2019

Implementation of a Trauma-Informed Care Program for the Reduction of Crisis Interventions

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MSN, Loyola University, 2009

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Project Submitted in Partial Fulfillment

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Abstract

Childhood trauma is the primary reason children and adolescents display behavioral issues that require hospitalization. Implementation of a trauma-informed care (TIC) program was the intervention chosen at a child and adolescent behavioral health hospital to decrease physical holds and seclusion rates for patients aged 3 to 17 and to reduce the risk of retraumatization of children needing psychiatric care. Six core strategies from the National Association of Mental Health Program Directors was the framework for this project. The number of crisis interventions before and after implementation were 440 and 259, respectively. The number of seclusions before implementation was 215, and total number of restraints was 225. The number of seclusions after implementation was 125, and total number of restraints was 134. Data showed that implementing a TIC program decreased the use of physical holds and seclusions by 26% within 6 months of program implementation. The implications of this project for positive social change include changing the approach to children with high-risk behaviors by decreasing the risk for retraumatization.

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Dedication

This project is dedicated to my husband and children who supported me during this process. The amount of time taken away from my family to complete this project was un-measureable and I am truly grateful for their devotion to my goal of obtaining my DNP.

Acknowledgement

I want to acknowledge my instructor Dr. Mary Verklan. Your continued support and dedication to our profession is something I will forever be grateful for. To my mentor Mrs. Dottie Irvin, your dedication to teaching future nurses has become my life dream and I will continue to teach in your memory. To my parents who pushed me to become a nurse in my younger years when my priorities were not sensible, thank you. I am forever grateful to you all, and my heart is overflowing.

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Section 1: Nature of the Project

Introduction

In the field of Child and Adolescent Psychiatry, it is imperative to understand how the patient's past can affect their current mental health. To be educated regarding trauma-informed care (TIC) means to be working with patients who have been traumatized and will have a deeper understanding of patients' past trauma and how it can affect their current mental health treatment. A traumatic event affects everyone differently and can have minimal or lasting effects on an individual. 25% to 61% of children and adolescents in the United States have been exposed to some form of trauma (Delaney, 2006). In 2012, an estimated 4.5 children died every day in the United States due to abuse and neglect (Saxe, Ellis, & Brown, 2016, p. 5). For some children, having to understand and deal with the stress of a traumatic event can be devastating and often require an acute stay at an inpatient behavioral health hospital. It is during a hospital stay that children may require a crisis intervention such as a physical hold or seclusion, thus increasing their risk of being retraumatized (Clarke, 2013). I will examine the implementation of a TIC program and show reductions in the use of physical holds and seclusions within the child and adolescent inpatient population. Within the project paper, I provided an overview of the project and a review of the scholarly evidence and outlined the significance and execution of the project. Section 1 of the study will containan introduction to the problem, background, problem statement, purpose, practice-focused questions, and objectives. Section 1 also includes frameworks for the project, nature of the project,

definitions, assumptions, scope and delimitation, limitations, and significance to the nursing profession.

Background

To qualify for admission to an inpatient mental health hospital, a patient must be declared harmful to themselves or someone else. Thus, the potential for patients to become aggressive to themselves or others is generally high during an inpatient stay. If patients become aggressive, it is the responsibility of the staff to keep them safe if they are not able to themselves. The use of physical restraint and seclusion are interventions used to keep a patient safe when all other interventions have failed (Oster, Gerace, Thomson, & Muir-Cochrane, 2016). Seclusion is an involuntary confinement of a person in a room or area. Restraint is a manual or mechanical device restricting a person's movement. Not all patients require the use of physical restraint or seclusion and staff make every attempt to not use such interventions. A few failed interventions include one-to-one interactions, verbal deescalation, use of identified coping skills, and separation from the milieu. Physical restraint and seclusion are restrictive interventions used to keep patients safe from themselves or others. Interventions such as physical restraint and seclusion should only be used when the patient is exhibiting imminent risk to self or others (Azeem, Aujla, Rammerth, Binsfield, & Jones, 2011). It is during the use of a physical restraint or seclusion that the risk of being re-traumatized is high. When children are admitted to an inpatient hospital, they are taken away from everything they know, their families, and their environment, and placed into a confined area that is designed to keep them safe. For those children requiring an inpatient stay, the experience can be

traumatizing, and if they require a crisis intervention, the risk is increased for even more traumatization (Muskett, 2014). When a patient is showing signs of imminent risk, staff must use skills based on TIC to lessen the risk of the patient being re-traumatized.

Problem Statement

When children are admitted to an inpatient facility, they have been referred from an outside agency to keep themselves safe or for someone else's safety. When children become a risk to harm themselves or someone else, an intervention must be done to keep the patient safe. The intervention used to keep a patient safe from harm can vary with each interaction. Two interventions that are currently being implemented within inpatient behavioral health hospitals are the use of physical restraint and seclusion. A physical hold restricts movement and control of the patient, whereas seclusion is involuntary confinement of a person in a room or area preventing the patient from leaving (Oster et.al., 2016).

For the past 6 months from April, 2015 to September, 2015, there have been 174 instances of physical restraint and 145 seclusion episodes at a local child and adolescent behavioral health hospital. The average for physical holds from April, 2015 to September, 2015 was 29 per month. The average for seclusions from April, 2015 to September, 2015 was 24 per month. Completed paperwork is required to be turned in on the day of the crisis intervention. The required paperwork is turned into the Risk Manager (RM); the Risk Manager generates a monthly report for corporate administration to review each month. Corporate administration collects data on every hospital owned by corporate and calculates the monthly benchmark based off each hospital rate. Currently

the corporate benchmark at this hospital has been set at 11.9 physical holds and 2.4 seclusions (personal communication, September 15, 2015). As of September, 2015 this hospital is over benchmark, and if these trends continue, this hospital will be placed on corporate watch. Being placed on corporate watch increases the hospital's risk for spontaneous surveys from corporate leaders. By decreasing physical hold and seclusion rates with the help of the TIC program, it will decrease children's risk of re-traumatization, thus providing a higher level of care. A residential provider in Ohio began a restraint reduction program after implementing the National Association of Mental Health Program Directors (NASMHPD) six core strategies. The six core strategies include leadership towards organizational change, using data to inform practice, work force development, use of seclusion and restraint reduction tools, ensure service users are given full information and use of debriefing techniques., and since the TIC program was initiated, restraint rates reduced by 94% (LeBel, Huckshorn, & Caldwell, 2010).

There are positive and negative consequences involving the use of physical hold and seclusion. One positive consequence involved with interventions such as physical restraint and seclusion is that the patient is free from harm during the intervention and can resume their normal activities once the intervention is discontinued. A negative consequence is the patient is either physically held or secluded in a safe area until the patient is no longer harmful to themselves or someone else. Utilizing this intervention could traumatize or re-traumatize the patient causing increased mental or physical harm to the patient. (Hammer, Springer, Beck, Menditto, & Coleman, 2011). A crisis intervention such as a physical hold or seclusion could have lasting traumatic effects on

patients' future mental health, causing a longer length of stay or future readmissions (Regan, 2010).

Purpose Statement

The purpose of this project initiative is to implement a TIC program to decrease physical hold and seclusion rates, thus decreasing a patient's risk of being re-traumatized. When children require admission to an inpatient behavioral health hospital, they often come after a crisis has occurred. They are brought to an unfamiliar facility, separated from their families and removed from their normal surroundings. Having to be hospitalized can be traumatic enough on top of the trauma that led them to have behavioral health issues from the beginning. Children who have been traumatized are not able to regulate their emotions and often require more attention from staff to help them de-escalate (Black, Woodworth, & Tremblay, 2012). Mental health workers who care for these patients are often greeted with behaviors that can be aggressive and unsafe and require a higher level of training to safely handle these children verbally and physically.

Upon hire, employees are required to attend a 3-week orientation program that will teach and guide them to care for patients with behavioral issues. Children with behavioral issues have a difficult time regulating their emotions and often become defiant when asked to perform a task or to stop doing a negative behavior (Hammer et al., 2011).Mental health workers such as nurses and behavioral health technicians (BHTs) are prepared to intervene when needed to ensure safety of the milieu or patient care areas. While in the milieu, patients are never left unattended as the risk for behavioral issues rises when children are confined in an area such as a group room or hallway. The risk of

using a restrictive intervention does increase when patients are not engaged in programming, staff are complacent with rules, when patients feel neglected, or when their needs are not being met. The purpose of implementing a TIC is to decrease restrictive interventions and provide an increased level of care that children with behavioral issues can thrive in.

Practice-Focused Question and Project Objectives

The project question is: Can implementing a TIC program by using the NASMPHD six core strategies decrease physical hold and seclusion rates by 25% within 6 months after implementing a TIC program? Decreasing the use of physical holds and seclusions will provide those within the field of child and adolescent psychiatry an ability to provide safer practices within the inpatient population. The TIC will provide organizational change and use of data to inform practice, provide workforce development, develop physical hold and seclusion prevention tools, highlight consumer roles in inpatient settings, and provide debriefing strategies.

To be able to decrease the need for crisis interventions while reducing the risk of patients being re-traumatized, a culture change will need to occur. Currently, patients are physically restrained or secluded when they are a danger to themselves or others, which are interventions in accordance with policy and procedures. Implementation of a TIC program will provide staff with multiple ways to avoid re-traumatization of patients and staff, decrease injuries, enhance best practices, and ultimately improve treatment outcomes and staff morale.

