PATERNAL DEPRESSION SCREENING PRACTICES OF HEALTHCARE PROVIDERS

by

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A DNP Project Submitted to the Faculty of the

COLLEGE OF NURSING

In Partial Fulfillment of the Requirements
For the Degree of

DOCTOR OF NURSING PRACTICE

In the Graduate College

THE UNIVERSITY OF ARIZONA

2015
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ACKNOWLEDGEMENTS

I wish to thank my committee members, Dr. Judith Berg, Dr. Janet Dubois, and Dr. Melissa Goldsmith. You are all incredible women and professionals. You are the movers and shakers of our profession and it has been my honor to work with each of you.

Dr. Berg, this was no easy year for you. While I worked through this project, you were fighting a much bigger battle. Even through your toughest days, you continued to provide me guidance and encouragement. I have learned many things from you but the most important thing is the resolve of the human spirit. Stay strong.
DEDICATION

This project is dedicated to my husband, Vince. You are my best friend, my rock and my never ending cup of tea. Thank you for believing in me, for all the prayers, and for always seeing the best in me. This is also dedicated to my children, Angela, Jessica, and Aaron. You have been my cheerleaders, my endless source of hugs, and my absolute greatest joy. Let this be your example that through hard work and perseverance, you can do anything.

Linda and Pam, you are my sisters and my sanity. Thank you for talking me through the doubts which most often meant lending an ear. You have been with me for a lifetime of memories and you still willing accepted a seat on this crazy ride. Thank you for sharing this adventure, for keeping me sane, and for always being there for me.

Thank you also to my friends, Ann, Barbara, and Lisette. You have been my faithful encouragers. You are the most selfless and inspiring women I know. You live life by the golden rule, truly love people, and I am a better person because of your friendships. Thank you for being my example and my inspiration.

To my breakfast crew, you ladies are amazing. Thank you for checking on me, motivating me, and supporting me through this project. I am blessed to call you my colleagues and my friends.

Finally, I give thanks to God for His favor and never ending Grace. I know that through You all things are possible. Let all I do be for Your glory.
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ABSTRACT

Background: Becoming a parent can elicit many emotions. For some parents, it can be a time of anxiety and depression. Fathers are not exempt from this type of depression. Paternal depression (PD) is a serious health issue with long lasting consequences for both the father and child. Unfortunately, little research has been done on PD. The research that has been done recommends routine PD screening. Methods: A cross-sectional descriptive study design was used to determine the current PD screening practices and screening tools of providers in the Tucson area. The study sample consisted of randomly selected healthcare providers. The total number of possible participants was eighty two. Participants were provided a 20 question survey to assess screening practices as well as the beliefs, attitudes, norms, and confidence of providers regarding PD screening. Results: The study found many providers routinely screen for maternal depression but few screen for PD. While providers did recognize the impact PD has on children, this belief was not enough to implement screening. Most providers were unsure if PD was serious or if PD screening and therapy were effective. Few providers had any training or education regarding PD and few were confident in their ability to screen for PD. Providers who felt confident in their ability to screen, acknowledge the USPTF recommendation for screening all adults for depression, and had positive beliefs/attitudes regarding PD screening were more likely to have incorporated screening into practice. Of those who do screen, the majority do not use a validated screening. Conclusions: Although research recommends PD screening, it has not been implemented into practice. Training and education regarding PD is also lacking. The next step in research is to implement interventions that improve screening practices among providers, increase provider confidence in screening, and increase provider’s awareness about PD.
CHAPTER 1 BACKGROUND AND SIGNIFICANCE

The transition into parenthood can cause anxiety and even depression for some parents. While research has focused mainly on maternal depression, little attention has been given to paternal depression. Traditionally, postpartum depression referred solely to mothers but research has found that it can also occur in fathers. Musser, Ahmed, Foli, & Coddington (2013) stated paternal postpartum depression is “underscreened, underdiagnosed, and undertreated” (p. 479). The purpose of this study was to (a) identify paternal depression screening practices of pediatricians, primary care providers, obstetricians, and midwives during pregnancy and postpartum periods; (b) identify use of validated screening tools; and (c) identify providers’ attitudes, beliefs, norms, and behavioral controls regarding paternal depression screening.

Background

The literature currently does not have a standardized definition of paternal depression and often adopts the existing definition of maternal postpartum depression to explain it. Many words have been used to describe this condition including depression, anxiety, and distress. Ramchandani et al. (2011) defined paternal depression as simply depression in a man that occurs at a specific time. For the purpose of this project, paternal depression is defined as depression in the father during his partner’s pregnancy as well as during the postpartum period.

Depression in parents is not restricted to the postpartum period, in fact, it can occur at any time during pregnancy and through the postpartum period. Increases in anxiety and distress have been demonstrated in first and third trimesters of pregnancy with subsequent decreases postpartum. (Teixeira, Figueiredo, Conde, Pacheco, & Costa, 2009).
It is estimated as many as 10% of fathers experience paternal depression (Paulson & Bazemore, 2010), although both mothers and fathers were more anxious and depressed during pregnancy, particularly in the first trimester (Figueiredo & Conde, 2011). The prevalence of anxiety and mood disorders in new fathers at 6 weeks postpartum was found to be 2-5% (Matthey, Barnett, Kavanagh, & Howie, 2001). Interestingly, the rate of paternal depression increased to 25-50% when the man’s partner was experiencing depressive symptoms (Goodman, 2004).

**Significance**

Paternal depression directly impacts a father’s ability to parent and interact with his child. In a recent study which examined fathers of 1 year old children, fathers with paternal depression were less likely to read to their child in the previous week and more likely to have spanked their child in the previous month. When depressed fathers were compared to non-depressed fathers, depressed fathers were four times more likely to spank their child (Davis, Davis, Freed, & Clark, 2011). Anxious or depressed men may be more likely to display violent behavior. One in four mothers in the postpartum period report domestic violence with an alarming 69% being the first occurrence (Kim & Swain, 2007). Paternal depression has a negative impact on children as young as 6 months old and more so in children ages 3 to 4 years old (Nazareth, 2011). Sons of depressed fathers were found to have lower psychosocial functioning, elevated suicidal ideation and attempts while daughters had higher rates of depression (Kim & Swain, 2007). Paternal depression negatively impacts the family. Due to the risk to both mom and baby, paternal depression must be considered a serious public health concern.
Risk Factors

Several risk factors have been associated with paternal depression. These include maternal depression (Goodman, 2004), history of paternal depression, employment status, and unintended pregnancy (Nishimura & Ohashi, 2010), low income, lower educational level, and age less than twenty-eight years (Bergstrom, 2013). Of the risk factors identified, the strongest predictor of paternal depression was maternal depression (Goodman, 2004).

