

Abilene Christian University

Digital Commons @ ACU

Electronic Theses and Dissertations

Electronic Theses and Dissertations

10-2021

The Effect of Postpartum Depression Screening Education for Postpartum Nurses

Shecarra S. Cook
sxc17b@acu.edu

Follow this and additional works at: <https://digitalcommons.acu.edu/etd>



Part of the [Educational Assessment, Evaluation, and Research Commons](#), [Educational Psychology Commons](#), [Maternal, Child Health and Neonatal Nursing Commons](#), [Psychiatric and Mental Health Commons](#), and the [Psychiatric and Mental Health Nursing Commons](#)

Recommended Citation

Cook, Shecarra S., "The Effect of Postpartum Depression Screening Education for Postpartum Nurses" (2021). Digital Commons @ ACU, *Electronic Theses and Dissertations*. Paper 407.

This DNP Project is brought to you for free and open access by the Electronic Theses and Dissertations at Digital Commons @ ACU. It has been accepted for inclusion in Electronic Theses and Dissertations by an authorized administrator of Digital Commons @ ACU.

This scholarly project, directed and approved by the candidate's committee, has been accepted by the College of Graduate and Professional Studies of Abilene Christian University in partial fulfillment of the requirements for the degree

Doctor of Nursing Practice

Nannette W. Glenn, Ph.D.

Dr. Nannette Glenn, Dean of the
College of Graduate and Professional
Studies

Date August 21, 2021

Scholarly Project Committee:



Dr. Lawrence Santiago, Chair



Dr. Ugochi Irikannu



Dr. Catherine Northrup

Abilene Christian University
School of Educational Leadership

The Effect of Postpartum Depression Screening Education for Postpartum Nurses

A dissertation submitted in partial satisfaction
of the requirements for the degree of
Doctor of Nursing Practice

by

Shecarra S. Cook

October 2021

Acknowledgments

I would like to express my great appreciation to all those who helped and supported my efforts in ensuring the success of my DNP project. First and foremost, I want to thank God for this amazing opportunity. My gratitude goes to all of my professors at Abilene Christian University, especially my project committee members and my chairperson, Dr. Lawrence Santiago, who provided guidance from the beginning of my project to completion. I also would like to thank my statistician, Dr. Granoff, for his expertise with analyzing my data. I definitely want to thank the staff for taking time out of their ever-busy schedules in the midst of the COVID-19 pandemic. Last but certainly not least, I would like to thank my family, especially my mom, whose love, support, and encouragement helped me persevere through the setbacks and the physical and emotional requirements of this program.

© Copyright by Shecarra Cook (2021)

All Rights Reserved

Abstract

Depression affects about 13% of pregnant women and about 10% of women after childbirth. Some cases are so severe, the mother may even commit suicide. If left untreated, postpartum depression (PPD) affects both the mother's and the infant's health as well as their quality of life. The gap in clinical practice is that currently, patients only complete a postpartum depression screening tool during their 6-week follow-up appointment with their OB/GYN, leaving a gap in PPD detection and care during the immediate postpartum period. Postpartum nurses are not usually given specialized training in postpartum depression. The purpose of this study was to educate postpartum nurses on postpartum depression indications and symptoms, as well as the use of a validated screening instrument. The study was limited to email delivery of a PowerPoint presentation due to the limits imposed by the COVID-19 pandemic. The study used a pretest/posttest design to determine if the education program increase knowledge of the nurses on PPD. The target sample was 30 postpartum registered nurses; however, only 19 postpartum nurses participated in the demographic survey, 12 postpartum nurses took the pretest, and 7 completed the posttest. While results showed no statistical significance due to small sample size, a slight increase in knowledge did occur based on posttest scores. Recommendations include expanding the methods of delivering education to include in-person group education with more focus not only on knowledge gain but nursing self-efficacy and actual change in practice. This would add more validity to the efficacy of nurse education.

Keywords: clinical practice, depression, postpartum depression, pretest, posttest

Table of Contents

Acknowledgments.....	i
Abstract.....	iii
List of Tables	vi
List of Figures.....	vii
Chapter 1: Introduction.....	1
Problem of Interest.....	2
Background of Problem of Interest.....	3
Purpose of Study.....	4
Significance of Problem of Interest	4
Nature of Project.....	5
Research Questions.....	5
Hypothesis.....	6
Theoretical Framework.....	6
Definition of Key Terms.....	7
Scope of Project.....	8
Summary.....	8
Chapter 2: Literature Review	10
Purpose.....	10
Risk Factors for Postpartum Depression.....	10
Prevalence of Postpartum Depression	11
Postpartum Depression Diagnosis	11
Maternal and Infant Outcome	11
Barriers.....	12
Overcoming Barriers.....	12
Screening for Postpartum Depression.....	14
Education and Professional Development	16
Theoretical Framework.....	18
Summary.....	19
Chapter 3: Research Methods	20
Project Design.....	20
Setting	20
Sample.....	20
Objective 1	20
Objective 2	21
Consent Needed	21

Instrumentation Sections.....	22
Data Collection Methods	22
Survey	23
Pretest	23
Posttest	23
Statistical Analysis.....	23
Summary	24
Chapter 4: Results	25
Problem.....	25
Descriptive Statistics.....	26
Addressing the PICOT Question	28
Research Questions	29
Interpretations About the Findings	34
Limitations	34
Inferences of Findings.....	34
Summary	35
Chapter 5: Discussion, Conclusions, and Recommendations	36
Interpretation of Findings	36
Implications of Analysis for Leaders	37
EBP Findings and Relationship to DNP Essentials (I-VIII).....	38
Essential I: Scientific Underpinnings.....	38
Essential III: Clinical Scholarship and Analytical Methods for Evidence-Based Practice.....	38
Essential VII: Clinical Prevention and Population Health for Improving the Nation’s Health	38
Essential VIII: Advanced Nursing Practice	39
Recommendations for Future Research	39
Summary	40
References.....	42
Appendix A: Demographic Survey, Pretest/Posttest Scoring.....	51
Appendix B: IRB Approval Letter.....	55

List of Tables

Table 1. Frequency Counts for Selected Variables	27
Table 2. Results of <i>t</i> Test and Mann–Whitney Test Comparing Number Correct Based on Time	30
Table 3. Fisher’s Exact Test Comparing Knowledge Items Based on Time	31
Table 4. Percentage of Correct Answers Sorted by Highest Percentage—Pretest Only	33
Table 5. Percentage of Correct Answers Sorted by Highest Percentage—Posttest Only	33

List of Figures

Figure 1. Bar Chart for Pretest and Posttest Correct.....30

Chapter 1: Introduction

The World Health Organization (WHO, 2020) reported that over 264 million individuals of various ages suffer from depression worldwide. Statistics show the world's leading cause of disability is depression (WHO, 2020). Women are more likely than men to suffer from depression, especially women of childbearing age, according to the National Institute of Mental Health (NIMH, n.d.) and WHO (2020). Depression affects roughly 10% of pregnant women and 10% of women after childbirth (WHO, 2020). Some cases are so severe that the mother may even commit suicide (WHO, 2020). This is unfortunate because so many maternal mental illnesses are treatable (WHO, 2020). Proper interventions can be provided by all health care providers who are trained properly (WHO, 2020).

The American Psychiatric Association (2018) stated that postpartum depression is a significant but treatable medical disorder that causes feelings of great sadness, apathy, and/or anxiety, as well as changes in energy, sleep, and appetite, according to the Centers for Disease Control and Prevention (CDC, 2020). Depression can also begin during pregnancy, referred to as peripartum depression. One of every 7 women will experience peripartum depression (American Psychiatric Association, 2018). Postpartum depression does not have one singular cause; physical and emotional factors contribute to it (National Institutes of Health [NIH], n.d.). A variety of psychological stressors can be experienced in the postpartum period (Negron et al., 2013). A strong predictor of postpartum depression is not having enough support or inconsistent social support after birth (Negron et al., 2013). Postpartum depression might be exacerbated by dissatisfaction with the social assistance provided (Negron et al., 2013). Because the postpartum trimester is a vulnerable period for mothers, they have a higher probability of developing mental illnesses such as depression and anxiety (American Psychiatric Association, 2018).

The U.S. Prevention Services Task Force (USPTT) updated its recommendations to include pregnant and postpartum women in adult depression screenings in primary care settings (American Psychiatric Association, 2018). PPD carries the risk of making it difficult for mothers to care for themselves and their infants (NIH, n.d.). Untreated peripartum depression affects both the mother's and the infant's health as well as their quality of life (American Psychiatric Association, 2018). It is important that mothers who are identified receive timely mental treatment.

There is a lack of nurse knowledge and training about postpartum depression in this one organization in north Texas. The purpose of this study was to improve postpartum nurses' knowledge of how to use the Edinburgh Postpartum Depression Screening (EPDS) tool to properly screen for PPD. The intervention's effectiveness was measured by comparing the pretest knowledge assessment scores and the posttest scores 1 month post lecture. Increasing postpartum nurses' knowledge of PPD screening should improve early identification of PPD, leading to earlier intervention and professional support in the immediate postpartum period.

Problem of Interest

Although the U.S. Preventive Services Task Force (USPSTF, 2016) and the American College of Obstetricians and Gynecologists (ACOG, 2018b) have recommended an established perinatal depression screening protocol, many U.S. community-based hospitals do not have one. In addition to having an effective screening protocol in hospitals, nurses need to be adequately trained on PPD to appropriately assess the mother's mental status and to correctly administer the tool. Health care providers must be convinced of the significance of PPD to change the trajectory of the diagnosis and treatment of the condition. When more providers and nurses become aware of their responsibility to educate, screen, treat, or refer promptly, it will be beneficial to both

mothers and infants, as well as the community. It has been established that screening is important; however, screening alone is not enough. A protocol needs to be in place once a mother has a positive screening that includes referral and follow-up appointments (Horowitz et al., 2009). These are essential to accurately diagnose PPD (Horowitz et al., 2009). Therefore, nurses need to have the proper training to enhance their knowledge, attitudes, and skills in early identification and screening for PPD.

