Implementation and Evaluation of a Psychoeducation Training Program for Correctional Psychiatric Nurses

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Implementation and Evaluation of a Psychoeducation Training Program for Correctional Psychiatric Nurses

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Abstract

This article describes a quality improvement project undertaken at a northeastern prison focusing on the psychiatric hospital unit. The project’s primary aim is to implement training in nurse-led psychoeducation groups for psychiatric hospital unit nurses with the outcome of increasing confidence and competency through improved self-efficacy. The secondary aim of this project is to positively impact the psychiatric hospital unit nurses’ intuition as a component of clinical decision-making through skill training that improves KSAs and care delivery to the highest level of the nurses' licensure. Participating nurses received pre and post-intervention surveys, including the Psychiatric Nurse Self-Efficacy Scales and the Rew Intuitive Judgement Scale ©. Electronic delivery of training materials, including a PDF manual and e-learning module, both created by the Veterans Health Administration (VHA) Office of Nursing Services (ONS) Mental Health Field Advisory Committee (MH-FAC) with permission from Dr. Czekanski was provided to participants for completion over four weeks. The pre and post-surveys were allotted three weeks pre and post-intervention for survey completion. Due to the limitations of the project, no statistically significant analysis supports or rejects project aims. Overall, this project supports the need for further study of the impact of the intervention utilizing a larger sample size.

Keywords: nursing intuition, nursing self-efficacy, psycho-educational groups, corrections nursing
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Implementation and Evaluation of a Psychoeducation Training Program for Correctional Psychiatric Nurses

The American Nurses Association (ANA), American Psychiatric Nurses Association (APNA), and International Society of Psychiatric-Mental Health Nurses (ISPN) identify psychoeducation as a standard of practice for psychiatric-mental health registered nurses (PHM-RN) (2014). Psychoeducation is delivered utilizing current knowledge, evidence-based practices, and content (ANA et al., 2014). Competency is the provision of health teaching on psychiatric/substance use disorders, treatment regimens, and self-management of symptomology, among other components of care included within psychoeducation (ANA et al., 2014). Group psychoeducation comprises education on a specific topic focusing on diagnoses and medication/treatment regimens most frequently identified as beneficial (Czekanski, 2016). As nurses’ expertise and knowledge base focus on illness, wellness, health promotion, health alteration, disease, and treatment, nurses are the ideal candidates for the initial knowledge necessary to conduct psychoeducational groups (Czekanski, 2016). Competency in and delivery of group psychoeducation is vital to practice to reduce relapse and promote adherence to treatment for individuals with severe mental illnesses, such as schizophrenia and schizoaffective disorders (Sarkhel et al., 2020).

Problem Description

Psychoeducation is a component of psychiatric nurses’ competency, yet nurses report receiving minimal training in facilitating nurse-led groups, such as psychoeducational groups (Czekanski, 2016). Additionally, nurses identify the lack of education and training barriers to implementing nurse-led groups (Czekanski, 2016). Chafin and Biddle recognized nurses’ desire for job training and increased knowledge, skills, and abilities (KSA) as a positive indicator of
retention (2013). Nurse empowerment positively impacts retention, improves job satisfaction, and reduces burnout (Wagner et al., 2010). Empowerment through self-efficacy and improved competence, defined as "an individual's confidence or belief in their abilities to perform an activity with proficiency," is linked to improving nurses' knowledge of leading groups and nurse job satisfaction (Wagner et al., 2010). Another link is self-determination, meaning nurses have a "sense of choice or control over one's work" (Wagner et al., 2010). Clinical judgment and critical thinking are how nurses exercise self-determination in delivering nursing care (Miller & Hill, 2017). Supporting nurses’ KSA through competency-based training improves nurses’ confidence and competence, leading to improved patient and nurse outcomes.

The complexity of care within the correctional environment efficiently supports specialty education for treating chronic and co-occurring illnesses within the prison population (Shelton et al., 2020). With only 9-30% of corrections budgets allocated for healthcare, nurses must do more with fewer resources, supporting the need for optimal KSA through training (Shelton et al., 2020). The KSA’s of nurse-led psychoeducational groups benefits individuals with chronic, severe mental illness (SMI) and individuals with SMI who are long-term offenders of crimes (Aho-Mustonen et al., 2011 & Sarkhel et al., 2020). To address the lack of nurse-led psychoeducational groups within the psychiatric hospital unit within a northeastern prison and improve nurses’ competency through empowerment and training, nurses require training in leading psychoeducation groups.

Available Knowledge

According to the National Alliance of Mental Health, 40% of people with an SMI will encounter the criminal justice system within their lifetime (Shelton et al., 2020). Current data indicates that 25% of all individuals arrested have an SMI (Shelton et al., 2020). Correctional
facilities have become the "nation's largest psychiatric facilities," with individuals with SMI nine
times more likely to be incarcerated than hospitalized (Shelton et al., 2020). In 1955
deinstitutionalization legislation closed state psychiatric institutions, releasing individuals with
SMI into the community (As cited in Frontline, 2005). With the progression of
deinstitutionalization, over three-quarters of a million individuals who met the criteria for
psychiatric institutionalization were living in the community (As cited in Frontline, 2005).
Furthermore, over 2.2 million individuals with SMI were not receiving psychiatric care (As cited
in Frontline, 2005). The goal was to move individuals to the least restrictive environments (As
cited in Frontline, 2005). Unfortunately for many, this resulted in individuals living in “a
cardboard box, a jail cell, or a terror-filled existence plagued by both real and imaginary
enemies” (As cited in Frontline, 2005).