Definitions

Postpartum Depression (PPD)

Postpartum depression is defined as “symptoms of depressed mood, diminished pleasure, marked change in appetite and sleep, psychomotor agitation or retardation, fatigue, feelings of worthlessness or inappropriate guilt, decreased concentration, and recurrent thoughts of death or suicide” which begin within four weeks of the birth of a child through the first year after delivery (American Psychiatric Association, 2004).

Paternal Depression (PD)

No standardized definition for paternal depression exists in the current literature. Many descriptions have been given regarding this condition including depression, anxiety, and distress. In this study, paternal depression is defined as depression in a man that occurs anytime during his partner’s pregnancy through the postpartum period.

Postpartum

Postpartum is defined as the period of time following the birth of a child (Merriam-Webster, 2015).
Conclusion

This chapter provided background information about paternal depression and its significance. Specific terms were defined and the study purpose was detailed. In the next chapter, pertinent literature is described and critiqued for quality and strength of evidence. The theory guiding this study is also explained. Finally, gaps in knowledge regarding PD screening practices are identified.
CHAPTER 2 LITERATURE REVIEW

This chapter will analyze pertinent literature in addition to critiquing the quality and strength of the evidence presented. It will also present the theory guiding this study. The gaps in knowledge regarding PD screening practices of healthcare providers will also be discussed. Finally, this chapter will explore the PD screening tools currently available and examine their strengths and limitations.

Literature Review

The focus of this literature review is to identify paternal depression screening practices of providers. A review of the literature was performed using various electronic databases including CINAHL Plus with Full Text, Cochrane Library, PubMed & OvidSP, and EBM Search. Keywords used in the search were paternal, depression, father, postpartum, antepartum, pregnancy, prenatal, perinatal, and screening. Inclusion criteria were articles in English, full text available, and found in academic journals. Because there is a dearth of literature on the topic, no date restrictions were used. One hundred and seventy seven articles were identified. Articles were eliminated if they were not relevant to the topic or duplicates. This reduced the number to fifty one. Of the fifty one articles, no studies were found that identified which healthcare providers, if any, routinely screen for paternal depression. Five articles were found which addressed screening practices and opinions regarding maternal depression.

Critique of the Evidence

The literature that is available for paternal depression is not without limitations. The Johns Hopkins Nursing Evidence-Based Practice Rating Scale is one tool which identifies the strength of the evidence provided in research (Figure 1) (Newhouse, Dearholt, Poe, Pugh, &
White, 2007). The Evidence Rating Scale (ERS) also evaluates the quality of the evidence as being either high, good, or low quality (Newhouse et al.; 2007). According to the ERS, the highest level of evidence and the gold standard for research is the randomized control trials (RCT) or meta-analysis of RCTs (Newhouse et al.; 2007). A RCT would include randomization, manipulation, and control using the traditional scientific method (Newhouse et al.; 2007). Unfortunately in the research of PD, the majority of the studies are not RCTs or meta-analysis of RCTs. Most of the research done on PD has been using cohort designs or cross-sectional design studies which are a Level III on the ERS. Cross-sectional studies provide data from one specific point in time (Newhouse et al., 2007). While cross-sectional design studies do provide useful information, they cannot assess for directional relationships. Cohort studies examine a subset of a specific population in which samples are taken at different times (Newhouse et al., 2007). While cohort studies can determine the incidence rate and relative risk of a disease, the sample is not randomized and follow up is difficult and often results in high dropout rates.

Most studies on PD use self-report surveys or questionnaires. Surveys completed by the patient are not as reliable as an extensive qualitative interview. With self-completed surveys, the possibility exists that the participant supplied the desired answers and not necessarily truthful answers. Due to the extensive cost and time involved in interviewing, surveys are often the tool used in this research. There are advantages to using surveys in research including high representativeness, low cost, convenience, little or no researcher bias, and precise results (Sincero, 2012).

Another concern with the quality of the evidence is often the sample. In RCTs, the sample would be sufficient size with adequate control. It would also be a random sample of the
population. In the literature analyzed for this study, the studies often used a convenience sample and/or a small sample size (Edmondson et al., 2010; Field et al., 2006; Kvalevaag et al., 2013; Nishimura & Ohashi, 2010; Ramchandani et al., 2011). Madsen & Juhl (2007) also identified small sample size to be a limitation in the research. The sample is also often not diverse in its demographics and cannot be generalized to the general population. An example of this is in the Teixeira et al. (2009) study in which 94.8% of the participants were Caucasian and 90.6% were Catholic. Another example of the lack of diversity in study populations is the Atkison & Rickel (1984) study in which all the participants were white.

Several important questions arise from the literature which will be addressed in the following section. Is it necessary to screen fathers? Whose responsibility is it to screen? Finally, what tool should be used to properly screen for paternal depression. In this section, these questions will be addressed comparing what was found in the literature review.

**Is Screening Fathers Necessary?**

Currently The National Institute of Mental Health has guidelines recommending every mother be screened for depression. However, recommendations by this group do not extend to fathers (National Institute for Health and Clinical Excellence [NICE], 2007). In a study by Buist, Morse, & Durkin (2002), the researchers identified the anxieties men encounter during their transition to fatherhood as distress rather than depression. They state most men adjust well to fatherhood, “infrequently reaching a level of clinical illness” and found no correlation between maternal and paternal distress (Buist, Morse, & Durkin, 2002, p. 178). For those men who are distressed postpartum, Buist et al. (2002) recommend discussion groups with peers and their partner. They also recommend antenatal classes which address good communication but make no
recommendation for routine screening (Buist et al., 2002). Like Buist et al., Gawlik et al. (2014) suggest that anxiety in the father could be reduced if prenatal classes, midwives, and educators addressed the father’s needs as well as the mother’s. It has also been suggested that providing fathers with sufficient information regarding pregnancy and birth could reduce their anxiety and the risk for depression (Boyce, Condon, Barton, & Corkindale, 2007). Yet fathers often attend prenatal classes looking for answers to father-specific questions and find prenatal classes are focused on the mother and her needs and often do not meet his specific needs (Plantin, Olukoya, & Ny, 2011). Therefore antenatal classes may not be enough to address the concerns and needs of the father in order reduce paternal depression.

In contrast, other researchers suggest all fathers be screened for paternal depression, particularly when the partner is depressed (Escriba-Aguir, Gonzalez-Galarzo, Barona-Vilar, & Artazcoz, 2008; Pinheiro, Magalhaes, Horta, Pinheiro, & da Silva, 2006; Schumacher, Zubaran, & White, 2008). Nazareth (2010) suggests that screening for depression is “the first step in normalizing depression for both parents” and should be done for all fathers (p. 2). He goes on to say that screening is the first step in changing the focus from the mother to the family as a unit when managing depression (Nazareth, 2011). Teixeira et al. (2009) agree that “every effort” should be made to include fathers in psychological interventions (p. 147). Massoudi et al, (2013) recommends routine screening of fathers only when the partner is depressed and does not recommend all fathers be screened. Another study found 50% of fathers had depressive symptoms when the mother was depressed (Harvey & McGrath, 1988). Due to this alarming statistic, Goodman (2004) recommends screening men whose partner is depressed should be a “standard protocol” (p. 33).
Who Is Responsible For Paternal Depression Screening?