Background of Problem of Interest

The Association of Women's Health, Obstetric and Neonatal Nurses (AWHONN) advises education for nurses regarding PPD and how to appropriately screen for it due to such high rates of postpartum depression (Kendig et al., 2017). Professional health care associations recommend universal screening for maternal depression symptoms during the perinatal period, including the ACOG, American Academy of Family Physicians (AAFP), and American Academy of Pediatrics (AAP; Earls et al., 2019). Bright Futures and the American Academy of Pediatrics Mental Health Task Force both suggested screening as a best practice in caring for newborns and their families (Earls et al., 2019). The USPSTF (2016) recommended mental health screenings during and after pregnancy. The first few weeks after giving birth are crucial for both the infant and the mother, as they set the tone for overall health and well-being (ACOG, 2018a). The ACOG (2018a) recommended that postpartum care be a continuous process and not just a single encounter between the patient and the provider. Most new mothers are unsure of what to expect after delivery; therefore, anticipatory guidance should discuss infant feeding and sleep deprivation as well as postpartum emotional and physical well-being.

Purpose of Study

Nurses need to be adequately trained on PPD to screen for it appropriately. In this study, I attempted to establish the efficacy of educating nurses on postpartum depression and the appropriate use of the Edinburgh Postnatal Depression Scale (EPDS). The expected result is that after receiving a lecture on PPD and the EPDS screening tool, the postpartum nurses would have increased knowledge in PPD. Both mother and infant outcomes should improve due to the nurses' ability to appropriately screen for PPD. The next step would be to have protocols in place when there are positive screens, but that was outside of the scope of this study.

A mental illness known as PPD dampens what is usually considered one of the happiest times in a mother's life (Lind et al., 2017). PPD affects the mother, infant, and family. Women often present for routine follow-up appointments in the beginning months of their infant's life, which are opportunities for PPD screening; however, only about half of the mothers who have PPD are screened and diagnosed (Lind et al., 2017). Women often suffer in silence because they do not seek help due to the stigma of being a danger to their children. Many mothers may want help but are completely unaware that help is available to them (Lind et al., 2017). As a result, universal screening in maternity and pediatric offices are encouraged by various organizations, including the ACOG and the AAP (Lind et al., 2017). Therefore, the objective of this project was to establish the efficacy of educating nurses on postpartum depression and the appropriate use of the EPDS.

Significance of Problem of Interest

This study holds significance for nurses, postpartum mothers, their infants, and their families. It will impact nursing practice by providing increased knowledge of PPD. The study addressed why both mom and infant benefit from PPD screening. As more women are diagnosed

with PPD, the demand for secondary/tertiary prevention as well as treatment resources will grow (Castle, 2008). It will require a team effort of nurses, nurse-midwives, obstetricians, primary care providers, pediatricians, and mental health professionals to ensure the need is met (Castle, 2008). Future research examining how varying disciplines can collaborate to meet the needs of this population will aid the coordination of efforts (Castle, 2008). Lind et al. (2017) hypothesized the sooner mothers are diagnosed and treated, the quicker their symptoms will dissipate. The screening protocol gives nursing personnel a structure to follow to make the screening and follow-up process easier.

Nature of Project

I educated the postpartum nurses at a large metropolitan hospital on PPD signs and symptoms and how to screen women using the EPDS. A pretest was administered before the lecture began. Once education on PPD was completed, the nurses were reassessed to determine if knowledge increased by administering a posttest 1 month afterward. Since the postpartum nurses are in prime positions to screen and detect risk factors for PPD in women, they must be well educated on the topic and have referrals in place once screening is positive (AWHONN, 2015).

Research Questions

The research questions that guided this study were as follows:

RQ1: After participating in a postpartum depression education course, what effect does the course have on PPD knowledge?

RQ2: How does the use of only a PPD lecture affect the posttest scores of postpartum nurses?

The PICOT question is a steady “formula” that creates answerable, researchable questions (Melnik & Fineout-Overholt, 2011). The continuing education literature states that

knowledge gain is not enough to change practice; measuring self-efficacy is a step in between the education and monitoring of practice change (Kirkpatrick Partners, 2021). This PICOT pivots on the question for postpartum nurses: Does the PPD educational PowerPoint presentation for postpartum nurses result in a significant improvement in knowledge of PPD and improved confidence in PPD screening?

P—For postpartum nurses

I—does an educational lecture on PPD and the purpose of the Edinburgh Postnatal Depression Scale (EPDS)

C—compared to no educational course on PPD and the EPDS screening tool at the hospital

O—result in a significant improvement in PPD knowledge based on posttest scores

T—1 month post-PowerPoint presentation on PPD?

Hypothesis

Providing postpartum depression education to nurses will increase their awareness of PPD, allowing them to appropriately screen for PPD using the EPDS. The prediction is that when the postpartum nurses are educated on PPD, they will be able to educate, screen, and identify mothers at risk for PPD.

Theoretical Framework

Beck's theory was formulated after a pervasive study of postpartum mothers discharged early from the hospital (Beck, 2002). Beck's theory, titled Teetering on the Edge, provides a framework that describes the mother's lived experiences of PPD (Marsh, 2013). The goal of this theory is to assist mothers suffering from PPD. A higher level of care can be provided to patients by nurses using this theory due to its holistic approach (Marsh, 2013). Beck's theory can be used

in the prenatal and postpartum periods (Lasiuk & Ferguson, 2005). Using Beck's approach, the patient gains a better knowledge of their feelings, both physical and emotional (Marsh, 2013). This theory also allows the nurse to assess and implement interventions related to PPD (Marsh, 2013). According to Beck's (2002) beliefs, early discharge puts mothers at a greater risk of developing "maternity blues" at home since symptoms usually develop within a week of postpartum; therefore, educating the nurses on PPD would have a greater impact on prevention and diagnosis by performing the appropriate screenings before hospital discharge.

A review of the literature revealed there was a scarcity of available research incorporating Beck's theory of PPD into the nursing school curriculum, administration, and practice (Marsh, 2013). Pregnant and postpartum patients can benefit from the use of Beck's theory (Marsh, 2013). The first step to reducing the impact of PPD is primary prevention. Reducing the impact of PPD will improve outcomes not only for the mom and infant but also the other members of the family.

Definition of Key Terms

Antenatal. The antenatal period is the period between conception and birth (Farlex Partner Medical Dictionary, 2018).

Perinatal. The perinatal period is the time frame immediately before and after birth. It begins at the 20th–28th week of gestation and ends 1 to 4 weeks after delivery (MedicineNet, 2021).

Peripartum depression. Peripartum depression is depression that begins during pregnancy or after childbirth (American Psychiatric Association, 2018).

Policy. Policy is a law, regulation, procedure, administrative action, incentive, or voluntary practice of governments and other institutions (CDC, 2015).

Postpartum blues. Postpartum blues occurs when a woman feels sad the first few days after having her baby and is sometimes referred to maternal blues (CDC, 2020).

Postpartum depression. Postpartum depression occurs when a mother develops moderate or severe depression soon after delivery; symptoms could last up to 1 year after delivery (NIH, 2018).

Procedure. A procedure is a set of actions that are the official or accepted way of doing something (Cambridge University Press, 2018).

Screening tools. Screening tools are an objective metric/language a clinician uses to provide testing for patients to help diagnose and prescribe treatment if needed (Hazelden Foundation, 2016).

Scope of Project

Current literature confirms there is a need to implement PPD screening programs in metropolitan hospitals on postpartum units. Screening with evidence-based tools, such as the EPDS, on postpartum units is a feasible and effective way to improve the diagnosis of PPD (Sit & Wisner, 2009). Implementation of a protocol for PPD screening will improve both the mother's and the baby's outcomes. In this study I evaluated whether education on PPD and the EPDS results in improvement in knowledge about PPD for postpartum nurses. I also determined whether the course impacted the postpartum nurses' ability to effectively screen for PPD using the EPDS. After administering the pretest and conducting the lecture, a posttest was administered 4 weeks afterward to reassess the postpartum nurses' knowledge.

Summary

According to the literature, mothers, infants, and their families will benefit from establishing a perinatal depression screening protocol. PPD that is left untreated can be costly to

both the mother and her child, as well as the entire family (Rafferty et al., 2019). PPD screening remains far from universal currently. Adequate evidence suggests clinical outcomes improve for postpartum women when combining PPD screening and having suitable support systems in place (Yogman, 2016). This study will be beneficial to health care delivery by providing evidence on why postpartum nurses should receive continued education regarding PPD and the EPDS screening tool. The study will hopefully influence health care institutions to have an evidence-based protocol in place for PPD that will improve the quality of care for patients.

Chapter 2: Literature Review

Purpose

I performed a review of literature utilizing CINAHL, Google Scholar, and MEDLINE. Articles and research studies dating from 2001–2020 were included in the review. *Postpartum depression, postpartum depression therapy, postpartum depression education, peripartum, postpartum depression outcomes, and PPD screening tools* were among the keywords utilized in the search. About 10,500 results were retrieved initially; however, only 18 articles met the inclusion criteria most closely. Clinical practice guidelines were retrieved from professional organizations, including the AAP, ACOG, AWHONN, CDC, NIH, and USPSTF. In this review, I evaluated the most up-to-date literature, addressed gaps in research, and formed inferences based on the latest evidence.

Risk Factors for Postpartum Depression

A history of premenstrual syndrome, depression, prior PPD, postpartum blues, as well as unwanted gender appear to be strong predictive factors for PPD (Ghaedrahmati et al., 2017; Mehta & Mehta, 2014). Low socioeconomic level, being a single and/or teenage mother, having low self-esteem, prenatal anxiety, substance use, poverty, personal or familial history of depression, insufficient social support, and facing general life stressors are all psychosocial risk factors for PPD (Lancaster et al., 2010; Underwood et al., 2017; Woods et al., 2004). Another possible contributing factor to PPD is parents' low self-esteem, which induces stress (Underwood et al., 2017). According to PRAMS data from 2004 to 2005, younger non-Hispanic African American moms were more likely to experience postpartum depression symptoms (CDC, 2008).

Prevalence of Postpartum Depression

According to the CDC (2020), 11%–20% of women in the United States have some form of sadness throughout the postpartum period. Depression is the most common neuropsychiatric complication of postpartum (CDC, 2020). The USPSTF suggested the general population be screened for perinatal depression (Siu et al., 2016). However, proper systems need to be in place to assure the appropriate diagnosis and treatment is given (Siu et al., 2016). A grade B recommendation was given for screening for depression due to the potential benefits and cons (Siu et al., 2016).