Deinstitutionalization reversed the efforts made by early pioneers in mental health, such
as Dorothea Dix, to move individuals out of the corrections system into psychiatric care (As
cited in Frontline, 2005). With the closing of these institutions, including many state psychiatric
hospitals, individuals with SMI returned to the system they were initially removed from, the
correctional system (As cited in Frontline, 2005). Torrey refers to this as the jails and prisons
becoming "surrogate mental hospitals for many people with SMI,” with the correctional
population of the mentally ill surpassing the state psychiatric hospitals’ population totals (1997).

Criminalization of the mentally ill results in an increased need for nursing care at the
intersection of justice and mental health care (Shelton et al., 2020). Within the Maine
Department of Corrections (MDOC), on average, 45% of the total average daily population for
2021, approximately 1,506 male residents, were being treated for psychiatric illness with
psychotropic medications at any one time (2022). Individuals with SMI that were incarcerated
instead of receiving mental health care resulted in a cost of $70-$80 billion to federal and state governments in 2017 alone (Shelton et al., 2020). The need for nurses increases with high expenses and demands for mental health care.

Increasing demands in correctional environments result in ratios as high as one RN to two hundred residents (Shelton et al., 2020). Another contributing factor to the market is higher vacancy rates for correctional nurses, 20% or higher, compared to non-correctional environments (Shelton et al., 2020). As high as 80% for correctional nurses, turnover is double that of staff nurses (Shelton et al., 2020). Vacancy and turnover result in too few retained staff and ill preparation for care in the correctional environment (Shelton et al., 2020). As job stress and satisfaction have an inverse relationship, supporting nurse-driven care and empowerment improves job satisfaction by reducing stressors. Support includes continued training based on evidence-based mental health practice and competencies (Shelton et al., 2020). Improved skill training, including the orientation process, positively impacts retention as honing job-relevant skills promotes overall job satisfaction (Chafin & Biddle, 2013). In addition to job-relevant skills, competency-based training promotes the skill-based improvement and develops the nurses’ intuitive thought processes (Miller & Hill, 2017). Training initially supports the novice in analytic processing, while competency progresses the individual toward expert proficiency, where intuition is honed and utilized to deliver care at a higher level (Miller & Hill, 2017). Continued training facilitates improvement in KSAs and builds nurses’ intuitive thinking as a component of nursing judgment in making and supporting competency (Miller & Hill, 2017).

The ANA et al. identified group psychoeducation as a competency standard for psychiatric nurses, such as those in the psychiatric hospital unit (Czekanski, 2016). Due to the nature of the residents within the psychiatric hospital unit, the integration of nurse-led group
psychoeducation is a benefit to both nurses, through skill development and increased retention, and patients, through the efficacy of psychoeducation for individuals with SMI (Czekanski, 2016). Barriers to nurse delivery of psychoeducation groups include a lack of knowledge of the value/benefits of groups, lack of priority for group time, lack of supervisory support for conducting groups, and inadequate training on the delivery of psychoeducational groups (Czekanski, 2016). Czekanski highlights the importance of efficient training programs that provide training on the delivery of nurse-led groups in psychoeducation to increase nurses' confidence and priority of group facilitation (2016).

Integrating the nurse into the daily milieu through nurse-led groups improves interpersonal relationships for the residents and the residents’ relationship with the nurse as a member of their care team (Czekanski, 2016). The relationship between the nurse and the resident is essential to providing effective psychiatric care; integrating interventions outside the medication pass will improve the psychiatric hospital unit nurses' ability to deliver care (Czekanski, 2016). Literature sources the patient-nurse relationship to impact patient outcomes, with patients experiencing positive therapeutic relationships experiencing better outcomes (Czekanski, 2016).

Within the psychiatric hospital unit within a northeastern prison, the most common diagnoses include chronic SMI, such as schizophrenia, schizoaffective disorder, and mood disorders, including bipolar disorder (MDOC, n.d.). Nurse-led group psychoeducation improves patients diagnosed with schizophrenia and bipolar disorder, medication adherence through improved medication acceptance, and increased knowledge of their illness and treatment (Matsuda & Kohno, 2016 & Sarkhel et al., 2020). Sarkhel et al. further support this finding, elaborating that psychoeducation is a cost-effective treatment modality that can reduce mental
illness relapse, specifically for individuals diagnosed with schizophrenia and bipolar disorders (2020). Overall, psychoeducation is a flexible, cost-effective treatment that psychiatric nurses can utilize to gain rapport and impact the overall well-being of their patients with SMI (Alhadidi et al., 2020). Mitigating barriers to implementation, such as lack of training, empowers nurses to perform within the full extent of their licensure and practice (Czekanski, 2016).

**Rationale**

Therapeutic relationships established through nurse engagement with patients ensure positive outcomes within inpatient and long-term psychiatric environments (Czekanski, 2016). With training gaps identified for nurse-led group facilitation, such as nurse-led group psychoeducation, a standard of psychiatric nursing care, training that addresses this gap promotes successful care delivery for the nurses and patient outcomes (Czekanski, 2016). The VA Office of Nursing Services (ONS) Mental Health Field Advisory Committee (MH-FAC) accomplished this through the development of an "RN Group Guide," a physical manual addressing the knowledge gaps of psychiatric nurses within the VA system (Czekanski, 2016). Additionally, virtual training was provided both live and on demand to support the training of nurses in a group nurse-led psychoeducation (Czekanski, 2016).

