Violence Checklist and educational video. Also reviewed were some journals, books, media, professional interviews, patient and staff interviews, psychiatric nurse organization and affiliates, other professional organizations and publications that give information on how to reduce aggression, did a violence risk assessment, emotional intelligence, effective communication skills, and how to improve patient and staff relationship safely.

Published Outcomes and Research

A search for the literature was carried through electronic databases including PubMed, CINAHL, Google Scholar, COCHRANE Library, Wiley Library, and EMBASE. The key words used in the search process were "violence", "aggression", "nursing", "de-escalation", "educational interventions", "training", "seclusion",

"effective communication" and "restraints". Various literature search techniques were used. Boolean operators (AND, OR) were used to combine or exclude the search terms leading to more focused and useful outcomes. An example of the search string is "Nurse or Health care provider," and "aggression or violence." Wildcard and truncation literature search techniques (e.g nurs*) were also used to build a more focused search. The techniques proved to be time-saving by eliminating unnecessary search outcomes that would have been scanned before being discarded. Footnote and citation search techniques were used to supplement the search process. The reference lists of eligible primary studies were scanned to identify similar studies. Citation search technique was used to find studies published after the reviewed article. The technique was useful in capturing more recent papers.

The search was limited to materials available in the English language. The inclusion criteria included peer-reviewed journal articles published between 2008 and 2016. Systematic reviews, meta-analysis, RCTs, cohort studies, quasi-experimental studies, descriptive qualitative and quantitative studies study designs were included. To be eligible, the study should have:

1. focused on aggression or violence in hospital settings,
2. involved care providers or patients as the participants
3. available in the English language
4. provided handout, training and investigated their outcomes.

The exclusion criteria include non-English studies, those not focusing on aggression or violence in care settings, those involving participants under 18 years, and

studies published before 2008. Books, essays, expert opinions and dissertations were excluded.

Level I Evidence

The literature search through the electronic databases led to identification of six systematic reviews and meta-analyses (Bak, Brandt-Christensen, Sestoft, & Zoffmann, 2012; Heckemann et al., 2015; Livingston et al., 2010; MacDonald & McGill, 2013; Price, Baker, Bee, & Lovell, 2015; Wassell, 2009). The reviews focused on the management and prevention of patient aggression in care settings. The authors of the reviews conducted a literature search through various electronic databases including PubMed, EMBASE, CINAHL, PsycINFO, and Cochrane Library among others. The reviews included all types of studies conducted in care settings with an objective of minimizing workplace aggression. The population of interest included care providers such as nurses and midwives and health care supporters such as the reception staffs who interacted with patients with mental challenges and/or their advocates in any public or private care facility.

Level II and Level III Evidence

The literature search led to identification of seven quasiexperimental studies (Gerdtz et al., 2013; Guay, Goncalves, & Boyer, 2016; Hahn et al., 2008; McDonnell et al., 2008; Muthuvenkatachalam et al., 2014; Nau, Dassen, Needham, & Halfens, 2009; Oostrom, & van Mierlo, 2008) evaluating the effectiveness of training programs in preventing and managing patient aggression in healthcare settings. The participants were health care providers particularly nurses working in mental health, intensive care, and

emergency departments. The interventions provided were educational/training programs to manage and prevent aggression caused by patients and visitors. The outcomes of interest were changes in participant knowledge, psychological distress, and assessment skills.

Evidence Generated for the Doctoral Project

To generate data for the completion of the doctoral project, primary data were used through the use of a questionnaire, administered online, as data collection instrument. Thus, psychiatric mental health nurses were asked to complete a pretest questionnaire. The questionnaire was designed in a manner as to gauge the baseline knowledge of nurses on the management of psychiatric patients, with a view to determining the methodologies presently in use. Their responses showed which side of the divide they belong with respect to control or prevention of aggression.

To accurately conceptualize the baseline knowledge of participants, predata, demographic, educational attainment, years of experience, and participants specialty unit data were collected. The result of the scoring helped to determine the number of participants who are knowledgeable in the management of psychiatric patients; the depth of their knowledge, their disposition to coercion and prevention in the control of aggression; their willingness or otherwise to accept new methods and their readiness to participate in the education program with a view to gaining alternative knowledge in aggression prevention.