Postpartum Depression Diagnosis

The *Diagnostic and Statistical Manual of Mental Disorders, 5th Edition* (DSM-5) defined PPD as a major depression that begins in peripartum or within 4 weeks of childbirth (American Psychiatric Association, 2018). When depression develops during pregnancy or within the first year following delivery, it is referred to as perinatal depression (American Psychiatric Association, 2018). The American Psychiatric Association (2018) defined PPD as a significant but treatable medical disorder characterized by excessive sorrow, indifference, and/or anxiety. Changes in energy, sleep, and appetite may occur with PPD.

Maternal and Infant Outcome

Sometimes the symptoms of PPD can be so extreme they affect a mother's competence of care for self and her infant (Stephens et al., 2016). The Centers for Medicare and Medicaid Services stated PPD has the potential to raise health care expenses, cause developmental delays for the child, and cause negative social outcomes (Stephens et al., 2016). There are long-term physical and behavioral health consequences for children living with mothers who have depression (Stephens et al., 2016). Identifying PPD early on allows for earlier treatment, which

can reduce negative outcomes for mothers, children, and families. This further validates the importance of screening and treating maternal depression (Stephens et al., 2016).

Barriers

The shortage of health care providers and resources along with the stigma accompanying mental issues are just some of the barriers associated with receiving effective treatment for women with PPD (WHO, 2020). Logsdon et al. (2018) suggested health care professionals can either help or hinder patients' self-seeking behaviors. Inaccurate assessments, along with insufficient knowledge about PPD, hinder patients from receiving treatment (Logsdon et al., 2018). Mothers become hesitant to seek treatment when health care providers downplay their feelings and symptoms (Logsdon et al., 2018). Mothers often are dissatisfied with their OB/GYNs and family physicians mostly because they don't have time to counsel and prefer to prescribe antidepressants instead of combining counseling with pharmacotherapy (Logsdon et al., 2018).

Overcoming Barriers

There are several options for overcoming barriers to seeking treatment for PPD. In 2015 AWHONN released a position statement endorsing guidelines to screen all pregnant and postpartum women for perinatal mood and anxiety disorders. AWHONN (2015) supports laws, regulations, and public health efforts that help raise awareness, remove stigma, lower treatment barriers, and enhance research on perinatal mood and anxiety. AWHONN (2015) also recommended providers become flexible and have referral options, recognizing that not all women want medications; some may prefer counseling or both. Women must be supported in their transition to motherhood by addressing both mental health and obstetric concerns (Byatt et al., 2011). To ensure access to mental health care, postpartum units should have protocols in

place that identify interventions that close clinical gaps in PPD, including screening protocols, referrals, and resource guides (Byatt et al., 2011). Byatt et al. (2011) stated that prevention, detection, and management of depression should be incorporated into perinatal care. Hospitals need to develop screening processes and infrastructure to prevent and manage depression (Byatt et al., 2011). One example is providing educational training for all medical providers who encounter perinatal women (Byatt et al., 2011). Mothers should also be educated on PPD beginning in the first trimester throughout the postpartum period. It is imperative to create supportive environments in which women can trust trained providers (Byatt et al., 2011). Unfortunately, there have been few published studies on postpartum depression in the last 5 years. Hopefully, this study will contribute to the current literature.

Mothers should be screened for depression during their hospital stay, whether before or after delivery. Farr et al. (2014) conducted a study on women in New Jersey who gave birth between 2009 and 2010. EPDS scores were recorded on birth certificates and connected to data from the Pregnancy Risk Assessment Monitoring System (PRAMS) survey (Farr et al., 2014). It was discovered that a little under 70% of the mothers had received PPD education by a provider, and a little less than 90% were screened for PPD before hospital discharge (Farr et al., 2014). Both PPD education and PPD screening are achievable during hospital stay, according to this study (Farr et al., 2014).

Education for nurses and mothers is a key factor in combating PPD. Logsdon et al. (2018) discovered educating new mothers about PPD decreases barriers that hinder them from seeking treatment. Nurses play an important role in providing PPD education for mothers (Logsdon et al., 2018). New mothers considered depression screening to be an important aspect of their treatment as well as the availability of community services (Logsdon et al., 2018).

Communication should be clear between in and outpatient maternal health care providers. It is beneficial for new mothers to utilize available resources that will help with a smooth transition for depression assessment, evaluation, and treatment (Logsdon et al., 2018). Literature suggests that larger health corporations that already have an established organizational operation are better suited to begin educating and screening for PPD and evaluating treatment (Logsdon et al., 2018). This study demonstrates when collaborating with various specialty departments, initiation of treatment in larger health care systems improves (Logsdon et al., 2018). Logsdon et al. (2018) discovered educating new mothers about PPD decreases barriers that hinder them from seeking treatment.

Branquinho et al. (2020) revealed that despite the availability of effective therapies such as cognitive behavioral therapy (CBT), only a small percentage of women with PPD seek professional care. Some of the structural hurdles to accessing professional support mentioned by postpartum women include time and financial constraints, as well as transportation and childcare concerns, indicating the need for innovative delivery formats to improve women's access to evidence-based PPD therapies (Branquinho et al., 2020).

Obstetric nurses help moms with PPD confront a number of challenges, including a shortage of time for neonatal care and face-to-face psychotherapy, the high cost of existing medications, and limited access to treatment for women in rural areas (Niksalehi et al., 2018). As a result, in this study I investigated the efficacy of information and communication technologies like the telephone and the internet in assisting women with PPD (Niksalehi et al., 2018).

Screening for Postpartum Depression

Affectability, specificity, timing, recurrence, and follow-up determine any screening tool's viability (Stewart & Vigod, 2016). Several agencies recommend universal PPD screening

(ACOG, 2018a; CDC, 2020; USPSTF, 2018). Multiple studies have shown that the prognosis is better for both mom and infant the earlier PPD is detected and treated (Castle, 2008; Stapleton et al., 2012; Thompson & Fox, 2010; Van der Zee-van et al., 2017). Despite depression being treatable, it often goes undiagnosed (Van der Zee-van et al., 2017). Reasons include the stigma associated with voicing their sadness after giving birth and due to providers' inability to accurately make a diagnosis of PPD once symptoms have been verbalized or observed (Van der Zee-van et al., 2017).

Wilkinson et al. (2017) did a study with 1,000 moms aged 18 to 49 who had given birth to a single child in the previous year. The study demonstrated that screening and treatment for postpartum depression are a cost-effective strategy that should be considered standard postnatal care (Wilkinson et al., 2017). Screening for and treating postpartum depression and psychosis produced 29 more healthy women at the cost of \$943 per woman (Wilkinson et al., 2017). The intervention branch's incremental cost-effectiveness ratios were \$13,857 every QALY gained (below the frequently recognized willingness-to-pay threshold of \$50,000 per QALY gained) and \$10,182 per remission achieved when compared to normal care (Wilkinson et al., 2017). Both deterministic and probabilistic sensitivity assessments of input parameters yielded similar results (Wilkinson et al., 2017). This finding backs up the USPSTF's previously recommended guidelines.

ACOG and the AAP both agreed that routine screening should be performed for perinatal women (Stuart-Parrigon & Stuart, 2014). Farr et al. (2014) looked for places where extra screening could be utilized, estimated the prevalence of PPD, and evaluated how well prenatal education is performed and whether screening was conducted at every delivery. According to the study, over half of the mothers reported a PCP discussed depression with them, and a little less

than 90% were screened at or before discharge from the hospital (Farr et al., 2014). In 2006 New Jersey became the first state to pass a law requiring patients to be educated and screened for PPD before discharge by providers in contact with patients (Farr et al., 2014). The findings demonstrated that educating and screening for PPD during the hospital stay are feasible (Farr et al., 2014). Since postpartum nurses constantly interact with their postpartum mothers, they are in a prime position to screen and counsel them during their hospital stay (Segre et al., 2010). When postpartum nurses offer mental health care, it could remove barriers that limit the identification of depression (Segre et al., 2010). This can improve outcomes for mothers, infants, and children (Segre et al., 2010).

Education and Professional Development

According to the AWHONN (2015), all perinatal women should be tested for mood disorders. Postpartum nurses are in a great position to screen mothers for PPD and teach them about it. According to Legere et al. (2017), there should be protocols in place that guide policies on when to screen mothers as well as educational policies on how to train staff (Legere et al., 2017). The diagnosis is difficult to recognize because women tend to suffer in silence (Legere et al., 2017). Providers' lack of commitment to continued education and professional development decreases their ability to notice symptoms, which then decreases the delivery of high-quality care to mothers experiencing PPD (Legere et al., 2017). Providers often mentioned a lack of formal education in perinatal mental health and the need for continuing education (Legere et al., 2017). The study also suggested that the provider's confidence and knowledge will increase regardless of how perinatal education is delivered (Legere et al., 2017).

The goal of one study was to see how an in-service educational program influenced nurses' knowledge and attitudes about pain treatment in an Ethiopian university hospital.

Between October and November 2016, a quasi-experimental investigation was undertaken (Germossa et al., 2018). The researchers enlisted the help of 111 nurses from Jimma University Medical Center (Germossa et al., 2018). There were 2 consecutive days of intensive pain management education with a follow-up training session after 1 month (Germossa et al., 2018). Following participation in the educational program, the mean rank score of nurses' knowledge and attitudes toward pain considerably increased ($z = 9.08, p = 0.001$; Germossa et al., 2018). In conclusion, the researchers found that the educational program enhanced nurses' knowledge and attitudes about pain treatment (Germossa et al., 2018). Nurses may be able to control pain more effectively as a result of this (Germossa et al., 2018).

