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LOYOLA UNIVERSITY CHICAGO

PEDIATRIC PROVIDERS' PERCEPTIONS OF THEIR ROLE IN EARLY DETECTION OF POSTPARTUM DEPRESSION

A DISSERTATION SUBMITTED TO

THE FACULTY OF THE GRADUATE SCHOOL

IN CANDIDACY FOR THE DEGREE OF

DOCTOR OF PHILOSOPHY

PROGRAM IN NURSING

BY

LAURA AIME DE LA PENA

CHICAGO, IL

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This dissertation is dedicated to my hero: my daughter Annali Alize De La Pena.
Your selflessness inspires me. Thank you for always believing in me.

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ABSTRACT

The birth of a child is usually a happy occasion in a woman's life. It is also often a time of overwhelming anxiety, stress and hormonal changes. Postpartum depression (PPD) could occur during the first year of childbirth in approximately 10-20% of mothers (Waldrop, Ledford, Perry, & Beeber, 2017). PPD is the most common maternal health problem within the first year after childbirth (The American College of Obstetricians and Gynecologists, 2018). Recognition of mothers who are at risk for PPD allows health professionals to initiate care that can prevent further problems for the mother, infant, and the rest of their family.

Screening, assessing, and treating maternal mental health problems should be a main concern in pediatric care, since maternal depression has major effects on children. There is overwhelming evidence of the long-term impact maternal PPD has on infant well-being throughout various research articles. Although there is evidence of the impact PPD has on the mother-infant dyad, there continues to be a lack of implementation within the pediatric care areas, and the lack of national guidelines and policies. Pediatric providers play a significant role in the prevention of negative outcomes for the infant and the maternal-infant dyad (Kurtz, Levine, & Safyer, 2018). Pediatric providers are in a perfect position to support healthy positive outcomes for maternal/infant health.

Eleven providers who see infants within their first year of life from five different organizations were interviewed. The participants were interviewed regarding their perceptions of their role in early detection of PPD. Using a descriptive, qualitative methodology, the data

from the interviews were analyzed. The data from the interviews were coded into 7 codes, and consisting of thirteen sub-codes. The codes that emerged consisted of a wide range of perceptions from healthcare providers who see infants and their mothers during the first year of life. Data from the interviews demonstrated how providers perceive their role as a critical aspect of early detection. Participants unanimously stated the importance of their role in early detection. Although participants were in accordance with the importance of their role in early detection, many issues and concerns did develop from the interviews. These issues ranged from inconsistencies regarding the lack of resources available to offer mothers, lack of collaboration, lack of screening protocols, and the lack of education the providers felt they received. Findings from this study offer much insight into the perceptions providers that see infants within their first year of life have regarding their role in early detection of PPD. In conclusion, this study demonstrates the need to increase awareness, and ensure that proper national guidelines are implemented among healthcare providers, policy makers, and organizations to secure a proper and efficient protocol to ensure the practice of screening all mothers. In addition, the results from this study have major implications in public policy, nursing practice, education, and further research.

CHAPTER ONE

INTRODUCTION

Problem Statement

Postpartum depression (PPD) has various specific negative short and long-term effects on maternal health, child health and development and the overall health of the family (Hamel et al., 2019). The presence of PPD can have a significant impact on an infant's life ranging from delayed developmental milestones to damaging developmental effects on the child's brain. A study by Glynn et al. (2017) investigated the prediction of maternal mood patterns on child temperament and adolescent mental health. According to Glynn et al. (2017) mental health conditions are the consequences of altered cognitive and behavioral conditions early in life. Therefore, maternal mood has been linked as a strong predictor of developmental mental health and should be considered when evaluating early life influences on lifespan mental health. Pediatric providers are in an ideal position to identify PPD, which, if treated, will change the course of infants' development and help to improve maternal mental health. An early diagnosis of PPD allows a timely and tailored approach in addressing PPD, which is critical for optimal results related to the mental and physical development of the infant and establishing the mother-infant bond (Stanescu, Balalau, Ples, Paunica, & Balalau, 2018).

Pediatric providers play a significant role in the prevention of negative outcomes for the infant and the maternal-infant dyad (Kurtz, Levine, & Safyer, 2018). Pediatric providers are in a perfect position to support healthy positive outcomes for maternal/infant health. Although there

is much data to demonstrate the importance of pediatric provider's role in screening mothers for PPD at a well-infant visit, this has yet to be universally implemented throughout pediatric care areas. This lack of implementation and involvement from pediatric providers has become a major concern due to the critical need for early intervention in incidents of PPD.

The well-being of infants and mothers continues to be a major priority in healthcare and in society. Much research has demonstrated the need to follow-up much more closely with the mother and to continue to ensure the safety of both the mother and her infant. Across the country, various changes are being implemented to ensure positive outcomes for families. Illinois Perinatal Quality collaborative (ILPQC) announced in May 2019 that the state will be implementing a new initiative called Improving Postpartum Access to care (IPAC). IPAC was created to optimize the health of all recently delivered women and provide early postpartum access to care during a two-week check-up. As part of the IPAC initiative, one of the priorities of the standard two-week check-up is now maternal mental health well-being. Other organizations and healthcare providers are adopting similar measures and activities in the shared goal of ensuring the safety of the mother and her infant, but pediatric providers continue to lag behind these efforts.

Postpartum Depression

The birth of a child is usually a happy occasion in a woman's life. It is also often a time of overwhelming anxiety. Researchers estimate that PPD occurs during the first year of childbirth in approximately 10-20% of mothers (Waldrop, Ledford, Perry, & Beeber, 2017). However, this is not an accurate assessment since many women go undiagnosed due to the lack of screenings and insufficient screenings. PPD is the most common maternal health problem within the first year after childbirth (The American College of Obstetricians and Gynecologists,

2018). Unlike other conditions, PPD is unique in that it affects the entire family, especially the infant within the first year of life. PPD may have a significant influence on the mother-infant bond, child growth and development (Thurgood et al., 2009). Undiagnosed PPD is extremely detrimental for the mother, child, and whole family. If PPD goes untreated it can lead to postpartum psychosis, which may lead to suicide. A recent study regarding perinatal suicide, accounts for suicide to be 5.3% of perinatal deaths. (Grigoriadis et al., 2017). Suicide is the seventh leading cause of maternal death in postpartum women (Lewis et al., 2011). Maternal depression is an extremely curable condition, specifically when recognized early during the postpartum period (Upadhyaya, Sharma, & Raval, 2014). Recognition of mothers who are at risk for PPD allows health professionals to initiate care that can prevent further problems for the mother, infant, and the rest of their family.

Background

PPD is classified as a multifactorial combination of depressive symptoms and conditions that appear during the first year following childbirth (Chaudron, 2018). According to the American Psychiatric Association Diagnostic and Statistical Manual of Mental Health Disorders-IV (DSM IV) the word postpartum is used to describe symptoms of a major depressive disorder, bipolar disorder, or a short-term psychotic disorder beginning within four weeks of delivery. Perinatal Depression is defined as a major or minor depressive episode that occurs during pregnancy or within the first year after childbirth (American College of Obstetricians and Gynecologists, 2018). PPD develops in 10% to 20% of postpartum patients and presents with a wide range of mild to severe depressive symptoms (Chaudron, 2018). The course of PPD continues to be unknown. The average length of a depressive episode ranges but is approximated to be around five months. The course and length of time until remission continues to be

unknown (Chaudron, 2018). In addition, risk factors include various factors in a women's life ranging from psychosocial factors, past mood disorders to maternal life stresses. The precise pathogenesis of PPD continues to be unknown. It is believed that hormonal and physiologic changes that occur after delivery have a significant influence on a woman and the development of PPD.

PPD can severely impede the mother-infant relationship in relation to the ability to create attachments and bonds (Sriraman, Pham, & Kumar, 2017). Mothers experiencing PPD show a decreased rate of breastfeeding and a lack of interest in providing care for the infant. The presence of PPD in an infant's life does have negative consequences on the infant's brain and development (Kurtz, Levine, & Safyer, 2017). These negative consequences include developmental delays that may lead to impaired social, cognitive, and behavior development. Infants require a secure attachment to a primary caregiver. This attachment and healthy development is dependent on emotional responsiveness and experiences that promote cognitive, social, and emotional growth. When this responsiveness and these experiences do not occur, infants miss the opportunity to develop essential social, emotional, and intellectual abilities (Kurtz, Levine, & Safyer, 2017). Pediatric providers are the healthcare providers that will frequently see the mother-infant dyad during the infant's first year of life for routine child check-ups. Therefore, pediatric primary care providers are in an ideal position to promote and support healthy developmental stages for the infant. They are able to evaluate the mother's emotional well-being and screen them for PPD since they see the mothers the most during the postpartum period (Kurtz, Levine, & Safyer, 2017).

Early detection might seem like an investment, but it pays great dividends in both economic and non-economic terms (van der Maas, 2014). Prompt screenings of PPD are related

to many benefits for the well-being of the mother, child, and overall family as well as for healthcare costs. Early detection might lead to earlier treatment for the mother suffering from PPD. Therefore, early detection might also lead to a decrease of negative exposure for the children of the mothers suffering from PPD. In economic terms, this means fewer resources spent treating the related effects of PPD. In non-economic terms, this means happier, healthier families with stronger bonds and a better chance of meeting developmental milestones.

Early identification and early interventions for PPD can easily be done with a validated screening tool. Healthcare professionals providing services to women in the postpartum period should invite the patient to complete a screening questionnaire (Glasser et al., 2016). In addition, healthcare professionals providing pediatric care to an infant should ask the mother to complete a screening questionnaire at any well-being check-up prior to the infant's first birthday. Routine screening for depression in obstetrics continues to be an effective and achievable approach to improving detection of PPD in mothers (Waldrop, Ledford, Perry, & Beeber, 2017). Consequently, the implementation of a screening tool should not be used to diagnose depression but only to assess and identify those at risk.

Waldrop, Ledford, Perry, and Beeber (2017) discusses that the Edinburgh Postnatal Depression Scale (EPDS) is the most commonly used tool in assessing PPD. The EPDS was implemented to measure depression during the perinatal period and is frequently used to evaluate women at risk for postnatal depression. Cox, Holden, and Sagovsky (1987) identified a lack of proper screening tools for postnatal mothers during their research, which led them to produce the EPDS screening tool. They created each item on the screening tool through vigorous testing during the pilot studies. Both the PHQ-9 and the EPDS are commonly used to screen mothers for postpartum depression (Zhong, Q. et al. 2014). The PHQ-9 is also commonly used to screen

mothers for PPD, it does detect somatic symptoms. However, the EPDS has been validated to detect depressive symptoms comorbid with anxiety during the perinatal period. Therefore, the EPDS is the most widely used screening tool during the perinatal period.

The EPDS consists of 10 questions. Responses are recorded on a four-point Likert scale (0-3) according to the severity of the symptom. This is a scale that assesses the mother's emotional experience within the past seven days. The overall total score is determined by calculating the scores for each of the 10 items. Cut-off score ranges are predetermined and range within institutions from 9 to 13 points. The cut-off scores chosen have demonstrated a change in reliability as seen in research articles (Kurtz, Levine, & Safyer, 2017). The scores of the test can range from 0 to 30. The higher the number the more at risk the mother is to developing perinatal depression.

Significance to Nursing

Identifying the perceptions of pediatric providers toward their role in early detection is significant to nursing. Pediatric providers' perceptions of PPD and their role in screening mothers could determine the long-term outcomes for the mother and her infant. Nursing is in the ideal position to partake in outreach programs to educate healthcare providers regarding PPD, help identify women who might be affected by PPD and provide resources for the newly delivered mother. Mothers have reported issues related to the lack of accessing health care for themselves (Gilbert, Balio, & Bauer, 2017). This can have long-term outcomes for mothers and their infants if they are not able to seek healthcare and be screened for PPD. However, they will seek care for their child, which will allow for access to care for mothers who do not see a healthcare provider of their own. The potential for the negative effects that PPD can have on the infant's development has led to recommendations for pediatric providers to partake in screening

mothers for PPD (Glasser et al., 2016). Fortunately, PPD is identifiable and treatable, which can prevent negative outcomes. However, screening for PPD is not yet universal or mandatory in the pediatric area. If pediatric providers deliver care to both the mother and infant dyad, they will allow for positive outcomes for everyone (Olin et al., 2015). Therefore, it is imperative for pediatric providers to partake in screening mothers for PPD.

There is a lot of literature on the importance of screening mothers for PPD, and organizations like the American Academy of Pediatrics (AAP), American College of Obstetricians and Gynecologists (ACOG), National Association of Pediatric Nurse Practitioners (NAPNAP), and Registered Nurses' Association of Ontario (RNAO) have established their positions that best practice for pediatric providers screening mothers for PPD. However, additional research is needed in fully understanding the perceptions of pediatric healthcare providers on their role in early detection in PPD. The lack of this best practice not being universally implemented has led to the implementation of this study. Since this has not been universally accepted, it is important to get the providers insight and their voices heard regarding their perception of their critical role. Therefore, this demonstrates the importance of this research being done. Qualitative studies will allow further exploration as to the experiences and perceptions pediatric providers have in their role in screening mothers.

Nursing is in a great position to advocate for mothers and their infants and provide greater clinical and public awareness. Nurses are able to implement best practice through actions such as screening, referral and treatment. This study will promote evidence-based protocols, and clinical utility of research interventions. Nurses are able to support maternal mental health, promote community-wide task forces to educate healthcare providers regarding PPD, and develop interventions to help women adjust to the role of mother.

Early identification and screening methods are neither standardized nor required as a standard of care, which creates a key public health concern for perinatal and pediatric populations (Selix et al., 2017). As a result of the lack of standardized care and screening for PPD, the disorder continues to be both under diagnosed and inadequately treated. In addition, gaps in the literature need to be addressed in future research to develop ideal evidence-based service provisions (Glasser et al., 2016). These gaps include research regarding the best way to prevent and detect PPD. To date, studies of PPD have focused on the impact PPD has on infants or the impact of early management (Olin et al., 2015). A qualitative approach to assess perceptions of pediatric providers and their role in early detection would begin to help fill the gaps in research literature by exploring an area that has not been studied. This study would also help expand our knowledge on what pediatric providers see as barriers within the healthcare setting, such as structures, policies, and protocols (Olin et al., 2015). A qualitative study such as this one would allow the opportunity to address and identify how to standardize and implement universal screenings of PPD for mothers within the pediatric setting.

The descriptive qualitative research approach will lead to deep insight on the experience and perceptions of pediatric providers on screening mothers for PPD (Guest, Namey, & Mitchell, 2013). This study will be a valuable resource for all healthcare providers, including nursing, as well as for mothers suffering from PPD and their families. Identifying the perceptions pediatric providers have in regards to their role in providing screenings for PPD and initiating care can prevent further problems for the mother, infant, and the rest of her family. In addition, this descriptive study might lead us to identify if there is a connection with provider perceptions and the barriers they see as negatively impacting the ability to identify or treat PPD in their role.

Results of this study may also help professionals in nursing research, policy, training,

primary care, and maternal mental health in several disciplines to collaboratively increase positive outcomes from PPD on mothers and their children (Selix, 2017). The findings from such a study would provide information and help healthcare administrators put protocols in place that guide practice within their organization. Such protocols would also allow for more frequent screenings throughout their institution and possibly provide for the early detection of PPD. Such knowledge will promote health policies that afford women ample options and provide access to safe and effective treatment. Implementing health policies as a result of these findings might lead to early referral and treatment options that are available and suitable for women experiencing PPD (Guevara et al., 2015). Identifying mothers suffering from PPD at an early stage will have significant implications in promoting positive family outcomes.

Summary

The proposed study will identify pediatric health care providers' perception in their role in screening mothers for PPD. In-depth interviews will be conducted with pediatric health care providers regarding their role in screening mothers for PPD during well-infant visits during the first year. These interviews will provide greater insight and increase knowledge into the effects collaborative practice may have on maternal mental health. This study will be a valuable resource for healthcare team members in identifying the population of mothers suffering from PPD.

The research question for this study is: What are pediatric healthcare providers' perceptions of their role in early detection of postpartum depression?

This study is crucial for many reasons. Addressing pediatric providers' perceptions will be of great value to qualitative research on PPD. PPD is a multidimensional public health concern that necessitates interdisciplinary prevention, screening, referral, and treatment efforts

(Selix, 2017). Within the literature, many researchers emphasize, with significant evidence, the importance of early screening, identification, and treatment for PPD. In addition, there are various potential adverse outcomes related to PPD for infants and their mothers (Guevara et al., 2016). Therefore, it is important for pediatric providers to follow the recommendations from organizations such as ACOG and AAP in screening mothers for PPD. Because adoption of this practice recommendation will identify the perceptions and possible barriers that may inhibit pediatric providers in screening, detecting, and intervening for mothers suffering from PPD (Frankhouser & Defenbaugh, 2017). In order to advance research, a qualitative research study to better understand the perceptions of pediatric healthcare providers in their role in identifying PPD is critical. The lack of following guideline recommendations of screening mothers at well-infant visits has led to the implementation of this study. The well-being of the mother has many consequences for the entire family dynamics, therefore, this warrants further research in addressing these concerns.

There is a common goal amongst healthcare providers to promote and enhance positive patient outcomes. The first years of a child's life is a critical part of their developmental process. PPD can have negative long-term effects on infants, including their health and welfare. This significance is why it is imperative for healthcare providers to detect PPD and to identify and treat it in its early stages. Qualitative research can bring awareness by offering insight and perceptions of pediatric providers and their role in identifying PPD. Further research needs to be implemented in order to identify issues obstructing early identification and enhance the collaboration of multiple disciplines. Further research is needed to support pediatric providers' crucial role in screening mothers for PPD and intervening when appropriate (Guevara et al.,

2016). Qualitative methodology may provide many benefits in addressing issues in early identification of PPD.

CHAPTER TWO

LITERATURE REVIEW

Introduction

A literature search of postpartum depression (PPD) with pediatric involvement was completed to assess existing knowledge and implementation. The following databases were used for this search: CINAHL, PubMed, Google Scholar, and PsycINFO. The search was refined and limited to 1985 to present, English, and peer reviewed research articles. The search terms included: "postpartum depression" and "pediatric providers" as well as "postpartum depression and child development". The search revealed 120 articles that were relevant to pediatric providers and postpartum depression, or to postpartum depression and child development. The articles discussing pediatric providers were refined to their involvement or lack of involvement with PPD. Articles related to postpartum depression were limited to the last five years, unless they were seminal articles about PPD. This led to an end result of 50 articles that were reviewed. Additional sources include professional websites and state regulatory documents from the American Academy of Pediatrics (AAP), American College of Obstetricians and Gynecologists (ACOG), National Association of Pediatric Nurse Practitioners (NAPNAP), the Illinois General Assembly, and Registered Nurses' Association of Ontario (RNOA).

This chapter will include a synthesis and critique of the relevant literature, a summary of what is known regarding PPD, its impact on the infant, and the impact pediatric providers may have on positive outcomes for the mother, her infant, and the family dynamics. The family

dynamics include the relationship between the mother, the infant, other children within the family, and the significant other. The gaps in the literature will also be discussed, which in turn will lead to a summary of how this study will contribute to the knowledge development of the perceptions pediatric providers have of their role of screening mothers for PPD, and resolve some of the gaps in the knowledge.

Pediatric Providers' Role in Early Detection

Screening, assessing, and treating maternal mental health problems should be a main concern for pediatric providers, since maternal depression has major effects on children. Many researchers such as Connelly, Baker, Hazen, and Mueggenborg (2007) stress the importance of pediatric providers performing PPD screenings because of the overwhelming negative effects they may have on the mother and her infant. However, screening by pediatric providers is not yet common practice despite research showing its significant impact on the mother-infant dyad.

Although there is evidence of the impact PPD has on the mother-infant dyad, there continues to be a lack of implementation within the pediatric care areas. Pediatric providers are not taught or trained in a detailed manner regarding PPD; instead they are briefly educated on how to screen mothers for PPD and encouraged to screen the mother (Shahid, 2019). The American Academy of Pediatrics Illinois Chapter (Pinkwater, 2019) played an essential role as a leader, ten years ago, in providing education and training in Illinois primary care settings regarding PPD. However, there is no current ongoing training for pediatric providers. Funding has not been available, and there have been no outreach programs within the past five years within the state of Illinois. The Illinois Department of Healthcare and Family Services Handbook for Providers of Healthy Kids Services does specify that according to the Public Act 95-0469, licensed health care professionals providing care to an infant must ask the mother to

complete a questionnaire to assess whether she suffers from perinatal mental health disorders. Despite the recommendations of these and other organizations, the lack of pediatric involvement in screening mothers for PPD persists.

PPD has specific various negative short and long-term effects on the newly delivered mother, the child's health and development, and the overall health of the family unit. PPD negatively impacts a mother's capability to interact with her infant and family at an emotional and cognitive level, which places the infant at greater risk for an impaired developmental state (Waldrop, Ledford, Perry, & Beeber, 2017). Research has shown the strong negative impact maternal depression may have on infants, including developmental delay, somatic symptoms, behavioral strains, injury, and possible future depression for the infant. In addition, lack of attentiveness in caring for the infant has also been associated with the infant demonstrating signs of failure to thrive, accidents due to maternal inattentiveness, and trauma (Sriraman et al., 2017). The evidence in the research demonstrates the critical role pediatric providers have in early detection of PPD in order to prevent short and long-term injuries for their infant patients. Therefore, there is a need based on research, and yet not common practice. In order to explore this problem, we will examine PPD, its implications on the entire family, current policies, and ethical considerations.

Postpartum Depression

Perinatal Depression is defined as a major or minor depressive episode that occurs during pregnancy or within the first year after childbirth (The American College of Obstetricians and Gynecologists, 2018). However, for the purpose of this study, the focus will be specifically on Postpartum Depression (PPD). Childbirth is a complicated emotional time and has been for centuries. PPD is a major disorder related to the delivery of an infant. Dating back to the times

of Hippocrates in 400 B.C., the relationship between childbirth and mental illness has been identified (Kornstein, & Clayton, 2002). PPD is usually a hindering mental health condition that affects 10-20% of mothers; however, countless cases of PPD continue to be undetected (Waldrop et al., 2017). Epidemiological data continues to demonstrate that the childbearing years place mothers at an increased risk to develop mood disorders. PPD can adversely impact maternal satisfaction and alter the emotional childbirth experience, such as interfere with bonding and cause the mother to perceive childbirth as a negative experience (Waldrop, et al., 2017). When a woman suffers from PPD it negatively impacts the emotional experience of childbirth. PPD has been linked to adverse childhood outcomes associated to growth and development (Bauer, Ofner, Pottenger, Carroll, & Downs, 2017). Childbirth may lead to PPD, which can have a major impact on the mother and her family. Therefore, it is critical for healthcare providers to identify and treat PPD as early as possible.

The World Health Organization (WHO) (2010) estimates that depression will be the second leading cause of premature death and morbidity by 2020. PPD has a major impact on the woman's life in the critical first year after childbirth. PPD is particularly challenging to diagnose due to the diverse symptoms the mother can experience such as fatigue and change in sleep patterns that mimic depression but are often observed in the normal postpartum period (Sylven, 2012). Symptoms of PPD are so similar to other, normal life conditions post-birth that it makes it hard for healthcare providers to detect, unless they are fully educated on PPD. The diverse symptoms and the similarity that PPD has to other postpartum changes lead to inadequate treatment for new mothers. Since it is both underdiagnosed and inadequately treated, medical professionals should stress the importance of efforts to detect this condition. Given the challenges of diagnosing PPD and the high stakes for women and their children, collaborative

practices among maternal and pediatric providers offer a better approach for delivering services to women experiencing PPD.

According to the U.S. Preventive Services Task Force (2018), PPD is unlike any other form of depression that can occur in a woman's life. This is due to the fact that many variables interplay in its severity. The causes of PPD are multifactorial, which includes social, psychological, biological, and genetic factors. If PPD is not identified at an early stage it could lead to many devastating results. Postpartum psychosis may also develop during the postpartum period and may have some interplay with PPD. Postpartum psychosis is a detrimental disorder, much more severe than PPD. Postpartum psychosis does not only entail severe depression but also is characterized by symptoms of agitation, confusion, hallucinations, and delusions (Wilkinson, Anderson, & Wheeler, 2017). Therefore, it is critical to identify PPD as early as possible in order to prevent it from becoming worse.

Early detection might seem like an investment but it pays great dividends in both economic and non-economic terms (van der Maas, 2014). Prompt screenings for PPD are related to many benefits for the wellbeing of the mother, child, and overall family as well as for healthcare costs. Early detection might lead to earlier treatment for the mother suffering PPD. Therefore, early detection might also lead to a decrease of negative exposure for the children of the mothers suffering from PPD. A key strategy to reduce the detrimental impact of PPD is early identification and early intervention.

Defining Postpartum Depression

PPD is defined as the experience of moderate to severe depression with an onset within one year of childbirth. PPD is a major depressive episode according to the Diagnostic and Statistical Manual of Mental Disorders, 5th edition (Sriraman et al., 2017). There are many

clinical manifestations related to PPD. According to the American Psychiatric Association Diagnostic and Statistical Manual of Mental Health Disorders-IV the word postpartum is specifically used to describe symptoms of a major depressive disorder, bipolar disorder, or a short-term psychotic disorder that may begin within four weeks of delivery.

The National Institute of Mental Health (NIH) describes PPD as a mood disorder that causes the mother to feel extreme sadness, anxiety, and exhaustion. In addition, the NIH states that PPD affects the mother and prevents her from completing daily care activities for herself and her entire family. The Oxford Dictionary defines PPD as depression suffered by a mother subsequent to childbirth, usually resulting from a combination of hormonal changes, psychological adjustment, and fatigue.

Symptoms of Postpartum Depression

Symptoms of PPD may occur immediately following childbirth up to within one year after birth (NIHCM, 2010). Symptoms of PPD are often difficult to assess during the postpartum period because oftentimes these symptoms might resemble usual conditions that are experienced by mothers during the postpartum period. Mothers who experience PPD will commonly experience at least five of the identified symptoms (Sylven, 2012; Chaudron, 2018). Mothers experiencing PPD may experience diverse symptoms such as fatigue, change in sleep patterns, weight loss, exhaustion, anxiety, irritability, difficulty concentrating, crying, and feeling overwhelmed. Some of the most prominent symptoms include feelings of hopelessness, worthlessness, loss of interest in usual activities, a depressed mood, and possibly thoughts of death for self or child. Symptoms of PPD usually could last for longer than two weeks; these symptoms occur almost daily and last for most of the day, which impairs functional activities. The symptomatology of PPD can range from minimal to severe. PPD is different from

depression at any other time in a person's life; it is linked to factors related exclusively to the state of motherhood.

Risk Factors

Women who experience PPD may experience a wide range of mental health issues that include mood, anxiety, and psychotic disorders (Noonan, Doody, Jomeen, & Galvin, 2016; Sriraman et al., 2017). There are many risk factors that may lead the mother to experience PPD (The American College of Obstetricians and Gynecologists, 2018). Women who have a history of anxiety or depression are at a higher risk of suffering from PPD. Undiagnosed depression during pregnancy has been linked to be a major risk factor for mothers to develop PPD. In addition, risk factors include young maternal age, lower socioeconomic background, lack of support, alcohol or substance abuse, and family history of depression. Experiencing stressful life events, preterm birth, and breastfeeding problems are also influential risk factors. Obstetrical factors also place mothers at risk for developing PPD. These factors include miscarriage, stillbirth, and traumatic birthing experiences.

Screening for Postpartum Depression

Healthcare professionals providing services to women in the postpartum period should invite the patient to complete a PPD screening questionnaire (Glasser et al., 2016). In addition, healthcare professionals providing pediatric care to an infant should also ask the mother to complete the screening questionnaire at any well-being check-up prior to the infant's first birthday. Waldrop, et al. (2017) discuss that the Edinburgh Postnatal Depression Scale (EPDS) is the most commonly used tool in assessing PPD. The EPDS was implemented to measure depression during the perinatal period and is frequently used to evaluate women at risk for postnatal depression. This scale was developed by Cox, Holden, and Sagovsky (1987) who

identified a lack of proper screening tools for postnatal mothers during their research, which led them to produce the EPDS screening tool. They created this tool throughout various pilot testing interviews with postpartum mothers.

The initial purpose of the EPDS tool was to screen women for PPD in the outpatient setting and at the 6 to 8-week postpartum checkup (El-Hachem et al., 2014; Cox et al., 1987). This screening tool was initially validated by Cox et al. (1987) within their own study (Waltz et al., 2017) and has since then been validated in many countries and in numerous languages. It was created to identify patients who are at risk of developing depressive episodes. Depressive episodes are the predetermined behaviors that the authors of the tool identified as critical elements that can assist healthcare providers in identifying postpartum mothers who are at risk of developing PPD.

Although the EPDS was created for women, specifically in the postpartum period, it has now been validated for use within the entire perinatal period (Upadhyaya, Sharma, & Raval, 2014). Both the clinical and epidemiological value of the EPDS have been validated among various studies with sensitivity and specificity ranging within 70-85% (Matijasevich et al., 2014; Sriraman et al., 2017; Kurtz, Levine, & Safyer, 2017). This range depends on the cutoff point chosen by the healthcare provider. The EPDS tool is used within the perinatal population of all ethnicities and ages. Today, this tool is available on the internet and can be retrieved by lay persons to view and screen themselves. It can be completed in less than five minutes and requires a third grade reading level (King, 2012). The EPDS is free, can be downloaded from the internet, and can also be scored easily.

The EPDS consists of 10 questions. Responses are recorded on a four-point interval, Likert scale (0-3) according to the severity of the symptom. The scale assesses the mother's

emotional experience within the past seven days. The overall total score is determined by calculating the scores for each of the 10 items. The scores of the test can range from 0 to 30. The higher the number the more at risk the mother is to developing perinatal depression. However, any score within 9-13 points should be flagged for follow-up. Cut-off score ranges are predetermined and range within institutions from 9 to 13 points (Kurtz et al., 2017). It is imperative to note that even if the mother scores a 0 on all the questions except for question number 10, the patient should be evaluated further. Question 10 asks if the patient has felt like harming herself; therefore, if she answers anything but no she should be evaluated by her healthcare provider. Even if a woman scores less than 9, an appropriate referral should be made if the healthcare provider feels the patient is at risk for developing PPD or experiencing depression. Screening is the initial step in identifying mothers at risk for PPD. The U.S. Preventive Services Task Force recommends that all pregnant and postpartum mothers be screened for PPD (2018). Screening for PPD is strongly encouraged to prevent devastating effects (ACOG, 2010).

Consequences on Maternal Health

Consequences of PPD on maternal health range from mild, such as not being able to interact with family members, to severe cases, such as maternal suicide. The American College of Obstetricians and Gynecologists (2015) states that perinatal depression is one of the most common medical complications during pregnancy and postpartum period. Maternal suicide exceeds other maternal mortalities, including hemorrhage and hypertensive disorders in the postpartum period. Suicide related to severe depression within the first six months of the postpartum period is related to 21% of maternal deaths (Lewis et al., 2011). Early detection will prevent severe cases of PPD.

Internationally, perinatal mental health is recognized as a vital public health issue. Noonan, Doody, Jomeen, & Galvin (2017) performed a synthesis of primary research to explore the major adverse outcomes associated with perinatal mental health problems which encompass PPD. They reviewed twenty-two articles, which included fifteen quantitative studies, six qualitative studies, and one mixed methods study. They used various articles that included different country of origins including Australia, United Kingdom, Slovenia, USA, Netherlands, and Sweden. They reported that persistent depression and an increased risk of psychosis may have long term damaging effects on the mother. Poor relationship satisfaction, increased risk of suicide, and "epigenetic modifications" may also be a result of PPD if not detected at an early stage (Noonan et al., 2017, p. 56). Preterm birth, low birth weight, and less responsive care toward the infant are related to adverse outcomes for the mother. These are vital implications for screening mothers for PPD in the postpartum period. Noonan et al. (2017) concluded that the perinatal period is a time of increased healthcare utilization and provides a great opportunity to screen mothers and ensure early detection and early intervention.

Cesar, and Chavoushi (2013) wrote a background paper describing and summarizing demographic trends and the burden of disease of major depression for the world, retrieved from the 2010 Global Burden of Disease Study. They discuss the various costs to the family with a family member suffering from depression. Maternal mental illnesses have been strongly linked to putting families with young children at risk for homelessness. The cost of depression in adults is 83.1 U.S. billion dollars annually, with 26.1 billion U.S. dollars (31%) directly related to medical expenses, 51.1 billion U.S. dollars (62%) related to the workplace, and 5.4 U.S. billion dollars (7%) related to suicide or mortality. Depression has also been linked significantly with lost work productivity per year. Estimates of the impact are 36.6 billion U.S. dollars lost

productivity per year related to depression. Costs of depression have a significant monetary impact on the entire family dynamic. Therefore, it is apparent that early interventions continue to represent a rich opportunity for early detection to avoid unnecessary expenditures.

Waldrop et al. (2017) evaluated the current state of the evidence and importance of implementing a screening for PPD in pediatric care settings in their narrative literature review. They discussed the impact PPD might have on maternal health and the recommendations of implementing a screening for PPD in a pediatric primary care setting by various organizations such as AAP, ACOG, and NAPNAP. They reviewed studies and reports that included the negative impacts PPD has and the importance of an implementation of PPD screening in the pediatric primary care setting. This resulted in the discussion that PPD negatively impacts a mother's capability to interact with her infant and family at an emotional and cognitive level, which places the infant at greater risk for an impaired developmental state. Waldrop et al. (2017) research findings are consistent with the recommendations that although there are major negative aspects of PPD for the mother and her infant, early detection and treatment may diminish negative outcomes. Although these findings are strong they may be limited due to the small amount of only seven studies that were used within this article.

Consequences on Infant Health

There is overwhelming evidence of the long-term impact maternal PPD has on infant well-being throughout various research articles. Maternal depression can also lead to child behavior problems and emotional and physical domestic abuse and have long-term effects on emotional behavior and cognitive skills (Knitzer, Theberge, & Johnson, 2008; National Research Council and Institute of Medicine, 2009). Mothers with PPD tend to use a car seat less frequently than a mother without PPD (Balbierz et al., 2014). Childhood psychological issues

that might be linked to having a mother with PPD have a lifetime loss of income of 300,000 U.S. dollars (Balbierz et al., 2014).

Sriraman et al. (2017) wrote an article discussing the practice gap of screening mothers for postpartum depression in the pediatric care area. They focused on laying a foundation explaining PPD, its risk factors, effects of PPD, different screening tools, and treatment options. This article also clarified the importance of why pediatricians should know about PPD, and why their role in early detection of PPD is imperative in the child's critical first year of life. PPD was described to develop within the first year of an infant's life, which is a significant time in the child's developmental and attachment phase. PPD can have negative long-term effects on infants, including their health and welfare, in addition to developing poor attachment skills. Sriraman et al. (2017) reiterate how research has shown the strong negative impact maternal depression may have on infants, including developmental delay, somatic symptoms, behavioral strains, injury, and possible future depression for the infant. In addition, lack of attentiveness in caring for the infant has also been associated with the infant demonstrating signs of failure to thrive, accidents due to maternal inattentiveness, and trauma.

In addition, Sriraman et al. (2017) discuss the increased medical costs PPD may have in relation to the infant. Children with mothers suffering from PPD have been found to have higher rates of emergency department visits and sick visits, and lower rates of well-child care and preventive visits. Sriraman et al. (2017) continues to elaborate that although infants might be brought to well-child visits, depressed mothers are less likely to integrate health care advice. This in turn may introduce further issues such as domestic abuse and child neglect. Finally, Sriraman et al. (2017) stresses as stated previously in the literature review that PPD does not just

affect the mother but will have a negative lasting effect of the maternal-child relationship and will impact the entire family.

Kurtz et al. (2017) reviewed PPD, its impact on infants, and the importance of screening in the pediatric care area. They reviewed evidence of other studies: that the presence of PPD in an infant's life may have negative consequences on the infant's brain and development. Infants require a secure attachment to a primary caregiver. This attachment and healthy development is dependent on emotional responsiveness and experiences that promote cognitive, social, and emotional growth. When this responsiveness and these experiences do not occur, infants miss the opportunity to develop essential social, emotional, and intellectual abilities. Therefore, Kurtz et al. (2017) continue to assert that pediatric primary care providers are in an ideal position to promote and support healthy developmental stages for the infant. They are able to evaluate the mother's emotional well-being and screen them for PPD since they see the mothers the most during the postpartum period.

Kurtz et al. (2017) reinforce what other research studies have stressed, specifically that early identification of PPD would lead to early treatment, which in turn may lessen the detrimental effects on infants and their mothers and will support healthy child development and mental health over time. This article explored timing and tools for PPD screening by reviewing medical and legislative recommendations. Although this article provided a strong stance and evidence on the impact PPD has on infants and the importance of screening, it only reviewed two different screening tools, which could be providing limited knowledge.

Chaudron (2018) in his article described PPD, its epidemiology, pathogenesis, prognosis, possible effects on the mother and infant and its management. This article reported that although there is an increasing understanding of the effects of PPD on a child's health and well-being, it

continues to be unrecognized and inadequately understood by mothers and healthcare providers alike. PPD continues to be unrecognized, which may have overwhelming consequences on women, infants, and their families. Chaudron (2018) states that while researchers have not established an age for a high risk of exposure to maternal depression, data does demonstrate that infants exposed to depressed mothers can exhibit withdrawn behavioral styles as early as three months old. Mothers with PPD have shown to have a decreased rate of breastfeeding. Infants with mothers who exhibit depression are at risk of child abuse. Chaudron (2018) explored research that has further shown how maternal depression is linked to an increase of cortisol levels in infants that can lead to anxiety, impaired social development, and withdrawal.

Possible effects of maternal depression on children's behaviors may include infant behavioral problems, delayed cognitive development, and insecure attachment patterns. Effects of maternal depression on parental attitudes and behaviors consist of parenting attitudes that can range from negative attribution toward the infant to thoughts of harming the baby. In addition, mother-infant interactions may be negatively affected as well. Chaudron (2018) is in agreement with other researchers that PPD may have significant repercussions for the health and well-being of the mother and her infant. Findings regarding the negative impact PPD has on maternal and infant health have led professional organizations and various states to give their recommendations to implement early detection of PPD. Pediatric providers have been identified as having a critical role in assisting mothers to identify, cope with, and seek treatment for PPD.

In summary, the literature review focused on various aspects pertaining to PPD. It is evident throughout the literature that PPD has many negative consequences impacting not only the mother but her entire family. The consequences for the mother, who is the primary care giver range from not being able to interact with her family to maternal suicide. The

consequences for the infant are devastating and can severely impact the infants brain and development. The research studied demonstrated strong evidence regarding the imperative role pediatric providers have in early detection of PPD.

Current Policies

Findings have prompted the need for early identification and treatment of PPD. Unfortunately, screening for PPD is not yet standard in regards to which tool to use and when is the appropriate time to screen (Waldrop et al., 2017; National Institute for Health Care Management, 2010). Several U.S. national healthcare organizations do recommend depression screenings during the perinatal period. These organizations include the American College of Nurse-Midwives, Association of Women's Health Obstetric and Neonatal Nurses, United States Preventive Services Task Force, American Academy of Pediatrics, and the National Association of Pediatric Nurse Practitioners (Sriraman et al., 2017; Rhodes, & Segre, 2013). In addition, the Registered Nurses' Association of Ontario (2018) has created best practice guidelines pertaining to assessment and interventions for perinatal depression.

Legislation has been enacted for women with perinatal depression at the state level across the United States (Selix, 2015). For, example, New Jersey, West Virginia, and Illinois have all passed laws for mandatory perinatal screening and education. Healthcare professionals including family practice, obstetricians, pediatricians, nurses, and advanced practice nurses (APN) are at a critical position in screening for perinatal depression. Nurses, specifically APNs, have the duty to ensure that screening happens and that the patient is referred to the appropriate healthcare providers (Selix, 2015).

The timing of screening mothers for PPD needs further research. There is no existing national policy that recommends screening intervals for PPD. An ideal time to screen mothers is

difficult due to the various symptoms and contributing factors that can arise at different time points for mothers within the first year (Gaynes et al., 2012; Guevara et al., 2016). However, there are various recommendations on when to screen mothers. The U.S. Preventive Services Task Force does recommend periodic screening during the postpartum period by all healthcare professionals who see mothers in the postpartum period (Sriraman et al., 2017). The American College of Obstetricians and Gynecologists (2015) advises that mothers should be screened at minimum once throughout the perinatal period for depression and anxiety symptoms with a validated tool. Yet, it does not endorse a specific instrument or a specific point in time when to screen mothers.

The American Academy of Pediatrics does provide recommendations for pediatricians to screen mothers at the 1, 2, 4, and 6-month healthy infant visits (Sriraman et al., 2017). The National Association of Pediatric Nurse Practitioners (2011) recommends screening mothers for PPD in the first year postpartum. The American College of Nurse Midwifes supports universal screening, and treatment for PPD as part of routine primary care, but does not specify a certain time (Gaynes et al., 2012). As stated by Guevara et al. (2016), there is a need for further research with epidemiology and to confirm prevalence rates and establish what time point is best to identify the greatest number of depressed mothers. It is proactive to screen more, because we do not know of the best time to screen. Since we don't have a golden time frame or exact moment PPD could occur, it's prudent to implement the practice of more frequent screening.

National guidelines neither mandate a specific time for screening nor establish who is responsible for conducting these screenings (Sriraman et al., 2017). PPD may occur within the first year after giving birth. It is suggested by the Agency for Healthcare Research and Quality (AHRQ) that if the peak of prevalence and incidence occurs within the first 6 weeks postpartum,

obstetricians should be screening mothers at their 6 week follow up appointments (Gaynes et al., 2012; Guevara et al., 2016). Mothers will usually only see their obstetrician at a 6-week appointment postpartum therefore, identifying and treating a mother for PPD might be missed. Since PPD may occur after 6 weeks postpartum, however, it is further suggested that programs such as family medicine, internal medicine, or pediatric clinics might also be effective in identifying mothers suffering from PPD (Chaudron, 2018).

Illinois Public Act 095-0469 (Illinois General Assembly, 2008) states that every hospital in Illinois that provides labor and delivery services must provide new mothers complete and full education regarding perinatal mental health disorders. With this education, hospitals are also asking mothers to fill out a questionnaire before they are discharged that will allow healthcare providers to identify mothers at risk for developing PPD. This act also encourages pediatricians to screen mothers at least once. There are various recommendations from different organizations on when to screen mothers for PPD. Further research needs to be conducted to find the best and most effective way to screen and implement early detection of PPD.

Screening, assessing, and treating mental health problems should be a national goal, since maternal depression has major effects on children. The American College of Obstetricians and Gynecologists (ACOG) (2015) discusses how obstetrician-gynecologists and women's healthcare providers are at an ideal position to screen, assess, and manage perinatal depression. Primary care physicians, obstetricians, and pediatricians play a major role in screening for maternal depression (Glasser et al., 2016). Nurses who specialize in maternal/child care play an essential role in early identification and prompt treatment of perinatal depression. Nurses, including APNs, and certified nurse midwives have frequent contact with mothers in the postpartum period and are able to screen, educate, provide support groups, and provide referrals.

The Association of Women's Health Obstetric and Neonatal Nurses supports nurse-delivered screening for PPD (Sriraman et al., 2017; Rhodes, & Segre, 2013). Nurses are often the ones who provide the screening tool to mothers in the clinical setting, as part of home health care, and during the period after birth in the maternity unit. In addition, primary care practices have a major role in identifying depression, particularly PPD. The American Academy of Pediatrics (Earls, 2015) discusses in their policy statement that family-centered pediatric care should be implemented. Although it is recommended for pediatricians to screen mothers, one study found that only 7% of pediatricians routinely ask mothers regarding depressive symptoms (Waldrop, Ledford et al., 2017).

The Registered Nurses' Association of Ontario (RNAO) (2018) created a best practice guideline regarding assessment and interventions for Perinatal depression. These guidelines discuss the importance of establishing local care pathways and protocols to guide healthcare settings and to ensure proper access to safe and effective interventions and treatment for mothers. RNAO discusses that even though evidenced based criteria have not been created in relation as to when screening should be done during the postpartum period, general principles for screening procedures should be employed.

Pediatric Providers and Screening

PPD is one of the most common complications during the postnatal period, affecting one in seven women (American College of Obstetricians and Gynecologists, 2015). Undiagnosed PPD can have significantly long-lasting negative affects not only on the mother but also on the entire family dynamics, which may include suicide and infanticide. This prevalence is why it is imperative for healthcare providers to detect PPD and address it in its early stages.

Gilbert, Balio, and Bauer (2017) stresses the legal and ethical case for universal screening in pediatric primary care due to the impact on the infant. In addition, this article explores and evaluates various different professional organizational positions regarding screening in pediatric settings with validated tools. The article also argues that although there is much research regarding PPD, there is still a lack of recognition of its impact on infants and the importance of early detection. In addition, mothers have reported issues and lack of accessing health care for themselves. Both the lack of access and the lack of recognition can have long-term outcomes for mothers and their infants if they are not able to seek healthcare and be screened for PPD. Gilbert et al. (2017) stress that mothers typically only see their infants' primary care providers during the first year. Mothers are more likely to seek care for their infants than for themselves and are willing to be more open with their replies to benefit their infants' health. Consequently, Gilbert et al. (2017) states that the infants' primary care physicians are in a better place to get at issues facing mothers, and to screen for PPD. Therefore, this article provides strong support of the importance and ethical implications of screening mothers for PPD.

Connelly, Baker, Hazen, and Mueggenborg (2007) in a descriptive cross-sectional study used a convenience sample of 98 eligible providers including physicians and APNs. These participants were given a survey with questions that elicited information regarding their confidence in his/her skills in assessing for PPD, and willingness to change his/her practice regarding screening for PPD. Connelly et al. begin by stressing pediatric guidelines that emphasize the importance of pediatric healthcare providers in playing an active role in detecting family problems, including depression.

They reported that although 48% of the providers stated being confident. In relation to willingness to change practice regarding screening for PPD, 70% of providers, and 94% of APNs

were willing to increase screening mothers. Connelly concluded that pediatric providers should be performing PPD screenings because of the overwhelming negative affects it may have on the mother and her infant. PPD is the most prevalent and treatable mental health problem, and yet it continues to be undetected and untreated. Up to 19.2% of new mothers can experience major or minor PPD within the first three months after delivery. However, only 20% of these episodes are detected and treated, leaving thousands of women to suffer alone. While this study demonstrates pediatric provider level of confidence and willingness to change and increase their screening of PPD, this study was only focused on one large metropolitan area of southern California.

According to Sriraman et al. (2017) it is estimated that every year 400,000 infants are born to mothers who are depressed at the nationwide level. One of the major goals in healthcare is to decrease PPD, in order to decrease detrimental lasting outcomes for the mother, infant, and her family. A missed diagnosis of PPD is a critical concern for pediatric healthcare providers. Pediatric providers need to have an overall comprehensive understanding of the infant's family life, including physical and mental stressors for the infant.

Mandate for Pediatric Provider Screening

Effects of PPD have many contributing elements on infant development. Maternal depression has a major impact on children and their physical and mental health, including negative severe and long lasting effects on infants (Chaudron, 2018). PPD may negatively affect maternal actions with the infant, including actions related to bonding, breastfeeding, sleep, and adherence to well-child visits. In addition, an infant's physical, cognitive, and emotional development has negatively been linked to mothers suffering from PPD (Glasser et al., 2016).

Pediatric providers frequently see mothers during the first year in an infant's life, which will usually lead to a long-term trusting relationship (Olin et al., 2015). The duration and

intensity of this relationship may allow the mother to speak freely regarding concerns that may affect the infants' environment, health, and well-being. If pediatric providers, physicians, and nurses, including advanced practice nurses (APN), are screening mothers for PPD, it may provide awareness for the mother and family as well and may lead to open discussions and possible elimination of the stigma of PPD. Although pediatricians are aware of PPD, it may not be their primary concern at the well-child visit (Sriraman et al., 2017). Nevertheless, pediatricians have the opportunity to encounter infants and caregivers regularly. Guidelines from the American Academy of Pediatrics (2010) recommend that pediatric providers screen mothers at well infant visits during the first year of life. Consequently, pediatric providers have the duty to screen mothers and offer the most suitable resources.

Pediatric providers are able to assess the mother-infant dyad frequently and are more familiar with the connection between mother and child. Pediatricians can also provide assistance to the family by monitoring the influence of depression on the mother-infant bonding, interactions, and the infant's health and development (Chaudron, 2018). Since pediatric healthcare providers already assess infant development and employ preventive practices, this should not be a difficult practice to put into place. Given the frequency with which pediatric healthcare professionals see infants' caregivers and the typical trust in nature of this relationship, pediatricians and APNs are in an ideal position.

Screenings for PPD that occur only once during the postpartum period at the obstetrician's office may not be enough to detect PPD if symptoms continue beyond the first three months or develop after these three months (Bauer, Ofner, Pottenger, Carrol, & Downs, 2017). It is estimated that 50% of women who have PPD remain undiagnosed (Chaudron, 2018). Mothers will usually only see their obstetrician at their six-week check-up, which may lead to the

under-detection of PPD. Women will, however, see their infants' pediatric healthcare providers regularly during the postpartum year. Therefore, pediatric healthcare providers are in a critical position and have an opportunity to assess, screen, educate, and ensure early interventions occur for mothers suffering with PPD. It is important to screen mothers after their postpartum check-up in order to identify PPD that might occur past the first three months.

Effective collaboration is a critical component of quality patient care. Collaboration between pediatric providers and healthcare providers such as obstetrics and other providers who will be able to support the mother should be in place. Screening a mother for PPD in the pediatric care area will allow and create an open dialogue between the infant's provider and the mother (Sriraman et al., 2017). This will promote open communication and minimize the stigma associated with PPD. If a mother screens positive on the screening tool, policies and guidelines should be in place for the knowledgeable providers to guarantee timely and proper referrals (Gibert et al., 2017).

In order to address inefficiency of health care, communication, and maternal outcomes, the long term goal of the World Health Organization is to provide collaborative care that will increase the detection of women at risk for PPD (Glasser et al., 2016). Collaborative care must be implemented within health care to improve long-term patient outcomes. Since PPD is both under-diagnosed and inadequately treated, medical professionals should start implementing screenings earlier and more often. Given the challenges of diagnosing PPD and the high stakes for women and their children, collaborative practices offer a better approach for delivering services to women at risk for or experiencing PPD. Numerous obstetricians screen mothers for PPD at the six-week postpartum check-up (Bauer et al., 2017). However, PPD could be missed or undetected if it does not develop until after the six-week appointment. Therefore, it is critical

that pediatric providers screen mothers at well-child visits during the first year. With professional license comes ethical consideration to educate patients and provide services such as screening mothers for PPD.

Ethical Considerations

Gilbert et al., (2017) elaborate on the ethical obligation that pediatric providers have to screening mothers for PPD. Providers have a legal responsibility to provide the best and most direct care possible to their patients due to their knowledge and the vulnerability of their patients. In relation to the pediatric care area, Gilbert et al. (2017) stress the duty providers have to make the child's interests imperative by providing care in the best interest of the child. Since the child is cared for by the parents, pediatric providers have a fiduciary duty that extends to include the parents regarding possible factors that may eventually impact the child's health. Beneficence and nonmaleficence are ethical principles in support of the pediatric provider's responsibility to do no harm and promote good. Gilbert et al. (2017) mentions that pediatric providers should not just screen mothers but also refer or connect them with appropriate referrals and services in order to avoid harm and promote well-being for both the mother and the infant. It is a moral responsibility that pediatric providers assess and screen mothers, since it is known that early detection will prevent possible life-long effects of PPD on mothers and their infants. Nurses have the responsibility to care for their patients and promote patient and family centered care. The values and scope of practice within nursing encompass the moral responsibility to deliver and provide to their patients the best care possible. Therefore, providing support and assessing mothers to enhance early detection of PPD is critically supported by the nursing values.

Scope of Practice

Maternal depression can lead to impaired parenting practices and mother-infant interactions as well as cause lasting damage to child functioning at home and at school (Bauer et al., 2017). Although pediatric healthcare providers' scope of practice does not encompass treating mothers who suffer from PPD, it is recommended to screen and provide the proper resources needed for early interventions and treatment. Due to the lack of education and training as well as ethical and legal concerns in screening mothers, pediatric providers may be resistant to screen mothers (Sriraman et al., 2017; Gilbert et al., 2017). In addition, pediatric providers might not feel comfortable screening mothers due to the fact that they are not able to treat the mother. However, proper guidelines in place and proper education, can alleviate the concerns of the providers. The pediatric provider should treat the mother and infant as a dyad, since the mother's PPD may negatively impact the infant.

The AAP recommends pediatric healthcare providers screen mothers for PPD at the infant's one, two, four, and six-month well-child visits (Sriraman et al., 2017). The National Association of Pediatric Nurse Practitioners (NAPNAP) position statement recommends screening mothers for PPD in the infant's first year of life. Many states have legislation in place supporting and recommending screening by pediatric healthcare providers, but not yet universal (Kurtz et al., 2017).

The position statements of the AAP, the American College of Obstetricians and Gynecologists (ACOG), and the NAPNAP state that screening is best practice and urge pediatric healthcare providers to incorporate screening for PPD into their practice (Waldrop et al., 2017). Pediatric guidelines state that pediatric care providers should play an active role in detecting family problems, including depression (Chaudron, 2018). Furthermore, these guidelines specify

that screening for PPD with appropriate interventions at well child visits will provide positive outcomes for the entire family dynamics. Various organizations, including the Center for Medicare and Medicaid Services (CMS), ACOG, and the U.S. Preventative Services Task Force, all discuss and encourage pediatric providers to screen for PPD during the infant's first year of life (Kurtz et al., 2017).

As stated by Kurtz et al. (2017), screening for PPD may improve the effectiveness of providers in dealing with and inhibiting a variety of childhood problems. Pediatric nurses also play a significant role in screening for PPD, a responsibility that is consistent with the profession's goal of actively promoting infant health. Screening, however, still remains outside of usual care on a national level within the pediatric setting. Kurtz et al. (2017) continues to indicate that although not nationally adopted, newborn appointments provide an opportunity for pediatric healthcare providers, including nurses, to ask mothers about their mood.

Pediatric healthcare providers including APNs are at an optimal position to screen mothers during the first year at well-child visits (Selix et al., 2017). APNs play a unique role in early identification of PPD due to their training as a nurse and their role as primary care providers. Nursing professionals are educated and have the expertise to intervene at the personal, familial, and community level. They provide distinctive contributions to interprofessional collaborative efforts required to intervene with PPD. Nurses, including APNs, are capable of providing holistic care essential to systematically and sensitively addressing patients' physical and mental health needs (Olin et al., 2015)

Although it is recommended for pediatric providers to partake in screening for PPD, research shows that there is a lack of adherence to the recommendations provided by the American Academy of Pediatrics (AAP) (Connelly et al., 2007; Olin et al., 2015). Pediatric

healthcare providers have reported the identification of their role in recognizing and addressing maternal depression, but few providers are implementing screenings in their current practice. Pediatric professionals find themselves in a challenging situation: unlike obstetricians who can screen and treat PPD, pediatric professionals can only identify PPD and refer mothers to the appropriate providers (Bauer et al., 2017). Pediatric providers are in a difficult position since they lack authority to treat mothers, this continues to be an issue that has been stated by pediatric providers to cause the lack of adherence to screening. Further research is needed to address this issue in order to promote positive family outcomes.

There is little or no research that looks at pediatric perceptions as to their role in early detection of PPD. At this current time, we really do not know why pediatric providers are not compliant with the recommendations provided by professional organizations and state legislature. Investigating pediatric perceptions might allow us to close the gap on compliance to screening. In addition, there is still a lack of research that describes an exact time to screen mothers for PPD in order to promote positive outcomes for the mother and infant. Having further evidence of an appropriate time period of when to screen mothers might also help influence pediatric providers to screen mothers. This is the gap in research that will be addressed.

Summary

Maternal depression is a prevalent and treatable mental health issue, but it still goes unrecognized and untreated. Screening, identification, and intervention can prevent the lasting negative outcomes on a child and possibly postpartum psychotic incidences associated with suicidal ideation and infanticide (Glasser et al., 2016). Pediatricians are in a position to help mothers identify, cope with, and seek treatment for PPD by implementing routine screening of

mothers for the condition. Pediatric providers can identify high-risk behavior and attitudes by mothers that can cause negative outcomes for their infants. Being actively engaged in their patients' environment will allow pediatric healthcare providers to play a role as an advocate to facilitate a holistic approach to patient care. This qualitative study will seek to identify pediatric providers' perceptions and further promote pediatric providers screening of postpartum mothers for PPD. The following chapter will describe the methodology of the study. The aim of this study will be to disclose the perceptions of pediatric providers of their role in early detection of PPD.

CHAPTER THREE

METHODS

Purpose of the Study

The purpose of this descriptive, qualitative study was to explore pediatric health care providers' perceptions of their role in screening mothers for postpartum depression (PPD) in the Chicagoland area. As the literature review has demonstrated, little is known about the perceptions pediatric providers have regarding their role in early detection of PPD. By contrast, there is a significant body of literature of the importance of screening mothers for PPD. This literature also describes the position of the American Academy of Pediatrics (AAP), American College of Obstetricians and Gynecologists (ACOG), and National Association of Pediatric Nurse Practitioners (NAPNAP) in regards to best practice and pediatric providers screening mothers for PPD. Maternal depression is a highly treatable condition, especially when identified early during the postpartum period (Upadhyaya, Sharma, & Raval, 2014). Identification of mothers who are at risk for PPD allows health professionals to initiate care that can prevent further problems for the mother, infant, and the rest of their family. This descriptive, qualitative study identified, explored, and articulated codes and views related to perceptions pediatric healthcare providers have of their role in screening mothers for PPD during the infants' well-child visits throughout the first year.

Research Questions

The research question for this study guided and facilitated the interviews. The interview questions were created to elicit responses from participants that would disclose their experiences with mothers during the first year well-child visits and their perceptions in early detection of PPD (Appendix C).

RQ1: What are pediatric healthcare providers' perceptions of their role in early detection of postpartum depression?

Research Design and Methods

Qualitative Research

Qualitative research focuses on the source of the data: the participants' perspective on their reality through the naturalistic aspect (Cristancho, Goldszmidt, Lingard, & Watling, 2018). An important goal of qualitative research is to achieve understanding of social and human phenomena in its natural setting. Qualitative design aims to understand a phenomenon, not influence culture or perspectives. Qualitative designs are used to study how things unfold in a real world setting and the meanings participants attach to them. Qualitative approaches are used to investigate the course of participant experiences and their decision-making process.

Choosing the appropriate qualitative methodology for a study is a critical component of the research process. Epistemology, the theory of knowledge, is what leads the researcher to choose a specific methodology suited to the phenomena of study (Christancho et la., 2018). Epistemological assumptions include how knowledge is developed, created, and communicated (Bradshaw, Atkinson, & Doody, 2017). This is the natural relationship "between the would-be knower and what can be known" (p. 2). The epistemological assumption of qualitative research is subjectivism. Subjectivism relies entirely on an individual's subjective awareness and the

reality of all objects. While implementing qualitative research it is important to realize that "the world does not exist independently of our knowledge of it" (p. 2). Instead, good researchers strive to understand their relationship to their subject and account for it in their study's methodology.

Descriptive Design

There are many types of qualitative research methods. In this case a descriptive design was chosen because it focuses on representing the essence of qualitative research, describing a situation, behavior, or phenomenon in a naturalistic inquiry. Qualitative descriptive research is appropriate where information is required directly from those experiencing the phenomenon being explored (Bradshaw et al., 2017). In order to identify pediatric provider's perceptions, it was most appropriate to ask them to elaborate on their personal lived experience and their role in early detection of PPD.

Kim (2016) describes qualitative descriptive research ideal when a straight description of a phenomenon is needed when a phenomenon is inadequately understood. There are six specific design features that are identified as an imperative aspect of qualitative descriptive research. First, researchers examine a phenomenon in its natural state from a naturalistic perspective. The basic principle of qualitative descriptive research is to analyze data inductively. Therefore, the next feature is the flexibility of not using a theory-driven approach. Qualitative descriptive design has the flexibility of not needing to commit to a theory or framework. Third, data collection strategies usually consist of individual or focus group interviews with semi-structured interview guides. Fourth, the techniques for gaining participants is commonly purposeful sampling in order to obtain broad insight and information regarding the phenomenon. Fifth, the data is usually analyzed by content analysis. This allows researchers to stay close to the data, in

order to prevent an alteration in the results during analysis. Lastly, the results of the findings should be straightforward, and accurate details represented in a clear format.

The philosophical underpinnings of qualitative descriptive research consist of various crucial aspects (Bradshaw et al., 2017). An inductive process adds knowledge to the phenomenon being studied while depicting the phenomenon. Subjectivity is a major aspect of qualitative research because it is understood that each individual has a unique perspective regarding their experience. Understanding and describing a new unexplored phenomenon is a distinct underpinning of qualitative research, rather than providing evidence for an existing phenomenon. During the research process, researchers become active in the process and phenomenon being examined since they are actively interacting with the participants. This insider, or emic stance provides an inner view on the participants' perspectives, an understanding that is influenced by the researcher to some degree due to the researcher's interpretation, but evaluation methods are applied to bolster accuracy. Lastly, qualitative descriptive research is conducted in the natural setting. Data must be collected in the natural setting with the participant who experiences the phenomenon.

Qualitative descriptive research describes a phenomenon and its characteristics (Nassaji, 2015). Descriptive research represents and focuses on the characteristics of qualitative research "rather than focusing on culture as does ethnography" or "lived experience as in phenomenology" or "building of theory as with grounded theory" (Bradshaw et al., 2017, p.1). It seeks to uncover and understand a phenomenon, a process, or the perceptions of the people involved. Descriptive research exposes the lived experiences which focuses on answering the who, what, when, where, and how of events or experiences (Sandelowski, 2000). Qualitative

descriptive research is specifically relevant when information is required directly from the individuals experiencing the phenomenon under investigation.

Bradshaw et al., (2017) stated "Qualitative descriptive research seeks to provide a rich description of the experience depicted in easily understood language" (p. 3). The resulting narrative is then a rich description of the phenomenon of interest directly from those who have experienced it. The approach offers a unique opportunity to gain inside knowledge and learn how participants see their world. A major advantage to a qualitative descriptive methodology is that data analysis should remain close to the participant's words. The participants' descriptions contribute to ensuring that the researchers' interpretations are transparent. The epistemological tenets of qualitative description are based in the assumptions that numerous interpretations of reality do exist and reference to verbatim quotations from participants supports an individual interpretation.

Qualitative descriptive research is a naturalistic approach to understand the phenomena in its natural state (Golafshani, 2003). Two key elements within this type of research involve learning from the participants and their descriptions and using this knowledge to influence interventions. Findings from qualitative descriptive research often have special relevance to practitioners and policy makers (Bradshaw et al., 2017).

Based on the philosophical underpinnings of qualitative research, this methodology was appropriate to understand pediatric healthcare providers' perceptions of their role in early identification of PPD in order to obtain a direct description of the phenomena from the participant's point of view. This method allowed for the understanding of each healthcare provider's individual reality and his or her experiences interacting with new mothers during well-child visits within the infant's first year.

Sample and Sampling Strategies

In this section, characteristics and recruitment for the participant sample will be discussed. There is a difference in sample size between qualitative research verses quantitative research (Dworkin, 2012). Qualitative research usually will have a smaller sample size. A smaller sample size is appropriate with qualitative research because it requires constant direct contact with participants and because the findings are not expected to be generalizable (Bradshaw et al., 2017). The goal in any qualitative research design, is to obtain cases believed to have rich information for the purpose of saturation of data (Lambert & Lambert, 2012). Data saturation is considered to be met when no new data emerges from participants during the data collection. Data saturation is key in determining the sample size in qualitative research (Glaser & Strauss, 1967).

Purposive and snowball sampling was used as recruitment strategies for this qualitative research. Purposive sampling allowed the researcher to select accessible participants and provides an advantage of simplifying the selection of participants whose qualities or experiences are required for the study (Bradshaw et al., 2017). Snowball sampling allowed the selection of participants through referrals by previously selected participants who have contact with potential participants. Therefore, in this descriptive design, both purposive and snowball sampling was used, and the sample size halted at eleven participants when saturation was reached.

The inclusion and exclusion aspects of the study participants and the procedures for recruiting the sample, including the sampling frame and sampling plan will be reviewed. Participants were licensed healthcare providers in direct contact with clients. Eligible staff members included pediatric healthcare providers such as residents, nurse practitioners, and attending physicians that come into contact with mothers during the first year well-child visits in

five different institutions in the Chicagoland area. These healthcare providers represent the healthcare population that works directly with postpartum mothers during the first year of a child's life.

The inclusion criteria for this population included licensed nurse practitioners, residents and attending physicians who rotate throughout the pediatric clinics and have direct contact with mothers during infant well-child visits within the first year. This population was chosen because they are the primary healthcare providers most likely to see postpartum mothers. Identifying perceptions of their role in early detection within this group of individuals was intended to enhance and promote the healthcare of women experiencing PPD.

The exclusion criteria consisted of pediatric providers who are part-time. Participants under the age of eighteen were excluded. Participants who do not speak English were omitted. The exclusion criteria ensured the best research results. The inclusion criteria guaranteed that the participants are frequently at that facility and regularly interact with postpartum mothers. Together, this provided the most credible data from the participants during the interviews.

Data Collection

The interviews were audiotaped, recorded, and transcribed verbatim. All personal identifying information was removed. Each participant was given a code number; staff identifiers were not used during the conversations. Transcription was done by the researcher. In addition, the researcher took field notes during and after the interviews. These field notes were also reviewed to assist in the data analysis. The interviews revealed participants' perceptions of their role in early detection of PPD. The field notes provided added information from participants regarding their perceptions as well as reminders to the researcher regarding environment and context. Field notes have an important reflective component. The researcher

noted comments about their feelings, reactions, speculations, or interpretations (Cristancho et al., 2018). Within qualitative descriptive research, the researchers' preceding knowledge or own beliefs regarding PPD will be bracketed to accurately describe and capture the participants' experience without bias. Therefore, the researcher's preceding knowledge was bracketed during the interviewing process.

The data collected regarding perception of pediatric providers' role in early detection of PPD was done anonymously. Each recording of the participant interviews was identified using a numerical system in order to provide anonymity and confidentiality as data is being analyzed. A document noting the participants name and code number were kept in a secure locked desk available only to the researcher, separate from the actual recording. Following interview transcription, audio materials were also secured in a locked location. Personal information that might identify the participant was not collected or used within the collection method. All the interviews will be destroyed once the project is complete in order to ensure confidentiality.

Recruitment

Approval by the Loyola University Institutional Review Board (IRB) (Appendix D) recruitment included: permission to post and distribute a flyer at the recruitment locations in where pediatric healthcare providers come into direct contact with patients and an email sent to pediatric providers asking them to participate or share the information with other pediatric providers who might meet the inclusion criteria (Appendix A). In addition, information regarding the research was approved to be posted on the social media pages of two nursing organizations (Appendix B). The inclusion criteria were listed in detail as well as the purpose of the research study, format of the interviews, the time commitment, and the researcher's contact information.

The researcher screened all volunteers for inclusion criteria and sought informed consent. The informed consent followed Loyola IRB standards and address any possible risks and benefits to the participant. Although risks are minimal, there was the need to clarify time commitment and any accidental breach in privacy due to the location of the interview. The researcher provided a private setting for the interviews. There are no benefits for the individual participants at the current time, but the study itself will yield additional information to advance the care of postpartum moms and their babies. Participants were told that their participation within the study would not affect their employment, and their employer will not be aware of the results of the interview.

Interview Questions

The interview questions (Appendix C) were created to obtain in-depth responses from pediatric healthcare providers regarding their role in early detection of PPD. The pediatric providers discussed their experiences with mothers during the first year well-child visits. All participants were asked questions that elicited personal perceptions. These questions were piloted with pediatric residents. This allowed the participants to convey their experiences and allowed the interviewer to further probe with follow-up questions. The interview questions (Appendix C) were used to guide this qualitative descriptive study consisted of:

I1: What has been your experiences with mothers whom you thought might have been experiencing postpartum depression?

I2: What do you think pediatric healthcare providers such as yourself should know regarding postpartum depression?

I3: What do you feel your role is in early detection of postpartum depression?

Interview Techniques

In this design, data was collected through interviews and then the interviews were transcribed. Interviews were performed by the PhD student, Laura De La Pena. Interview times were scheduled according to the preference of the participant and interviewer. The participants were assured of confidentiality and were given the option to partake in the interviews either face-to-face or via phone interview. The interviews were conducted at the place of employment of the participant, if they choose to be interviewed face-to-face. The interview prompts were designed to stimulate thorough responses from participants concerning pediatric perceptions regarding PPD.

During the one-on-one, face-to-face or phone interviews, the researcher asked participants focused, semi structured, open-ended questions from a pre-established interview guide (Appendix C). The semi structured, open-ended interview guide prevented participants from having limited responses and encouraged participants to fully express their perceptions (Sandelowski, 2000). The interviews were conducted in a conversation-like format to enhance comfort for each participant and allowed them to share their perceptions on their role in early detection in maternal postpartum depression. Although a pre-established interview guide was used, the conversational-style interviews allowed participants to go through at their own pace and ease (Appendix C). The participants were advised that they were allowed to stop the researcher at any time for questions and could also refuse to answer questions and/or end the interview.

The interviews were led by using a prepared interview guide with exploratory questions that stimulated participants to discuss their perceptions, opinions, and possible concerns about their role in early detection of PPD with a mother that does not fall under their care (Appendix

C). Interviews allowed the researcher to explore participants' perceptions and concerns through encouraging depth and rigor (Bradshaw et al., 2017). As data collection proceeded, the guide was further modified based on initial coding. This allowed the development of new codes or issues. Fetterman (1998) states that interviewing in qualitative research is a fundamental process that allows the researcher into the depth of the phenomenon by looking at the phenomenon through the participants' perception of their reality.

Data Analysis

Data analysis for the descriptive qualitative design was conducted using constant comparison in order to retrieve codes from this study. Constant comparison is an inductive technique used to reduce data through continuous recoding. Researchers use constant comparison to develop themes or codes from data by coding and analyzing the information simultaneously (Cristancho et al., 2018). In this study, constant comparison was used to identify code and sub-codes. Open coding was used for this descriptive design. Coding was done promptly and confirmed with a member of the dissertation committee. Coding began with the first interview, which provided the researcher emerging insights about the phenomena and provided insight for future interviews for data collection. While coding the interviews, the researcher addressed recurring patterns. Based on that review, additional interviews followed and these interviews were similarly coded and confirmed.

Using the constant comparative method, the researcher identified codes, sub-codes, and associated quotes independently. Once the data demonstrated a saturation of critical codes, then recruitment of participants was complete. Data saturation is essential to ensure that ample information has been collected and properly reflect the perceptions of the study's participants. Emerging codes were reviewed and explored for consistency within the data. Subsequently, the

emerging codes were interpreted for meaning and correlation. Analysis of transcripts were hand-coded and facilitated by NVivo12 software (QSR International, Doncaster, & Australia, 2015). Inter-coder agreement was established through the use of hand-coded data. Inter-coder agreement was established through independent coding of the content between the advisor and the researcher. Hand-coded data of the items where labeled with codes. Both coders demonstrated an agreement on the codes assigned to the elements retrieved from the interviews. The similar results validated that both coders were consistent with their understanding of the interviews.

The data analysis followed a several step process for data analysis of each transcript. First, each transcript was read repeatedly to gain a general awareness about the entire content. Next, meanings for each important statement were conveyed. Third, the meanings retrieved from each transcription were sorted into clusters of codes. Fourth, the results of the study were incorporated into an extensive description of the phenomenon being studied. Sixth, the essential structure of the phenomenon is explained.

Trustworthiness/Rigor

In order to maintain rigor, the Lincoln and Guba criteria was used for the descriptive research design. The Lincoln and Guba criteria stress that qualitative research should be judged by its trustworthiness (Cohen, & Crabtree, 2006). Trustworthiness consists of credibility, transferability, dependability, and confirmability. Lincoln and Guba (Cohen, & Crabtree, 2006) discuss credibility as one of the most significant factors in determining trustworthiness. There are many techniques that can be used to ensure credibility. These techniques include prolonged engagement, persistent observation, triangulation, peer debriefing (participant debriefing), negative case analysis, referential adequacy, and member-checking. These techniques will allow

for confidence in the truth of the findings regarding the description of provider behavior. The next step in assuring trustworthiness is transferability. Transferability consists of thick description. Thick description is described as a thorough interpretation of field experiences in which the researcher explains detailed patterns of cultural and social relationships and places them into perspective. Transferability demonstrated how the findings of mothers experiencing PPD might be applicable to various settings, situations, and people. Dependability is the third factor. This criterion addresses reliability issues by using inquiry audits such as an external audit done by a researcher not involved in the research process. Dependability was established for this study by having an uninvolved researcher perform audits through the process of committee review. The last aspect of trustworthiness for this evaluation criteria is confirmability. The techniques for confirmability, which is in reference to objectivity, include confirmability audit, audit trail, triangulation, and reflexivity. Confirmability demonstrated that the research is not a result of researcher bias, motivation, or interest, but the findings of the study. These four elements of the Lincoln and Guba criteria were used for this study to ensure trustworthiness within the data.

Protection of Human Subjects

The protection of the participants was ensured by receiving approval for conducting this study through the IRB committee at Loyola University (Appendix D). No personal information identifying the participant or patients were on the interview recordings. The interviews were labeled in numerical formation to distinguish among the different interviews. The interviews were stored in a locked office in a locked and secured cabinet, and the researcher will have the only copy of the key. During the interviews the participants were reminded that their participation did not affect their position at their institution, and this information will not be

shared with anyone at the institution. Once the research is complete, the data collected will be destroyed.

Summary

Although quantitative research has brought forth much information regarding PPD, a qualitative descriptive study will allow us to uncover the perceptions of pediatric healthcare providers on their role in early detection of PPD in their own words. Qualitative research focuses on a scientific, deductive approach to human inquiry whereas quantitative research engages in experimental techniques to establish contributing relationships among variables, to challenge or create a theory, and to generalize findings (Golafshani, 2003).

The findings of this study have significant implications for practice, nursing education, administration, and health policy. Addressing each of these considerations in turn is critical to qualitative research on PPD because PPD is a multidimensional public health concern that necessitates interdisciplinary prevention, screening, referral, and treatment efforts (Selix, 2017). Within the literature, many researchers emphasize, with significant evidence, the importance of early screening, identification, and treatment for PPD. In addition, there are various potential adverse outcomes related to PPD for infants and their mothers (Guevara et al., 2016). Therefore, it is important for pediatric providers to follow the recommendations from organizations such as ACOG and the AAP in screening mothers for PPD. Moreover, it is critical to identify the perceptions and possible barriers that may inhibit pediatric providers in screening, detecting, and intervening for mothers suffering from PPD (Frankhouser & Defenbaugh, 2017). In order to advance this agenda, a qualitative research study to better understand the perceptions of pediatric healthcare providers in their role in identifying PPD is critical.

The findings from this study will provide information and help healthcare administrators

put protocols in place that guide practice within their organization. Such protocols will allow for more frequent screenings throughout their institution and possibly provide for the early detection of PPD. Finally, these findings will lead to critical evidence-based knowledge on the experience pediatric providers have with mothers and their perceptions of their role in early detection of PPD. Such knowledge will promote health policies that afford women ample options and provide access to safe and effective treatment. Implementing health policies as a result of these findings might lead to early referral and treatment options that are available and suitable for women experiencing PPD. Identifying mothers suffering from PPD at an early stage will have significant implications in promoting positive outcomes for mother and baby.

CHAPTER FOUR

RESULTS

The purpose of this chapter is to describe the findings of this qualitative descriptive study. This qualitative descriptive study examined the perceptions of pediatric providers and their role in early detection of postpartum depression (PPD). A qualitative descriptive approach allowed a thorough depiction of pediatric providers' perceptions not only on their role in early detection but also many other aspects of their responsibility to the mother/infant dyad.

Qualitative descriptive research describes a phenomenon and its characteristics (Nassaji, 2015). Descriptive research exposes the lived experiences by focusing on answering the who, what, when, where, and how of events or experiences (Sandelowski, 2000). Two key elements within this type of research involve learning from the participants and their descriptions and using this knowledge to influence interventions. This method allowed for the understanding of each healthcare provider's individual reality and his or her experiences interacting with new mothers during well-child visits within the infant's first year.

Chapter four summarizes the data analysis and results of the study. This includes the sample for the study, and the data. Throughout the study, data collected from interviews was coded and identified. The outcome shows the study's results alignment with the research question. The results are supported with a descriptive narrative where direct quotes from providers are employed to demonstrate alignment with the findings.

During the coding process, many codes emerged. While implementing constant comparison of the interviews, saturation was identified. Seven codes were discovered, as follows:

1. Screening formally and informally
    a. "We should be doing a screening at the newborn visits"
    b. "We use a screening tool"
    c. "I stated the reason I gave the screen was because some mothers do experience some depression after pregnancy"
2. Providers perceiving their role
    a. "We are in the best position to screen"
    b. "I think my role is important"
3. Actively engaged
    a. "Sometimes people don't realize they are struggling until they're asked"
    b. "I always make it a point to ask the mother about their feelings"
    c. Involving spouse/support person
    d. Pediatric providers offer resources and follow up with the mother
4. "I think there should be more education"
5. "I don't know what other providers are doing"
6. "Falling through the crack" with subcategories including
    a. Broken continuity of care
    b. Liability risks
    c. Missing pathway
    d. Time restrictions

7. A supportive organization has an impact of the role of the provider

Sample

Eleven interviews were conducted with 11 different participants. The participants were providers who see patients within their first year of life. Four of the providers were advanced practice nurses; this sample consisted of one pediatric nurse practitioner and three family nurse practitioners. Seven of the providers were physicians. Among the seven physicians, there were two residents; one provider was a second year resident and another provider was a third year resident. Two providers were attendings in general pediatrics. Three providers were double certified as pediatricians and internist primary care providers. All seven physicians worked at the same Chicagoland university.

The four advanced practice nurses worked in different clinics in the Chicagoland area. One nurse practitioner worked in a private clinic, where the majority of patients are on Medicaid. The second nurse practitioner worked for a clinic that is affiliated with the state and federal government. The third nurse practitioner worked for a private clinic in the Chicagoland area. The fourth nurse practitioner worked for a clinic which was associated with a hospital in the Chicagoland area. This sample allowed for a range of different providers with different backgrounds and expertise within their field. Out of the 11 providers, nine were currently using the Edinburgh Postnatal Depression Scale (EPDS) at their clinic. One provider was using the screening tool in a private clinic but not in the current position. One participant did not use a formal screening tool at the clinic. All the providers used the screening tool at various times according to what their clinic protocol was. The tool was given to the mother to complete as either a handout or on a hand held device.

Screening Formally and Informally

Screening formally and informally is the first code that developed with various sub-codes. This code is defined as participants screening mothers for PPD both by using an actual screening tool or by asking the mother questions regarding her transition into being a new mother during well-infant visits. Participants discussed a couple of techniques used to screen mothers during the well-infant visits. While discussing screening informally, participants had different methods of how they screen mothers. Imperatively, all 11 participants unanimously discussed their perceptions of how their role in screening mothers is extremely important. This code contains a few sub-codes that consist of *We should be doing a screening at the newborn visits, We are using a screening tool,* and *I stated the reason I gave the screen was because some mothers do experience some depression after pregnancy.*

We should be doing a screening at the newborn visits. *We should be doing a screening at the newborn visits* is defined as the perception all 11 providers had in regards to screening mothers during newborn visits. The providers explicitly mentioned they felt that as pediatric providers they should be screening mothers for PPD at well-child visits. It is crucial to have buy-in from providers who see infants within their first year in assessing mothers for PPD. Participants mentioned both screening mothers formally with a screening tool and screening informally by simply asking the mother questions regarding her emotional and physical state. However, the providers reported a variety of perceptions of how and when mothers should be screened for PPD. The inconsistency in how providers are screening mothers may influence the outcomes for mothers suffering from PPD. Therefore, it is important to evaluate the way mothers are being screened in order to further research and facilitate support for providers in their role of early detection.

Four of the participants mentioned that they felt they should be screening mothers even sooner than they currently do at the four-month visit, in their clinic, to help possibly identify PPD early on. Providers were asked whether, if they had the power, they would change anything regarding the process of screening mothers at their clinic. Participants said they would screen mothers a lot sooner than they currently do. These statements demonstrate the willingness of the participants to screen mothers, yet they feel they are not screening mothers as efficiently as they should be.

> I actually think it's a little late, four months. It would be even better at one-month visit or even repeating at the two-month visit I think that would be good to screen a little sooner formally. (P5)

Three of the participants discussed how they felt they should continue to screen further out then they currently do in their clinics. Providers did state that even if they are not required to screen a mother after a certain period of time, they would still assess the situation and even provide an actual screening tool if they noticed something different with a mother further out. Some providers discussed how they felt the clinic where they practice should at least be doing a screening until the infant is six months old. Participants discussed their concerns of the lack of screening mothers within their clinic. Even though participants mentioned the protocol only suggests screening at certain intervals, they take it upon themselves to still continue to assess mothers beyond the required period.

> More than at the four months? I think so. I mean I think maybe six months could be okay. (P8)

Other providers did mention that they felt they should be screening mothers throughout all the newborn visits. Providers mentioned they might miss a mother having difficulties if they do not assess for PPD at all the visits. A provider mentioned that after discussing their experiences with

mothers experiencing PPD, they realized they should be screening mothers at all newborn visits. A couple of the participants also discussed their thoughts on screening mothers at all newborn visits:

> I guess truly it should be done at every time we see the baby at least for a well check for the first year at least. (P7)

A specific participant discussed how their previous clinic stressed the importance of screening the mother. However, the current location where the provider worked did not specify the need to screen mothers. This participant continues to screen mothers informally due to their previous knowledge and training on screening and assessing mothers, even though their clinic does not discuss this as a need. The lack of consistency from clinic to clinic within the same organization caused the participant to feel unsettled and made them feel uncomfortable with the lack of support and guidance from the organization. This participant did mention their concerns and how they felt a screening should be done at least once.

> I mean I think my clinic should do the Edinburgh at least at four months or if not more often. Especially since like I just saw the six to nine-month old mother who was struggling it's probably something that is not necessarily at four months is over which at yeah it would probably be helpful to screen later too. (P6)

We are using a screening tool. *We are using a screening tool* is derived directly from interviews with participants. This statement signifies that a screening tool is being used to assess mothers for PPD during the infant well-child check-ups. The interviews aligned with the suggestions the literature review revealed in accordance with various healthcare organizations. All but two of the participants mentioned they screen mothers for PPD with an actual screening tool at least at one point during the infant well-checkups. Each of these nine providers stated they used a screening tool, specifically the Edinburgh Postnatal Depression Scale (EPDS). There were some inconsistencies among the providers as to when they used the screening tool, but they

all stressed that they do use the screening tool. Although nine of the participants stated they screen with a screening tool, the inconsistency as to how they screen is demonstrated as a major barrier in assessing and addressing possible risks mothers might be experiencing.

Provider 6 discussed how their former clinic implemented the use of a screening tool at the four-month check-up. However, at their new clinic, a screening tool is not used at all. Provider 6 did discuss that they continue to assess the mother using elements of the tool, due to their previous knowledge of the tool. Another participant mentioned that although their clinic is very supportive in relation to preventative measures, they do not formally use a screening tool to assess mothers.

> You know what, I don't at this time. Because usually when they come, what I do is I speak with them and give them literature. But I don't use any screening tool for the mom. (P11)

The remaining participants had different reasons such as why they were not using an actual screening tool. There are several recommendations from various healthcare organizations that should be used within healthcare facilities to support the role of the provider. There continues to be many inconsistences related to screening mothers.

I stated the reason I gave the screen was because some mothers do experience some depression after pregnancy. *I stated the reason I gave the screen was because some mothers do experience some depression after pregnancy* is defined as participants describing how they explained to mothers why they gave the screening, the providers concern, and the need to seek support. Participants would explain the reason for the screening to provide the mother insight on the importance of early detection of PPD. Participants described how they conversed as a way to informally screen mothers, such as asking them how they are feeling and whether they are overwhelmed. The participants would go into detail asking about support persons in mothers'

lives and encouraging them to speak up. This sub-code demonstrated the support the participants provide for the mother and her infant. Once the mother screened positive in a formal or informal screening, the participants would explain to them the need to seek help. Participants attempted to reach out to the mothers' OB/GYN regarding their concerns of PPD, if they had the contact information and permission from the mother. The participants did explain their concerns and the importance of following up with their provider to the mother as well. In addition, one participant discussed various therapy options with the mother. The actions participants described provide insight into how they interpret their role in early detection. They ensure the safety not just of the infant but the mother as well. This demonstrates their concerns of the overall well-being of the family. Participants made it a point to follow up with the mother at subsequent infant appointments as well.

> I reached out to her GYN as well to try to get her some resources and followed up with her and she was not interested in meds we talked about the idea of meds but she was more interested in the counseling part but we talked about postpartum depression. (P6)

Some participants did follow-up with mothers once they detected early symptoms of PPD. They would get specific and ask what kind of help they are receiving, if they followed up with their doctor, and how their mood has been since.

> I stated that of course the reason I gave the screen was because some mothers do experience some depression after pregnancy and I didn't go in depth about it but just kind of touched on it and that's why we always screen all mothers and that's some of the answers that she gave, give me concerns that she is going through this and that overall for her own benefit and just in general for the whole, families benefit that she should get the help that she needs and that's when she said that she was in therapy and that her doctor had already like detected it. (P4)

Providers Perceiving their Role

Providers perceiving their role is defined as what providers see their role as when it comes to screening mothers for PPD during the infant visits. This is a critical code that

developed from the interviews with the participants. This code demonstrated that the providers interpret their role in early detection of PPD as a major influence for the mother. This in turn ensures that providers are attempting to screen the mother, when feasible, with available access and the proper resources. The code *providers perceiving their role* has two of sub-codes that may be considered linked together. These sub-codes are *We are in the best position to screen,* and *I think my role is important.*

We are in the best position to screen. *We are in the best position to screen* was cited by participants as an important aspect of their role. This statement is defined as participants disclosing how they view their role in the mother/infant dyad and screening for PPD. They verbalized how they feel they are the providers who see the mother/infant dyad the most within that first year. Therefore, they are able to detect any issues early on during the infant's early development.

> So I think we are in the best position to screen for this especially cause the baby no matter what has to come so frequently. (P1)

Participants revealed how they felt that if they are able to detect PPD and provider support then the mother is better able to care for herself and her children. Participants mentioned that oftentimes mothers are so busy with the newborn that they might not be going to their own provider appointments. Consequently, this puts the participants as the infant provider in the best-suited position to detect PPD early on and provide support. Participants continued to express how they inform the mother that their health is a priority and that if they are not healthy, it would be difficult for the infant to be healthy as well. Participants also recognized that if the mother receives help sooner, then this will hopefully allow for a more enjoyable postpartum experience.

> I think they are appreciative, because it is more of a holistic approach I feel. Like as the nurse I am treating the patient but I am also asking how the mom is doing and I am also

> making sure that because this is a big bonding process right now especially with the infants and the mothers so if there is some kind of mood or some baby blues you know the bonding of the mom and the patient might be altered. And that is important with you know developmental. So if we are able to interview early and having them be able, for mom to feel a little bit better about herself and you know the patient and the mother having a good bonding experience, I think that is important as well. (P8)

I think my role is important. *I think my role is important* is derived from all participants stressing the importance of their role in early detection of PPD. The participants discussed how the infant is their priority but if the mother is not able to care for her infant, then this is a critical matter for the providers and they need to be able to assess and identify any issues that may prohibit the mother from caring for her infant. Participants discussed how critical it is to identify PPD early on, by asking the appropriate questions and having the appropriate resources to help the entire family. Participants also mentioned that they feel part of their role is to help the mother recognize that she is experiencing PPD. In addition, participants elaborated that they are in the best position to screen mothers for PPD because they see the mother/infant dyad so frequently. The participants discussed that they should also "encourage her to seek help and it's okay to feel that way." The interviews with the participants supported the research that describes the providers who see infants within the first year as a pivotal role in early detection of PPD. Although participants did mention in their interviews the lack of adherence in screenings, from their organizations, they continue to express their perception of their critical role in early detection of PPD.

> So of course I care about all people, my number one priority is children because those are my patients and so I think my role is to make sure that my patients are safe at home so detecting postpartum depression in mother and advising them to get the help that they need can prevent consequences of postpartum depression. And for multiple reasons whether it turns into the mother directly like physically hurting her child or even not having a good relationship with the child, so emotional as well. (P4)

Actively Engaged

The code *actively engaged* is defined through and elaborates on the active participation providers demonstrated during their interviews. Participants discussed their routine in their practice in promoting and enhancing both physical and emotional health for the mother. This code also contains several sub-codes, which include *Sometimes people don't realize they are struggling until they're asked, I always make it a point to ask the mother about their feelings, Involving spouse/support person, Pediatric providers feel comfortable with giving resources* and *Following up with the mother.*

Sometimes people don't realize they are struggling until they're asked. The code of *sometimes people don't realize they are struggling until they're asked* is defined as mothers not realizing they might be struggling with the different aspects of motherhood, or in a worst-case scenario, PPD. Participants discussed that once they identified mothers suffering from different issues, including PPD, the mothers seemed to open up and express their concerns. According to the participants, the mothers are usually pretty relieved to be able to talk about what they are experiencing and begin to open up. Participants also mentioned that they made it a priority to explain to the mother that what they were experiencing was okay as well as the importance of discussing it and seeking the appropriate care.

Many of the participants asked the mothers regarding their support system at home. They made sure to make it a point in explaining the importance of asking for help and having a good support system. Participants discussed that they feel their role is important because they see the mother the most that first year and because the mother's support person at home might not notice any changes or might not ask the mother how she is feeling. Participants felt they need to be

willing to help patients feel comfortable expressing needs or concerns and asking for help. They mentioned that they understand that some mothers might not feel comfortable asking for help or seeking the help on their own. Therefore, they felt that they, as the infant provider, were the frontline for the mother/infant dyad.

> I usually encourage, and at first check if they have a good support system or not and then you know ask them do you feel like it's overwhelming or you know it's okay you may sometimes feel like you are overwhelmed but if that happens make sure you have a good support system and if you don't have it or if you're feeling you don't have to suffer you have to speak up and bring it out so that's what I usually tell them and I know some of the moms would say I thought I could handle it but now I feel like I need to go see you know my care provider. Oh yes, and sometimes parents are not recognizing it themselves and when someone asks, they breakdown. They all go through these hormonal changes and if they are not recognizing it themselves then it can you know it could move forward and it could become something bigger. (P3)

I always make it a point to ask the mother about their feelings. *I always make it a point to ask the mother about their feelings* was obtained directly from the participant interviews. This statement is defined as the participants asking mothers regarding feelings and emotions they might be experiencing during the postpartum period at the well infant visits. All 11 providers mentioned that even though they might not formally screen the mother for PPD routinely or at every visit, they still assess the mother informally. All the providers asked a variety of questions they felt were critical in assessing all mothers so they could identify possible issues or a mother who could be experiencing PPD. Providers mentioned how they make it a point to ask mothers about their feelings. Although providers did not have a set guide on how to screen mothers informally, they felt this was a critical aspect of the infant visits. The providers had different perceptions on how and what to ask during their informal screening, but they all made it a point to still ask mothers regarding their well-being. If providers have different perceptions of what they should ask, this could lead to a gap in early detection. If they are not asking the proper

questions, or if they are not asking the best questions when evaluating the mother, they might risk detecting PPD.

Providers also mentioned how they also focus on the "patient and parent interaction." If the provider noticed anything alarming the provider would continue to probe and ask more questions at that time. They would ask the mother how she is feeling and adapting to being a new mother. Participants mentioned that they could notice the mother's mood, and this would trigger them to further probe even if a mother screened negative on the depression scale. A provider mentioned that they had the experience of mothers screening negative on the depression scale but continued to ask mothers how they are feeling emotionally or physically. This validated how the providers, even though they mention different obstacles to screening mothers, went ahead and still took the time to screen mothers for PPD. The participants reported how patients feel comfortable opening up to the infant's provider and disclosing what they are experiencing in response to the providers' concern.

Providers further discussed that they will frequently ask the mother how she is doing emotionally and "how she's handling things." One provider discussed how they use the PPD screening as guidance and actually point at it and review it with the mother and ask how the mother is coping.

> Well if I suspect something I'll go a little deeper but just in general just ask how they are doing, do you feel supported at home like do they feel sad, not have pleasure in the things they used to do things like that I could just ask pretty quickly and they will give me the answer I don't have to go through every single question of the survey and they're pretty forthcoming. I think if I had more suspicion then I would ask more questions and make sure they got plugged into the correct resources. (P1)

Some providers stressed the importance of assessing and screening at every visit but particularly as a family unit. Assessing them as a family unit aligns with the literature on the importance of

ensuring the safety of the entire family due to the negative effects PPD may have on the entire family. They described how they ask a variety of questions and offer referrals when indicated for the mother.

> Hmmm I usually assess them as a whole. So my priority is making sure that the infant is appropriately cared for, so like I said at every visit I assess the whole picture, the whole family, the mom, how is she interacting with the baby, how does the baby look, is the baby clean, is the baby getting fed, so yes I do the whole thing. And of course I ask how are you feeling. (P11)

Involving spouse/support person. *Involving spouse/support person* is described as the participant communicating with the mother's spouse or support person and informing them of their concerns and getting their insight. In addition, this code can include at times contacting the spouse or support person to ensure that the mother did in fact follow-up as intended. Participants discussed the importance of a support system for these mothers. They often stressed how they asked the mother regarding who her support person was, whether it was a spouse, significant other, or even a close relative who might offer some assistance during this difficult time, and who would be a good contact person for the participant to discuss their concerns. Participants described efforts to ensure the mother has an involved spouse or support person:

> Seeing who's going to be with them and who's going to be reliable, if there is a grandma or someone that could help them up until they get a follow-up visit. (P8)

Providers also described how they discussed the issue with the spouse during one of the infant well-child visits:

> He was concerned as well, he thought you know she was just you know feeding the baby, like not wanting to. He was just concerned with that and of course, he was going to assist. He was very attentive to her and trying to see how he could help. (P11)

Participants continued to iterate how they will talk to the mother and the spouse about the signs of PPD and how they need to step back and take time for themselves as well, if the participant

was noticing a negative interaction as well between the mother and her spouse. One participant stated they explained signs and symptoms, the reasons these could surface, and the importance of intervening early on. Participants will oftentimes ask for permission to contact the spouse or significant other to get their perception and receive any further insight into the situation. They often do follow-up as well with the spouse to ensure the mother is following up appropriately. Participants discussed their approach to involving a spouse or support person:

> They usually have their husband or significant other with them and just let them know that they are going through this, if they have someone. I would usually follow up with the patient to make sure they have a follow up appointment. I would probably have another contact person like the husband or someone else, just to make sure it gets done. (P8)

Pediatric providers offer resources and follow up with the mother. *Pediatric provides offer resources and follow up with the mother* was chosen as a code because participants reported offering resources to mothers who were experiencing PPD. All but one participant had experiences with mothers suffering from PPD. The remaining 10 participants expressed familiarity with mothers experiencing PPD. One participant who was double certified as a general pediatrician, and a general internist, felt comfortable prescribing medication as needed and providing other counseling services. The participant mentioned that they felt it was their role to identify PPD early on and to provide the necessary healthcare services required. The participants mentioned they communicated with their social workers, case managers, psychologists, or psychiatrists if their facility provides those services. Many of the participants discussed that they encouraged the mother to reach out to their OB provider for a follow-up. The participants who had access to the OB team in their office reached out to that department, so they could connect the mother with treatments. When possible, and with the permission of the mother, participants would also communicate with the mother's primary healthcare provider and

inform them of the need to further evaluate the mother. Participants would also do frequent follow-up calls or ask the mother to come back frequently. Providing this support provides a safeguard for the mother and her infant. Proper follow-up will ensure that the mother is receiving the proper resources and treatments to meet her needs. Providers explained their efforts to provide resources and follow up with the mother:

> Usually call their primary and let them know they need to be evaluated further, and then they follow up to make sure that they went to their primary. I would usually follow up with the patient to make sure they have a follow up appointment. I would probably have another contact person like the husband or someone else, just to make sure it gets done. I call them or leave them a message and tell them what it is and then follow up with their family in one week to make sure they made a follow-up appointment. (P7)

Participants were able to discuss the resources and the referrals they provide mothers in order to assist them. Participants explained their efforts:

> We do offer them counseling resources. We have a lot of referrals and we have them follow-up more frequently just because if they're depressed or showing signs of depression then you know we have to make sure that the baby is still okay. We follow them up pretty closely. (P1)

I Think There Should be More Education

All 11 providers feel that more education regarding PPD would benefit them and support their role in early identification of mothers experiencing PPD. More education would enhance their abilities to assist the mother/infant dyad. All the participants had different perspectives on what aspect regarding PPD they should continue to receive education on. Some participants thought it might be helpful to receive more education on resources they could provide for mothers. Other participants mentioned the lack of education regarding the course of PPD and how to properly use the screening tool. Participants raised concerns over their need to have education regarding what they should be doing for the mother once she is identified with having PPD. Participants disclosed:

> I think I would have enjoyed, you know a lot more background and information at school. I think we really need a lot more education on like how to you use the assessment tool and that it might not be 100% accurate, and understanding that there are other signs that we could see, not on the tool but signs during the assessment or conversation with the mom that might lead us to believe that they have postpartum depression and just kind of more info on the tools or is this something that could happen throughout the first year of infancy or at what point does it become less common to see postpartum depression or is it just in the initial postpartum period or how long does it extend? (P10)

The participants discussed the wide range of education they received at various times during their schooling and during their training. Some participants mentioned they would like to receive further education at least once a year from their employer or routine training and updates on PPD such as assessment and monitoring due to the frequency with which they see the mother/infant dyad. Providers feel that they should receive more education such as additional lectures during their residency program to prepare them as a provider who sees infants and their mothers so frequently. A provider elaborates on their interpretation on the training they received:

> No I don't think any of us get enough training in mental health disorders period. Probably in residency it would've been better to have some formal education in peds residency about, like besides just I know we learn about the Edinburgh and we've talked about that informally but like I said I don't remember any formal lectures it probably would be good for me to sign-up for some like continuing education for all the newborns and stuff that I see. I'm trying to think about the peds conferences I've gone to like I don't even remember any options about signing-up for those in terms of the national meeting I don't remember any but that might be a good opportunity to talk about it at the Ped's national meeting and do a lot of education stuff. (P6)

There were major variations among the providers regarding the education they received, and what further education they should receive regarding PPD. They universally discussed the need for further education regarding PPD, which would enhance their abilities in assisting mothers who are at risk for or experiencing PPD.

I Don't Know what Other Providers are Doing

Pediatric providers expressed a broad range of opinions about how often colleagues are screening mothers during that first year. This led to the code of *I don't know what other providers are doing*. This statement suggests that PPD is not being talked about among pediatric healthcare providers as a critical aspect of their care. Not discussing or educating providers in conferences or competencies regarding PPD allows for a lack of education. In addition, this inhibits providers from having insight into the importance of early detection among their colleagues. Some participants assumed other providers are screening mothers during the well infant visit due to their institution's protocol. However, they mentioned that although they are supposed to be screening mothers, there is usually no documentation to confirm it is being done. Some participants stated that lack of documentation is due to not being able to bill for the screening or because they are not allowed to document regarding the mother in the infant's chart. This aspect of providers not knowing what other providers are doing within their own institution discloses a major flaw in the system, both in the organizational and at the national level. Not documenting what is being done may lead to major liability issues and poor continuity of care.

> It's just that you know our residents at least know that they are supposed to be doing four-month depression screening I mean look at it but then again we don't document per se but yeah they are supposed to be doing it. There's no way for us to track it because we don't bill it and whatnot but I know that it is done. (P3)

Other participants stated they are not sure what other providers are doing in regards to screening mothers. Some participants stated that they felt their colleagues were screening as much as they are. Providers expressed a belief that most providers provide some version of the screening:

> I think it's been very routine in pediatrics. I don't know, I'm sure everybody has a different time that they do it but to my understanding I think people who follow the (screening) guidelines are doing it. (P7)

Some participants discussed PPD and the screening within their clinic among their fellow providers. In addition, they mentioned that they see the screening documented. Therefore, they feel pretty confident that it is being done. Participants spoke confidently that screening was being done:

> I think so, at least the providers I work with. Yea, and I see the screening being done at the clinic. (P10)

Falling Through the Cracks

Falling through the cracks is defined as the possibility of mothers being overlooked or missed. *Falling through the cracks* is an aspect of the interviews that shined light on many of the issues that may lead to missing mothers at risk of PPD. These issues ranged from lacking knowledge of when to screen, lack of resources, lack of continuity of care, risks of screening and not documenting, billing issues, referral issues, confusion regarding provider's role, lack of a specific workflow and responsibility for the screening tool, and the lack of time. This code has several sub-codes that include *broken continuity of care, liability risks, missing pathway,* and *time restrictions.*

Broken continuity of care. *Continuity of care* has different aspects that might affect early detection and treatment of PPD. First, participants did acknowledge that at times the infant might see different providers at their well-being checks during that first year. Participants discussed that this could essentially lead to the mother/infant dyad "falling through the cracks" (P6). Such a gap in continuity of care could also be hand-in-hand with the next subcategory of *liability risks*. The next provider would have to read through the notes of the previous provider, which participants admit might not always occur. Moreover, this review would only work if the provider had documented their concerns regarding the mother in the infant's chart, which is

generally discouraged because the infant's record is not intended to document information about the mother.

> Assuming that, that I mean that I did write it in my note and assuming I am the one seeing them to because sometimes there isn't the greatest continuity of care either. Yea I mean they would have to happen to look back at my note, which some people do and some people don't. This is why I think continuity is so so so important but unfortunately I feel like especially well I don't know; different clinics do things differently. I think we intend to have continuity of care in our clinic but by being part of a larger institution and not having the scheduling done always right in our office, people call and get put in the first available appointment on the day they happen to want and that may be with a different doctor. And people don't always understand how important continuity is. So, but I know that there are offices out there that purposely have patients see different doctors every time, which I don't really understand. Yea, so it would really just be if they happen to look back at my note or if they are lucky enough that the other person, or maybe I was the one that, that family didn't know very well but then the next visit there back with somebody that knows them a little bit better and would maybe know this already. There is a way to put something into the patient's problem list but again I start to wonder how that might not be the best thing in terms of HIPPA, to be putting a note about the mother's mental health in the baby's problem list. (P7)

Participants discussed the difficulty of access to resources for mothers and the feasibility of providers having enough information regarding resources to refer mothers to all the different available services. Participants suggested that getting into counseling or other counseling services such as support groups, a psychologist, and/or a psychiatrist are really hard to come by for mothers. These participants also mentioned that they perceive the lack of counseling services to be a huge barrier for women: both the early detection and intervention for PPD.

> You know we are lucky enough to have behavioral health onsite, sometimes sometimes. But it is a pediatric clinic, so they are not going to see adults here. So there's that barrier as well as the availability for behavioral health services in the area, they are limited. (P9)

Participants discussed how they were not sure what to do for the mother who screened positive or were displaying signs of PPD. They typically decided to refer the mother back to their OB provider or locate an OB nurse to help the mother. However, both of these outcomes could lead to a break in continuity of care. Providers should be trained and educated on the proper

resources on where to refer mothers that will be the best resource for mood disorders.

Participants reflected on their referral strategy:

> If I do find a mom who screens positive or that I'm worried about for any reason and they do see the OBs in our office, I can go grab one of the OB nurses to come talk to them. So I've done that multiple times. (P7)

Another issue was raised regarding not ever receiving any type of communication from the OB/GYN or a discharge summary from the hospital related to any possible mental health issues pertaining to the mother that might be pertinent to the care of the infant. Participants also discussed their concerns for mothers who do not have a primary care provider (PCP) at the same facility. Many participants elaborated that not having any access to the mother's PCP was an issue for them. Therefore, the participants disclosed that they simply asked the mother to follow-up with her OB/GYN.

> But her OB/GYN had no way of knowing why I told the mother to follow-up with them. (P6)

Providers had many concerns about breaks in continuity of care while attempting to reach out to the mother's healthcare provider. Participants did stress their frustration at the lack of communication from other providers when they are attempting to communicate their concerns and collaborate with the mother's provider in order to provide early intervention and treatment of PPD. One participant discussed many issues they routinely encounter while trying to communicate with a provider from another facility who is not associated with their particular clinic. Participants described a common potential break in continuity of care:

> No, we just get the information from the family, and that's where there could be a gap. There is another issue, because we have a lot of families that don't really have good providers. There are times I think when I spoke to the doctor before when I was asking questions about this, she said she will usually call them or leave them a message and tell them what it is and then follow up with their family in one week to make sure they made a follow-up appointment. Some providers will fax us things over right away, or answer

> us, some of them will never like get a message or aren't very compliant with that. Yes, this is where I would say we would be missing moms. I think that we are trying to be as proactive as we can, but if the other side is not as proactive it's kind of hard. Cause there is some, even now I do email some things or fax some things to some providers and I don't get any response and even though we do everything, they don't send us stuff. We ask that in our intake in terms of medical history for parents. So it's all whether or not they disclose. I don't think I've seen a discharge summary that discloses any mental health. (P8)

Liability risks. *Broken continuity of care* might also lead to *liability risks*. Many participants admitted how they might be missing mothers at risk of suffering from PPD due to their clinic's protocol of only screening mothers at certain time periods within the infants first year of life. This is a liability risk for providers because they could have prevented detrimental effects of PPD if they would have been screening mothers frequently and more often during that first year of the infants life. Providers elaborate:

> Admittedly then we are potentially missing things that could be happening later with these moms. (P7)

Participants discussed the gaps that might occur if the mother does not follow-up with their own provider as suggested by the infant's provider. Participants stressed how they do not have access to follow-up with an outside provider to see if the mother did follow up with her own provider. Documentation was also a major debate among all the providers that were interviewed. They all had different ideas and perceptions on whether or not they should document their concerns regarding the mother in the infant's chart. In addition, they all had different ideas on where it might be acceptable to chart any of this information. Participants described how the acceptability of charting information about the mother's mental health was impacted by whether they could bill for their services. Participants described this as a major issue because even if they screen the mother, there is no definitive way of knowing the outcomes if it is not documented. Seven of the participants all worked at the same facility in the Chicagoland area. However, they

all interpreted the formality of how, where, and when they could document in the infant's chart regarding the mother differently. Providers reflected on the ambiguity:

> There's also been a big debate about how do we document in a baby's chart about the mom's mental health and whether that's okay to do, also billing for the postpartum depression screen in the babies' chart has been a big question and the answers I feel like have changed constantly because nobody really, I don't even know if there are any official rules or if anyone just makes them up, no one really knows. For a while we were told we should not document like we could just say in the baby's chart that we did the screen but that's all we could say and that is like I don't actually put a score in the baby's chart. (P7)

Missing pathway. Participants discussed issues that led to this sub-code of *missing pathways*, defined as the participants not knowing or not being told who is in charge of giving the screening tool and what could and should be documented in the infant's chart. This is a major break within the organization. If there is confusion regarding who is in charge of doing or handing out the screening tool, then this puts the mother at risk for a missed opportunity. There needs to be a clear pathway in order for providers to fully be able to assist the mothers and provide the necessary support. In addition, a missing pathway is also defined as the confusion among providers of when the screening should be completed, and whether the screening is actually being done. Providers described the difficulty:

> Time like the check in desk is asked to do so many more things every time that like asking them to review the schedule ahead of time and have the forms on hand to get to the new moms. I guess would be a bit of a burden for them. And so like who does the screening, who gives the form, stuff like that just not having a pathway set up for how it's done. I know that technically that I'm putting a mental health issue on a mom in somebody else's chart and that I don't know what that means HIPPA wise but I don't know another way to put that in because that really it's obviously completely relevant to the baby's heath as well. I do think we should probably be screening for it more frequently at least at some time during the second half of the year. You know it's probably completely being lost. (P6)

Time restrictions. *Time restrictions* are defined as the limited time the provider has with each of their patients during their appointments in the clinic. Various participants disclosed how time

has them limited to the things they are able to assess for and evaluate during the infants' well-child visits. Participants discussed they felt they could probably get in depth more if they didn't feel like they had to rush and start preparing for their next patient. Participants also mentioned that if they had more time, they would be able to sit down and talk to their patients more and be able to listen to their concerns and their questions. In addition, they discussed how more time would allow them to tease out issues a little bit more and pick up on the cues that are visible when walking into a room. Time continues to be seen as a major barrier for providers. This may be an overall national and organizational issue. Organizations need to focus on ensuring the implementation of all imperative aspects of care, even though time might be an issue. Providers describe the challenge:

> I think it would just be the time restriction. I think just having to, it doesn't take a ton of time but I have seen providers who maybe are busy and might not find the time, and if they don't have the resources as far as staffing goes. (P10)

A Supportive Organization has an Impact on the Role of the Provider

A supportive organization has an impact on the role of the provider is defined as the way in which an organization is a determining factor on how the provider perceives his or her role, how the provider perceives the importance of screening for PPD, and the support providers feel they receive in screening for PPD. Participants from the same organization had different views on the support they received from their organization. The variation among the participants revealed the concerns participants mentioned regarding the irregularity when it comes to screening mothers for PPD. One participant thought that the organization should require their clinic to screen mothers and to make it a priority. Another participant from the same organization discussed how they felt supported by their organization in screening mothers for

PPD, but that the overall structure of healthcare was not supportive due to the lack of time available to spend with the families.

> I think that they are supportive. I know that before I started, you know when I said that doing this at the four-month checkup was already determined before I started there had been a big push for just starting to do developmental screening period in pediatrics and there has been somebody who was basically in charge of that, and ended up kind of putting it all in place and then leaving but I think it might have been some sort of a part of a grant and this was part of that and so I think that the organization was part of that and was supportive. I think that just in general, medicine, the structure of medicine is not supportive because we don't have the time to spend with our patients. (P7)

The advanced nurse practitioners all worked in different clinics and were affiliated with different groups or organizations. All the advanced practice nurses mentioned the support they received through their organization. A couple of participants mentioned how great it was to have actual behavior health services in their own clinic. Another described how proactive their organization was in making sure mothers are being screened and ensuring that there is proper documentation.

> Well to tell you the truth, they are very involved. Like I said we are lucky enough, I am lucky enough to work with you know an organization with behavior health, so we cover the topics not just a certain chosen, but we cover for the whole family. (P11)

Trustworthiness/Rigor

In order to maintain rigor, the Lincoln and Guba criteria was used for the descriptive research design. The Lincoln and Guba criteria stress that qualitative research should be judged by its trustworthiness (Cohen, & Crabtree, 2006). Trustworthiness consists of credibility, transferability, dependability, and confirmability. These four aspects of trustworthiness were implemented to reinforce the findings of this study. They also enhance the significance and effectiveness of the study outcomes.

Credibility

Lincoln and Guba (Cohen, & Crabtree, 2006) discuss credibility as one of the most

significant factors in determining trustworthiness. There are many techniques that can be used to ensure credibility. These techniques include prolonged engagement, persistent observation, triangulation, peer debriefing (participant debriefing), negative case analysis, referential adequacy, and member-checking. These techniques allow for confidence in the truth of the findings regarding the description of provider behavior. During the analysis of the interviews, I consulted with my advisor several times regarding each individual interview. Numerous meetings and conference calls were carried out throughout the research process. This process allowed for dissemination of the interviews and detailed interpretation of the codes. This step was taken to secure validity in the study.

Transferability

Transferability consists of thick description. Thick description is described as a thorough interpretation of field experiences in which the researcher explains detailed patterns of social relationships and places them into perspective. Thick description demonstrated how these findings could be applicable in circumstances and other situations were healthcare providers see infants during their first year of life. This process was secured by asking the participants focused, semi structured, and open-ended questions. The interviews were led using the prepared interview guide with exploratory questions that encouraged participants to discuss their perceptions, opinions, and possible concerns about their role in early detection of PPD with a mother that does not fall under their care. In addition, field notes were also taken throughout and after the interviews. These field notes allowed the researcher to look back and reflect on any data that was captured during the interview that might not have been recorded but was observed. Transferability was implemented as a critical component of trustworthiness in order to display the findings in a systematic approach. It demonstrated how healthcare providers who see infants

and their mothers perceive their role in early detection of PPD.

Dependability

Dependability addresses reliability issues by using inquiry audits such as an external audit done by a researcher not involved in the research process (Lincoln & Guba, 1985). Dependability was established for this study by having an uninvolved researcher, the advisor and committee member, performed audits during the research process and data analysis through constant communication and inquiries regarding the interviews and field notes. Dependability demonstrates the possibility of replicating the study by other researchers. In addition, the study is in the process of being replicated from the research data that has been collected and reported.

Confirmability

The final component of trustworthiness is Confirmability. Confirmability demonstrates the research is not a result of researcher bias, motivation, or interest but the findings of the study. The techniques for confirmability are in reference to objectivity and include confirmability audit, audit trail, triangulation, and reflexivity (Lincoln & Guba, 1985). Confirmability ensures that research bias did not distort the interpretation of the participant interviews to fit the study outcomes. During the process of this research study, confirmability was enhanced by collaborating with the committee chair, who reviewed the interviews, discussed the field notes, and had constant insight and questions that allowed for further discussion of additional categories. The committee chair also took part in overseeing the data analysis during the interview phase.

Summary

This chapter discussed the findings of this qualitative descriptive study. This qualitative descriptive study examined the perceptions of pediatric providers and their role in early detection

of PPD. This study was done with a qualitative descriptive stance, which describes the phenomenon and its characteristics. This method allowed for the understanding of each healthcare provider's individual reality and his or her experience interacting with new mothers during well-child visits within the infant's first year. Data collected from the interviews were coded and identified. These results demonstrated validity and alignment with findings as supported by a descriptive narrative containing direct quotes from providers.

During the coding process, many categories developed. While implementing constant comparison during the data analysis of the interviews, saturation was identified. The findings from this study included the data analysis from all 11 interviews. There were 7 codes, with thirteen sub-codes. The codes were defined and provided supporting data derived directly from the interviews. The codes that emerged consisted of a wide range of perceptions from healthcare providers who see infants and their mothers during the first year of life. Data from the interviews demonstrated how providers perceive their role as a critical aspect of early detection. However, there were many emerging categories that demonstrate the need to increase awareness among healthcare providers, policy makers, and organizations to secure a proper and efficient protocol to ensure the consistent practice of screening all mothers for PPD.

CHAPTER FIVE

DISCUSSION

The aim of this descriptive qualitative research study was to describe the perceptions pediatric providers have of their role in early detection of postpartum depression (PPD). Constant comparison was used to analyze the data from the interviews, which allowed for codes to be developed and identified throughout the interview process. The findings of this study shed light into many different thoughts providers have of their role in early detection.

Seven codes with thirteen sub-codes were created based on the interviews with the participants, who were healthcare providers that see infants within their first year of life. The seven codes were developed from the interviews, and the perceptions participants had regarding their role in early detection. Participants unanimously stated the importance of their role in early detection. Although participants were in accordance with the importance of their role in early detection, many other issues and concerns did develop from the interviews. These issues ranged from inconsistencies regarding the lack of resources available to offer mothers, lack of collaboration between mother and infant providers, lack of screening protocols, and the lack of education the providers felt they received. Many of these findings related to existing literature. This chapter explores the study findings, limitations of the study, and its implications for healthcare, which include public policy, nursing practice, nursing education, provider education, and future nursing research.

Findings from the Study

Screening Formally and Informally

Screening formally and informally was a code that included three sub-codes. Overall, the participants discussed many different techniques they use to screen the mothers, both formal and informal. Most critically, all participants discussed their perception that they feel they should be screening mothers, which led to the sub-code *We should be doing a screening at the newborn visits*. They also discussed screening formally, by using a screening tool. This created the sub-code *We are using a screening tool*. In addition, they discussed the many aspects of screening, such as informing the mother as to why they screened the mother, and discussed PPD specifically. This led to the sub-code *I stated the reason I gave the screen was because some mothers do experience some depression after pregnancy*.

We should be doing a screening at the newborn visits. *We should be doing a screening at the newborn visit* was an important sub-code that developed throughout the interview process and emerged in all 11 interviews. All 11 participants discussed screening formally and informally. However, there was a variation of when and how often they were screening the mothers according to their institution's policies and protocols. The providers expressed their concerns and said they felt they should be screening more than they already are. These comments demonstrate the impact providers feel they have in screening mothers. No matter how the participants were screening, they felt that it was important for them to implement a screening at the well-infant visits. Although participants mentioned that they are only required to screen mothers at four-month well-infant visits, they still feel the need to screen the mother informally at other time frames. They elaborated on how they identified the importance of screening mothers for PPD frequently.

The results from the interviews demonstrate that the participants' perceptions on screening align with the literature. The participants feel the need to screen mothers at the infant-well visits because they are in the front lines in being able to provide early detection and support. Sriraman, Pham, and Kumar (2017) elaborate on how pediatric healthcare providers have the greatest opportunity of interacting with the mother and her infant the most within that first year. Therefore, pediatric providers have a responsibility to screen mothers and provide the support and appropriate resources available. Sriraman et al. (2017) discuss how screening mothers is imperative because of the detrimental effects PPD has on children born to mothers with depression.

We are using a screening tool. *We are using a screening tool* was derived directly from the interviews with nine of the participants. The majority of participants discussed how they use an actual screening tool at least at one point during the first year of the infants' life. The screening tool they discussed was the Edinburgh Postnatal Depression Scale (EPDS). Participants mentioned that they knew it was a screening tool specifically for mothers during the perinatal period. Although the participants did use a screening tool, they expressed their concern regarding the need to implement the screening more often, sooner, and further out during that first year of life.

Many inconsistencies were identified among the participants and the way they screen mothers using the EPDS. These inconsistencies were discovered while the providers discussed the timing of the screening. Although a majority of the participants were part of the same organization, they mentioned different intervals in regards to when they screen mothers for PPD. Many were not able to explain why the tool was done only at certain times. They stated they

assume there was some research on the best times to screen and said they figured that their organization used these findings to determine the time frame of when to screen.

The literature discussed in chapter two demonstrates the importance of screening all mothers for PPD at pediatric healthcare visits. Being able to screen mothers may enhance the ability of early detection and lead to early interventions for PPD. As the research has shown, it is important to implement an actual validated screening tool because of the wide variation of perceptions when screening mothers informally. Chaudron (2018) discusses that in previous studies pediatric providers were not able to completely identify mothers who had depressive symptoms regardless of the severity of her symptoms. The evidence illustrates that screening without an actual screening tool does not work effectively in assessing mothers with PPD. Therefore, a tool needs to be implemented and used across all organizations, and within their clinics where infants are seen. A major advantage to using a validated screening tool is that it is quick and easy to use and is able to detect a mother at risk of PPD at a specific score. Implementing a validated screening tool like the EPDS will provide for early and more accurate assessment of mothers at risk for developing PPD.

I stated the reason I gave the screen was because some mothers do experience some depression after pregnancy. *I stated the reason I gave the screen was because some mothers do experience some depression after pregnancy* was derived directly from the participants' interviews. Participants discussed how they formally screen mothers and asked them questions informally regarding their feelings and asking about their social support. Participants would screen the mothers and then discuss with them their results, any concerns, and the importance of following up with their provider. Participants also mentioned that when possible they would contact the mothers' OB/GYN to ensure the mother was able to follow up appropriately.

Participants felt the need to follow up much closer and sooner with mothers who had a positive screening. In order to promote positive outcomes for her and her infant, participants felt they needed to explain to the mothers the screening and results so they could understand the importance of follow-up with their own healthcare provider and the referrals they had received.

The participants' actions and the way they perceived the need to express to the mother the results of her screen is supported by research focused on the outcomes of this communication on mothers, their willingness to follow-up appropriately, and the health of the mother/infant dyad. Bauer, Ofner, Pottenger, Carroll, and Downs (2017) discuss the positive impact of sharing the results of the screening and provider concerns with the mother. In addition, a decision-making approach between the provider and the mother regarding the importance of seeking help, demonstrates a positive aspect for mothers in determining whether or not they seek help. Communication between the provider, mother and her primary care provider continues to be a critical factor when promoting positive outcomes for the mother/infant dyad.

Providers Perceiving their Role

Providers perceiving their role was developed as a vital part of this study. The role providers perceive they have in early detection is important in distinguishing whether providers who see infants will follow through with screening mothers during infant visits. If the provider feels this is a significant aspect of their care, then they will promote the screening process. Two sub-codes developed from this code: *We are in the best position to screen* and *I think my role is important.* Both of these sub-codes go hand in hand in describing the importance of the role of the provider.

We are in the best position to screen. Participants cited *We are in the best position to screen* as a reason why they feel the need to screen mothers during infant visits. Participants discussed

how they see the mother/infant dyad the most during that first year. Screening the mother at these well infant visits could be easily implemented, yet this is still lacking across the health system. They also mentioned that they felt this places them in the most perfect situation to be able to screen, assess, detect and provide early interventions for the mother. Participants discussed how PPD has many significant influences on the infant's early development. Therefore, by promoting the mother's health, they are also enhancing the infant's health as well.

The literature also discusses how providers who see infants during their first year of life are in the best position to screen and provide early identification of PPD (Chaudron, 2018). Providing early detection, support, and appropriate resources for the mother would promote a prompt recovery for the mother and prevent negative consequences on the infant's development (Van der Zee-van den Berg et al., 2017). Benefits are optimized when PPD screening has been done in pediatric care areas. The literature demonstrates that early detection of PPD has positive effects on parenting and infant outcomes. Although there is so much literature on the importance of screening mothers in the pediatric care areas, it has not been implemented within healthcare systems. Screening mothers during these visits needs to be enforced from organizations.

I think my role is important. Participants discussed *I think my role is important* in providing early detection of PPD. Participants elaborated on how mothers need to be healthy in order to care for their infant. Although the mother is not the participant's patient, they are the primary provider, which has major influences on the health and development of the infant. Participants also discussed the importance of early detection and how they could play a major role in identifying PPD. Moreover, participants expressed how they feel their role is also to encourage the mother to seek help and properly educate the mother on what she is feeling and how it is important to treat depression rather than ignore it. Although the mother is not their patient it was

understood that the participants are a pivotal individual in intervening and providing much-needed help.

Screening and early detection of PPD during infant visits throughout the first year will have a significant role in the improvement of PPD, parenting and infant development (Van der Zee-van den Berg et al., 2017). The literature states it's crucial for pediatric providers to screen mothers during well infant visits. This should be evidence enough to implement policies within the hospital and its clinics. PPD inhibits the role of the mother, which may ultimately interfere with the infant's health and development. The primary care provider for the infant has a longitudinal relationship with the families (Earls, 2015). Therefore, they have the unique opportunity to assess and identify mothers at risk for PPD and in turn prevent further issues related to PPD that could affect the mother/infant dyad and the entire family dynamics.

Actively Engaged

The next code identified, *Actively engaged,* describes how the participants are active within their care and interactive with the mothers in promoting their health and assessing for early detection of PPD. Participants discussed their routine of assessing mothers and helping them identify their needs and possible risk factors. The sub-codes that emerged were *Sometimes people don't realize they are struggling until they're asked*, *I always make it a point to ask the mother about their feelings, Involving spouse/support person,* and *Pediatric providers offer resources and follow up with them mother.*

Sometimes people don't realize they are struggling until they're asked. Participants described this aspect of their role as a priority. *Sometimes people don't realize they are struggling until they're asked* was a critical sub-code that developed throughout the interviews and was identified as a very significant point of care. Participants expressed that once they

identified PPD or any other issue by asking the mother routine questions regarding their mood, these mothers were able to open up and express their concerns. The mothers were able to open up and speak to the provider regarding concerns. Participants felt comfortable discussing issues with the mothers and how the mothers needed to seek help and the appropriate care.

Participants felt that once the mothers opened up to them, it was important to ask about their support system at home. Participants disclosed how they educated the mothers on the importance of speaking up and asking for help. Participants comprehended the importance of the mother's support system in determining the overall health of the mother and her infant. Participants strongly believed that mothers might not fully understand they are struggling with motherhood or with possible risk factors for PPD until they are asked regarding their feelings, and adaptations to their new role. Therefore, participants discussed how they continued to feel that their role is so significant in maternal/infant health. Their perception of their role in identifying mothers who are struggling and allowing the mother to open up regarding her feelings, and concerns has validated the participants' stance.

Coates, Ayers, and de Visser (2014) discuss how mothers often describe their experiences as positive when they felt they had a supportive relationship with a healthcare provider. Women felt that having a close empathic relationship with the healthcare provider, they could discuss their feelings without feeling that they were being rushed. Communicating with the mother, and discussing the screening results, allows opportunities for the mother to discuss what she is feeling (Bauer, et al. 2017). A support system continues to be identified across all the literature in providing a foundation that will enhance the health of the mother and her infant (The American College of Obstetricians and Gynecologists, 2018., Chaudron, 2018., Sriraman et al., 2017). This sub-code provides further evidence that of what the literature mentions.

I always make it a point to ask the mother about their feelings. Participants expressed how they always ask the mother regarding feelings and emotions, which led to the sub-code *I always make it a point to ask the mother about their feelings.* According to the participants, they feel asking about the mother's feelings directly will help the mothers to open up. Participants also mentioned that sometimes a mother might screen negative on the tool but might still be displaying signs or symptoms of PPD. It was clearly stated by all the participants that they continue to assess mothers at every visit even if they are not using the screening tool at every well-infant visit.

Although all participants discussed they make it a point to ask the mothers regarding their feelings, they all had different perceptions on what the mothers need to be asked. Participants described how they might use the screening tool as a guide when deciding what questions to ask the mother at the infant first year visits. Participants expressed their perceptions that they should assess the family as a complete dynamic. They identified this aspect of their care as a priority and identified how the health of the mother influences the family as a whole.

The participants' statements about asking mothers regarding their feelings during every visit is also supported in the literature. Just as discussed by the participants, the infant's wellbeing is affected by the presence of the mother experiencing PPD (Emerson, Mathews, & Struwe, 2018). Primary care providers have been noted to be inconsistent in their practice of screening mothers, whether it is with a formal or informal screening, and when screening takes place. In this study, participants discussed how they assess the mother for PPD at every visit. Emerson et al. (2018) concludes that screening mothers at more visits than just one may be beneficial in identifying PPD. Providers should be asking mothers regarding their feelings at every opportunity. The mother and the infant provider build a strong relationship due to the

frequent infant visits, which allows the mother to open up and feel comfortable expressing her feelings and concerns (Sriraman, Pham, & Kumar, 2017). In addition, screening without a clear and consistent content assessment might place the mother and infant at risk of being missed for further issues. Therefore, although the participants are asking the mothers regarding their feelings, a screening tool would be most effective to assist the participants in assessing mothers at risk. The evidence in the literature strongly displays the importance of enforcing an actual validated screening tool. Asking mothers regarding their feelings and concerns is not enough to fully identify every mother at risk for PPD. A uniform screening must to be implemented with a proper and clear policy in place.

Involving spouse/support person. Participants discussed *Involving spouse/support person* while assessing mothers for PPD. Specifically, participants elaborated how they felt that involving the spouse or support person was a major factor in assisting the mother in seeking help and receiving the care she needs. Participants expressed their perceptions that a support person for the mother was an important factor to ensure the mother is having a positive postpartum period. Participants discussed they will often ask the mother for her permission to discuss their concerns with a member of their support system. In addition, participants would often follow-up with a spouse in order to get a bigger picture of the situation and how the spouse has perceived the mother to be acting.

Participants mentioned different aspects of care that are also demonstrated in the literature. A support system has been identified across all the literature as an imperative role in providing aid to the mother at risk or experiencing PPD (The American College of Obstetricians and Gynecologists, 2018., Waldrop, Ledford, Perry, & Beeber, 2017., Chaudron, 2018., Sriraman et al., 2017). The support system, whether a spouse, family member, or close friend,

may aid in the mother seeking help and prevent further suffering from the mother. In addition, the mother getting help and having a support system may prevent any long-term negative consequences for the infant. Collaboration among the healthcare provider, the mother, and her support person will lead to positive outcomes as well. Through collaboration available resources and referrals for the mother are identified, which will provide support for the mother (Sriraman, Pham, & Kumar, 2017).

Pediatric providers offer resources and follow up with the mother. Another sub-code derived from the interviews, *Pediatric providers offer resources and follow up with the mother,* is a critical perspective that resonated with the research regarding PPD. Participants reported how they offer resources to mothers who display any signs or symptoms of PPD. Participants who were double certified as a general pediatrician, and a general internist, would additionally prescribe medication as needed for the mothers. Participants offered services that were available to them in their clinic, organization, or community. These services consisted of counseling; referrals to social workers, case managers, psychologists, or psychiatrists; and in some cases referrals back to the mother's OB office for further evaluation.

Pediatric providers offering resources is undoubtedly discussed throughout all the literature as an important function of the pediatric provider once they have identified concerns or issues that may alter the mother's mood and affect the infant. The literature discusses that although screening is critical, screening alone does not significantly affect outcomes (Sriraman, Pham, & Kumar, 2017). Instead, resources must be given to the mother for treatment and adequate follow-up must also be in place in order to promote a positive outcome for the mother/infant dyad. Pediatric healthcare providers should have a system in place for a referral network of mental health professionals and other community resources (Sriraman, Pham, &

Kumar, 2017). PPD has a significant negative impact on the infant's development. Therefore, pediatric providers should be able to refer mothers for early interventions as needed and be able to trust that the mother will receive the care and follow-up she and her child needs.

I Think There Should be More Education

The code *I think there should be more education* was something that emerged during all the interviews. This code undeniably, represented a major concern for the providers. All 11 providers discussed the lack of education regarding PPD they received throughout their education, during their clinical rotations, and in their current setting. Although all the providers felt the need to know more regarding PPD, they all had different thoughts on what aspect regarding PPD is critical in enhancing their role in early detection. The participants discussed the lack of knowledge regarding the screening tool, available resources, and what to do once they identify a mother with a risk for PPD. Participants also offered their insights on what would be beneficial for them. Their suggestions included continuing education of some sort from their employer and continued updates on PPD, it's assessment, and monitoring.

More education on PPD and a set pathway for pediatric healthcare providers is an important part of supporting the mother/infant dyad. Chaudron (2018) states the first step to improving detection is to provide pediatric providers with the proper education around prevalence, risk factors, symptoms, and the protocol for resources. An increased awareness may allow providers to ask specific psychosocial questions to the mother and her experiences in the postpartum period. In this study, the pediatric providers mentioned the insufficient training they have received regarding PPD. Yet the literature continues to stress the important role the pediatric healthcare provider has in early identification. Pediatric healthcare providers should be able to facilitate interventions and prevent adverse outcomes (Earls, 2015). Therefore, pediatric

providers should have the adequate knowledge needed to provide information for family support, resources, and emergency services as indicated. This data informs us of the need of a policy for screening, and proper protocols regarding the education process received by pediatric providers. Proper protocols regarding education should be in place along with frequent assessment and evaluation of the provider's knowledge.

I Don't Know What Other Providers are Doing

The code *I don't know what other providers are doing* reflects the lack of discussion within the pediatric community regarding PPD. This absence of transparency and communication could lead to many adverse implications for the mother/infant dyad. The participants discussed their perceptions of what they assume their colleagues are doing regarding screening and assessing for PPD. Participants also discussed their lack of awareness due to a protocol of not being able to document that the screening is being done within the infant's chart. This demonstrates the lack of structure among providers seeing infants within their first year. The lack of discussion of PPD among these providers, may lead to an unfamiliarity of PPD how to assess for PPD, and the risk of providers not adhering to guidelines regarding screening if they are not aware of the importance of PPD. Other participants stated a lack of knowledge over whether other providers are using a screening tool. Some participants assumed it was being done because it is policy.

This code demonstrates a major need to ensure PPD is being discussed in order to further develop and implement a network to assist mothers suffering from PPD. A local policy must be implemented to assess and screen mothers. There also must need to be frequent discussion regarding PPD among these healthcare providers during their meetings, and grand rounds. Pediatric healthcare providers are in an ideal position to assess and intervene in PPD (Chaudron,

2018). Therefore, adequate systems need to be implemented to ensure accurate assessment, effective treatment, and appropriate follow-up. The lack of discussion among pediatric healthcare providers might interfere with the early interventions mothers need. Sriraman, Pham and Kumar (2017) elaborates that all pediatric healthcare providers should be knowledgeable and comfortable with screening in order to assist the mother/infant dyad. Screening for PPD in infant-well visits allows for the improvement of overall maternal mental health and parenting, which in turn positively affects the infant (Van der Zee-van den Berg et al., 2017). In order to enhance and further implement set protocols and policies, more education and discussion needs to occur within the pediatric care areas. The healthcare system has an electronic medical record (EMR) however, it is not being used effectively. A proper protocol on where to document a mothers screening or mood within the infants EMR must be applied to facilitate positive outcomes for infants.

Falling Through the Cracks

Falling through the cracks consists of several sub-codes that elaborate on issues participants disclosed as possible risk factors for missing a mother who might be experiencing PPD. These sub-codes disclosed many of the issues identified throughout the interviews, which have implications that may hinder outcomes for the mother/infant dyad. The sub-codes are broken continuity of care, liability risks, missing pathway, and time restrictions. There are many issues within these sub-codes that need to be evaluated in order to promote and heighten early detection for mothers with PPD. These issues include but are not limited to lacking knowledge of when to screen, lack of resources, patients lacking continuity of care, risks of screening and not documenting, billing issues, referral issues, confusion regarding their role, lack of a specific flow with who is in charge of giving out the screening tool, and the lack of time.

Broken continuity of care. The sub-code of *Broken continuity of care* entails a range of aspects of care. Participants discussed broken continuity of care as a major concern. For example, infants are sometimes seen by different providers during their well-being visits. Not having the same provider meet with the infant at each visit could lead to the mother/infant dyad "falling through the cracks". In this case, if the provider doesn't review a note that discloses concerns of PPD, he or she could fail to provide proper follow-up, which could place the mother and her infant at greater risk for developing long-term adverse outcomes related to PPD. In another example, participants discussed how documentation might not always occur in the infant's chart due to organizational protocols. Different providers and lack of documentation may lead to a broken system for continuity of care.

Resources, and the lack of resources, to provide and access care were mentioned as an issue for the participants. Participants disclosed that counseling services are particularly hard to locate for mothers with PPD. Providers perceive this to be a major barrier during the process of early detection and intervention of PPD. There was also a lack of clarity from participants around what do to once a mother was identified to be displaying signs or symptoms of PPD. Participants mentioned referring the mother back to her OB provider. This decision-making demonstrates a lack of knowledge and training from pediatric healthcare providers. Providers should be armed with the proper training and guidance to be able to properly support the mothers.

Lack of collaboration is another frustration participants discussed. Participants revealed they never received any communication or documentation regarding mothers' mental health issues or other concerns. Collaboration with the mother's provider would assist and prepare the infants provider in offering the much-needed support. At times participants disclosed how they

attempted to communicate with the mother's provider in order to ensure proper follow-up. Yet, at times there would be no reciprocation from the mother's provider. Although the pediatric providers described their attempts to be proactive, the lack of support from the mother's provider has potential negative consequences if there is not follow through.

This sub-code displays many issues that may interfere with providers offering the best possible care for the mother and her infant. Much of the literature discusses the critical role providers have in early detection of PPD. In addition, the literature discusses the importance of a clear pathway for providers to properly support the mother. A care pathway or protocol should be developed and implemented (Registered Nurses' Association of Ontario, 2018). Simply put, there is little benefit in identifying women with PPD if there is a lack of knowledge regarding what to do once a mother is identified, a lack of resources available, or a lack of collaboration among primary care providers.

Much of the literature discusses different possible interventions or protocols that may ensure mothers are being assessed and followed-up with as well. One study did mention a unique way of ensuring that providers are reminded to follow-up with mothers. Guevara et al. (2016) suggested implementing an electronic medical record alert for the pediatric provider would allow for different providers to be mindful of screening or following up with the mother. A strong referral network, and a variety of effective and accessible interventions, and various accessible resources should be implemented among healthcare organizations.

It is imperative that proper collaboration is in place to promote timely access to appropriate treatment resources for a mother who has been confirmed to have PPD. One study (MacArthur, 2002) implemented a preventive intervention that included proper training, a symptoms checklist, care plans, and evidence-based guidelines to meet the mother's needs. This

study suggested that collaboration among healthcare providers and integrating a checklist, care plans, and guidelines enhances the well-being of the mother/infant dyad.

Liability risks. The next sub-code, *Liability risks,* was linked to broken continuity of care. An issue that arose in this sub-code was again the gap in collaboration among proper follow-up between the primary providers for the infant and mother. Participants stated they are only able to encourage the mother to follow up with her provider, but uncertain she does, especially if her provider is not part of the same organization. This may lead to a liability risk if the providers aren't communicating and discussing concerns regarding the mother/infant dyad, which may lead to devastating results for both the mother and infant. Participants admitted to possibly missing mothers at risk of or suffering from PPD due to their clinic protocols and suggested screening intervals. In addition, documentation continues to be a major issue that developed through the participant interviews. Although several of the participants worked within the same organization, they all had different perceptions of how, where, and when they could document in the infant's chart regarding their concerns for the mother.

Guidelines have demonstrated how and when to screen mothers, which in turn may help prevent mothers being missed. Several national organizations discuss that protocols should be in place according to national guidelines. These organizations include the American College of Nurse-Midwives, Association of Women's Health Obstetric and Neonatal Nurses, United States Preventive Services Task Force, American Academy of Pediatrics, the National Association of Pediatric Nurse Practitioners and Registered Nurses' Association of Ontario. Communication between primary care providers and pediatric healthcare providers need to be clear and consistent, and some mechanism should be in place to facilitate referrals and proper follow-up (Guevara et al., 2016). The literature demonstrates that screening for PPD is feasible in pediatric

healthcare settings. In addition, interdisciplinary collaboration may enhance screening, early detection, and proper treatment.

Missing pathway. A *missing pathway* emerged from the interviews as participants not being aware of who needs to be responsible for giving the mother the screening tool, with potential answers ranging from the secretary upon arrival, the medical assistant, the nurse, or the providers themselves. This is a critical issue and yet no one knows who's responsible, for the workflow. This lack of certainty was an issue because the participants disclosed how giving the screening tool at every visit would disrupt the workflow for the person in charge of handing it to the mother. This disruption could essentially delay the flow of the clinic. In addition, another feature of a *Missing pathway* was the confusion of when the screening should be completed and whether the screening is actually being done. These characteristics could develop into a major risk factor that may place the mother and her infant at danger of *Falling through the cracks*.

The Registered Nurses' Association of Ontario (2018) discusses the need for practice settings to establish care pathways and protocols to guide practice and ensure that mothers experiencing PPD have access to safe and effective interventions. Care pathways have been recommended to improve patient care by influencing underlying practice. General principles for screening procedures have been outlined and include specific healthcare system recommendations from various healthcare organizations. Therefore, it would be feasible and important for healthcare organizations to implement principles to guide practice to support pediatric providers in early detection of PPD and ensuring that mothers with PPD will receive the proper support and treatment needed. It is critical for healthcare organizations at the local level to apply the recommendations from healthcare organizations and implement precise policies that will facilitate the role pediatric providers have in early detection of PPD. Protocols

should be in place to identify and assess PPD to prevent detrimental effects of PPD for the mother and her infant (Emerson, Mathews, & Struwe, 2018).

Developing a clear cut pathway for identifying mothers with PPD may improve the assessment, screening, and implementation of the proper interventions. Although participants mentioned time restraints of screening at each visit, a clear pathway would allow for further discussion among providers and let them adjust the workflow as needed. Organizations need to provide continued education to healthcare providers regarding PPD, its assessment, and resources that are grounded in evidence to prevent confusion among providers regarding their role (Registered Nurses' Association of Ontario, 2018).

Time restrictions. A major barrier in liability risks are *Time restrictions. This sub-code* refers to participants' concerns regarding the limited time they have for each individual infant during their appointments in the clinic. Participants acknowledged how limited time prevents them from being able to assess and evaluate for every aspect of care during the infant's first year visits. In addition, participants expressed that if they had more time during each visit, they could talk and discuss more with their patients and have more opportunities to listen to possible concerns and questions. Providing more time for patient visits would allow the providers to tease out issues and possibly pick up on certain cues that can be observed during the mother and infant interaction.

Time restrictions has been identified as a barrier for providers who see infants within that first year in previous research. Guevara et al. (2016) discusses how providers perceived a lack of time related to adding the screening into their practice more often. In addition, they admitted that if they were behind in their clinic, they would skip the screening tool. Although they discussed the lack of time, they also noted how screening facilitated assistance for the mother

and her infant. Research continues to demonstrate the positive effects of screening a mother with a formal screening tool and how these efforts will lessen the levels of PPD and maternal anxiety and increase the general maternal mental health and overall well-being for the infant (van der Zee-van den Berg, 2017). Although there is strong evidence regarding the positive effects of screening it is clear from the interviews that consistent and frequent screening still isn't being done. Therefore, organizations and policy makers should strive to support the infant providers who play a critical role in the early detection and interventions of PPD.

A Supportive Organization has an Impact on the Role of the Provider

A supportive organization that will facilitate the provider in their role is critical. The participants all had different perspectives on the support they received from their organizations. Seven of the participants were all from the same organization; however, even participants from the same organization perceived the support they received differently. Some participants thought their organization was supportive because they implemented many important screening measures, including the EPDS. However, another participant mentioned no one was enforcing the screening at a location that was also part of this same organization. The nurse practitioners described feeling that they were provided with ample support and resources from their organizations for their role in early detection of PPD.

The support of the organization coincides with the literature that discusses the providers who see infants within their first year as having an important role in early identification of maternal depression (Earls, 2015). A policy to integrate a screening tool within the infant first year visits is vital. The support of the organization will facilitate the role of the provider and allow for support the provider needs to meet the needs of the mother and to intervene in issues that may arise and affect the mother/infant dyad. The literature does confirm that PPD has many

negative consequences on both the infant and the mother's health (Slomian, Honvo, Emonts, Reginster, & Bruyere, 2019). In addition, Slomian et al (2019) elaborates that screening mothers without a clear protocol in place within the organization may also place the mother/infant dyad at risk. A supportive organization that places policies and protocols in place to ensure the safety of the patient leads to improved care for the patients and enhanced coordination and ultimately reduces healthcare costs. Organizational support may require multifaceted strategies to provide education, support, referrals, and resources for the providers (Registered Nurses' Association of Ontario, 2018).

Limitations of the Study

There are some limitations to this study. Firstly, the sample size was small, even though saturation occurred. The sample consisted of mainly physicians while only four participants were nurse practitioners. The sample was drawn from a homogeneous pool; only one institution was included in the initial aspect of the study. Later, two nursing associations were added to the study, and the study was promoted via their website and social media. The fact that they only came from three organizations (one facility & two associations) limited the participants for the study. The majority of participants were employed through one institution. Although it might be argued that the saturation occurred due to the source of the sample, participants within the same organization had different views and perceptions on numerous topics, such as screening protocols, documentation, and perceptions on organizational support.

Implication for Public Policy

This study has major implications for public policy. As reviewed in the first two chapters of this dissertation, there is strong evidence to support early identification and treatment of PPD. In addition, there is numerous discussion in the literature and from different professional

organizations that encourage screening mothers in the pediatric care settings (Earls, 2015). However, there is yet to be a standardized national or local policy in regards to screening mothers in the pediatric healthcare setting (Waldrop et al., 2017; National Institute for Health Care Management, 2010). PPD has been discussed within the literature, as well as by the participants of this study, as having a detrimental impact for both mother and infant.

Many of the participants discussed their confusion of when and how to screen mothers at their facility. There were many inconsistencies among the participants regarding using a method of screening, including formally and informally. One participant said they would like to see more organizational support in implementing and enforcing the screening at their current clinic. The participants expressed their concerns of possibly missing the detection of PPD in a mother if they didn't screen soon enough or stopped screening mothers early within that first year. Participants all had different perspectives of when or how to screen mothers. There was a variety of confusion among the participants of when the proper time is to actually screen mothers, and whether or not an actual screening should be done. The inconsistencies are caused by the lack of no real policy in place to guide and support providers who see infants during their first year of life, and interact with mothers. One study discusses how the prevalence of PPD, as evidenced by self-reporting questionnaires, is the highest in the United States within twenty-two developed countries (Slomain et al., 2017).

There continues to be a lack of guidelines mandating a specific time for screening or establishing who is responsible for conducting these screenings in the pediatric care settings (Sriraman et al., 2017). This demonstrates the urgency of implementing a policy at the national and local level. According to Sriraman et al. (2017) it is estimated that every year 400,000 infants are born to mothers who are depressed at the nationwide level. Every day that passes

without a standardized guideline in place to enforce screening mothers for postpartum depression in the pediatric care areas, is placing mothers and their infants at risk for detrimental outcomes, that could be easily prevented with a simple screening tool in place.

This study demonstrated the urgency for a national and local policy that will assist providers who see infants within their first year of life in screening mothers without having to guess at the proper process. Providers seeing infants during the first year need to be required to screen all mothers and more consistently during the infants first year of life. The policy should include the implementation of a formal specific screening tool to be used at every infant visit during the infants first year of life. A formal validated screening tool needs to be used to ensure that mothers are being assessed properly. Included in the policy, there should be a standard of proper hand-off between the mother and infant's provider. Interdisciplinary collaboration between the mother and infant providers should be employed during the hospitalization at delivery. This would help identify mothers at risk and allow a collaborative effort from both providers in following up closely with the mother. Upon discharge from the hospital, the provider should be documenting the mothers screening results on the infant's summary. This will allow the infants physician to be alerted of any critical issues that may impact the mother/infant dyad. Local and hospital guidelines to screen mothers are critical and need to be urgently implemented routinely at all well-infant visits during the first year.

Guidelines also need to be in place with a standardized policy as to exactly how and where to document the mother's results of the screening tool in the infant's electronic medical record (EMR). A structured policy of where to document concerns would allow all providers a quick and easy was to access information regarding any issues without any confusion. A policy will also make it easier for providers to understand the proper protocols they need to follow. A

proper protocol must also be implemented in regards to the proper procedures to take once a mother has been identified at risk for PPD. This should include a suitable protocol with a chain of command as to what steps follow according to the mother's results on the screening tool, including resources available. In addition, a protocol should be in place to involve the support person in cases of concerns regarding the mother's mental health. This protocol would allow providers, with the permission of the mother, to involve the support person as part of the assessment, and implementation of services to support the mother. Implementing a unit policy within a hospital and its affiliated clinics will facilitate the role of the pediatric provider. Implementing a policy would easily be integrated by following and implementing the recommendations of Bright Futures and the American Academy of Pediatrics Mental Health Task forces into the first year infant well-child visits (Earls, 2015).

Implications for Nursing Practice

Healthcare professionals, obstetricians, pediatricians, nurses, advanced practice nurses (APN), and nurses with a Doctorate of Nursing Practice (DNP) are in a critical position in screening for perinatal depression. Nurses, specifically APNs, have the duty to ensure that screening happens and that the patient is referred to the appropriate healthcare providers when depression is indicated (Selix, 2015). Participants, including the nurse practitioners, discussed the impact they have in early detection of PPD. The nurse practitioners specifically discussed their role in a holistic approach of treating and evaluating the entire family dynamics while assessing the infant in the well-infant visits. Nursing has the education and background that allows them to educate other healthcare providers in providing care to the mother/infant dyad in a holistic approach. This aligns with the American Academy of Pediatrics (Earls, 2015) policy statement that family-centered pediatric care should be implemented.

The Association of Women's Health Obstetric and Neonatal Nurses supports nurse-delivered screening for PPD (Sriraman et al., 2017; Rhodes, & Segre, 2013). Nurses who specialize in maternal/child care play an essential role in early identification and prompt treatment of perinatal depression. Nurses often provide an important role in the screening tool to mothers in the clinical setting, as part of home health care, and during the period after birth in the maternity unit. In addition, nurses in primary care practices have a major role in identifying depression, particularly PPD. The nurse practitioners interviewed mentioned how they were able to screen mothers during the well-infant visits, provide education, and refer them as needed. The participants discussed the positive impact they had on the mother/infant dyad with the early detection of PPD.

Nursing is in the forefront of implementing many aspects into practice. Nurses are at the bedside with these mothers for long hours at a time. Therefore, they are in the best position to be aware of any issues that may arise. I recommend for nursing to play a major role in implementing proper education, collaboration, and hand-off to all healthcare providers involved in the care of the mother/infant dyad. In addition, I recommend for nursing to lead in the implementation and evaluation of enforcing policies and protocols that will structure the screening tool into every infant well-being visit.

Nursing should implement a collaborative effort on the maternal/child units between pediatrics, obstetrics, and the social worker to ensure effective communication. Nursing could enhance the hand-off communication between pediatric providers and obstetrics with a clinical pathway to foster a protocol that will ensure clear communication between disciplines regarding mothers who are at risk for PPD. Nursing supports their communities in various aspect of care, including outreach programs such as support groups for mothers. Therefore, they hold

tremendous knowledge that needs to be distributed and shared across all disciplines to enhance an expansion of knowledge regarding PPD. Nursing should properly educate both pediatrics, and obstetrics regarding the appropriate resources available for providers to offer to mothers and their families.

Nursing has many roles in healthcare including providing care coordination, triaging within the clinic, and being the primary care provider for the infant. Nurses, including APNs, certified nurse midwives and with a DNP degree have frequent contact with mothers in the postpartum period and are able to screen, educate, offer support groups, and provide referrals. Therefore, promoting and enhancing education and implementing screening protocols would assist nurses in their role of providing early detection of PPD and offering assistance to other healthcare providers regarding background, education, and proper protocols.

Implications for Nursing Education

The findings of this study demonstrate the need to continue to educate primary care providers. Nurses play a pivotal role in healthcare. Healthcare providers who see infants and their mothers during the first year of life need to have foundational education to assist mothers who might be experiencing PPD. Participants identified several crucial elements lacking that could support the early detection of PPD, including: education during school, additional support post school, educational material from employers, and conference topics. Implementing nursing best practice and implementing proper education, planning, having resources in place, organizational and administrative support may enhance the supportive environment needed to address PPD.

Nursing is a leader in education. Nursing needs to lead this change in promoting and enforcing policies to screen mothers for PPD at all infant well visits during the first year. Nurse

leaders feel comfortable in screening mothers while using a screening tool. Nurses are familiar with the validated EPDS tool, and they will be able to quickly assess for any issues that might place the mother at risk as well. Many nurse practitioners who see mothers and their infants already have knowledge regarding the depression screening tool based on their prior clinical experiences as maternal/child floor nurse. Therefore, they will be able to provide education for other healthcare providers and guide them through the process to ensure proper follow through. Nurses who hold a DNP are in an ideal position to implement and enforce the use of a screening tool at all infant well visits. During their DNP nursing leadership and scholarly project they could assist, educate and implement policies within health care organizations regarding the use of a PPD screening tool. Nurses at various levels implement many quality improvement projects within practice and education. Therefore, nurses should be armed with the proper education regarding PPD, in order to make positive changes within the healthcare system.

PPD has been shown to have many direct and indirect negative outcomes on the development of the infant. Slomian et al. (2019) argues how the accumulation of the characteristics of PPD creates an environment that is not conducive to promoting positive outcomes for the mother/infant dyad. Well-educated/well-trained/ well-supported nurses and other healthcare providers can get ahead of these negative consequences. Providing the proper education, training, and support might enhance and influence the perceptions providers have of their role in the early detection and treatment of PPD. Therefore, within nursing education there is overwhelming evidence for the implications this study has on early detection.

Implications for Provider Education

This study has demonstrated many implications for physicians and further education. Throughout the study, participants repeatedly discussed the lack of education they received

throughout their schooling and in their current role. Education needs to be implemented during the various programs within colleges and universities that prepare health care providers who see infants. There should be a needs assessment for providers who are seeing infants within their first year of life in order to evaluate their preexisting knowledge of PPD. Education should also include continued yearly competencies of PPD for all healthcare providers who see infants within the first year of life. Continuing education is critical in order to keep pediatric providers up to date with the most current knowledge regarding PPD, resources, and implementation of policies.

Provider education should also consist of training within interdisciplinary collaboration. Interdisciplinary education and collaboration has shown a significant increase in positive patient outcomes. Collaboration among providers who see mothers and infants is required in order to promote the well-being of the mother and her infant. Providers who see infants within that first year need detailed education regarding the mother/infant bond and how PPD could possibly affect the mother and her infant. This would fully allow the provider to continue to actively engage with the mother and understand how to be a valuable resource for mothers. Implementing research on the outcomes of provider knowledge regarding PPD and collaboration would be critical to identify any barriers that may be inhibiting providers from assisting mothers at risk.

Future Nursing Research

There are various recommendations from different organizations on when to screen mothers for PPD. Further research needs to be conducted to find the best and most effective way to screen and implement early detection of PPD. There needs to be an implementation of a policy at the local level, hospitals and affiliated clinics regarding screening at all well infant

visits during that first year with a validated screening tool. Then, researchers need to assess the rate of compliance, outcomes for mothers, and possible barriers. This would allow researchers to identify avenues for improvement. More research and rigorous testing are needed to refine policies on screening within organizations and the outcomes that they have on the mother and her infant. In addition, research should not just stop at assessing and implementing a policy of screening mothers. Researchers should also identify an appropriate place to document concerns about the mother. There are many recommendations on when to screen but not specific data as to where to document concerns regarding the mother in the infant's chart. We should also examine various ways to document concerns in the infants EMR and evaluate what the best option would be to alert the provider that sees the infant at the next visit.

Participants discussed their approach of including the support person and discussing concerns over the mother's mood while evaluating the mother for PPD. In addition, the participants consistently spoke about providing support and asking how the mother was feeling. The literature discussed the impact on the mother/infant dyad when providers offered support and discussed the mothers' feelings. Therefore, future research should be done on implementing a protocol to discuss issues of concern with the support person. This would allow us to identify any major barriers of communication, and any resistance from the mother. Providing holistic approaches as part of interventions may lead to influential and emotional support for mothers (Shorey & Ng, 2019).

Slomian et al. (2019) discusses that the promotion of maternal health by healthcare providers should not end at the birth of the infant or even at the 6-week postpartum visit. The mother's needs go beyond the 6-week period. In order for the mother to experience a healthy and positive postnatal period, the mother's ability to effectively apply her own skills to satisfy

her own needs and those of her family must occur. Consequently, additional research should be done regarding mothers and their adaptation to motherhood and their challenges during the first year. This would allow researchers to identify possible issues that may lead to an increase risk for PPD. More research needs to be done on the changes to the mental and physical well-being of the mothers during their first year after giving birth.

Research needs to be implemented on interdisciplinary collaboration between obstetrics and pediatric care providers. This includes providers who see mothers and infants during their hospital stay and in the clinic within the infants first year of life. Providers should consist of physicians, nurse practitioners, nurses, care coordinators, and social workers. Research regarding the hand-off between these providers should be studied. Obstetric providers should give a hand-off to pediatric providers to alert them of mothers at risk for PPD or any other debilitating issues that could affect the infants well-being. Research could also include different ways of implementing a hand-off, whether it be during interdisciplinary rounds, or communicating during a set time of daily huddle among both groups. In addition, part of this research could also include an audit trail looking to see if there is some documentation on the infants discharge summary to alert the pediatric providers of possible issues at the first infant follow-up after hospital discharge.

Providers who see the infant/mother dyad frequently within that first year need to comprehend that the needs of the mother during this state are not limited to just the physical state but overall well-being including an emotional state. This study demonstrated many flaws within the healthcare system that are prohibiting pediatric providers to detect early detection of PPD. The research recommended was based on the literature, and the results of this study.

Summary

There is no doubt that PPD has an abundance of negative outcomes for the entire family. This descriptive qualitative study has expanded our knowledge into the pediatric provider's role in PPD. This study on the perceptions pediatric healthcare providers have on their role of early detection led to many aspects that were identified into codes. This study has provided insight into the perceptions providers have of their role in early detection within various aspects from screening, documenting, providing resources, providing support, and offering close follow-up. Although there were some limitations, several implications developed from this study. Providers stated that they perceive numerous benefits to screen mothers during the well-infant visits. Benefits included building stronger ties with mothers, facilitating assistance for mothers, and building stronger clinical skills in evaluating PPD.

It was demonstrated that in order to support pediatric providers in their role of early detection, continuing competence in PPD should be in place. Offering ongoing and consistent training and support would ensure that providers are able to effectively support the mother/infant dyad in a constantly changing healthcare system and social environment. Routine competencies should be implemented to assess and evaluate any possible further training and support needed by providers. Competence will allow organizations to evaluate and assist providers in identifying their knowledge, skills, attitudes, perceptions of their role, clinical setting as well as updating the necessary protocols.

There was a wide range of perceptions from the participants. This study and the perceptions of the participants demonstrate that the participants do feel that they are in the forefront in preventing negative consequences for their patient and the mother. The study demonstrates that providers who see infants within their first year of life believe their role is

imperative in early detection of PPD. They identify screening during this first year of life a feasible, acceptable and as a worthy goal that is limited due to various restrictions. Although providers want to promote positive outcomes for their patients and the mothers there are many obstacles that need to be addressed. There was a discrepancy among all providers on how, when, and where to conduct the screening, whether the screening should be informal or formal, and where to document the screening process and results. In addition, there was no clarity or consensus on who should conduct the screening. Consequently, the findings from this study may provide further information to expand this research in the development and implementation strategies for policymakers at the national, state, and institutional level. This study may be implemented to enlighten and promote public policy, nursing practice, nursing education, and future research.

APPENDIX A

RECRUITMENT LETTER FOR UNIVERSITY

Dear Pediatric Health Care Provider:

My name is Laura De La Pena; I am a PhD student at Loyola University. In order to fulfill my PhD program requirement, with my advisor Dr. Frances Vlasses, I am asking pediatric providers to participate in my study. The study is Pediatric Providers and Their Thoughts of Their Role in Early Detection of Postpartum Depression.

The purpose of this descriptive, qualitative study is to explore pediatric health care providers' thoughts of their role in early detection of postpartum depression (PPD). Your insight on your impact in early detection is critical to promote and encourage early detection of postpartum depression, which will lead to positive outcomes for mothers and the entire family, including the infant.

1. Your participation in this project is voluntary.

2. Whether or not you choose to participate **will not** affect your standing within Loyola University Medical Center or Loyola University Chicago.

3. You are being asked to partake in a face to face or phone interview lasting approximately fifteen minutes.

4. The data we collect may be used for publication. You will **not** be identified in any way in any article or any presentation in which this data may be used.

5. Feel free to contact me with any questions. I may be reached at (773) 209-8067 or ldelapena@luc.edu.

Thank you for your participation.

Sincerely,

Laura De La Pena, PhDC, MSN, RNC, C-EFM
Health Systems, Leadership and Policy
Marcella Niehoff School of Nursing
Loyola University Chicago
BVM Hall

APPENDIX B

RECRUITMENT LETTER FOR NURSING ORGANIZATIONS

Dear Pediatric Health Care Provider:

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The purpose of this descriptive, qualitative study is to explore pediatric health care providers' thoughts of their role in early detection of postpartum depression (PPD). Your insight on your impact in early detection is critical to promote and encourage early detection of postpartum depression, which will lead to positive outcomes for mothers and the entire family, including the infant.

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Feel free to contact me with any questions. I may be reached at (773) 209-8067 or ldelapena@luc.edu.

Thank you for your participation.

Sincerely,
Laura De La Pena, PhDC, MSN, RNC, C-EFM
Health Systems, Leadership and Policy
Marcella Niehoff School of Nursing
Loyola University Chicago
BVM Hall
1032 W. Sheridan Road
Chicago, IL 60660

APPENDIX C

INTERVIEW GUIDE

Pediatric Providers and Their Thoughts of Their Role in Early Detection of Postpartum Depression Study

1. What is your role at your institution?
2. How long have you been a pediatric provider?
3. What education have you received regarding postpartum depression?
4. What has been your experience with mothers whom you thought might have been experiencing postpartum depression?
5. What do you think pediatric healthcare providers such as yourself should know regarding postpartum depression?
6. What do you feel your role is in early detection of postpartum depression?

APPENDIX D

INSTITUTIONAL REVIEW BOARD APPROVAL

NOTICE OF EXPEDITED APPROVAL OF A RESEARCH PROJECT

Date: 10/09/2019

Investigator: Vlasses, Frances
LU Number: 212718
TITLE: Pediatric providers and their thoughts of their role in early detection of postpartum depression

ITEMS SUBMITTED FOR REVIEW:

- 09/17/2019 Interview questions
- 09/17/2019 protocol
- 09/17/2019 Flyer for study
- 09/17/2019 Copy of email to distribute to providers
- 09/17/2019 Consent
- 09/17/2019 Research proposal
- 10/09/2019 212718r (Redline Version)
- 10/09/2019 212718r3.100919 (Approved Consent Doc) (ICD: 10/09/2019)

Dear Investigator,

The above-referenced research project was given Expedited Approval by the Institutional Review Board on 10/09/2019.

YOUR PROJECT MAY NOW BEGIN.

Results from the Board Review and required conditions applied to the project can be accessed through the online Research Portal or by clicking this link: https://portal.luhs.org

The following is for your information and will help you meet local and federal IRB requirements.

1. You must use the final IRB-approved version of the Consent Document. Spelling and grammatical changes may be made as necessary, but any other changes require prior review and approval.

2. You are required to maintain complete records of this project. Any changes in the protocol and the Consent Document must receive prior IRB approval. Use the online Research Portal's Project Amendment form to report changes. A change to the protocol necessary for the immediate safety and welfare of a research participant may be implemented prior to IRB review and approval.

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VITA

Dr. Laura De La Pena was born and raised in Chicago, Illinois. She attended Robert Morris College and received an Associates of Arts in Science in 2000 and received her Associates of Arts in Nursing at Richard J. Daley College in 2004.

Dr. De La Pena has been a nurse on the Maternal/Newborn and the Labor and Delivery Units since 2004 and the quality coordinator for the Maternal/Newborn and Labor and Delivery Units since 2012. Dr. De La Pena has also been faculty at Loyola University Chicago since 2012.

Dr. De La Pena has implemented and leads support groups for mothers with postpartum depression as well as for new parents.