Nurses evaluated the materials and program as highly satisfactory, noting the efficacy of e-learning, the "dominant delivery mode of future mental health program education" (Czekanski, 2016). Nurses who evaluated the training program gained knowledge and skills in e-learning that they could apply to improve their job performance (Czekanski, 2016). The development and integration of e-learning training for psychiatric nurses on nurse-led group psychoeducation in the corrections environment is an acceptable and effective method to meet the ANA standards while addressing nurse-identified knowledge gaps (ANA et al., 2014 & Czekanski, 2016).
Nursing theorist Hildegard Peplau addresses the importance of psychiatric nurses prioritizing other skills through experience and education (1962). The theory states that individuals with mental illness can analyze their illness with the support of professionals to identify ways by which the patient can alter and control their symptomology (Peplau, 1962). Interpersonal techniques, according to Peplau, are the heart and crux of psychiatric nursing, demonstrated by the prioritization of the role of the counselor or psychotherapist (1962). Peplau elaborates that those interpersonal techniques are "useful in relation to specific problems—such as withdrawal, aggression, hallucinations, delusions, and the like—and these are the crux of psychiatric nursing" (1962, p. 52). Utilizing the interpersonal technique theory to address the patient's treatment through a therapeutic patient relationship can facilitate the treatment of patients' symptomology (Peplau, 1962). Nurse delivery of group psychoeducation aligns with Peplau's purpose in psychiatric nursing. The goals of psychoeducation include improved knowledge of illness and treatment, resulting in enhanced insight and acceptance of care and reducing illness relapse (Sarkhel et al., 2020).

Specific to the training of nurses, theorist Patricia Benner identifies the difference between obtaining knowledge and applying this knowledge to practice, where experience, exposure, and education expand the nurses' practice (Murray et al., 2019). Benner's theory of novice to expert highlights the need for support and appropriate resources to progress from the book knowledge of the novice and advanced beginner through training, exposure, and experience toward competent, proficient, and expert skill levels (Murray et al., 2019). Benner identifies that expertise is based not only on competency but also on building intuition, through which analytical processing of the nursing process is supported by intuitive understanding (Miller & Hill, 2017). Benner identifies the need to identify practice education gaps and implement
interventions, such as training and education, to bridge these gaps in practice to facilitate competent care (2012). Building nurses’ exposure and experience to clinical situations through on-the-job experiences and training improve care delivery proficiency (Miller & Hill, 2017). Expert nurses deliver competent and intuitive care, the highest level of care (Miller & Hill, 2017). Implementing training programs to address the gap between the standard of psychiatric care and nurse comfort and skill level in the delivery of group psychoeducation will bridge the shared responsibility from academia to the practice environment to best meet the nurses' needs to progress from an analytical novice to an intuitive expert (Benner, 2012).

**Specific Aims**

This project's primary aim was to implement training in nurse-led psychoeducation groups for psychiatric hospital unit nurses with the outcome of increasing confidence and competency through improved self-efficacy. Reintegrating a nurse-led psychoeducation group into the unit improves the therapeutic relationship between the nurses and the residents, resulting in improved resident outcomes. This aim aspires to improve pre/post measure of competency in the nurse delivery of group psychoeducation measured by the Psychiatric Nurse Self-Efficacy Scales. ONS MH-FAC identified the benefits of creating a training manual and training delivered via e-learning (Czekanski, 2016). As improved competency is determined to impact satisfaction and retention positively, satisfaction is also affected by improved competency is an accessible means to strengthen the nurse workforce within the psychiatric hospital unit. With an 80% turnover rate and over 20% vacancy rates, even the best training will be ineffective if retention is inadequate to deliver patient care (Shelton et al., 2020). Overall, nurse-led group psychoeducation training will benefit the nurses' self-efficacy and competency and provide future outcomes of improved patient knowledge, acceptance, and treatment compliance.
The secondary aim of this project was to positively impact the psychiatric hospital unit nurses’ intuition as a component of clinical decision-making through skill training that improves KSAs and care delivery to the highest level of the nurses’ licensure (Flanagan & Flanagan, 2002 Rew, 2000, & Shelton et al., 2020). This aim seeks to identify improvement from pre to post on the Rew Intuitive Judgment Scale©. Competency is multifaceted, with theorists such as Benner linking expertise and competency with intuition in clinical decision-making (Rew, 2000). Specifically, to psychiatric nurses, intuition is imperative due to the unique nature of psychiatric care in that objective or concrete data is not available in treating mental illness (Rew, 2000). The expert nurses’ use of both intuitive and analytic skills and clinical judgment in decision-making supports the measurement of nursing intuition to determine the impact of experience, such as competency-based training, on nurse self-efficacy and expertise level (Miller & Hall, 2017 & Rew, 2000).

Methods

Context

All project phases occurred at the psychiatric hospital unit within a northeastern prison. The psychiatric hospital unit was created on February 15, 2014, as a "housing unit of the Department of Corrections for male prisoners with serious mental illnesses, persistent disabling personality disorders, or severe cognitive impairments who require structured intensive mental health services, to include evaluation and treatment, in a specialized mental health housing unit" (MDOC, 2018). The psychiatric hospital unit within a northeastern prison aims to restore individuals to their optimal levels within the least restrictive environment available while working toward reducing criminogenic risk factors (MDOC, 2018). The five-year daily census for the psychiatric hospital unit is twenty-five residents, with approximately nine chronic
residents residing within the unit since its opening (MDOC, n.d. & MDOC, 2022). The residents are acute, sub-acute, and chronic, with most of the residents experiencing dual diagnosis or co-occurring head injuries and/or significant medical issues (MDOC, n.d.). In 2021 the psychiatric hospital unit, on average, 758 therapeutic contacts are made by all mental health staff within the unit, with an average of eighty-four group therapy sessions per month (MDOC, 2022). The unit’s staffing consists of 5.6 RN FTEs who perform all nursing care within the unit (MDOC, n.d. & MDOC, 2018).

In collaboration with the psychiatric hospital unit within a northeastern prison Behavioral Health Director Dr. Sheehan, the need for nurse-led psychoeducation within the unit was identified. Nurse-led psychoeducation was a component of care patients found beneficial when delivered by previous nursing staff. Due to difficulty in nurse retention and recruitment, the nurse position within the psychiatric hospital unit has remained understaffed for greater than six months leading to a reduction in nurse involvement within the unit. The implementation of nurse-led group psychoeducation training was identified to increase nurse involvement and delivery of psychoeducation within the unit.

