Knowledge Awareness of Coping Skills in Individuals with Serious Mental Illness Among Healthcare Providers in Miami, Florida: A Quality Improvement Project

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Knowledge Awareness of Coping Skills in Individuals with Serious Mental Illness Among Healthcare Providers in Miami, Florida: A Quality Improvement Project

A Scholarly Project Presented to the Faculty of the Nichole Wertheim College of Nursing and Health Sciences

Florida International University

In partial fulfillment of the requirements For the Degree of Doctor of Nursing Practice

By

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Approval Acknowledged: ________________________________, DNP Program Director

Date: ________________
Abstract

Nearly 1 in 5 Americans have some form of mental illness, with 1 in 20 experiencing a serious mental illness (SMI) in 2020. Thirty seven percent of adults incarcerated in state and federal prisons have a diagnosed SMI, and 20.8% of people experiencing homelessness in the United States (US) have a SMI. Costs related to mental health treatment and services in the U.S. reached $225 billion in 2019, an increase of 52% since 2009. The purpose of this quality improvement project was to enhance knowledge awareness among healthcare providers, regarding coping skills in individuals with SMI at a behavioral health hospital in Miami, Florida. A descriptive, cross-sectional, pre- and posttest design was employed to conduct this project. Convenience sampling technique was utilized to recruit N = 12 participants and access data at a large hospital in Miami, Florida. The project, including the educational intervention, was conducted remotely and participants completed demographic, pre-, and posttest surveys using Qualtrics and the modified Holahan and Moo’s Coping Strategies Scale (HMCSS) to assess their knowledge of awareness of coping skills in individuals with SMI. Results revealed a significant difference between pre- and posttest results, with an overall increase in knowledge awareness among healthcare providers after an educational intervention, $t(11) = 3.4719, p = 0.001, (p < 0.05)$. Healthcare providers should receive training in this area to increase coping skill utilization and improve health outcomes in individuals with SMI.

Keywords: nursing research, coping skills, serious mental illness, knowledge awareness, health outcomes
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According to the American Psychological Association (APA), coping skills is defined as the use of cognitive and behavioral strategies to manage the demands of a situation when these are appraised as taxing or exceeding one’s resources or to reduce the negative emotions and conflict caused by stress (American Psychological Association, 2022). Coping methods include self-soothing, distraction, opposite action, emotional awareness and mindfulness. Furthermore, examples of coping skills include engaging in self-care, a hobby, identifying and expressing feelings, meditation, or relaxation and most importantly, having a crisis plan and support system (Thrive Treatment Center, 2020).

Maladaptive coping skills involves biological traits and behavioral patterns that are detrimental, counterproductive, or otherwise interfere with optimal functioning in various domains (American Psychological Association, 2022). Examples of maladaptive coping include engagement in self-harm behavior, substance abuse, and other risky behaviors or in milder form, procrastination, rumination, avoidance, passive aggressiveness, and withdrawal. In any form, these behaviors tend to produce some temporary satisfaction, with negative long-term consequences to the individual (Tsaras et al., 2018). On the contrary, the benefits of utilizing positive coping skills and managing stressors appropriately include not only improved mental and emotional health, but also improved physical health, and an overall wellbeing. However, limited research on coping skills in individuals with serious mental illness (SMI) may contribute to knowledge deficits among healthcare providers when caring for this population (Camm-Crosbie et al., 2019). Therefore, researchers are urged to collaborate with healthcare providers to increase research in coping skills among those who suffer from SMI (Tsaras et al., 2018).
According to National Alliance on Mental Illness (2020), nearly 1 in 5 Americans have some form of mental illness, with 1 in 20 experiencing a serious mental illness (SMI) in 2020. Thirty seven percent of adults incarcerated in state and federal prisons have a diagnosed serious mental illness, and 20.8% of people experiencing homelessness in the United States (US) have a SMI (National Alliance on Mental Illness, 2020). According to an Open Minds Market Intelligence Report, costs related to mental health treatment and services in the U.S. reached $225 billion in 2019, an increase of 52% since 2009 (Leonhardt, 2021). This figure however, does not account for indirect costs, including lowered workforce and decreased productivity. Major depressive disorder, a serious mental illness, alone accounts for $44 billion in workforce and productivity loss annually in the U.S. (Leonhardt, 2021). The purpose of this quality improvement project was to enhance knowledge awareness among healthcare providers, regarding coping skills in individuals with serious mental illness at a behavioral health hospital in Miami, Florida.

**Problem Statement**

Patients with mental illness should be educated on effective coping skills. However, there is limited research on coping skills among individuals with serious mental illness (SMI) (Camm-Crosbie et al., 2019; Saxon et al., 2017). Effective coping skills could help individuals with SMI tolerate and decrease stressful situations that may trigger illness exacerbation (Baton Rouge Behavioral, 2021). Furthermore, the literature indicates knowledge deficits among health care providers regarding coping skills in this population (Brekke et al., 2013; Renner et al., 2019). The development and delivery of an educational intervention on coping skills in individuals with SMI is essential in the promotion of optimal psychiatric nursing care in the United States (Andermann, 2016). Costs related to SMI amount to over $193 billion in the United States each
year (National Alliance on Mental Illness, 2020). This quality improvement project will enhance health care providers’ knowledge awareness of coping skills in individuals with SMI in Miami, Florida, and attempt to increase mental health outcomes in this population.

**Advanced Literature Review**

The purpose of this project was to enhance knowledge awareness among healthcare providers, regarding coping skills in individuals with serious mental illness (SMI) at a behavioral health facility in Miami, Florida. A literature review was conducted, identifying gaps in the literature related to the research problem, using Google Scholar and Florida International University’s remote library comprehensive database with keywords: “schizophrenia,” “severe mental illness,” “coping skills,” “practitioner input,” “teaching,” “inpatient mental health,” “treatment,” “illness management,” and “recovery.” The search was limited to resources from 2016 through present day, with full text articles in English. Articles with relevant topics such as ‘serious mental illness,’ ‘coping skills,’ and ‘provider teaching’ were selected. Twelve articles responded to or addressed the PICO question or related the overall focus of the project. Further review highlighted specific subject areas, including: (1) coping skills in mental health patients (2) coping skills in the homeless population with chronic conditions, and (3) the promotion of coping skills among healthcare providers.

**Coping Skills in Mental Health Patients**

This content area examines serious mental illness (SMI), including schizophrenia, bipolar disorder, post traumatic stress disorder (PTSD) or borderline personality disorder (BDP) and coping skill utilization in this client population. Schizophrenia is a disabbling mental illness that may impact an individual's developmental, social, and occupational domains. Patients with schizophrenia experience incapacitating symptoms, impaired social functioning, difficulties in
daily activities, lack of motivation and deteriorating communication skills (Shoib et al., 2021). Symptoms interfere with educational, occupational, familial, and social functioning, with available treatment providing unreliable results. Patients with schizophrenia usually employ a variety of methods of coping with disease symptomology. Studies show that sufferers will engage in avoidance and distraction techniques, usually in the form of drug use or social isolation. On the contrary, those who utilized the coping strategy of eliciting social support and engaging in active and growth-orientation coping, tend to experience fewer negative symptoms, a lower level of disability and higher quality of life (Shoib et al., 2021). Shoib et al. (2021) hypothesized that positive coping styles would improve quality of life with greater impact in younger individuals who have had a shorter duration of illness.

Shoib et al. (2021) conducted a cross-sectional study from January 2018 to September 2019 in a hospital in South India, following approval from research ethics committee. The sample included 48 patients diagnosed with schizophrenia, in clinical remission- mild to no symptoms for at least six months. Written consents were received from the participants, including both males and females, 18-65 years of age. Following training in administration and scoring, a standardized evaluation process was utilized, including the Positive and Negative Syndrome Scale (PANSS), a 30 item, seven-point rating scale, to ensure remission (Shoib et al., 2021). The Personal and Social Performance Scale (PSP) is a 100-point, single item scale, was used to assess functioning in four specific areas: (1) socially helpful activities, (2) personal and social interactions, (3) self-care, and (4) unsettling and aggressive behaviors. Sub-scales evaluated quality of life, coping styles and stress level. Study results revealed that supportive and psychoeducation strategies, coping skills training, enhanced self-efficacy, decreasing stress and
rehabilitation programs focused on managing symptoms of psychosis could help patients employ more adaptive coping strategies and improve their quality of life (Shoib et al., 2021).

Bipolar disorder (BPD), or manic-depressive disorder is an affective disorder characterized by pronounced mood swings with recurrent cycles of mania or hypomania-increased energy level, decreased need for sleep, frequent agitation, confusion, distraction, heightened libido, hallucination, delusions, severe depression, despair, anhedonia, guilt, and suicidal ideation (Angeler et al., 2018). This disorder impacts between 3% to 8% of individuals (and potentially more undiagnosed), symptoms manifesting with high variability and potential co-occurrence with other mental health symptoms. Like most mental ailments, genetics plays a role in vulnerability to illness, often triggered by stressful life events during adolescence to early adulthood. Individuals without bipolar vulnerability are more likely to rebound from such events, while the more vulnerable individual remain at increased risk of illness development. Illness is then expressed, as the threshold for tolerating stressful events is surpassed (Angeler et al., 2018).