Who holds the responsibility for paternal depression screening is a key issue. It would seem pediatricians, primary care providers, midwives, and obstetricians all have the means and opportunity to conduct this screening, as they have the most contact with fathers and families during the prenatal and postpartum period. However, it is not known if these providers recognize and accept this responsibility. Underdown (1998) suggests it is important for healthcare providers to be conscious of the needs of the father. Obstetricians and midwives care primarily for the mother and baby as a unit, but Underdown (1998) recommends providers care for the family as a whole and consider the father and his needs as well. Schumacher et al. (2008) looked at midwives’ role in screening for paternal depression and suggested midwives are in the best position to identify paternal depression because of their contact with the family as a whole during the perinatal period. Moreover, they believed midwives have an “ethical responsibility” to the family and not just the mother (Schumacher et al., 2008, p. 68).

The American Academy of Pediatrics Task Force on the Family identified pediatricians as having a responsibility to know the physical and mental health of the parents (Schor, 2003). Musser et al. (2013) specifically addressed the role of the pediatric nurse practitioner to screen for paternal depression suggesting it is within the scope of practice for the PNP to manage paternal depression. They identify the responsibility of the PNP to promote family health through prevention, education, screening, and referral when necessary (Musser et al., 2013). Pediatricians are in an optimal position to screen for paternal depression during the postpartum period. Davis et al. (2011) found that 82% of fathers reported talking with their child’s pediatrician in the
postpartum period. Pediatricians and PNPs are challenged because they do not treat adults and may not feel confident in treating the parents.

Spector identified the obstetrician as being in the best position to detect paternal depression early on (2006). Schumacher et al. also agreed that obstetric clinicians should be more aware of the needs of new fathers (2008). LaRocca-Cockburn et al. (2003) found that when it comes to maternal depression, most obstetricians feel they have a responsibility to identify depression in their practice and but only half screen for it. The issue then becomes whether or not obstetricians feel the same responsibility to the family unit and the father as they do to the mother. No studies have been done to assess the attitudes of obstetricians regarding their responsibility toward paternal depression screening.

Primary care providers also have the opportunity and obligation to screen for paternal depression. Primary care providers seem the most likely provider for a father to seek help from when a problem occurs. Seehusen et al. (2005) found that while family physicians believe postpartum depression is “serious, identifiable, and treatable” only 70.2% screened mothers “often” or “always” (p. 104). No data were available regarding the screening practices of primary care providers for paternal depression.

Interestingly, another study surveyed 87 college students and asked which healthcare providers they felt had the most responsibility to screen for postpartum depression in women (Behimehr, Curtis, Curtis, & Hart, 2014). Physicians were thought to be the most responsible for screening, with obstetricians being regarded as the second most responsible provider (Behimehr et al., 2014). This study provides an interesting perspective on the public’s opinion. No similar study was found regarding screening for postpartum depression in men.
What Tool Should Be Used When Screening For Paternal Depression?

No screening tool exists specifically for paternal depression. Studies have used various tools including the Edinburgh Postnatal Depression Scale (EPDS) (Appendix A), the Beck Depression Inventory, General Health Questionnaire, and Edinburgh Postnatal Depression Scale Partner (EPDS-P) to detect paternal depression in men. Not all providers use a validated tool to assess for depression. Some providers rely on clinical evaluation alone. One study sought to determine the incidence of maternal postpartum depression using a validated screening tool versus clinical evaluation. The results showed that the validated screening tool identified considerably more participants than clinical evaluation alone (Evins, Theofrastous, & Galvin, 2000). In the Evins et al. study (2000), 35.4% of women were identified using the validated tool while only 6.3% of women were detected using clinical evaluation (p 1080). This is an alarming difference highlighting the fact that the method used to screen is as important as screening itself.

The EPDS is widely used and accepted by the healthcare community (Fisher, Kopelman, & O'Hara, 2012). The EPDS was originally developed to screen women for postpartum depression and was expanded to screen for perinatal depression as well. The EPDS was found to be both reliable and valid in men (Matthey et al., 2001). The EPDS is not without criticism. Massoudi et al. (2013) found that the EPDS revealed more anxiety and worry than depression in men. While the EPDS was found reliable and valid in men, it does have a major flaw. The cut off score for mothers and fathers is not the same. In fact, different researchers recommend different cut off points for men. Matthey et al. (2001) recommends a cut off score of 5/6 when screening for depression and anxiety in fathers but Massoudi et al. (2013) suggest 12 or more to be a more appropriate cut off score and Edmondson et al. (2010) found 10 or more to be the ideal cut off
score. The differences for these cut off points may be due to cultural differences. In general, men are less expressive of their feelings than women. Cultural norms can also play a role in how a man expresses his emotions.

Another screening tool for paternal depression is the Edinburgh Postnatal Depression Scale-Partner (EPDS-P). The EPDS-P is a 10 item scale used to screen postpartum mothers based on their partner’s report (Fisher et al., 2012). The EPDS-P has been revised so that it can be used to assess for paternal depression based on maternal reporting (Fisher et al., 2012). The EPDS-P is not without limitations. Maternal reporting was not able to reliably screen for paternal suicidal risk and fathers with paternal depression were twenty one times more likely to be at risk for suicide than fathers who did not have paternal depression (Fisher et al., 2012). Self-reporting by the fathers would provide a more accurate screening and better assess for suicidal risk. Despite its limitations, the EPDS-P was able to detect clinical depression in fathers and was found to be both a reliable and valid tool in measuring paternal depression (Fisher et al., 2012). Because fathers are not always present for prenatal or postpartum appointments and often do not seek medical care, this tool can be a useful alternative.