Cost-Benefit Analysis

A cost-benefit analysis was completed (Appendix A), demonstrating minor costs associated with implementing the interventions. Cost includes approximately 2.5 hours of work for 5.6 FTE nurses, which time includes completion of a preintervention and postintervention Psychiatric Nurse Self-Efficacy Scales, preintervention and postintervention completion of the Rew Intuitive Judgment Scale ©, and completion of the 90-minute e-learning module (MDOC, n.d., Stamps & Market Street Research, 2012, & Yada et al., 2021.). The initial cost is estimated at $560 for 5.6 nurses FTEs, or $100/FTE, utilizing a median salary of $40 per hour (glassdoor,
Manuels were provided electronically; however, printing costs were incurred for individuals who requested printing utilizing facility resources. The printing cost was not higher than is allotted within the average daily printing within the facility leading to minimal to no financial impact.

**Interventions**

Before the distribution of training, all nurses participating in the training received two self-report measures for completion before initiation of the training. Measures were sent to participants' emails for completion. The Psychiatric Nurse Self-Efficacy Scales include the Improved Self-Efficacy Scale (ISES) and the Decreased Self-Efficacy Scale (DSES) (Appendix B) (Yada et al., 2021). All participants received the Psychiatric Nurse Self-Efficacy Scales. Statistical analysis found both the ISES and the DSES to be reliable and valid for psychiatric nurses' self-efficacy (Yada et al., 2021). The Rew Intuitive Judgment Scale © (RIJS) (Appendix C) was disseminated. The developer granted permission for the use of the scale. The current 21-item RIJS was produced through a three-phase development and validation process (2000). The RIJS started as a 50-item scale and was reduced to a 28-item scale with a 0.96 content validity index (Rew, 200). The 28-item scale was then reduced to 21 items, removing seven questions that produced low factor loadings in analysis (Rew, 200). The result is a valid and reliable measure of a “nurse’s acknowledgment of intuition in clinical decision-making” (Rew, 200, p. 98). Both measures were repeated upon completion of training to determine the efficacy of training on impacting nurses' competency, including self-efficacy and intuition in psychiatric nursing.

The training was delivered via email link with continued consideration of transition to an e-learning platform based on facility preference for continued implementation of training. The
training was completed at the nurse's discretion during regular shifts to increase accessibility. In one study provided, web learning took a range from 1 day to 5 months for participants to complete, which demonstrates the availability of nurses to learn at their own pace and style; however, the flexibility of web learning can also result in disadvantages of "procrastination, delayed progress, or interruptions" (Matsuda & Kohno, 2021). Therefore, participants had four weeks to complete the training before they were provided post-intervention measures.

The clinical team includes the project leader, faculty mentor, practice mentor, and DNP director. The project leader delivered all training and pre/post-intervention measures. The Director of Nursing and the Regional Director of Behavioral Health were made aware of project details with appropriate involvement, as indicated throughout the project.

**Study of Interventions**

A list of nurses assigned to the psychiatric hospital unit within a northeastern prison and other psychiatric nurses within the agency system identified as potential participants by agency stakeholders was obtained as potential process improvement study participants. The nurses were invited to participate in this project. The preintervention questionnaire and scales were provided electronically for completion for those individuals who consented to participation. Email delivery included an invitation for completion with a link to Qualtrics. Participants had three weeks to complete preintervention measures allowing for adequate time for completion during regular work hours. Completion resulted in the electronic delivery of training materials, including a PDF manual and e-learning module, both created by the Veterans Health Administration (VHA) Office of Nursing Services (ONS) Mental Health Field Advisory Committee (MH-FAC) with permission from Czekanski (2016). Participants had four weeks to complete training via VHA ONS MH-FAC e-learning access, which is 90 minutes in length,
again allowing for adequate time for completion during regular work hours. Finally, participants were provided post-intervention measures identical to preintervention measures, determining training efficacy based on the change in measure results. Participants were provided the questionnaire and scales electronically via email with a link to the postintervention survey via Qualtrics. Participants had three weeks to complete postintervention measures during regular work hours.

**Measures**

Data from the two described measures, Psychiatric Nurse Self-Efficacy Scales and the Rew Intuitive Judgment Scale ©, was collected utilizing an electronic survey via Qualtrics and completed by all participants. As previously stated, an email invitation was provided, including a web link to the Qualtrics surveys.

**Analysis**

Preintervention and postintervention scales and questionnaires were evaluated for statistically significant change. Pre-intervention and post-intervention results were presented within the clinical team and shared with the Director of Nursing and Regional Behavioral Health Director to determine efficacy or improvements needed for future facility comprehensive implementation and continuity of training within the psychiatric hospital unit within a northeastern prison.

**Ethical Considerations**

The University of New Hampshire Research Office Web-Based Program of Instruction in the Ethical and Responsible Conduct of Research and Scholarly Activity was completed. The knowledge gained from this training informed this project. As no interventions within this
Project involved direct experimentation on human or animal subjects, the University of New Hampshire did not require IRB approval. The Nursing Clinical Project Review Committee received this project for quality improvement determination and deemed its content quality improvement. This project utilized new and current processes to increase nurse retention and preparedness in delivering psychoeducational groups within the psychiatric hospital unit. The educational materials and measures are being used solely for quality improvement. All participation was voluntary, with the option to revoke the involvement during the project implementation. Additionally, all participant responses to measures are anonymous.