The first objective is to implement a TIC program based on the NASMHPD six core sstrategies. The NASMHPD focuses on crisis prevention and violence prevention, reduction of the use of seclusion and restraint, implementation of a TIC culture of care, and providing a patient-centered level of care that focused on planning and treatments (National Association of Mental Health Program Directors, 2006). Utilizing the NASMPHD's six core strategies as a guide for implementation of a TIC culture will decrease the practice of restrictive interventions and children's risk of being re-traumatized. Sustaining a decrease in crisis interventions, decreasing staff turnover, and improving staff morale will help create a culture that is trauma-informed.

The second objective is to decrease the utilization of seclusion and physical holds by 25% within 6 months after implementation of the TIC program at a child and adolescent inpatient hospital. Implementation of a TIC program using the NASMHPD's six core strategies will begin first with educating the nursing leadership team about the six core strategies to reduce the use of physical holds and seclusions. Educational sessions will be offered weekly beginning with nursing leadership. Once nursing leadership is trained, the nursing staff and BHT's will be trained regarding TIC and techniques to improve care delivery to patients with trauma. Data will show rates for crisis interventions before and after implementing a TIC program. The RM is responsible for reporting all crisis interventions to corporate administration. The RM is also responsible to lead the monthly Quality Management Committee (QMC). The rates for each intervention are documented, tracked, and trended and reported during monthly Quality Management Committee (QMC) meetings. Information is shared regarding

seclusion and physical hold rates, average time of day for use of physical holds and seclusions, and average day of week for utilizations of physical hold and seclusions. The RM is responsible for gathering the monthly rates of physical holds and seclusion and compares these rates to the previous months.

Frameworks for the Project

Implementation of a TIC program was constructed on the six core strategies established by the NAMHPD. The NAMHPD represents public health service delivery systems, and their goals are to promote wellness, resiliency, and recovery in all mental health communities that provide care to patients with mental illness. The framework used is the six core strategies that consist of organizational change, use of data to inform practice, provide workforce development, develop physical hold and seclusion prevention tools, highlight consumer roles in inpatient settings, and provide debriefing strategies. The development of the six core strategies was developed due to the increased utilization of seclusion and restraint and the effect trauma has on the mental health population.

The first principle is leadership towards organizational change. Leadership towards organizational change means that senior leadership needs to be aligned and committed to the reduction of seclusion and restraint and are aware of the effects of their use. The second principle is using data to inform practice. This means data regarding the number of physical holds and seclusion by unit, shift, day, and staff member are important to understanding the use of crisis intervention. The number of physical hold and seclusion rates gathered are used to help set improvement goals and compare rates over a specified time. The third principle is workforce development, which focuses on the

creation of an environment that is coercion-free and primarily implemented through staff training and education. Policies, procedures, and practices are based on principles of recovery and characteristics of TIC systems that support workforce development. The fourth principle is the use of seclusion and restraint reduction tools, and focuses on the use of tools and assessments that are specific to each individual patient. The tools and assessments used by mental health staff who work with mental health patients consist of identifying risk factors, restraint and seclusion history, use of trauma assessment, identification of risk factors for death and injury, and the use of de-escalation safety plans. The fifth principle is ensuring service users are given full information about service and treatment choices and options. Patients are to be included in safety crisis plans, multidisciplinary care plans and family staff meetings to help with crisis intervention reduction. The sixth principle is using the process of debriefing after a crisis intervention has occurred. Debriefing after an event ensures knowledge, informs policies, procedures, and practices to avoid physically holding or secluding patients in the future. There are two separate debriefing events: one event immediately after the incident and the second using a more formalized process within a few days.

Nature of the Project

The approach used to reduce the use of seclusion and restraint is the implementation of a TIC program. Implementation of a TIC program will provide several positive changes for child and adolescent populations who require inpatient care and the medical and nursing staff who care for them. Positive changes that can occur are improved patient outcomes, reduced recidivism rates, positive coping skills, and

improved patient and staff interactions (LeBel et al., 2010). Patients are educated about their own trauma and how it has affected them, and they will be managed in a milieu that uses crisis interventions as a last resort and staff understand the risk using physical holds or seclusions has on re-traumatization. The lifelong damage trauma exposure has on children and adolescents including long-term adverse mental health effects supports the need for all inpatient mental health staff to become trauma-informed (Muskett, 2014).

Implementation of a TIC program will provide benefits to all members of the multidisciplinary team. The education gained from being trauma-informed will increase staff satisfaction, provide an increase in staff morale, and provide staff with alternatives to seclusion and restraint (Valenkamp, Delaney, & Verheij, 2014). Mental health staff include physicians, nurses, social workers, and support staff. Mental health staff are educated with either a college degree and or licensure to ensure they have basic knowledge regarding what mental illness is and how it can affect a person. However, when working with a specialized population such as children and adolescents with behavioral disorders, specialized education is required. Specialized education for staff who work with mental health patients consist of age-specific competencies, experience with mental health codes, knowledge of trauma informed care, and alternatives to physical holds and seclusions. Knowledge gained will educate staff on more alternatives to treatment, and include evidence-based knowledge that will provide an environment that is safe and therapeutic.

Data on seclusion and physical hold use is gathered daily by unit managers regarding who had a crisis intervention the day prior, why it occurred, and what the

patient's response was to the crisis intervention. Staff are debriefed within a defined time frame regarding the incident and senior leadership are either present or available by phone to discuss the incident and what could have been done to prevent the crisis intervention from happening again. Treatment plans are updated and changed to reflect the use of physical hold and seclusion reduction techniques that are specific to the patient. Care and staff morale will continue to improve and TIC will be used to ensure patients receive appropriate care without the risk of being re-traumatized.

Definition of Terms

Crisis Intervention: The use of a physical hold or seclusion. It is used when all other interventions have failed. Interventions are coping skills that are specific to the patient that help the patient calm down, release stress, distract them from what made them upset in the first place, and hopefully decrease the chance of a crisis (NASMHPD, 2016).

Milieu: The physical and social surroundings of a person or group of persons. A milieu is the feel of the unit, the morale of the staff, and the investment of the patients, and is what sustains a safe environment (Espinosa et al., 2015). A milieu that sustains a crisis intervention affects many aspects of the hospital unit. A crisis intervention affects a patient's demeanor, staff engagement for patients not involved with the physical hold or seclusion and programming that should be occurring but is halted until the crisis is averted.

Trauma-Informed Care (TIC): A practice that promotes safety, trustworthiness, choice, collaboration, and empowerment for every person involved within a milieu. TIC

involves creating a safe environment that provides information to staff about the psychological and neurological effects of trauma and the effects trauma may have on patients with mental health issues (Berger & Quiros, 2014).

Traumatic Events: Iincidents that are perceived as terrifying, shocking, and sudden, or create a threat to someone's safety. Examples of traumatic events include but are not limited to all forms of abuse, neglect, war, abandonment, and natural disasters (Black et al., 2012).

Assumptions

There are many dependent factors that should be considered during the implementation of a TIC program in regards to assumptions, delimitations, and limitations. According to Simon (2001), assumptions are out of anyone's control but are needed within a person's project. The first assumption is trauma can be prevented within any environment that exists today. The more information people have regarding what trauma is and how it can affect a person increases the chance it can be prevented. When a hospital implements the six core strategies ofTIC, the risk of a patient experiencing trauma while being in the hospital will be decreased by reducing the risk of physical holds and seclusions.

The second assumption is that mental health nurses and staff have a process guide to follow that will establish a model of practice that will improve patient care and their ability to deliver safe care, thus providing increased staff satisfaction, morale, and retention. Providing staff with a TIC model of practice will improve their knowledge base and lead to increased confidence in their own practice.

The third assumption is implementation of a TIC program will improve patient care by providing staff with increased knowledge needed to care for a specialized population. Care of patients with mental health disorders is not always taught in higher education courses. Using the knowledge gained by attending the TIC program will help staff relate and empathize with individuals with mental health issues on an enhanced level. Thus, patient care will improve and staff will demonstrate increased satisfaction with the care provided as well as the patient's response to that care.

The fourth assumption is that TIC will promote an evidence-based practice to improve patient care to current and future psychiatric patients. Experiencing trauma is not genetic, however, traumatic events within families may have lasting effects from one generation to the next. Childhood exposure to adverse experiences such as trauma, can increases their chances of alcoholism, suicide attempts, depression, drug abuse, obesity, heart disease, and cancer (Saxe et al., 2016).

Scope and Delimitations

According to Simon (2001), Delimitations are characteristics that limit the scope and define boundaries of the project. The implementation of TIC was chosen due to the increased use of physical holds and seclusions within inpatient hospital stays for children and adolescents. The child and adolescent population is at a critical state in human development as their brains are still developing, and their attitudes and perceptions are very impressionable. The risk within the child and adolescent population to have experienced trauma is high. When a patient is admitted to an inpatient behavioral health hospital that use trauma informed care, that patient has a decreased chance of being re-

traumatized if a crisis intervention is needed (Hammer et al., 2011). The population being identified in this practice problem are children and adolescents aged 3 to 17 years who have been admitted to an inpatient behavioral health hospital.

