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Implementation of a Postpartum Depression Screening Protocol

Samantha Abercrombie
sabercrombie1@stu.jsu.edu

Jacksonville State University
Graduate Studies
700 Pelham Rd N., 320 Angle Hall, Jacksonville, AL 36265
Phone: (256) 782-5348
http://www.jsu.edu/graduate/index.html

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Implementation of a Postpartum Depression Screening Protocol

A Doctor of Nursing Practice Project Submitted to the
Graduate Faculty
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Requirements for the Degree of
Doctor of Nursing Practice

By

Samantha K. Abercrombie

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Samantha K Abercrombie August 4, 2023

Abstract

Background*:* Postpartum depression (PPD) is a major depressive disorder that can occur after having a baby and anytime during the first year postpartum (Centers for Disease Control and Prevention [CDC], 2021). Symptoms of PPD may include anger, crying more than usual, withdrawing from family, inability to bond with the baby, feelings of anxiousness, or thoughts of the mother harming herself or the baby. PPD can yield many challenges and hinder daily living activities. Recent research by the CDC (2021) estimates that 1 in 8 women experience manifestations of PPD. Findings also suggest that 1 in 5 women were not screened for PPD during a prenatal visit, and roughly 1 in 8 women were not screened during a postpartum visit. The Association of Women's Health, Obstetric, and Neonatal Nurses (AWHONN, 2022) reported that perinatal depression affects 1 in 7 pregnant women. Perinatal mood and anxiety disorders are serious health issues in the United States, affecting 600,000 to 900,000 women yearly.

Purpose*:* The evidence-based Doctor of Nursing Practice (DNP) quality improvement project was to develop a PPD screening protocol to improve the identification of PPD and increase referrals to case management. The project aimed to screen 100 postpartum patients using a PPD screening scale on day one postpartum. A policy and protocol for referral was developed for postpartum patients who screened positive on the Edinburgh Postnatal Depression Scale (EPDS). Written permission was granted for using the EPDS for the DNP project (see Appendix A).

Methods*:* This quality improvement project used a quantitative design as the outcome measurement for the DNP project and included the total number of patients screened with appropriate referral to case management before discharge (Grech, 2021). Kurt Lewin’s Change Theory was used as the organizing framework for the DNP Project. The Plan-Do-Study-Act

(PDSA) cycle was used to guide the project plan, development, implementation, and evaluation of the Quality Improvement (QI) project (Butts & Rich, 2018).

Results*:* The percentage of patients referred for case management increased from 5% to 18% with the implementation of the survey instrument. The change in the number of patients referred to case management was statistically significant (X2 (1, N = 168) = 7.1182, p = .00763).

Conclusion*:* The DNP project aimed to implement a PPD screening protocol to assist in the early identification of PPD and increase referrals to case management. The quality improvement project consisted of training and educating nurses in the obstetrical unit to increase awareness of the clinical manifestations of PPD and the PPD screening protocol. The project enabled staff members to educate patients on the clinical manifestations of PPD.

Keywords: Postpartum, women, depression, screenings, early identification, postpartum depression, screening tool, screening scale, assessment, evaluation, intervention

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Implementation of a Postpartum Depression Screening Protocol in an Obstetrical Unit

Postpartum depression (PPD) is a depressive disorder that begins within one year of childbirth and is often characterized by feelings of sadness, anxiety, and despair, and it interferes with daily tasks (American College of Obstetrics and Gynecologists [ACOG], 2023; CDC, 2021; Rossi & Radney, 2022). PPD is a common complication during the perinatal period (ACOG, 2023). Depression during pregnancy ranges from 11.3% to 19.6% (Abdallah et al., 2022; Accortt et al., 2022; Liu et al., 2022). The pathophysiology of PPD is unclear, but researchers believe it stems from various stress factors, including socioeconomic status, nutrition, sleep deprivation, financial stress, cultural patterns, lack of social support, substance abuse, and the birth experience (Rossi & Radney, 2022). Perinatal mood and anxiety disorders (PMADs), such as PPD, are stigmatized and often overlooked because women may be reluctant to report their changes in mood (ACOG, 2023). If undiagnosed, PPD can seriously affect the mother's and child's physical and mental health. PPD is a significant risk factor for maternal self-harm or suicide, impaired maternal functioning, inadequate mother-child bonding, and adverse effects on childhood development (Abdallah et al., 2022; Accortt et al., 2022; Liu, 2022). PPD is identified and diagnosed using clinical assessments and validated screening tools (Rossi & Radney, 2022). The aim of the DNP project was to implement a PPD screening scale on postpartum day two in a not-for-profit community hospital setting.

Background

Mothers diagnosed with PPD can encounter challenges that interfere with daily living activities (CDC, 2021; Rossi & Radney, 2022). Clinical manifestations of PPD are similar to those of depression and may include insomnia, fear of loneliness or leaving the house, and/or feelings of insignificance. Additional manifestations of PPD may include impaired infant

bonding, withdrawal from close family or friends, unexplained anger, feelings of excessive anxiousness, thoughts of harming self or baby, difficulty concentrating or making decisions, crying more often than usual, and feeling out of control (Cohen et al., 2021).

PPD is easily treated, but if left untreated, manifestations can adversely impact the mother's mental and physical health and become life-threatening to the postpartum mother and her newborn child as the mother may physically harm herself or her baby (Friedman et al., 2019). A mother experiencing PPD may have difficulty providing care and bonding with her infant. A review of literature revealed that if left untreated, PPD results in poor mother-baby bonding, negative parenting methods, difficulties breastfeeding, marital problems, or suicidal thoughts (Postpartum Depression, 2018; Holopainen & Hakulinen, 2019).

Holopainen and Hakulinen (2019) further described manifestations of PPD as mild to severe. Mild symptoms are often referred to as baby blues, and symptoms consist of tearfulness and fatigue. Mothers with moderate symptoms may experience anxiety, irritability, tearfulness, changes in eating and sleeping patterns, and/or feelings of inadequacy and suicidal thoughts. The symptoms become more intense in severe PPD. In severe PPD, the mother may harm herself, her baby, or other family members (Postpartum Depression, 2018). Suicide accounts for approximately 20% of postpartum deaths and is the second leading cause of death among postpartum women (McCoy, 2018). Suicide attempts during pregnancy have nearly tripled over the past decade (Kuntz, 2020). In the Maternal Behavioral Health Policy Evaluation (MAPLE) study, researchers found that 2,683 of 595,237 insured mothers, aged 15 to 44, in the United States had suicidal ideation (Kuntz, 2020).

To assist in the early identification and intervention of PPD, one of the aims of Healthy People 2030 is to increase the proportion of women who get screened for postpartum depression.

Healthy People 2030 are guidelines established by the U.S. Department of Health and Human Services that identify public health priorities to assist individuals across the United States in improving their health (U.S. Department of Health and Human Services, n.d.). The United States Preventive Services Task Force (USPSTF) recommends counseling women at increased risk for perinatal depression. USPSTF also recommends interventions for women during pregnancy or postpartum if they have: A history of depression, symptoms of depression, a recent history of partner violence, or other risk factors related to mental health (U.S. Department of Health and Human Services, n.d.).

Needs Analysis

A needs assessment was conducted at a 90-bed not-for-profit healthcare agency, and a gap in evidence-based practice was identified. Analysis revealed no PPD screening protocol in place. Prior to project implementation, case management referrals for PPD were at the discretion of the nurse. From January 2022 to January 2023, only 5.4% of patients were referred to case management for history of untreated depression. The practice did not meet the guidelines established by the American College of Obstetricians and Gynecologists (ACOG, 2023) that recommend all obstetric care providers complete an emotional well-being assessment, including screening for postpartum depression with a validated screening tool.

Problem Statement

PPD is a major depressive disorder that can occur during the first year after childbirth (ACOG, 2023). The CDC (2021) estimates that 1 in 8 women experience manifestations of PPD. Findings also suggested that 1 in 5 women were not screened for PPD symptoms during a prenatal visit, and roughly 1 in 8 women were not screened during a postpartum visit (CDC, 2021). PPD is a global issue as it affects hundreds of millions annually. It is estimated that 13.4% of women experience PPD in the United States (America's Health Ranking United Health

Foundation, 2022). Alabama has the highest percentage of PPD in the United States, as 23.5% of women experience PPD (America's Health Ranking United Health Foundation, 2022).