**Results**

All twenty-seven nurses employed within the northeastern prison received access to the pre and post-intervention survey. The intervention period occurred over 12 weeks between August 2022 and November 2022. Figure 1 presents a timeline of the distribution of surveys and training interventions. The participants were all nurses working within a northeastern prison, including but not limited to those working within the psychiatric hospital unit. This project yielded eight responses from nurses on the surveys prior to intervention and five responses to the post-intervention surveys, resulting in a pre-measure response rate of approximately 29.6% and a post-measure response rate of approximately 18.5%. However, of the submitted surveys, many were incomplete, ranging from one to five unanswered questions per survey, which further reduces the response rate. Demographic information was not collected to ensure the anonymity of responses.
Figure 1

Project Implementation Timeline

All nurses received the three surveys via their company email pre-and post-intervention. The meet and greet occurred with nurses on staff prior to initiation of the intervention phases, including the initial surveys, which facilitated an explanation of the project and questions answered. The estimated time for survey completion was 30 minutes for all three pre and post-intervention surveys. Upon completion of the surveys, the average time to complete the three surveys was approximately 8 minutes for the pre-survey and approximately 9 minutes for the post surveys. This data provided by the Qualtrics system indicates a substantial reduction in the estimated time, positively impacting the cost-benefit analysis. However, no time data is available for time spent on the intervention training video, making it difficult to determine the average time spent overall.

The primary aim of this project focused on nurses' confidence and competency based on an evaluation of self-efficacy. While the goal was an improvement in pre/post measures of competency indicated by the Psychiatric Nurse Self-Efficacy Scales to impact job satisfaction, retention, and competency positively, due to the small sample/response size and unpaired data, it is difficult to ascertain any meaningful statistical change between the pre and post-survey results for self-efficacy.

The data from the Improved Self-Efficacy Scale (ISES) and the Decreased Self-Efficacy Scale (DSES) were analyzed utilizing Excel to determine response percentiles. These percentiles
were then further collapsed by category, resulting in three categories, agree, uncertain, and disagree. Comparing the pre and post-intervention measures for the ISES resulted in the following:

- Questions 1-3 involving experiencing patient consideration, compassion, and appreciation showed an increase in disagreement from 0% on pre-measure to 20-40% on post-measure, while questions regarding patient satisfaction and happiness were nearly unchanged.

- Questions regarding the ability to make the right nursing decision were reduced from 100% agreeing on pre-measure to 40% agreeing on post-measures.

- Questions regarding trust of colleagues indicated reduced trust on post-measures, with approximately 30% of participants that indicated uncertainty in trust on pre-measures, indicating disagreement in trust on post measure.

- Question 7 regarding foreseeing nursing showed a positive increase, with 57% changing from disagreeing to uncertain or agree.

- Little change was seen in the average percentage of responses of disagreeing, uncertain, and agree when comparing pre to post-measures for ISES.

Comparing the pre and post-intervention measures for the DSES resulted in the following:

- The post-measures indicated an overall reduction in uncertainty for multiple questions.

- Questions regarding ambiguity in care, uncertainty in patient's symptomology, and the necessity of the nursing staff all indicated a 20-50% change towards improved self-
efficacy, decreasing ambiguity, increasing certainty, and increasing nurses' view of the necessity of their role

• Question regarding equality of staff members was unchanged pre to post, with 100% of respondents indicating they are as needed as other staff members

• Risk for violence from patients was also unchanged pre to post, with 60% of respondents feeling no risk, 20% remaining uncertain of the risk, and 20% maintaining a risk of violence

• On post-measures, decreased uncertainty in the amount of interaction with patients was noted, indicating 100% of respondents on post measure indicated an adequate amount of interaction with patients

• Overall uncertainty appeared to decrease from pre to post-measures, with the average of pre-measure indicating 20% of respondents indicated uncertainty in response and the average of post-measure indicating 12%, an 8% decrease in average response of uncertain

The Rew Intuitive Judgement Scale ©'s final survey was utilized to address the project's second aim: to identify improvement in nurses' intuition on post-measures. Data obtained from these surveys was analyzed utilizing Excel to determine response percentiles. These percentiles were then further collapsed by category, resulting in three categories, agree, uncertain, and disagree. Comparing pre to post-measures for the Rew Intuitive Judgement Scale © resulted in the following:

• An increase in intuition, to 100% agree, was seen on measures regarding intervention to avert an emergency in the absence of precise data, intervening based on intuition even if
unable to support with assessment data and a sudden knowledge of how to intervene for patients

- Questions supporting the use of intuition and trust of one's feeling in complement with assessment data remained in 100% agreement from pre to post

- Overall uncertainty appeared to increase from pre to post-measures, with the average of pre-measure indicating 13% of respondents indicated uncertainty in response and the average of post-measure indicating 25%, a 12% increase in the average response of uncertain in response to all questions regarding intuition

Discussion

Summary

The identified benefits of this quality improvement project include accessibility, ease of distribution, and cost-effectiveness. The training and accompanying guides were available for no cost, thanks to the VA Office of Nursing Services (ONS) Mental Health Field Advisory Committee (MH-FAC). However, the overall impact of the training implemented needs to be more consistent based on the analysis of pre and post-measures.

The Increased Self-Efficacy Scale focuses on factors of positive changes in the patient and the prospects of continuing in psychiatric nursing (Yada et al., 2021). Responses within this project indicated a loss of trust in colleagues and reduced positive change in patients, evidenced by increased disagreement with questions supporting patients' demonstration of compassion and appreciation. Colleague trust in the literature impacts shared responsibility, with increased trust increasing innovation and efforts (Shih & Susanto, 2017). A reduction in patient change could be secondary to the impact of reduced trust on the nursing teams' productivity and effort toward
completing their tasks (Shih & Susanto, 2017). Secondarily, the focus on continuation or retention appears to be troubling due to a demonstrated decrease in the respondents' perception of their ability to make the right nursing choice. The ability of nurses to make decisions and be confident in those choices correlates with burnout and emotional exhaustion (Van Bogaert et al., 2013). A lack of nurses to make appropriate decisions and utilize their skills results in increased emotional exhaustion and psychological demands (Van Bogaert et al., 2013). When nurses feel supported in their ability to make nursing choices, burnout reduces, increasing the quality of care and job outcomes (Van Bogaert et al., 2013).