Limitations

Limitations are potential weaknesses in your study and are uncontrollable (Simon, 2001). Patients are admitted to inpatient behavioral health hospitals with many different diagnoses and reasons for admission. One limitation is that perception of what constitutes trauma will vary from patient to patient. Each patient comes to the hospital with their own sets of ideas, hopes, dreams, and ideations regarding how the world works. The second limitation is that each child will have different levels of cognitive abilities that may alter their understanding of what trauma and crisis intervention is, how to identify coping strategies, and also how to interact with staff.

Significance of the Project

Seclusion and physical holds have been long-standing interventions used in the field of child and adolescent psychiatry. Using seclusion and physical holds is an appropriate option when the patient presents an imminent risk to self and others (Azeem et al., 2011). The implementation of the TIC program included the use of such interventions; however, the importance is on ensuring all other options have been exhausted. The TIC program ensures all staff involved with patient care have a deep understanding of what trauma is, how the trauma affects people within all age populations, interventions to be used instead of physical holds and seclusions, and use of the debriefing process to learn from previous mistakes. Implementation of the TIC

program should allow for reductions in seclusion and restraint by ensuring all other interventions have been used before using physical holds and seclusion. A decrease in the use of such crisis interventions will decrease the risk of re-traumatization of the patient, increase staff morale, and improve patient outcomes (Hammer et al., 2011). Fostering an environment that will create a reduction in the number of crisis interventions, improve patient care, increase staff retention rates, and improve patient outcomes is worth achieving. The use of NASMHPD's six core strategies will promote an environment to sustain such changes. Implementing NASMHPD's six core strategies will assist with the culture change needed to enable the TIC program, reduce the use of crisis interventions, increase staff retention, and improve patient outcomes.

Reduction of Gaps

Trauma can affect anyone at any time in their life, and at times the effects of trauma can have a lasting effect on a person's future. Childhood trauma exposure can cause long-term adverse mental health outcomes, dysfunction in brain development, difficulties with social development, and ineffective interpersonal relationships (Muskett, 2014). In the field of child and adolescent psychiatry, trauma is a common factor that can help identify when behaviors began and assist mental health workers to be able to use information gained about the patient's past to assist them with their current psychiatric crisis. Information learned regarding patient trauma will also help caregivers empathize with negative behaviors and if needed use alternative interventions instead of physical hold and seclusions.

Implications for Social Change

Trauma exposure can have lasting effects on a person's mental health and also contribute to irreversible mental damage. When a child is exposed to trauma, the brain overcompensates in the limbic system in a way that is conducive to surviving a traumatic event or environment. Changes within the brain due to traumatic exposure can lead to dysregulation of cortisol, which inhibits appropriate social behaviors and induces aggressive behaviors (Black et al., 2012). No one is immune to trauma within their lifetime. Knowing effects of what trauma can do to a child's future can possibly change or alter paths parents choose for their children's future. Knowing as an adult what it is like to have experienced trauma and how it affected one's life can have significant advantages. Awareness regarding what causes trauma, how to prevent and protect oneself from trauma, and how to care for someone who has been traumatized can reduce the likelihood of future traumatic events in an individual, their loved ones, or anyone they may encounter.

A critical component to developing a TIC program is ensuring all staff who have contact with patients have a comprehensive understanding of the effects and complexities involved with trauma, signs and symptoms of trauma, and how to care for children who have been traumatized. Working with children who have been traumatized is difficult, and often mental health caregivers become burnt out fast, have high levels of compassion fatigue, and either do not last long in the field or begin to provide a less therapeutic environment for patients (Foster, Bowers, & Nijman, 2006). High levels of patience and understanding are just a few of the skills required of someone to care for children with

behavioral disorders. To work within the child and adolescent population it is important to know what trauma is, how it affects children, and how to care for children with behavioral issues to ensure a successful treatment experience for those with a history of trauma.

Summary

Implementing TIC program for children and adolescents within an inpatient behavioral health hospital is important to decrease their risk of being re-traumatized. Providing mental health staff with increased knowledge regarding what trauma is, how it can affect their patients, and interventions to stop or prevent trauma can have a positive lasting effect on young mental health populations. The child and adolescent population is fragile and impressionable and with the information gained from implementing a TIC program, mental health staff have the ability to change lives for the patients they care for. Section 2 will provide further information on how TIC can affect nursing practice, provide concepts and models to be used, and identify how a TIC program can be implemented.

Section 2: Background and Context

Introduction

When children are admitted to an inpatient behavioral health hospital, a crisis intervention may be required to keep them safe. Harming oneself or someone else is a requirement for an intervention such as a physical hold or seclusion. Children are products of their environment and often learn and act out what is around them (Li, Johnson, Musci, & Riley, 2016). These learned behaviors often do not adhere to a healthy lifestyle and require mental health interventions to learn new ways of coping with stressful situations. Implementation of a TIC program will support these interventions and provide increased insight into trauma-related diagnoses and behaviors and provide support to a milieu that is often stressful and chaotic. Section 2 of the study will include the literature search strategy, review of concepts, models, and theories, frameworks, literature review related to methods, and background and context.

Literature Search Strategy

The library source used for this quality improvement project was Walden University. Several search engines used wereCumulative Index to Nursing and Allied Health Literature (CINAHL), ProQuest Nursing, Allied Health Source, Medline, Pro Quest Health & Medical Collection, and PubMed. Key search terms used within the search engine were *trauma-informed care*, *trauma*, *child and adolescent psychiatry*, *physical hold and seclusions*, *reduction of physical hold and seclusions* and *NASMHPD*. All sources were published within the past 7 years dating from years 2012 to present day. Thirty articles were located, of which 18 were chosen that fit the search terms. The

quality improvement project needed to contain specific key terms that discussed reduction of physical holds and seclusions, content was specific to child and adolescent population, information regarding trauma and the effects of trauma on mental health and explanation of the six core strategies created by NASMHPD.

Concepts, Models, and Theories

The main concept used for this quality improvement project is the use of a TIC program. TIC means having a profound understanding of how past trauma experiences can affect the current realities of a person's mental health and overall wellbeing (SAMHSA, 2014). The provision of TIC is an emerging concept to address trauma in the lives of children as well as adults. TIC refers to the recognition of the persuasiveness of trauma and has a commitment to identify and address it early (Hodas, 2006). TIC involves resisting re-traumatization of patients in inpatient and outpatient settings and educating staff who work with patients with mental illness or behavioral health disorders (BHD). Mental Illness or behavioral disorders can consist of depression, anxiety, oppositional and defiant disorder (ODD), post-traumatic stress disorder (PTSD), attention deficit hyperactivity disorder (ADHD), and attention deficit disorder (ADD). The rationale for using the TIC concept was due to the effects of past trauma and how it can affect someone with mental illness in a profound way that can or could have been prevented. TIC provides insight, education, and proactive interventions, and does not cause shame or point blame to a person or thing. TIC is a process that develops over time with commitment of staff, education of the multidisciplinary team and a plan to reduce the risk of traumatic events.

TIC provides mental health staff the ability to be informed about and sensitive to issues present in survivors of trauma (Regan, 2010). The prevalence of childhood exposure provides compelling evidence for inpatient mental health nurses to become trauma informed educated. Advances in neuroscience have identified the structure and function of a child's developing brain to be altered and the effects to be irreversible. Repeated exposure to significant childhood trauma determines how well parts of the brain integrate and function together (Muskett, 2014). To work in the field of mental health, knowledge about trauma and how it affects an individual is imperative. Understanding the effects of trauma and how it can affect a person is especially valid when working in the field of child and adolescent psychiatry. It is estimated that one in four youths will experience some form of trauma during their developmental years (Black et al., 2012). In instances where trauma and psychiatric mental health meet, implementation of a TIC program will improve the care being given and received and ultimately promote and provide knowledge of the effects of trauma on individuals with mental health issues.

Implementation of a TIC program within the child and adolescent population will provide patients and caregivers a heightened level of understanding that promotes trust between caregivers and patients. TIC will allow patients the ability to heal and feel safe within a defined care center such as an inpatient facility, and provide less traumatic interventions to reduce the risk of re-traumatization. The risk of traumatic exposure increases for both staff and patients when restraint and seclusion are used. Utilizing crisis interventions can be traumatic for both the patient and the staff members involved (Ross

et al., 2014). Promoting an environment to reduce re-traumatization by reducing physical holds and seclusions is the main focus for this project.

Crisis interventions such as seclusion or physical hold are common practices within the inpatient setting for children and adolescents. The history and use of seclusion and restraint within mental health treatment has a long history and with the implementation of TIC, the risks and benefits of their use have been identified. To be able to reduce seclusion and physical holds and the risk of re-traumatization as well as improve patient care outcomes within a child and adolescent inpatient setting, the theory of TIC will be used. TIC will provide this project with an evidence- based guide through the NASMHPD's six core strategies to provide a framework to ensure success of this quality improvement project.