Participants. The target population in the proposed educational project included mental health nurses and technicians working in psychiatric units at the East Coast Inner

City Psychiatric Hospital. Participants were drawn from the psychiatric mental health nurses and mental health technicians who were interested in taking part in the online training. The hospital has about 200 nurses and mental health techs with varied educational attainments, age, experience, and ethnicity working in various departments. These demographic data formed the first section of the data collection instrument and the instrument was assigned code numbers in order to connect these demographics with corresponding responses at the latter part of the questionnaire. The participants were selected through convenience sampling, a type of nonprobability sampling technique. Selection was done using survey monkey platform, an online data collection software that promotes confidentiality of selected subjects, enhances prompt data collection and facilitate easy and accurate data analysis. Using power analysis for sample size determination, specifically using the table developed by Dupont and Plummer (2008), a sample size of 80 was required to achieve a 95% power based on $\alpha = 5\%$, and $\delta = 2.2$. My goal, then, was to reach at least 80 or more of the staff and provide the education and training to them exclusively online.

Procedures. The educational program was taught exclusively using e-learning platform, a PowerPoint presentation that discussed risk assessment, emotional intelligence, communication and Broset checklist. Hard copies of lectures were made available online and literature references were available as resource. Also, current research works contained in journals in which practical data were used to show the possibility of the new change materializing was available online. All of these form the nature and format of the training.

The curriculum covered the following key topics (see Appendix C): risk assessment, de-escalation, emotional intelligence, and interpersonal communication. These major topics were delivered in modules with each covering a number of sub-topics relevant to the accomplishment of their specific objectives. The overall learning outcome of the curriculum is to ensure a knowledge transfer that would provide nurses with knowledge that would hopefully change from control to prevention, and knowledge of risk assessment, de-escalation, emotional intelligence, and interpersonal communication to their practice in the psychiatric setting.

An invitation flyer was posted on the units to invite participants. The scheduled period for the online education was two weeks to provide EBP education on de-escalation, emotional intelligence and effective communications as techniques to manage and prevent patient aggression. Skill education on how to complete the Broset violence risk assessment checklist was completed online. A post training quiz, at the end of the training period to determine the changes in knowledge with the recommended practice through the pre and post questionnaire and space for comments in the post questionnaire.

The individual participant was responsible for login online, reading the consent and consenting to participate in the education project then proceeding to the demographics and pre questionnaire, then the training and followed with the post questionnaire. To evaluate the impact of the educational program, a pretest questionnaire was administered online to establish the baseline knowledge nurses and BHTs. A

demographic questionnaire form was also administered to capture participants' details such as age, the number of years as a nurse, and their educational attainment.

The instrument used for the DNP project is set of structured questionnaires, for the collection of primary data directly from respondents using online platform. Content validity of the tool had been established to ensure that the questionnaire measures what they were designed to measure. To do this, the questions were developed and reviewed by an expert panel. To provide evidence of content validity the experts in the field of psychiatry developed the tool and established reliability for internal consistency with a Cronbach's alpha of 0.749 used with a sample of 30 nurses not related to the DNP project site (NM, personal communication, 2018, March 16). The questionnaire was administered as a pretest before the educational program and as a posttest, afterwards addressing specific aspects of the program. These questionnaires were based on specific skill sets addressing content provided in the educational program, including but not limited to risk assessment, de-escalation, emotional intelligence, and interpersonal communication.

The pretest scores were used to establish the baseline knowledge. Campbell and Stanley (2015) illustrated that it is essential to establish the baseline knowledge so as to determine the changes in the behavior. The cognitive information processing was used to determine the effectiveness of the program in improving nurse knowledge and efficacy in managing patient aggression and violence. In total, the participants were required to complete three questionnaires. Two of these were completed at the beginning as a pretest, demographics, and remaining one was completed at the end of the educational video. The

first includes the demographic factsheet. The demographic fact-sheet captured the general demographic details of the participants including their age, educational level, number of years as a nurse or tech, work unit, and gender. The fact-sheet was completed at the beginning of the project online education.

Protections. Though the educational strategy poses minimal risk to the participants, as DNP project leader, I have taken a number of steps to ensure that the ethical principles guiding data collection involving human participants are not violated. I have completed an online course on the protection of human participants in research. Approval from both the hospital and Walden IRB was sought before embarking on the DNP project. The participants were nurses and BHTs working in various psychiatric units and were not obtained from vulnerable groups.