Phoosuwan and Lundberg (2020) conducted a quasi-experimental study to assess the knowledge, attitudes, and self-efficacy of public health professionals (PHPs) after participating in a knowledge, attitude, and self-efficacy (KAS) program for identifying and managing perinatal depressive symptoms. The KAS curriculum consisted of 1 day of theory and a 4-week field practice period (Phoosuwan & Lundberg, 2020). A total of 33 PHPs from PCCs took part in the program. A total of 23 of them took part in focus group talks (FGTs). After the PHPs had fully participated in the KAS program, their knowledge, attitude, and self-efficacy levels improved (Phoosuwan & Lundberg, 2020). The knowledge scores for prenatal depressive symptom identification and management increased significantly from 8.94 at T1 (before lectures on theory day) to 9.45 at T2 (after lectures on theory day) and stayed unchanged from T2 to T3 (after 4 weeks of field practice; $p = 0.031$ for trend; Phoosuwan & Lundberg, 2020).

Another study showed that putting in place a nurse education program is useful. The purpose of this study was to investigate nurses' knowledge and attitudes about pain in surgical wards before and after a postoperative management program was implemented at a Jordanian

university hospital (Abdalahim et al., 2011). The program consisted of an education program for nurses, and its effect was evaluated by using a pre- and postintervention design (Abdalahim et al., 2011). Sixty-five registered nurses were asked to respond to a 21-item questionnaire, and 240 patients' records were audited (Abdalahim et al., 2011). The mean scores for all the questionnaire items increased to 75% once the program was implemented, with an average of 16/21 for correct responses (Abdalahim et al., 2011). For a majority of the questionnaire items, there was a statistically significant difference ($p < 0.05$) in the number of correct answers between nurses' responses in the preintervention period and their responses in the postintervention phase (Abdalahim et al., 2011).

Aqel et al. (2020) conducted a study evaluating nurses' knowledge and attitudes toward cancer-related pain and assessed the effectiveness of a pain management education program on nurses' knowledge and attitude toward pain. A quantitative, experimental design was used. The total number of participants who were surveyed at three measurement points was 131, with a completion rate of 87.3%. The study concluded a pain management education program could improve nurses' knowledge and attitude toward cancer-related pain (Aqel et al., 2020).

Theoretical Framework

Beck's theory was created from an extensive study of postpartum depression from mothers who were discharged early from hospitals (Beck, 2002). Beck believed nurses should be observing for signs of postpartum blues during home visits (Beck, 2002). In this study I attempted to determine the effectiveness of educating nurses on PPD and the EPDS screening tool to improve the confidence of the nurses. The expected result is that the postpartum nurses will be able to screen effectively for PPD. Beck felt that all nurses and health care professionals need to routinely screen patients for PPD. Although Beck established the Postpartum Depression

Predictors Inventory (PDPI), the EPDS was employed in this study. This study focused on the postpartum unit, but it can be useful in labor and delivery, antepartum, NICU, pediatrics, mental health, pediatric, and obstetrical and gynecological offices. Both mother and infant benefit from early detection and interventions of PPD (Beck, 2002). Therefore, nurses must be educated on how to observe the patients' moods, provide PPD education, and appropriately screen for PPD during the patients' hospital stay.

Summary

Postpartum depression is a prevalent and serious problem in health care according to the literature. The ACOG, American Psychiatric Association, AWHONN, and CDC hold the position that postpartum nurses should receive continuing education regarding PPD. Then they can appropriately screen mothers in the hospital before discharge. Existing literature shows PPD screening is a cost-effective intervention that should be routinely performed (USPSTF, 2016; Wilkinson, 2017). Having postpartum nurses screen for depression during the hospital stay will help ensure that mothers at risk or who meet the cutoff criteria are identified and diagnosed promptly. It is also important that resources are provided to mothers during their admission to prevent possible complications.

Chapter 3: Research Methods

Project Design

PPD is a mental disorder that can occur from days to months postdelivery and can persist from a few weeks to months if left untreated (American Psychiatric Association, 2018). Therefore, nurses need to screen mothers before discharge to ensure treatment begins promptly if necessary. The goal of the study was to see how effective it was to educate postpartum nurses on PPD and how to screen properly with the EPDS tool at a community hospital. The EPDS was chosen since it is the screening tool for postpartum moms presently in use at the large suburban medical institution. The EPDS was most likely chosen by the suburban hospital because it is one of the most frequently used screening tools for PPD (Shrestha et al., 2016). This chapter explains how the data were collected, what type of consent was needed, the type of survey and tool used to conduct research, and the statistical method used to analyze scores from the pretest and posttest.

Setting

The setting for the study was the postpartum unit in a community hospital in North Texas. The hospital is accredited by The Joint Commission and is Magnet® recognized by the American Nurses Credentialing Center for excellence in nursing.

Sample

The target sample was all 30 postpartum registered nurses; however, only 19 postpartum nurses participated in the demographic survey, 12 took the pretest, and seven completed the posttest.

Objective 1

The goal of Objective 1 was to educate the postpartum nurses on the risk factors, signs, symptoms, and the appropriate screening method for PPD. They also received education on the PPD screening methodology, how to administer and score the screening tool, and what to do if the patients tested positive for PPD. A PowerPoint presentation was used as the educational medium, and it was emailed to the attendees. I provided the education. I also developed both the pretest and posttest.

Objective 2

Objective 2 was aimed to assess for enhanced PPD knowledge. The postpartum nurses were given a posttest to see if their understanding of PPD had improved. The survey, pretest, and posttest were delivered via SurveyMonkey. The participants gave consent for participation by electronically signing the consent form via DocuSign.

Consent Needed

There was no institutional review board (IRB) at the suburban hospital. Approval from the maternal unit manager as well as the chief nursing officer (CNO) was required for this study. This was done to guarantee that all potential risks associated with the use of human subjects, as well as all institutional requirements for postpartum nurses were addressed. Nurses were not required to participate, and there were no penalties for nonparticipation. The only risk to the subjects was potential anxiety from answering the pre- and posttest questionnaires. Knowledge gained for practice improvement is an incentive for the lecture on PPD. A letter was emailed to the CNO and office manager asking to conduct the study, and written permission was given to conduct the study and sent to the IRB. The nurse manager and participants were informed that this class was part of a doctoral project study, and participation was strictly voluntary.

Abilene Christian University (ACU, 2020) established its IRB policy to ensure ethical behavior in the conduct of scholarship and research. The purpose of IRB approval is to ensure that research practices minimize risk to both humans and nonhumans and that potential benefits from research activities are maximized (ACU, 2020). This document ensures procedures that involve human subject participation are based on an equitable selection of subjects and the principle of informed consent, and that participants are not coerced (ACU, 2020). The ACU IRB approved the study, and it was completed.

Instrumentation Sections

Originally, instruments for this project were to include a verbal seminar utilizing a PowerPoint presentation and a handout that highlights key points regarding PPD, contact information for PPD resources, and a brochure for postpartum nurses to utilize. The baseline data were obtained from a brief demographic survey and a pretest consisting of general questions assessing participants' baseline knowledge of PPD (e.g., incidence, onset, risk factors, symptoms, and patient–family education). The pretest and posttest included two multiple-choice questions and seven true–false questions. To assess if the postpartum nurses increased their knowledge from the PowerPoint presentation, nurses were asked to complete the posttest 1 month afterward.

Data Collection Methods

The learning module was developed to provide the content. The EPDS had been utilized as a part of the postpartum discharge packet for postpartum mothers but was now included in the lesson plan for implementation during hospitalization. The class was originally set to include a lecture and a group discussion about PPD and how to effectively screen for it. However, no one agreed to participate in the Zoom conference lecture. Therefore, the PPD PowerPoint was

presented via email and questions could be asked regarding the lecture. There was an identical pretest and posttest during the session. The lecture included the definition of etiology, signs, symptoms, and treatment of PPD. After reading the PowerPoint presentation, the nurses should have gained a greater understanding of the risk factors, the signs to look for inpatients, and how to appropriately screen for PPD. The session was to be no more than 60 minutes long in total. After the PowerPoint presentation, an open discussion followed, which allowed the nurses to ask questions.

Survey

A demographic survey was administered to determine the specific demographics of the participants, whether they believed screening for PPD using the EPDS was beneficial, and their confidence in screening for PPD. The demographic survey consisted of nine questions that determined the participants' age, gender, ethnicity, highest degree completed, employment status, and marital status.

Pretest

The participants were asked to complete the pretest via email link. The pretest included questions related to postpartum depression.

Posttest

The participants were asked to complete the posttest 1 month afterward. The objectives were explained to the participants. The posttest included the same questions as the pretest.

Statistical Analysis

The data retrieved from the demographic survey, pretest, and posttest were analyzed using frequency counts for selected variables, Fisher's exact test comparing knowledge items based on time, a *t* test, and the Mann–Whitney test comparing number correct based on time. In

the reporting of any information, no names were utilized. Any reports that were written as a result of this study were reported as a group. These procedures ensured anonymity.

Summary

The goal of this study was to increase the knowledge of postpartum nurses before applying new clinical practice standards at a suburban hospital. The primary purpose was to educate registered nurses who provide postpartum care so they would be able to appropriately screen patients for PPD. The goal was for the nurses to appropriately screen for PPD and then inform the patient's OB/GYN of the results to ensure help is received promptly and limit suffering.

Chapter 4: Results

The purpose of this study was to educate postpartum nurses on the signs and symptoms of postpartum depression and the use of a validated screening tool. The research questions that guided this study were as follows: After participating in a postpartum depression education course, what effect does the course have on PPD knowledge? How does the use of only a PPD lecture affect the posttest scores of postpartum nurses? The related PICOT was as follows:

P—For postpartum nurses

I—does an educational lecture on PPD and the purpose of the Edinburgh Postnatal Depression Scale (EPDS)

C—compared to no educational course on PPD and the EPDS screening tool at the hospital

O—result in a significant improvement in PPD knowledge based on posttest scores

T—1 month post-PowerPoint presentation on PPD?

Problem

Depression affects about 13% of pregnant women and about 10% of women after childbirth (WHO, 2020). Some cases are so severe the mother may even commit suicide (WHO, 2020). The USPSTF updated its recommendations to include pregnant and postpartum women in adult depression screenings in primary care settings (American Psychiatric Association, 2018). PPD carries the risk of making it difficult for mothers to care for themselves and their infants (NIH, n.d.). Therefore, if left untreated, peripartum depression affects both the mother's and the infant's health as well as their quality of life (American Psychiatric Association, 2018). Therefore, it is important that mothers who are identified receive timely mental treatment. Although the USPSTF (2016) and the ACOG (2018b) have recommended an established

perinatal depression screening protocol, many U.S. community-based hospitals do not have one. In addition to having an effective screening protocol in hospitals, nurses need to be adequately trained on PPD appropriately assess the mother's mental status and correctly administer the tool. Education for nurses and mothers is a key factor in combating PPD. Logsdon et al. (2018) discovered educating new mothers about PPD decreases barriers that hinder them from seeking treatment. Since nurses play an important role in providing PPD education for mothers (Logsdon et al., 2018), it is imperative to educate them properly. This study focused on the postpartum unit in a community hospital in north Texas and will hopefully draw more attention for future research to further fill the knowledge gap in the area of PPD education and nursing knowledge.