Frameworks

The framework used for the quality improvement project is the six core strategies and was established by the NASMHPD. The NASMHPD developed their six core strategies because of the increased use of seclusion and restraint. The development of the six core strategies is also due to negative effects of the use of crisis intervention within a mental health settings. The six core strategies are providing organizational change, using data to inform practice, providing workforce development, developing physical hold and seclusion prevention tools, highlighting consumer roles in inpatient settings, and providing debriefing strategies (National Technical Assistance Center, 2016). Azeem et al., (2011) noted that in the first six months of implementing the NASMHPD's six core strategies, the number of crisis interventions was 93 (73 seclusion/20 restraints) and in

the final six months the crisis interventions decreased to 31 (6 seclusion/25 restraints). The study demonstrated a downward trend in crisis interventions due to using the six core primary principles.

Implementation of a TIC program has been proven to reduce the use of physical holds and seclusion rates (Azeem et al., 2011). Implementation of the TIC program involved several members of the multi-disciplinary treatment team that included licensed practitioners, nurses, medical staff, therapists, outpatient providers, guardians, and the patient. The purpose for the development of the six core strategies of NASMHPD was due to the increased use of crisis interventions in inpatient hospitals and the risk they have on patients and staff. The NASMHPD focused on several negative consequences of holds and seclusions. Negative consequences are re-traumatization of the patient, trauma for the participating staff, physical injury of the patient, and physical injury of staff and sentinel event.

The first of the six NASMHPD principles is leadership towards organizational change. Leadership towards organizational change principle notes that senior leadership needs to be aligned and committed to the reduction of seclusion and restraint and are aware of the effects of their use. The involvement of leadership will express the level of investment and provide an expectation for the entire hospital staff. The second principle is to use data to inform practice, which represents the need for data to characterize the service usage by unit, shift, and day and staff member. Data gathered will be shared with all members of the hospital as a visual to measure improvements or identify areas in need of further assistance. The third principle, workforce development, focuses on the creation

of an environment that is coercion free and is patient focused. By educating staff of the effects of trauma and interventions to prevent re-traumatization, awareness will be increased.

The fourth principle is the use of seclusion and restraint reduction tools. Knowledge regarding seclusion and restraint reduction tool is proactive and imperative to the success of this project. The tools and assessments consist of identifying risk factors, restraint and seclusion history, use of trauma assessment, identification of risk factors for death and injury and the use of de-escalation safety plans. The fifth principle ensures service users are given full information about service and treatment choices and options. The fifth principle requires transparency to patients, families, staff and other participants involved in the patient's care. The sixth principle is the use of debriefing techniques, which ensures the use of knowledge informs policy, procedures and practices to avoid repeats in the future. Debriefings provide a heightened level of insight thru the patient and staff comments regarding the specified incident.

Literature Review

Current literature is supportive of TIC programs and the effects a TIC can have on improvement of patient care and the reduction of re-traumatization. (Azeem et al., 2011) found a downward trend in seclusion and restraint among hospitalized youth after implementation of the NASMHPD six core strategies based on trauma informed care. During the first six months of the study there were 93 crisis interventions, and after implementation of TIC, the episodes of crisis intervention decreased to 31 in the final 6 months. The information learned from this study reveals the success of decreasing

seclusion and physical holds by implementing the six core strategies. By decreasing the use of crisis interventions, the risk of being re-traumatized will be decreased and increased therapeutic environment will be provided to the patient and staff.

A key indicator of a TIC environment and milieu is the decrease of the risk of re-traumatization due to a reduced use of crisis intervention. Evidence has shown the NASMHPD six core strategies, when implemented correctly does decrease the use of physical holds and seclusions (Muskett, 2014). The State of Massachusetts had a restraint reduction plan that implemented the NASMHPD six core strategies in 27 of their child/adolescent inpatient units. A year after implementing the six core strategies there was a reduction of restraint/seclusion incidents by 72.9% on child units, 47.4% of adolescent units, and 59% on mixed units. The study also went on to report that several of these inpatient units have been able to sustain these improvements. These improvements were supported by the unit leadership to the commitment of low restraint rates (Delaney, 2006). To provide mental health care that is trauma informed, restraint and physical hold free is the environment the quality improvement project needs to be successful. To reduce seclusion and physical holds, provide a safer environment for both patients and staff and reduce the risk of re-traumatization is the focus for the quality improvement project. Evidence shows the implementation of TIC does decrease the use of physical holds and seclusion thus decreasing the patient's risk of re-traumatization.

The effects of trauma have a profound effect on the mentally ill population and utilizing traumatic interventions such as seclusion/restraint can hinder their treatment causing longer lengths of stay and a reduction in positive patient outcomes (Ross,

Campbell, & Dyer, 2014). It was shown that violence increases for both staff and patients where seclusion and restraints are practiced. According to this study it was estimated that up to 90% of mental health patients had a pre-existing trauma history. Implementation of this quality improvement project will provide benefits to several areas of the child and adolescent mental health population. A TIC will bring attention to the effects trauma has on the mentally ill and provide education and treatment to others to prevent or sustain traumatizing interventions. A TIC will reduce the use of seclusion and restraint in exchange for alternatives that are safer and do not endorse violence. It will also promote an environment that will promote staff retention and decrease patient readmission rates.

Background and Content

The hospital leadership's plan to implement a TIC program was in alignment with wanting to change the culture and provide a safer environment for their patients and staff. The leadership team was in support of implementing a TIC program while decreasing physical holds and seclusion thus decreasing the risk of re-traumatizing a child whom already has a trauma history. When developing the idea for this project, I met with the leadership team and asked what would be one thing they would like to change within the clinical area in this hospital? All members of the leadership team agreed they wanted to decrease the use of crisis interventions, provide a safe and therapeutic environment to all patients and to provide a positive experience while admitted to the hospital.

Currently, in the state of Illinois, there is no requirement for a behavioral health hospital to have a TIC program, however since the hospital is Joint Commission (JC) accredited; the hospital is required to have a restraint and seclusion reduction

performance improvement (PI) team. The JC has specific guidelines to reduce the use of restraint and seclusion with a recommendation to provide competency based training for all professionals working within the inpatient setting (Martin, Krieg, Esposito, Stubbe & Cardona, 2008). During the last JC Survey, several positive comments were made regarding the current seclusion and restraint PI team and one surveyor asked for information regarding the PI team and what actions were taken and plans for the upcoming year. One of the responsibilities of a surveyor is to share information with others to promote this within the JC community. The seclusion and restraint PI team meets twice a month to review data, review interventions, develop new initiatives, and provide leadership feedback, data management, information gained regarding use of debriefings and patient feedback. I am a member of the leadership team and the restraint and seclusion reduction PI team.

I have been a psychiatric nurse for 24 years and with experience gained from years in the field, the effects of trauma exposure are present in every patient I have seen. Children whom are admitted to the hospital have little to no control over their own trauma experiences. Often these children are products of their environment and often replicate what is seen or heard in their worlds. Children who have been exposed to trauma did not choose to be traumatized and should be able to live in an environment that is safe and therapeutic. According to LeBel and Goldstein (2005), the use of seclusion and restraint conflict with the goals of inpatient use for children and adolescents due to the increased trauma risk and how patients view inpatient hospitalization as a source of new trauma, not treatment.

Summary

Implementation of a TIC program will provide several positive components to the mental health inpatient field. The amounts of resources are increasing due to understanding of what trauma is and how it can affect children and adolescents whom suffer from mental illness. The TIC concept has been shown to lessen the use of seclusion and restraint within inpatient hospitals, educate staff on what trauma is and how it affects the patients they care for, and provide improved mental health care. The concept being used was created by NASMHPD's six core strategies to decrease the use of seclusion and restraint and to lessen the risk of re-traumatization. The use of seclusion and restraint is an acceptable intervention however there are other options that can be utilized first. Leadership members within any organization should be educated about TIC and how it can improve patient care. Section three will provide information on approach and rationale, data collection, data analysis, and an evaluation plan as part of the evidence based practice initiative to reduce the use of seclusion and restraints by implementing a TIC program.

Section 3: Collection and Analysis of Evidence

Introduction

Trauma exposure and mental illness are common among children and adolescents who seek inpatient treatment. Mental health staff use several interventions to keep patients safe from themselves or someone else. Physical holds and seclusion are approved approaches within inpatient behavioral settings; however, the long-term effects that may be triggered can cause undue harm to patients that may impact their current or future mental health needs. To ensure such interventions are done as a last resort and do not cause re-traumatization to a child, an evidence-based therapeutic model is needed. The implementation of a TIC program to reduce physical holds and seclusion is warranted and has shown to reduce the use of physical holds and seclusions. Section 3 will discuss the approach and rationale, participants, setting, data collection, data analysis, and evaluation of the TIC program.

Approach and Rationale

Project Design and Method

The project initiative used a before and after quantitative design to determine if implementation of a TIC program will reduce the use of physical holds and seclusion, thus decreasing children's risk of being re-traumatized. The project initiative to implement a TIC program occurred by using the NASMHPD's six core strategies. Each member of the healthcare team was offered training on the six core strategies and how to apply them to their daily practice. To be trauma-informed, knowledge of the six core strategies is imperative along with a true understanding of how trauma can affect a

person, especially a person with mental illness or behavioral issues. By implementing a TIC program using the six core strategies, educating staff regarding trauma and reducing the use of crisis interventions will also decrease a patient's risk for re-traumatization, improve patient care and staff morale, and reduce physical harm to the patient and staff.