All the target participants were adults who are healthy and have the capacity to make informed decisions regarding their participation in the DNP project. All the potential participants were informed about the intent of the project and its potential implications for the organization. There were some risks to participate, there is a chance the participant may become upset when answering questions about their experience of violence during the project. All the collected data was stored on a password-protected laptop.

Presentation Process Guide

The educational program was taught exclusively using e-learning platform, a PowerPoint presentation that discussed risk assessment, emotional intelligence, communication, and Broset checklist. Hard copies of lectures were made available online

and literature references were available as resource. Also, current research works contained in journals in which practical data were used to show the possibility of the new change materializing was available online. All of these form the nature and format of the training.

Analysis and Synthesis

Evaluating the impacts of practice changes is a crucial yet a step that is often overlooked in evidence-based projects (Hodges & Videto, 2011). The outcomes of a project are indicative of the impact they have made in an organization. It is essential to measure the outcome and the contribution of evidence-based projects to best practices (Melnyk, & Fineout-Overholt, 2011). The purpose of the DNP evaluation plan is to establish the extent to which the initial objectives of the study will be met.

Descriptive statistics were used to calculate the frequencies and the means so as to describe the characteristics of the study population using the demographic data collected. Scores at the beginning and at the end of the project were compared to determine the changes in knowledge. Statistically significant improvements in knowledge indicated that the project has achieved its initial purposes. A quantitative comparison of participant's scores in pre and post tests using paired t-test at $p<.05$ level of significance was conducted to determine that knowledge has improved. All data obtained in the project were analyzed using the Statistical Package for the Social Sciences (Version 21

Summary

In this section, the method used to identify various sources of evidence has been presented to support the development of the proposed project. There is substantial

evidence that staff education programs lead to improved staff knowledge in managing patient aggression as well as reduced use of seclusion and restraint practices. The purpose of the proposed project is to improve the nurses' knowledge in preventing and managing aggressive patients as well as minimizing the use of seclusion and restraint in psychiatric units at the hospital (Allen & Tynah 2000; Hahn et al. 2008; Guay et al. 2016). An evaluative project design was used to determine the effectiveness of the training program. The next section presents the results and the findings of the DNP project.

Section 4: Findings and Recommendations

Introduction

The rate of attacks on psychiatric mental health nurses by psychiatric patients has been on the increase over the years. Thus, the increase of violence in the DNP setting has exposed nursing staff working in a psychiatric setting to be exposed to greater work hazard compared with their colleagues in other specialties and even other professional groups within the same psychiatric specialty. In a way, the attacks on staff members were beginning to impact their job performance and health. The workplace is expected to be safe, conducive, welcoming, and accommodating to bring out the best in psychiatric nurses and every worker in general. The rate of patient aggression and the violent attacks towards the psychiatric mental health nurses suggested that they lack the knowledge in proper management of aggression and violence. The knowledge gap is ultimately responsible for the unabated scourge of violent attacks on nurses in a psychiatric setting. Specifically, psychiatric mental health nurses were discovered to have competencies in aggression control methods such as seclusion, restraints, and medication while they had little or no knowledge of aggression prevention approaches such as risk assessment, de-escalation, emotional intelligence, and interpersonal communication. As a way of addressing the gap in practice, a practice focus question was developed. The practice-focused question for the DNP project is: To what extent can a revamped educational program improve knowledge of nursing staff in a psychiatric setting? The purpose of the DNP project was to determine if there is an alteration in knowledge concerning management of aggression with the use of an educational program. To achieve

knowledge acquisition, psychiatric mental health nurses were taught risk assessment, de-escalation, emotional intelligence, and interpersonal communication as against solely relying on restraint, seclusion, and medication to reduce aggression by mental health patients.

The primary source of evidence for this DNP project were nurses working at the psychiatric unit of the project site, using a structured questionnaire administered online, as data collection instrument. The selection was made using SurveyMonkey™ platform, online data collection software supported by a non-probability sampling technique called convenience sampling technique. Power analysis method was used for sample size determination, and the computation resulted in a minimum of 80 subjects.

Findings and Implications

Of the 91 nurses who participated in the study, there were more female: 52 (57.1%) with fewer male 39 (42.9%). The larger number of women participants implies that the aspect of the study that might be influenced by gender would reflect more of feminine opinion. Most of the participants were holders of baccalaureate degree: 36 (39.6%), followed by holders of graduate and post graduate degrees: 25 (27.5%), 16 (17.6%) were holders of associate degree while 14 (15.4%) had high school diploma. Thus, about 67.1% of the nurses were graduates with some possessing higher degrees, thus placing them in the right stead to participate adequately in the study. The highest number of participants came from psychiatric nursing: 42 (46.2%), those from forensic were 24 (26.4%), general nursing 14 (15.4%) and geropsych 11 (12.1%). The implication of these descriptive statistics is that although psychiatric nurses were in the majority, they

did not comprise half of the entire sample. Also, the geropsychiatric specialist benefit from the education might not be apparent, because the sample size was so small.

Of the 91 participants, 32 (35.2%) had between one and six years of experience, 22 (24.2%) had between 11 and 16 years of experience, 20 (22.0%) had more than 15 years working experience and 17 (18.7%) had between one and five years of experience. Experience counts in a study of this nature. Hence, considering the fact that close to 80% of the participants had worked for over 5 years, they brought to bear their attitudes, experience and habits to the educational program. Most of the participants were aged 31 to 40 years: 29 (31.9%), followed by age group 51 and above: 24 (26.4%); then 41-50: 22 (24.2%) and between 20 and 30 there were 16 (17.6%). That most of the participants were aged 31 years and above brought maturity to the way and manner they handled the educational program. Most were likely to be serious during the knowledge transfer process.

SPSS v25 was used to analyze the data, to determine if the differences in the mean scores from the pretest to the posttest were statistically significant. To begin, there were five items which were phrased negatively to avoid response set bias (Greenleaf, 1992). These items, numbers 1, 3, 4, 5, and 8 were recorded on both the pretest and the posttest, so that all answers indicated negativity or positivity in the same direction (Appendix A). In addition, data were examined for normality, and although there was a normal distribution evident on the pretest, the posttest showed a statistically significant difference from the normal, so both parametric and nonparametric statistics were used (Table 1). The finding indicating a skewed and kurtotic distribution in posttest scores

this is different from the normal distribution is not surprising, as the staff included a range of scores on the demographics and confirmed the need for the educational process.

Table 1

Tests of Normality: Pretest and Postest

	Kolomogorov-Smirov			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Pretest	.073	91	.200	.981	91	.220
Posttest	.140	91	.000	.913	91	.000

Thus, I used both the paired sample t test and the Wilcoxon Signed Ranks Test to determine whether the change in scores from the pretest to the posttest was statistically significant. The paired *t* test, a parametric test, showed a difference of 102.34 points from pretest to posttest (135.16 on the pretest and 237.50 on the posttest; the lowest score possible was 25 and the highest possible score was 250) with a *p* value of .000. The Wilcoxon Signed Ranks test (z = -8.288, p = .000) was also significant. There were no differences when the test scores were analyzed based on age, gender, educational preparation, or specialty unit.

Recommendations

In order to potentially reduce the knowledge gap among nurses in psychiatric setting with respect to the appropriate approach to managing aggression and violent attacks by psychiatric patients, it is hereby recommended that the educational program assessed in the DNP project be introduced as part of mandatory induction training for

new hired nurses at the project site and possibly other psychiatric unit. Also, nursing hierarchy should adopt the content of the educational program as management protocol for psychiatric unit as part of the continuous education training for nurses and BHTs.

Strengths and Limitations of the Project

The major strength of this DNP project is that it does not involve any adverse effect or effects on human subjects. Reaching out to subjects via the online method equally gave the study the strength of far-reaching, flexibility of participation in the educational program and absolute protection of confidentiality of subjects' intentions to participate or decline participation. The online method afforded anonymity including participants' performances on both the pretest and posttest. The online module is self-paced education and it was completed at staff members' own time without interruption or distractions; as each individual learns at a different pace.

However, that the educational program was exclusively done online gave some limitations to its methodology. The program was not as interactive as it ought to be it was done face-to-face. The delivery model was also cumbersome as the researcher had to attend to questions and/or concerns of participants differently as all of them were not always online at the same time. Participants were initially reluctant to take part in the educational program as it was going to eat-up into their free time, which could be used for resting or another gainful engagement. Thus, I did not achieve a 100% enrollment of the nurses and BHTs in the study area.

For similar work in this similar area, a different methodology is recommended. It is recommended that instead of using online method of knowledge transfer, a face-to-face

approach is likely going to yield better result due to its interactive nature and the fact that the teaching modules can be put into practice as they are being taught.

Summary

In this section, findings from data analysis and their implications were discussed. There were more female participants than male. Most of the participants were holders of the baccalaureate degree with the least figure recorded for those with a high school diploma. As expected, the highest number of participants came from psychiatric nursing specialty while geropsych as a specialty produced the lowest number of participants. On the length of experience, the highest number of participants had between six and 10 years of working experience while the lowest number of participants had between one and five years of working experience. Considering the age distribution of participants, most of them were aged between 31 and 40 with the lowest number of participants recorded between ages 20 and 30 years. A test for normality showed that the datasets for the DNP project were not normally distributed, meaning that they are not evenly distributed about the mean, median and mode (which were expected to coincide if the datasets were normal); hence, the use of non-parametric test statistic for data analysis. A comparison of scores obtained by participants in the pretest and posttest showed a significant difference in knowledge, thus confirming that participants learned a lot from the educational program and indicated an improvement in their clinical acumen in managing psychiatric patients with respect to aggression and violent attacks. It was recommended that the educational program should be integrated into the induction training of nurses who are new in a psychiatric setting and that its content should be considered for acceptance as

part of psychiatric patients' management protocol. The major strength of the DNP project was its ability to reach far and wide through the use of online method but the online method also served as a limiting factor as there might have some advantages with a face-to-face approach, particularly if there were negative attitudinal issues that might have been changed to positive through interaction.

Section 5: Dissemination Plan

Introduction

There are two avenues for the dissemination of the DNP project work to relevant stakeholders. In the first case, the project is intended to be presented at a postsubmission scientific session using poster presentation at the next APNA and oral presentation to psychiatric mental health nurses at the project site during their routine annual research and projects reviews. Also, it will be presented to psychiatric hospitals in the metropolitan area. Ultimately, the project is being projected for publication in the psychiatric nursing periodical for a broader reach to psychiatric mental health nurses, who function outside of the case study area. Through this approach, the content of the educational program is set to be a global phenomenon, attracting the interest of scholars worldwide.

Analysis of Self

In the context of a nursing practitioner, I found the findings of the DNP project interesting and thought-provoking. Having been involved in the management of psychiatric patients for years and applying the established, though nonevidence-based methods of seclusion and restraints to control aggression. It was entirely in my imagination that methods do exist that could practically prevent aggression and violent attacks by psychiatric patients. As a practitioner, the dearth of knowledge on the prevention of aggression affected my practice and exposed me to preventable aggressive and violent attacks in my workplace.

My scholarly role in developing the proposed and educational program was indeed an eye-opener for me. It afforded me the rare privilege of exploring various academic, professional articles that are evidence-based approaches in the management of psychiatric patients. I was able to process available data to information; the understanding of the resultant information gave me sound knowledge on averting aggression and violent attacks. It is imperative to state that the application of the knowledge will eventually create in me, wisdom for a completely safe working environment for psychiatric mental health nurses and other professionals.

The DNP project is a complete process of solution-seeking for me. As the project manager, I saw the need to critically examine the work environment of psychiatric mental health nurses with a view to identifying an important area that impacts directly on their work. It took me a long while to realize that the threat to safety in the nurses' operating environment had a direct bearing with the knowledge gap between aggression control and aggression prevention. The project saw me objectively comparing the merits and demerits of these two approaches and identifying the specific methods included in each. Seclusion, restraints, and medication were placed side-by-side risk assessment, de-escalation, emotional intelligence, and interpersonal communication. As a project leader, I had to identify all the resources needed in pursuant to its completion in due time. I worked tirelessly to do a human resource planning for the work, prepared an estimate on the funds required for different phases of the project, generate both intellectual and other materials needed to facilitate the completion of the study, painstakingly worked out the most appropriate method for conducting the study and also did a time management

schedule through the preparation of a work plan that would see me completing the project before the due date. All my resources were planned, organized, directed along the right path and adequate control was instituted to ensure compliance with my pre-determined goals.

In order to create a nexus among project experience, present state, and long-term professional goals, my project experience saw me coming up with an area that has remained problematic to the nursing profession for a long time. Addressing the problem of working in an unsafe environment impacted negatively on performance, and most nurses were beginning to think of other specialties aside psychiatric due to aggressive and violent attacks in the setting. It was not easy to identify that all of these were due to the knowledge gap; or simply, an application of wrong techniques. The place of evidence-based practice is inevitable in every area of human endeavor. It was a past that had little or no connection with evidence-based practice to the present where advocacy for the use of evidence-based techniques is non-negotiable. There is a paradigm shift from controlling techniques to prevention methods in the management of psychiatric patients. The primary goal of the DNP project was achieved; that is, making psychiatric mental health nurses knowledgeable in evidence-based techniques such as risk assessment, de-escalation, emotional intelligence and interpersonal communication using an educational program. The long-term goals that are connected with the DNP project include implementation and institutionalization of these new techniques with the sole aim of eradicating aggression and violent attacks in the psychiatric setting by making it a policy to use the new educational program to train newly employed nurses in psychiatric

settings. Also, encouraging but new and experienced psychiatric nurses to "think outside the box," by independently identifying and applying aggression prevention techniques in an ordered sequence as a management protocol for psychiatric cases.

The completion of the DNP project was a challenging one to say the least. Looking back at all the events and activities that eventually resulted in the production of the DNP project, there is a strong nexus between classroom ideas and workplace realities. I had to navigate through some intellectual peregrinations before I could find an area that is so important to nursing practice, yet not so regarded as a fundamental problem that required urgent educational intervention. That the study centered on using an educational program to solve workplace problem gave me the knowledge that research into day-to-day functionality of the nursing profession is an important issue. Evolving approaches to management of patients generally are indicative of one gap or the other. Some of these gaps may not require educational intervention, like in the case treated here but some policy formulation or re-alignment. Completing the DNP project provided me with a learning opportunity and a problem-solving platform. In discussing some of the misgivings I encountered while conducting the project, there was an initial challenge of the possibility of preventing aggression as most of the literature were discussing aggression as a controllable rather than a preventable phenomenon. Even when some works of literature did recognize the possibility of prevention of aggression, there was the challenge of whether it is more effective than control mechanisms.

As I became more comfortable with the topic but was at a crossroad of whether to work on full implementation of the identified prevention methods or concentrate on a

simple educational process. It took a while before I came to terms with the fact that implementing these new methods would need to be fully implemented outside of the scope of the DNP project. Hence, the focus changed to education as opposed to full implementation. Education equally presented its unique challenges. How was I going to identify nurses who needed my proposed educational program? What form would the training session take? How would I assess learning among the participants? How was their participation going to affect their duties and what would be the reaction of nursing hierarchy to my educational program? Finally and most importantly, how would I be able to ensure confidentiality of participants with reference to their identity, opinion, and scores in both pretest and posttest? Virtually all these challenges were addressed when I resolved to use an online electronic to provide the education and collect the data. The online method equally promotes confidentiality and it was adequately and appropriately utilized. As I journey through the ever-challenging and critical academic pathway, the significant insights gained were that every DNP student has a role to play in contributing, every problem has a solution even in an imperfect form and that solutions are susceptible to refinement as time goes by. The findings of the project can be further modified to generate better solutions that will make a more significant impact on aggression management.

Summary

The DNP project attempted to make the work environment safe for psychiatric mental health nursing staff. It sought to address a fundamental issue in closing an important knowledge gap among nurses. A generational problem that required

educational program was discussed in this study. Education is relevant to better job performance and is also instrumental in solving perceived insurmountable obstacles in the workplace. Forcing psychiatric patients to remain calm using any of seclusion, restraint, and medication are no longer considered the best practices. With proper education, psychiatric mental health nurses will be proficient in preventing aggression by using any risk assessment, de-escalation, emotional intelligence, and interpersonal communication. All the above remains the essence of the educational program implemented in the DNP project.

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Appendix A: Pretest Posttest Questionnaire

Pre-Test/ Post-Test: Prevention and Management of Aggression and Violence in Mental Health Settings

Assigned ID number: ______________________________

Date:

Instruction: Use the code numbers below to signify your response to each question

Scale Indicator: 1 – No Agreement

2 - Very Much Disagreed

3 - Much Disagreed

4 - Disagreed

5 - Indifferent

6 - Partially Agreed

7 - Agreed

8 - Much Agreed

9 - Very Much Agreed

10 – Full Agreement

Rating scale 1=No agreement 10= full agreement	1	2	3	4	5	6	7	8	9	10
1. All patients are likely to be aggressive.										
2. When nurses have no interaction with patients, there is the chance that patients will become violent										
3. Most of our patients have criminal records, it is not safe to stay in the same place with them.										
4. Medication is the only treatment that can be used to prevent patient										

aggression.										
5. It is not possible for the staff to know that a patient may become aggressive.										
6. A new patient should be checked for possible risk of aggression or violence that may come later.										
7. When a nurse is talking to a patient, they should show that they are fully involved in the discussion.										
8. Aggression is always sudden in patients.										
9. To be aware of your surrounding and what is going on with your patient will help to reduce aggression.										
10. When patients can communicate freely with staff, the patients are less aggressive										
11. In the course of managing patients, nurses should know when not to be too close to patients										
12. The nurses should know when to walk away from a violent patient.										
13. Trying to meet the needs of every patient does not necessarily prevent aggression.										
14. A nurse should not show that they like a particular patient and do not like another patient.										
15. When nurses show confidence in the discharge of their professional duties, aggression is prevented.										
Rating scale 1=No agreement 10= full agreement	1	2	3	4	5	6	7	8	9	10
16. Nurses should avoid every form of distraction when a discussion line is opened by a psychiatric patient.										
17. A nurse who knows what to do and what not to do while on duty would be able to prevents aggression and violence by patients.										

18. Non-verbal and verbal communication is important in the management of violent patient.										
19. Speaking clearly is one attribute that makes a nurse competent in the prevention of aggression										
20. Rewording is a communication skill that makes a psychiatric nurse function effectively										
21. The use safety protection skill is effective in psychiatric setting										
22. Startling reactions are normal in a staff who has been assaulted by a patient.										
23. The nurse should identify that maintaining an open arm is a nonverbal clue of active-listening										
24. Confusion, irritability, boisterousness, physical threats, and verbal threats are signs of aggression in Broset violence checklist										
25. Empathy is considered to be one of the most important parts of the therapeutic relationship.										

Appendix B: Demographics and Competency Assessment

The questionnaire was designed for the purpose of eliciting requisite data towards the completion of Doctor of Nursing Practice (DNP) degree dissertation on the topic "Can Educational Intervention on the use of Risk Assessment, De-escalation, Emotional Intelligence and Interpersonal Communication Prevent Violent Attacks on Psychiatric Mental Health Nurses".

Kindly pick an option per question and you are assured that information provided shall be used for academic purpose and nothing more.

PART A: Biodata of Respondents

S/N	**QUESTION**	**RESPONSES**			
1.	What is your gender?	Male	Female		
2.	Indicate your age group	20-30	31-40	41-50	51 & above
3.	What is your highest academic qualification?	High School Diploma	Associate Degree	First Degree	Post Graduate or higher
4.	Indicate your area of specialty?	General Nursing	Psychiatric Nursing	Geropsych	Forensic
5.	What is your length of experience in completed years	1 – 5	6 – 10	11 – 15	Above 15

Appendix C: Educational Curriculum Plan

Project Title: Prevention and Management of Aggression and Violence in Mental Health Settings.

Problem: High risk of experiencing violence and aggression towards psychiatric mental health nurses

Purpose: The purpose of the DNp project is to determine if there is a change in knowledge among staff members who work in a behavioral health (BH) setting related to managing patient aggression with the use of an educational program.

Practice Focused Question: To what extent can a revamped educational program improve knowledge of nursing staff in a psychiatric setting?

Learning Objective: At the end of this educational program, participants	Content Details	Presentation Mode	Ref. that supports content area or behavioral objective	Evaluate each area of content
Determining nurses level of knowledge in aggression management	Nurses' knowledge base in aggression management The components of seclusion Sources of psychiatric patients Risk assessment in psychiatric setting using Broset risk assessment checklist De-escalation as an exposition to patient's mood A self-regulated nurse Essence of interpersonal	Oral presentation via power-point online format.	Allen, D., & Tynan, H. (2000) Almvik, R., Woods, P., & Rasmussen, K. (2007).	This will be evaluated with the use of Pre and Post Tests

	communication.			
Acquiring knowledge for self-protection	Keeping the right distance from aggression prone patients Empathetic and sympathetic disposition in psychiatric setting Knowing psychiatric patients' mood Being non-judgmental in managing patients Application of medication and seclusion or restraints in aggression control as the last result	Oral presentation via power-point online	Price, O., Baker, J., Bee, P., & Lovell, K. (2015)	This will be evaluated with the use of Pre and Post Tests

Educational Curriculum

Module 1: Introduction to Broset Violence Checklist

Module 1 introduces Broset Violence Checklist (BVC). It spells out the six cardinal issues that are evaluated with the checklist. The core areas to be assessed by BVC include: Confusion, Irritability, Boisterousness, Verbal Threats, Physical Threats and Attacks on objects. In Module 1, other key terms such as sensitivity, specificity, predictive validity, violence prediction and risk assessment will be explained with illustrations. For the purpose of evaluating violence process in clinical practice, Module 1 will teach participants the rudiments of developing data collection instrument. To foster harmonious working relationship, all professional groups will be taught the importance of teamwork. Further to the foregoing, participants will be educated on how to assess the risk of violence to self, others and property. Participants will be exposed to standardized risk assessment tool that will focus on the earlier listed six core areas of violence. Finally, there is PowerPoint slide of how to complete BVC and operationalize and interpret the results (Sande, 2011).

Module 2: Emotional Intelligence

Module 2 will commence with detailed explanation of the concept of “Emotional Intelligence”. It will also cover the five components of emotional intelligence (Self-awareness, Self-regulation, Motivation, Empathy, and Social skills). For emotional intelligence to be appreciated, its application to workplace will be taught by looking at areas such as (a) the need to be concerned with emotional intelligence; (b) thinking about our emotional intelligence; (c) thinking about our own behavior (d) Knowing oneself (e)

attentive listening (f) getting involved in conflict resolution and negotiation (g) using nonverbal communication in workplace (h) identifying attributes of difficult people (i) application of stress reduction kit (j) Managing stress (k) knowing people's boundaries (l) using the rules of the thumb and (m) motivating people.

Module 3: Communication Strategies to Prevent and Manage Aggression and Violence

The module that is presented next centers on evolution, conceptualization, adoption and implementation of communication strategies for the purpose of preventing and managing violence and aggression. Specifically, the following topics will be taught: definition of interpersonal communication; interpersonal communication as a process; why interpersonal communication; features of interpersonal communication connection between interpersonal communication and ethics, what makes communication inappropriate, effects of diversity on interpersonal communication, and steps for increasing interpersonal communication competence. Verbal and non-verbal communication and how it affects the nurse-patient relationship. The second part of the module will cover topics such as aggression and violence in psychiatric setting; relating with psychiatric patients and using interpersonal communication to prevent aggression and violence.

Module 4: Completing Broset Violence Checklist

Module 4 is exclusively a practice session. Participants will be shown a standard Broset Violence Checklist form. All the elements on the form will be defined in purely contextual manner. The checklist consists of a series of rows and columns; while the

rows show the six aggression violence factors that depict violence progression down the line; the columns show what time of the day the form is completed. Three periods of the day (night, day and evening) for each day of the week are to be involved. For each period, each factor is assessed and completed appropriately

Confusion

Irritability

Boisterous

Verbal Threats

Physical Threats

Attacking objects

Confusion: patient is asked to say time, identify a person or persons and asked to identify places.

Irritability: patient is evaluated on the basis of being able to accept the presence of others or not.

Boisterous: patient's tone is assessed when talking; whether it is rising or not.

Verbal attacks: patient is evaluated for verbal outburst that is considered higher than raised voice

Physical threats: patient is assessed for aggression; attacking others, grabbing people's clothing, raising of arm or leg as a way of attacking people.

Attacking objects: patient will be evaluated for unreasonable throwing of objects, kicking of furniture, smashing windows and other objects.

When no aggression is seen: a score of 0 is entered into the respective cell, when the noted level of risk is moderate and preventable, a score of 1-2 is indicated and when the risk of violence is high, a score of >2 is entered into the respective cell.

Module 5: Feedback

Module 5 is the last module and it is essentially for taking feedback from participants. Participants will be allowed to share feedback on the training with a view to sharpening rough edges and harmonizing thoughts and connecting with global best practices in the implementation of the outcome of the educational program. The post test and evaluation of the educational PowerPoint content will be completed online by the participants.