The Decreased Self-Efficacy Scale focuses on factors of nursing overload and its impact on ability, difficulty in seeing results/impact, and the value of one's role as a psychiatric nurse (Yada et al., 2021). Responses within the project indicated increased certainty in response for all participants. When analyzing the DSES as an independent factor of the success of the intervention, the results of the post-intervention DSES indicated improvement in nurse respondents' certainty in their assessment of the patient and reduced ambiguity regarding the impact of treatment. Additionally, nurse respondents increased the identification of their necessity in their role to include equality of need among all staff members. Improvement in the competence and self-determination implied by the response to these components of the DSES supports overall improvement in nurse empowerment (Wagner et al., 2010). Increased empowerment reduces the impact of stressors, improving nurse retention and care, and supporting the impact of the intervention on nurse respondents' self-identified value, ability, and impact on their role (Wagner et al., 2010).

The Psychiatric Nurse Self-Efficacy Scales (PNSES) findings support a reduction in participation linked with increased certainty regarding decreased trust in colleagues and
decreased confidence in patient appreciation. Nurses' confidence in their ability to make the right
decision for the patient decreased, while their ability to understand the symptomology and
treatment for the patient increased. Nurse burnout increases when occupational stress increases,
with the most significant impact seen in interaction with others (de Lima Garcia et al., 2019). In
the analysis of the overall results, the nurses on post-measure indicate increased difficulty with
interpersonal interaction with patients and colleagues. The decrease in confidence in the ability
to make the right nursing decision correlated to these interpersonal complications could indicate
a decline in patient safety secondary to burnout (de Lima Garcia et al., 2019). Studies have found
a decline in patient safety when burnout increases (de Lima Garcia et al., 2019). Additionally,
higher burnout results in reduced job satisfaction and teamwork, impacting the overall safety and
delivery of care (de Lima Garcia et al., 2019).

Higher levels of burnout increase patient complaints, which could explain the nurses'
perceived decrease in patient appreciation, compassion, and consideration towards the nurses on
post-measures (de Lima Garcia et al., 2019). As teamwork is a protective factor against burnout,
the implication of reduced trust seen in post-measures likely contributes to increased emotional
and professional exhaustion (de Lima Garcia et al., 2019). While the patient workload is
traditionally the primary contributor to burnout, study results indicate that nurses' felt they had
adequate time with patients on post-measures (de Lima Garcia et al., 2019). Therefore, emotional
demands and interpersonal conflicts are the main factors in this study (de Lima Garcia et al.,
2019). The reported level of concern for patient violence was unchanged in pre to post-measures;
however, the presence of concern or uncertainty of the level of concern for violence in
approximately 40% of the participants further supports the stress experienced by nurses in the
correctional environment. Future interventions on the impact of burnout, specifically regarding
interpersonal interactions and work balance and environment, would be recommended to further analyze the results of similar study results to this one.

The Rew Intuitive Judgement Scale (RIJS) © highlights the need for nurses to make correct decisions even with incomplete, conflicting, or ambiguous data (Rew, 2000). Using intuition complements analytic skills as a means of self-reflection and a component of judgment (Rew, 2000). Post-measures indicated improvement regarding this precise concept, where nurses found more agreement in their utilization of intuition, especially in complex decision-making with ambiguous or conflicting data. Additionally, utilizing intuition as a supporting factor in the analysis of the patient maintained high for pre and post-measure data. The development of nurse intuition increases perception and the ability to identify patients’ concerns, especially for those patients who cannot clearly articulate their immediate needs (Rew, 2000). As supported by Benner’s theoretical framework, expert nurses rely not only on analytical processing but instead incorporate intuition in their analysis of a patient or situation (Miller & Hill, 2017). Consistent with literature findings, increased scoring on the RIJS supports higher proficiency or nursing expertise (Miller & Hill, 2017). The remainder of the questions saw little change from pre to post-measure, with most changes indicating increased uncertainty in response by the respondents. While responses to some questions indicate a positive impact on intuition, the low response rate, and mostly unchanged data, it is difficult to ascertain that this data represents any meaningful change to nursing intuition and expertise based on the intervention.

Electrophysiological studies have confirmed the changes in the frontal cortex supporting the ability of the human brain to utilize intuition to accurately predict near future events, particularly those involving risk or threat, such as many decisions made by mental health correctional nurses (Hassani et al., 2016). The intuitive judgment allows nurses to recognize
truths before rational evidence exists (Hassani et al., 2016). However, consistent with the findings of this study, the study of nursing intuition has primarily remained descriptive and exploratory unable to correlate the nurses' experience of intuition with physiological findings (Rew et al., 2007). Similarly to this study, the literature indicates support for Benner and Rew's work, in which intuition increases with experience and expertise (Rew et al., 2017).

**Interpretation**

Implementation of training on psychoeducation for the nurses at northeastern prison, specifically those engaged in the psychiatric hospital unit, has the potential, based on the available knowledge, to improve the self-efficacy and intuition of the nursing staff. Analysis of pre and post-intervention measures within this quality improvement project found improvement in competence, self-determination, and intuition. However, trust and confidence in patient outcomes decreased. While increased competence, self-determination, and intuition are associated with improved patient and nurse outcomes, a reduction in trust and nursing perception of patient outcomes negatively impacts the therapeutic relationship necessary for psychoeducation group success (Czekanski, 2016; Miller & Hill, 2017; Wagner et al., 2010). The improvement seen in post-measures compared to pre-measures could be a result of the training increasing expertise/experience (Rew et al., 2017). Literature by Rew and Benner supports that increased experience and expertise result in improved intuition (Rew et al., 2017).