Population and Sampling

Several disciplines make up the interdisciplinary team that cares for every patient at the hospital. Team members consist of physicians, nurse practitioners, nurses, BHT's, therapists, dietary staff, and ancillary staff who work in admissions and reception. It is imperative that any person who has contact with an inpatient child be trauma-informed and educated regarding the implementation of the NASMHPD's six core strategies. Each staff member who works at the hospital had gone through the same orientation; however, for this project initiative, everyone was offered training regarding the implementation of the six core strategies and how to apply them to the reduction of physical holds and seclusion.

The interdisciplinary team members varied in terms of education levels, hours worked, and level of involvement with patients. Providers consist of psychiatrists, physician assistants, and nurse practitioners. Psychiatrists have their medical degree and spent their residency in child, adolescent, adult, and geriatric psychiatric settings. The physician assistant completed a 2-year master's physician assistant program and provides care under the physician. Nurse practitioners are masters' prepared and/or have a Doctor of Nursing Practice (DNP) degree. Registered nurses (RNs) have either completed an associate's degree (ADN), bachelor's degree (BSN) or master's degree (MSN). Licensed

practical nurses (LPNs) graduated from a vocational school and are licensed by the state nursing board and required to maintain a certain level of continuing education. A BHT has at minimum a high school diploma with experience in the field of child and adolescent psychiatry up to a bachelor's degree in a relevant field. Therapists have a master's degree in clinical counseling with experience in the field of psychiatry. Dietary staff consists of a dietician who has a bachelor's degree and is licensed by the Commission on Accreditation for Dietetics (CADE) and support staff that work in the kitchen and deliver food to the units. Ancillary staff in admissions all have master's degrees and are licensed clinical therapists with experience in the psychiatric field.

To remain compliant with corporate regulations, an RN is required on each unit at all times. Corporate regulations are policies and procedures each hospital has to comply with that are established by corporate leaders. There are three units and three RNs are required at a minimum to run the psychiatric department per shift. Due to patient acuity and patient census, a medication nurse may be warranted who will be either an RN or LPN. Each unit has a staff to patient ratio, the pediatric unit has a 1:4 ratio adolescent unit has a 1:5 ratio. The number of staff for each unit can vary depending on the patient census; however the only requirement is an RN must be on each unit, so the support staff can either consist of other RNs, LPNs, and BHT's. Every patient is assigned a provider and therapist by the admissions team upon arrival to the hospital. Each patient admitted to the hospital has been involved in some form of crisis or trauma that has led them to not be safe if not admitted to the hospital.

Data Collection

Data collected for this project initiative measures the number of seclusion instances and physical holds that occurred prior to and after implementation of the TIC program. On a monthly basis, the RM department gathers data regarding the number of crisis interventions during the prior month. Data is broken down by patient, unit, time of day, and day of week. The hospital rate is then compared to other psychiatric hospitals within the Universal Health System (UHS). Each month data on restraints and seclusion use are compared to other hospitals' rates. Data gathered by the RM department are used to measure the number of crisis interventions for six months prior to and after implementation of the TIC program. The RM manager deidentified the information so that it is identified as a crisis intervention only before providing it to me on an encrypted Universal Serial Bus (USB) flash drive. The USB flash drive was stored in a locked office for which I have the key. The computer and USB flash drive being used to review and obtain data is stored in my work office at the hospital, which is lock-protected. Data are stored on an Excel spreadsheet that is available via the USB flash drive only.

Implementation of the TIC program took 3 weeks as each staff member has an opportunity to attend weekly educational session that focused on each of the six core strategies. Department leaders for the interdisciplinary team were aware of the time commitments this project initiative would take and were agreeable to let their team members to participate. The leadership team was provided TIC training first during the week prior to training of all staff. Education of the leadership team was easier to complete due to greater accessibility and low number of team members.

Each department leader was given a copy of the agenda and a schedule for the TIC program. It is the responsibility of the department leader to ensure their staff is aware of the educational sessions. The agenda defined topics discussed during each of the three sessions. Two core strategies were the focus for each educational session. Staff were required to participate in all sessions. If a staff member was not able to attend, a makeup class was offered at a different time along with educational materials for staff.

Educational sessions were held in the hospital's large training room. Staff were required to sign an attendance sheet that was kept to ensure attendance requirements were being met. All educational sessions were completed by me. At the beginning of each educational session, I announced the two core planned strategies for discussion and completion of these were reviewed at the end of the 1-hour session. I provided handouts during each session to define what the core strategies were and how they would relate to a specific patient scenario.

Once the educational sessions were completed, I began data collection for the next six months regarding the use of crisis interventions. Data regarding use of crisis interventions was obtained from the RM department at the end of each month. All data gathered on the number of crisis interventions was stored on an encrypted USB flash drive. The USB flash drive was kept in my office that is locked when I am not present. Data obtained from the RM manager was entered manually onto an Excel spreadsheet by me. Data was entered the second week of each month for the crisis interventions done during the month prior. I was able to compare rates for the use of physical holds and seclusions prior to and after implementation of the TIC program.

Ethical Protection of Participants/Human Subjects

Once I received IRB approval from Walden, I began to data collection on the use of physical holds and seclusions. The IRB approval number for this study is 07-21-18-0446285. Data was collected retrospectively for the six months prior to the staff being TIC trained to measure the rate of crisis interventions. Once all educational sessions were completed, data was prospectively gathered six months after implementation of the TIC program and training. Trained employees were requiredTo be considered to state what the six core strategies were and how they could relate to their job duties. At the end of the educational sessions, staff were able to use the six core strategies to improve their engagement with patients in crisis and be able to use alternative treatments to keep their patients safe instead of using a crisis intervention. The Governing Board and Quality Management Committee for the hospital provided consent for the TIC program and were interested in the positive results this project initiative could have on the future use of crisis interventions. All data collected was stored on an encrypted USB flash drive that was used on a password protected computer. The computer and USB flash drive were be stored in my office that was locked when I am not present

Data Analysis

Data were collected on the use of physical holds and seclusions for six months prior to implementation and for six months after implementation of the TIC program. Data were transcribed onto an Excel spreadsheet on an encrypted USB flash drive. After staff were TIC trained, data was collected the second week of each month for the crisis interventions done during the month prior. Once data were collected from the pre and

post implementation of TIC program, data was entered onto an Excel spreadsheet. An Excel spreadsheet was used to organize data and was able to show changes in physical hold and seclusion rates before and after implementation of the TIC program. To show how implementing a TIC program benefited crisis intervention, descriptive statistics was used to compare the six-month period before implementation and the period of six months after implementation. Color bar graphs were used to show the reduction of both physical holds and seclusions, and were used to compare one time period to the other. Data collected on the Excel spreadsheet was stored on an encrypted USB flash drive that was used on a password protected computer. The computer and USB flash drive were stored in my office that is locked when I am not present.

Evaluation Plan

The purpose of this project initiative was to reduce the amount of crisis interventions used in a child and adolescent inpatient hospital setting by implementing a TIC program. The use of crisis interventions is an approved intervention when used for the appropriate reasons. Participants who participated in this project initiative had a profound understanding of what trauma is and how it can affect the patients they care for. Participants were educated on how to care for patients with trauma in an effective manner that reduced the use of physical holds and seclusions. Participants were ttrauma-informed and viewed the use of crisis interventions as a last resort by utilizing tools taught in the TIC program. Implementing a TIC program reduced the use of crisis interventions, allowed the hospital to begin meeting corporate benchmarks and had the hospital not appear on the corporate watch. Ultimately the hospital had a reduction in crisis

interventions, participants have new resources to use when assisting patients who are at imminent risk and patients had a reduced risk of being re-traumatized.

Summary

Children and adolescents are admitted to a behavioral health hospital for being a threat to self or others. A time may occur when a hold or seclusion is needed to keep the child safe from themselves or someone else by use of physical hold or seclusion. Implementation of a TIC program has been devised to reduce the use of crisis interventions. The TIC program is based off NASMPHD's six core strategies for reduction of physical holds and seclusions. Data collected on the use of physical holds and seclusions for a time period of six months before and after implementation of the program. I collected data about the number of crisis interventions used before and after implementation of the program and assessed the effectiveness of the intervention. The use of crisis interventions before and after implementation showed NASMPHD's six core strategies were effective in reducing the use of physical holds and seclusions. An evaluation plan was devised to answer pertinent questions to show the effectiveness, success and failure of this project. Information gained from the evaluation was used to improve the collection and analysis of evidence received.

Section 4: Findings and Recommendations

Introduction

Seclusion and restraint are acceptable treatment options for children and adolescents during times of crisis. The only reason to use seclusion and restraint is to keep the patient safe from self or anyone else. Use of seclusion and restraint can increase injuries of involved parties and ultimately retraumatize the patient (Muskett, 2014). Implementation of TIC can decrease risk of injury to patients and staff, provide an environment that does not re-traumatize the patient, and create an environment that is cohesive for patients and staff to function in (Azeem et al., 2011). The purpose of this project was to implement a TIC program by using the NASMHPD six core strategies to decrease physical hold and seclusion rates by 25% within six months after implementing a TIC program. Section four contains a discussion of the findings and implications for using the NASMPD's six core strategies to reduce the use of physical hold and seclusions. Section four also includes findings and implications of the evidence-based interventions, recommendations gleaned from the results of the interventions, and strengths and limitations of the implemented project.