Descriptive Statistics

Table 1 displays the frequency counts for selected variables. The ages of the nurses ranged from 25 to 34 years (38.5%) to 55+ years (23.1%), with the median age being 39.50 years ($Mdn = 39.50$). Over half the nurses (61.5%) were married. All but two nurses (84.6%) reported that they were female. Sixty-two percent of the sample was Black or African American. Most nurses had either a bachelor's degree (53.8%) or a graduate degree (38.5%). Over half the sample (61.5%) worked part-time. All (100.0%) believed in PPD screening. For PPD screening confidence, 61.6% rated their confidence level as *extremely confident* or *very confident* (see Table 1).

Table 1*Frequency Counts for Selected Variables*

Variable	Category	<i>n</i>	%
Age ^a	25–34	5	38.5
	35–44	2	15.4
	45–54	3	23.1
	55+	3	23.1
Marital status	Married	8	61.5
	Other status	5	38.5
Gender	Female	11	84.6
	Did not answer	2	15.4
Race/ethnicity	Black or African American	8	61.5
	Other	5	38.5
Education	Associate's degree	1	7.7
	Bachelor's degree	7	53.8
	Graduate degree	5	38.5
Employment status	Full-time	5	38.5
	Part-time	8	61.5
Belief in PPD screening	Yes	13	100.0
PPD screening confidence	Extremely confident	4	30.8
	Very confident	4	30.8
	Somewhat confident	5	38.5

^a*Mdn* = 39.50 years.

Tables 3, 4, and 5 present a visual representation of both the pretest and posttest knowledge items. Both the pretest and posttest included questions related to postpartum depression, risk factors, signs and symptoms of PPD, rates of PPD, screening measures, and the effect PPD has on mother–infant interaction. The participants already were knowledgeable in these areas and scored 100% on the following questions: “Anxiety or obsession predisposes to postpartum depression?” “Having a baby with special needs (i.e., premature birth, medical complications, and illness) is a risk factor for PPD?” “Sometimes the first signs of postpartum depression are physical in nature?” The area where the most focus is needed would be on the impacts that PPD has on bonding between the mother and the infant. The participants initially scored 50% on the question, Does maternal postpartum depression have a strong positive effect on mother–infant interaction? However, this could have been related to the verbiage of the question. The topics that fall in the middle that could use more education include risk factors for PPD, the rate at which mothers are affected by PPD, PPD symptoms, onset, duration, and PPD screening methods.

Addressing the PICOT Question

As stated above, the related PICOT was as follows: P—For postpartum nurses, I—does an educational lecture on PPD and the purpose of the Edinburgh Postnatal Depression Scale (EPDS), C—compared to no educational course on PPD and the EPDS screening tool at the hospital, O—result in a significant improvement in PPD knowledge based on posttest scores, T—1 month post-PowerPoint presentation on PPD? To address the PICOT, Table 2 displays the *t* test and Mann–Whitney test comparing the number of correct answers based on time. Both tests were used because of the small sample ($N = 19$). Significant differences in knowledge were not found based on either the *t* test ($p = .32$) or the Mann–Whitney test ($p = .19$; see Table 2).

Table 3 displays Fisher's exact test comparisons for the percentage of correct answers given at pretest and posttest. Fisher's exact tests were used instead of the more common chi-square tests due to the sample size ($N = 19$). Inspection of the table revealed that none of the 10 knowledge questions had significant pretest to posttest gains (see Table 3).

Research Questions

The purpose of the quantitative, longitudinal, quasi-experimental, pretest/posttest study was to determine if providing postpartum education online would influence postpartum nurses' knowledge over a 4-week period. The research questions that guided this study were as follows:

RQ1: After participating in a postpartum depression education course, what effect does the course have on PPD knowledge?

RQ2: How does the use of only a PPD lecture affect the posttest scores of postpartum nurses?

Hypothesis: Providing postpartum depression education to nurses will increase their awareness of PPD, allowing them to appropriately screen for PPD using the EPDS. The prediction is that when the postpartum nurses are educated on PPD, they will be able to educate, screen, and identify mothers at risk for PPD.

To address the PICOT, Table 2 displays the t test and Mann–Whitney test comparing the number of correct answers based on time. Both tests were used because of the small sample ($N = 19$). Significant differences in knowledge were not found based on either the t test ($p = .32$) or the Mann–Whitney test ($p = .19$; see Table 2 and Figure 1).

Table 2

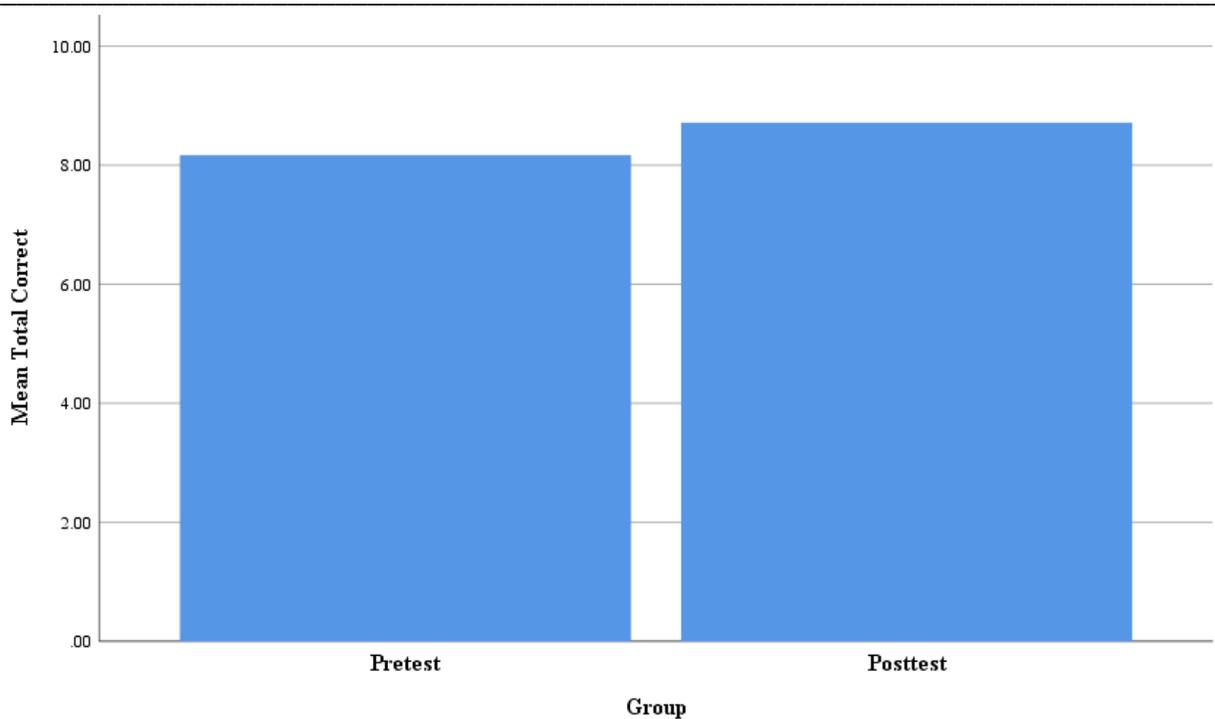
Results of t Test and Mann–Whitney Test Comparing Number Correct Based on Time

Variable	Time	<i>n</i>	<i>M</i>	<i>SD</i>	<i>t</i> test		Mann–Whitney	
					<i>t</i>	<i>p</i>	<i>z</i>	<i>p</i>
Number correct					1.03	.32	1.31	.19
	Pretest	12	8.17	0.94				
	Posttest	7	8.71	1.38				

Note. *N* = 19.

Figure 1

Bar Chart for Pretest and Posttest Correct



Note. *N* = 19. Pretest mean = 82%. Posttest mean = 87%.

Table 3*Fisher's Exact Test Comparing Knowledge Items Based on Time*

Knowledge item	Time	Pretest		Posttest		<i>p</i>
		<i>n</i>	%	<i>n</i>	%	
The symptoms of PPD include?	Incorrect	2	16.7	1	14.3	1.00
	Correct	10	83.3	6	85.7	
What is the most commonly used postpartum depression screening tool?	Incorrect	5	41.7	3	42.9	1.00
	Correct	7	58.3	4	57.1	
Clinicians are encouraged to screen for depression in mothers and fathers?	Incorrect	4	33.3	1	14.3	.60
	Correct	8	66.7	6	85.7	
Anxiety or obsession predisposes to postpartum depression?	Incorrect	0	0.0	1	14.3	.37
	Correct	12	100.0	6	85.7	
Having a baby with special needs (premature birth, medical complications, illness) is a risk factor for PPD?	Incorrect	0	0.0	0	0.0	1.00
	Correct	12	100.0	7	100.0	
PPD is a form of major depression that has its onset within 4 weeks after delivery?	Incorrect	3	25.0	0	0.0	.26
	Correct	9	75.0	7	100.0	
Maternal postpartum depression has a strong positive effect on mother–infant interaction?	Incorrect	6	50.0	1	14.3	.17
	Correct	6	50.0	6	85.7	

Knowledge item	Time	Pretest		Posttest		<i>p</i>
		<i>n</i>	%	<i>n</i>	%	
Postpartum depression is a mental health disorder affecting as many as 1 in 9 new mothers?	Incorrect	1	8.3	0	0.0	1.00
	Correct	11	91.7	7	100.0	
Isolation and lack of social support is not a risk factor for PPD?	Incorrect	1	8.3	1	14.3	1.00
	Correct	11	91.7	6	85.7	
Sometimes the first signs of postpartum depression are physical in nature?	Incorrect	0	0.0	1	14.3	.37
	Correct	12	100.0	6	85.7	

As an additional set of analyses, Table 4 displays the pretest percentage of correct answers sorted by the highest percentage. Inspection of the table found 6 of 10 pretest items to have over 80% correct (see Table 4).

Table 5 displays the posttest percentage of correct answers sorted by the highest percentage. Inspection of the table found 9 of 10 posttest items to have over 80% correct (see Table 5).

Table 4*Percentage of Correct Answers Sorted by Highest Percentage—Pretest Only*

Knowledge items	<i>n</i>	%
Sometimes the first signs of postpartum depression are physical in nature?	12	100.0
Having a baby with special needs (premature birth, medical complications, illness) is a risk factor for PPD?	12	100.0
Anxiety or obsession predisposes to postpartum depression?	12	100.0
Isolation and lack of social support is not a risk factor for PPD?	11	91.7
Postpartum depression is a mental health disorder affecting as many as 1 in 9 new mothers?	11	91.7
The symptoms of PPD include?	10	83.3
PPD is a form of major depression that has its onset within four weeks after delivery?	9	75.0
Clinicians are encouraged to screen for depression in mothers and fathers?	8	66.7
What is the most commonly used postpartum depression screening tool?	7	58.3
Maternal postpartum depression has a strong positive effect on mother–infant interaction?	6	50.0

*Note. n = 12.***Table 5***Percentage of Correct Answers Sorted by Highest Percentage—Posttest Only*

Knowledge items	<i>n</i>	%
Postpartum depression is a mental health disorder affecting as many as 1 in 9 new mothers?	7	100.0
PPD is a form of major depression that has its onset within four weeks after delivery?	7	100.0
Having a baby with special needs (premature birth, medical complications, illness) is a risk factor for PPD?	7	100.0
The symptoms of PPD include?	6	85.7
Maternal postpartum depression has a strong positive effect on mother–infant interaction?	6	85.7
Anxiety or obsession predisposes to postpartum depression?	6	85.7
Clinicians are encouraged to screen for depression in mothers and fathers?	6	85.7
Isolation and lack of social support is not a risk factor for PPD	6	85.7
Sometimes the first signs of postpartum depression are physical in nature	6	85.7
What is the most commonly used postpartum depression screening tool?	4	57.1

Note. n = 7.

Interpretations About the Findings

The findings from this study provided an overview on the potential positive impact of the use of PPD education on postpartum nurses. The posttest scores indicated that PPD education positively increased the nurses' knowledge. The demographics results demonstrated that all participants believed in PPD screening. The majority of participants rated their confidence level in screening for PPD as *extremely confident* or *very confident*. The following are examples of questions where scores improved from the pretest to the posttest: For "The symptoms of PPD include?" the pretest score was 83.3%, and the posttest score was 85.7%. For "Clinicians are encouraged to screen for depression in mothers and fathers?" the pretest score improved from 66.7% to 85.7% after the posttest. For "PPD is a form of major depression that has its onset within 4 weeks after delivery?" on the posttest, the pretest score increased from 75.0% to 100.0%. For "Maternal postpartum depression has a strong positive effect on mother–infant interaction?" the score improved from 50.0% on the pretest to 85.7% on the posttest. For "Postpartum depression is a mental health disorder affecting as many as 1 in 9 new mothers?" this question improved slightly from 91.7% on the pretest to 100% on the posttest.

Limitations

Due to the COVID-19 pandemic, the original plan of in-person presentation with immediate audience interactions and patient simulation scenarios was not possible. The education literature suggests that reading a PowerPoint alone is not particularly viable in adult learning. The number of participants was too low for statistical significance. The research site included only one hospital and may not be representative of postpartum nurses in other settings.

Inferences of Findings

- Many of the nurses were already knowledgeable and comfortable.

- Inclusion of the screening tool in the nursing plan within the electronic health record (HER) could assist with implementation.
- The use of PP alone versus expanded training using simulated patient scenarios may result in different findings.

Summary

In summary, postpartum nurses were taught the signs and symptoms of postpartum depression as well as the use of a validated screening tool in this study. The PICOT question (PPD knowledge will increase) was not found (see Table 2). While results showed no statistical significance due to the small sample size, a slight increase in knowledge did occur based on posttest scores. In the final chapter, these findings will be compared to the literature, and conclusions and implications, as well as a set of recommendations for future research, will be drawn.

Chapter 5: Discussion, Conclusions, and Recommendations

In this chapter, I will compare these findings to the literature, draw conclusions and implications, and offer a series of recommendations. The gap in clinical practice was that patients only complete a postpartum depression screening tool during the 6-week follow-up visit with their OB/GYN, leaving a gap in PPD detection and care during the immediate postpartum period. The primary goal of this study was to evaluate the PICOT: P—For postpartum nurses, I—does an educational lecture on PPD and the purpose of the Edinburgh Postnatal Depression Scale (EPDS), C—compared to no educational course on PPD and the EPDS screening tool at the hospital, O—result in a significant improvement in PPD knowledge based on posttest scores, and T—1 month post-PowerPoint presentation on PPD?

Interpretation of Findings

This study found that educating nurses on PPD did not show statistical significance due to the small sample size; however, a slight improvement in knowledge did occur based on posttest scores. The assumption is that better-educated nurses will be more helpful to mothers during their hospital stay and will be able to refer them for treatment early in the course of the depression. The sample size revealed individual results showed areas of improvement. This supports Beck's theory that educating nurses on PPD will make them have a better understanding of the condition. Questions that improved from pretest to posttest include the following: For "The symptoms of PPD include?" the pretest score was 83.3%, and the posttest score was 85.7%. For "Clinicians are encouraged to screen for depression in mothers and fathers?" the pretest score improved from 66.7% to 85.7% after the posttest. For "PPD is a form of major depression that has its onset within 4 weeks after delivery?" on the posttest, the pretest score increased from 75.0% to 100.0%. For "Maternal postpartum depression has a strong positive effect on mother–

infant interaction?” the score improved from 50.0% on the pretest to 85.7% on the posttest. For “Postpartum depression is a mental health disorder affecting as many as 1 in 9 new mothers?” this question improved slightly from 91.7% on the pretest to 100% on the posttest. Overall, there were five questions that showed improvement from the 10-question pretest to posttest.

Beck’s theory on postpartum depression held that nurses should be observing for signs of postpartum blues during home visits (Beck, 2002). Beck felt that all nurses and health care professionals need to routinely screen patients for PPD. Both mother and infant benefit from early detection and interventions of PPD (Beck, 2002). Therefore, nurses must be educated on how to observe the patients’ moods, provide PPD education, and appropriately screen for PPD during the patient’s hospital stay. My findings fit with my theoretical framework emphasizing that there must be proper education for postpartum nurses on PPD to improve knowledge so that nurses will be able to appropriately screen for PPD.

Implications of Analysis for Leaders

Current nursing leadership should care about the findings from this project because it demonstrates that any perinatal depression professional development education will improve certain areas of the nurses’ knowledge and is far more beneficial than no education at all. For clinical and academic instructors, education can be a valuable resource for improving health care workers’ confidence, attitudes, and knowledge about PPD. Further research comparing various educational and professional development initiatives is needed to discover the most effective strategies and consistently satisfy the needs of health care personnel in order to achieve optimal health outcomes (Legere et al., 2017).

EBP Findings and Relationship to DNP Essentials (I-VIII)

Essential I: Scientific Underpinnings

Postpartum depression (PPD) is a mood disorder that affects 10% to 15% of new moms. It should be distinguished from milder forms of the more prevalent postpartum blues. PPD has a tremendous impact not only on the mother but also on the child. An effective screening strategy in the antepartum and postpartum periods can help prevent the progression of mild blues into more serious depression. This study allowed me to acknowledge a health care delivery gap in nursing education on postpartum depression. This study developed a new approach, utilizing nursing theories to improve the current process while evaluating the outcome for future implementation.

Essential III: Clinical Scholarship and Analytical Methods for Evidence-Based Practice

The initiative will allow the DNP candidate to translate nursing research into practice by designing and implementing a quality improvement study for the postpartum nurses at the suburban hospital. Developing a postpartum depression screening protocol for postpartum women at the community-based hospital will be beneficial.

Essential VII: Clinical Prevention and Population Health for Improving the Nation's Health

The essential focus is on the promotion of population health. The quality improvement initiative is in line with the Healthy People 2020 maternal, infant, and child health initiative promoting maternal mental health awareness and education. I analyzed the clinical data on postpartum depression and synthesized psychosocial and cultural dimensions to develop, implement, and evaluate the intervention for population health promotion.

Essential VIII: Advanced Nursing Practice

Since nurses who work with pregnant women and new mothers are well-positioned to conduct routine screenings to identify at-risk women, initiate effective interventions to ensure the woman's and the newborn's safety, and improve access to community-based perinatal mental health providers and support groups, they are well-positioned to perform routine screenings to identify at-risk women, initiate effective interventions to ensure the woman's and newborn's safety, and improve access to community-based perinatal mental health providers and support groups. It is extremely beneficial that nurses are knowledgeable of the aforementioned (AWHONN, 2015). I developed, implemented, and evaluated the intervention to improve nurses' understanding of the risk factors, the signs to look for in patients, and how to appropriately screen for PPD. This will allow the nurse to work as a change agent to support the provision of high-quality, evidence-based care for women who are experiencing or who may be at risk for PPD.

Recommendations for Future Research

Given these findings and what the literature says, there is more research to be done to evaluate which adult learning styles would be better suited for educating nurses to improve knowledge. For nurses to effectively screen for PPD, it is important to eliminate barriers to screening, such as lack of knowledge and skills. In the future, a quasi-experimental study design would possibly be beneficial. A larger population size would have been useful in this study. Also, a different population that included antepartum, labor and delivery, and neonatal intensive care nurses may yield different results. Antepartum patients who spend a significant period awaiting delivery with the added pressures of bed rest and hospitalization are at exceedingly high risk for depression. These units are also important sites for screening. It is also recommended

that the same study design be used in different settings and the findings be compared between settings, as it can offer more generalizability of the findings.

Another recommendation would be expanding the methods of delivering the education to include more interaction. Expanding the measurement to include not just knowledge gain but nursing self-efficacy and actual change in practice would add validity to the efficacy of nurse education. Ultimately, a follow-up study of the impact of practice change on the target population would further validate the role of education in improving professional practice. In this study, for confidentiality purposes, no unique identifier was collected with the responses. The implication of this is that I did not link the pretest data to the posttest data; therefore, the pretest responses cannot be connected to the posttest. Not being able to connect the pretest to the posttest data is why the Mann–Whitney tests and chi-square tests were used to separate the pretest group from the posttest group. Had I been able to link the pretest answers to the posttest answers for each nurse (a repeated-measures situation), it would have allowed me to have used the Wilcoxon matched-pairs tests to compare the scale scores and McNemar tests to compare the dichotomous (correct/incorrect) individual answer data. For future studies, a unique identifier should be given to participants to connect the pretest to the posttest.

Summary

PPD is a mental disorder that can occur from days to months postdelivery and can persist from a few weeks to months if left untreated (American Psychiatric Association, 2018). If left untreated, it can have long-term consequences for the woman's physical and emotional health, as well as that of her child and family. Perinatal nurses working in hospitals can help patients with PPD have better results. PPD is a common complication for women all over the world. In the process of actively and consistently screening for PPD. Perinatal nurses working in hospitals can

help patients with PPD have better results; therefore, nurses should be better educated on the topic and screening. While results showed no statistical significance due to the small sample size, a slight increase in knowledge did occur based on posttest scores.

References

- Abdalahim, M. S., Majali, S. A., Stomberg, M. W., & Bergbom, I. (2011). The effect of postoperative pain management program on improving nurses' knowledge and attitudes toward pain. *Nurse Educational Practice, 11*(4), 250–255.
<https://doi.org/10.1016/j.nepr.2010.11.016>
- Abilene Christian University. (2020). *ACU institutional review board policy*.
<https://www.acu.edu/community/offices/academic/orsp/human-research/irb-policy.html>
- American College of Obstetricians and Gynecologists. (2018a). *ACOG committee opinion*.
<https://www.acog.org/Clinical-Guidance-and-Publications/Committee-Opinions/Committee-on-Obstetric-Practice/Optimizing-Postpartum-Care>
- American College of Obstetricians and Gynecologists. (2018b). *Perinatal depression*.
<https://www.acog.org/Clinical-Guidance-and-Publications/Committee-Opinions/Committee-on-Obstetric-Practice/Screening-for-Perinatal-Depression>
- American Psychiatric Association. (2018). *What is postpartum depression?*
<https://www.psychiatry.org/patients-families/postpartum-depression/what-is-postpartum-depression>
- Aqel, E. L., Abdullah, O., Ihsan, J., Khaled, A. R., & Ahmad, A. H. (2020). Effectiveness of education program on nursing knowledge and attitude toward pain management. *Asia Pacific Journal of Oncology Nursing, 7*(4), 382–388.
https://doi.org/10.4103/apjon.apjon_17_20
- Association of Women's Health, Obstetric and Neonatal Nurses. (2015). *Mood and anxiety disorders in pregnant and postpartum women*. [https://www.jognn.org/article/S0884-2175\(15\)35319-3/fulltext#secst0025](https://www.jognn.org/article/S0884-2175(15)35319-3/fulltext#secst0025)

- Beck, C. T. (2002). Theoretical perspectives of postpartum depression and their treatment implications. *American Journal of Maternal/Child Nursing*, 27(5), 282–287.
<https://doi.org/10.1097/00005721-200209000-00008>
- Branquinho, M., Canavarro, M. C., & Fonseca, A. (2020). A blended cognitive–behavioral intervention for the treatment of postpartum depression: Study protocol for a randomized controlled trial. *International Journal of Environmental Research and Public Health*, 17(22), 8631. <https://doi.org/10.3390/ijerph17228631>
- Byatt, N., Biebel, K., Friedman, L., Allison, J., & Ziedonis, D. (2011). *Overcoming barriers to perinatal depression treatment*. https://www.umassmed.edu/globalassets/center-for-mental-health-services-research/documents/about/dmh/mw_poster.pdf
- Cambridge University Press. (2018). Procedure. In *Cambridge dictionary*. Retrieved August 1, 2021, from <https://dictionary.cambridge.org/us/dictionary/english/procedure>
- Castle, J. (2008). Early detection of postpartum depression: Screening in the first two to three days. *Journal of Lancaster General Hospital*, 3, 4.
http://www.jlgh.org/JLGH/media/Journal-LGH-Media-Library/Past%20Issues/Volume%203%20-%20Issue%204/V3n4_Castle.pdf
- Centers for Disease Control and Prevention. (2008). Prevalence of self-reported postpartum depressive symptoms—17 states, 2004–2005. *Morbidity Mortality Weekly Report*, 57(14), 361–366. <https://pubmed.ncbi.nlm.nih.gov/18401329/>
- Centers for Disease Control and Prevention. (2015). *Definition of policy*.
<https://www.cdc.gov/policy/analysis/process/definition.html>
- Centers for Disease Control and Prevention. (2020). *Depression among women*.
<https://www.cdc.gov/reproductivehealth/depression/index.htm>

- Earls, M. F., Yogman, M. W., Mattson, G., & Rafferty, J. (2019). Incorporating recognition and management of perinatal depression into pediatric practice. *Pediatrics*, *143*(1), e20183259. <https://doi.org/10.1542/peds.2018-3259>
- Farlex Partner Medical Dictionary. (2018). Antenatal. In *Farlex partner medical dictionary*. Retrieved August 1, 2021, from <https://medical-dictionary.thefreedictionary.com/antenatal>
- Farr, S. L., Denk, C. E., Dahms, E. W., & Dietz, P. M. (2014). Evaluating universal education and screening for postpartum depression using population-based data. *Journal of Women's Health*, *23*(8), 657–663. <https://doi.org/10.1089/jwh.2013.4586>
- Germossa, G. N., Sjetne, I. S., & Hellesø, R. (2018). The impact of an in-service educational program on nurses' knowledge and attitudes regarding pain management in an Ethiopian university hospital. *Frontiers in Public Health*, *6*, 229. <https://doi.org/10.3389/fpubh.2018.00229>
- Ghaedrahmati, M., Kazemi, A., Kheirabadi, G., Ebrahimi, A., & Bahrami, M. (2017). Postpartum depression risk factors: A narrative review. *Journal of Education and Health Promotion*, *6*, 60. https://doi.org/10.4103/jehp.jehp_9_16
- Hazelden Foundation. (2018). *Screening tools*. http://www.bhevolution.org/public/screening_tools.page
- Horowitz, J. A., Murphy, C. A., Gregory, K. E., & Wojcik, J. (2009). Best practices: Community-based postpartum depression screening: Results from the CARE study. *Psychiatric Services*, *60*(11), 1432–1434. <https://doi.org/10.1176/appi.ps.60.11.1432>

Kendig, S., Keats, J. P., Hoffman, M. C., Kay, L. B., Miller, E. S., Moore Simas, T. A., Frieder, A., Hackley, B., Indman, P., Raines, C., Semenuk, K., Wisner, K. L., & Lemieux, L. A. (2017). Consensus bundle on maternal mental health: Perinatal depression and anxiety. *Journal of Obstetric, Gynecologic & Neonatal Nursing, 46*(2), 272–281.

<https://doi.org/10.1016/j.jogn.2017.01.001>

Kirkpatrick Partners. (2021). *The Kirkpatrick model*. <https://www.kirkpatrickpartners.com/Our-Philosophy/The-Kirkpatrick-Model>

Lancaster, C. A., Gold, K. J., Flynn, H. A., Yoo, H., Marcus, S. M., & Davis, M. M. (2010). Risk factors for depressive symptoms during pregnancy: A systematic review. *American Journal of Obstetrics and Gynecology, 202*(1), 5–14.

<https://doi.org/10.1016/j.ajog.2009.09.007>

Lasiuk, G., & Ferguson, L. (2005). From practice to midrange theory and back again: Beck's theory of postpartum depression. *Advances in Nursing Science, 28*(2), 127–136.

<https://doi.org/10.1097/00012272-200504000-00005>

Legere, L. E., Wallace, K., Bowen, A., McQueen, K., Montgomery, P., & Evans, M. (2017). Approaches to health-care provider education and professional development in perinatal depression: A systematic review. *BMC Pregnancy and Childbirth, 17*(1), 239.

<https://doi.org/10.1186/s12884-017-1431-4>

Lind, A., Richter, S., Craft, C., & Shapiro, A. (2017). Implementation of routine postpartum depression screening and care initiation across a multispecialty health care organization: An 18-month retrospective analysis. *Maternal & Child Health Journal, 21*(6), 1234–

1239. <https://doi.org/10.1007/s10995-017-2264-5>

- Logsdon, M. C., Vogt, K., Davis, D. W., Myers, J., Hogan, F., Eckert, D., & Masterson, K. (2018). Screening for postpartum depression by hospital-based perinatal nurses. *American Journal of Maternal/Child Nursing, 43*(6), 324–329. <https://doi.org/10.1097/NMC.0000000000000470>
- Marsh, J. (2013). A middle range theory of postpartum depression: Analysis and application. *International Journal of Childbirth Education, 28*(4), 50–54. <https://www.thefreelibrary.com/A+middle+range+theory+of+postpartum+depression%3a+analysis+and...-a0352490741>
- MedicineNet. (2021). *Medical definition of perinatal*. <https://www.medicinenet.com/perinatal/definition.htm>
- Mehta, S., & Mehta, N. (2014). An overview of risk factors associated to post-partum depression in Asia. *Mental Illness, 6*(1), 5370. <https://doi.org/10.4081/mi.2014.5370>
- Melnik, B. M., & Fineout-Overholt, E. (2011). *Evidence-based practice in nursing & healthcare*. Lippincott Williams & Wilkins.
- National Institute of Mental Health. (n.d.). *Postpartum depression facts*. <https://www.nimh.nih.gov/health/publications/postpartum-depression-facts/index.shtml>
- National Institutes of Health. (2018). *Postpartum depression*. <https://medlineplus.gov/ency/article/007215.htm>
- Negron, R., Martin, A., Almog, M., Balbierz, A., & Howell, E. A. (2013). Social support during the postpartum period: Mothers' views on needs, expectations, and mobilization of support. *Maternal and Child Health Journal, 17*(4), 616–623. <https://doi.org/10.1007/s10995-012-1037-4>

- Niksalehi, S., Taghadosi, M., Mazhariazad, F., & Tashk, M. (2018). The effectiveness of mobile phone text messaging support for mothers with postpartum depression: A clinical before and after study. *Journal of Family Medicine and Primary Care*, 7(5), 1058–1062. https://doi.org/10.4103/jfmpe.jfmpe_120_17
- Phoosuwan, N., & Lundberg, P. C. (2020). Knowledge, attitude and self-efficacy program intended to improve public health professionals' ability to identify and manage perinatal depressive symptoms: A quasi-experimental study. *BMC Public Health*, 20(1), 1–10. <https://doi.org/10.1186/s12889-020-10086-9>
- Rafferty, J., Mattson, G., Earls, M. F., Yogman, M. W., & Committee on Psychological Aspects of Child and Family Health. (2019). Incorporating recognition and management of perinatal depression into pediatric practice. *Pediatrics*, 143(1), e20183260. <https://doi.org/10.1542/peds.2018-3260>
- Segre, L. S., O'Hara, M. W., Arndt, S., & Beck, C. T. (2010). Nursing care for postpartum depression, part 1: Do nurses think they should offer both screening and counseling? *American Journal of Maternal Child Nursing*, 35(4), 220–225. <https://doi.org/10.1097/NMC.0b013e3181dd9d81>
- Shrestha, S. D., Pradhan, R., Tran, T. D., Gualano, R. C., & Fisher, J. R. (2016). Reliability and validity of the Edinburgh Postnatal Depression Scale (EPDS) for detecting perinatal common mental disorders (PCMDs) among women in low-and lower-middle-income countries: A systematic review. *BMC Pregnancy and Childbirth*, 16, 72. <https://doi.org/10.1186/s12884-016-0859-2>
- Sit, D. K., & Wisner, K. L. (2009). Identification of postpartum depression. *Clinical Obstetrics and Gynecology*, 52(3), 456–468. <https://doi.org/10.1097/GRF.0b013e3181b5a57c>

- Siu, A. L., Bibbins-Domingo, K., Grossman, D. C., Baumann, L. C., Davidson, K. W., Ebell, M., Garcia, F., Gillman, M., Herzstein, J., Kemper, A. R., Krist, A. R., Kurth, A. E., Owens, D. K., Phillips, W. R., Phipps, M. G., & Pignone, M. P. (2016). Screening for depression in adults: US Preventive Services Task Force recommendation statement. *JAMA*, *315*(4), 380–387. <https://doi.org/10.1001/jama.2015.18392>
- Stapleton, L. R., Schetter, C. D., Westling, E., Rini, C., Glynn, L. M., Hobel, C. J., & Sandman, C. A. (2012). Perceived partner support in pregnancy predicts lower maternal and infant distress. *Journal of Family Psychology*, *26*(3), 453–463. <https://doi.org/10.1037/a0028332>
- Stephens, S., Ford, E., Paudyal, P., & Smith, H. (2016). Effectiveness of psychological interventions for postnatal depression in primary care: A meta-analysis. *Annals of Family Medicine*, *14*(5), 463–472. <https://doi.org/10.1370/afm.1967>
- Stewart, D. E., & Vigod, S. (2016). Postpartum depression. *New England Journal of Medicine*, *375*(22), 2177–2186. <https://doi.org/10.1056/NEJMcp1607649>
- Stuart-Parrigon, K., & Stuart, S. (2014). Perinatal depression: An update and overview. *Current Psychiatry Reports*, *16*(9), 1–9. <https://doi.org/10.1007/s11920-014-0468-6>
- Thompson, K. S., & Fox, J. E. (2010). Post-partum depression: A comprehensive approach to evaluation and treatment. *Mental Health in Family Medicine*, *7*(4), 249–257. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3083254/>

- Underwood, L., Waldie, K. E., D'Souza, S., Peterson, E. R., & Morton, S. M. (2017). A longitudinal study of pre-pregnancy and pregnancy risk factors associated with antenatal and postnatal symptoms of depression: Evidence from growing up in New Zealand. *Maternal and Child Health Journal*, *21*(4), 915–931.
<https://doi.org/10.1016/j.ajog.2009.07.041>
- U.S. Department of Health and Human Services, National Institutes of Health, National Heart, Lung, and Blood Institute. (2003). *Managing asthma. A guide for schools* (NIH Publication No. 02-2650). http://www.nhlbi.nih.gov/health/prof/lung/asthma/asth_sch.pdf
- U.S. Preventive Services Task Force. (2016). *Depression in adults: Screening*.
<https://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/depression-in-adults-screening1>
- Van der Zee-van, A. I., Boere-Boonekamp, M. M., IJzerman, M. J., Haasnoot-Smallegange, R. M., & Reijneveld, S. A. (2017). Screening for postpartum depression in well-baby care settings: A systematic review. *Maternal and Child Health Journal*, *21*(1), 9–20.
<https://doi.org/10.1007/s10995-016-2088-8>
- Wilkinson, A., Anderson, S., & Wheeler, S. B. (2017). Screening for and treating postpartum depression and psychosis: A cost-effectiveness analysis. *Maternal and Child Health Journal*, *21*(4), 903–914. <https://doi.org/10.1007/s10995-016-2192-9>
- Woods, S. M., Melville, J. L., Guo, Y., Fan, M. Y., & Gavin, A. (2010). Psychosocial stress during pregnancy. *American Journal of Obstetrics and Gynecology*, *202*(1), 61.e1–61.e61. <https://doi.org/10.1016/j.ajog.2009.07.041>
- World Health Organization. (2020). *Depression*. <https://www.who.int/en/news-room/factsheets/detail/depression>

Yogman, M. W. (2016). Postpartum depression screening by pediatricians: Time to close the gap. *Journal of Developmental & Behavioral Pediatrics*, 37(2), 157.

https://www.mcpapformoms.org/Docs/Publications/Yogman%20Postpartum_Depression_Screening_by_Pediatricians_%206.pdf

Appendix A: Demographic Survey, Pretest/Posttest Scoring

The demographics survey, a pretest, and a similar posttest were administered. The pretest and posttest consisted of two multiple-choice questions and eight true–false questions.

Demographic Survey

How old are you?

Are you married?

What is your gender?

What is your ethnicity (race)?

What is the highest degree you have completed?

What is your current employment status?

What is your marital status?

Do you believe screening for PPD using the EPDS is beneficial?

Confidence in screening for PPD from a level 0 to 5. 0 being not at all and 5 extremely confident. ____

Pretest & Posttest Scoring

Pretest

Multiple Choice

1. The symptoms of PPD include?
 - A. Appetite changes, Sad mood, Fatigue, Feelings of guilt
 - B. Feelings of worthlessness, Hypochondriasis, Delusional beliefs, Mood swings
 - C. Poor concentration, Severe anxiety, increased appetite, Sleep disturbances
 - D. Suicidal thoughts, Irritability, Insomnia, Restlessness

2. What is the most commonly used postpartum depression screening tool?
 - A. Patient Health Questionnaire-9 (PHQ-9)
 - B. Edinburgh Postnatal Depression Scale (EPDS)
 - C. Beck Depression Inventory
 - D. Postpartum Depression Screening Scale (PDSS)

True/False

3. ___T___ Clinicians are encouraged to screen for depression in mothers and fathers
4. ___T___ Anxiety or obsession predisposes to postpartum depression.
5. ___T___ Having a baby with special needs (premature birth, medical complications, illness) is a risk factor for PPD
6. ___T___ PPD is a form of major depression that has its onset within four weeks after delivery.

7. ___F___ Maternal postpartum depression has a strong positive effect on mother-infant interaction
8. ___T___ Postpartum depression is a mental health disorder affecting as many as 1 in 9 new mothers.
9. ___F___ Isolation and lack of social support is not a risk factor for PPD
10. ___T___ Sometimes the first signs of postpartum depression are physical in nature

Posttest

1. ___T_ Sometimes the first signs of postpartum depression are physical in nature
2. ___F_ Isolation and lack of social support is not a risk factor for PPD
3. ___T__ Clinicians are encouraged to screen for depression in mothers and fathers
4. ___T_ Anxiety or obsession predisposes to postpartum depression
5. ___T__ Having a baby with special needs (premature birth, medical complications, illness) is a risk factor for PPD
6. ___T_ PPD is a form of major depression that has its onset within four weeks after delivery.
7. ___F_ Maternal postpartum depression has a strong positive effect on mother-infant interaction
8. ___T__ Postpartum depression is a mental health disorder affecting as many as 1 in 9 new mothers.
9. The symptoms of PPD include?
 - A. Appetite changes, Sad mood, Fatigue, Feelings of guilt
 - B. Feelings of worthlessness, Hypochondriasis, Delusional beliefs, Mood swings
 - C. Poor concentration, Severe anxiety, increased appetite, Sleep disturbances
 - D. Suicidal thoughts, Irritability, Insomnia, Restlessness
10. What is the most commonly used postpartum depression screening tool?
 - A. Patient Health Questionnaire-9 (PHQ-9)
 - B. Edinburgh Postnatal Depression Scale (EPDS)
 - C. Beck Depression Inventory
 - D. Postpartum Depression Screening Scale (PDSS)

Appendix B: IRB Approval Letter

ABILENE CHRISTIAN UNIVERSITY

Educating Students for Christian Service and Leadership Throughout the World

Office of Research and Sponsored Programs

320 Hardin Administration Building, ACU Box 29103, Abilene, Texas 79699-9103
325-674-2885

October 15, 2020



Shecarra Cook
Department of Nursing
Abilene Christian University

Dear Shecarra,

On behalf of the Institutional Review Board, I am pleased to inform you that your project titled "The Effect of Postpartum Depression Screening Education on Postpartum Depression Knowledge",

(IRB# 20-161) is exempt from review under Federal Policy for the Protection of Human Subjects.

If at any time the details of this project change, please resubmit to the IRB so the committee can determine whether or not the exempt status is still applicable.

I wish you well with your work.

Sincerely,

Megan Roth

Megan Roth, Ph.D.
Director of Research and Sponsored Programs