While unmeasurable within the construct of this project, the impact of staff retention and changes to staff availability would be a valuable assessment in the analysis of the current data. Shahhosseini and Hamzehgardeshi identified inadequate support as the primary barrier to participation in training opportunities for nurses (2015). Specifically, a lack of support from colleagues was an impactful barrier to participation in education (Shahhosseini &
Hamzehgardeshi, 2015). The reduction in colleague trust seen on the ISES supports the lack of support experienced by the nursing staff, further evidenced by the reduced response rate on post-measures (Shahhosseini & Hamzehgardeshi, 2015). Literature supports the impact of a lack of both colleague and institutional support for training as a significant barrier to participation, especially in the presence of increased demands or pressures within the nursing care environment (Shahhosseini & Hamzehgardeshi, 2015). As a result, the future analysis would benefit from including staffing data, such as retention and satisfaction, due to the impact it serves on the efficacy of nursing participation in education and training (Shahhosseini & Hamzehgardeshi, 2015).

The changes addressed above indicate a possible positive impact of the intervention on outcomes. However, the limitations of this project do not allow for statistical confirmation of the impact. Further investigation with alteration in method to address the limitations to include analysis to increase the participation and response rates would support or reject the possible statistical significance of the intervention.

Limitations

The analysis resulted in the identification of several limitations. A small sample size and a reduced response rate increased bias while reducing generalizability. While the problem of nonresponse bias is not unique to nursing, when focusing on nurses, the barrier of focus is time (VanGeest & Johnson, 2011). The secondary rationale for nonresponse by nurses is like other health professions in that poor perceived value or understanding of the research/study results in a reduced response rate (VanGeest & Johnson, 2011). Furthermore, a reduction in overall institutional support reduces the nurse response rate, increasing the possibility of nonresponse bias (VanGeest & Johnson, 2011). The low response rate and incomplete data impacted the
ability to utilize statistical analysis. The ability of respondents to decline to answer a component of the survey or to skip portions contributed to the low response rate and requires alteration if replicating this intervention. Paired responses with unidentifiable labels would have facilitated statistical analysis while maintaining the anonymity of responses.

Conclusions

Competent psychiatric nurses provide psychoeducation, including psychoeducational groups. However, nurses identify a lack of preparation for the delivery of psychoeducation (Czekanski, 2016). Empowering nurses through education and training has been shown in research to positively impact nurses' self-efficacy and competence, which in turn positively impacts retention, job satisfaction, and reduction of burnout (Wagner et al., 2010). Nurse-led psychoeducational groups positively impact patient outcomes, especially for individuals with severe mental illness, such as those housed within the psychiatric hospital unit of the prison (Czekanski, 2016).

Implementation of the interventions within this quality improvement project resulted in the delivery of evidence-based training, which was accessible and cost-effective. Electronic delivery of pre and post-measures allowed for the efficient delivery of accessible information across the facility. The project and intervention timeline facilitated completion during regular work hours without significant disruption, as indicated by the cost-benefit analysis. At the same time, the moderate improvements seen from pre to post-measures support the implication for future replication with a larger sample size. Focus on the implications of burnout and interpersonal relationships between colleagues and patients will improve the quality of future data and contributions to the body of research on psychoeducational group training's impact on nursing intuition and self-efficacy.
References


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https://doi.org/10.1177/0163278711399572


## Appendix A

<table>
<thead>
<tr>
<th>Interventions</th>
<th>Costs</th>
<th>Benefits</th>
</tr>
</thead>
</table>
| Time to complete pre/post measures and training    | (5.6 FTE x $40/hour) x 2.5 hours = $560 ($100/FTE)                    | - Completion of measures to determine the efficacy of training in improving the psychiatric hospital unit nurses’ perception of competency in psychoeducation  
- Completion of measures to determine the efficacy of training in enhancing unit nurses’ retention  
- Completion of training to support skill-building in conducting group psychoeducation |
| Printing of manual at nurses’ preference           | The cost would not exceed the facility's current margin of error for daily printing. | - Manual allows for reference of skills and education provided in the training  
- Electronic delivery allows for accessibility and reading preference to be determined by the individual nurse reducing printing to those who prefer printed use  
- Printing availability enhances nurses’ use in multiple settings due to the lack of computer accessibility within the psychiatric hospital units |
Appendix B

Appendix I: Gray highlights indicate Japanese translation.
Improved Self-Efficacy Scale (ISES: 自己効力感向上尺度)
These questions ask about your present psychiatry department work. Please circle (〇) the number that best matches your response.

<table>
<thead>
<tr>
<th>No</th>
<th>Question Item</th>
<th>Not at all ←</th>
<th>→ Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I feel that I can get words of appreciation from patients by being considerate.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>I feel that compassion makes smile of patients.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>I feel that I can get words of thanks from patients.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>I feel that some patients are happy.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>I feel that the patient is satisfied.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>I feel that the patient's mind is open.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>I can predict the patient's symptoms.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>I can foresee nursing.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>I feel that I can make a right nursing decision.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>I can make use of my own experience of failure.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>I feel trust from my colleague nurses.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Items 1-6: Positive changes in the patient (患者のポジティブな変化), Items 7-11: Prospect of Continuing in Psychiatric Nursing (精神病科看護継続の見通し)
Appendix II: Gray highlights indicate Japanese translation.

**Decreased Self-Efficacy Scale (DSES: 自己効力感低下尺度)**

These questions ask about your present psychiatry department work. Please circle (○) the number that best matches your response.