The following PICOT question was developed based upon the needs analysis and the identified gap in practice: "In postpartum women (P), how does the use of a postpartum depression screening protocol on postpartum day one (I) compared to the current practice of no postpartum screening protocol (C) improve the identification of postpartum depression screenings and referral to case management (O) over four weeks (T)?" Based upon the developed PICOT, a literature review was conducted, and data was obtained to support the evidence-based intervention of a PPD screening protocol at the agency.

Aims and Objectives

The DNP project aimed to implement a PPD screening protocol and PPD screening for the obstetrical unit as recommended by ACOG (2023). The goal of PPD screening was to improve the identification of PPD during the postpartum period and increase referrals for PPD to Case Management. The PPD screening protocol's effectiveness was evaluated by comparing the total number of case management referrals after project implementation to the number of referrals before implementation.

Review of Literature

Determining best practices for implementing a PPD screening protocol required a thorough literature review. A literature review is vital in developing and implementing the DNP project as it provides supporting evidence of what is known about the topic. The literature review considers prior research on the topic, the strengths and limitations of prior studies, and establishes norms surrounding the research (Novosel, 2022). A review of the literature assisted in determining best practices for implementing a PPD policy and protocol. The literature review

justified the need to implement a PPD screening protocol. Several search engines were used to gather pertinent peer-reviewed evidence-based data to support the DNP project. The search engines included Medline, EBSCOhost, PubMed, Cochrane, PsychINFO, APA, the Cumulative Index to Nursing and Allied Health Literature (CINAHL), and Joanna Briggs Institute (JBI) Evidence-Based Practice (EBP).

The following keywords proved helpful in the search for empirical literature on evidence-based programs in screening for postpartum depression: postpartum, women, depression, screenings, early identification, postpartum depression, screening tool, scale, assessment, risk factors, evaluation, and intervention. Results were narrowed using peer-reviewed and academic journal limitations. The year of publication was restricted to the last five years, reducing potential sources to 253 findings. Additional articles were removed due to content irrelevance. Research studies that examined PPD screening in postpartum patients served as the basis for the DNP project. This literature review aims to compare, contrast, and analyze the studies and summarize the findings.

Perinatal Depression

Perinatal depression is associated with depression in the postpartum period, with a prevalence fluctuating between 17% and 17.7% (Abdallah et al., 2022; Accortt et al., 2022; Liu et al., 2022). Dubey et al. (2021) determined that PPD is one of the most common perinatal psychiatric illnesses impairing the quality of life and mental health of the mother and her child. The study by Dubey et al. (2021) concluded out of 295 participants, 30.84% of mothers 18-35 years of age experienced PPD. Factors that have a statistically significant association with PPD include lower educational status of the mother, decreased family income, rural residence, increased parity, preterm delivery, and complications with the newborn (Dubey et al., 2021).

A cross-sectional study conducted by Abdallah et al. (2022) determined the factors related to perinatal depression symptoms. The factors associated with perinatal depression included family income, chronic illness, and history of depression (Abdallah et al., 2022). Limitations to the study included a sample of only working pregnant women seeking care in a public health setting, which may limit the generalizability of the findings. Another limitation was that manifestations were self-reported and not clinically diagnosed. The strengths of the study were that the study was conducted in a prominent multicenter involving women from diverse sociodemographic settings, included a large sample size of 389 participants, and contained a low rate of missing information. The findings of Abdallah et al. (2022) recommend further research into other associated risk factors, such as psychosocial work demands and socioeconomic status.

The Birth Experience

Researchers suggests that understanding the possible connection between PPD and the birth experience is vital to enhancing maternal health (Sega et al., 2020; Nagele et al., 2022). To understand the influence of delivery on the childbirth experience, Sega et al. (2020) completed a mixed methods study comparing PPD in women who underwent emergent versus elective cesarean deliveries. A retrospective analysis of Listening to Mothers Survey III, conducted to understand the experience and views of childbearing women, identified connections between emergent cesarean deliveries and PPD (Sega et al., 2020). A pre-interview survey using the Edinburgh Postnatal Depression Scale (EPDS) was given to mothers who gave birth via cesarean section within the past twelve months. Twenty-five participants with a diagnosis of PPD were randomly selected for interviews that included questions regarding birth stories and postpartum experiences. The questions and interview provided subjective information of maternal well-being. Interview data were subjected to qualitative analysis. The average EPDS score of

emergent cesarean section participants was 10.7, with 68.5% scoring greater than 8 (n=120). The average EPDS score of elective participants was 8.96, with 52.7% greater than 8 (n=93). Interview results revealed prominent themes: support, medical interaction, stress, recovery, breastfeeding, and sleep (Sega et al., 2020). The findings were helpful in the planning, development, and implementation of the DNP project and assisted in educating the nursing staff and patient participants on the risk factors for PPD. The study's strength was that the results support the researcher's hypothesis that emergent cesarean sections have a higher occurrence and severity of PPD.

Risk Factors for Postpartum Depression

Gastaldon et al. (2022) conducted systematic reviews and meta-analyses of 185 observational studies from 11 systematic reviews to measure the strength and reliability of evidence on risk factors of PPD. Results include premenstrual syndrome, violent experiences, and unintended pregnancy, the most robust risk factors of PPD. Findings revealed the associated risk factors for PPD that are essential to use in training sessions for the obstetrical nursing staff. Implications for future research include that the results should be integrated into clinical algorithms to assess the risk of PPD.

Sociodemographic influences such as low educational status, rural populations, and low family income were risk factors associated with PPD in a cross-sectional observational study completed by Dubey et al. (2021). Parity was significantly associated with PPD as primiparous mothers had a significant higher prevalence of PPD. Adverse birth experiences such as postpartum hemorrhage, preterm deliveries, and forceps-assisted deliveries were also risk factors for developing PPD.

Postpartum Depression Screening

Several studies suggested a lack of consistency in the PPD screening process. ACOG (2023) guidelines recommend for PPD screening to be completed at least once during pregnancy and again during postpartum. Screening for PPD with a validated screening instrument can assist in identifying women at risk for PPD and guide them to referral and treatment, such as cognitive behavioral therapy and antidepressants (Accortt et al., 2022; Docherty et al., 2020; Zhao et al., 2017). Approximately 50% of all persons with PMADs are not identified as PPD screenings are not conducted (Accortt et al., 2022).

In a study conducted by Accortt et al. (2022) several interventions and screening tools were used to evaluate PPD. A retrospective cohort study in an academic medical center determined that screening results and treatment referrals dramatically improved after an institutional policy required PPD screening and education. The prenatal screening rate improved by 65%, postpartum screening rates improved by 20%, and treatment recommendations improved by 33%. The study concluded that implementing a policy for universal PPD screening was associated with improvements in PPD screening and treatment recommendations for women with a positive PPD screen.

Accortt et al. (2022) used quality improvement reporting guidelines to evaluate an inpatient PPD screening, education, and referral program at a major US birthing facility. Researchers used four interventions to increase inpatient PPD screenings: (1) nurse-champion training; (2) use of the 9-item Patient Health Questionnaire-9 (PHQ-9) in the postpartum unit; (3) a series of brief in-service trainings; and (4) a 10-minute video training. Quantitative and qualitative data were collected, including nurse feedback/anecdotal comments, screening rates, rates of positive screens, and the number of social work consultations. Researchers suggested the

four quality improvement interventions increased: (1) nurse screening comfort and perinatal mood and anxiety disorder knowledge; (2) PPD screening rates from 10% to 99% and PPD screen-positive rates from 0.04% to 2.9%; and (3) rates of social work consultation from 1.7% to 8.4%.

Recent research suggests that PPD screening scores can predict the development of depression or anxiety two to eight weeks after delivery (Accorrtt et al., 2022; Miller et al., 2019). A limitation of the study was that only 5% of the patient participants used publicly funded insurance (Accorrtt et al., 2022). Socioeconomic status negatively associates with mental health, which could affect generalizability. Another possible limitation of the study was that patients may have refused PPD screening but accepted a social work consult, which would have resulted in fewer positive screens while increasing the number of social work consultations.

A systematic review completed by Brito et al. (2022) synthesized qualitative evidence to examine the types and effectiveness of interventions used by health professionals to screen and refer women with PPD. The review found that the EPDS was the most used tool for PPD screening, while patient education was the most frequently used intervention. The findings supported the planning, development, and implementation of the DNP project and assisted in answering the research question. The research demonstrated that screening was reasonable and could positively affect the diagnosis of PPD and referral for treatment. The researcher suggests that the PPD scale should include questions about symptoms of depression or anxiety experienced in the previous week. The article's strengths included the research approach, which focused on qualitative data, including, approaches such as phenomenology, grounded theory, ethnography, action research, and feminist research. The authors analyzed their results and two independent reviewers critiqued studies for methodological quality, using the Joanna Briggs

Institute (JBI) standard critical assessment checklist for qualitative research. Authors of the reviewed studies were contacted to request missing data or additional information for clarification. A potential limitation of the method used was no date limitations in the reviewed studies. An Implication of the results for future practice includes all obstetrical patients should be screened for PPD, as screening can positively affect the recognition of PPD symptoms and referral for treatment (Brito et al., 2022).

In addition to the recommendation for obstetricians to screen all postpartum patients, the American Academy of Pediatrics (AAP) recommends that pediatricians screen mothers for PPD at the infant's well-child (WC) visits for the first six months (Lamere & Golova, 2022). Despite these recommendations, fewer than 50% of mothers are screened nationally. Lamere and Golova (2022) conducted a study to evaluate the influence of a statewide quality improvement (QI) initiative that implemented routine screening for PPD utilizing the EPDS at WC visits. Before implementing the QI initiative, no systems were in place to consistently administer the EPDS. With the implementation of the QI initiative, mothers completed the PPD screening tool on a tablet. Using a data collection system, the PPD screening tool score was automatically linked to the patient’s electronic medical record using a data collection system. The researchers’ primary goal was to identify all mothers at risk for PPD to promote early intervention. Positive screens were defined as a score of greater than or equal to 9 or confirmation of suicidal ideation. The pediatrician counseled mothers with positive screens, and follow-up actions were taken, including consultation with the social worker and referral to a mental health provider. The study's strengths include the total number of patients included in the study. The notable results concluded that screening rates increased significantly at all four WC visits. A higher prevalence

of positive EPDS screens was detected in mothers with a history of mental health conditions and those with recent food or housing uncertainty.

Lamere and Golova's (2022) study contributes to existing literature signifying the importance of integrating PPD screening into pediatric WC visits and the challenges of universal screening. The researchers identified that a critical barrier to 100% screening is ensuring that screening is available for non-English speaking mothers or those with low literacy. In addition, continuing to refine the workflow and ensuring providers know the importance of PPD screening is vital. A limitation identified in the study was that the clinic served a predominantly low-income urban population; therefore, the results may not be generalizable to other patient populations. Additionally, due to the retrospective chart review, researchers could not track mothers' long-term follow-up with positive EPDS screens.

Many pediatric providers are uncomfortable formally screening patients for PPD even though they recognize that it is essential (Lamere & Golova, 2022). Research has shown that few mothers who screen positive for PPD receive mental health treatment, demonstrating the importance of developing referral networks, resources, and standardized procedures for ensuring mothers are provided with appropriate mental health services (Lamere & Golova, 2022).

Postnatal Depression Screening Scale

Several tools are available for PPD screening, although providers have yet to agree on which tool is most accurate for PPD screening. Ukatu et al. (2018) reviewed the literature to examine the accuracy of PPD screening tools and determine whether special considerations are needed to evaluate women for PPD. The EPDS and Patient Health Questionnaire 9 (PHQ-9) were included in the study. Results of the research suggest that the accuracy of screening tools depends upon numerous factors. The studies reviewed varied in the types of screening tools

tested, the combination of screening tools, the timing in which screening tools were administered, the geographic location of patients screened, and the reference standard(s) used. The study suggested that clinicians choose a PPD screening tool that best fits their practice.

In contrast to Ukatu et al.'s (2018) study findings, several researchers suggest that the EPDS is a reliable and well-accepted screening tool to assist in identifying PPD (Lamere & Golova, 2022; Park & Kim, 2022; Sega et al., 2020; Vik et al., 2021). The EPDS is the most commonly used screening tool in perinatal care to detect depression during pregnancy and postpartum (Rossi & Radney, 2022; Levis et al., 2020). The EPDS is a validated tool that consists of ten screening questions to determine if a patient has symptoms of depression and anxiety during pregnancy and the year following childbirth (Rossi & Radney, 2022; Cox et al., 1987). The EPDS, initially developed in Britain, was the first validated screening tool for PPD. Cox et al. (1987) completed a validation study on 84 mothers using the Research Diagnostic Criteria for depressive illness obtained from Goldberg's Standardized Psychiatric Interview. The EPDS had satisfactory sensitivity and specificity and was also sensitive to changes in the severity of depression. The scale can be completed in 5 minutes and has a simple method of scoring (Cox et al., 1987).

Several studies have been completed using the EPDS in clinical practice. An exploratory qualitative approach by Vik et al. (2021) examined how midwives and health visitors perceive and practice the EPDS. Ten health visitors and two midwives shared their thoughts and reflections in two focus group interviews. The findings suggested that the EPDS was well-accepted as a screening tool. In addition to giving providers information regarding mothers who need further assessment concerning mental health challenges, the EPDS was a tool used for discussing problems related to early motherhood (Vik et al., 2021). The screening tool helped

establish a trusting relationship between providers and patients by opening dialogue regarding problems related to early motherhood and mental health challenges.

Park and Kim (2022) completed a systematic review and meta-analysis study to compare the predictive validity of the EPDS and other PPD screening tools. Findings from the study suggest that the EPDS showed excellent performance in screening for depression in pregnant and postpartum women. In 515 postpartum women reviewed from six studies, the EPDS pooled sensitivity and specificity, with sROC being 0.79, 0.92, and 0.90, respectively. Park and Kim's (2022) results suggest using the EPDS in preference to other tools to screen for PPD. While the EPDS is the most used tool, it is recommended that providers choose a validated PPD screening tool that best fits their practice (Ukatu et al., 2018).

Postpartum Depression Screening in the Hospital Setting

Successful attempts to improve PPD screening and referral rates in the United States have been demonstrated in research studies. However, research suggests that providers do not consistently screen patients for PPD, and screening tool results are ignored (Sega et al., 2020). Birthing facilities screen in the immediate postpartum period (1-2 days following delivery) to ensure that PPD screening occurs. PPD screening completed in the immediate postpartum period can predict the development of PPD or anxiety two to eight weeks after delivery. PPD screening and discharge education are essential to improving perinatal care and decreasing the prevalence of Severe Maternity Morbidity (SMM) (Sega et al., 2020; McCarter et al., 2022; Reyes et al., 2022). Therefore, hospitals must establish PPD screening protocols consisting of PPD screening, patient education, and referrals (Accorrtt, 2022).

Hospital nurses play a crucial role as interprofessional team members by screening women for perinatal depression and anxiety (McCarter et al., 2022). Discharge education is vital

to maternity care and is essential to women's successful transition to becoming mothers. McCarter et al. (2022) completed a systematic review to determine what nurses knew about postpartum education before discharge and whether current practices are adequate to prepare women to identify warning signs of complications, perform emotional and physical self-care, prepare for parenting a newborn, and establish infant feedings (McCarter et al., 2022). When women are identified as high risk for developing PPD, nurses should educate them on signs, symptoms of PPD. Nurses should provide additional resources and refer women at increased risk for PPD to case management and outpatient counseling (McCarter et al., 2022). Findings from the study suggest that postpartum education is a priority and recommend further research on the effectiveness of postpartum education for identifying PPD (McCarter et al., 2022).

Reyes et al. (2022) completed a study to evaluate whether AWHONN's postpartum discharge education initiative is associated with improved patient knowledge of warning signs of SMM. AWHONN's initiative, created in 2016, aimed to improve universal discharge education to reduce postpartum maternal mortality (Reyes et al., 2022). Findings from the study suggest that implementing an educational initiative for postpartum patients is associated with improved knowledge and warning signs of SMM (Reyes et al., 2022). The continuing occurrence of PPD and anxiety highlights the need to move forward with screening efforts and the evaluation of existing screening processes to ensure the identification of women at risk (Fleischman et al., 2022).

Theoretical Model

Kurt Lewin’s Change Theory (1947) was used as the organizing framework for the DNP project. The Plan-Do-Study-Act (PDSA) cycle was used to guide the project plan, development, implementation, and evaluation of the QI project (Butts & Rich, 2018; Hussain et al., 2018).

Lewin's theory consists of three stages: unfreezing, changing, and refreezing (Lewin, 1947). In addition to the three stages, the theory has three concepts that impact change: driving forces, restraining forces, and equilibrium (Butts & Rich, 2018; Burnes, 2020). Lewin's model describes the change process as a dynamic force within the organization that moves in opposing directions. A driving force pushes participants towards change, while a restraining force pushes away the change. Lewin viewed successful change as a dynamic balance of these forces (Butts & Rich, 2018). Lewin's theory promoted change within the obstetrical unit, and the PDSA model was used as a problem-solving model for the process change.

Lewin's Theory-Driven Approach

Lewin's three-stage change model provided a theory-driven approach to the DNP project as it is a brief but profound approach to change (Curley, 2020; Lewin 1947). As the change agent, the DNP student used the three-stage theory to implement the quality improvement project. The first stage of the theory-unfreezing, and destabilizing is necessary for the behaviors to be unlearned or discarded. The change stage, also called the "movement" stage, comprises a process of change in thoughts, feelings, and behaviors that enables individuals to switch to the desired change. The final stage, refreezing, involves a new state of equilibrium and establishes the change as a new practice (Butts & Rich, 2018). Each stage of Lewin's change theory will be discussed with application to the DNP project.

Unfreezing is Lewin's first stage of change (Curley, 2020). In this stage, it was necessary to destabilize the old behavior of not screening for PPD (Butts & Rich, 2018). This stage was activated through intrinsic motivational factors and health education. Basic psychological needs such as autonomy, competence, and relatedness were used to facilitate intrinsic motivation (Flannery, 2017). The approach was applied to the DNP project by hosting staff training sessions

to provide education on PPD and the need for PPD screening in the healthcare setting. The sessions assisted in inspiring staff of the need for change and motivating staff to complete the screening protocol. Education and encouragement of nursing staff participation created autonomy, competence, and relatedness. Stakeholders at the healthcare agency supported the DNP project and encouraged staff to adopt the new policy and process change.

The second stage of Lewin's theory reflects that change is not timed but an ongoing process (Curley, 2020). During this stage, the nursing staff transitioned to new attitudes and behaviors as they acquired new skills and perspectives (Butts & Rich, 2018). Upon completion of training sessions, new processes, and protocols were developed to assist in implementing the desired change. Reinforcement of the value of this change occurred as evidence supporting how PPD screening protocols enhance patient outcomes was presented to nursing staff during training sessions.

The final stage reflects re-stabilization (Butts & Rich, 2018). An example of this stage applicable to the DNP project was when the PPD screening protocol was implemented into daily practice and referrals to case management occurred based on the new policy, procedure, and process. During this stage, staff adapted the protocol as it was integrated into the healthcare agency. Statistical data was analyzed throughout project implementation to ensure staff adopted the change process. The DNP student collected and analyzed data for the first four weeks of implementation. To assess sustainability, the unit director and clinical nurse specialists continued chart audits for PPD screening completion for a three months post-project implementation.

The Plan-Do-Study-Act (PDSA) quality improvement framework was used in correlation with Lewin’s change theory to provide the foundation for planning, developing, implementing, and evaluating the DNP project. The framework supported the DNP project as the PDSA cycle

offers a supportive mechanism for iterative development and scientific testing of improvements in healthcare systems. The method is a systematic process for gaining knowledge to constantly improve a product, process, or service (The W. Edwards Deming Institute, 2021). Further elaboration of the PDSA cycle and application to the DNP project is discussed in the methodology section of the manuscript.

Significance to Project

Lewin's change theory and the PDSA cycle are proven models for implementing change in the quality improvement DNP project as they provide a philosophical approach to change at the aggregate level (Butts & Rich, 2018; Curley, 2020; Hussain et al., 2018). Boyd et al. (2022) adapted Lewin's change theory and the PDSA cycle in a quality improvement project to implement a standardized workflow process to increase the palliative care to hospice admission rate. Research results for the post intervention group concluded that palliative care to hospice admission rates increased by 11.5% in the post-intervention group (Boyd et al., 2022).

Following Lewin's three-step approach provided the nursing staff with an understanding of how the recognized change of implementing a PPD screening protocol will enhance patient outcomes by improving the identification of PPD and increasing case management referrals. Lewin's theory and the PDSA model were used to encourage nursing staff involvement throughout project implementation to assist in overcoming barriers and resistance to change. During training sessions, nurses were encouraged to ask questions and voice concerns regarding the PPD screening protocol. After project implementation, the PDSA cycle was used as the number of positive PPD screenings and case management referral rates were analyzed, and the plan was refined accordingly. Lewin's refreezing stage was used to assess project sustainability.

Chart audits were completed weekly for three months to ensure the PPD screening protocol was established into daily practice (Butts & Rich, 2018).

Addressing the Gap in Practice and Guidelines for Project

The identified gap in practice was addressed using the PDSA cycle and Lewin' change theory. The project aim was to implement a PPD screening protocol to identify PPD, increase referrals to appropriate resources, and integrate the PPD screening protocol into daily practice within the healthcare agency. The theoretical framework guided the quality improvement project and PICOT question: "In postpartum women, how does the use of a postpartum depression screening protocol on postpartum day one compared to the current practice of no PPD screening protocol improve the identification of postpartum depression screenings and referral to case management over four weeks?"

Methodology

The evidence-based intervention for the quality improvement DNP project was implementing a PPD screening policy and protocol for the obstetrical unit as recommended by ACOG (2023). Several steps occurred to achieve effective implementation, including adopting the PPD screening protocol and a staff training program regarding the protocol, policy, and clinical manifestations of PPD.

Setting

The setting for the DNP project was a 90-bed not-for-profit healthcare facility in the Southern United States. The specific unit for project implementation was an obstetrical unit that consists of seven labor and delivery rooms and delivers approximately 1300 babies per year. The facility is designated a Baby-Friendly hospital that encourages maternal-infant bonding and breastfeeding (Baby-Friendly USA [BFUSA], 2022). In addition, the selected facility has a Level

II Special Care Nursery (SCU).

BFUSA is the accrediting body and national authority for the Baby Friendly Health Initiative (BFHI) in the U.S. (BFUSA, 2022). Hospitals and birthing centers with the Baby-Friendly designation are accountable to the highest standards for mother/baby care practices associated with infant feeding and bonding (BFUSA, 2022). The DNP project was helpful for the facility as it contributed to the sustainability of its Baby-Friendly initiative.

A Level II SCU provides care for babies born at or after 32 weeks and weighing more than 1,500 grams (3.3 pounds). These babies may have health problems that result in prolonged stays in the SCU (March of Dimes, 2022). The Centers for Disease Control and Prevention (CDC) suggests that preterm deliveries before 37 weeks and birth complications can increase the risk of PPD (CDC, 2022). Implementing the screening policy and protocol in the selected facility assisted in detecting PPD in mothers caring for preterm infants or those experiencing other complications.

Population

The population of interest for the DNP project was obstetrical patients 18 years or older. The population comprised postpartum patients 24-48 hours after infant delivery. Registered Nurses (RNs) and Licensed Practical Nurses (LPNs) working on the obstetrical unit were also included in the DNP project, as staff training sessions were completed on the PPD screening protocol.

Inclusion/Exclusion Criteria for the Project

The inclusion criteria for the patient population in ages ranging 18 years or older was postpartum women who were 24-48 hours post-delivery. Inclusion criteria for staff participants included RNs and LPNs working on the obstetrical unit. The exclusion criteria were non-

postpartum women, those younger than 18, and those who did not consent to participate in the DNP project. Exclusion criteria for staff participants included RNs and LPNs that did not work on the obstetrical unit and those who did not consent to participate in the DNP project.

Recruitment

During the implementation of the DNP quality improvement project, educational flyers were posted throughout the obstetrical unit to recruit staff participants. The flyers included the dates and times of training sessions for the implementation of the PPD protocol (see Appendix B). During training sessions, staff was provided a script to use during the screening process (see Appendix C). Patient participants were recruited on the postpartum unit before discharge. Patients were provided educational handouts on the clinical manifestations of PPD and the PPD screening scale.

Consent

Institutional Review Board (IRB) approval was obtained from the university where the DNP student was enrolled. Patient participants signed a consent form (see Appendix D) that stated participation in the DNP project was not mandatory and would not affect the plan of care. The consent also stated that the patient may decline participation during the DNP project and would not suffer any retribution, retaliation, or harm should they wish to withdraw from the DNP project. Staff participants also signed a consent (see Appendix E) that stated participation was voluntary. The consent stated that the staff may withdraw from the DNP project without fear of penalty or loss of benefits to which they were entitled.

Design

The purpose of the evidence-based DNP quality improvement project was to develop a PPD screening policy and protocol to improve the identification of PPD and increase referral to

case management. The DNP project assisted in the early identification and intervention of PPD. A quantitative design was selected for the DNP project as the outcome measurement was the total number of patients screened with appropriate referral to case management before discharge (Grech, 2021). A PPD screening scale was used to screen patients for PPD.

The Plan-Do-Study-Act (PDSA) cycle provided the foundational framework for planning, developing, implementing, and evaluating the DNP project. The PDSA quality improvement framework was initially developed in the 1920's by Walter Shewhart. W. Edwards Deming later modified the cycle to refocus on analysis and improvement processes in quality management (Butts & Rich, 2018). The method is widely used in healthcare improvement as it is a systematic process for gaining valuable knowledge to continually improve a product, process, or service (The W. Edwards Deming Institute, 2021).

The cycle consists of four components: plan, do, study, and act. The "plan" step involves studying a process, identifying a goal or purpose for improvement, formulating a theory, and implementing a plan (Butts & Rich, 2018). The planning step of the PDSA cycle was used during the DNP project planning phase. During this phase, the DNP student conducted a needs assessment where current practices were analyzed, data was collected, and a gap in best practice was identified. The gap was that the facility does not have a PPD screening protocol to guide the treatment and referral of patients that screen positive for PPD. The plan for implementation of a PPD screening protocol was determined and was as follows: a protocol was developed that guided PPD screening, training seminars were conducted for nursing staff that included clinical manifestations of PPD and training for implementing the PPD screening tool, postpartum patients 18 years or older were screened for PPD 24-48 hours after delivery of the infant, case management referrals were ordered for patients that score >9 on the PPD screening tool.

During the "do" phase, the plan is implemented, and data is collected and analyzed (Butts & Rich, 2018). During this phase of the DNP project, nurses attended training sessions, the PPD screening protocol was implemented, and data collection was completed. Problems or unexpected observations were documented during this step (Butts & Rich, 2018).

The plan is evaluated in the "study" phase, and outcomes are monitored to test the plan's validity or areas for improvement, and modifications of the changed process occur (Butts & Rich, 2018). Data was analyzed using a quantitative approach during the “study” phase of the DNP project. Secondary data was compared to primary data collected before project implementation (Moran et al., 2017). To ensure accuracy, the DNP student worked collaboratively with a statistician to analyze and evaluate the data. During the "act" phase, analyzed data was evaluated to determine if the results were valid and if the PPD screening protocol improved the identification of PPD and increased case management referrals (Butts & Rich, 2018). Chart audits were completed weekly for three months to ensure the PPD screening protocol was established into daily practice (Butts & Rich, 2018).

The PDSA cycle offers a supporting mechanism to test and implement process improvements in healthcare systems. The PDSA is a tool that can be used repeatedly to increase knowledge and implement changes for quality improvement (Butts & Rich, 2018). A potential weakness to the PDSA cycle is that failure to use the four steps correctly or not completing each step of the cycle can lead to the unsuccessful implementation of change in the healthcare setting (Butts & Rich, 2018; Taylor et al., 2014). As previously described, each stage of the PDSA cycle was used throughout project implementation to address this potential weakness.

Data Review Process

Before project implementation, secondary data was extracted from the Electronic Health

Record (EHR) to include the number of case management referrals for a history of PPD in the past 12 months. Data collection revealed that from January 2021 to January 2022, 5.4% of postpartum women were referred to case management for a history of untreated depression. During project implementation, primary data collection was captured via the data collection spreadsheet. The data included the following information: delivery method, date and time of delivery, gravida/parity, identified risk factors for PPD, date and time screening was completed, names of nurses that completed the screening protocol, whether the PPD handout was provided to the patient, screening results, and whether patients that scored >10 on the PPD screening tool were referred to case management. After data collection was complete, data was de-identified and secured in a locked area in the Principal Investigator's (PI) office.

Risks and Benefits

The potential risk for patient participants was that personal health information could be compromised as depression screening results were conducted. The facility has data protective mechanisms in place such as health system protected server requiring individual user authentication. The risk of compromising personal health information was mitigated using non-specific, de-identified data secured in a locked area in the PI's office. The data was further protected through password protected hardware and software. Raw data will be destroyed by shredding three months after the completion of the DNP project.

Another risk to patient participants was the misdiagnosis of PPD. Risks were minimized by providing patient participants with referral resources for PPD. No foreseeable risks to staff participants were identified. Appropriate screening and referral benefits, including early detection of PPD with prompt intervention (ACOG, 2023), outweigh the risk.

Compensation

The DNP student considered the appropriateness of compensation for participation in the DNP project. The facility, nursing staff, and physician's offices were not provided compensation for participation in the DNP project. Furthermore, patients were not provided any form of compensation for participation in the DNP project.

Timeline

Project planning began in June 2022 and included the development of the DNP project team and identification of organizational stakeholders. The facility gap analysis was completed in August 2022. After completing the gap analysis, the project proposal was presented to the university's faculty and shared with facility stakeholders. The DNP project proposal was sent to the IRB for approval in October 2022 upon the recommendation of the course faculty and DNP chair. After IRB approval, project implementation began in January 2023. Implementation occurred over a time frame of four weeks from February through March 2023, and data analysis took place in March 2023. Dissemination of the DNP project findings with agency stakeholders and the university's faculty is tentatively planned for August of 2023 (see Appendix F). To support sustainability, chart audits will be completed weekly for three months to ensure the PPD screening protocol is established into daily practice.

Budget and Resources

Implementation of the PPD screening protocol did not require any financial cost or specific resources. Project implementation did not require additional staff on the obstetrical unit or altering job descriptions. Staff training sessions were conducted during routine staff meetings, and PPD screenings of patient participants were conducted during patient assessments.

Evaluation Plan

The American Association of Colleges of Nursing (AACN) recommends an evaluation of the outcomes and process of the DNP project (Bradshaw & Vitale, 2021). In addition to the DNP student, the agency stakeholders were involved throughout the evaluation phase of the DNP project as the agency continues to fully support the DNP project and has a vested interest in ensuring sustainability of the project. PPD screening data was collected using a validated PPD screening scale during project implementation. Screening results were entered into the data collection sheet (see Appendix G) and reviewed by the PI.

Results

Data Analysis

Before data analysis, data was gathered and reviewed for missing data and outliers (Moran et al., 2017). Primary data were analyzed and included the number of PPD screenings completed, screening results from the PPD screening tool, and whether patients that scored >10 on the screening tool were referred to case management. Primary data was compared to secondary data collected before project implementation (Moran et al., 2017).

The PI collected data, and the number of case management referrals completed post-implementation was compared to that pre-implementation. To ensure accuracy, the DNP student worked collaboratively with a statistician to analyze and evaluate the data. Because the study data could only be compared to limited historical data, the only available analysis was Pearson's Chi-Square, comparing the percentage of patients referred to case management without the survey instrument to the actual number of patients referred with the survey. While this is not an ideal way to compare two groups, the Pearson's Chi-Square did strongly suggest that the survey instrument has an impact on referrals to case management.

A total of 68 patients participated in the study. The percentage of patients referred for case management increased from 5% to 18% (17 of 68) with the implementation of the survey instrument. The change in the number of patients referred to case management was statistically significant ($X2$ ($N = 68$) = 7.1182, $p = .00763$). Because the data available for comparison were limited to a historical percentage of patients referred to case management, confidence in the statistical comparison is similarly limited.

Mitigating the risk of compromise of personal health information was addressed by securely locking data in a locked filing cabinet in a locked office that only the DNP student could access. In addition, all electronic files were password protected to prevent unauthorized user access. The data will be kept for three months after collection and then shredded.

Discussion

The focus of the DNP project was implementing a PPD screening protocol to improve the identification of PPD and increase referrals to case management. After reviewing the literature, it was discovered that all patients should be screened for PPD during the postpartum period (ACOG, 2023). CITI training was completed (see Appendix H). The objectives and goals of the DNP project were met. After the educational sessions, the PPD screening protocol was implemented. Patients were provided educational flyers (see Appendix I) that included clinical manifestations of PPD along with mental health resources (see Appendix J). Case management referrals were implemented for all PPD screenings that scored >10 on the PPD screening tool. An IRB application was met with approval (see Appendix K). A letter of support for the quality improvement project was obtained from stakeholders (see Appendix L).