Summary of Findings

The goal for the quality improvement project was to decrease the use of physical holds and seclusion within the child and adolescent population. The risk for re-traumatization increases after each crisis intervention used, explaining the need for a reduction in the use of physical holds and seclusions (Muskett, 2014). The project served to answer the following question: Can implementing a TIC program by using the

NASMPHD six core strategies decrease physical hold and seclusion rates by 25% within six months after implementing a TIC program? The first objective was to implement a TIC program based on the NASMHPD six core strategies. The second objective was to decrease the use of seclusion and physical holds by 25% within six months after implementation of the TIC program. The project initiative used a before and after quantitative design to determine if implementation of a TIC program could reduce the use of physical holds and seclusion, thus decreasing a children's risk of being re-traumatized. The concept came from the NASMHPD, a nationwide organization that provides resources and programs to bring attention to the negative use of seclusion and restraint. In May 2018, staff with direct contact with patients were trained to be trauma-informed using the foundation of the NASMHPD's six core strategies. Each staff member was educated regarding the six core strategies and evidence-based research was shared related to these strategies.

Implementation of the TIC program took place in May 2018 and required three weeks of educational sessions. Each educational session focused on two core strategies each week. Classes were taught by me to ensure consistency in terms of delivery of information. In attendance were nursing and therapy staff, and handouts explaining the six core strategies were available to dietary, admission, and recreational staff. Nursing and therapy staff were the only clinical staff present. The average daily attendance for the month of May 2018 was 92 (J, Savarino, personal communication, January 12th, 2019) and because of the increase in patient admission other disciplines were unable to attend. Handouts were provided during each class that defined each core strategy and how it

related to each specific patient population. During each session, the assigned core strategy was defined and examples of how each strategy could reduce use of crisis interventions were provided, along with new programs being offered to staff, patients, and families.

Objective 1

The first core strategy taught was leadership toward organization change. Several TIC interventions were developed and taught to staff specific to this strategy. The hospitals mission "to promote healing of children and their families through compassionate and supportive care" (M. Luttrell, January 12th, 2019) had to align with TIC teachings. Policies and procedures for a trauma informed care program were already in alignment with the mission for this hospital. To ensure leadership was involved with implementation of the trauma informed care program, the physical hold and seclusion policy was updated to ensure all crisis interventions were called to the Administrator on Call (AOC) within a reasonable time following the incident. The new policy was created so leadership could begin the debriefing process. The AOC began the debriefing process by asking questions regarding why the incident occurred, who were the patients and staff involved, and if there were any patient or staff injuries, and also ensured that all paperwork was completed. On the following day, the AOC followed up with the treatment team to share information and answer questions if needed. A third intervention was for leadership to analyze and compare physical hold and seclusion data from the previous month and year to evaluate if trends were occurring in regard to time of day, day of use, staff involved with the intervention, and other pertinent information regarding

fluctuation of use. The hospital rate for crisis interventions is compared to other psychiatric hospitals within the corporate division. Each month, data was compared regarding physical holds and seclusion to other hospitals, along with individual floors and patients. Programming was evaluated to ensure engagement of patients was not a factor for the crisis intervention. Time of day was evaluated to determine if medication or treatment options were accurate for that specific patient in question. Also, the Chief Operating Officer (COO) began town hall meetings to meet with any staff that had concerns about the new TIC program along with any concerns relative to staff needs. An all-star program was developed to recognize one staff member a month who had shown effective de-escalation techniques that stopped a crisis intervention from happening. Once a month, a ceremony was performed on the respective unit the staff member works on. Patients are also involved in the ceremony and refreshments are served.

The second core strategy taught was using data to inform practice. Several TIC interventions and programs were developed and taught to staff specific to this strategy. Data were collected daily, and aggregated and graphed to compare crisis interventions in terms of specific floor, day of week, and time of use in a day. Data regarding seclusion and restraint use was made available to staff and patients, and used to evaluation adoption of the intervention of each floor. The data were presented on a rolling TV screen for staff and patients to observe. Each month, the floor that had the least amount of crisis interventions was given a reception for staff and patients. A banner was also given to the respective floor to hang outside the unit to highlight that floor had the least amount of physical holds and seclusion for that month.

The third core strategy taught was workforce development. Developing workforce educational opportunities with TIC upon hire and annually were vital steps for implementation of the TIC program. The majority of nursing and technical staff had little to no experience within the behavioral health population prior to employment at this hospital. Due to staff's inexperience, orientation is vital to the success of staff that care for patients with behavioral disorders. It is during orientation that TIC is first introduced and taught to new staff. Another intervention developed was the mandated annual education for all staff regarding seclusion and restraint. A computerized power point presentation along with a test was administered to staff annually to provide updated policy changes and introduce new interventions to decrease physical holds and seclusion. Staff are also required to attend an annual refresher at the Crisis Prevention Institute that highlights de-escalation techniques for children and adolescents in crisis. Also, in regard to workforce development, TIC was added to all staff job descriptions and annual evaluation.

The fourth core strategy taught was use of seclusion and restraint prevention tools. Assessment tools were revised to include trauma and aggression histories which are completed upon admission to the hospital. Intake therapists are required to assess for trauma to help clinical staff identify patients who may be more prone for aggression. During the admission assessment done by the nurse, crisis interventions were first introduced to the patient. Nurses assess each patient upon admission to inquire about current coping mechanisms, current and past triggers which may lead to aggressive behaviors and identify physical changes that may occur if the patient were to become out

of control. If a crisis intervention occurred more than three times during a patient's stay, a supplemental meeting with the treatment team is required. A supplemental meeting focusses on what could have been done differently that may have eliminated the need for a crisis intervention. A second intervention was the creation of break boxes for patients to use during a crisis to detour use of restrictive interventions. Break boxes contain stress balls, playing cards, hand radios and other hand trinkets to help patients de-escalate. Each floor also has a comfort room that allows a potential patient in crisis a place to go that provides a calm environment with music, a rocking chair, bean bag and sensory tools.

The fifth core strategy taught was consumer of child/family and advocate roles in inpatient settings. The hospital has a patient advocate on site five days a week to respond to all complaints, issues or patient/parent concerns. The patient advocate plays an important role on the clinical team as several risk factors can arise when a patient is secluded or restrained, which include, physical injury, re-traumatization and false accusations (Azeem et al., 2011). When issues arise, the patient advocate provides support services for the patient, family and hospital. Another intervention developed with respect to consumer of child and family was the creation of the new position, a milieu coordinator (MC). The MC position will be able to provide an extra layer of support for both the patient and family, and also staff. A MC is not assigned to one specific patient, but based on the situation acts as a buffer between the patient and staff. Often the MC is able to help the patient de- escalate before a crisis intervention is necessary.

The sixth core strategy taught was debriefing techniques. Once a hold or seclusion occurred, a debriefing was done immediately by the charge nurse or at the end

of the shift with the AOC on call. Within a few days, a more formalized debriefing was done with the clinical team along with a camera review of the incident. Debriefings are essential in the learning process, especially during the development and maintenance of a TIC program. During the formalized debriefing all staff involved in the incident were present along with the clinical team. The goal for each debriefing was for each team member to learn from each incident, each other and be able to update the treatment plan or change treatment interventions that will benefit the patient. Staff and clinical teams can learn from each other and be able to view the camera output to determine if proper procedure for hold or seclusion was implemented according to policy and procedures.

Objective 2

To determine if there was a decrease in use of physical holds and seclusions data were evaluated using a quantitative design beginning six months before implementation and for six months after implementation of a TIC program. Data gathered by the RM department each month and broken down by patient, unit, time of day, and day of week was analyzed. I was able to obtain data prior to implementation and for six months after implementation of the TIC program from the RM department. Data was then placed on an encrypted USB flash drive stored in a locked office that only I had access to.

The number of crisis interventions was obtained each month and placed on an Excel spreadsheet. Each month, until six months after implementation, data was uploaded onto an Excel spreadsheet and compared to the previous months. The number of crisis interventions was calculated for the six months prior to implementation and for six months after implementation. The number of crisis interventions prior to implementation

of TIC program was 440. The total number of seclusions prior to implementation was 215 and total number of restraints was 225 (Table 1).

Table 1

Number of Crisis Interventions Before Implementation of TIC Program

Before TIC Implementation	2017 Nov	2017 Dec	2018 Jan	2018 Feb	2018 Mar	2018 Apr	Total
Seclusion	28	50	22	47	28	40	215
Restraint	28	47	29	46	30	45	225
Total #	56	97	51	93	58	85	440

The total number of crisis interventions after implementation of the TIC program was 259 interventions. The total number of seclusions after implementation was 125 and total number of restraints was 134 (Table 2). The total number of crisis interventions prior to implementation of the TIC program was 440 compared to the total number of crisis interventions after implementation was 259.

Table 2

Number of Crisis Interventions after Implementation of TIC Program

After TIC Implementation	2018 May	2018 June	2018 July	2018 Aug	2018 Sep	2018 Oct	Total
Seclusion	25	19	10	18	22	31	125
Restraint	24	21	14	19	28	28	134
Total #	49	40	24	37	50	59	259

Table 3

Summary of Crisis Interventions Prior to and Before Implementation

Crisis interventions for 6 months before TIC	440
Crisis interventions for 6 months after TIC Program implementation	259
Total crisis interventions for total 12 months	699
Total less number of interventions	181
Percentage of difference	25.8%

Data showed that implementing a TIC program decreased the use of physical holds and seclusions by 26% within six months of program implementation (Table 3). After implementation of the TIC program there were 90 less seclusions and 91 less restraints.

Findings and Implications

Implementing a TIC program decrease the use of crisis interventions and the risk of re-traumatization of the patient, and increase staff morale and improve patient outcomes (Hammer et al., 2011). Implementation of a TIC program fosters an environment that can sustain a culture that will incorporate a patient's past trauma to assist the patient with his/her current and future mental health needs. Staff who are TIC trained are educated about patients past traumas, through newly developed programs and assessments, and become aware of how it affects a patient's current and future mental health needs. Newly developed programs being used that have supported the decreased in crisis interventions are town hall meetings, formalized debriefing process, supplemental

meetings and mandated education of TIC. Past trauma can affect a patient's current mental health and with increased re-traumatization the patient's mental health can deteriorate more (Muskett, 2014).

Implementing a TIC program did not eliminate the need for crisis interventions as each crisis intervention is unique. Once all interventions have been exhausted, utilizing restraint or seclusion for imminent risk is an acceptable intervention. Utilizing restraint and seclusion is an appropriate intervention when a patient is at risk to harm self or someone else and all other interventions have failed (Azeem, Aujla, Rammerth, Binsfield, & Jones, 2011). Having a TIC program provides alternative interventions to be used first before using restraint and seclusion. Staff are now knowledgeable regarding the effects of negative use of crisis interventions and how utilizing a crisis intervention instead of exhausting all other alternative interventions is traumatizing to the patient and can hinder the patient's current and future mental health. Implementation of the TIC program did showed a reduction in use of seclusion and restraint thus reducing the risk of re-traumatization of the psychiatric patient. Positive social change can occur with the reduction of crisis interventions related to the decreased risk of patients being re-traumatized. Children and adolescents whom are admitted to an inpatient psychiatric hospital already have an increased chance of being traumatized. Utilizing the TIC program will reduce the use of crisis interventions and reducing the risk of re-traumatization.

An unanticipated limitation found during the implementation process was the amount of new staff that began during the months of March, April and May 2019. In

previous years, new employees were required to attend the first five days of orientation and if unable they were pushed to another orientation or were not hired. This year, to help with getting more experienced staff hired, the process changed and this made it difficult to meet and teach new employees. New employees are not required to attend the first five days, only the first day. Accommodations were made for the new orientation process after the first day to ensure they have all the necessary training. On day two, I met with new employees and reviewed the TIC process. I was unable to meet with each new employee which could have affected our hold and seclusion rates. We were able to meet our 25% reduction in use; however, this number could have been more if I was able to meet with every new employee during these months.

Individuals

Patient care is positively affected by a decrease in restraint and seclusions in several ways. Patients with histories of trauma are now well known by staff due to increased recidivism rates and increased documentation of the patient's trauma. Staff were taught that 25% to 61% of children and adolescents have been exposed to some form of trauma (Delaney, 2006). Staff that are aware of the patient's past trauma are prepared on how to approach the patient when he/she is exhibiting negative behaviors. When a patient is exhibiting negative or threatening behaviors staff can position themselves differently to allow space for the patient to not feel threatened or defensive towards staff. Staff use their tone of voice, distraction and eye contact when trying to de-escalate a patient. Staff have an increased sense of pride knowing they have the tools needed to treat patients who have experienced trauma, and know this framework of care

has worked in other facilities and believe they can make the same changes. One staff member stated, "Before taking the TIC course I felt helpless not knowing what was wrong with the patient, but now I feel more equipped to handle them" (D. Morgan, personal communication, December 12th, 2018). Since implementation of the TIC program, providers such as psychiatrists and nurse practitioners, reported that there is less need to document increased use in crisis interventions that may increase a patient's length of stay and interfere with medication management. During implementing of the TIC program, several discussions with floor staff found agreement that the culture had changed. Changing the culture at the hospital is vital to the success of the TIC program. Educating staff, patients, and families about TIC has been successful for the culture change to occur. One aspect of culture change that could be easily seen was the decline in crisis interventions and amount of engagement of staff to ensure their environment is free of re-traumatization.

Communities

Trauma identification improved awareness for patients with histories of trauma during staff meetings and assessments of new patients entering the hospital. Information regarding how trauma affects a patient and patient's mental health is now obtained during admission and inpatient assessments. Information about the patient's trauma assessment is now shared with families, outside mental health agencies and outpatient providers. Outside agencies that are aware of a patient's trauma may increase their own awareness of the effects of trauma and provide these outpatient centers increased knowledge about how trauma has affected this patient and continue to educate about mental health and also

ways to prevent re-traumatization (Muskett, 2014). Family involvement is imperative in regards to trauma awareness. Clinical staff, such as inpatient therapists, continued to educate families regarding the effects of trauma on mental health and interventions to handle a crisis that is not re- traumatizing. Allowing families to share their frustrations or concerns about future incidents is important to the patient's future mental health needs. To have patients, families and outpatient providers be trauma informed educated can provide a consistent platform to promote safety and help identify traumas as an intervention for treatment of mental health disorders.

Institutions

Psychiatric hospitals and residential facilities will benefit from implementing a TIC program as shown in my scholarly project. Implementing a TIC program has shown to decrease the use of crisis interventions and the risk of re-traumatization (Ross et al., 2014). Inpatient psychiatric hospitals and residential facilities will continue to use crisis interventions when patients are a risk to themselves or someone else, however, staff at institutions that have an increased knowledge from a TIC program will use less traumatizing interventions during a potential crisis situation. Utilizing the use of crisis interventions as a last resort and exhausting all other alternative interventions before utilizing a restraint or seclusion is imperative to not re-traumatizing a patient (Hammer et al., 2011).

Regulatory bodies such as JC oversee the use of crisis interventions used within hospitals and residential facilities. The JC considers restraint and seclusion as acceptable interventions and requires accredited facilities to have an ongoing restraint and seclusion

reduction performance team (Joint Commission, 2018). The purpose of the reduction performance team is to ensure continuous assessment and observation of crisis interventions are being managed effectively and continued education for its use is occurring (M. Trader RN, personal communication December 15th, 2018).

Systems

Since implementation of the TIC program, the restraint and seclusion reduction PI team has taken on new members. Still in its infancy stages, the PI reduction team now has access to data of crisis interventions. Members of the PI team compared rates from previous months and attempt to understand the reason for the fluctuation or reduction in numbers. Since implementation of the TIC program the PI team realized not enough floor staff was involved in the PI reduction team despite being invited. One of the six core strategies is for work force development that focusses on the creation of an environment that is coercions free and is primarily implemented through staff trainings and educational opportunities. Allowing more floor staff who has more hands on experience with patients who utilize crisis intervention was another recommendation for the success of implementing the TIC program. Since implementation the floor staff has been more present during the monthly PI meetings and has been referencing the PI reduction meeting in dialogue on the floors and during report. Having staff involvement is imperative to the continued growth of the TIC program and sustainability of the culture change that is so needed to ensure the continued awareness of not re-traumatizing the patient during use of crisis interventions (Ross et al., 2014).

Recommendations

Implementation of the TIC program occurred over three weeks'. I was responsible for educating all clinical and nursing staff regarding the TIC program. I began with nursing leadership team and ended with clinical and nursing staff. I did not take into consideration timing of the sessions as they occurred during the month of May, 2018 a time of higher patient census that did not permit all clinical staff and nursing staff to attend all sessions in their entirety. Ancillary staff was not able to attend due to the increased census and also an increase in staff turnover. In the month of May, 2018 there was also an increase in vacation time as several clinical, nursing and ancillary staff had scheduled vacation time due to graduations and travel commitments. I recommend more time for the educational sessions for future implementations. This new time allotted will provide for an increase in variety of times for classes. Having more variety with educational classes may provide more opportunities for staff to attend. I also recommend changing the orientation back to the original requirement for new employees to attend the first five days. Training each new employee about TIC when it is convenient for the new employee could devalue the importance of this new program and alter the culture change that the hospital has fought hard to obtain. I would also recommend educational sessions during high census months like spring and fall as this will allow for increased opportunity for staff to attend scheduled sessions.

Another recommendation for implementing a TIC program is during the formalized debriefings to include the patient in the debriefing if appropriate. To have the patient present during the formalized debriefing it would provide an objective assessment

from the staff and subjective assessment from the patient that would encompass all aspects for why the crisis intervention occurred. To have information from both the patient and staff is vital to the success of the TIC program. Staff can learn from a patient's view of what was going on at the time and why they were not able to keep themselves safe. The floor staff can use this opportunity to learn from the patient's perspective and what they could have done instead of utilizing a crisis intervention (Azeem et al., 2011).

Strengths and Limitations of the Projects

Strengths

One strength of this scholarly project is the relevance it has to current events. Trauma is unfortunately an issue that will always be present within mental health populations. The use of crisis interventions is also relevant as its continued use is an acceptable treatment intervention. To educate about trauma and use of crisis interventions and how each one affects the other is vital to the management of mental health patients and their future treatments. A second strength of this scholarly project was implementing a TIC which decreased the use of restraint and seclusion and risk of re-traumatizing a patient (Hammer et al., 2011). Implementing a TIC program at this hospital revealed a 26% decline in crisis interventions. After implementation of the TIC program, there were 90 less seclusions and 91 less restraints. A third strength is the use of strength-based care with focus on primary prevention through utilizing the six core strategies developed by NASMHPD. Through my scholarly project by utilizing the six core strategies I have shown NASMHPD's six core strategies do decrease use of crisis interventions.

Limitations

A limitation for this scholarly project is the timing of the education sessions. Implementation of the TIC program began in early May, 2019 which also happens to be a high patient census month and also a higher rate of staff to take vacations. Having this limitation did decrease the amount of clinical and floor staff that was able to attend all educational sessions. Handouts were provided to those who could not attend, however staff were not there for the enriched discussions about each strategy and how it related to our specialized population. A second limitation is how the data was shared with the individual floors. The plan was to post monthly rates of crisis intervention use on each individual floor either through posting on units or presenting on a rolling TV screen for all staff and patients to see. The rates were posted however they were not in a timely manner. Mostly, rates were posted on the rolling TV and not on the units. Also, rates for use by individual floors were presented on the TV but at two months at a time, not monthly. This limitation did not allow staff to have up to date data information on decrease use of crisis intervention and be unable to see their progress in a timely manner.

Summary and Conclusion

To be trauma informed is to have a profound understanding of a patient past trauma and how it relates to the patient's current mental health treatment. Understanding the effects of trauma can have a profound benefit to the patient's current and future mental health. Implementation of a TIC program will benefit all patients who seek mental health treatment; staff who work in the mental health field, families who support loves ones seeking mental health and outside agencies who treat patients with trauma histories.

Section 5: Dissemination Plan, Analysis of Self, and Summary

Introduction

The scholarly project has been successfully developed. Clinical and nursing staff who attended the educational sessions were able to verbalize an increased knowledge of how using crisis interventions with children and adolescents can re-traumatize patients and increase the need to exhaust all other alternative interventions prior to utilizing a physical hold or seclusion with the patient. Staff who continued to attend formalized debriefings and the restraint and seclusion reduction PI team meetings were most likely to use alternative interventions instead of crisis interventions. Knowledge about a patient's past trauma can alter his or her current mental health treatment which will benefit not only the patient's recovery but also reduce patient and staff injuries, improve staff morale, reduce recidivism rates, and decrease staff turnover (Muskett, 2014).

The findings of this DNP project will be disseminated via an oral presentation using power point as a visual aide with the administration and nursing leadership team at the project site after my oral defense presentation. I will also present my scholarly project at the annual meeting for the American Psychiatric Nurses Association (APNA) that will be presented on October 3rd, 2019 in New Orleans, Louisiana. I was selected to present for a two hour presentation that will include my project and also my knowledge regarding trauma informed care within the child and adolescent population.

Analysis of Self

Scholar

As a scholar, my goal throughout this project was to create a culture change within a hospital setting that demonstrated a commitment to positive social change through evidence-based research. Creation of a scholarly project that would decrease the use of crisis interventions which was reported in the literature to cause re-traumatization was my goal (Hammer et al., 2011). Each experience I had throughout my DNP education has led me to completing my scholarly project and emerging as a scholar by using the most rigorous level of preparation for nurses. Because of my doctoral preparation, I now can demonstrate the critical discovery of existing literature to solve a problem through translation of research and integration of new knowledge. Opportunities and new practices within my nursing practice have evolved into improved communications within the nursing administration team regarding advancing new evidence-based research findings to improve our practices. When issues or concerns arise, I now understand how to incorporate credible research findings into supporting new practices to enhance outcomes and improve the patient-provider experience. As a DNP graduate, I will be able to use my practice to generate evidence that will provide parameters in the future to help guide improvement practices and patient care outcomes.

In the child and adolescent psychiatric population, difficult patients are discussed during treatment team and interdisciplinary team meetings. These meetings include nurses with various degrees and therapists who have, at minimum, a master's degree in social work. It is during these meetings that I feel I have grown as a scholar as I have

provided literature to support why or how a difficult patient could receive a different level of care more individualized to the his or her needs. Being able to have the advanced practice knowledge gained during my DNP education has increased my credibility as a professional nurse and also as an effective leader for change. As a DNP student, I am qualified to reformulate evidence into clinical practice and systematic reviews of research to change practices based on validated evidence.

Practitioner

My current role within the hospital is Clinical Nurse Manager. My essential duties include management of staff and patients by providing safe and effective care that is in alignment with our policies and procedures. Since implementation of the project's TIC program, policies have been updated that provide TIC language and instructions to support TIC. One of my daily duties is to spend time on the unit to observe and support our mission and vision of a TIC community. Positive and engaged interactions with psychiatric patients are imperative to the support of a TIC program. (Azeem et al., 2011). Children who are admitted to the hospital have behavioral issues that can be overwhelming to staff and being able to redirect negative staff behaviors using my clinical judgment by providing alternative responses is vital to the success of the culture change. DNP graduates are prepared in terms of methods of effective leadership and are prepared to establish and assume leadership when needed. In my past nursing experiences within the psychiatric population, I have always felt there was a reason why children who have experienced trauma have severe behavioral issues. I would observe children and adolescents during their admission stays at the beginning of my practice and see how

these traumas have personally affected them. When I completed their intake, I would hear about their traumas and could not help but correlate their trauma with inpatient stays. I knew 24 years ago the impact trauma had on psychiatric patients, and now 24 years later, I am able to show evidence from literature and research how trauma affects a person with mental illness. To acknowledge my beliefs and ideas that would inform my daily practice, I realized through my doctoral education that my insights were the results of obtaining my DNP. Through my education, I have gained the knowledge needed to know as an Advanced Practice Nurse (APN) how important evidence-based practice is on nursing care and how knowledge and evidence can improve patient outcomes.

Developer

I have grown within my leadership and nursing role, and enhanced my devotion and mission to provide evidence-based care to our specialized patient population. As a leader for change, I identified safety initiatives that needed to be addressed while researching topics for my scholarly project. During the preliminary stages of my DNP project development courses, I assessed my current work environment for fragmentation within practices, identified practice problems that had scholarly need, and safety practices that had been identified as not within the hospitals policy and procedures. I identified key stakeholders within the administration who were able to provide me with guidance to focus on my scholarly activity. I had recognized the increase in the use of seclusion and restraints, and the correlation between increased use of crisis interventions and staff injuries and turnover. Use of the literature and open discussions with my preceptor led me to develop and implement a TIC program that would reduce the use of seclusion and

restraints. Through my DNP education, I have learned combining knowledge from my clinical practice along with evidence-based research will assist in my decision-making regarding dissemination of new knowledge

What This Project Means for Future Professional Development

The level of growth within my personal and professional career while obtaining my DNP degree has been evident in many ways. When presented with an ethical or compliance issue while in my leadership role, I now use scientific inquiry to guide my approach to develop a PI team or create an action plan to organize findings related to the clinical issue. In the field of child and adolescent psychiatry, new advances are being introduced or discussed in the literature. Not every hospital is the same, nor is every approach or advancement created going to work, as each hospital is created differently. Each hospital only admits certain patients with similar diagnoses or is equipped to handle certain patients based on the hospital setup, number of patients allowed to be admitted, or resources readily available to them. When presented with a new approach or advancement, I am able to develop an action plan to create strategies to address individualized issues specific to our hospital and be able to evaluate the best outcomes for our hospital.

Development of new policies and procedures that enhance TIC are being shared with other hospitals through compliance officers who work within the organization. As I continue to grow within my professional role as a leader and scholar I am able to organize and present these new policies and procedures in a systematic way that enhances patient care, prioritizes patient outcomes, provides alternatives that provide effective

communication and collaborative skills and to positively affect change and work collaboratively with other hospitals in need of assistance. I am also able to enhance the knowledge and growth of the nursing students I have. From the bachelor level student to the graduate level nurse I am able to use information regarding best practices, evidence-based research and scientific inquiry to engage my students to enhance their learning process and provide them with same opportunities I had while obtaining my DNP.

Summary

In the field of child and adolescent psychiatry, it is imperative to understand how the patient's past can affect their current mental health. To be trauma-informed educated means that anyone working with patients whom have been traumatized will have a deeper understanding of the patient's past trauma and how it can affect his/her current mental health treatment. Trauma can affect each individual differently; however, the one thing that is true is that traumatic events will continue to occur. Mental health workers need to understand the effects of trauma on patients with mental health disorders and be able to work with them in an environment that is safe. The use of physical holds and seclusions are an effective intervention to be used when a patient is exhibiting imminent risk. While the use of crisis interventions is effective, mental health workers need to be informed of the negative effects of their use and be able to exhaust all other interventions before using a physical hold or seclusion.

The intention of this scholarly project was to implement a TIC program that would reduce the use of crisis interventions by 25%, and by doing so would reduce the risk of re-traumatization for the patient in care. I was able to show by utilizing the

NASMHPD's six core strategies I was able to implement a TIC program that reduced the use of crisis interventions within six months after implementation. As a DNP student I was able to show evidence for best practices for patients who have behavioral disorders who may require the use of crisis interventions. It has been through my studies, research, compassion for this population and the knowledge base I have learned that has led me to the place I am.

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