Unfortunately, there is no cure for this illness, with medication and therapeutic intervention as staple treatment methods. Clinical intervention attempts to coerce the individual to return to a pre-diagnosis state, with ongoing disease management necessary to maintain some level of recovery. Recovery is indicated by developing resilience, reflecting the individual’s ability to adapt and function through coping mechanisms. However, current psychological interventions (medications, therapies) continue to lack the ability to fully restore an individual to pre-illness state. With the knowledge gained, clinical approaches to treating BPD may change, to encourage increased self-awareness of precursors to illness, adaptation, and coping abilities to prevent relapse and encourage resilience to BPD episodes. In their study, Angeler et al. (2018)
discuss resilience in mental health by connecting concepts of ecology with bipolar disorder. Researchers revealed that management of a healthy mental state requires proactive, preventive approaches to recognize BPD vulnerability and increase resilience, reducing the risk of triggering the disorder (Angeler et al., 2018). These strategies have proven very useful in improving patients coping capacities and adaptation abilities, facilitating minimization of symptoms and faster recovery from episodes (Angeler et al., 2018).

As previously noted, resilience is the capacity to thrive in the face of adversity (Thompson et al., 2018). When exposed to trauma, high levels of resilience are a key protective factor against outcomes, such as those associated with post-traumatic stress disorder (PTSD). Resilience itself however may be as dynamic as the triggering event, influenced by an individual’s personal characteristics, past life experiences and current life stressors. Several cross-sectional studies have revealed that resilient individuals are less likely to develop PTSD following a traumatic event (Thompson et al., 2018). According to Thompson et al. (2018), coping can further be categorized into active and avoidant strategies. Active coping attempts to change the perception of a stressor, by utilizing problem solving or cognitive structuring. In contrast, avoidant coping involves actions and thought processes used to escape direct confrontation with the stressor (Thompson et al., 2018). The author elaborates, resilience is a set of protective factors, such as close family relationship, community, an optimistic outlook, ability to embrace challenges, which allow the individual to have a positive outlook on the triggering event. In contrast, coping strategies may yield either a positive or negative result.

Though the two terms may seem interchangeable, Thompson et al. (2018), suggests they have distinct cognitive implications, with resilient individuals, having been found to employ greater amounts of active coping (Thompson et al., 2018). This study suggests that resilience
may influence coping strategy selection and evaluates coping strategies, as it influences the development of PTSD symptoms. This study by Thompson et al. (2018), aimed to investigate the role of resilience and coping strategies, measuring one month, then three months post trauma, then evaluating the development of PTSD six months post traumatic event. Thompson et al. (2018) hypothesized that individuals with high levels of resilience at one month post traumatic event would be more likely to use active coping strategies and less likely to employ avoidant coping strategies, therefore less likely to develop symptoms of PTSD six months post traumatic event.

Sample included Level 1 Emergency Department (ED) patients from an inner-city facility, ages 18 to 65, English speaking, alert and oriented, endorsed experiencing events potentially resulting in serious injury, threat to physical wellbeing or death to themselves or others. Exclusion criteria included current or recent suicidality, active psychosis, or significant substance abuse. Initial interviews were conducted during ED stay, within a few hours of traumatic event, followed by evaluations performed in person at one-, three- and six-month intervals by persons trained by clinical psychologists. Initial interviews utilized the Standardized Trauma Interview (STI), gathering demographics and extent of impact of event. One-month evaluation measured resilience via the Connor-Davidson Resilience Scale (CD-RISC), assessing the individual's ability to cope with adversity, adapt to change, have closer secure relationships, and feel in control of live events during the past month. The three-month mark assessed coping strategies, utilizing the Coping Strategies Inventory (CSI), evaluating coping thoughts and behaviors tied to a specific event. Six months past the event, the presence of PTSD symptoms was evaluated, using the PTSD Symptom Scale, and symptom criteria as defined by the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) (Thompson et al., 2018)
One hundred and sixty-four individuals completed the six-month follow-up interview, which included traumas resulting from motor vehicle collision, pedestrian versus automobile, non-sexual assault, sexual assault, falls, motorcycle accident, industrial/home accidents, bike accidents, stabbings, gunshot wounds, fire, and burns. Individuals with higher PTSD symptoms at the six-month mark were noted to be less educated, have experienced childhood and interpersonal trauma, and female gender (Thompson et al., 2018). Resilience positively correlated with coping strategies, problem solving, cognitive restructuring and social support, and negatively correlated with wishful thinking, self-criticism, and social withdrawal. Study results concluded that higher resilience at one month post trauma was associated with lower PTSD symptomology at the six-month mark, and that early resilience proved to be a predictor of a lower potential for developing symptoms of PTSD (Thompson et al., 2018).

Difficulty in emotion regulation and maladaptive coping strategies are key features of patients with borderline personality disorder (BPD). Early intervention encouraging coping strategies targeting reducing self-destructive behaviors, problem solving, appropriately responding to stress, and reducing impulsivity have been noted as key features of effective therapy (Kramer et al., 2017). In addition, appropriate therapist responsiveness focuses on motive-oriented therapeutic relationship (MOTR), where the therapist responds to the patient’s in-session characteristics, proactively adapting to patient need, and preventing problematic behavior (Westermann et al., 2015). This study by Westermann et al. (2015) aims to evaluate (a) if there is a responsiveness effect in treatments based in MOTR, (b) if there is a reduction in frequency in unproductive coping strategies over the course of the first ten therapy sessions, (c) whether the use of MOTR fosters greater decrease in unproductive coping than the comparison group, (d) a meditation model where it is assumed that the change in behavioral form of coping
mediates the link between treatment type (MOTR) and symptom change (Westermann et al., 2015).

Study method evaluated appropriate responsive, when combining MOTR with a ten-session version of general psychiatric management (GPM). Study subjects included 38 female patients, with a mean age of 33.7, French speaking, with a DSM-IV diagnosis of BDP. Video or audio recorded therapy sessions were professionally translated and evaluated at the intake session, then following session five, and session ten. Expected outcome included a decrease in psychological distress over a four-month treatment period (Westermann et al., 2015). A 45 item self-report, the Outcome Questionnaire, was used to measure level of distress utilizing an observer-rating system, assessing the coping processes based on interview transcripts. Based on Skinner et al.'s (2003) hierarchy conception of the structure of coping, the following 12 categories of coping were identified: problem solving, information seeking, self-reliance, support-seeking, accommodation, negotiation, helplessness, escape, delegation, isolation, submission, and opposition. A manual describing indicators of coping was used to rate results and justify the observer rated approach. Ratings were performed by clinical psychology PhD level students who were unaware of study hypothesis and had received three months of training prior to study. Transcripts were anonymized and given a code. Study report revealed that even in short-term psychiatric treatment for BDP, changes in distress may be supported by a decrease in frequency of unproductive coping strategies. Therapists’ methods of responding or interacting with patients had a specific effect on the outcome between session five and ten (Westermann et al., 2015). As noted by Kramer et al. (2017), early intervention, aimed at decreasing behavioral response to stress are core in treating for BPD.
Coping Skills in the Homeless Population with Chronic Conditions

Maslow’s Hierarchy identifies basic human needs that must be met, in order to promote personal growth and progression through each identified level. The most basic psychological need includes the availability of adequate shelter, sleep, and clothing (Kenrick et al., 2010). Homelessness constitutes a traumatic period in one’s personal experience. Couple this with the presence of chronic mental illness, individuals in this position face significant life challenges, namely in identifying and utilizing effective coping skills. This section aims to address coping skills in the homeless population, co-occurring with mental and, or physical illness.

Homelessness is a serious social and public health concern affecting thousands in both low and high-income countries, negatively impacting the individual’s well-being. Those experiencing homelessness are vulnerable to unsafe conditions, powerlessness, loss of privacy, and loss of social connections. Additional traumas, including victimization, physical and sexual abuse, exposure to crime and discrimination, further compound the psychological impact, especially in the presence of previous traumas (Mejia-Lancheros et al., 2021). Exposure to trauma increases individuals’ vulnerability to mental and substance use disorders, physical comorbidities, social disconnectedness, poor recovery outcomes and hopelessness (Mejia-Lancheros et al., 2021). In order to overcome trauma or life stressors, the individual must be able to respond appropriately to stress, utilizing adaptive coping mechanisms, such as resilience. This ability has been shown to enhance one’s capacity to rebound, or adjust to adversity, resulting in protected and improved mental health. Socio-economic disadvantaged individuals, such as those experiencing homelessness, have shown that increased resilience results in higher community functioning, increased social support, increased percentage of days in stable housing and, decrease in suicidal ideation (Mejia-Lancheros et al., 2021). Homeless individuals can adopt
resilience strategies to positively cope with their circumstances. Conversely, maladaptive coping methods negatively influence mental health, resulting in negative feelings, emotional/psychological emptiness, pessimism, and hopelessness.