Implications for Clinical Practice

PPD is a mental health condition that requires early identification and intervention to prevent complications with the mother or her newborn child (Rossi & Radney, 2022). The consistent use of a validated screening tool is essential to identify women experiencing PPD or who are at risk for developing PPD. ACOG (2023) recommends that all women be screened at least once during pregnancy and again during postpartum. When a diagnosis is made, providers should discuss risks, symptoms, and treatment options using a patient-centered approach (Rossi & Radney, 2022). Rossi and Radney (2022) suggest that local and national mental health resources should be provided to the perinatal patient. Nurses are able to educate patients on the manifestations of PPD, assist with mental health resources, and help each patient explore their support system (Rossi & Radney, 2022). The DNP project's aims were met as a PPD screening protocol was implemented, PPD screenings increased, and referrals to case management were initiated when appropriate. Based upon the supportive evidence, results of the DNP project can have a positive impact on clinical practice including integration of evidence-based policies and protocols focused on early identification and intervention of PPD.

The DNP project focused on quality improvement to improve the identification of PPD and increase referrals to case management. Implementing the PPD screening protocol increased PPD screening and provided patients with mental health resources. Patient outcomes were improved as PPD screenings increased, patients received education on the clinical manifestations of PPD, a list of mental health resources was provided, and case management consults were initiated when necessary. Research supports that PPD screening increases the identification of PPD, prompting early intervention (Fleischman et al., 2022; Vik et al., 2021; Zhao et al., 2017).

The project may impact future policy development as policies could be implemented in obstetrical offices to screen during antepartum visits to improve patient outcomes (Friedman et al., 2019). The literature suggests that PPD screening should be a part of comprehensive care for all pregnant women to achieve optimal perinatal outcomes (Zhao et al., 2017). In addition to future policy development, educational implications can influence project sustainability.

McCarter et al. (2022) suggest that hospital nurses are critical in screening women for perinatal depression and anxiety. Educational implications from the DNP project include educating all current staff members in the obstetrical unit regarding the clinical manifestations of PPD and available mental health resources. Another implication for education could be the integration of content related to PPD in new employee orientation and annual unit-based competency sessions. The implication of PPD education in the undergraduate nursing curriculum in Obstetrics and Mental Health could emphasize the importance of PPD screening, as PPD is a national issue (AWHONN, 2022).

Limitations

A vital limitation of the DNP project was the timing of the PPD screening. The PPD screening protocol entailed that PPD screening would be completed on day two postpartum. Evidence supports that women should be screened by their obstetrician during the pregnancy and again two-to-four weeks after delivery to detect PPD (Accortt et al., 2019). Another limitation to the DNP project was the sample size which may be considered small and affect study findings (Sylvia & Terhaar, 2018). It was determined that the sample size of 100 participants was adequate for this project; however, a larger sample size may have yielded more case management referrals.

Dissemination

AACN (2023) established requirements for dissemination of the DNP Project. AACN (2023) states that dissemination of the project must include a product that describes the project's purpose, planning, implementation, and evaluation components. Dissemination of the project outcomes is essential and should be targeted to an appropriate audience to ensure an impact on clinical practice. Dissemination may include a variety of forms depending on the focus and area of advanced nursing practice (AACN, 2023).

To meet the requirements of AACN, dissemination of the DNP project findings was shared with the agency stakeholders and staff members in the obstetrical unit. Findings were disseminated to stakeholders via a PowerPoint presentation and executive summary. The DNP project was disseminated using the three Ps of dissemination: paper, presentation, and poster (Bradshaw & Vitale, 2021). A written manuscript was completed, and the project was presented virtually to the university's faculty and peers at the 2023 DNP Dissemination Day. In addition, the DNP quality improvement project manuscript was uploaded to the University's Digital Commons repository and is available for download by individuals within and outside of the University’s community. Dissemination of findings will be presented at the Alabama League of Nursing (ALN) annual conference.

Sustainability

Moran et al. (2017) describe sustainability as securing the progress made by an improvement initiative over time. Stakeholder support is critical for project sustainability (Moran et al., 2017). Key stakeholders are more likely to support the project's sustainability when they clearly understand the project goals and outcomes (Moran et al., 2017). The population of interest will benefit from project sustainability as PPD screenings will be implemented into daily

practice. Integration of PPD screenings before discharge will comply with ACOG's recommendation that all patients be screened for PPD (ACOG, 2023).

Lewin's refreezing stage and the PDSA's act phase were used to promote the sustainability of the PPD screening protocol (Butts & Rich, 2018). Stakeholders and hospital administration have buy-in for implementing the screening policy and protocol into daily practice throughout the organization. While there is no foreseeable funding for sustaining the policy and protocol, staff training is needed to continue the screening protocol. The unit director and administration will allocate mandatory educational refresher courses during the annual skills training for all nurses within the facility.

Partnerships were established with obstetrical providers to ensure that PPD screenings continue to be completed on all patients. Project findings were communicated to all providers and stakeholders during stakeholder meetings throughout project implementation. To support sustainability, chart audits will be completed weekly for three months to ensure that the PPD screening protocol is established into daily practice. The audits will also assess that case management referrals are implemented when necessary, contingent upon the PPD screening results.

Plans for Future Scholarship

This project was implemented to improve the identification of PPD and increase referrals to case management during the immediate postpartum period. The dramatic increase in the number of patients referred to case management for PPD is important and clearly calls for follow-up analysis to see if there is a corresponding improvement in patient outcomes. Future scholarship endeavors are needed to expand knowledge on PPD and PPD screening during the antepartum period. Research suggests that PPD screening protocols must be established

consisting of PPD screening, patient education, and referrals (Accortt et al., 2022; Docherty et al., 2020; Zhao et al., 2017). Future DNP projects could focus on involvement of the obstetrical offices in PPD screening training to increase the diagnosis and awareness of PPD. Training the obstetrical offices on PPD screening allows for screening during the initial antepartum visit and again during the postpartum follow-up visit. Further education on the clinical manifestations of PPD and screening increases the identification of PPD, allowing for prompt intervention (Accortt et al., 2022; Docherty et al., 2020; Zhao et al., 2017). Another suggestion for future scholarship includes data collection from the initial prenatal visit to identify risk factors for PPD.

Conclusion

PPD is a common complication during the perinatal period (ACOG, 2023). Prevalence rates of depression during pregnancy range from 11.3% to 19.6% (Abdallah et al., 2022; Accortt et al., 2022; Liu et al., 2022). Perinatal mood and anxiety disorders (PMADs), such as PPD, are stigmatized and often overlooked because women may be reluctant to report their symptoms (ACOG, 2023). If undiagnosed, PPD can adversely impact the mother's and child's physical and mental health. PPD is identified and diagnosed using clinical assessments and validated screening tools (Rossi & Radney, 2022). ACOG (2023) recommends screening all patients during the prenatal and postpartum period to increase the identification of PPD. The DNP project aimed to implement a PPD screening protocol to assist in the early identification of PPD and increase referrals to case management.

The DNP quality improvement project involved training and educating staff nurses in the obstetrical unit to increase awareness of the clinical manifestations of PPD and the PPD screening protocol. McCarter et al. (2022) suggest that hospital nurses play a crucial role as interprofessional team members by screening women for perinatal depression and anxiety

(McCarter et al., 2022). The project enabled nurses to educate patients on the clinical manifestations of PPD and screen patients for PPD with a validated screening tool before hospital discharge.