<table>
<thead>
<tr>
<th>No</th>
<th>Question Item</th>
<th>Not at all ←</th>
<th>→ Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I feel that patients do not need me.</td>
<td>0 1 2 3 4 5 6 7 8 9 10</td>
<td></td>
</tr>
<tr>
<td></td>
<td>私は患者から必要とされていないと感じる。</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>I have lost confidence in my attitude toward nursing.</td>
<td>0 1 2 3 4 5 6 7 8 9 10</td>
<td></td>
</tr>
<tr>
<td></td>
<td>私は、看護職に対する自信の喪失がある。</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>I feel that patients need other staff members than me.</td>
<td>0 1 2 3 4 5 6 7 8 9 10</td>
<td></td>
</tr>
<tr>
<td></td>
<td>私は、患者から自分よりも他のスタッフが必要とされていると感じる。</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>I feel that nursing care is increasing due to the aging of patients.</td>
<td>0 1 2 3 4 5 6 7 8 9 10</td>
<td></td>
</tr>
<tr>
<td></td>
<td>私は患者の高齢化により介護が増加していると感じる。</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>I feel a risk of violence from patients.</td>
<td>0 1 2 3 4 5 6 7 8 9 10</td>
<td></td>
</tr>
<tr>
<td></td>
<td>私は、患者からの暴力のリスクを感じる。</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>I encounter the excitement of patients.</td>
<td>0 1 2 3 4 5 6 7 8 9 10</td>
<td></td>
</tr>
<tr>
<td></td>
<td>私は、患者の興奮に遭遇する。</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>I feel that I have little interaction with patients because of other work.</td>
<td>0 1 2 3 4 5 6 7 8 9 10</td>
<td></td>
</tr>
<tr>
<td></td>
<td>私は、他の業務のせいで患者との関わりが少ないと感じる。</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>I do not feel the effectiveness of the care given to the patients.</td>
<td>0 1 2 3 4 5 6 7 8 9 10</td>
<td></td>
</tr>
<tr>
<td></td>
<td>私は、患者に行ったケアの有効性を感じない。</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>I feel that the patient's symptoms have not improved.</td>
<td>0 1 2 3 4 5 6 7 8 9 10</td>
<td></td>
</tr>
<tr>
<td></td>
<td>私は、患者の症状の改善のないを感じる。</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>I feel ambiguity about the treatment effect.</td>
<td>0 1 2 3 4 5 6 7 8 9 10</td>
<td></td>
</tr>
<tr>
<td></td>
<td>私は、治療効果にあいまいさを感じる。</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>I feel uncertain about the patient's symptoms.</td>
<td>0 1 2 3 4 5 6 7 8 9 10</td>
<td></td>
</tr>
<tr>
<td></td>
<td>私は、患者の症状にあいまいさを感じる。</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Items 1-3: Devaluation of own role as a psychiatric nurse (精神科看護師としての自身の役割のないき) Items 4-7: Decrease in nursing ability due to overload (過重な負担による看護力の低下) Items 8 - 11: Difficulty in seeing any results from psychiatric nursing (精神科看護の結果を見ることの困難さ)
Appendix C

Rew Intuitive Judgment Scale ©Lynn Rew

The following scale is not a test. Please indicate how much you agree with each statement as it relates to your clinical nursing practice. Circle only one number per item to correspond with what you usually do in clinical practice. Use the following scale for your response:

7 = strongly agree
6 = agree
5 = slightly agree
4 = uncertain
3 = slightly disagree
2 = disagree
1 = strongly disagree

1. I would prefer to create something new than to build something from a kit. 1 2 3 4 5 6 7
2. I am willing to take specific action to avert an emergency even when there are no clear signs that the patient is in trouble. 1 2 3 4 5 6 7
3. I trust my feelings as well as concrete data when assessing a patient’s condition. 1 2 3 4 5 6 7
4. I am willing to intervene with a patient even when my feelings contradict some of the assessment data. 1 2 3 4 5 6 7
5. There are times when I suddenly know what to do for a patient, but I don’t know why. 1 2 3 4 5 6 7
6. When I have a “funny feeling” about a patient, I gather more concrete data before deciding what to do. 1 2 3 4 5 6 7
7. There are times when the steps of the nursing process are not useful in planning a patient’s care. 1 2 3 4 5 6 7
8. Many decisions that I make about my patient’s care are unique to his or her situation. 1 2 3 4 5 6 7
9. I will trust my gut feelings about a patient when I think a decision should be made quickly to avert an emergency. 1 2 3 4 5 6 7
10. Many of my decisions about patient care are based on experience rather than on scientific theory. 1 2 3 4 5 6 7
11. I feel best about a decision I make about nursing care when all the objective data support it. 1 2 3 4 5 6 7
12. I am inclined to make decisions based on a sudden flash of insight. 1 2 3 4 5 6 7
13. There are times when I immediately understand what to do for a patient, but I can’t explain it to other people. 1 2 3 4 5 6 7
14. There are times when I feel that I know what will happen to a patient, but I don’t know why. 1 2 3 4 5 6 7
Rew Intuitive Judgment Scale

©Lynn Rew

15. When using standard nursing care plans, I like to rely on my own sense about what else to do for my patient.

1 2 3 4 5 6 7

16. There are times when a decision about my patient's care just comes to me.

1 2 3 4 5 6 7

17. I like to come up with new ideas about how to assess the condition of my patients.

1 2 3 4 5 6 7

18. I like to incorporate new ideas into my nursing care.

1 2 3 4 5 6 7

19. There are some things I suddenly know to be true about some of my patients, but I am unable to support this with concrete data.

1 2 3 4 5 6 7

20. I am usually open to a patient's family member's feelings and suggestions about the patient.

1 2 3 4 5 6 7

21. Sometimes I act on a sudden knowledge about a patient to prevent a crisis from developing even when I can't explain it.

1 2 3 4 5 6 7

As reported in: