Postpartum Nurses' Perceptions of Identifying and Providing Care for Mothers at Risk for Postpartum Depression

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Dedication

This work is dedicated to all of the women who suffer in silence from postpartum depression (PPD). This potentially devastating disorder carries significant lifetime consequences for women and their children. PPD can be successfully treated and it is crucial that mothers at risk for PPD are identified as early as possible to reduce potentially negative outcomes. Mothers need to feel supported and encouraged to seek treatment for PPD instead of being fearful of the stigma from a mental health diagnosis.

After years of experience as a postpartum nurse and clinical educator, my hope is to increase awareness for PPD identification and screening and encourage all nurses who care for postpartum mothers to understand their significant role to improve patient outcomes. Postpartum nurses who care for new mothers have a crucial role to identify mothers at risk for PPD and provide appropriate referrals for treatment.

This study is also dedicated to all the nurses I have worked with throughout my nursing career. I am grateful for your support, guidance, humor and teamwork.

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Abstract

Postpartum depression (PPD) is a common complication of childbirth that is mostly undetected and untreated. PPD can inflict long-term negative consequences on mothers, children and families. Recently, there has been increased awareness of PPD and recognition of the need for healthcare providers to routinely address this health issue. However, there has not been particular attention directed to the role that nurses may play in improving methods of PPD identification and providing effective interventions for postpartum mothers at risk for PPD. The purpose of this research was to explore and describe nurses' perceptions of identifying and providing care for mothers at risk for PPD. A qualitative descriptive study was completed after identifying a gap in the literature. This study utilized a purposive sample of postpartum nurses from one urban hospital in the Mid-Atlantic region of the U.S. Twenty-six interviews were completed using a secure digital conference room. Elo's and Kyngäs' inductive approach to content analysis was used to interpret the data. Three main themes emerged during data analysis: (1) nurses' informal assessment of maternal behavior; (2) conditions that facilitate nurses caring for mothers at risk for PPD; and (3) perceived barriers encountered by nurses. Ten subthemes supported the main themes. The nurses in this study were not screening mothers for PPD due to a lack of knowledge and no access to a validated screening tool. Most of the nurses shared that they base their assessments for PPD on observing the mothers' interactions with their babies or through a general nurse-patient conversation. Dissemination of PPD screening recommendations is necessary to inform postpartum nurses of current standards for identifying and caring for mothers at risk for PPD. Nurses require additional education on PPD recognition and screening using validated PPD screening tools. Nursing care time constraints, lack of knowledge, unacquainted with appropriate resources, lack of information on the use of screening tools and

stigma associated with being inadequate as a mother were perceived barriers for PPD recognition and screening encountered by nurses in this study. None of the participants in this study were aware of appropriate resources for mothers at risk for PPD. Nurses need to have the necessary skills and tools to assess and screen mothers at risk for PPD. Since pregnancy tends to increase women's contact with healthcare providers, it is important that nurses understand their role in assessing, educating, and screening all mothers for PPD.

Chapter One: Significance

Postpartum depression (PPD) is the most common complication of childbirth affecting 11% to 20% of women in the United States (CDC, 2017). The etiology of PPD is not clearly understood, as no single causative factor has been determined. PPD is believed to be influenced by a combination of hormonal, psychosocial, and genetic factors. PPD is mostly undetected and untreated and can inflict long-term negative consequences on mothers, children and families (Cox, 1987; Beck, 1996, 2001). In addition, Abell (2007) stated that a woman's risk of recurring PPD with subsequent children is estimated at 50% to 100%. Recently, there has been increased awareness of PPD and recognition of the need for healthcare providers to routinely address this health issue. However, there has not been particular attention directed to the role that nurses may play in improving methods of PPD identification and providing effective interventions for postpartum patients who experience PPD.

Background

Postpartum depression is defined as an episode of major depression that is associated with childbirth. The American Psychiatric Association, in the 2013 *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-V)* recently amended the name of this condition to peripartum depression. The DSM-5 does not recognize postpartum depression as a separate diagnosis; rather, patients must meet the criteria for a major depressive episode and the criteria for the peripartum-onset specifier. The definition is therefore a major depressive episode with an onset in pregnancy or within 4 weeks of delivery.

The DSM-5 criteria for a major depressive episode are as follows:

a) Five or more out of 9 symptoms (including at least one of depressed mood and loss of interest or pleasure) in the same 2-week period. Each of these symptoms represents a change from previous functioning, and needs to be present nearly every day:

- Depressed mood (subjective or observed); can be irritable mood in children and adolescents, most of the day;
- Loss of interest or pleasure, most of the day;
- Change in weight or appetite. Weight: 5 percent change over 1 month;
- Insomnia or hypersomnia;
- Psychomotor retardation or agitation (observed);
- Loss of energy or fatigue;
- Worthlessness or guilt;
- Impaired concentration or indecisiveness; or
- Recurrent thoughts of death or suicidal ideation or attempt.

b) Symptoms cause significant distress or impairment.

c) Episode is not attributable to a substance or medical condition.

d) Episode is not better explained by a psychotic disorder.

e) There has never been a manic or hypomanic episode. Exclusion e) does not apply if a (hypo)manic episode was substance-induced or attributable to a medical condition (American Psychiatric Association, 2013, p.186-187).

General depression and PPD share a number of symptoms. General depression is unrelated to childbirth, while PPD occurs after the birth of a baby. PPD is experienced within a year after giving birth but can extend beyond that time as well. Certain characteristics distinguish

PPD from depression that is unrelated to childbirth. In addition to generalized depressive symptoms that can affect anyone, a mother with postpartum depression may also be sleep deprived, transitioning to motherhood, breastfeeding, and experiencing fearful thoughts about her baby or her ability to be a good mother. Almost twice as many women as men have major or clinical depression; hormonal changes during puberty, menstruation, pregnancy, miscarriage, and menopause which may increase the risk. Other factors that boost the risk for clinical depression in women who are biologically vulnerable to it include increased stress at home or at work, balancing family life with career, and caring for an aging parent. Raising a child alone will also increase the risk.

In the United States (U.S.) the majority of women (99%), of all ethnicities and socio-economic status deliver their children in the hospital setting (MacDorman, Matthews, & Declercq, 2012). Nurses on postpartum units in hospitals are the health care professionals best suited to screen and educate mothers for PPD. However, postpartum nurses' perceptions about recognizing and caring for mothers at risk for PPD are unknown. Thus, the purpose of this qualitative descriptive study was to describe and explore postpartum nurses' perceptions of identifying and providing care for mothers at risk for PPD.

Postpartum depression is a potentially devastating disorder that carries significant lifetime consequences for women and their children. In addition to the suffering and impairment associated with PPD, there are long-term risks associated with the illness including increased risk of recurrence (Marcus, 2009). Women attempt to hide their distress and struggle alone for fear of being labeled as unfit parents. They may minimize their symptoms or attribute them to feeling overwhelmed by the demands of a new baby, lack of sleep, or difficult infant temperament (Thurgood, Avery, & Williamson, 2009). During pregnancy, the amount of estrogen and

progesterone hormones increases greatly. In the first 24 hours after childbirth, the levels of these hormones rapidly drop or perhaps return to their normal, non-pregnant amounts. While it appears that there is no consistent correlation between serum levels of estrogen, progesterone, cortisol, or thyroid hormones and the occurrence of postpartum depression, some researchers hypothesize that there is a subgroup of women who are particularly sensitive to the hormonal changes that take place after delivery (NMHA, 2005). PPD is believed to be influenced by a combination of hormonal, psychosocial, and genetic factors. In addition, The National Mental Health Association (NMHA, 2005) described the cause of PPD as a composite of three interrelated factors: hormone fluctuations, situational risk, and life stresses. The hormone fluctuations involve decreased serotonin and estrogen levels after giving birth. Situational risks may include a death in the family, loss of a job, or divorce. Life stresses that could trigger the development of PPD include balancing a career and motherhood, relationship problems, loss of former roles or freedoms and unresolved feelings about the pregnancy (National Mental Health Association, 2005). Even the most informed health care providers may not attribute these maternal feelings to PPD, assuming that they are due to the multiple stresses of motherhood. These women continue to suffer, mostly in silence, about their condition which is treatable and possibly even preventable.

Symptoms of PPD differ from the baby blues. The transient symptoms of the baby blues may encompass brief crying spells, irritability, nervousness, poor sleep and emotional reactivity. The baby blues affect 50% to 80% of mothers with an onset within 1 to 2 days and resolution within two weeks post-delivery (American Psychiatric Association, 2009). Although symptoms vary, mothers with PPD typically described a diminished pleasure in interacting with people or

engaging in formerly enjoyable activities, as well as difficulty in making simple decisions, experiencing anxiety, agitation, poor self-care, hopelessness, and possible suicidal ideation.

A number of risk factors are significantly associated with the development of PPD. Research findings have consistently shown that lack of social support, previous history of depression, marital conflict, and stressful life events are major factors that contribute to an increased risk of PPD (Segre & O'Hara, 2005). Beck's (2001) meta-analysis identified low social support, poor quality relationship with a partner, childcare-related stressors, maternal anxiety, and life stressors as the most significant predictors of PPD. These risk factors have been extensively examined among mothers of healthy, full-term infants (Segre & O'Hara, 2005). Even when depressive symptoms are identified, several barriers prevent postpartum women from receiving treatment. In the U.S., lack of mental health services, cost of care, social stigma, and lack of trust are some common barriers to treatment of maternal depression (Dennis & Chung-Lee, 2006).

The Effects of a Mother's PPD on Her Children

Depression after the birth of a child can be debilitating and may have adverse consequences for maternal-infant bonding and infant development (O'Hara, 2009). Maternal PPD has been linked with various negative infant outcomes, including attachment avoidance, behavioral and emotional difficulties, and cognitive delay (Civic & Holt, 2000). Researchers have noted that mothers suffering from PPD tend to show less affection to their babies and be less responsive to their needs (Beck, 2006). Maternal depression is associated with disruptions in mother-child interactions and attachment and has profound consequences for infant development. Research findings indicated that depressive symptoms in mothers can place their children at risk for developmental delay, colic, sleep and feeding disorders, behavioral

difficulties, injury, and increased use of medical care (NICHD Early Child Care Research Network, 1999). In turn, these infants tend to be fussier, more distant, and make fewer positive facial expressions and vocalizations (Beck, 2006). Infants of mothers with PPD may exhibit insecure attachments to their mothers, have decreased eye contact, and activity levels. They are at risk for impaired language development and perform less well on cognitive tests at 18 months when compared to their peers whose mothers did not experience depression. Indeed, the effects of PPD are still evident in children at ages 4 to 5 years old (Peindl, Wisner, & Hanusa, 2004).

Identifying PPD

It is estimated that at least 50% of PPD cases go unrecognized (Peindl, Wisner & Hanusa, 2004). PPD can be successfully treated and it is crucial that it is identified as early as possible to reduce potentially negative outcomes, not just for the mother but also for her developing child. Use of education and screening strategies are essential to recognize and treat mothers at risk for PPD.

Screening for PPD is not limited to the inpatient hospital setting, birthing centers, or obstetric and gynecologic settings. Mental health centers may screen women for PPD if they present with symptoms and potentially may assess women who have been previously evaluated and treated for depression and anxiety prior to childbirth. Research has been conducted that looks at the feasibility of performing PPD screenings in the pediatric setting as well as in the family/adult primary care office (Tam, Newton, Dern, & Parry, 2002). Pediatric health care providers care for young children and many mothers interact more frequently and consistently with them during their children's early years (American Academy of Pediatrics, 2010). Although screening for PPD in pediatric settings is congruent with promoting child health and well-being, several barriers to implementation exist: 1) the mother is not the patient in a pediatric clinical

setting; 2) there are time limitations of the well child visit; and 3) health insurance plans may not include coverage for mental health referrals unless certain procedures are implemented (Tam, Newton, Dern, & Parry, 2002). In addition to the lack of screening, health care providers may not always refer mothers with symptoms of PPD for further evaluation and treatment. Mothers who are not diagnosed or who do not receive treatment for PPD are at risk of further complications such as future episodes of major depression, lack of maternal-child bonding, and children that are more likely to have emotional and behavioral problems.

Significance to Nursing

The arrival of a baby is a life-changing event that brings significant changes to the life of the mother. Parenthood can affect the perception of one's self, one's partner, and social relationships. The awareness of being responsible for the life of a completely dependent infant may be a frightening realization. A baby's arrival is always a time of transition and adjustment so, for mothers with PPD, it is even a greater time of transition. The stress and strain on relationships presents an additional challenge when the mother is suffering from PPD. She may feel overwhelmed, sad, anxious, and unable to cope with the baby and requirements of daily living. Adequate recognition and treatment of PPD are important to the wellbeing of the children of these mothers. If a mother's PPD remains untreated, there is an increased risk of cognitive and developmental delays in her children and an increased risk for the mother to develop chronic depression (Thurgood, Avery, & Williamson, 2009).

PPD can place significant burdens on families and can often lead to increased utilization of medical and mental health services for women and their children resulting in increased medical costs (National Institute of Mental Health, 1998). Children who experience maternal depression early in life may experience lasting effects on their brain architecture and persistent

disruption of their stress response systems (Harvard Center on the Developing Child, 2009). In comparison to non-depressed mothers, 84% of mothers with PPD are less likely to use a car seat consistently, 26% more likely to bring their babies to the emergency room and 79% less likely to have their infant use the back sleep position (Balbierz, Howell, Bodnar-Deren, Loudon, Mora, & Leventhal, 2014). According to the National Business Group on Health (2011), children of depressed mothers have higher medical claims than do children of healthy women due to a higher rate of illness and the overuse of emergency department visits. In addition, adolescents with a history of exposure to maternal depression have higher rates of major depression and other disorders such as anxiety, conduct disorders, and substance abuse disorders. This is of particular concern because depression that begins early in life is associated with a greater severity of illness and a higher risk of suicide and other violent behavior. Women who suffer from depression during pregnancy and their infants are at risk for costly complications. Nearly $5.7 billion dollars is the estimated annual cost of untreated maternal depression in the U.S. (National Business Group on Health, 2011). Nurses who evaluate postpartum women are a crucial resource for the identification and care of mothers at risk for PPD. However, many postpartum nurses may not recognize the importance of consistently screening for PPD.

There is a lack of literature to examine nurses' perceptions of caring for patients at risk for PPD. Few studies have investigated this concept from nurses' perspectives. Massoudi, Wickberg, and Hwang (2007) conducted a study that looked at the nurses' perceptions in the clinical setting and indicated that many nurses lack the knowledge, confidence, and skills to educate, effectively screen, and refer women at risk for PPD to community mental health centers and counselors. It is likely that nurses, especially during sensitive times such as the postpartum period, can play an important role in detecting and supporting women's mental health (Borglin,

Hentzel, & Bohman, 2015). A study by Sofronas et al., (2011) indicated nurses' perspectives on the challenges they had when screening for PPD. Two main challenges that were identified were finding time to complete the screening process during the short inpatient stay of busy new mothers and screening women who were not fluent in English. Postpartum nurses have significant opportunities to identify depressive symptoms early in the postpartum period and to provide education that increases new mothers' awareness of symptoms and follow-up resources. It is important to understand postpartum nurses' perceptions about educating and screening mothers for PPD and to identify any barriers that may prevent them from implementing this care. The beliefs and values of postpartum nurses are essential to improve the identification and treatment of women who are at risk for PPD.

Statement of the Problem

The birth of a healthy baby is a joyful event for most families. However, for women with PPD, the happiness of motherhood is not an option. PPD is a crippling mood disorder that causes women to suffer in confusion, fear, and silence. Beck (1996) described PPD as a "thief that steals motherhood" (p.99). Beck (1996) also reported that mothers characterized PPD as a loss of control over their emotions, thoughts, and actions. If undiagnosed, PPD can adversely affect the mother-infant relationship and cause long-term emotional and behavioral problems for the child. Screening, identification, and intervention can prevent ongoing negative child outcomes. The U.S. Surgeon General's Report on Mental Health (2010) acknowledged the influence of maternal mental health on children lacks recognition. Depression is a highly treatable condition, especially when identified early during the pregnancy or postpartum period. Healthcare professionals who identify mothers at risk for prenatal and postpartum depression are able to initiate services for mothers that may prevent further complications. Improving efforts for early identification and

treatment of PPD will benefit women, their children and families, and society. Unfortunately, screening for maternal depression is not a standard of practice, and as a result, PPD may not be diagnosed.

Although there are no U.S. federal policies that require screening of new mothers for postpartum depression, at least 12 states have adopted either state legislation, developed awareness campaigns, or convened tasks forces. States that require screening include New Jersey (Findings, Declarations Relative to Postpartum Depression, 2006), Illinois (Perinatal Mental Health Disorders Prevention and Treatment Act, 2008), and West Virginia (Uniform Maternal Screening Act, 2009). Other states require education about postpartum depression including Texas (Relating to Information Provided to Parents of Newborn Children, 2005), Virginia (Certain Information Required for Maternity Patients, 2003), Minnesota (Postpartum Depression Education and Information, 2015), and Oregon (Relating to Perinatal Mental Health Disorders and Declaring an Emergency, 2011). Washington has passed statewide awareness campaigns, and California, Michigan, and Oregon have postpartum depression awareness months. Maine, Maryland, Massachusetts, and Oregon have appointed perinatal depression task forces.

In November 2015, Congresswoman Katherine Clark of Massachusetts and Congressman Ryan Costello of Pennsylvania have introduced the following bill; Bringing Postpartum Depression Out of the Shadows Act of 2015 [H.R. 3235]. This bill would amend the Public Health Service Act to authorize the Secretary of Health and Human Services, acting through the Administrator of the Health Resources and Services Administration, to make grants to States for screening and treatment for maternal depression. The Bringing Postpartum Depression Out of the Shadows Act would build upon existing state and local efforts by providing targeted federal

grants to assist states in developing programs to better screen and treat maternal depression. However, no such grants have been made available.

The adoption of the Patient Protection and Affordable Care Act (ACA), Section 2952: Support, Education, and Research for Postpartum Depression, mandated ongoing research to better understand the frequency and course of postpartum depression, address differences in treatment needs among racial and ethnic groups, and develop culturally competent evidence-based treatment approaches (Patient Protection and Affordable Care Act, 2010). However, the ACA does not provide funding for this research. In January 2016, The U.S. Preventive Services Task Force (USPSTF), recognized that screening for depression is appropriate for all adults, including pregnant and postpartum women. The American College of Obstetricians and Gynecologists (ACOG), currently recommends routine screening for depression for all women at least once during the prenatal period (ACOG, 2015).

Over the past decade, there has been increased awareness of PPD and recognition of the need for healthcare providers to routinely address this health issue. The release of the Surgeon General's Report on Mental Health in 2010 was followed by a rise in media attention on postpartum depression and recognition of the need for federal funding to screen and treat maternal depression. However, there has not been particular attention given to the implementation of accessible screening and referral programs for all postpartum women. The nursing profession plays a significant role in patient outcomes. Nurses are fundamental in providing skilled care, education, empathy and support to patients. Exploring the nurses' perceptions of postpartum patients at risk for PPD is the first step in understanding what information, preparation and skills are needed by postpartum staff nurses to effectively screen and provide care for women with PPD. Furthermore, researchers need to study what background

knowledge these nurses feel they personally require to facilitate their ability to care for and refer new mothers for treatment.

Purpose of the Study

The purpose of this qualitative descriptive study was to describe and explore postpartum nurses' perceptions of identifying and providing care for mothers at risk for PPD.

Research Questions

1. What do postpartum nurses describe as factors that influence their ability to recognize and screen mothers for PPD?
2. What do postpartum nurses describe as factors that influence their ability to care for mothers at risk for PPD?
3. What barriers do postpartum nurses identify which affect their ability to recognize, screen and care for postpartum mothers prior to their discharge from the hospital?
4. What appropriate resources and referral sources do postpartum nurses provide for postpartum mothers at risk for PPD?

Assumptions

A major assumption for this study was that nurses were able to describe their experiences in providing care for mothers at risk for PPD. Nurses, who were the study participants, answered the questions candidly and provided useful information to guide improvements in the education, identification and referral of women at risk for PPD.

Definitions of Terms

The term postpartum depression encompasses several mood disorders that follow childbirth such as:

Postpartum Depression (PPD)

Postpartum depression is a diagnosis with specific diagnostic criteria. The onset can be during pregnancy or after delivery and can last up to one year postpartum. Typically, the symptoms include intense anxiety, fatigue, a diminished pleasure in interacting with people or engaging in formerly enjoyable activities, as well as difficulty in making simple decisions, poor self-care, hopelessness or feelings of guilt. Treatment options incorporate counseling with a trained professional or medication. Combination therapy has been the most beneficial as evident in research studies (Beck & Indman, 2005).

Perception

Perception is the way a person thinks about or understands something or someone. It is the ability a person has to see, hear, or become aware of information through the senses. Perception is the process by which people translate sensory impressions into realistic views that can guide human behavior (Field, 2011). The behavior of people is influenced by the way they learn about life and often is based on their first experiences.

Postpartum nurses

In this study, postpartum nurses included all registered baccalaureate-prepared nurses who care for postpartum women within the hospital clinical environment.

Screening

Screening is the examination or testing of individuals to identify those who are well from those who have an undiagnosed condition or who are at high risk for its development. Health screening is a nursing intervention defined as detecting health risks or problems by means of history, examination, and other procedures (NIH, 2007).

Referral Resources for PPD

Referral is the process in which a health care professional sends a patient to another practitioner or specialist for help or information (American College of Obstetricians and Gynecologists, 2013). Referral resources are used to direct a mother to a source for help or information about PPD. In health care, referral is the transfer of care for a patient from one clinician to another. This process enables a patient or the patient's family to be introduced to additional health resources in the community. Referral resources for PPD may include:

- **Counseling:** Group therapy, individual therapy and/or marriage or family counseling with a licensed, qualified therapist.
- **Medication:** Antidepressants may be prescribed, especially if depression is moderate to severe. It is important to discuss the risks and benefits of taking medications while pregnant or breast-feeding.
- Postpartum Support International (PSI) which provides support, education, and local resource information. (www.postpartum.net) and the Support Helpline (800) 944-4PPD (4773)
- Online resources such as blogs, support groups and educational materials

Chapter Summary

Since PPD is the most common complication of the postpartum period, postpartum nurses must be capable of identifying women at risk and providing appropriate referrals for treatment. A majority of women do not recognize the symptoms of PPD and fail to seek help for this illness. Untreated PPD leads to maternal distress and infant emotional, cognitive, and developmental problems throughout childhood (Liberto, 2012). There is limited research available on nurses' perceptions of mothers at risk for PPD. Most research focuses on risk factors, screening and diagnosis, and long-term consequences of untreated PPD. To help improve outcomes for mothers, nurses will require the necessary tools to assess risk, screen, recognize symptoms, and refer mothers for PPD treatment. It is important to explore nurses' perceptions about caring for mothers at risk for PPD and to identify barriers that may prevent them from screening and referring these mothers. Hence, this study helped to ascertain and describe the perceptions of nurses caring for mothers at risk for PPD in order to improve the identification and care for patients at risk for PPD.

Chapter Two: Review of the Literature

Introduction

This chapter provides a review of the literature regarding the identification and screening of mothers at risk for postpartum depression (PPD). Studies on PPD screening instruments, PPD screening skills of nurses, barriers associated with nurses to recognize and care for mothers at risk for PPD, and referral sources for PPD were reviewed. A theoretical framework that considers the intention to perform a behavior which follows the beliefs that an individual holds is discussed. The review of the literature describes the various methods used to recognize, screen, and treat mothers at risk for PPD. As a result of this literature review, a gap was identified regarding the nurses' role in recognizing and caring for mothers at risk for PPD.

Review of the Literature

Depression affects 121 million people worldwide and by the year 2020, depression will be the second leading cause of disability (World Health Organization WHO, 2010) and by 2030; it is expected to be the largest contributor to disease burden. Depression is 50% higher for females than males (Patel & Prince, 2010). According to the WHO, the most common mental health condition to affect perinatal women and mothers worldwide is depression (2010).

Postpartum depression (PPD) is a significant public health problem, affecting approximately 10 to 20% of women within the first year of childbirth. Depression at this critical period of life carries significant risks to the woman and her family. PPD occurs among women of all ages, parities, races, and socioeconomic groups. Unfortunately, PPD is frequently undiagnosed and therefore untreated (Sword, Busser, Ganaan, McMillan, & Swinton, 2008).

Beck developed a substantive theory of postpartum depression called Teetering on the Edge (1993). As a result of in-depth interviews of 12 women with PPD, Beck defined the theory in four stages: encountering terror, dying of self, struggling to survive, and regaining control. During the encountering terror stage, depression suddenly occurs and women described feelings of anxiety, obsessive thinking, and the loss of concentration. The dying of self is the stage where mothers described their tendency to be withdrawn and socially isolated. Mothers conveyed daily feelings of just going through the motions. The third stage is struggling to survive. This is when mothers would try to improve their circumstances by seeking treatment with health care providers or support groups. Regaining control is the last stage in which the mothers progressed to having more good days than bad. However, during this period the mothers grieved the time they had lost with their baby and felt guilty (Beck, 2006). Anticipatory guidance is important for all mothers about PPD symptoms as well as the recognition that they are cared for and supported (Beck, 2006).

There are established prenatal risk factors for PPD: depression or anxiety during pregnancy, stressful recent life events, poor social support, previous history of depression, childcare stress, low self-esteem, obstetric and pregnancy complications, single marital status, and poor relationship with partner (Dennis, Janssen & Singer, 2004; O'Hara & McCabe, 2013). If PPD is left untreated, this situation can negatively influence the mother-infant attachment and their relationship as well as increase the risk of cognitive delays, social-behavioral problems, and affective disorders in young children (Halligan, Murray, Martins & Cooper, 2007).

The reduction of PPD is a priority health need in the U.S., and a major public health concern (Healthy People 2020, Objective 16-5c, U.S. Department of Health and Human Services, 2010). Much attention has been given to the need for primary care providers to screen

for PPD and manage it effectively. However, providers may not feel prepared to screen, diagnose, treat, and refer women for PPD treatment. Olsen, Kemper, Kelleher, Hammond, Zuckerman, and Dietrich (2002) conducted a descriptive study with primary care physicians and pediatricians. The findings from this study identified lack of knowledge and insufficient training as barriers for primary care physicians and pediatricians in managing patients with PPD. Although health care professionals are well-positioned to educate, prevent, recognize, and treat PPD, it often remains undetected in childbearing women. Mental health disorders during pregnancy and the postpartum period are important public health issues. The general stigma surrounding mental health disorders is a major barrier to screening and treatment. Depressed mothers may be reluctant to admit their depressive symptoms based on suspicions that their ability to be a good mother may be questioned. Also, women have concerns about privacy, confidentiality, and the fear of receiving unhelpful responses that include the dismissal and trivialization of their feelings (Horwitz, Kelleher, & Stein, 2007). In the Diagnostic and Statistical Manual of Mental Disorders 5th Edition, PPD is labeled a major depressive episode with peripartum onset, and 50% of PPD cases actually beginning during pregnancy (American Psychiatric Association, 2013). Depression during pregnancy is a mood disorder just like clinical depression. During pregnancy, hormone changes can affect brain chemicals, which are directly related to depression and anxiety. These can be exacerbated by difficult life situations, which can result in depression during pregnancy.

National attention has been given to the need for primary care providers to recognize and manage postpartum depression (i.e., Agency for Healthcare Research and Quality, 2005; American College of Nurse Midwives, 2008; Association of Women's Health, Obstetric and Neonatal Nurses, 2010; National Association of Pediatric Nurse Practitioners, 2003; the

American Academy of Pediatrics and the American College of Obstetricians and Gynecologists 2002, 2012). In addition, public awareness and education about PPD is critical in helping women identify PPD symptoms and seek treatment.

In the U.S., postpartum care typically consists of two to three days in the hospital after the birth, followed by a postpartum visit four to eight weeks later that focuses on managing complications, assessing for reproductive organ involution, and the initiation of contraception. This model of care lacks a holistic approach essential to addressing the psychosocial needs of women during this critical period. Postpartum women have a high need for health information and social support from formal and informal sources (Sword, 2005). In addition to formal advice from health care professionals, postpartum women also gather information from various informal sources such as family members, the internet, blogs, and social network groups. Current trends, such as mothers in the workforce and decreased traditional assistance for postpartum women, contribute to the social isolation experienced by some mothers. Social support for postpartum women is identified as a key buffering factor associated with prevention of depression. Women who report depressive symptoms are less likely to have adequate social support than those who do not report symptoms of PPD (Howell, DiBonaventura, & Leventhal, 2009). A study by Negron, Martin, Almoq, Balbierz, and Howell (2013) explored postpartum women's views and experiences with social support following childbirth. The findings of this study reinforce the notion that social support is an essential component for the physical and emotional well-being of mothers. Support from partners and families was identified as essential to the physical and emotional recovery of postpartum mothers.

Postpartum nurses have frequent contact with mothers after childbirth and are well-positioned to identify and counsel women at risk for PPD. Nurse-delivered, mental health care

has the potential to increase the detection and treatment of depression, and ultimately improve outcomes for infants and children. Without systematic screening, many postpartum women will unnecessarily suffer from depression, comprising not only their own well-being but also that of their children (O'Hara, Stuart, Gorman, & Wenzel, 2000). If nurses could integrate consistent screening into all clinical settings serving pregnant and postpartum women, then detection, referral, and treatment of depression may increase. Nurses tend to have a positive rapport with their patients and therefore, are highly trusted and respected by their patients. With adequate training and resources, postpartum nurses can identify women at risk for PPD and ensure they are referred to appropriate treatment in order to have optimal outcomes with their babies (O'Hara, Stuart, Gorman, & Wenzel, 2000).

Identification and Screening for PPD

Postpartum depression can occur during pregnancy or in the first twelve months after delivery**.** The American College of Obstetricians and Gynecologists (ACOG) recommends screening for all pregnant and postpartum women at least once during the perinatal period for depression symptoms using a standardized, validated tool. It is important to identify pregnant and postpartum women with depression because untreated perinatal depression can have devastating effects on women, infants, and families. Screening instruments have been validated for use during pregnancy and the postpartum period. The research findings of Buist, Condon, Brooks, Speelman, Milgrom & Hayes (2006) have shown that detection of maternal depression by health professionals increases with routine use of a screening tool.

The Postpartum Depression Screening Scale (PDSS) was developed by Beck and Gable with the intent of identifying PPD (2002). The PDSS has seven categories and consists of 35 questions. The categories include: sleeping/eating disturbances, anxiety/insecurity, emotional

liability, mental confusion, loss of self, guilt/shame, and suicidal thoughts. The responses are on a Likert scale from 1 (strongly disagree) to 5 (strongly agree). A score of 60 to 79 is considered a positive screen for minor depression, and a score of 80 or above indicates a positive screen for major PPD (Beck, 2001). The second instrument is the Edinburgh Postnatal Depression Scale (EPDS) which was developed specifically to screen for symptoms of depression during the postpartum period. The EPDS is a self-report, ten question instrument that has been used in many countries (Cox, Holden, & Sagovsky, 1987). It has a sensitivity and specificity of 86% and 78%, respectively. The EPDS has proven valid in numerous studies and is translated into more than twelve languages. This instrument is written at a lower elementary school reading level and has been successful in identifying PPD regardless of socioeconomic status (Murray & Carothers, 1990). Responses are scored 0 to 3 with a maximum score of 30. Usually, a score greater than 12 will identify most women with PPD. This screening tool can be easily administered and scored. In addition to screening, the postpartum nurse has a significant role to discuss the results in a sensitive manner and refer mothers for appropriate treatment.

In one of the largest studies of PPD to date, 10,000 mothers who gave birth at a Pittsburgh hospital were screened for PPD. Unique to this study was that women who showed signs of depression were given a full psychiatric evaluation (Wisner et al., 2013). The study revealed that 30% of the women who showed signs of depression after delivery had experienced an episode of the condition before pregnancy, 40% had experienced one episode during pregnancy, and 67% of the women also had signs of an anxiety disorder. Postpartum anxiety has similar symptoms of PPD such as constant worries about the baby's health and development, the ability to become a good parent, and navigating the balance between work and home (Wisner et al., 2013). Some postpartum women may feel anxious, but not depressed. However, researchers

have shown that depression and anxiety are highly correlated. Approximately 50% of women diagnosed with PPD also have anxiety symptoms (Matthey, Barnett, Howie & Kavanagh, 2003). Thus, the EPDS is currently viewed as the most optimal screening tool because it explores both depression and anxiety with a brief, user-friendly questionnaire (Hanusa, Scholle, Haskett, Spadaro, & Wisner, 2008).

In some cases, women may experience depression or anxiety for the first time in their life after childbirth. Since pregnancy and childbirth tend to increase the women's contact with medical professionals more than at other times in their lives, it is important to use these opportunities to recognize and treat these symptoms. If untreated, PPD can be fatal. Suicide accounts for 20% of postpartum deaths and is the second most common cause of death in postpartum women after maternal hemorrhages (Wisner et al., 2013).

Staff training and community awareness is essential when implementing a screening program. Healthcare providers must understand the significance of PPD and their role in educating, screening, diagnosing, and managing or referring women who are struggling with PPD. However, formal education on PPD is not readily provided to healthcare providers which leads to their insufficient training and knowledge to diagnose and counsel women.

Current Practices and Management of PPD

Additional literature was reviewed to explore current practices and management of PPD in the U.S. and globally. In the U.S., nurse-delivered screening for PPD is supported and has been effective and feasible in some of the U.S. primary care settings (Chaudron, Szilagyi, Kitzman, Wadkins, & Conwell, 2004). However, there is a lack of consistent screening practices in the U.S. that may vary depending on the state in which one lives. In addition, researchers have

shown the benefits of the midwifery care delivery model in establishing relationships with mothers and providing consistent education and support for the physical, psychological, and social well-being of the mother throughout the childbearing cycle. However, midwifery care is used by only 8.3% of women in the U.S. (Martin, Hamilton, Osterman, Curtin, & Mathews, 2015).

Establishing screening programs requires many components including staff education, use of screening instruments, establishing a screening policy/protocol, and referral resources. In 2010, The American College of Obstetricians and Gynecologists released a committee opinion stating that screening for perinatal depression may be beneficial since health risks and costly complications associated with maternal depression can cause adverse effects on child development and well-being (Committee Opinion no. 453, 2010). This statement urged providers to consider universal implementation and use of depression screenings during prenatal and postpartum visits. In addition, New Jersey (2006) and Illinois (2008), have issued state requirements for health care providers to screen all women for depressive symptoms prenatally and during the postpartum period. The Patient Protection and Affordable Care Act also requires all health plans to cover women's preventive services such as perinatal depression assessments (Rhodes & Segre, 2013). Despite these policy initiatives, few studies have examined the acceptability and feasibility of maternal depression screening in hospitals, primary care settings, or in public health clinics. As a major public health problem, PPD deserves a focused and comprehensive educational program that is flexible, cost effective, and reaches a large number of health care professionals.

Looking at PPD from a global perspective includes studies done in other countries as well as the U.S. In the United Kingdom (U.K.), nurse health visitors provide a new birth home visit to

all women as part of universal child health surveillance. As part of this care, nurse health visitors routinely screened all new mothers for depression and provide home-based treatment to any mother identified as mildly to moderately depressed (Cowley, Caan, Dowling, & Weir, 2007). An intervention, known as listening visits, was offered to depressed mothers. This four week program in the home included weekly, one- hour sessions and used reflective listening and problem solving strategies to help new mothers manage PPD symptoms (Davies, Howells, & Jenkins, 2003). Currently, three randomized control trials have been completed and demonstrated the benefit of listening visits to treat mild-to-moderate depression (Segre, O'Hara, Arndt, & Beck, 2010). As a non-directive intervention, the specific course of the visits was based on the women's needs. The first sessions focus on exploring the women's conditions and working in a partnership to understand their experience and the associated effect. The listener uses collaborative problem solving to help mothers handle their concerns and to brainstorm viable solution options. Results of these studies have shown that listening visits were associated with significant improvement in life satisfaction and a consistent decrease in PPD symptoms (Segre et al., 2010).

Although PPD screening in the U.K. is an established clinical practice, there were no published reports that have directly examined what the perceptions of the health visitors were regarding their acceptance and beliefs about in-home PPD screening and treatment. A focus group study of six health visitors in Scandinavia, found that they considered screening with the EPDS helpful in assessing for depression. Before their use of the EPDS, these nurses felt they lacked reliable ways to determine whether some of their patients were depressed. With the routine use of the EPDS, the nurses felt more confident in assessing their patients' moods and new motherhood role (Vik, Inger, Willumsen, & Hafting, 2009). According to Buist et al.,

(2006), an Australian national screening implementation effort found that 99% of nurses reported that the EPDS was easy to use and they would continue to use it. This suggests that nurses have positive views of maternal depression screening.

In 2008, the Australian government funded the National Perinatal Depression Initiative, known as *Beyond Blue*, to include routine psychosocial assessment, health care professional training, and information about treatment options and community resources as part of clinical practice standards (Reavley & Jorm, 2011). In Australia and the U.K., the nurse midwife has a significant role in the care of pregnant and postpartum women. Few studies have assessed midwives' knowledge of depression during pregnancy and postpartum, but those that have been conducted in Australia and the United Kingdom found that midwives possessed limited knowledge about the recognition and management of PPD (Buist et. al., 2006).

Attitudes and Beliefs Related to PPD

Flynn, Henshaw, O'Mahen and Forman (2010) evaluated patient perspectives on improving the depression referral processes in obstetric settings. The purpose of this descriptive qualitative study was to identify factors that influence the likelihood of seeking and participating in perinatal depression treatment among untreated depressed women to begin to develop strategies to better address depression in the obstetrics setting. The researchers conducted semi-structured interviews with twenty-three pregnant and postpartum women to identify: (1) what women perceive as facilitators and barriers to treatment for depression in the perinatal period, and (2) areas of improvement in current practices to bridge the gap between screening and referral follow-through. The ultimate goal was to improve adherence to depression treatment.

This study used stratified purposeful sampling based on three factors: pregnancy status, socioeconomic status and depression severity. Participants were initially recruited in the waiting areas of five obstetric clinics by research assistants. The clinics served women with private or Medicaid insurance and routinely administered a depression screening tool to all new obstetric patients at their first visit. In addition, all clinics provided social work counseling and case management referrals to specialty care services such as psychiatry. Several consistent themes emerged regarding factors that influence patient follow through with depression referrals in obstetric settings: (1) Practical considerations such as location, timely connections with referrals, and appointment flexibility; and (2) psychological factors such as awareness, beliefs and feelings. According to Flynn, Henshaw, O'Mahan and Ferman (2010), the two primary psychological themes centered on the need for awareness about the illness and treatment, and concerns about stigma associated with treatment for depression. Findings from this study include recommendations for a systematic approach to following up depression screening with individualized assessments and referrals.

Straub et al., (1998) surveyed local obstetricians, family practitioners, and pediatricians to try to define the incidence of PPD in their local community. Some physicians said they routinely saw a few patients per month with symptoms of PPD, and others said it occurred very sporadically in their practices. Most of the physician respondents stated that they did not know how to treat this illness, nor did they know of community resources to assist those patients identified as depressed. As a result, they never addressed PPD with their patients.

In addition, Straub et al. (1998) also surveyed the nurses in one community hospital and they were also uninformed. Nurse respondents reported that PPD was not discussed in the local nursing curricula, and no professional development opportunities were offered to nurses that

included education about PPD. As a result, a group of proactive nurses in one rural hospital developed a multidisciplinary task force to educate health care professionals about PPD, to help identify women who might be affected, and to provide community education as well. Telephone calls were initiated 2 to 3 days after hospital discharge to discuss the mothers' transition to home and answer their questions or concerns. Telephone follow-up programs were the most successful task force intervention along with community education to increase awareness (Straub et al., 1998). Continued funding and administrative support were also an essential part of this program's success. More research needs to be done to determine the long-term effectiveness of telephone follow-up interventions.

Segre, Pollack, Brock, Andrew and O'Hara (2014) conducted a mixed-methods evaluation of nurses' views and implementation strategies on depression screening in a maternity unit. In the past, success of postpartum depression screening programs was measured in terms of screening rates; however, evaluating the screening rate does little to inform implementation of depression screening in patient outcome. According to Segre, Pollack, Brock, Andrew and O'Hara (2014), this study described the experiences of nurses in implementing depression screening on a maternity unit. The practice was evaluated qualitatively by asking nurses to describe their screening strategies and their views about implementation and quantitatively by assessing their screening rates and the number of women identified as being depressed Twenty maternity unit nurses completed three Likert-scaled items on nurses' perspectives about implementing depression screening, including whether they thought screening is a good idea, whether they would opt to continue this practice if given a choice, and their level of comfort in screening women for depressive symptoms (Segre et al., 2014).

According to Segre et al. (2014), nurses believed that depression screening is important and that they have a responsibility to screen women, but identified challenges to performing these screenings. Suggestions for sustainability of depression screening were identified. These included education for the nurses about depression and screening in conjunction with providing the staff with the opportunity to perform sample EPDS screens and use scripting techniques to improve nurse-patient communication. Nurses who felt confident were more likely to implement depression screening into their practice (Segre et al., 2014).

Education and Anticipatory Guidance

Early identification can reduce the rate of morbidity and mortality and can improve overall outcomes for the mother and her baby (Beck, 2006). According to Beck (2006), mothers and family members should learn the signs and symptoms of postpartum depression prior to discharge. Mothers and families should also be provided with information about PPD support groups in the area and contact information of mental health professionals who specialize in postpartum mood disorders. In addition, information about online support networks may be beneficial.

Barriers for Management of Patients at Risk for PPD

Teng, Blackmore and Stewart (2007) interviewed healthcare workers in Toronto, Canada, regarding their experience of providing care to recent, immigrant women suffering from postpartum depression. The objectives of this study were to identify potential barriers to care that recent immigrant women may encounter as perceived by healthcare workers and to identify challenges healthcare workers faced as providers of care to this population. Qualitative semi-structured interviews were conducted with sixteen participants from various disciplines. Two

main categories of barriers to care for immigrant women were identified: practical barriers and culturally determined barriers. Practical barriers include difficulty accessing appropriate services due to language fluency and the ability to identify and access sources of information. Culture barriers include women having a poor understanding of postpartum depression and being unable or unwilling to disclose their feelings to healthcare workers, family members and friends. The participants identified stigma as a barrier to care. Mothers were afraid to speak out due to stigma of being labeled depressed or a bad mother. They felt that the expectation for mothers is happiness but instead, they struggled with feelings of shame and guilt. This is consistent with the literature indicating that shame, stigma and the fear of being labeled mentally ill hinder the process of seeking help for postpartum depression. The challenges experienced by healthcare providers were fear of incompetence, language barriers, inadequate assessment tools and the fear of cultural uncertainty. The fear of incompetence referred to the lack of awareness or knowledge necessary to identify a mother at risk for PPD and the potential consequences of an untreated mother. Inadequate assessment tools were another challenge due to the lack of consistent universal screening methods and the uncertainty of the screening instruments to be applied to different cultural contexts.

In a qualitative descriptive study by Sword, Busser, Ganaan, McMillan and Swinton (2008), women's care-seeking experiences after referral to counselors for postpartum depression were explored. Interviews were conducted with eighteen women recruited from a Healthy Children's Program. This program is an early intervention and prevention initiative designed to promote healthy child development. Women who spoke English and who scored a 12 or higher on the Edinburgh Postnatal Depression Scale were invited to participate in the study. Data were collected using semi-structured telephone interviews conducted four weeks after initial screening

for postpartum depression. Specific interview questions were asked such as "How did you feel when the nurse told you that you might have postpartum depression?" "How did other people respond to the fact that you might have depression?" and "Tell me what it was like when you tried to follow up on the nurse's advice?" All eighteen interviews lasted approximately 40 to 50 minutes, were audiotaped and transcribed verbatim (Sword et al., 2008). Themes were identified that revealed three levels of influence: individual level, social network level and healthcare system level. At each level, specific barriers to and facilitators of care-seeking emerged.

Individual-level barriers included normalizing of symptoms. According to Sword et al. (2008), participants attributed their symptoms to adjustment to motherhood or the baby blues. Others mentioned a lack of sleep as an important influence on how they were feeling. Limited understanding of postpartum depression was a barrier to care seeking for many women. Waiting for symptom improvement and discomfort with discussing mental health concerns due to fear of being judged were other barriers expressed by women in seeking treatment for postpartum depression. Symptom awareness and recognition helped women to facilitate treatment sooner. Some participants described not feeling like themselves which prompted them to seek care.

Sword et al. (2008), identified that encouragement to seek care was recognized when participants spoke about reliance on others to make the decision to obtain care for them. Family and friends' expressions of concern about the women's emotional well-being prompted the women to seek help. Participants reported that physicians normalized their symptoms telling them to get more rest and accept help from others. Women identified issues related to disconnected care within the healthcare system that hindered their ability to get care. Lack of physician communication from obstetrician to primary care physician was reported. Also, women mentioned that the physical exams by physicians were thorough but there were no

psychosocial components to their exams or questions about their mental condition at the sixth week postpartum follow-up visit. Timing issues, including difficulty in getting an appointment and the limited availability of support groups served as barriers for women seeking care for postpartum depression (Sword et al., 2008). The most common barrier identified by women seeking care was their health care providers' responses to their symptoms. Women were hesitant to discuss their concerns with health care providers since most of them would attempt to normalize their symptoms. Women, family and friends, and health care professionals often attributed symptoms of postpartum depression to external factors such as sleep deprivation, stressful work/life balance, and lack of support (Sword et al., 2008). Limited understanding about PPD by health care providers emerged as another barrier.

Many primary care physicians (PCP) still fail to diagnose and treat maternal depression despite the potential consequences. According to a study by Leiferman, Dauber, Heisler, and Paulson (2008) which examined the relationships among PCPs' beliefs, knowledge, self-efficacy, and perceived barriers toward managing maternal depression; there was a gap between the opportunity for care and the actual care delivery. The study was designed to understand and identify potential differences in attitudes, beliefs, practices and current barriers toward managing maternal depression across primary care specialties. The sample comprised of 217 PCPs currently practicing in either family medicine, obstetrics, or pediatrics in Southeastern Virginia. Participants completed a 60-item survey either web-based or by mail. Over 90% of PCPs reported that it was their responsibility to recognize maternal depression. However, nearly 40% of PCPs reported rarely/never assessing for maternal depression and 66% reported rarely or never referring a patient for treatment of maternal depression. PCPs reported they have inadequate time for counseling patients and they do not feel confident in their knowledge and

skills to manage maternal depression. Many PCPs perceived mental health resources in the community as inadequate, calling for more coordination of care between primary care settings and mental health specialists (Leiferman et al., 2008).

The birth of a baby is usually perceived as a happy event. For women with PPD, this is experienced as a struggle in which expressing negative feelings is not acceptable within the social image of motherhood. As a result of their silence, women become overwhelmed with feelings of incompetence and a connection with others is difficult to maintain (Sword et al., 2008). This leads to detachment and isolation from their children, significant others, and even themselves. Depression is perpetuated by the isolation. Regaining connection to others and creating an environment in which negative aspects of mothering can be expressed are important steps in making it through PPD (Sword et al., 2008). This recovery process needs to be facilitated by supportive acknowledgements from others that validate the woman's experience and help her view herself as a good mother.

Since PPD is prevalent, under-diagnosed and often has long-term effects on the well-being of women, their families and infants, universal screening can enable early detection and appropriate intervention. Adequate screening tools exist, and their limitations are well established. However, screening is not a consistent standard of care and varies greatly based on health care provider, clinical practice setting and geographical location. Having access to a screening tool is important, but knowledge about performing the screening and appropriate referral resources are essential for optimal patient outcomes.

Depression in the postpartum period can be treated successfully with psychological therapies which most women prefer to medication during lactation for reasons such as potential side-effects on infants (Guille, Newman, Fryml, Lifton & Epperson, 2013). Researchers have

shown that antidepressants differ with respect to infant exposure. Available data shows the selective serotonin reuptake inhibitors (SSRIs) group are excreted in low amounts into the milk and do not produce measurable concentrations in infant blood levels. Medication exposure may involve a risk to the infant, but there are also risks both with an untreated depression and of not receiving mother's milk for the infant (Uguz, 2011). Breastfeeding is an optimal way to have a mother connect with her child. Breastfeeding provides a unique interaction between mother and child. To help a depressed mother continue to breastfeed her baby is a significant way to help her recognize her essential role as a mother and bond with her baby. When antidepressant treatment is indicated in mothers with postpartum depression, they should not be advised to discontinue breastfeeding. An individual risk-benefit assessment should always be performed (Lavoie, 2015). A review of the literature has demonstrated that several antidepressants pose minimal, if any, risk to the nursing child. A mother who feels that her nursing relationship with her child is the only thing right in her life can now continue to breastfeed while receiving appropriate medications for PPD. Since some women with PPD described feeling profound guilt and considered themselves as bad mothers; breastfeeding is a lifeline to their infants and it's one thing that mothers feel they can do right for them (Beck, 2006).

It is common for health professionals to not identify mothers with PPD due to the lack of screening (Gaynes, Meltzer-Brody, Swinson, Gartlehner, and Miller, 2005). In addition, it is unlikely that most depressed women in the postpartum period will seek treatment for a number of reasons. These explanations can include perceptions of stigma, lack of knowledge about PPD, unrealistic beliefs about coping with motherhood, feelings of failure, and fears about mental health services. In a study by Segre and colleagues (2014) screening seemed to be acceptable to most perinatal women and postpartum nurses. However, it is very important to be aware that a

positive screening result is not a diagnosis of depression. When integrated into routine postpartum care in addition to screening, psychosocial assessment can also capture the broader view of a woman's life, including her supports, stressors, and the quality of her relationships.

The fundamental aim of screening is to reduce the morbidity associated with PPD. It is evident that there are numerous studies on the risk factors and symptoms of PPD, with no clear consensus as to the best methods to screen, educate and treat this debilitating condition. Given the significant impact of PPD on maternal and infant outcomes, it is imperative to be consistent and holistic in detecting and treating PPD. Detection and management involves increasing awareness of the screening methods, symptoms, and management of PPD by all healthcare providers and families whom the new mother engages. Support and prompt referral of women with PPD is necessary to improve maternal and infant outcomes. Women often lack the knowledge to recognize the symptoms of depression and fail to seek help for the condition. Help-seeking behavior for women with PPD is influenced by several factors including recognition of the problem, available resources, adequate social support, and perceived stigma (Goodman, 2009). According to Goodman (2009) untreated PPD is associated with maternal distress and childhood emotional, behavioral, and developmental problems. Therefore, early recognition and treatment is crucial.

Since a large number of mothers describe feeling overwhelmed and sleep-deprived, PPD screening must be simple and nonthreatening. In addition, nurses can make women more aware that PPD is common and assure them that experiencing symptoms of PPD after childbirth does not make them unfit or bad parents (Logsdon, Wisner, & Shanahan, 2007). The review of the literature shows a gap in exploring the nurses' perceptions of caring for patients at risk for PPD. It is significant to identify the nurses' knowledge, skills, and confidence in their ability to care

for and refer mothers for treatment. Nurses have such an important role in identifying women at risk for PPD and assisting them on a path to recovery.

Theoretical Framework

Even though screening tools exist to identify women at risk for PPD, routine screening is not consistently performed. Few studies have been done to explore the nurses' perceptions in the clinical setting. It is important to identify if nurses have the knowledge, confidence, and skills to educate, effectively screen and refer women at risk for PPD. Fishbein's Integrative Model of Behavioral Prediction (IMBP) focuses on changing beliefs about consequences, normative issues, and efficacy with respect to a particular behavior (Fishbein, Triandis, Kanfer, Becker, & Middlestadt, 2001). A few behavioral theories suggest three critical determinants of a person's intentions and behaviors: (a) the person's attitude toward performing the behavior, which is based upon one's beliefs about the positive and negative consequences (i.e., costs and benefits) of performing that behavior; (b) perceived norms, which include the perception that those with whom the individual interacts most closely support the person's adoption of the behavior and that others in the community are performing the behavior; and (c) self-efficacy, which involves the person's perception that one can perform the behavior under a variety of challenging circumstances. These variables have been incorporated in an integrative model of behavioral prediction (Fishbein et al., 2001; Fishbein & Ajzen, 2010).

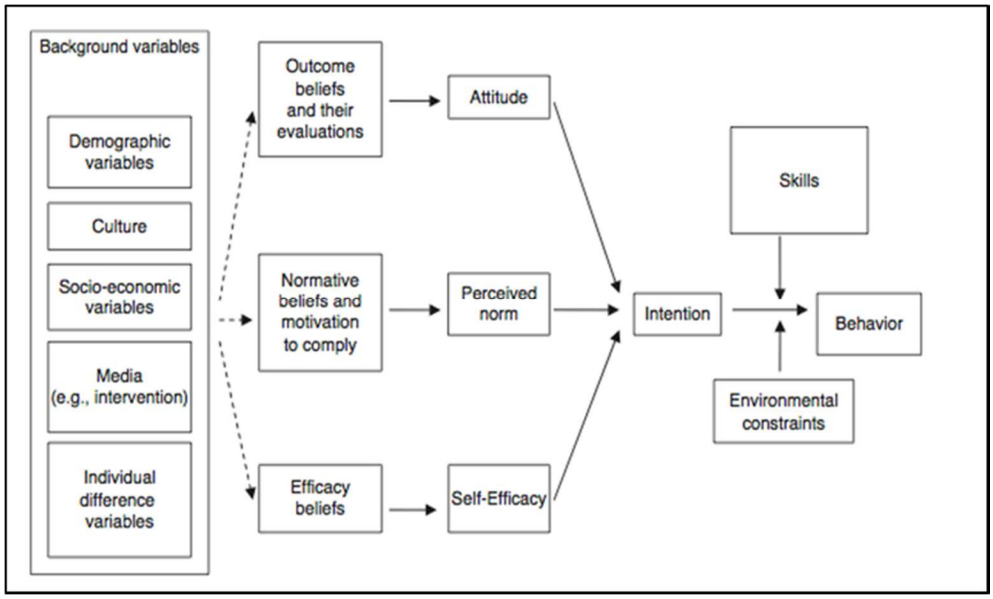

Figure 1. Fishbein Integrated Model of Behavior Prediction
Fishbein & Ajzen. This figure is used with permission from Psychology Press 2010

According to Figure 1, any given behavior is most likely to occur if one has a strong intention to perform the behavior, if a person has the necessary skills and abilities required to perform the behavior, and if there are no environmental constraints preventing behavioral performance (Fishbein et al., 2001). If a person has formed a strong intention to perform a given behavior and has the necessary skills and abilities to perform the behavior, and if there are no environmental constraints to prevent the performance of that behavior, there is a high probability that the behavior will be performed (Fishbein, 2001; Fishbein & Ajzen, 2010). Clearly, if nurses have formed the desired intention to identify women at risk for PPD but are not acting on it, a successful intervention should be directed either towards skill building or at removing (or helping people to overcome) environmental constraints. The more one believes that performing the behavior in question will lead to good outcomes and prevent bad outcomes, the more favorable one's attitude should be toward performing the behavior (Fishbein et al., 2001). Similarly, the more a person perceives that one can (i.e., have the necessary skills and abilities

to) perform the behavior, even in the face of specific barriers or obstacles, the stronger one's self-efficacy will be with respect to performing the behavior (Fishbein et al., 2001). This model can be utilized to help explain why some nurses identify and refer patients at risk for PPD and others do not. By exploring beliefs, attitudes, norms, self-efficacy, intention, and behavior, research studies can determine whether nurses are not identifying patients at risk for PPD because they either have not formed an intention to perform this action, or because they are unable to act on their intention. It is recognized that the integrative model of behavioral prediction is particularly useful for interventions that aim to develop and strengthen intentions to perform a recommended behavior.

Chapter Summary

The review of the literature indicates that PPD is a significant health problem that affects women and their families worldwide. As healthcare providers, nurses have a significant role to identify and refer women at risk for PPD. Postpartum depression is one of the most common complications that can occur during the postpartum period and can have serious effects on the mother, infant, and family. Nurses can play an important role in educating perinatal women and their families by dispelling myths and reducing stigma. In listening to women's voices, researchers have conveyed a greater understanding of the barriers that prevent mothers from seeking help for PPD. Implementation of strategies to improve care coordination and to bridge primary care and mental health services could enhance women's care seeking and, ultimately, the likelihood that they will receive appropriate assessment and treatment. The consequences of allowing maternal depression to go undiagnosed and untreated are detrimental to the health of all mothers and their children. It is vital for nurses to recognize and screen for symptoms of depression and understand the risk factors associated with PPD.

Chapter Three: Method and Design

Introduction

Postpartum Depression (PPD) can be successfully treated**.** For this reason, it is crucial that PPD be identified as early as possible to reduce potentially negative outcomes, not only for the mother, but also for her developing child. Education of nurses related to knowledge and skills in screening are essential to recognize and treat mothers at risk for PPD. Nurses who evaluate postpartum women are a crucial resource for the prevention, detection, and treatment of PPD. Exploring the nurses' perceptions of patients at risk for PPD is significant to identify their ability to recognize, screen and refer mothers for treatment. Chapter Three describes the proposed research method and design. The recruitment of participants, protection of human subjects, data collection, data analysis method, and the steps to ensure rigor and trustworthiness of the study are discussed.

Research Method and Design

A descriptive qualitative design was used for this study. This design is preferred when there is little known about a phenomenon and a researcher is interested in studying a phenomenon in its natural setting, gaining further knowledge of the participants' experience and point of view (Morse & Field, 1995). This descriptive qualitative design was chosen due to the lack of literature concerning postpartum nurses' perceptions about caring for and identifying mothers at risk for PPD. The purpose of this study was to describe and explore postpartum nurses' perceptions of identifying and providing care for mothers at risk for PPD. It is important to understand how nurses can be valuable in the identification and treatment of mothers suffering from PPD.

The qualitative descriptive approach is a unique design that can capture the feelings and experiences of the participants as they are occurring. Descriptive qualitative studies allow the researcher to be closer to the data and produce a final product that has language similar to that of the participant who experienced it. Sandelowski (2000) stated that qualitative descriptive research aims to achieve descriptive validity which is an accurate accounting of events that most people observing the same event would agree is accurate. In addition, Sandelowski (2009) compared descriptive, qualitative studies to naturalistic inquiry since there is no pre-selection of variables to study, no manipulation of variables, and the phenomenon under study can present itself as naturally as possible.

Through the use of a qualitative descriptive design, open-ended data collection methods allowed the participants to provide knowledge based on their personal experiences in caring for women at risk for PPD. This study allowed for a description of the perceptions of the postpartum nurses regarding identifying and referring mothers at risk for PPD. This study provided insight on nurses' perceptions about recognizing and caring for mothers at risk for PPD.

Sample

This study utilized a purposive sampling technique focusing on postpartum nurses from one urban hospital in the Mid-Atlantic region of the U.S. This sampling technique enables the researcher to interview nurses who have knowledge and experience in the area being studied to participate in order to gain new insights (Sandelowski, 1995). For this study, the researcher recruited postpartum registered nurses who currently work on a postpartum unit in an urban hospital in which approximately five thousand newborns are delivered annually. The hospital currently employs 65 registered nurses on the postpartum unit including 10 float nurses. Float

nurses, in this hospital, are registered nurses that are trained to provide patient care in the Labor and Delivery, Intensive Care Nursery, and Postpartum Units.

Recruitment of Sample

The proposed study was approved by the Institutional Review Board (IRB) at one urban hospital in the Mid-Atlantic region of the U.S. and Villanova University. After IRB approval, the researcher emailed all of the registered nurses on the postpartum unit through a hospital email distribution list inviting prospective postpartum nurses to participate in the study. The email included a brief statement about the purpose of the research study (see Appendix A) and included instructions to send an email to the researcher if interested in participating in the study. Upon receiving the email, the researcher responded to the prospective participant and scheduled an interview date and time. Participation in the study concluded after each member check was completed. The member check is a qualitative research technique where the data are reviewed with the participants to check for accuracy.

Protection of Human Subjects

Participation in this study was completely voluntary. Participants were encouraged to ask any questions prior to, during, or after the interview. There was no direct cost to any of the participants for their participation in the study other than their time. Informed consent was obtained by explaining the purpose of the study as well as the risks and benefits of participating (see Appendix B). Informed consent was obtained in-person by explaining the purpose of the study as well as how long participation will take, and assuring that withdrawal from the study is optional at any time without penalty. Participants were assured anonymity throughout data collection, data analysis, and during dissemination of findings. The researcher read the consent

form to the potential participant, then provided the informed consent to the nurse to read it, consider participation, and then sign if the nurse agreed. There were no known risks to the research study participants. Any identifying information in the transcripts was removed using pseudonyms to maintain confidentiality during the data analysis. Member checking was done after the data was collected. The transcripts were returned to the participants for validation. This technique enabled the participants to affirm that the transcripts reflect their views and experiences. Direct quotations of study participants were used. All information was kept in an encrypted file on the researcher's computer which is secured and password protected. The employer does not have access to the information about the participants in the study. In this study, all interviews were digitally recorded and later transcribed for analysis. All interview data were copied to an external hard drive for storage that is password protected. The digital recordings and external hard drive were stored in a locked, file cabinet located in the researcher's office.

Setting

Participants were interviewed in the hospital setting. The interviews were conducted in a private conference room in the hospital. The conference room is soundproof and was reserved for each interview. Participants were asked to turn off their cell phones to eliminate potential distraction during the interview. All audio equipment was placed on the conference room table for the duration of the interview.

Data Collection Procedure

Semi-structured individual interviews were conducted using prepared interview questions. Interviews are the preferred data collection method used when the researcher has a good understanding of the questions to ask (Morse & Field, 1995). Two experts in the maternal-newborn specialty area were asked to review and make recommendations to the semi-structured questions prior to the study. Both experts did approve the questions after their recommendations were incorporated. Interviews were completed in person in a reserved and private conference room and were digitally recorded on two digital recorders. Two recorders were used to protect against any loss of data due to a potential recorder malfunction. At the completion of each interview, the researcher asked the participants if there is anything else they would like to add, or if the participants have any additional comments. Potential participants were contacted by email and interviews were conducted until saturation was noted in the data. Saturation is reached when repetitive content is revealed within subjects' interviews and no new data emerge (Richards, 2006). Once saturation was achieved, no further interviews were conducted. Participants were contacted via email after the interview to verify that their transcripts were valid, to check for accuracy of their responses and to make any additions or clarifications to the responses.

Data Management

Inductive content analysis is used when there are no previous studies that describe a phenomenon. The aim is to attain a comprehensive description of the phenomenon, and the outcome of the analysis is categories describing the phenomenon. The inductive approach to content analysis was used to analyze the qualitative data represented in three main phases: preparation, organizing and reporting (Elo & Kyngas, 2008).

In this study, all interviews were digitally recorded and later transcribed for analysis. The recordings from the interviews were transcribed by a professional transcriptionist service and returned to the researcher in a Microsoft Word text format. The transcription service ensured confidentiality of the recordings and transcripts. Professionals in the transcription business are obligated to sign a confidentiality agreement stating they will not share files and documents inappropriately. Data fragmentation is a method in which transcription companies assure clients that their data will not be compromised. This method ensures that no one employee has complete access to any given file at one time. They may have to transcribe it in sections, or separate parts of the file may be issued to different transcriptionists. Transcription services use safeguards to prevent breaches and will not allow confidentiality to be compromised.

The researcher reviewed each of the transcripts and compared them to the digital recordings. The digital recordings were labeled by the researcher with an assigned number code to protect the identity of the participants. Following each interview, the researcher listened to the recording to assess the quality and clarity of the recording (Morse & Field, 1995). The researcher removed any potential personal identifying data to maintain confidentiality of the data and of the study participants. This final set of data were uploaded to ATLAS.ti 7, a qualitative data analysis software program. This program provided tools to enable the researcher to locate, code, and annotate findings in data to evaluate their significance. All interview data were copied to an external hard drive for storage that was password protected. The external hard drive was stored in a locked, file cabinet located in the researcher's office. All data will be destroyed five years after the completion of the study.

Data Analysis

The researcher coded and sorted the data using ATLAS.ti 7. The purpose of ATLAS.ti is to help researchers systematically analyze data. ATLAS.ti provides tools for researchers to code and annotate findings in data, to weigh and evaluate their importance, and to visualize potential relations between them. An inductive approach of content analysis by Elo & Kyngas (2008) was used to review and code the data. A doctorally prepared nurse educator and researcher reviewed the analysis process and categorization. The purpose of using content analysis is to identify categories that describe the phenomenon. An important feature of inductive content analysis is to classify data into smaller content categories. In the preparation phase, the category of analysis is selected with a representative sample. Next in the analytic process, the researcher strives to make sense of the data and to learn what is occurring (Morse & Field, 1995). The aim is to become immersed in the data, which is why it is important to read through the data several times. After understanding the data, an inductive content analysis process was used. This process included open coding, creating categories and abstraction. Open coding means that notes and headings are written in the text while reading through it to describe all aspects of the content. The codes facilitate the identification of concepts around which the data can be assembled into patterns. The researcher used a coding list, including explanations of the codes, to minimize a cognitive change during the process of analysis (Elo & Kyngas, 2008). Codes created inductively may change as the study progresses, as more data become available. Therefore, the coding process was performed repeatedly with each transcript. The use of open coding enabled the researcher to look for distinct concepts and categories in the data and break it down into master headings and subheadings. This process helped the researcher synthesize and summarize the data.

Once open coding was completed, the lists of categories were grouped into broader categories according to those that were similar or dissimilar (Dey, 1993). After the categories were identified, the researcher checked if all aspects of the content had been covered in relation to the purpose of the study. The researcher considered whether or not the unmarked text should be included. If the unmarked text gives some answers to the research question, it was included in the analysis.

According to Cavanagh (1997) the purpose of creating categories is to provide a means of describing the phenomenon, to increase understanding and to generate knowledge. The abstraction phase is used to formulate a general description of the research topic through generating categories. Each category is labeled and subcategories with similar events are also created (Cavanagh, 1997). According to Elo & Kyngas (2008) valid inferences and replication from data are made when content analysis is used to analyze research data.

Rigor and Trustworthiness

Rigor and trustworthiness of a study is important to evaluating its worth. Trustworthiness involves establishing: credibility, transferability, dependability, confirmability, and authenticity (Beck, 2009). In addressing credibility, the researcher attempts to demonstrate that a true picture of the phenomenon is being presented. In this study, the researcher strictly adhered to the study design, methods and analysis. Member checking was used to verify all of the collected data. All participants reviewed their transcripts to determine if they were accurate and included what they intended to share with the researcher.

Transferability is evident when the researcher provides sufficient detail of the context of the fieldwork for the reader to be able to decide whether that environment is similar to another

where the findings can be justifiably applied (Elo & Kyngas, 2008). Dependability shows that the findings are consistent and could be repeated. A major technique for assessing dependability is when an independent auditor reviews the activities of the researcher as recorded in an audit trail to see how well the study was conducted and reported. In this study, a doctorally prepared nurse educator and researcher reviewed the analysis process and categorization and discussed any discrepancies until agreement is obtained. The researcher also collected data until saturation occurred in order to enhance transferability of the data.

To achieve confirmability, the researcher must take steps to demonstrate that findings emerge from the data and not from researcher bias, motivation, or interest (Lincoln & Guba, 1985). Prior to the study, the researcher journaled about personal experiences and feelings about caring for mothers at risk for PPD. The researcher referenced this journal while reading the transcripts to ensure that personal beliefs were kept separate from data analysis. Polit & Beck (2012) and Ahern (1999) stated that the use of reflective journaling aids in putting aside any personal preconceptions about the subject being studied by reflexive thinking that may bring about thoughts the researcher was unaware of prior to this study.

Authenticity focuses on the degree in which the researcher faithfully and fairly describes participants' experiences (Beck, 2009). In addition to the member checking process, the auditor was asked to verify that the findings and description of the phenomenon were an accurate reflection of the data.

Chapter Summary

This chapter provided support for the research method for this study. A qualitative descriptive methodology was used to describe and explore postpartum nurses' perceptions about

identifying and referring mothers at risk for PPD to appropriate services. Procedures for sampling, protection of human subjects, recruitment, data collection, data management, and data analysis were discussed. In addition, the steps to ensure rigor and trustworthiness of the study were reviewed.

Chapter Four: Findings

Introduction

The purpose of this research study was to explore and describe nurses' perceptions about identifying and caring for mothers at risk for postpartum depression. This chapter discusses the results of this qualitative descriptive study addressing the data analysis about nurses' perceptions of caring for mothers at risk for postpartum depression. A discussion of the sample, data and content analysis are reviewed in this chapter.

Sample Description

After receiving participant consent the researcher scheduled a date and time to conduct the interview. The participants were provided contact information for the researcher in case they needed to change the interview time, decided to decline participation, or had any questions or comments before or after the interview. Next, the researcher conducted 26 interviews. All interviews took place in person at the hospital in a private conference room.

A description of the sample was compiled from the demographic questionnaire responses. The sample for the study included 26 registered nurses who were all female. The characteristics of the sample are included in Table 1.

Table 1 Sample Demographics		
	Sample	
	n	%
Age		
21-25	3	12
26-30	2	8
31-35	0	0
36-40	3	12
41-45	4	15
46-50	4	15
51-55	10	38
> 55	0	0
Race / Ethnicity		
Asian	1	4
Black or African American	2	8
American Indian or Alaska Native	0	0
Native Hawaiian or Pacific Islander	0	0
White	23	88
Education Level / Highest Degree in Nursing		
BSN	20	77
MSN	2	8
PhD	0	0
DNP	0	0
Other: AD	4	15
Hospital Unit(s) worked on:		
Postpartum	25	96
Labor & Delivery	1	4
Antepartum	0	0
How many years in nursing		
0-5	8	31
6-10	1	4
11-15	1	4
16-20	6	23
21-25	4	15
26-30	5	19
31-35	1	4
36-40	0	0
How many years as a postpartum nurse		
0-5	8	31
6-10	2	8
11-15	5	19
16-20	2	8
21-25	4	15
26-30	4	15
31-35	1	4
36-40	0	0
Questions	**Yes**	**No**
Any experience with a family member with PPD?	8	18
Any experience with a friend with PPD?	8	18

Do you feel confident in recognizing mothers with PPD symptoms?	19	7
Do you feel comfortable working with mothers with PPD symptoms?	23	3
Do you feel that you have adequate knowledge to care for mothers at risk for PPD?	17	9
Do you feel that you have adequate clinical skills to care for mothers at risk for PPD?	16	10
Do you feel comfortable speaking to patients about PPD?	23	3
Do you feel comfortable teaching patients about PPD?	23	3
Have you used a screening tool to assess mothers for PPD?	1	25
If yes, which screening tool did you use?	EPDS	
Do you feel confident in using a screening tool?	2	24
Do you identify available resources for mothers at risk for PPD?	16	10
Do you feel that mothers receive adequate information about follow up resources for PPD?	3	23
In clinical practice, when do you use a screening tool to assess mothers for PPD?		
Always	0	
Sometimes	0	
Rarely	0	
Never	26	
Do you feel that mothers are aware of PPD symptoms prior to hospital discharge?		
Always	2	
Sometimes	17	
Rarely	7	
Never	0	
Do you perceive that the mother's family members are aware of PPD symptoms prior to hospital discharge?		
Always	0	
Sometimes	10	
Rarely	15	
Never	1	

The demographic questionnaire provided information about postpartum nurses who care for mothers at risk for PPD. Twenty-three participants (88%) stated they felt comfortable speaking to mothers about postpartum depression. Eighteen participants (68%) had experience with a friend or family member with PPD. Nineteen participants (73%) stated they felt confident in recognizing mothers with PPD symptoms. Seventeen participants (65%) indicated they had adequate knowledge to care for mothers at risk for PPD. Twenty-five participants (96%) conveyed they have never used a screening tool to assess mothers for PPD. Twenty-four

participants (93%) indicated they did not feel confident in using a screening tool for PPD. Twenty-three participants (89%) said they did not feel that mothers receive adequate information about follow up resources for PPD prior to hospital discharge. Two participants (8%) said they felt that mothers are always aware of PPD symptoms prior to hospital discharge, seventeen participants (65%) stated they felt that mothers are sometimes aware of PPD symptoms prior to hospital discharge, and seven participants (26%) said mothers rarely are aware of PPD symptoms prior to hospital discharge. Ten participants (38%) replied that they felt family members are sometimes aware of PPD symptoms prior to discharge, and fifteen participants (57%) mentioned that they felt family members are rarely aware of PPD symptoms prior to hospital discharge.

Data Analysis

The data were analyzed using Elo and Kyngas' (2008) inductive approach to content analysis which includes open coding, coding sheets, grouping, categorization, abstraction, and reporting the results. After the interviews were completed, the tapes were sent to a transcription service. Upon receiving the transcripts, the researcher read through each transcript while listening to the audio to check for accuracy. After each of the transcripts were verified for accuracy, the transcripts were read through multiple times to allow the researcher to gain familiarity with the data.

The information from the transcripts were uploaded to Atlas.ti for open coding. This process involved highlighting sections of data and adding headings into the margins for each of the transcripts. Code manager within this program was used to develop a coding sheet of the 42 generated open codes. Each of the open codes was reviewed and the data was organized into the following groups:

- PPD assessment and identification
- postpartum depression screening behaviors prior to hospital discharge
- postpartum depression screening skill
- conditions that support the nurses' ability to recognize, screen and care for mothers at risk for PPD
- factors that are barriers to the nurses ability to recognize, screen and care for mothers at risk for PPD
- resources and referrals for PPD
- miscellaneous
- nurses' suggestions

The researcher reviewed the open codes within each of the generated groups to confirm that the data categorized in each of the groups accurately represented the grouping. This process included rereading sections of the transcripts to confirm or regroup codes. Each of the open codes within the created groups were placed on an individual, colored piece of paper and hand sorted by the researcher. The researcher reviewed the data within each of the groups created to categorize the data. The sorting process helps the researcher to determine what data were similar within the groups and what data were different. The researcher continued to read through the data in the transcripts and the categories generated multiple times. These categories were reviewed several times on the coding sheet to start the abstraction phase of the analysis.

The abstraction phase included generating themes or main categories (Elo & Kyngas, 2008). The main categories described the research topic and were supported by sub-themes that provided content characteristics. Descriptors, or sub-categories, were utilized to provide the

participants' expressed words. This study used main themes, sub-themes, and descriptors for categorizing the data.

Three main themes emerged during data analysis: nurses' informal assessment of maternal behavior, conditions that facilitate nurses caring for mothers at risk for PPD, and perceived barriers encountered by nurses. Ten sub-themes supported the main themes. The main themes and sub-themes are outlined in Table 2.

Table 2 Themes and Sub-themes

Main Themes	Sub-Themes
Nurses' informal assessment of maternal behavior	- Nurse-patient interactions - Nurse perceptions and clinical judgements
Conditions that facilitate nurses caring for mothers at risk for PPD	- Awareness of PPD - Nursing experience - Established rapport with mothers
Perceived barriers encountered by nurses	- Nursing care time constraints - Lack of knowledge - Unacquainted with appropriate resources - Lack of information on the use of screening tools - Stigma associated with being inadequate as a mother

Theme One: Nurses' Informal Assessment of Maternal Behavior

The first main theme, nurses' informal assessment of maternal behavior, emerged from participants describing their actions in clinical practice when assessing postpartum mothers

during their inpatient postpartum period. Two sub-themes support the main theme: nurse-patient interactions, and nurse perceptions and clinical judgements.

The main theme, nurses' informal assessment of maternal behavior, provided a description of the behaviors that nurses use to assess postpartum mothers for postpartum depression. Many participants described certain characteristics that caused them to consider that a mother might be at risk for PPD. These symptoms included:

- "lack of bonding or attachment with the baby"
- "a previous history of postpartum depression"
- "mothers who state they feel depressed or helpless"
- "mothers who seem overwhelmed and anxious with caring for their babies"
- "mothers who cry often or seem withdrawn from their babies"
- "mothers who express negativity or uncertainty in their ability to care for their babies"
- "if something unexpected occurred, such as a premature delivery or a baby with anomalies"

One participant said, "I am concerned about possible postpartum depression if a mother says this was an unplanned pregnancy, or if she is not in a good relationship." Another participant stated, "I get worried about postpartum depression for teen mothers or mothers with advanced maternal age and those who say they have no support at home to help them." Another participant mentioned, "I think it is too early for nurses to see signs for postpartum depression while in the postpartum hospital unit." Two participants mentioned that mothers are at risk if they have stressors at home, have a history of abuse, or if their labor ended with a cesarean delivery and they really hoped for a vaginal delivery." One participant stated, "I

had a mother say she thought she would feel something more for the baby than she does. She was sad that she did not feel that instant love for the baby that she thought she should have."

Nurse-Patient Interactions

The sub-theme, nurse-patient interactions, was derived from the nurses indicating that they informally assessed the new mothers during their nurse-patient conversations. In place of more structured postpartum depression assessment tools and techniques, the nurse conversed with the mothers during their routine maternal physical evaluations. One participant conveyed, "I don't do a formal postpartum depression assessment, I just ask her how she is feeling." However, many participants did explain that they did not mention postpartum depression during their patient assessment unless the patient inquired about the topic or if the mother showed symptoms that concerned them. Another participant replied, "I don't assess mothers for postpartum depression. I mainly work night shift and that is discussed during discharge, I think."

Nurses' Perceptions and Clinical Judgements

The sub-theme, nurses' perceptions and clinical judgements, included what nurses described as their methods for postpartum depression screening and assessment on a postpartum hospital unit. The descriptors to support the sub-theme, nurses' perceptions and clinical judgements, included: observation, informal patient assessment, and verbal communication. Observation was described by several participants as "watching" the mother bond with her baby and "observing" the mother care for her baby. Participants described a component of their patient assessments as observational. One participant stated, "I observe mothers and how they interact with their babies. If nothing strikes me as abnormal, I assume the mom is fine." Also, a participant explained, "I go with my gut feeling in terms of maternal affect, that's how I

determine if there is something to be concerned about." One participant indicated, "I haven't seen postpartum depression here. I tell mothers to look for symptoms around four to six weeks after delivery."

One participant shared, "I rely on my intuition when assessing moms for postpartum depression. I would like to see a screening tool in place because I feel guilty that I may be missing it sometimes." Another participant mentioned "there is no formal place to document anything for postpartum depression screening on the EMR and nurses are often too busy, so a general psychosocial assessment may be overlooked as well."

Theme Two: Conditions That Facilitate Nurses Caring For Mothers at Risk for PPD.

This theme provides a general description of the participants' limited awareness and lack of familiarity with presentation of postpartum depression symptoms and screening tools. It also includes a general description about the clinical experiences of participants when caring for mothers at risk for postpartum depression. Three sub-themes supported the main theme: awareness of postpartum depression, nursing experience, and established rapport with mothers.

Awareness of Postpartum Depression

The sub-theme, awareness of postpartum depression, emerged from the participants describing the importance of recognizing postpartum symptoms while mothers are in the hospital prior to discharge. One participant stated:

> Personally, I feel that I notice signs of postpartum depression more than other nurses because my sister-in-law experienced it. I think postpartum depression happens more than we realize and we need to do more when we have them under our care. It is also

> obvious to me that postpartum depression awareness and patient education varies from nurse to nurse based on their knowledge of it and their clinical experience.

Another participant shared:

> I talk to mothers verbally because we have nothing written specific to postpartum depression. I tell the mothers it is not a reflection on them as a parent or a mother, it is a chemical imbalance that they can't control.

Many participants were aware of signs and symptoms for postpartum depression but stated they did not receive any specific education about postpartum depression during their hospital orientation or during any ongoing educational opportunities within the hospital. One participant stated, "I am familiar with postpartum depression because I educated myself outside of my work environment."

Nursing Experience

The sub-theme, nursing experience, includes participants' description of specific incidents when mothers at risk for postpartum depression were identified. One participant shared,

> I had a mom who actually articulated to me that, "I'm going to harm my baby." She actually said she was going to, "Get it out of here. I'm going to drown her." The first thing I did was get the baby to safety. Then I actually went in and talked to her and I actually elevated my call up to the doctors and requested a psychiatric consult and then after talking with her, I learned that she had a prior history of post-traumatic stress disorder. She had been a gunshot wound victim who had had a premature baby. And she had a premature baby who she had gone through postpartum depression with but never

> disclosed it to anybody in her history. She has been on and off meds and had a counselor but didn't disclose it but was willing to tell me so I finally was able to get her to talk with the doctors and they pulled her chart. We started a safety plan for the baby and told her why. She went home with the baby with a safety plan, family support, and interventions in the house. And she had therapists and meds. I don't think she would have disclosed it or people would have missed it because she started with the pain complaints and then she was like, "I'm not ready to go. I'm not ready to go." I don't know what it was about this person that I was picking up on but it was the pain that she claimed she was feeling that wasn't congruent with what was really happening with her. Based on her chart, she looked good with vital signs and physical assessment. She was walking around this floor perfectly fine.

Most participants described their nursing experience with patients with PPD "as minimal" and stated "we don't know what to say to mothers or where to refer them to be honest." Another participant said, "I haven't seen mothers with PPD here in the hospital. I think it doesn't happen until four to six weeks later." One participant mentioned, "My experience has just been seeing mothers crying and not bonding with their babies." A participant also shared, "My experience has been when some mothers say they are not feeling well but, they say it is from their hormones changing or from lack of sleep. Those comments make me get a little concerned."

Established Rapport with Mothers

The sub-theme, established rapport with mothers, included comments and descriptions from participants about establishing relationships with mothers during their time on the postpartum unit. One participant said, "I think most patients don't establish a positive rapport

with nurses due to the shortened length of stay in the hospital." Another participant mentioned, "She told me she felt comfortable with me and she trusted me." One participant commented, "I build a rapport from the time I meet them which may come from years of experience."

A participant explained,

> If there is somebody that I am concerned about and I have a rapport with them, I would introduce a little bit of conversation about it (postpartum depression), but, just in general. I don't go over that with mothers. That's mostly discussed, I think, at discharge.

Another participant stated,

> It is challenging when you can't sit and get to know your patients. Most folks won't talk about personal matters unless they trust you or think you can help them. Having a positive rapport with mothers is definitely beneficial if you want to assess any psychosocial things.

Theme Three: Perceived Barriers Encountered By Nurses

The third main theme, perceived barriers encountered by nurses, emerged from participants' descriptions of their current challenges with assessing mothers at risk for PPD. One participant indicated, "We have no screening tool. You just have to be really talking to them and it has to be on your mind as a nurse to really assess for postpartum depression since there is no policy or protocol." Another participant shared, "Yeah, I think it's probably part of what we should do. It's just there's so much else going on that we are focused on, the basic cut and dry things you need to do." Five sub-themes support the main theme: nursing care time constraints,

lack of knowledge, unacquainted with appropriate resources, lack of information on the use of screening tools, and stigma associated with being inadequate as a mother.

Nursing Care Time Constraints

Several participants shared, "We are just too busy sometimes and too much else is going on. This might cause us to miss subtle cues or something." One participant said, "Many days I just don't have the time to discuss postpartum depression with moms. I wish I could but it just doesn't happen." Several participants shared that they "may have a difficult patient care assignment some days" or have more patients assigned to them due to "a high census and there is no time to sit and have a discussion with mothers."

Another participant stated, "I don't feel that I have enough time or knowledge to have a good discussion with a mother about postpartum depression. I did not have any education on postpartum depression screening, assessment tools, or educational materials for postpartum depression."

Other statements made by participants to describe time constraints included the following:

- "Sometimes I'm just too busy and postpartum depression education or assessments may be overlooked."
- "Visitors are challenging because they are in the patient rooms throughout the day and evening and we have no privacy to discuss personal matters with the mothers."
- "It is hard when we are busy and we are assigned to various patients to have the time to spend with the mothers beyond the physical assessment time."
- "Nurses are focused on certain things and postpartum depression is not really one of those things we focus on."

- "I wouldn't say that postpartum depression is something that we can really sit and talk about for very long because we have other patients to care for and a lot of other responsibilities."
- "I think the topic deserves more time with teaching and screening."
- "Since we are trying to get through other tasks, I think it sometimes gets overlooked."
- "I don't think you have the devoted time to sit down with them."

One participant shared,

> Patients are not hospitalized too long in OB so we only have a short time frame to do all of the required assessments, documentation and education. Unfortunately, it might not cover postpartum depression. It would be nice if postpartum depression education started prenatally. Mothers receive too much information during their short postpartum stay and it is overwhelming and exhausting.

Lack of Knowledge

The sub-theme, lack of knowledge, included comments from participants about their lack of knowledge about PPD. Many participants mentioned the need for education about PPD and PPD screening tools.

One participant stated,

> We need overall education for nurses, physicians, and anyone who works on a mother-baby unit. I know that all nurses do not assess moms for postpartum depression. They do not provide information or education about postpartum consistently. From my experience with mothers, every nurse says something different about postpartum depression.

Another participant commented, "Nurses can't do everything and sometimes we are just too busy." In addition, one participant stated, "postpartum depression is something I always thought about learning on my own so I could provide better care to patients but, I honestly just haven't had the time." Another participant shared, "I think nurses really want education about postpartum depression. We understand there is a need but don't know how to get it to be implemented into practice."

Unacquainted with Appropriate Resources

The sub-theme, unacquainted with appropriate resources, included comments and descriptions from participants about their lack of awareness about resources for mothers at risk for postpartum depression. One participant remarked, "I'm sure there are resources, I'm just not aware of any." Access to resources was described by many participants as an unknown. Several participants stated, "We don't know where to refer mothers with symptoms of postpartum depression."

Another participant explained,

> Most nurses call the social worker or put a consult in the computer for a social worker and they come any time prior to discharge and see the patient. That can be challenging on weekends and holidays but they do try their best to see the patients if needed.

Other statements made by participants to describe the lack of awareness of resources included the following:

- "We tell the patients to call their OB provider and discuss what they are feeling with them."

- "Personally, I am not aware of any resources, but I would assume there may be some on the hospital webpage, but I am not aware of them."
- "I am not aware of what the social worker discusses or provides the mother with in regards to postpartum depression."
- "I think the social worker asks the mothers if they have help and support at home and they may give them information on who to call if they don't seem to be getting better."
- "We need to be aware of local resources that are not only dependent on insurance and also do not have a four to six week waiting time for an appointment."
- "We need resources, websites and educational materials on postpartum depression to be posted and readily available for all healthcare providers."
- "If you work night shift, I don't get to interact with the social worker, so, I don't know if I should have done something different than a social work consult or not."
- "I think there must be some more resources that we can give to mothers besides telling them to call the doctor. They don't feel well and are struggling to care for themselves and the baby."
- "I think we would really benefit from having more available knowledge about resources."

Many participants indicated they referred mothers with postpartum depression symptoms to their OB Provider. One participant verbalized, "I tell the mom to contact her OB doc if she feels sad or depressed after discharge." Another participant stated, "I tell them to call the OB if they can't cope or feel hopeless or if the baby blues don't fade." One participant mentioned, "I tell moms that it's normal to have baby blues the first few weeks but if you feel depressed or in a funk, you need to call your OB and discuss it." Another participant remarked, "I think our

discharge packet of information that we give to the mothers has a line or two about postpartum depression and tells them to call their OB if they have any concerns."

Most participants were not able to articulate specific resources to refer mothers at risk for postpartum depression. Most participants were not aware of the resources that the social worker provided to mothers at risk for postpartum depression.

Lack of Information on the Use of Screening Tools

The sub-theme, lack of information on the use of screening tools, described the participants' inability to utilize screening tools for postpartum depression prior to hospital discharge. Twenty-five participants from the twenty-six interviewed stated that they have never used a screening tool for postpartum depression in clinical practice. One participant stated, "I used the Edinburgh Postpartum Depression Scale years ago while I was working in homecare. But, I have not used any screening tool since I started working with inpatient mothers on a postpartum unit."

Several participants mentioned that they do not use a screening tool for postpartum depression. Many participants shared the challenge of not having a systematic policy in place to screen for postpartum depression. One participant shared, "we don't have a tool, policy, or template to refer to when caring for mothers." Another participant commented, "Since there is no formal way here, I feel that I end up relying on my gut and my own personal judgement." One participant shared, "I feel patients are slipping through the cracks because we have no formalized way to assess mothers."

Other statements made by participants to describe the lack of access to screening tools included the following:

- "Any tool would be helpful. Postpartum depression education and screening is important and deserves more time."
- "We don't document anything in the EMR related to PPD. Having a formal screening tool as part of the EMR would be great."
- ""I'm not familiar with what tools are, or what using a tool would look like."
- "There is no scale that we go by and we do not use a tool here. Just myself, I'm the screening tool."
- "I think a screening tool would be more consistent for everybody versus just verbal communication from nurse to nurse."
- "On night shift you kind of get a glimpse of what they're like when they are not putting a face on for family members."
- "We need to screen every mom consistently so some don't fall through the cracks. Screening may help us see red flags."

Many participants discussed the value of postpartum depression screening.

One participant said:

> I think we really need to screen and score mothers for postpartum depression. Nurses need a screening tool and a policy for consistency so all moms are assessed for postpartum depression regardless of their comfort level, knowledge, or daily patient care assignment.

Another participant shared:

> I don't think we address postpartum depression enough. It is more serious than we think. We have screening tools for skin breakdown and falls risk, why not for postpartum

> depression? I think it is important and we definitely should have something concrete to help our patients. A tool is more accurate since some moms struggle more with verbal disclosure.

A participant stated, "We need postpartum depression educational resources in different languages and at a basic reading level. A screening tool should also be available in several languages. I feel that our non-English speaking mothers can get overlooked."

Another participant shared,

> We need a system here. When my sister delivered out of state, there was a team which consisted of a social worker, a psychologist and mothers who volunteered to come to the hospital just to talk about postpartum depression awareness to mothers and families.

Stigma Associated With Being Inadequate as a Mother

The sub-theme, stigma associated with being inadequate as a mother, emerged from the participants when describing their challenges with assessing mothers for postpartum depression. Some participants discussed the difficulty of bringing up postpartum depression as a topic because some families seem to be emerged in talking about their babies and learning how to care for themselves and their babies. Several participants conveyed that PPD can be an awkward topic to discuss sometimes.

One participant stated,

> Patients hide things well because there is a stigma with postpartum depression and anything related to mental illness. Moms are sometimes not willing to talk about postpartum depression. They brush it off if you try to discuss it with them.

A participant shared, "One mother said that if she admitted that she was struggling, she would be viewed as a bad mother. Maybe we need to increase awareness of postpartum depression so it can ease the social strain." Another participant mentioned, "I think it is really important that a mom knows postpartum depression is not her fault. It's dangerous, it's scary, this postpartum depression, and what it does to mothers and kids if not diagnosed and treated in time." General stigma surrounding PPD is a major barrier to screening and treatment. Depressed mothers may be reluctant to admit their symptoms based on suspicions that their ability to be a good mother may be questioned.

Chapter Summary

This chapter described a summary of the demographic characteristics of the sample and the results of the data analysis. Applying Elo & Kyngas' inductive approach of content analysis, three main themes emerged with ten sub-themes that supported the main themes. Descriptors, representing the words of participants, further explained the subthemes. This study identified that the postpartum depression screening behaviors of nurses mainly consisted of actions that were informal. Nurses lacked access to standardized methods of postpartum depression screening. Lack of information on the use of screening tools, nursing care time constraints, lack of awareness of resources, lack of knowledge, and stigma associated with being inadequate as a mother were identified as perceived barriers in recognizing, screening, and caring for mothers at risk for postpartum depression.

Chapter Five: Conclusions and Implications

Introduction:

The purpose of this qualitative descriptive study was to describe and explore postpartum nurses' perceptions of identifying and providing care for mothers at risk for PPD. Nurses who care for postpartum women are a crucial resource for the identification and referral of mothers at risk for PPD. However, many postpartum nurses may not recognize the importance of consistently assessing and screening mothers for PPD. There is a lack of literature to examine nurses' perceptions of caring for mothers at risk for PPD. The perceptions of postpartum nurses are important to improve the identification and treatment of PPD. Early identification can help to initiate treatment and services for mothers and may prevent further complications.

The research questions for this study included:

1. What do postpartum nurses describe as factors that influence their ability to recognize and screen mothers for PPD?
2. What do postpartum nurses describe as factors that influence their ability to care for mothers at risk for PPD?
3. What barriers do postpartum nurses identify which affect their ability to recognize, screen and care for postpartum mothers prior to their discharge from the hospital?
4. What appropriate resources and referral sources do postpartum nurses provide for postpartum mothers at risk for PPD?

Three main themes emerged during data analysis: (1) nurses' informal assessment of maternal behavior; (2) conditions that facilitate nurses caring for mothers at risk for PPD; and (3) perceived barriers encountered by nurses. Ten sub-themes supported the main themes. This chapter discusses the nurses' perceptions of identifying and providing care for mothers at risk for PPD and examines the relationship of the study findings to the literature. It also presents the limitations of the study, implications for nursing practice and education, and recommendations for future research.

Discussion of the Findings

Theme One: **Nurses' Informal Assessment of Maternal Behavior**

Most participants shared that they based their assessments for PPD on observing the mothers' interactions with their babies or through a general nurse-patient conversation. Several participants mentioned that they based their PPD assessments on observing mothers' interactions with their babies. Nurses' comments indicated that they would only be concerned if a mother was not engaged in caring for her baby or did not appear to be bonding with her baby. Other situations that caused nurses to be concerned about PPD were mothers who expressed uncertainty and feelings of being overwhelmed and anxious about caring for their babies.

It is important during all nurse-patient interactions to assess and educate mothers about PPD. Postpartum nurses can support their care of postpartum mothers through informal teaching practices. The nurses can plan their teaching to include PPD and have it embedded in various other nurse-patient interactions such as during a physical assessment. This method may produce some understanding of PPD. Nurses' informal teaching practices are essential to opening conversations and incorporating health information into casual interactions. Participants only mentioned extreme situations such as a previous history of PPD, stressors at home, a history of

domestic abuse, or an unplanned cesarean section which lead them to be more concerned about PPD rather than recognizing the importance to screen all mothers. There are other factors which place mothers at risk for PPD that the participants did not mention during the interview. According to Lancaster et al., (2010) other PPD risk factors include:

- lower education
- lower income
- lack of social support
- poor relationship quality
- traumatic birth experience
- preterm infant / neonatal intensive care admission
- anxiety during pregnancy
- single status
- breastfeeding concerns

None of the participants revealed that they had access to validated screening tools or received education about tools to screen mothers at risk for PPD. The nurse-patient interactions included only informal assessments about PPD which occurred during conversations when the nurse was focused on the maternal physical assessment. The participants did not mention discussing PPD with postpartum mothers at a separate time apart from the physical assessment. Many participants stated that they did not mention PPD during their patient assessment unless the patient inquired about the topic of if the mother showed symptoms that concerned them.

The American College of Obstetricians and Gynecologists (ACOG) recommends routine screening for depression for all women at least once during the perinatal period using a standardized, validated tool. ACOG noted that screening by itself is insufficient to improve clinical outcomes and must be coupled with appropriate follow-up and treatment when indicated. Clinical staff in obstetrics and gynecology practices should be prepared to initiate medical

therapy or refer patients to appropriate behavioral health resources when indicated. Policies should be in place to ensure follow-up for diagnosis and treatment. ACOG also stated that women with current depression or anxiety, a history of perinatal mood disorders, or risk factors for perinatal mood disorders warrant close monitoring, evaluation, and assessment (ACOG Committee Opinion Number 630, 2015). The data from the reported study demonstrates that these recommendations for practice were not in place and were not met. This finding supports previous studies that validated PPD screening instruments were not being used in the postpartum period to assess for PPD (Straub et al., 1998; Segre et al., 2014; Teng et al., 2007). The participants in this study were not screening mothers for PPD due to a lack of knowledge and no access to a validated screening tool. It is crucial that postpartum nurses are aware of the signs and symptoms of PPD and have the knowledge and the tools to screen all mothers.

Many participants described using their clinical judgement or personal intuition to determine if a mother is at risk for PPD. Participants made assumptions based on their personal intuition about mothers at risk for PPD rather than performing standardized PPD assessments. They described a more passive approach of identifying mothers at risk for PPD through observations and waiting to see if mothers expressed any concerns about PPD. The nurses shared they would feel guilty if they missed identifying a mother at risk for PPD. Their approach tended to be subjective, based on what they thought or felt, rather than on ACOG guidelines. Several participants said that they have a feeling based on their observations of maternal affect and maternal-newborn interactions. The nurses mentioned they were concerned if mothers appeared anxious, sad, irritable, showed a lack of interest in the baby, experienced a change in eating or sleeping habits, or if they had thoughts of hopelessness, and felt incompetent in caring for their babies. The nurses questioned if they were missing something, but they did not engage in

obtaining additional assessment information. Nurses need to be proactive for optimal patient outcomes. As the participants described using their intuition to identify mothers at risk for PPD, none of them mentioned taking specific actions to ensure the mothers received further screening to ensure that they received appropriate interventions or treatment for PPD. The participants' failure to be proactive can cause a delay in treatment for mothers at risk for PPD and lead to potentially negative outcomes for mothers and their children.

Theme Two: Conditions That Facilitate Nurses Caring For Mothers at Risk for PPD.

Nurses are essential in providing skilled care, education, empathy and psychosocial support for patients. It is important to learn what knowledge nurses have and other conditions that facilitate their ability to care for mothers at risk for PPD. Many participants revealed that they used their intuition and made assumptions about the signs and symptoms for PPD and stated they did not receive any specific education about PPD. The participants conveyed that there was not a policy or template to reference for information about PPD. The nurses did not have an accessible list of risk factors for PPD so they relied on their personal recollection of potential PPD risk factors. Most of the nurses made no individual attempts to learn or educate themselves about PPD.

Two participants stated they were aware of PPD symptoms since they knew friends or family members who experienced PPD. The participants also disclosed that they are not familiar with treatment options for mothers at risk for PPD so they referred all of their concerns to a social worker in the hospital setting. After referral to the social worker, the participants did not have any knowledge of what the social worker discussed with the mothers and what referral information and treatment plans were initiated. Based on these findings, there are implications for interdisciplinary collaboration among all members of the healthcare team who must work

together to provide optimal patient care. Development of multidisciplinary health team members with expertise in clinical practice, PPD education and research from the hospital, community and academic settings should be designed to identify PPD among postpartum mothers and implement effective prevention and treatment interventions. The research outcome of Segre et al. (2014) conveyed that nurses needed further education in order to recognize symptoms of mothers at risk for PPD and facilitate appropriate interventions.

The participants shared that they were not aware of resources or treatment options for mothers at risk for PPD. They mentioned that the hospital protocol was to refer mothers at risk for PPD to the social worker. Some participants said they told the mothers to contact their obstetric provider if they had any feelings of sadness or depression after discharge from the hospital. Those participants also stated that they were not aware of what the obstetric provider discussed or provided to mothers at risk for PPD.

Midwifery care in the U.S. is only used by 8.3% of women, but studies of women who use midwives in the U.S. revealed positive relationships, consistent education and support with the midwifery care delivery model (Martin et al., 2015). There were no specific studies in the U.S. that focused on PPD screening with the midwifery care delivery model. A study in Australia found that midwives possessed limited knowledge about the recognition and management of PPD (Buist et al., 2006).

Developing a rapport with mothers included descriptions from participants about trying to establish relationships with mothers during their time on the postpartum unit. Many participants found this difficult to do and described lack of privacy, time constraints and shortened length of stay in the hospital as possible reasons. Most participants conveyed that time constraints limited their ability to establish a good rapport with mothers. Nurses had less time to

spend with their patients if their patient assignments were challenging or if they had multiple patients assigned to them during their shift. Patient visitors and short length of stays also contributed to the nurses' inability to establish a rapport with mothers. One participant specifically mentioned the night shift as a difficult time to establish a rapport with mothers and as a result, PPD assessments were not completed on this shift. Several participants discussed the importance of building a rapport with mothers so the mothers felt comfortable enough to discuss personal thoughts and feelings. Nurses attempted to engage in conversations with mothers during their assessments and provided care for mothers for more than one shift if their schedules permitted. Continuity of patient care can help to establish a positive rapport with postpartum mothers.

According to the participants, patient education is completed at discharge. The timing of education may not have been optimal since the patients were receiving education about their physical recovery, newborn care and follow-up requirements. Discussing PPD at this time may not be adequate to effect health outcomes. Participants often mentioned that there was no policy or protocol to guide their care for PPD recognition and screening. The role of the nursing staff is to ensure that each patient is receiving consistent education and management for PPD. Ideally, anticipatory guidance and education about PPD are important aspects of care since PPD is a common complication of childbirth. This education should be initiated in the prenatal period and reinforced during postpartum hospitalization and after discharge. There have not been studies that have specifically explored nurses' rapport with mothers at risk for PPD to see if it effects patient outcomes. No studies in the literature have measured outcomes of PPD discharge education by postpartum nurses to see how it influences patient care outcomes.

Theme Three: Perceived Barriers Encountered By Nurses

The third main theme, perceived barriers encountered by nurses, emerged from participants describing barriers to identifying mothers at risk for PPD in the hospital setting. Participants discussed five factors that limited their ability to assess mothers at risk for PPD. Time constraints have been discussed in the literature in reference to PPD assessment and screening (Segre et al., 2014; Straub et al., 1998; Martin et al., 2015). One study specifically included pediatricians, obstetricians and family practitioners and showed time constraints as a barrier to assessing mothers for PPD (Straub et al., 1998). Too much pressure due to time constraints and limited expertise may cause the physician to be selective in choosing what can be effectively treated. Nurses and obstetric providers have disclosed that limited training and experience of behavioral health treatments and inadequate time for discussing psychosocial concerns with patients has led to the lack of adequate PPD screening (Straub et al., 1998).

Obtaining prenatal care allows health care providers to monitor the course of a pregnancy while promoting healthy lifestyles that benefit both the mother and child. These prenatal visits would be an optimal time to introduce anticipatory education to new mothers about PPD. However, due to the high volume of patients and the shortened time allotment to examine each patient, PPD education may be omitted.

Participants shared that they should take the time to complete a psychosocial assessment on their patients but sometimes it is not possible. This finding denotes the nurses' ambivalence about performing PPD assessments and their uncertainty about how to include PPD screening as

part of their comprehensive patient assessment. Nurses need to understand the importance of PPD screening and the implications of untreated mothers with PPD. The psychosocial assessment is an integral piece of each patients' evaluation and must not be overlooked. Nurses need to be informed and confident in PPD symptom identification and provide patient and family education about PPD throughout the mother's postpartum hospitalization. PPD awareness, screening and education needs to be an integral part of all postpartum nurses' maternal assessments. Postpartum mothers should have a holistic assessment which incorporates both the physical and psychosocial assessment components to improve patient care outcomes.

Nursing care time constraints was also evident when several participants stated that the presence of visitors was challenging because they were in the mothers' rooms throughout the day and evening causing them to lack the privacy needed for personal discussions. Limiting open visiting hours may help to reduce the distractions for postpartum nurses and patients. This would allow more opportunities for nurse-patient interactions and dialogues. Also, implementing quiet time hours for patients may help to have a specific amount of time allotted for nurses to address any patient concerns or provide individual education without distraction. Access to an online education program may help provide PPD education to mothers during their hospitalization when they have time such as when they are awake at night feeding their baby. Education that is continuously available for mothers can improve consistent access to important postpartum content which the nurses can then discuss with mothers in more detail. Education about self-care, infant care, and PPD should be reviewed with the mothers in a private setting and in a more personal manner.

None of the participants felt knowledgeable or were confident in providing care for mothers at risk for PPD. Most participants did not know when PPD education was reviewed with

mothers and stated many nurses do not feel comfortable educating mothers about PPD and, as a result, the topic was avoided. Participants revealed that they were required only to do a complete physical assessment and document their findings. The nurses documented their patient assessments in the electronic medical record template which consists of checklists. The physical assessment documentation was comprehensive, but there is nothing specific to PPD assessment. According to postpartum nurses in this study, the only psychosocial component that was currently available to document in the EMR was about maternal bonding. In a previous study, respondents stated that they were uninformed about how to assess and treat PPD and were not aware of community resources for referral. Participants stated that PPD was barely mentioned in their pre-licensure nursing curricula, and no hospital in-service education programs had focused on it (Straub et al., 1998). The importance of nurses becoming more knowledgeable about PPD symptom recognition and referral was underscored by Straub's study.

None of the participants in this study were familiar with appropriate resources for PPD. Most of the participants referred mothers at risk for PPD to a social worker or obstetric provider. Participants described a social work referral as the protocol that they were instructed to do if they had concerns about a mother in the postpartum hospital unit. A social work referral consisted of nurses notifying the social worker assigned to the postpartum unit that they are concerned about a patient. The social worker will plan to visit the mother on the postpartum unit prior to hospital discharge. The nurses did not initiate any treatment or provide any resources to mothers at risk for PPD. The social worker provided the mothers with a list of resources for PPD that include local counseling options, support groups, and online resources. The mother needs to contact those resources independently for an appointment and further evaluation. Some participants mentioned that they also discussed their concerns with the nurses who would be caring for the

patient during the next nursing shift. All of the participants in this study conveyed that they were also not aware of the resources that the social worker provided to mothers at risk for PPD. The participants were not aware of support groups, counseling centers or online references to assist mothers at risk for PPD. This finding has not been discussed in previous studies about nurses' caring for postpartum mothers.

Several participants acknowledged the importance of PPD screening, but lacked access and the knowledge to use a standardized screening tool. This finding contrasts with a previous study (Buist, 2006) stating that detection of maternal depression by health care professionals increased with routine use of a screening tool. The American College of Obstetricians and Gynecologists (ACOG, 2015) recommends screening for all pregnant and postpartum women at least once during the perinatal period for depression symptoms using a standardized tool. The perinatal period starts at the 20th to 28th week of gestation and ends 4 weeks after birth. The optimal time for PPD screening is not clearly defined in the literature. A risk of not screening or educating in the postpartum hospital setting is the possible decreased use of healthcare after discharge. The majority of participants in this study revealed they have never been educated on the use of a PPD screening tool and as a result, have never used a standard tool to screen mothers at risk for PPD.

Even though screening tools exist to identify women at risk for PPD, routine screening is not consistently performed. According to Fishbein's Integrative Model of Behavioral Prediction (IMBP), any given behavior is most likely to occur if one has a strong intention to perform the behavior, if a person has the necessary skills and abilities required to perform the behavior, and if there are no environmental constraints preventing behavioral performance (Fishbein et al., 2010). The more postpartum nurses believe that performing PPD assessments and screenings on all

mothers would lead to good outcomes and prevent bad outcomes, the more favorable their attitudes should be toward performing the behavior. Postpartum nurses need to have the necessary skills and tools to assess and screen mothers at risk for PPD.

Participants shared that depressed mothers tend to be reluctant to admit their symptoms based on fear that their ability to be a good mother may be questioned. This was consistent in the literature with prior studies focusing on mothers' likelihood of seeking treatment for PPD symptoms (Flynn et al., 2010; Negron et al., 2013). According to Teng, Blackmore and Stewart (2007), stigma was identified as a barrier since mothers were afraid to speak out due to fear of being labeled depressed or as a bad mother. This was consistent in the literature indicating that shame, stigma, and the fear of being labeled mentally ill hinder mothers from seeking help (Flynn et al., 2010; Teng, Blackmore and Stewart, 2007).

Being able to identify women at risk for PPD is important, but knowing what can be done to reduce the risk for PPD in mothers is vital. Many new mothers were afraid to admit to their symptoms of PPD because they were fearful of the consequences. These women knew that, if they admitted to having thoughts of harming their newborn or themselves, they may be hospitalized. They were also terrified of having the baby taken away from them. These women were concerned about public humiliation. They did not want to feel different from other mothers, and they were apprehensive about the stigma related to depression and being under the care of a mental health provider (Flynn, Henshaw, O'Mahen & Forman, 2010). Some women may be afraid of disapproval by others in their society. A resource, Practical Resources for Effective Postpartum Parenting (PREPP), consists of several infant behavioral interventions which provided coaching sessions to minimize the stigma that many women associate with receiving mental health care. Research-derived infant behavioral techniques were used with the goal of

reducing infant fussing and crying behaviors and promoting sleep. The researchers observed that mothers who received the PREPP intervention experienced lower levels of depressive symptoms (Werner et al., 2015).

Limitations of the Study

This section explored some of the limitations of the study. Measures such as adhering to a strict study protocol, member checking, bracketing, journaling, and having a PhD prepared nurse researcher confirm the analysis were taken to establish credibility, dependability, confirmability, and transferability. Although these measures were used, the data analysis remained dependent upon the perceptions of the researcher. A purposive sampling method was used to enable the researcher to select participants who could provide in-depth information about mothers at risk for PPD and who could best inform the researcher about the research questions (Morse & Field, 1995). It is possible that those who responded to the study participation request may have had a greater interest in postpartum depression assessment. Individuals who agreed to participate usually have information that they feel is important and would like to share based on the specific subject matter.

The qualitative descriptive study design also relied on information provided by the participants. Due to the nature of some of the semi-structured questions pertaining to clinical practice, and the participants' intentions to provide optimal patient care, socially desirable responding may have occurred. Although recruitment was not limited to female participants, no male nurses were available on this unit to participate in the study.

Implications for Nursing Practice

Data from this study present several implications for nursing practice. Despite recommendations from ACOG (2010) stating that a validated screening instrument should be

used to assess mothers at risk for PPD, all of the nurses in this study lacked the knowledge and access to a standardized PPD screening tool. None of the nurses in this study were familiar with PPD screening, treatment or referral resources for postpartum mothers. In addition, a list of local resources and services available for mothers with PPD was requested by some of the participants in this study. Integration of a standardized PPD screening instrument with EMR systems could be beneficial to ensure consistent screening strategies are available to all postpartum mothers in the prenatal offices and hospital settings.

Some participants in this study requested more in-service education programs on PPD. These education programs can assist bedside nurses, as well as those nurses who work in physician offices, clinics and home care services. Further education can help nurses to improve their ability to screen, intervene and make referrals for mothers at risk for PPD. Education about PPD needs to be included in nursing orientation programs as well as ongoing education for nurses on the postpartum unit. The goal is to implement a change in clinical practice so PPD identification and intervention becomes a standard of care required to be performed by the nurses.

It is crucial to identify pregnant and postpartum mothers with symptoms of PPD because untreated depression can have debilitating effects on women, infants, and families. Since pregnancy tends to increase the women's contact with healthcare providers, it is important that healthcare providers understand their role in diagnosing, educating, and screening mothers at risk for PPD. However, participants in this study disclosed that they did not receive any formal education on PPD which leads to their insufficient knowledge to identify and counsel mothers. Postpartum nurses have a pivotal role to screen, educate, and refer all childbearing women for PPD. Nurses in all clinical areas need to be aware of the signs and symptoms of PPD and

increase awareness that PPD is a treatable disorder.

Implications for Nursing Education

Data from this study also indicated implications for nursing education. A need for further education on PPD screening, treatment, and referral was identified in this study. PPD is a condition that needs to be covered in nursing education, hospital unit-based nursing educational opportunities provided by a clinical nurse educator, and during postpartum nursing orientation. Clinical Nurse Educators have a pivotal role in leading change on postpartum hospital units by providing education and treatment options for postpartum nurses to enhance patient outcomes. Basic knowledge about PPD symptoms, ACOG recommendations for PPD screening guidelines, and presentation of validated PPD screening tools, need to be included in nursing education for providers of postpartum nursing care. Since all of the participants discussed not having hands-on experience with validated PPD screening tools in their nursing clinical setting, further nursing education and clinical learning opportunities about PPD identification and treatment in undergraduate and graduate levels are important. Screening with a validated tool includes distributing the self-administered PPD screening tool to mothers and nurses having the knowledge to refer mothers at risk for PPD appropriately.

Undergraduate nursing curricula needs to include PPD education and clinical or simulation experiences about mothers at risk for PPD. Since many study participants shared they felt uncomfortable speaking to mothers about PPD, perhaps a clinical simulation could be developed to help nurses engage in crucial conversations about PPD and help them feel more confident when speaking with parents in the clinical setting. Graduate education needs to include

PPD content for nurse practitioners to promote awareness of symptoms and treatment options for mothers with PPD. Nurses at every level of care can influence patient outcomes

Recommendations for Further Research

A qualitative descriptive study allowed for a description of nurses' perceptions of identifying and providing care for mothers at risk for PPD. Additional research is needed with postpartum nurses on PPD recognition, screening, resources, and treatment. Due to the significant impact of PPD on maternal and infant outcomes, it is imperative for postpartum nurses to determine the best methods to screen, educate and treat this debilitating condition. Although the analysis included facilitators and barriers to PPD assessments and referrals, none of the participants were using a validated PPD screening tool.

Additional research is needed to evaluate postpartum nurses' awareness of PPD resources and treatment options since participants in this study were not familiar with any appropriate resources for mothers at risk for PPD. Barriers to timely screening and treatment when a PPD concern is present need to be explored. Future research on nurses' awareness of state-specific guidelines and policies regarding referral for PPD concerns is also warranted. Further study is needed to explore potential options for PPD screening to determine if a standardized protocol could be implemented to assist nurses with consistent PPD assessments and screenings.

Another alternative treatment option for PPD may include an application for cell phones for mothers who lack access to health care providers after discharge from the hospital. This method would provide an ongoing connection with health care providers so postpartum mothers experiencing any PPD symptoms can seek treatment options and avoid potential isolation. Further research is warranted to explore the relationship between PPD and breastfeeding to see if

there is any connection with breastfeeding mothers intentionally not seeking treatment due to the fear of potential side-effects of medication with breastfeeding. Also, it is important to explore if additional breastfeeding support and encouragement may reduce the possible stress which may influence a new mother's ability to breastfeed successfully. Limiting stressors can help to decrease a mothers' risk of PPD.

The sample for this study represented postpartum nurses in one large urban hospital, but nurses have been underrepresented in previous studies. Replication of this study is needed with perinatal and postpartum nurses from obstetric offices, hospitals and clinics.

Conclusions

This study explored nurses' perceptions of identifying and providing care for mothers at risk for PPD. All of the participants in this study were not aware of PPD screening tools and did not have access to a tool. There is a need for additional education on PPD and practice with validated PPD screening tools. The role of the nursing staff is to ensure that each patient is receiving consistent education and management for PPD. Many participants stated that they did not mention PPD during their patient assessment unless the patient inquired about the topic of if the mother showed symptoms that concerned them. Most participants revealed that they used their intuition and made assumptions about the signs and symptoms for PPD and stated they did not receive any specific education about PPD. Time constraints, lack of knowledge, lack of familiarity about PPD resources, and lack of information and access to PPD screening tools, were identified as barriers to the completion of PPD assessments and screening.

Chapter Summary

This qualitative descriptive study provided a description of postpartum nurses' perceptions of identifying and providing care for mothers at risk for PPD. This chapter presented the conclusions about the postpartum nurses' PPD assessment behaviors, conditions that facilitated nurses caring for mothers at risk for PPD, and perceived barriers encountered by nurses. Several themes which emerged from this study were: (1) nurses' informal assessment of PPD and maternal behavior; (2) the nurses' decision to refer based on their perceptions and clinical judgements; (3) the nurses lack of knowledge about PPD; (4) the nurses were uncertain about PPD resources; and (5) the nurses lacked education and access to validated PPD screening tools. The findings served as a foundation to developing implications for nursing education, practice and research.

Efforts to increase routine screening to identify patients at risk for PPD should involve the nurses who are the primary caregivers for women after childbirth. Adequate training and education in the identification, management, and support of this diagnosis in postpartum women is essential. Early identification can improve overall outcomes for the mother and her baby.

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Appendix A

Email to Recruit Participants

Dear Postpartum Nurse,

My name is Susan Meyers and I am a nursing doctoral student at Villanova University. I am sending this email to ask for your participation in my dissertation study which is titled "Postpartum Nurses' Perceptions of Identifying and Providing Care for Mothers at Risk for Postpartum Depression."

I have obtained permission from the University of Pennsylvania Healthcare System to recruit postpartum nurses who are currently working in the hospital setting. I would like to interview interested participants at Pennsylvania Hospital at a location and time convenient for the participants. The interview will last up to 30 minutes and I will be asking participants questions about their experiences with identifying and providing care for mothers at risk for postpartum depression (PPD).

Should you wish to participate in this study, an informed consent will be provided to you prior to the interview. Please contact me at the email address below if you are interested in participating in this study.

Thank you for your consideration.

Sincerely,

Susan K. Meyers, MSN, RNC, CNES, CPNP-PC

Villanova University Doctoral Student

susan.meyers@villanova.edu

Appendix B

Title of Study: Postpartum Nurses' Perceptions of Identifying and Providing Care for Mothers at Risk for Postpartum Depression

Informed Consent

The purpose of this research study is to describe and explore postpartum nurses' perceptions of identifying and providing care for mothers at risk for postpartum depression (PPD). Participation in this research study is voluntary. Withdrawal from the study is optional at any time without penalty.

This research study will involve individual participant interviews with the researcher which may last up to 30 minutes. You will complete a demographic form prior to participating in the interview. Information shared on the demographic form is confidential and stored on a secured server. The interview will take place in-person. The location of the interview will be in a private, reserved conference room in the hospital. Participant responses during the interview will be audio-recorded with two digital recording devices.

The interview will then be transcribed by an independent transcription service. Participants' responses will remain confidential. The researcher will not use the participants' names during the taped interview or in any future publication of this research study. However, direct quotes from the transcripts and results of this study may be used in future publication or presentations of this research study. The audio recordings and written transcripts will be secured in a locked file cabinet in the researcher's office. There are no risks involved with this study. The benefit of this study would be to further understand the nurses' perceptions about identifying and caring for mothers at risk for postpartum depression.

As a participant, you will be able to see the results of the study and ask questions at any time during the study. If you have any questions or concerns about this study, please contact the researcher, Mrs. Susan Meyers at (610) 659-1456, susan.meyers@villanova.edu. If you have any questions about your rights as a research participant or if you cannot contact the study staff please contact the Villanova Office of Research Administration at 610-519-4220. If you have any complaints about the study please call the Villanova Ethics Point Hotline at 855-236-1443. (https://secure.ethicspoint.com/domain/media/en/gui/35905/index.html).

Participant Responsibilities:

- You should e-mail the Investigator, susan.meyers@villanova.edu, any and all questions as you think of them.
- Notify the investigator via email should you change your mind about participating in the study.
- Should you decide to participate in this study, you will need to sign your name and the date below.

Non-Waiver of Legal Rights Statement

- By your agreement to participate in this study, and by signing this consent form, you are not waiving any of your legal rights.
- In order to be in this research study, you must sign this consent form.
- You affirm that you have read all pages of this consent form. You have been told that you will receive a copy.

If you understand and agree to participate in this study, please sign below.

Name (print): _____

Signature: _____

Date: _____

Appendix C

Research Questions

1. What do postpartum nurses describe as factors that influence their ability to recognize and screen mothers for PPD?
2. What do postpartum nurses describe as factors that influence their ability to care for mothers at risk for PPD?
3. What barriers do postpartum nurses identify which affect their ability to recognize, screen and care for postpartum mothers prior to their discharge from the hospital?
4. What appropriate resources and referral sources do postpartum nurses provide for postpartum mothers at risk for PPD?

Appendix D

Nurses' Perceptions of Identifying and Referring Mothers at Risk for Postpartum Depression

Demographic Form

Introduction: The purpose of this brief form is to obtain some background information about the participants who participate in the study on nurses' perceptions of identifying and referring mothers at risk for postpartum depression (PPD). This information will remain anonymous and confidential. Thank you for completing the form.

Please read each question carefully and answer appropriately.

1. What is your age in years? _____

2. What is your Race/Ethnicity? **(Please circle the appropriate choice.)**

   American Indian or Alaska Native **Asian** **Black or African American**

   Native Hawaiian or Pacific Islander **White**

3. What is your highest degree in nursing? **(Please circle the appropriate choice.)**

   BSN MSN PhD DNP Other (Please specify) _____

4. What unit(s) do you work on? **(Please circle the appropriate choice(s).)**

   Postpartum Labor & Delivery Intensive Care Nursery Antepartum

   Other (Please specify) _____

5. How many years have you been a nurse? _____

6. How many years have you been a postpartum nurse? _____

7. Have you ever had experience with a family member with PPD? **Yes** **No**
   (Please circle the appropriate choice.)

8. Have you ever had experience with a friend with PPD? **Yes** **No**
(Please circle the appropriate choice.)

9. Do you feel confident in recognizing mothers with symptoms of PPD? **Yes** **No**
(Please circle the appropriate choice.)

10. Do you feel comfortable working with mothers with symptoms of PPD? **Yes** **No**
(**Please circle the appropriate choice**.)

11. Do you feel that you have adequate knowledge to care for mothers at risk for PPD? (**Please circle the appropriate choice**.) **Yes** **No**

12. Do you feel that you have adequate clinical skills to care for mothers at risk for PPD? (**Please circle the appropriate choice**.) **Yes** **No**

13. Do you feel comfortable speaking to patients about PPD?
(Please circle the appropriate choice.) **Yes** **No**

14. Do you feel comfortable teaching patients about PPD?
(Please circle the appropriate choice.) **Yes** **No**

15. Have you used a screening tool to assess mothers for PPD? **Yes** **No**
(Please circle the appropriate choice.)

If **"Yes",** which screening tool did you use? (**Please circle the appropriate choice(s).**)

Edinburgh Postnatal Depression Scale (EPDS) **Postpartum Depression Screening Scale (PDSS)**

Patient Health Questionnaire (PHQ-9) **Other: (Please specify)** _____

16. In your clinical practice when do you use a screening tool to assess mothers for PPD?
(Please circle the appropriate choice.)

Always **Sometimes** **Rarely** **Never**

17. Do you feel confident in using a screening tool to assess mothers for PPD? **Yes** **No**
(**Please circle the appropriate choice**.)

18. Do you identify available resources for mothers at risk for PPD? **Yes** **No**
(Please circle the appropriate choice.)

19. Do you feel that mothers receive adequate information about follow up resources for PPD? (**Please circle the appropriate choice**.) **Yes** **No**

20. Do you feel that mothers are aware of the symptoms of PPD prior to hospital discharge? (**Please circle the appropriate choice**.)

Always **Sometimes** **Rarely** **Never**

21. Do you perceive that the mother's family members are aware of the symptoms of PPD prior to hospital discharge? (**Please circle the appropriate choice**.)

Always **Sometimes** **Rarely** **Never**