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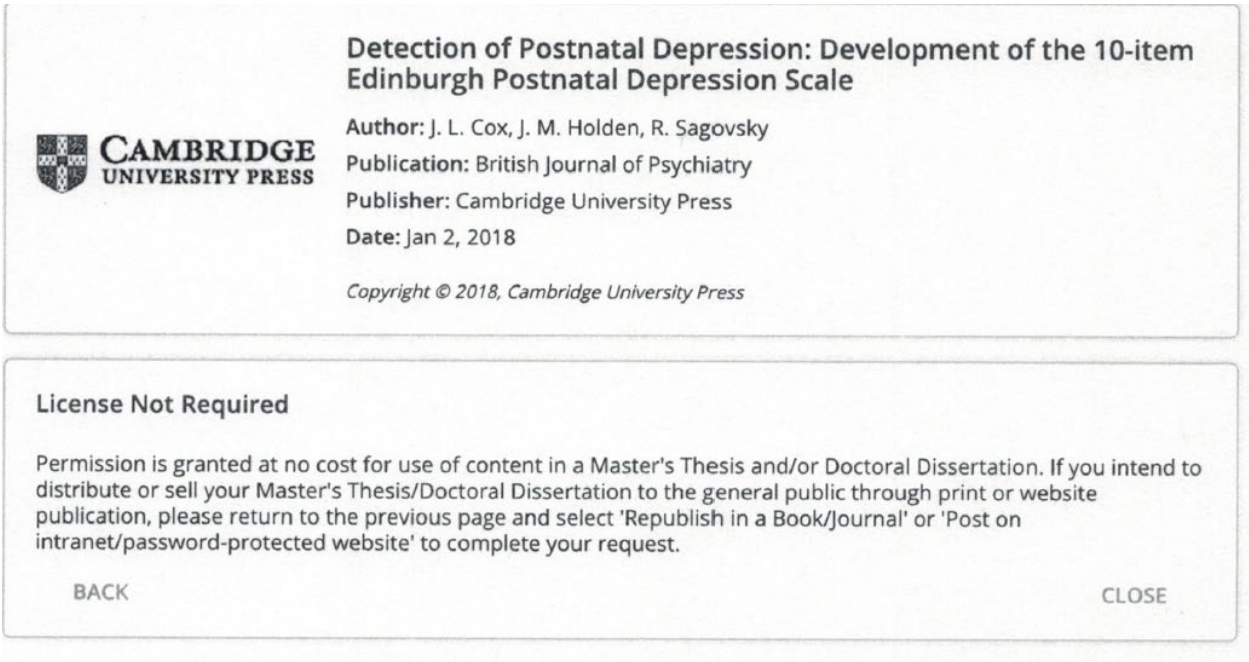
Appendix A

Written Permission for Using the EPDS



CAMBRIDGE UNIVERSITY PRESS

Detection of Postnatal Depression: Development of the 10-item Edinburgh Postnatal Depression Scale

Author: J. L. Cox, J. M. Holden, R. Sagovsky

Publication: British Journal of Psychiatry

Publisher: Cambridge University Press

Date: Jan 2, 2018

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BACK CLOSE

Appendix B

DNP Project Participant Recruitment Flyer

Appendix C

Consent Script for Nurses

Nurse Script for Doctor of Nursing Practice (DNP) Project: Implementation of a Postpartum Depression Screening Protocol

Nurse: Would you like to participate in a screening for postpartum depression (PPD) as part of a DNP project? "Participation is not mandatory and will in no way affect your care. You may decline participation at any time during the DNP project and you will not suffer any retribution, retaliation, or harm should you wish to withdraw from the DNP project".

- No risks are identified with the screening process. The benefits of appropriate screening and referral are important because it allows for early detection and prompt treatment of PPD.
- Patient Confidentiality of information will be maintained throughout the DNP project.

If patient answers yes, explain the EPDS:

- **Nurse state:** The 10-question Edinburgh Postnatal Depression Scale (EPDS) is a valuable and efficient way of identifying patients at risk for postpartum depression in the year following the birth of a child. The EPDS is easy to administer and has proven to be an effective screening tool.
- Provide the DNP Project consent and have patient sign
- Provide patient a copy of the EPDS screening tool and have them complete the tool

If patient answers no:

- Thank them for their time and reiterate that "Participation is not mandatory and will in no way affect their care.

Appendix D

Patient Participant Consent Form

The purpose of this consent form is three-fold, it serves to:

1. Provide transparency related to the implementation of a Doctor of Nursing Practice (DNP) student project
2. Inform participants (patients) as to the purpose of this practice improvement project
3. Seek informed consent for voluntary participation in the project.

If questions should arise during this practice improvement project:

- Feel free to ask the principal investigator.
- You will be provided with answers which you clearly understand
- You will be informed of the risk (which are not applicable in this project) and benefits of participation.

After a clear explanation of the process improvement project:

- You may elect to voluntarily participate in the DNP Practice/Process Improvement Project
- If you decline to participate, no retribution will occur
    - your care with the agency will not be impacted
- Participation is strictly voluntary

Title of Study: Implementation of a Postpartum Depression Screening Protocol

Principal Investigator Name and Contact Information:
Name: Samantha Abercrombie
Email: sabercrombie1@stu.jsu.edu

Purpose of the DNP Project: Is to implement a postpartum depression (PPD) screening protocol for the obstetrical unit as recommended by the American College of Obstetricians and Gynecologists (ACOG).

Location of DNP Project:
Madison Hospital
8375 U.S. Highway 72 West
Madison, AL 35757

Description of the DNP Project:
The intervention is to implement a PPD screening protocol for the obstetrical unit as recommended by ACOG. Several steps will occur in the protocol, including adoption of the PPD screening tool and protocol at the facility, development of a PPD screening tool policy and procedure, staff training on the tool and appropriate referral. Primary data includes participant/patients screening with the EDPS. Secondary data includes chart audits to review collected data, to assess appropriate screening and referral on postpartum day one. The desired

outcome is that all patients that score >10 on the EPDS will receive a case management consult, and a follow-up phone call will be completed seven days after discharge by the lactation consultant (LC). In addition, the obstetrician will be notified of the screening results.
Length of Time of Participation in the DNP Project: The approximate time to complete the survey will take 15 minutes

Benefits of the DNP Project: The benefits of appropriate screening and referral include early detection of PPD with prompt treatment for PPD.

Potential Risks of Participation in the DNP Project:
Participation in this project is voluntary and will in no way affect your care. The risk to participants is that personal health information could be compromised. All information obtained during the practice/process improvement project will be kept confidential and destroyed after the completion of the process improvement project.

Confidentiality:
All information obtained will be securely stored in a locked area in the principal investigator's (PI) office. Raw data will be destroyed by shredding three months after completion of the DNP Project.

What will happen if you do not wish to participate in the project or if you later decide not to stay in the project?
Participation in this project is voluntary and will in no way affect your care. Participants are given a choice to participate and may change their minds at any time and withdraw from participation. Screening results will be pulled from the study if the participant chooses to withdraw. You may decline participation at any time during the DNP project and you will not suffer any retribution, retaliation, or harm should you wish to withdraw from the DNP project.

Who can you call if you have any questions?
If you have any questions about your participation in this practice improvement project, please call the principal investigator:

Name: Samantha Abercrombie,
Phone Number:256-609-0979,
Email: sabercrombie1@stu.jsu.edu

1. Subject Consent Signature Page:

I understand the purpose and implications of the discussed process improvement intervention. My questions have been answered, and I agree to take part in this DNP Quality Improvement Project/Intervention.

Subject Name:_____

Subject Signature:_____ Date:_____

2. Signature of Primary Investigator/Individual Obtaining Consent:

I have explained the purpose, mechanics, and implications of this practice improvement project to relevant stakeholders to the best of my ability. I have addressed concerns with the parties involved.

Investigator/Person Obtaining Consent

(printed name): _____

Signature:_____ Date: _____

Appendix E

Staff Participant Consent Form

The purpose of this consent form is three-fold, it serves to:

4. Provide transparency related to the implementation of a Doctor of Nursing Practice (DNP) student project.
5. Inform participants (patients) as to the purpose of this practice improvement project
6. Seek informed consent for voluntary participation in the project.

If questions should arise during this practice improvement project:

- Feel free to ask the principal investigator.
- You will be provided with answers which you clearly understand.
- You will be informed of the risk (which are not applicable in this project) and benefits of participation.

After a clear explanation of the process improvement project:

- You may elect to voluntarily participate in the DNP Practice/Process Improvement Project.
- If you wish to not participate or withdraw from the project at any time, you may do so without fear of penalty or loss of benefits to which you are otherwise entitled.
- Participation is strictly voluntary.

Title of Study: Implementation of a Postpartum Depression Screening Protocol

Principal Investigator Name and Contact Information:
Name: Samantha Abercrombie
Email: sabercrombie1@stu.jsu.edu

Purpose of the DNP Project: Is to implement a postpartum depression (PPD) screening protocol for the obstetrical unit as recommended by the American College of Obstetricians and Gynecologists (ACOG).