This study by Mejia-Lancheros et al. (2021) aimed to investigate the longitudinal associations of resilience level, with generic and mental health-related quality of life scores in adults who experience both homelessness and severe mental disorder (Mejia-Lancheros et al., 2021). Study method included enrolling 575 participants (1) ages 18 years or older (2) homeless or unstable housing, with at least two episodes of homelessness lasting four or more weeks over the previous year, and (3) diagnosed with mental disorder or without co-occurring substance or alcohol use disorder (Mejia-Lancheros et al., 2021).

Participants were organized based upon their need for mental health services. Those requiring more intervention were aligned with necessary resources, including Housing First (HF)-policy aimed at ending homelessness, assertive community treatment (ACT), rent supplements and treatment as usual (TAU), with intensive case management (ICM). Participants were monitored for an average of two years. Overall resilience scores were assessed using an abbreviated Connor-Davidson Resilience Scale (CD-RISC2), comprised of two items, (1) “Able to adapt to change,” and (2) “Tend to bounce back after illness or hardship” (Mejia-Lancheros et al., 2021). The CD-RISC2 was administered in face-to-face interviews at specific intervals. Overall resilience scores were calculated, with higher values indicating higher levels of resilience. Lehman’s twenty-item QOL interview was also administered in face-to-face, interview every six months during treatment, assessing leisure, family and social relationships, finances, and safety domains, with higher values indicating better overall quality of life. Results of this longitudinal study indicated that high levels of resilience were positively associated with
greater global and mental quality of life scores (Mejia-Lancheros et al., 2021). It supports the idea that individuals experiencing homelessness and serious mental illness (SMI) can utilize strategies to strengthen resilience and response to adversity, even while experiencing unstable housing. Individuals can promote health and well-being by seeking appropriate support, socializing, engaging in meaningful activities, and remaining hopeful. In contrast, individuals with maladaptive coping methods, such as engaging in criminal activity, drug and alcohol use had higher incidences of negative health outcomes (Mejia-Lancheros et al., 2021).

Higher resilience levels are positively associated with long-term global and mental-health related quality of life values in homeless adults with mental illness (Mejia-Lancheros et al., 2021). As noted, it is crucial to facilitate access to social, psychological, emotional and health support services to boost resilience in this vulnerable population, enhancing mental state and quality of life (Mejia-Lancheros et al., 2021). Healthcare providers working with this population can incorporate resilience training in current services, aimed at enhancing specific skills.

Merdsoy et al. (2020) aimed to explore the perceptions, needs and preferences for chronic disease self-management (SM) and SM support among men experiencing homelessness. According to the World Health Organization (WHO), chronic disease is an invasive global epidemic and leading cause of mortality worldwide (Merdsoy et al., 2020). Its implications result in adverse health outcomes, reduced quality of life, increased emotional distress, loss of productivity and increased healthcare costs. Those with lower socio-economic status (SES) have higher rates of chronic illness, related to lack of access to protective factors. The most at risk of low SES are the homeless, with up to 85% reporting diagnosed chronic illness, along with higher prevalence of substance abuse, mental illness, risk of violence, poor nutrition, and lacking shelter (Merdsoy et al., 2020). Coping with such adversity requires appropriate self-management (SM)
and understanding the roles one must take to maintain one or more chronic conditions. The availability of support is one key in encouraging appropriate SM. As supported by this study, interdisciplinary collaboration among healthcare providers improves patient outcomes.

This study by Merdsoy et al. (2020) aims to answer the question: what are the perceptions, needs, and preference of chronic disease SM support among men experiencing homelessness? A qualitative interpretive approach was utilized, conducting interviews at an emergency overnight shelter. Eighteen individuals were included, between ages 32 to 65 years, 61.1% with multiple chronic illnesses and 38.9% comorbid with mental illness. Face-to-face interviews, with open ended questioning was conducted by master’s level nursing students or research assistants (Merdsoy et al., 2020). Audio recordings were transcribed verbatim and coded, then organized into categories of shared similarities. Seventy-two percent of participants agreed on the importance of chronic illness management however, acknowledged obstacles in the presence of homelessness (Merdsoy et al., 2020). Participants reported adaptive behaviors to combat their situations, such as using shelter provided face cloths to cover a wound or storing prescribed medications in plastic egg to avoid theft or ‘forgetting to take pills.’ One area with reported difficulty however, was managing negative emotions related to homelessness. Participants reported frustration, despair, guilt, and feelings of powerlessness, with greater impact on those also experiencing mental illness. As reported, coping with such feelings requires purposeful positive actions, seeking social support, and focusing on positives in their lives. Some participants did however, report drug and alcohol use as a distractor. Researchers found that chronic disease SM plays an important role in mitigating the negative impact of homelessness. Those with mental illness, comorbid with chronic illness and homelessness had an increased burden of symptoms, even lower quality of life and increased hospital costs.
Preventive methods, such as the availability of social/peer support, and community resources were associated with reduced Emergency Department (ED) visits, smoking cessation, improved mood, and sense of belonging (Merdsoy et al., 2020). Prevention of chronic disease must be addressed by healthcare providers at various levels.

In April 2009, a 6.3 magnitude earthquake struck L’Aquila, a small town of 70,000 in central Italy, killing 309 and injuring 1,500 (Ciocca et al., 2015). The town historic center, as well as thousands of homes were destroyed. Evidence shows that there are specific personal, social, and behavioral changes following a catastrophic event. Post-traumatic syndrome describes a continuous state of alarm, even in the absence of the negative stressor. Post-traumatic stress disorder (PTSD) is a complex psychopathological disease that may develop following a traumatic event (Ciocca et al., 2015). Coping strategies, however, play a fundamental role against the development of PTSD. Without this buffer, psychopathological effects are able to have greater impact on chronic and metabolic pathologies, such as diabetes. Studies suggest that chronic or acute state of distress may impact the metabolism of glucose, increasing the risk of developing type II diabetes.

This study by Ciocca et al. (2015) hypothesizes a major prevalence and severity of PTSD in individuals diagnosed with type II diabetes following the earthquake (Ciocca et al., 2015). It aimed to evaluate PTSD and coping strategies in type II diabetic patients diagnosed within six months following the earthquake. One-hundred patients aged 30-65, with diabetes type II who had lived through the earthquake were recruited. Sixty were previously diagnosed with type II diabetes, the remaining 40 were diagnosed within six months post-earthquake. A clinical psychologist assessed all subjects according to DSM-IV and conducted clinical interviews. Davidson Trauma Scale (DTS) and Brief-COPE self-report questionnaire utilized open ended
questioning assessing coping, versus maladaptive coping methods. Results revealed PTSD was not only more severe, but also more prevalent in post-quake patients than other groups. Maladaptive coping was the only specific and predictive psychological factor for PTSD in the post-quake group (Ciocca et al., 2015). In conclusion, study results confirmed a strong link between diabetes type II and PTSD in patients diagnosed post-quake with diabetes type II. Results can also infer that psychological trauma sustained by survivors of the quake may play a role in earlier development of diabetes. PTSD can then be considered as one risk factor for the development of diabetes. Psychological support proved to be important in encouraging appropriate reactions to PTSD and diabetes, as well as to improve the utilization of effective coping skills (Ciocca et al., 2015).

Homelessness is associated with various mental and physical health concerns. The marginalization of homeless individuals creates greater obstacles in having these needs met, such as the treatment of chronic pain. Chronic pain is described as pain exceeding the comfortably tolerable level, ongoing for at least three months. Recent survey revealed that 18.9% of Canadians self-report living with chronic pain for more than three months, with similar prevalence being reported in other countries (Vogel et al., 2017). Chronic pain negatively impacts overall well-being, resulting in difficulty with general activities, mood, and sleep. As a large portion of homeless individuals with chronic pain also suffer from mental illness and substance abuse, healthcare providers may be hesitant to appropriately assess and treat complaints of pain. This study by Vogel et al. (2017) aimed to determine the prevalence of chronic pain, describe the characteristics of individuals with chronic pain and analyze the factors associated with its presence in participants (Vogel et al., 2017).
Cross-sectional data from a randomized control trial on homelessness and mental health was utilized, with participants consisting of homeless individuals in three Canadian cities. There were 742 individuals, with a mean age of 41.7. Self-report was utilized to assess the presence, intensity, and duration of chronic pain. Nearly 60% of subjects reported having suffered from pain for most days during the week for the past three months or more. However, 43.4% reported consistent intense pain, greater than 3.5/10 (Vogel et al., 2017). In addition, mental illness influences the occurrence and experience of pain however, depression, and anxiety disorders may also occur in response to chronic pain (Vogel et al., 2017). With both chronic pain and mental illness increasing the risk of suicidality, it is important to understand the implications of chronic pain on the individual. Clinicians must be aware of these conditions and collaborate with other specialists to ensure patient needs are appropriately met, reducing the possibility of symptom exacerbation.

The Promotion of Coping Skills Among Healthcare Providers

In providing care to the ill, healthcare providers tend to utilize predetermined treatment plans to address specific disease symptomologies. Treating SMI, however, presents additional challenges, as reaction to specified treatment regime may vary significantly from patient to patient. In this case, healthcare providers must be more reliant on patient-provider rapport and clinical knowledge to identify necessary treatment methods. This section addresses the promotion of coping skills among healthcare providers, as it contributes to positive patient outcomes.

Şimşek & Buldukoglu (2018) carried out a descriptive study in a Turkish psychiatric clinic engaging eight providers and 122 clients, meeting the inclusion criteria of (1) able to read and write, (2) over 18 years of age, (3) volunteering to participate (4) having no handicap, such
as hearing, sight, comprehension, and perception and (5) expecting to be discharged within one week (Şimşek & Buldukoglu, 2018). The researchers aimed to answer the following question, ‘Is there an association between provider care perceptions and coping skills on posttraumatic growth in mental disorders?’ The study acknowledged that being diagnosed with a mental illness could serve as a traumatic life event, resulting in destructive events to the individual, their families, or their communities. It recognized that the key to effective coping through such life stressor include utilizing counseling from health professionals, practicing coping skills, and having social support. Utilization of these tools resulted in posttraumatic growth and reduced the impact of SMI (Şimşek & Buldukoglu, 2018).

Sharp et al., (2018), conducted a qualitative study using thematic analysis in two United Kingdom (UK) inpatient psychiatric hospitals to explore providers views on weather implementation of a workbook would aid or present barriers in encouraging client’s utilization of coping skills. Thirty-five providers participated in four focus groups, with two other healthcare providers conducting semi-structured interviews. Results highlighted barriers to workbook implementation including, (a) time and space to encourage workbook use in the stressful ward environment, (b) a unit culture of emotional neglect, whereby neither staff nor clients felt able to speak about emotions and (c) the presence of patient’s psychotic symptoms limiting their ability to engage in the study (Sharp et al., 2018). Barriers were addressed by discussing the importance of (a) encouraging staff to value psychological approaches and view the workbook as a resource to help manage existing tasks, (b) emphasized the value of staff utilizing their experience to deliver the workbook in various formats and settings, (c) empowering the staff to identify best timing for workbook utilization, in the presence of the patients fluctuating psychological symptoms and tasks needing to be achieved (Sharp et al., 2018). This study highlighted the
importance of flexibility of healthcare providers in coping with both the patients fluctuating psychological state and utilization of their fluid environments.

van Weeghel et al., (2019), aimed to assess recovery from mental illness, as well as barriers to recovery. Systematic review and meta-analysis were conducted, on recovery in mental illness, reviewing 33 articles, 25 of which utilized the Connectedness, Hope and optimism about the future, Identity, Meaning in life and Empowerment (CHIME) conceptual framework for personal recovery. A comprehensive overview searched PubMed, PsychINFO, CINAHL, Cochrane Library and Google Scholar, seeking ‘mental illness AND recovery.’ Scoping review mapped key concepts, types of evidence and gaps in research related to the identified topic. Inclusion criteria included: severe mental illness, adults (18 years and older) and articles written in English. The study concluded that processes relevant to client recovery included: connectedness (peer support, relationships, being a part of society), hope and optimism (motivation, having positive thinking and aspirations), identity (positive sense of self), meaning in live (having goals, meaningful life) and empowerment (being responsible and focusing on strength), the process of CHIME contributed to a better understanding of recovery (van Weeghel, 2019). Identified recovery methods highlight the role providers can play in encouraging growth through effective coping mechanisms, reducing the severity of SMI.

As noted in each of these studies, healthcare providers play a key role in influencing positive client outcomes. Healthcare providers must understand the significance of their impact and the importance of teaching and encouraging utilization of effective coping skills. Healthcare providers must possess the knowledge and skill set to engage in effective communication, provide effective interventions and encourage utilization of identified support systems. In addition, healthcare providers must receive the support necessary to meet the demands of
providing care to populations coping with SMI. Through effective educational interventions, clients are best able to achieve optimal function, decreasing their burden on their loved ones and on society.

**Significance**

This project was significant in the discipline of nursing. It is significant for nursing practice, research, and health policy.

**Significance to Nursing Practice**

Of all healthcare disciplines, nurses spend the greatest amount of time with patients (Butler et al, 2018). Nurses represent the eyes and ears of the treatment team, making ongoing assessments and remaining keenly aware of subtle changes in patient status. In addition, patients often form stronger bonds with nurses than any other provider, strengthening the nurse-patient relationship (Butler et al, 2018). In this environment, nurses can understand the positive impact of coping skill usage in patients with SMI, as well as attempt to increase patient outcomes in this population.

**Significance to Nursing Research**

To this investigator’s knowledge, there was limited practitioner-led research on coping skills among patients with SMI in Miami, Florida. More specifically, there was no practitioner-led research on coping skill usage among patients with SMI in Miami, Florida. If nurses do not conduct research in this area, the profession may fall short of mental health nursing interventions in this population. Positive coping skills may reduce negative health outcomes such as illness exacerbation and suicide (Banerjee et al, 2019).
Significance to Health Policy

Based on the findings of this study, hospitals should develop a policy or protocol that promotes coping skills in individuals with mental illness among healthcare providers. When interacting with patients, healthcare providers should constantly assess for the presence of disease symptomology. Patients should be encouraged to identify effective individualized coping methods to prevent illness exacerbation. Instituting a protocol will facilitate improved patient care and improve outcomes in patients with SMI.

Purpose

The purpose of this quality improvement project was to enhance knowledge awareness among healthcare providers, regarding coping skills in individuals with serious mental illness at a behavioral health hospital in Miami, Florida.

PICO Clinical Question

RQ: Is there a significant difference between pre and posttest scores among healthcare providers after an educational intervention at a behavioral health facility in Miami, Florida?

H0: There is no significant difference between pre and post-test scores among healthcare providers at a behavioral health hospital in Miami, Florida after an educational intervention.

Ha: There is a significant difference between pre and post-test scores among healthcare providers at a behavioral health hospital in Miami, Florida after an educational intervention.

Definition of Terms

The variables of this project were knowledge awareness, healthcare providers, age, gender, level of education, and years of experience. Project variables are described in the following paragraphs.
**Knowledge Awareness**

This variable referred to healthcare providers’ knowledge awareness of coping skills in individuals with SMI at a behavioral health hospital in Miami, Florida. Coping strategies have been found to moderate the adverse influence of negative life events on psychological functioning (Houlahan & Moo, 1987). In addition, coping strategies involving negotiation and optimistic comparisons have been linked to reductions in concurrent stress, as well as lessening future role problems, even when initial distress is controlled (Houlahan & Moo, 1987). Holahan and Moo’s Coping Strategies Scale will be used to assess knowledge awareness of coping skills. This tool measures sociodemographic factors- the link between socioeconomic status and adaptive coping; personality disposition- variables of resilience; stressful life events- related to psychological and physical morbidity; and social network resources- accessibility to resources positively impacting learning, physical and mental health (Houlahan & Moo, 1987).

**Healthcare Providers**

This nominal variable refers to employees who work at a behavioral health hospital in Miami, Florida and provide direct patient care to individuals diagnosed with SMI. Study variables are classified as: Behavioral Health Technician, Registered Nurse (RN), Behavioral Health Therapist, Advanced Registered Nurse Practitioner (APRN), and Physicians encountering this patient population.

**Age**

This ratio variable refers to the age of healthcare providers who deliver care to patients at a behavioral health hospital in Miami, Florida. This demographic variable was grouped as follows: (a) 18 to 30 years; (b) 31 to 44 years; and (c) 45 years and older.
Gender

This nominal variable refers to the gender of healthcare providers delivering care to patients in a behavioral health facility in Miami, Florida. This demographic variable is categorized as follows: (a) female; (b) male.

Level of Education

This nominal variable refers to the level of education and highest degree attained by healthcare providers who deliver care to patients at a behavioral health hospital in Miami, Florida. This demographic variable is classified as follows: (a) vocational certificate or diploma, (b) associate degree, (c) bachelor’s degree (d) master’s degree, (e) doctoral degree.

Years of Experience

This nominal variable refers to the years of clinical experience of healthcare providers who deliver care to patients at a behavioral health hospital in Miami, Florida. This demographic variable was grouped as follows: (a) 0 to 5 years; (b) 6 to 10 years; and (c) 11 years or more.

Conceptual Underpinning

This research is being conducted under the positivism paradigm. The researcher will measure healthcare providers' knowledge awareness of coping skills in individuals with SMI at a behavioral health facility in Miami, Florida, before and after the delivery of an educational intervention. As a positivist, this researcher assumes that knowledge awareness of coping skills in individuals with serious mental illness will increase among healthcare providers at a behavioral health facility in Miami, Florida. The scientific method will be utilized to analyze data and examine results of this project.
Theoretical Framework

The researcher will utilize Jean Watson’s Theory of Human Caring, developed in 1979 during her doctoral studies, to guide this quality improvement project (Sitzman & Watson, 2018). Watson developed the idea of transpersonal caring, where caring goes beyond self and the here and now, to a deeper connection and relationship focused on the moment to tap into subtle healing possibilities and potentials (Sitzman & Watson, 2018). This theory focuses on 10 constructs, or “caritas”: (1) Sustaining humanistic–altruistic values by practice of loving kindness, compassion, and equanimity with self/others; (2) Being authentically present, enabling faith/hope/belief system; honoring subjective inner, lifeworld of self/others; (3) Being sensitive to self and others by cultivating own spiritual practices; beyond ego-self to transpersonal presence; (4) Developing and sustaining loving, trusting–caring relationships; (5) Allowing for expression of positive and negative feelings— authentically listening to another person’s story; (6) Creatively problem-solving– “solution-seeking” through caring process; full use of self and artistry of caring–healing practices via use of all ways of knowing/being/doing/becoming; (7) Engaging in transpersonal teaching and learning within context of caring relationship; staying within other’s frame of reference—shift toward coaching model for expanded health/wellness; (8) Creating a healing environment at all levels; subtle environment for energetic authentic caring presence; (9) Reverentially assisting with basic needs as sacred acts, touching mind body spirit of other, sustaining human dignity; and (10) Opening to spiritual, mystery, unknowns— allowing for miracles (Sitzman & Watson, 2018).

Watson's Theory of Human Caring will guide this project and encourage participants to improve the therapeutic relationship and care of individuals with SMI. Healthcare Providers will remain keen to patient strengths and weakness, pitfalls to mental health healing and the presence
of illness exacerbation. Through ongoing therapeutic growth and patient rapport, healthcare providers will promote the use of coping skills in patients with SMI and improve mental health outcomes in this population. Through this project, participants may gain insight into the benefits of coping skills in patients with SMI. Furthermore, this project could stimulate healthcare providers to develop specific interventions for patients with SMI and allow them to identify the most effective coping skills in this population.

**Methodology**

The purpose of this project was to enhance knowledge awareness among healthcare providers, regarding coping skills in individuals with serious mental illness at a behavioral health hospital in Miami, Florida. This researcher conducted an advanced literature review and discovered gaps in the literature. Findings from the literature review were used to develop the PICO clinical question, providing justification for conducting this quality improvement project. This section explores the study design, setting, sample, inclusion and exclusion criteria, intervention, measures and instruments, data collection procedures, data analysis and protection of human subjects.

**Study Design**

**Descriptive Design**

Descriptive design is used to observe, describe, and document a situation as it occurs (Pilot & Beck, 2017). This researcher assessed healthcare providers' knowledge awareness of coping skills in individuals with SMI. The investigator collected data before and after an educational intervention among healthcare providers.
Cross-Sectional Design

A cross-sectional design is a research design in which individuals, typically of different ages or developmental levels, are compared at a single point in time (American Psychological Association, 2022). This researcher collected data from participants using pre- and post-surveys at a specific point in time.

Pre- and Posttest Design

A pre- and posttest design was utilized to measure changes in knowledge awareness among healthcare providers. Healthcare providers' knowledge awareness of coping skills in SMI was measured before and after an educational intervention using Holahan and Moos’s Coping Strategies scale.

Setting

This researcher conducted this quality improvement project at a behavioral health facility in Miami, Florida.

Sample

Convenience sampling method was used to recruit participants and access data. Estimated sample size was 15 participants.

Inclusion Criteria

Healthcare providers, providing care to individuals with SMI and over the age of 18 years, were considered for this study. Only those who were willing and observed to have some clinical impact will be allowed to participate in this study. Potential participants will include Behavioral Health Technician, Registered Nurse (RN), Behavioral Health Therapist, Advanced Registered Nurse Practitioner (APRN), and Physicians.
Exclusion Criteria

Healthcare providers who do not provide care to individuals with SMI at a behavioral health facility in Miami, Florida, will not be included in this study. Individuals under the age of 18 will not be included in this study. Healthcare providers without direct access to this population will not be included in this study.

Intervention

Florida International University (FIU) Institutional Review Board (IRB) approval was obtained prior to data collection. Permission from the nursing management team will be obtained and invitations will be sent via email to potential participants. The purpose of the project, objective, and overview will be provided to potential participants prior to project initiation, facilitating informed decision to potential participants. After consenting to participate, project participants will complete an online demographics questionnaire, followed by a pretest survey, assessing their knowledge awareness of coping skills in individuals with SMI.

Following the online pretest, participants will watch a 15 to 20-minute voice over PowerPoint presentation with the goal of increasing their knowledge awareness of coping skills in individuals with SMI. The voiceover PowerPoint presentation will be research-based, stressing the significant role healthcare providers play in the promotion of effective coping skills in individuals with SMI. Immediately after the PowerPoint presentation, participants will complete an online post-test survey to reassess their knowledge awareness of coping skills in individuals with SMI. The pre- and post-test surveys are the modified Holahan and Moo's Coping Strategies Scale evaluating the following PICO clinical question: ‘Is there a significant difference between pre and posttest scores among healthcare providers after an educational intervention?’ The researcher will conduct this project within four weeks following IRB approval.
Measures and Instruments

Participants of this project will provide their demographic information identifying their (a) age, (b) gender, (c) education level, and (d) years of experience in their current role. Furthermore, the Holahan and Moo's Coping Strategies Scale assesses cognitive, emotional, and behavioral methods of dealing with problems (Hambay et al., 2015). Survey items ask participants to evaluate their level of understanding and perspective of the problem; alternative point of views; behavior modification; use of humor; lifestyle and behavior evaluation; as well as coping behaviors and changes to usual habits. Healthcare providers can evaluate their personal coping methods, related to improving the therapeutic relationship with psychiatric patients, and elicit effective coping strategies from patients. Clinicians are encouraged to practice ongoing self–evaluation, fostering improved patient rapport and the promotion of positive coping skills.

Data Collection Procedures

Following IRB approval from Florida International University (FIU) electronic mail will be used to contact potential participants, explaining the purpose and objective of this quality improvement project, with a link to the survey via Qualtrics. Convenience sampling method will be used to recruit participants and access data at a behavioral health facility in Miami, Florida. Participants will first complete an online demographic survey collecting their age, gender, highest level of education, years in current role and current role as healthcare provider. Participants will then complete an online pretest, followed by a 15 – 20-minute Power Point Presentation. Finally, participants will complete a posttest survey after the educational intervention. Participants will take approximately 30 minutes to complete the demographic questionnaire, the pre-test survey, the Power Point Presentation, and posttest survey. This project will be conducted over a 4-week period, with an estimated sample size of $N=15$. Data
will be secure and accessed only by the researcher. Data will be stored in a password protected laptop.

**Data Analysis**

Data was analyzed using Microsoft Excel and the Statistical Package for Social Sciences (SPSS) version 25.0. Qualtrics and Statistical Package for Social Sciences (SPSS) were used for data entry and coding. The mean ($M$); median ($Mdn$); mode; standard deviation ($SD$); and range will be calculated for the variables of this project. Significant differences between variables will be examined using the $t$-test, as well as to identify statistical differences between surveys and mean values before and after the educational intervention. A $p$-value of <0.05 will be considered statistically significant (Polit & Beck, 2017).

**Protection of Human Subjects**

Following IRB approval from Florida International University (FIU), this researcher will ensure ethics and protection of human subjects are maintained throughout this project. Participant privacy will be maintained and only the researcher will have access to the data of the project. Data collection will be anonymous with no participant identifying factors present on survey material. Participation in this project will be voluntary and participants will be able to withdraw at any time without penalty. Consents will be obtained from the participants prior to participation, and study participants will be provided with an overview of the project, including its purpose and objectives. No known risks are associated with this project. Data will be stored in a password protected laptop.

**Results**

The purpose of this quality improvement project was to enhance knowledge awareness among healthcare providers, regarding coping skills in individuals with serious mental illness at
a behavioral health hospital in Miami, Florida. Potential participants were invited via e-mail to participate in this quality improvement project. Participants completed a demographic survey and pretest, the modified Holahan and Moo’s Coping Strategies Scale, using Qualtrics. After watching the educational intervention, participants completed posttest surveys, and the modified Holahan and Moo’s Coping Strategies Scale, to assess an increase in knowledge awareness of coping skills in individuals with SMI. SPSS version 25.0 was used for data entry, coding, and analysis. This researcher will provide demographic data and statistical outcomes of the project related to the PICO clinical question in the sections below.

This quality improvement project was conducted from August 29, 2022, to September 24, 2022. The researcher used Qualtrics to deliver two surveys to participants: one survey contained the demographic questionnaire and pretest; the second survey contained the posttest. Fifteen participants completed the demographic survey and pretest. However, three pretests were incomplete and excluded from data analysis. Twelve participants completed the posttest. When comparing the unique identifier for the pretest and posttest in the Qualtrics surveys, only $N = 12$ participants completed all surveys. Therefore, the sample size consisted of $N = 12$ participants.

Age distribution did not vary among the healthcare providers (see Table 1). Half of the participants were above 45 years of age, and the other half were 30 to 44 years old.

Table 1

*Age Distribution Among Healthcare Providers at a Behavioral Health Hospital in Miami, Florida ($N = 12$)*

<table>
<thead>
<tr>
<th>Age</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 to 44 years</td>
<td>6</td>
<td>50%</td>
</tr>
<tr>
<td>45 years and older</td>
<td>6</td>
<td>50%</td>
</tr>
<tr>
<td>Total</td>
<td>12</td>
<td>100%</td>
</tr>
</tbody>
</table>
The gender of participants was classified as male, female, transgender, not listed and prefer not to say. The gender distribution among participants was unequal (see Table 2). Most participants were men and approximately 45% of women participated in this project.

**Table 2**

*Gender Distribution Among Healthcare Providers at Behavioral Health Hospital in Miami, Florida (N = 12)*

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>7</td>
<td>58%</td>
</tr>
<tr>
<td>Female</td>
<td>5</td>
<td>42%</td>
</tr>
<tr>
<td>Transgender</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Not listed</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Prefer not to say</td>
<td>0</td>
<td>0%</td>
</tr>
</tbody>
</table>

The educational level of participants varied (see Table 3). Most participants had a Bachelor’s degree. However, less than 30% of the participants had attained a Master's or Doctoral degree.

**Table 3**

*Educational Level Among Healthcare Providers at Behavioral Health Hospital in Miami, Florida (N = 12)*

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vocation certificate or diploma</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Associates Degree</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Bachelor’s Degree</td>
<td>7</td>
<td>58%</td>
</tr>
<tr>
<td>Master’s Degree</td>
<td>2</td>
<td>17%</td>
</tr>
<tr>
<td>Doctoral Degree</td>
<td>3</td>
<td>25%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>12</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>
Furthermore, all participants of this project had 4 or more years of experience in their current role (see Table 4).

**Table 4**

*Years in Current Role Among Healthcare Providers at a Behavioral Health Hospital in Miami, Florida (N = 12)*

<table>
<thead>
<tr>
<th>Years in Role</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 1 year</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>2 to 3 years</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>4 or more years</td>
<td>12</td>
<td>100%</td>
</tr>
</tbody>
</table>

Total 12 100%

Role of participants varied (see Table 5). Most participants were Registered Nurses (RN). However, fewer than 30% of participants were Behavioral Health Technicians or Advanced Practice Registered Nurses (APRN). Physicians and Behavioral Health Therapists did not participate in this project.

**Table 5**

*Role Among Healthcare Providers at a Behavioral Health Hospital in Miami, Florida (N = 12)*

<table>
<thead>
<tr>
<th>Role</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavioral Health Technician</td>
<td>1</td>
<td>8%</td>
</tr>
<tr>
<td>Registered Nurse</td>
<td>8</td>
<td>66%</td>
</tr>
<tr>
<td>Behavioral Health Therapist</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Advanced Practice Registered Nurse</td>
<td>3</td>
<td>25%</td>
</tr>
<tr>
<td>Physician</td>
<td>0</td>
<td>0%</td>
</tr>
</tbody>
</table>

Total 12 100%
PICO Clinical Question

The PICO clinical question was: Is there a significant difference between pre and posttest scores among healthcare providers after an educational intervention at a behavioral health facility in Miami, Florida? The alternative hypothesis (Ha) was that there is a significant difference between pre- and posttest scores among healthcare providers at a behavioral health hospital in Miami, Florida after an educational intervention.

Results revealed that there was an increase in knowledge awareness among healthcare providers after an educational intervention at a behavioral health hospital in Miami, Florida (see Table 6, Table 7, and Table 8). For a sample size of $N = 12$ healthcare providers, post-test results showed an increase in knowledge awareness in areas relating to coping with patient’s presenting behaviors. Areas showing no change, included those relating to healthcare providers personal coping methods.

Table 6

*Paired Samples T-Test Between Pre and Post Survey Scores*

<table>
<thead>
<tr>
<th></th>
<th>$M$</th>
<th>$SD$</th>
<th>95% Confidence interval of the Difference</th>
<th>$t$</th>
<th>$df$</th>
<th>$p$ value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Posttest</td>
<td>3.043</td>
<td>0.820</td>
<td>Lower 2.346 Upper 3.487</td>
<td>3.471</td>
<td>11</td>
<td>0.001</td>
</tr>
<tr>
<td>Pretest</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

KNOWLEDGE AWARENESS OF COPING SKILLS
### Table 7

**Pre-Survey Scores**

When dealing with patients with SMI, I try to

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>N</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spend time understanding what happened</td>
<td>3.08</td>
<td>12</td>
<td>.900</td>
</tr>
<tr>
<td>See the positive side of the situation</td>
<td>3.50</td>
<td>12</td>
<td>.647</td>
</tr>
<tr>
<td>Step back from exhibited behavior</td>
<td>3</td>
<td>12</td>
<td>.603</td>
</tr>
<tr>
<td>Consider alternatives for disease symptomology</td>
<td>3.17</td>
<td>12</td>
<td>.577</td>
</tr>
<tr>
<td>See the humor in a problem</td>
<td>2.75</td>
<td>12</td>
<td>1.138</td>
</tr>
<tr>
<td>Think about what a problem may say about bigger lifestyle changes</td>
<td>3.08</td>
<td>12</td>
<td>.793</td>
</tr>
<tr>
<td>Remember that presenting behavior may vary from actual problem</td>
<td>2.92</td>
<td>12</td>
<td>.793</td>
</tr>
<tr>
<td>Make compromises</td>
<td>3.25</td>
<td>12</td>
<td>1.138</td>
</tr>
</tbody>
</table>

### Table 8

**Post-Survey Scores**

When dealing with patients with SMI, I try to

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>N</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spend time understanding what happened</td>
<td>3.33</td>
<td>12</td>
<td>.888</td>
</tr>
<tr>
<td>See the positive side of the situation</td>
<td>3.58</td>
<td>12</td>
<td>.669</td>
</tr>
<tr>
<td>Step back from exhibited behavior</td>
<td>3.08</td>
<td>12</td>
<td>.515</td>
</tr>
<tr>
<td>Consider alternatives for disease symptomology</td>
<td>3.25</td>
<td>12</td>
<td>.452</td>
</tr>
<tr>
<td>See the humor in a problem</td>
<td>3.00</td>
<td>12</td>
<td>.953</td>
</tr>
</tbody>
</table>
Furthermore, some item scores on pre and post surveys revealed no changes or improvements. Areas showing no deviation between pre- and post-tests ($SD = 0.00$) included, ‘waiting to see if disease symptomology will resolve on their own,’ ‘utilizing exercise, hobbies or meditation to help get through a tough time,’ ‘make joke out of a problem to make light of the situation,’ ‘increase self-care in response to a problem,’ and ‘changing personal habits and staying closer to those I care about in response to a problem.’ However, scores were overall greater on posttests than pretests, indicating improvement in knowledge among healthcare providers after an educational intervention (see Table 9).

**Table 9**

*Pre- Versus Posttest Results (M) Following Educational Intervention*

<table>
<thead>
<tr>
<th>Item</th>
<th>N</th>
<th>Standard Deviation (M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spend time understanding what happened</td>
<td>12</td>
<td>0.125</td>
</tr>
<tr>
<td>See the positive side of the situation</td>
<td>12</td>
<td>0.04</td>
</tr>
<tr>
<td>Step back from exhibited behavior</td>
<td>12</td>
<td>0.04</td>
</tr>
<tr>
<td>Consider alternatives for disease symptomology</td>
<td>12</td>
<td>0.04</td>
</tr>
<tr>
<td>See the humor in a problem</td>
<td>12</td>
<td>0.125</td>
</tr>
<tr>
<td>Think about what a problem may say about bigger lifestyle changes</td>
<td>12</td>
<td>0.085</td>
</tr>
</tbody>
</table>
Summary and Discussion

The purpose of this project was to enhance knowledge awareness among healthcare providers, regarding coping skills in individuals with serious mental illness (SMI) at a behavioral health facility in Miami, Florida. This researcher utilized a descriptive, pre and posttest design to conduct this quality improvement project. The project was conducted remotely, and participants completed demographic, pre, and posttest surveys using Qualtrics. The modified Holahan and Moo's Coping Strategies Scale was utilized to examine healthcare provider's knowledge awareness of coping skills in individuals with SMI. Convenience sampling technique was utilized to recruit 12 participants and access data at a large behavioral health hospital in Miami, Florida. Data was analyzed using the Statistical Package for the Social Sciences (SPSS) version 25.0. This researcher will further compare and contrast the project findings with the literature in the section below. The researcher will also discuss implications for advanced practice nursing, limitations of the project, recommendations, and conclusions.

Summary of the Results and Discussion

Project results revealed that there was an increase in knowledge awareness of coping skills in individuals with SMI among participants following the delivery of an educational intervention. Outcomes indicated a significant difference between pre- and posttest scores among healthcare providers, \( t (11) = 3.4719, p = 0.001, (p < 0.05) \), with greater scores on posttests after an educational intervention.
Chu et al. (2018) conducted a pre-test and post-test study to examine the effectiveness of an innovative smoking reduction education program. It was conducted by nursing students, around two major entrances of a 500-bed teaching hospital in Taiwan. The education program consisted of posters, audio broadcasts, and dramatic performances, providing information and resources related to smoking reduction. Data was collected in three phases: before, during, and after the intervention. Twenty-seven third-year nursing students were provided education on smoking reduction, and assistance with developing the contents of the program. Through interdisciplinary collaboration, they learned how to create posters, audio recordings and performed a short situational dance containing information related to smoking reduction, and available resources.

The study by Chu et al. (2018) was conducted for 75 days. A group of students observed and recorded the gender of smokers and number of cigarette butts at 10 locations around two major hospital entrances hourly, between 8am and 5pm. Weather conditions were taken into consideration, noting that individuals tended to smoke during more temperate hours such as mornings and evenings. On average, 78 individuals were observed smoking outside of the hospital entrance. Following the educational intervention, it was found that smoking incidences were reduced by 44% \( (p \leq 0.05) \) in staff and 37% \( (p \leq 0.05) \) in visitors. After adjusting for weather and temperature, results showed that the number of smokers reduced significantly during the afternoon and towards the end of the day, following one day of smoking reduction intervention. Findings revealed that smoking reduction initiatives surrounding hospital entrances significantly reduced both the number of individuals smoking and the number of cigarette butts on the ground.
Limitations to this study however, included the nonrandom sampling of one hospital and limited geographical scope and limited generalizability of these findings (Chu et al., 2018). Additionally, lack of a control group creates a potential threat to internal validity. The short duration of the study also reduces the possibility of observing if smoking reduction education physically changed smokers’ behavior. Study results proved smoking reduction education program to be a useful tool in reducing smoking at hospital entrances. Nursing students should remain informed of the positive impact they can have on smoking reduction education. Follow up study would benefit from a longer duration for a more thorough study evaluation.

Another pre and posttest study by Elnakib et al. (2021) was conducted to assess changes in food waste, following a training session on food waste with food service workers and the implementation of selected Smarter Lunchroom Movement (SLM) strategies. SLM examined strategies for changes to the lunchroom environment, and their effect on students' consumption of more fruits and vegetables. The researchers identified schools as a priority sector in reducing food waste, with vegetables, grain, and fresh fruit as the highest percentage of wasted food. Strategies such as changing the names of foods to make them more appealing to children, or more prominent placement of healthier food options was utilized.

Eligible participants included 25,010 students from diverse backgrounds enrolled in elementary and middle schools in the northeastern US, that prepare their meals on site. Fifteen of the 30 eligible schools were randomly selected to participate in the study, resulting in a mean of 506 students. Training sessions with food service workers (FSW) from the 15 selected schools provided education on the problems associated with food waste, as well as best practices for implementing low-cost or no-cost changes to the lunchroom through SLM strategies. FSW identified various methods for meeting this objective, within the categories of “improve the
lunchroom atmosphere,” “focus on fruit,” “varying the vegetable,” and “moving more milk.” Interventions included improving lunchroom lighting, placing various fruit and vegetable options at eye level and the availability of a variety of flavors of milk. Baseline food waste measurements were collected by weight in the month prior to the intervention. Post two-weeks of intervention, food was again measured via weight at two different points (M= 15.33 days apart). A total of 9258 trays were measured for food waste, 4642 pre-test and 4616 post-test intervention. Multiple linear regression assessment found a significant association between the number of consistent strategies implemented and the percentage of changes in total food waste. For each additional strategy implemented, the percentage of total food waste decreased by 0.42%, with a total overall food waste decrease of 7.01%.

Limitations to this study included variations in FSW choices for SLM strategies at participating schools, creating the possibility for inconsistencies in study implementation. In addition, study results could be further increased by conducting weight measurements at more frequent intervals, over a longer period of time. Study findings, however, suggest that FSW can reduce food waste with low-cost strategies, once implemented consistently. Thus, providing FSW the autonomy to choose their specific SLM strategy may have positively influenced a significant reduction in food waste (Elnakib, et al, 2021).

Sankarapandian et al. (2019) conducted a pre-posttest study to determine the effectiveness of short duration, intensive bed mobility training in idiopathic Parkinson’s disease patients. Prior studies suggested that participants benefit from adhering to highly supervised, short duration training programs. This study aimed to reduce the duration of interventions and focus on important aspects of improving bed mobility. The sample size included 15 patients diagnosed with Idiopathic Parkinson’s disease ages 50 – 75 years old. Excluded from the study
were individuals suffering from cognitive impairment, severe orthopedic conditions, neuromuscular conditions and preexisting mobility impairments.

Study duration was 12 months. Patients received intensive bed mobility training in 30-minute intervals, three times per day for seven days, utilizing verbal instruction and visual demonstration. Tasks such as rolling to left and right side, supine to sit and sit to supine, were practiced 15 times with 60 second breaks for 5 repetitions. Pre and post-test evaluations were taken, and t-tests were used to compare results. Significant clinical improvement was noted in pre- and post- test values, with a calculated t-value of 10.75 (p<0.001) (Sankarapandian et al, 2019). Results indicated that the change in performance was clinically and statistically significant in showing the effectiveness of training (Sankarapandian et al, 2019).

Study limitations included a small sample size. The author recommends future study to include larger sample size and conducting a randomized controlled trial. The chronicity of the disease and participant level of function must also be taken into consideration when selecting study participants. The study concluded however, that multiple educational training sessions per day with shorter duration resulted in improved mobility in patients with Parkinson's disease (Sankarapandian, et al, 2019).

**Implications for Advanced Practice Nursing**

This quality improvement project had significant implications for the discipline of nursing. This project helped nurses and other healthcare providers improve their knowledge awareness of coping skills in individuals with SMI. Advanced practice nurses should create policies that promote coping skills in individuals with SMI among healthcare providers. While acknowledging the benefits of coping mechanisms, healthcare providers must also identify their own biases, relating to encouraging the use of coping mechanisms. Having this practice in place
will facilitate improved outcomes for individuals living with SMI. Advanced practice psychiatric nurses should increase research in behavioral health to improve health outcomes in this population.

**Limitations of the Project**

The limitations of this project were:

1. Convenience sampling technique was used to conduct this project; however, this method does not involve randomization.

2. A low number of participants decreased the generalizability of the project.

3. Data was collected from participants employed at a behavioral health hospital in Miami, Florida; therefore, results may not be generalized to other clinical settings.

4. Some surveys had to be discarded due to non-completion.

**Recommendations**

More studies are needed to identify individualized effective coping skills in mental health nursing. Larger sample populations are required to generalize the results of studies. Additional studies should be conducted in various patient settings, such as in day treatment areas or in private practice. Furthermore, qualitative researchers should explore coping skills among patients with SMI to identify effective strategies in this vulnerable population.

**Conclusions**

Participants of this project had an increase in knowledge awareness of coping skills in individuals with SMI following an educational intervention. Results of this project revealed a difference between pre- and posttest scores among participants, \( t (11) = 3.4719, p = 0.001, (p < 0.05) \), with higher \( M \) scores on posttests following an educational intervention. Healthcare
providers should receive training about coping skills in individuals living with SMI to improve quality of care and health outcomes in this population.
References


Appendix A

FLORIDA INTERNATIONAL UNIVERSITY

INSTITUTIONAL REVIEW BOARD APPROVAL LETTER

MEMORANDUM

To: Dr. Francisco Bremes
CC: Tamara Dewar
From: Carrie Bassols, BA, IRB Coordinator
Date: August 2, 2022

Proposal Title: “Knowledge Awareness of Coping Skills in Individuals with Serious Mental Illness Among Healthcare Providers in Miami, Florida: A Quality Improvement Project”

The Florida International University Office of Research Integrity has reviewed your research study for the use of human subjects and deemed it Exempt via the Exempt Review process.

IRB Protocol Exemption #: IRB-22-0353  IRB Exemption Date: 08/02/22
TOPAZ Reference #: 112086

As a requirement of IRB Exemption you are required to:

1) Submit an IRB Exempt Amendment Form for all proposed additions or changes in the procedures involving human subjects. All additions and changes must be reviewed and approved prior to implementation.
2) Promptly submit an IRB Exempt Event Report Form for every serious or unusual or unanticipated adverse event, problems with the rights or welfare of the human subjects, and/or deviations from the approved protocol.
3) Submit an IRB Exempt Project Completion Report Form when the study is finished or discontinued.

Special Conditions: N/A

For further information, you may visit the IRB website at http://research.fiu.edu/irb.
Dear Dr. Brenes,

Thank you for inviting Jackson Behavioral Health Hospital to participate in the DNP project of Tamara Dewar. It is understood that Tamara will be conducting a quality improvement project as part of the requirement for the Doctor in Nursing Practice program at Florida International University. After reviewing the proposed title, "Knowledge Awareness of Coping Skills in Individuals with Serious Mental Illness among Healthcare Providers in Miami, Florida: A Quality Improvement Project," she has been granted permission to conduct the project in this organization.

The quality improvement project will be implemented at Jackson Behavioral Health Hospital and will occur in 1 session. Participants will receive an email link with pre and post-test survey as well as an educational intervention will be linked also in this email. All educational interventions and assessments will be provided virtually. Data analysis will be done electronically. This quality improvement project intends to enhance health care providers' knowledge awareness of coping skills in individuals with serious mental illness in Miami, Florida, and attempt to increase mental health outcomes in this population. This project will be conducted with consent and volunteer participation of healthcare providers at Jackson Behavioral Health Hospital.

June 30, 2022
The educational intervention will be a voice over PowerPoint presentation that will last approximately 15 to 20 minutes. Any data collected by Tamara Dewar will be kept confidential and participant information will be de-identified. Data will be stored in password protected computer within the hospital fire walls and u-drive.

It is expected that Tamara Dewar will not interfere with a normal hospital function, will behave in a professional manner, and will follow hospital standard of care. I support the participation of the Jackson Behavioral Health Hospital staff in this project and look forward to working in collaboration with Florida International University.

Sincerely,

Dante Durand, M.D.
Chief Medical Officer
Jackson Behavioral Health
1695 N.W. 9th Avenue, Suite 3302
Miami, FL. 33136
Office: (305)689-9709
Appendix C

FLORIDA INTERNATIONAL UNIVERSITY

RECRUITMENT EMAIL

Dear healthcare provider,

My name is Tamara Dewar, and I am a student from the Graduate Nursing Department at Florida International University. I am writing to invite you to participate in my quality improvement project. The goal of the project is to enhance health care providers’ knowledge awareness of coping skills in individuals with serious mental illness in Miami, Florida, and attempt to increase mental health outcomes in this population. You are eligible to take part of this project because you participate in the care of patients with serious mental illness in the Behavioral Health Hospital. I am contacting you with the permission of your managing director.

If you decide to participate in this project, you will be asked to complete an online demographic and a pre-test questionnaire, which is expected to take approximately 15 to 20 minutes. You will then be prompted to watch an educational 15 - 20-minute voice over PowerPoint Presentation online. After the presentation, you will be asked to complete the post-test questionnaire which is expected to take approximately 5 - 10 minutes. No compensation will be provided. Your participation is voluntary. You can choose if you would like to participate in the study. If you would like to participate, please click in the link provided (link for Qualtrics questionnaire). If you have any questions about the study, please email or contact me at tdewa001@fiu.edu.

Thank you very much.

Sincerely,

Tamara Dewar
Appendix D

FLORIDA INTERNATIONAL UNIVERSITY

RESEARCHER-DEVELOPED DEMOGRAPHIC INSTRUMENT

Demographics

Please click on the appropriate response.

1. What is your age?
   a. 18 to 29 years
   b. 30 to 44 years
   c. 45 years and older

2. What is your Gender?
   a. Male
   b. Female
   c. Transgender
   d. Not Listed
   e. Prefer not to answer

3. What is your highest level of education?
   a. Vocational certificate or diploma
   b. Associate Degree
   c. Bachelor’s Degree
   d. Master’s Degree
   e. Doctoral.

4. How many years do you have in your current role?
   a. 0 to 1 year
   b. 2 to 3 years
   c. 4 or more years

5. What is your current role as a provider in this facility?
a. Behavioral Health Technician
b. Registered Nurse
c. Behavioral Health Therapist
d. Advanced Practice Registered Nurse
e. Physician
Appendix E

FLORIDA INTERNATIONAL UNIVERSITY

MODIFIED HOLAHAN AND MOO’S COPING STRATEGIES SCALE

Pre / Post Test

Select the response that most closely pertains to you:

1. When dealing with patients with Serious Mental Illness (SMI), I spend time trying to understand what happened.
   a. Mostly true about me (4)
   b. Somewhat true about me (3)
   c. A little true about me (2)
   d. Not true about me (1)

2. When dealing with a problem, I try to see the positive side of the situation.
   a. Mostly true about me (4)
   b. Somewhat true about me (3)
   c. A little true about me (2)
   d. Not true about me (1)

3. When dealing with a problem, I try to step back from the exhibited behavior and think about it from a different point of view.
   a. Mostly true about me (4)
   b. Somewhat true about me (3)
   c. A little true about me (2)
   d. Not true about me (1)
4. When dealing with a patient with SMI, I consider several alternatives for handling disease symptomology.
   a. Mostly true about me (4)
   b. Somewhat true about me (3)
   c. A little true about me (2)
   d. Not true about me (1)

5. When dealing with a problem, I try to see the humor in it.
   a. Mostly true about me (4)
   b. Somewhat true about me (3)
   c. A little true about me (2)
   d. Not true about me (1)

6. When dealing with a problem, I think about what it might say about bigger lifestyle changes that can be made.
   a. Mostly true about me (4)
   b. Somewhat true about me (3)
   c. A little true about me (2)
   d. Not true about me (1)

7. When dealing with a patient with SMI, I often wait it out and see if disease symptomology will resolve on their own.
   a. Mostly true about me (4)
   b. Somewhat true about me (3)
   c. A little true about me (2)
   d. Not true about me (1)
8. When dealing with a problem, I often try to remember that behavior presentation may vary from the actual problem.
   a. Mostly true about me (4)
   b. Somewhat true about me (3)
   c. A little true about me (2)
   d. Not true about me (1)

9. When dealing with a problem, I often use exercise, hobbies, or meditation to help me get through a tough time.
   a. Mostly true about me (4)
   b. Somewhat true about me (3)
   c. A little true about me (2)
   d. Not true about me (1)

10. When dealing with a problem, I make jokes about it or try to make light of it.
    a. Mostly true about me (4)
    b. Somewhat true about me (3)
    c. A little true about me (2)
    d. Not true about me (1)

    a. Mostly true about me (4)
    b. Somewhat true about me (3)
    c. A little true about me (2)
    d. Not true about me (1)

12. When dealing with a problem, it encourages me to take better care of myself.
a. Mostly true about me (4)

b. Somewhat true about me (3)

c. A little true about me (2)

d. Not true about me (1)

13. When dealing with a patient with SMI, I work on making things better for the future by changing my habits, such as diet, exercise, budgeting, or staying in closer touch with people I care about.

a. Mostly true about me (4)

b. Somewhat true about me (3)

c. A little true about me (2)

d. Not true about me (1)
Appendix F

FLORIDA INTERNATIONAL UNIVERSITY

CITI ETHICS CERTIFICATION

This is to certify that:

Tamara Dewar

Has completed the following CITI Program course:

Basic/Refresher Course - Human Subjects Research
(Curriculum Group)
Biomedical Human Research Course
(Course Learner Group)
2 - Refresher Course
(Signoff)

Under requirements set by:

Florida International University

Verify at www.citiprogram.org/verify/?w18519d55-6b0b-4338-912c-c7aa1f6c59f8-43056624
Appendix G

Florida International University

CV

1999
BS Psychology, Florida Atlantic University

2007
BS Nursing, Florida International University

2007-Present
Registered Nurse: Cleveland Clinic Florida
Emergency Department/ Cardiovascular Intensive Care Unit

2021
MSN, Florida International University

2021-Present
Registered Nurse: Memorial Regional Hospital / Cardiovascular Intensive Care Unit

2021
Advanced Practice Registered Nurse- Board Certified, Primary Mental Health Nurse Practitioner

2022
DNP, Florida International University