Location of DNP Project:
Madison Hospital
8375 U.S. Highway 72 West
Madison, AL 35757

Description of the DNP Project:
The intervention is to implement a PPD screening protocol for the obstetrical unit as recommended by ACOG. Several steps will occur in the protocol, including adoption of the PPD screening tool and protocol at the facility, development of a PPD screening tool policy and procedure, staff training on the tool and appropriate referral. Primary data includes participant/patients screening with the EDPS. Secondary data includes chart audits to review collected data, to assess appropriate screening and referral on postpartum day one. The desired

outcome is that all patients that score >10 on the EPDS will receive a case management consult, and a follow-up phone call will be completed seven days after discharge by the lactation consultant (LC). In addition, the obstetrician will be notified of the screening results.
Length of Time of Participation in the DNP Project: The approximate time to complete the survey will take 15 minutes

Benefits of the DNP Project: The benefits of appropriate screening and referral include early detection of PPD with prompt treatment for PPD.

Potential Risks of Participation in the DNP Project:
Participation in this project is voluntary and will in no way affect your care. No foreseeable risks to participants have been identified. All information obtained during the practice/process improvement project will be kept confidential and destroyed after the completion of the process improvement project.

Confidentiality:
No confidential or identifiable information will be collected. All information obtained will be securely stored in a locked area in the principal investigator's (PI) office. Raw data will be destroyed by shredding three months after completion of the DNP Project.

What will happen if you do not wish to participate in the project or if you later decide not to stay in the project?
Participants are given a choice to participate and may change their minds at any time and withdraw from participation. If you wish to not participate or withdraw from the project at any time, you may do so without fear of penalty or loss of benefits to which you are otherwise entitled. You may decline participation at any time during the DNP project and you will not suffer any retribution, retaliation, or harm should you wish to withdraw from the DNP project.

Who can you call if you have any questions?
If you have any questions about your participation in this practice improvement project, please call the principal investigator:

Name: Samantha Abercrombie,
Phone Number:256-609-0979,
Email: sabercrombie1@stu.jsu.edu

1. Subject Consent Signature Page:

I understand the purpose and implications of the discussed process improvement intervention. My questions have been answered, and I agree to take part in this DNP Quality Improvement Project/Intervention.

Subject Name:_____

Subject Signature:_____ Date:_____

2. Signature of Primary Investigator/Individual Obtaining Consent:

I have explained the purpose, mechanics, and implications of this practice improvement project to relevant stakeholders to the best of my ability. I have addressed concerns with the parties involved.

Investigator/Person Obtaining Consent

(printed name): _____

Signature:_____ Date: _____

Appendix F

Timeline

Task	May	June	July	August	September	October	November	December
Obtained Preceptor	X							
Met with Stakeholders	X							
Received Approval of Problem by Stakeholders	X							
Receive IRB Approval				X				

Task	January	February	March	April	May	June	July	August
Data Collection		X	X					
Analyzing and Interpreting Data			X					
Disseminate Findings to Agency						X		
Present at JSU Dissemination Day							X	
Graduation								X

Appendix G

Data Analysis Collection Tool

Data Collection: Implementation of PPD Screening Protocol

Delivery Method, Date/Time	Patient Age	Gravida/ Para	Risk Factors for PPD: (History of Depression, Anxiety, Substancs abuse, etc)	Date/Time Screening Completed	Nurse that completed Screening	Was PPD handout given to patient	EPDS Score	Was pateient referred to case management and lactation consultant (LC) notified?

Appendix H

CITI Training Certificate

Completion Date 23-Aug-2022
Expiration Date 22-Aug-2025
Record ID 50840773

This is to certify that:

Samantha Abercrombie

Has completed the following CITI Program course:

Not valid for renewal of certification through CME.

Social and Behavioral Responsible Conduct of Research
(Curriculum Group)
Social and Behavioral Responsible Conduct of Research
(Course Learner Group)
1 - RCR
(Stage)

Under requirements set by:

Jacksonville State University

Collaborative Institutional Training Initiative

Verify at www.citiprogram.org/verify/?wf33e703a-5153-4c2c-81ef-18a595272c75-50840773

Appendix I

PPD Patient Educational Flyer

What is Postpartum Depression?

What is Postpartum Depression (PPD)?

PPD is a major depressive disorder that can occur anytime during the 1st year after having a baby.

Common symptoms: Intense feelings of sadness or anxiety that prevent you from performing daily tasks; withdrawal from family/friends; impaired infant bonding

Did you know...

- It is estimated that 13.4% of women will experience PPD in the United States.
- Alabama has the highest percentage of PPD, as 23.5% of women experience PPD (America's Health Ranking United Health Foundation, 2022).

Contact your Primary Obstetrician if you develop any symptoms of PPD. If left untreated, PPD can become life-threatening to the postpartum mother and her newborn child, as the mother may physically harm herself or her baby.

Appendix J

Mental Health Resources

You have participated in a Postpartum Depression (PPD) screening. Screening tools are not always 100% effective in identifying PPD. If you should experience any of the symptoms listed below, even if your screening results were negative, please see the community resources available to you. Please seek help **immediately** if you experience any of the following symptoms:

- You're having trouble caring for yourself or your baby
- You're having thoughts of harming yourself or your baby

Resources for PPD Support

Resource	Contact Information
Postpartum Support International Helpline	**Phone Number**: 1-800-944-4773 or Text "Help" to 800-944-4733 (English) Text en Español to 971-203-7773
National Suicide & Crisis Lifeline	Dial 988
Carastar Health	1-800-408-4197
Crisis Services of North Alabama HELPline	1-256-716-1000
Wellstone Emergency Services Crisis Center	1-256-705-6444
Mental Health Center of Madison County	1-256-533-1970
Cornerstone Christian Counseling	1-256-519-9000
Covenant Counseling-Decatur	256-822-2375
Family Service Center-Huntsville	1-256-551-1610
Gina Porter, LCSW Huntsville	256-988-0879
Integrated Behavioral Health-Decatur	256-822-2375
Oasis Counseling Services	1-256-694-0788

Therapists who offer Tele-video Counseling Services

Name	Contact information
Alicia Schuster-Couch LPC with New Leaf Counseling Services	256-755-4599
Dana Hampson, LPC with Balanced Life	256-258-7777
Byrnnan Reedy, LPC with Life Lessons Counseling Services	256-203-3987
Jane Allgood, PhD, LMSW	1-938-222-3757

Local Support Groups

Name of Group	Contact Information
Postpartum Support International	**Facebook:** Postpartum Support International **Phone Number:** 1-800-894-9453
Mama Circle- Huntsville	**Facebook**: Mama Circle-Huntsville **Website:** www.mamacirclehuntsville.com **Address:** 3077 Leeman Ferry Road SW Suite A3 Huntsville, AL 35801 **Email:** alabamacohosh@gmail.com

Appendix K

JSU IRB Approval Letter

INSTITUTIONAL REVIEW BOARD
JACKSONVILLE STATE UNIVERSITY

Institutional Review Board for the Protection of Human Subjects in Research
249 Angle Hall
700 Pelham Road North
Jacksonville, AL 36265-1602

December 13, 2022

Samantha Abercrombie
Jacksonville State University
Jacksonville, AL 36265

Dear Samantha:

Your protocol for the project titled "Implementation of a Postpartum Depression Screening Protocol" protocol number 12132022-04 has been approved by the JSU Institutional Review Board for the Protection of Human Subjects in Research (IRB).

If your research deviates from that listed in the protocol, please notify me immediately. One year from the date of this approval letter, please send me a progress report of your research project.

Best wishes for a successful research project.

Sincerely,

Jennifer Mead
Senior Human Protections Administrator, Institutional Review Board

Appendix L

Letter of Support

MADISON HOSPITAL
8375 Highway 72 W • Madison, AL 35758 • (256) 265-2012

September 14, 2022

Dear Sir or Madam:

This letter is to confirm my wholehearted support of Jacksonville State University Doctor of Nursing Practice (DNP) student Mrs. Samantha Abercrombie. Mrs. Abercrombie has received our approval to focus on "Implementation of a Postpartum Depression Screening Protocol in an Obstetrical Unit" over the coming year.

We are excited to support Mrs. Abercrombie as she works toward improving patient care delivery in our facility.

Sincerely,

Mary Lynne Wright
President

MLW:bjm