The EPDS-P and the EPDS are not without criticism. The EPDS was originally designed to assess for depressive symptoms in women. The EPDS-P is merely the EPDS altered the wording to reflect the appropriate gender pronouns and changed “she” to be “my partner” in the questions (Fisher et al., 2012). The EPDS and EPDS-P focus more on cognitive and emotional symptoms of depression and less on somatic symptoms (Madsen & Juhl, 2007). Men who are depressed are more likely to be angry and irritable than women who are depressed (Bergstrom, 2013).
The Gotland Male Depression Scale (GMDS) (Appendix B) recognizes the symptoms of depression are different for men and women and uses male specific symptoms to screen for depression (Madsen & Juhl, 2007). The GMDS is a 13 question screening tool for men specifically (Madsen & Juhl, 2007). When compared with the EPDS, one-fifth of the men suffering from depression were only identified when the GMDS was used. This suggests that more men with depression will be identified when screening tools include male specific symptoms. It also suggests that using the EPDS alone may not be the best option when screening men.
Theoretical Framework

The theoretical framework for this study is Ajzen’s Theory of Planned Behavior (TPB) which is a behavioral theory from the social sciences. This framework addressed the attitudes, beliefs, and norms of providers regarding paternal depression screening. TPB proposes several factors predict behavior: behavioral beliefs, attitude, subjective norms, normative beliefs, control beliefs and perceived behavioral control (Figure 2) (Ajzen, TPB Diagram, 2006). These factors determine a person’s readiness to perform the specific behavior or intention (Ajzen, TPB Model). The behavioral belief is whether the provider believes screening for PD (behavioral belief) will accomplish the desire result (Ajzen, TPB Model). Attitude is the positive or negative view a person has regarding the behavior (PD screening) (Ajzen, TPB Model). Norms are another key factor. Norms can consist of social and professional pressures which compel people to perform a specific behavior (Ajzen, TPB Model). When applying TPB to this study, the norm was based on the USPSTF’s recommendation that all adults presenting in clinical practice be screened for depression while subjective norms addressed clinical policy and colleague practices. Finally, behavior is impacted by control beliefs and a person’s perceived behavioral control (Ajzen, TPB Model). For the purpose of this study, education and previous training addressed control belief while the provider’s self confidence in the ability to screen for PD addressed perceived behavior control. According to the TPB, a provider who identifies paternal depression screening as valuable; identifies with the USPSTF’s recommendation for screening; and is trained and confident in PD screening is more likely incorporate screening into practice than a provider who does not (Figure 3). LaRocco-Cockburn et al. (2003) found this to be true and stated that a physician’s attitude may predict a physician’s behavior.
Conclusion

This chapter explored the literature and gaps found in the research. One key gap in the literature is the research itself. There is a dearth of research done in this area. Of the existing PD research, few RCTs have been done. Most studies are cohort or cross-sectional design using convenience samples with small sample sizes which lack diversity. Most studies also use surveys which are not as reliable as interviews but are a less expensive and more convenient means of reaching many participants. A major gap in research identified through the literature review is who, if anyone is actually screening for PD and what screening tool is being used.

This chapter also examined three ongoing questions regarding PD: Is screening necessary; who should perform the screening; and what screening tool should be used? While these questions still remain topics of debate, key sides of these issues were presented in this chapter. Finally, the theoretical framework for this study was presented and the components of the framework explained as it pertains to this study. The next chapter will address the methods to be used for this study.
CHAPTER 3 METHODS

This chapter addresses the methods selected for this study. It discusses how the theoretical framework relates to the survey questions. This chapter provides details regarding the sample selection process and describes the survey used in the study. Survey questions are described in detail. Finally, the data collection and data analysis procedures are identified.

Design

A cross-sectional descriptive study was used to (a) identify paternal depression screening practices of pediatricians, primary care providers, obstetricians, and midwives; (b) identify use of validated screening tools; and (c) identify the beliefs (behavioral, normative, and control), attitudes, subjective norms, and perceived behavioral control of providers regarding paternal depression screening. In place of a written consent form, each potential participant received a disclosure form which the participant kept (Appendix C). Completion of the survey indicated consent from the participant.

Sample

The study sample consisted of healthcare providers in the Tucson area. Providers whose specialty includes family practice, general practice, obstetrics and gynecology, women’s health, and pediatrics were selected based on the Tucson version of *thelittlebluebook*. *Thelittlebluebook* is a reference guide which lists providers by specialty. The guide also provides provider information such as degree, specialty, NPI number, phone number, and address. It is updated annually and providers voluntarily list themselves or their practice in the guide free of charge. The guide is then sold as a reference guide for a specific geographic area. The guide is available in many states and metropolitan areas.
Participants were randomly selected by listing the providers alphabetically and selecting every tenth provider to receive a survey. Inclusion criteria were clinicians (physicians, nurse practitioners, physician assistants and midwives) in family practice, general practice, obstetrics and gynecology, pediatrics, or women’s health. Exclusion criteria were providers who are retired, primarily administrative, primarily surgical, hospitalists, primarily gynecology with no obstetrics, or declined participation. The total number of possible participants was eighty two.

**Instrument**

Surveys were completed on a voluntary basis. Participants were provided a letter explaining the study and the researcher’s contact information. A disclosure regarding consent was also provided to the participants.

The survey instrument was used to assess the beliefs, attitudes, norms, and confidence of providers regarding paternal depression screening. It was also used to determine current screening practices and method of screening used by providers. The hypothesis was that providers who felt PD screening was important; identified with the USPSTF recommendation; had training or education in PD screening; and were confident in their ability to screen would have incorporated PD screening into their practice.

The survey consisted of twenty questions (Appendix D). It was an adaptation of Seeshan, Baldwin, Runkle, & Clark’s (2005) validated survey of provider screening practices of maternal depression (Appendix E). Seehusen granted written permission to both use and adapt the original survey (Appendix F). The questions in the survey addressed the aims of the study as well as provided demographic information. One question, which was question 20, determined eligibility. Four questions provided demographic information. One question addressed the tool used for
screening. Attitude was assessed using two questions and behavior belief assessed using four questions. Norms were assessed using two questions. Perceived behavior control was assessed using one question. Control belief was assessed with one question directed at prior education or training regarding PD. Four questions addressed current screening practices.

Nine questions were Likert scales ranging from one to five points. The data were analyzed by computing additive scores from Likert scales accordingly: strongly disagree = 1, disagree = 2, neutral = 3, agree = 4, strongly agree = 5. Scores greater than twenty-seven were viewed as positive scores. Positive scores indicated positive beliefs (behavioral, normative, and control), attitudes, subjective norms, and perceived behavioral control reflecting readiness to screen. According to the TPB theory, providers whose scores demonstrate readiness to screen would also then be more likely to have already incorporated PD screening into their practice. A score of twenty-seven or less was viewed as negative and having a lack of readiness to screen for PD. According to the TPB theory providers whose scores showed a lack of readiness would be less likely to incorporated PD screening in their current practice.

Procedures

Surveys were hand delivered by the researcher to the providers in the Tucson metro area and mailed via USPS to those outside the Tucson metro area. A letter explaining the study and information on how to contact the researcher were included with the survey as well as a disclosure regarding consent. A stamped return envelope was provided for the participant’s convenience. After two weeks, a second letter, survey, disclosure regarding consent, and stamped return envelope were mailed to the providers whose survey was not returned. Providers were given two more weeks to respond to the second survey.
Data Management

The study was approved by the University of Arizona’s Institutional Review Board prior to data collection. Each survey was given a study number. A separate data file linking the study number to the specific participant was password protected and accessible only by the researcher and the DNP Chair. Returned surveys were stored in a locked file cabinet. All data collected from the surveys were entered into a password protected computer file. Data were entered into Excel data sheets by survey number. The reported and analyzed data from the surveys were de-identified aggregate data. Data were double entered to insure accuracy then cleaned by checking for outliers. Mean substitution was used to manage missing data. At the completion of the study, the paper surveys were incinerated.

Data Analysis

The data were analyzed using Microsoft Excel 2010. The data were analyzed by computing additive scores from Likert scales accordingly: strongly disagree = 1, disagree = 2, neutral = 3, agree = 4, strongly agree = 5. Mean substitution was used to manage missing data. Scores that were greater than twenty-seven were viewed as a positive score indicating positive beliefs and readiness to screen. A score of twenty-seven or less was viewed as negative and having a lack of readiness to screen for PD.

The sample was described using descriptive statistics and measures of central tendency. Sample characteristics are gender, degree, specialty, years of practice, and practice setting.

Specific aim one was determined by identifying the percentage of providers currently screening for PD. Descriptive correlation was used to evaluate the relationship between
screening practices and demographic data such as gender, degree, years in practice, and specialty.

Specific aim two identified the screening tool used in PD screening using percentages. Descriptive correlation was used to identify relationships between screening tools used and demographic data.

Specific aim three examined the correlations between the variables of attitude, beliefs, and norms of providers and PD screening practices. Correlation was used to examine the screening practices of the population and subgroups in relation to any education or training received regarding PD and their attitude toward PD.
Conclusion

This chapter has outlined the design and purpose for this study. It has identified the sample population and participant selection process. The method for managing data was also discussed. The survey was examined and the questions reviewed according to how they relate to the theoretical framework and the purpose of the study. The data collection process was also outlined. Finally, this chapter described the data analysis process in detail.
CHAPTER FOUR: RESULTS

This chapter will detail the findings gathered from the study. It will examine the three aims of the study which include demographics of the sample populations, the screening tools used by providers, and relationships between the different variables. This chapter will also explore the beliefs, norms, and confidence of providers regarding PD screening and how that compares to Ajzen’s Theory of Planned Behavior.

A total of 82 surveys were distributed to providers on two separate occasions. Sixteen surveys were returned for incorrect address or the provider was no longer at that facility. Twenty-four surveys were completed and returned. Four surveys were ineligible for inclusion based on the following reasons: hospitalist, solely academic, primarily gynecology with no obstetrics, and returned after the cut-off date. An equal number of males and females completed the survey. The majority of respondents were MDs and no surveys were completed by PAs. The participants had been in practice an average of 20 years and ranged from 5 to 40 years. Sixty percent of the participants practice in a group setting. The participants specialized mostly in pediatrics (40%). Table 1 provides demographic information of participants.

Aim One

Aim one examined the current screening practices of providers. The survey asked how often providers screen for PD. The options were “Never”, “Sometimes”, “Often”, and “Always”. Of the 20 surveys included in the study, only four participants (20.0%) “Sometimes” screen for PD. The other sixteen participants responded “Never”. Given the same four options, six providers (30.0%) answered that they “Sometimes” screen for PD when the partner is depressed or has a history of postpartum depression. Providers who do screen had been in practice for an
average of 21 years with the range being 10-30 years. Three of the four providers who screen also stated they had not received any training or education regarding PD. Table 2 shows the screening practices of participants and any PD training or education they received.

Half the providers screen postpartum (n=3). Two providers screen both prenatally and postpartum. The remaining provider did not specify when screening occurred. The majority of the providers were MDs (n=4) and the remaining two providers were APNs. The majority of the providers were also female (n=4). Four providers work in a group practice. Providers who screen for PD had been in practice for an average of 20.6 years with the range being 10-30 years.

Interestingly, the majority of participants (85%, n = 17) do screen women for maternal depression at some point between pregnancy and postpartum. A total of eight (40%) participants “always” screen for maternal depression.

Aim Two

Aim two identified which screening tool providers used for PD screening. The data for this aim included both providers who screen for PD and who screen for PD when the partner has a history of PPD or was depressed. The providers who screen for PD most often used a structured clinical interview for screening. Beck Depression Inventory and the Patient Health Questionnaire 2 were also listed as a screening tools and one respondent stated that no specific tool was used.

Aim Three

Aim three examined the general beliefs, attitudes, and norms of providers regarding PD. It also looked for any correlation between these variables and screening practices. Aim three
explored differences between screening providers and non-screening providers based on the average scores on the survey questions in relation to beliefs, norms, and confidence.

When reviewing the survey answers, the majority of providers (55%) were neutral on whether PD is a serious problem that warrants screening; if screening for PD is effective; and if therapy for PD is effective. The majority of providers responded positively (agree or strongly agree) to the following questions: Healthcare providers should always screen fathers for depression when his partner is depressed or has a history of postpartum depression (75%, n=15); USPSF recommends all adults be screened for depression (55%, n=11); and PD negatively impacts children of affected fathers (85%, n=17). See Figure 4 for Response to USPSF Recommendation. Participants responded negatively (disagree or strongly disagree) to the following questions: I am confident in my ability to screen for PD (50%, n=10); and I am aware of other providers who screen for PD (73.7%, n=14). See Table 3 for Participants Responses to Belief and Attitude Questions.

Pearson’s Product Moment correlations were calculated to find relationships and p values between variables. A significant positive relationship was found between screening practices and four different variables. Screening practices were positively related to: believing therapy is effective (r 0.55, p = 0.01). A positive correlation was also found between screening for PD and USPSF recommends screening for all adults (r 0.49, p = 0.02). Provider confidence in screening (r 0.53 p = 0.03) and overall survey score (r .53, p = 0.015) had a positive correlation with screening practices.

Surveys were scored and the results compared between the providers who screen and those who do not. See Figure 6: Average Score for Questions 6-14. The average score for
providers who do screen was 33.5/36 while the average for those who do not screen was 28.3/36. The average score for providers who do screen was higher in all three areas of beliefs/attitudes, norms, and training/confidence which supports the hypothesis that a provider whose beliefs and attitudes regarding PD are positive; who identify screening for PD as a norm; and who are trained and confident in PD screening would exhibit readiness to screen and be more likely to incorporate screening into practice. See Figure 7: Average Score for Beliefs/Attitudes, Norms, and Training/Confidence. However, a score equal to or less than 27 was hypothesized as the cutoff point between readiness to screen and a lack of readiness. Surprisingly, the majority of providers (60%, n=12) scored above 27 meaning they displayed readiness to screen yet only four providers, or one third actually screen for PD.
**Conclusion**

This chapter discussed the findings of the study. The demographics of the study participants were discussed. Aim one results showed that only 4 providers screen for PD. Six providers screen for PD when the partner has a history of postpartum depression or is depressed. No participants routinely screen for PD. Aim two found that when examining the providers who do screen for PD (n=6), only one used a validated screening tool. Aim three looked at the beliefs/attitudes, norms, and controls of the providers which influence screening practices based on the theoretical framework. The majority of providers felt paternal depression negatively impacts the children of depressed fathers. Surveys were scored and 37 points were possible. A score of 27 or less was determined to be a lack of readiness to screen. A score greater than 27 was determined to reflect readiness to screen. The scores indicate 13 out of 20 respondents exhibit readiness to screen.
CHAPTER 5 DISCUSSION

This chapter will address the findings of the study and how they compare to previous studies. The limitations and strengths of the study will also be discussed. Finally, it will also discuss recommendations for future areas of research.

Discussion

Paternal depression is a newer area of research. The findings in this study confirm the statement by Musser, et al. that paternal depression is under screened (2013). Although studies have widely recommended paternal depression screening, the majority of healthcare providers in this study had not implemented PD screening into practice. The majority of participants did screen women for maternal depression but had not carried that practice over to screening men.

It is difficult to compare the findings of this study to similar PD studies because no other studies were found that assess the PD screening practices of providers. The findings of this study were similar to those found by Seehusen, et al. (2005). In both studies, participants believed maternal/paternal depression was serious yet screening was not universal. Both studies found that the use of a validated screening tool was uncommon and training/education was associated with screening. Like Seehusen, et al., the present study found females screened more often than males.

While there are a few providers who do screen for PD, unfortunately, only one used a validated screening tool. Research shows that validated screening tools identify more cases than clinical evaluation alone. When a validated screening tool is not being used, PD screening is not as effective. Regardless of the tool, any PD screening is still better than no screening at all. This finding may be related to the fact that the majority of providers have not received any training or
education on PD and may not be aware of what screening tool to use. The lack of training and education may also be a contributing factor to why providers did not feel confident in their ability to screen for PD.

The fact that the participants recognized PD negatively impacts the children of depressed fathers is a promising finding although it was not a strong enough motivator for providers to screen for PD. Providers were unsure of the seriousness of PD and the effectiveness of screening and therapy. The lack of training/education and lack of confidence in one’s ability to screen also seemed to have a negative effect on screening. The study findings support Azjen’s TPB. Providers who screen had higher scores on beliefs/attitudes, norms, and training/education than those who do not screen. This suggests that beliefs/attitudes, training/education, and norms impact the provider’s readiness to screen and the likelihood the provider has incorporated screening into practice.

Limitations to this study include small sample size making the results not generalizable to a larger population. Another limitation was the study also was based on a self-reported survey and not observation or chart review.

This study was the first to assess the PD screening practices of providers. It also included all types of providers who could potentially screen for PD. An additional strength was this study identified gaps in education, training, research and clinical practice regarding PD screening. It underscored the absolute lack of compliance to screen for depression in fathers. This study is the first step toward a larger study that could provide power to make statistical comparisons regarding PD screening.
Providers must begin to recognize the impact pregnancy and parenthood has on fathers. An easy first step is to screen fathers using the EPDS. If the father is not present at a visit, the next step would be to have the partner complete the EPDS-P based on her observations.

There is much work to be done in the area of PD research. A screening tool specifically for men needs to be developed and providers need more training and education on PD. Prenatal classes and couplet discharge teaching need to include information and resources for parents regarding PD. Most importantly, men with PD need to be screened, identified, and treated.
Conclusions

This study did identify gaps in training and education regarding PD, a lack of confidence in screening, and an uncertainty regarding the seriousness of PD and the effectiveness of screening and therapy. While research regarding PD has been ongoing for decades, the information is not being incorporated into practice. Recognizing PD as a serious condition is a first step but has not been enough to influence practice.

Increasing the PD training and education regarding is an important next step in increasing awareness about PD and screening. Efforts should be made to incorporated information regarding PD in training and continuing education courses for all healthcare providers. Endeavors should not stop there. Information needs to be available to not only healthcare providers but patients as well. Including information about PD in prenatal classes and couplet discharge teaching can increase the mother and father’s awareness of this condition.

Finally, it is time to recognize that pregnancy affects the family unit as a whole. Becoming a parent is a colossal life change. The stress and anxiety of this life change can be detrimental to not only the father but the child and the family unit. Providers need to recognize the impact pregnancy and parenthood have on fathers. The next step in research is to implement interventions that improve screening practices among providers, increase provider confidence in screening, and increase provider’s awareness about PD.
APPENDIX A

EDINBURGH POST NATAL DEPRESSION SCALE (EPDS)
In the past seven days:

1) I have been able to laugh and see the funny side of things:
   - As much as I always could.
   - Not quite so much now.
   - Definitely not so much now.
   - Not at all.

2) I have looked forward with enjoyment to things:
   - As much as I ever did.
   - Rather less than I used to.
   - Definitely less than I used to.
   - Hardly at all.

3) I have blamed myself unnecessarily when things went wrong:
   - Yes most of the time.
   - Yes some of the time.
   - Not very often.
   - No never.

4) I have felt worried and anxious for no very good reason:
   - No not at all.
   - Hardly ever.
   - Yes sometimes.
   - Yes very often.

5) I have felt scared or panicky for no good reason:
   - Yes quite a lot.
   - Yes sometimes.
   - No not much.
   - No not at all.

6) Things have been getting on top of me:
   - Yes most of the time I have not been coping at all.
   - Yes sometimes I have not been coping as well as usual.
   - No most of the time I have coped quite well.
   - No I have been coping as well as ever.

7) I have been so unhappy that I have had difficulty sleeping:
   - Yes most of the time.
   - Yes sometimes.
   - Not very often.
   - No not all.
8) **I have felt sad or miserable:**
   Yes most of the time.
   Yes quite often.
   Only occasionally.
   No never.

9) **I have been so unhappy that I have been crying:**
   Yes most of the time.
   Yes quite often.
   Only occasionally.
   No never.

10) **The thought of harming myself has occurred to me:**
    Yes quite often.
    Sometimes.
    Hardly ever.
    Never.

APPENDIX B

GOTLAND SCALE FOR ASSESSING MALE DEPRESSION
THE GOTLAND SCALE FOR ASSESSING MALE DEPRESSION

During the past month, have you or others noticed that your behaviour has changed, and if so, in which way?

1. Lower stress threshold/more stressed out than usual
   - Not at all
   - To some extent
   - Very true
   - Extremely so

2. More aggressive, outward-reacting, difficulties keeping self-control
   - Not at all
   - To some extent
   - Very true
   - Extremely so

3. Feeling of being burned out and empty
   - Not at all
   - To some extent
   - Very true
   - Extremely so

4. Constant, inexplicable tiredness
   - Not at all
   - To some extent
   - Very true
   - Extremely so

5. More irritable restless and frustrated
   - Not at all
   - To some extent
   - Very true
   - Extremely so
6. Difficulty making ordinary everyday decisions
   - Not at all
   - To some extent
   - Very true
   - Extremely so

7. Sleep problems: sleeping too much / too little / restlessly, difficulty falling asleep/waking up early
   - Not at all
   - To some extent
   - Very true
   - Extremely so

8. In the morning especially, having a feeling of disquiet / anxiety / uneasiness
   - Not at all
   - To some extent
   - Very true
   - Extremely so

9. Overconsumption of alcohol & pills in order to achieve a calming & relaxing effect. Being hyperactive or blowing off steam by working hard and restlessly, jogging or other exercises, under- or overeating
   - Not at all
   - To some extent
   - Very true
   - Extremely so

10. Do you feel your behaviour has altered in such a way that neither you yourself nor others can recognize you, and that you are difficult to deal with?
    - Not at all
    - To some extent
    - Very true
    - Extremely so
11. Have you felt or have others perceived you as being gloomy, negative or characterized by a state of hopelessness in which everything looks bleak?
   - Not at all
   - To some extent
   - Very true
   - Extremely so

12. Have you or others noticed that you have a greater tendency for self-pity, to be complaining or to seem “pathetic”?  
   - Not at all
   - To some extent
   - Very true
   - Extremely so

13. In your biological family, is there any tendency towards abuse, depression / dejection, suicide attempts or proneness to behavior involving danger?
   - Not at all
   - To some extent
   - Very true
   - Extremely so

APPENDIX C

CONSENT DISCLOSURE FORM
CONSENT DISCLOSURE FORM

Paternal Depression Screening Practices of Healthcare Providers

Mary Kathleene Estrada MSN, FNP-BC, DNP Candidate

The purpose of this study is to (a) identify paternal depression screening practices of pediatricians, primary care providers, obstetricians, and midwives during pregnancy and postpartum periods; (b) identify use of validated screening tools; and (c) identify providers’ attitudes, beliefs, norms, and behavioral controls regarding paternal depression screening.

If you choose to participate in the study, you will be asked to complete a 20 question survey regarding paternal depression screening practices. The survey will take approximately 2 minutes to complete. There are no foreseeable risks associated with participating in this study. The results of this study will help identify if fathers are being screened and identify areas for future research in this area.

By taking the survey, you agree to have your answers used for research purposes. Your participation in this study is voluntary. You may choose not to participate without penalty or loss of benefits to which you are otherwise entitled. You may discontinue participation at any time without penalty or loss of benefits. You may also choose to skip any questions you do not wish to answer. An Institutional Review Board responsible for human subjects’ research at The University of Arizona reviewed this research project and found it to be acceptable, according to applicable state and federal regulations and University policies designed to protect the rights and welfare of participants in research. For questions regarding your rights as a participant in this study or to discuss other study related concerns with someone who is not part of the research team, you may contact the Human Subjects Protection Program at 520-626-6721 or online at http://orcr.arizona.edu/hspp.

For questions or concerns about the study, you may call Mary Estrada, MSN, FNP-BC, DNP Candidate at 520-979-7016 or email kestrada@email.arizona.edu.
APPENDIX D

PROVIDER SURVEY
PROVIDER SURVEY

Paternal Depression Screening Practices among Healthcare Providers

Please circle the most appropriate answer:

1. How often do you screen women for antenatal or postpartum depression?
   - Never  - Sometimes  - Often  - Always

2. How often do you screen men for paternal depression (defining paternal depression as depression occurring in fathers anytime during his partner’s pregnancy through one year after the birth of the child)?
   - Never  - Sometimes  - Often  - Always

3. How often do you screen for paternal depression when his partner is depressed or has a history of postpartum depression?
   - Never  - Sometimes  - Often  - Always

4. If you do screen for paternal depression, when do you screen for paternal depression?
   - Prenatally  - Postpartum  - Both  - Other__________

5. If you do screen for paternal depression, which tool do you use?
   - Beck Depression Inventory
   - Postpartum Depression Checklist
   - Gotland Male Depression Scale (GMDS)
   - Edinburgh Postnatal Depression Scale
   - Edinburgh Postnatal Depression Scale - Partner
   - Structured Clinical Interview
   - Other____________________________

Please circle the answer that most closely describes your views about paternal depression.

6. Health care providers should always screen fathers for depression when his partner is depressed or has a history of postpartum depression. 1 2 3 4 5

7. Health care providers should routinely screen for paternal depression. 1 2 3 4 5

8. Paternal depression is a serious problem that warrants screening. 1 2 3 4 5

9. Screening for paternal depression is effective. 1 2 3 4 5

10. Therapy for paternal depression is effective. 1 2 3 4 5

11. The USPSF recommends all adults be screened for depression. 1 2 3 4 5

12. Paternal depression negatively impacts children of affected fathers. 1 2 3 4 5

13. I am confident in my ability to screen for paternal depression. 1 2 3 4 5

14. I am aware of other providers who screen for paternal depression. 1 2 3 4 5
15. Please check any and all settings that you have received training or education about paternal depression.

___ Medical school    ___ Graduate studies
___ Continuing education courses    ___ Research articles
___ Other ___________________    ___ None of the above

Please provide the following demographic information:

16. I am: ___ Male   ___ Female.

17. I have been in practice for _____ years.

18. My degree is: ___ MD    ___ DO    ___ OB/GYN    ___ CNM    ___ APN    ___ PA

19. My specialty is: ___ Women’s Health    ___ Pediatrics    ___ General or Family Practice    ___ Other________

20. My practice setting is:

___ Solo practice    ___ Group practice
___ Hospitalist    ___ Retired
___ Primarily administrative duties    ___ Primarily Gynecology with no Obstetrics
___ Primarily surgical    ___ Other________

Please use the back of this questionnaire to provide any additional comments you have regarding paternal depression screening. Please return this questionnaire to 2881 N Silver Island Way, Tucson, AZ 85745. Thank you for your time and participation in this study.
Dear «GreetingLine»

I am a Doctoral Candidate with the University of Arizona’s College of Nursing. My research focus is paternal depression. Paternal depression is defined as depression occurring in a father anytime during his partner’s pregnancy through one year after the birth of the child. The aim of the study is to assess the paternal depression screening practices of healthcare providers in the Tucson area.

Providers from various backgrounds and specialties were chosen to include any provider who could potentially screen for paternal depression.

While maternal antenatal and postpartum depression has received a lot of attention and much research has been done on the subject, paternal depression has not been studied to the same extent. The information gathered from this survey will help identify if fathers are being screened and identify areas for future research.

I would appreciate your assistance with this brief survey and would welcome any feedback. The survey is twenty questions and should take no longer than two minutes to complete. A disclosure statement regarding consent is enclosed as well as a self-addressed stamped envelope for your convenience.

Thank you for your assistance with this research study. Your time and input are greatly appreciated.

Respectfully,

Mary Kathleene Estrada, MSN, FNP-BC

ENC: Consent Disclosure Statement
Provider Survey
APPENDIX E

SEEHUSEN SURVEY
SEEHUSEN SURVEY

Washington State Family Medicine Postpartum Depression Practices   Code _________

1. Do you currently see patients for at least 10 hours per week?
   ___ Yes
   ___ No   Please go to question 19.

2. In your practice, you take care of: Please check all that apply
   ___ women who have delivered children in the prior year
   ___ children under 1 year-of-age
   ___ neither   Please go to question 19.

3. How often do you screen for postpartum depression (defining postpartum as within one year of delivery)? Please circle the most appropriate answer.
   Never    Sometimes     Often    Always

4. How often do you screen mothers of children being seen for a well-child check for postpartum depression? Please circle the most appropriate answer.
   Never    Sometimes     Often    Always
   If you answered “Never” to both questions #3 and #4, skip to question #6.

5. When you screen for postpartum depression, do you use a validated screening tool?
   ___ no   ___ yes which one?
   ___ Beck Depression Inventory
   ___ Edinburgh Postnatal Depression Scale
   ___ Postpartum Depression Checklist
   ___ structured clinical interview
   ___ other________________________________

Please circle the answer that most closely describes your ideas about postpartum depression.

6. Family physicians should screen for postpartum depression.                     Strongly Disagree  Disagree  Neutral  Agree  Strongly Agree
   1     2     3     4     5

7. Postpartum depression is common enough to warrant screening.                  1     2     3     4     5

8. Screening at every postpartum visit would be very time consuming.           1     2     3     4     5

9. Postpartum depression is a serious enough problem to warrant screening.     1     2     3     4     5

10. Screening at every well child visit up to one year-of-age would take too much effort. 1     2     3     4     5

11. Postpartum depression affects the children of affected mothers.             1     2     3     4     5
12. Postpartum depression affects the spouses of affected women. 
   [Strongly Disagree 1 Strongly Disagree 2 Disagree 3 Neutral 4 Agree 5 Strongly Agree]

13. Screening at every postpartum visit would take too much effort. 
   [1 2 3 4 5]

14. Screening at every postpartum visit would not be effective. 
   [1 2 3 4 5]

15. Therapy for postpartum depression is effective. 
   [1 2 3 4 5]

16. Screening at every well child visit up to one year-of-age would be very time consuming. 
   [1 2 3 4 5]

17. I encounter postpartum depression often in my clinical practice. 
   [1 2 3 4 5]

18. Screening at every well child visit would not be effective. 
   [1 2 3 4 5]

19. Please check all of the settings in which you have received training or formal education about postpartum depression.
   ___ medical school
   ___ residency
   ___ continuing medical education conferences
   ___ the medical literature
   ___ other ______________________________________________________
   ___ none of the above

Please answer the following questions about yourself.

20. I am: ___ male ___ female

21. My age is: _____

22. I:
   ___ am a resident
   ___ graduated residency _____ years ago
   ___ am not a resident nor a residency graduate

23. My practice setting is:
   ___ solo practice
   ___ group practice
   ___ other ______________________________________________________

24. Please estimate the number of times you have diagnosed or treated postpartum depression during the last 2 years: _____

25. Please use the following space or an additional piece of paper to provide any additional comments you have regarding postpartum depression screening.
APPENDIX F

SEEHUSEN EMAIL
Mary Kathleene Estrada <kestrada@email.arizona.edu>

**Questionnaire used for article "Are Family Physicians Appropriately Screening for Postpartum Depression?"**

2 messages

Mary Kathleene Estrada <kestrada@email.arizona.edu> Fri, Jun 20, 2014 at 9:55 AM

To: dseehusen@msn.com

Mr. Seehusen,

I had the pleasure of reading the above mentioned article. I am currently a doctoral candidate at the University of Arizona College of Nursing. My research focus is paternal depression. It is very much like maternal depression. Like maternal depression, research suggests that all providers should screen fathers for depression as well as mothers. My project is much like yours in that I will be screening various providers to determine if they are screening for paternal depression during pregnancy and thru postpartum.

I am currently at the point where I am developing the questionnaire for my study. I would greatly appreciate the opportunity to review and possibly use part of your questionnaire in my research.

I can be reached at this address or on my cell phone 520-979-7016. I look forward to hearing from you.

Respectfully,

Mary Estrada, MSN, FNP-BC

DEAN SEEHUSEN <dseehusen@msn.com> Sat, Jun 21, 2014 at 4:43 PM

To: Mary Kathleene Estrada <kestrada@email.arizona.edu>

Mary,

I am attaching my questionnaire. You are very welcome to use/modify/ignore as you see fit. I'm happy to discuss any fine points with you. I think the topic you are studying is very interesting and important.

Dean

[Appendix A- Questionnaire.doc | 27K]
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<td>Providers who screen for paternal depression</td>
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<td>Providers who screen for PD when the partner is depressed or has a history of postpartum depression</td>
</tr>
<tr>
<td>Never</td>
</tr>
<tr>
<td>Sometimes</td>
</tr>
<tr>
<td>Often</td>
</tr>
<tr>
<td>Always</td>
</tr>
<tr>
<td>Providers who received education or training regarding PD</td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>No</td>
</tr>
<tr>
<td>Providers education or training regarding PD</td>
</tr>
<tr>
<td>Medical School</td>
</tr>
<tr>
<td>Graduate School</td>
</tr>
<tr>
<td>Continuing Education Courses</td>
</tr>
<tr>
<td>Research Articles</td>
</tr>
<tr>
<td>None</td>
</tr>
<tr>
<td>Question</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Healthcare providers should always screen fathers for depression when</td>
</tr>
<tr>
<td>his partner is depressed or has a history of postpartum depression.</td>
</tr>
<tr>
<td>Disagree</td>
</tr>
<tr>
<td>Neutral</td>
</tr>
<tr>
<td>Agree</td>
</tr>
<tr>
<td>Strongly Agree</td>
</tr>
<tr>
<td>Healthcare provider should routinely screen for paternal depression.</td>
</tr>
<tr>
<td>Disagree</td>
</tr>
<tr>
<td>Neutral</td>
</tr>
<tr>
<td>Agree</td>
</tr>
<tr>
<td>Strongly Agree</td>
</tr>
<tr>
<td>Paternal depression is a serious problem that warrants screening.</td>
</tr>
<tr>
<td>Disagree</td>
</tr>
<tr>
<td>Neutral</td>
</tr>
<tr>
<td>Agree</td>
</tr>
<tr>
<td>Screening for paternal depression is effective.</td>
</tr>
<tr>
<td>Disagree</td>
</tr>
<tr>
<td>Neutral</td>
</tr>
<tr>
<td>Agree</td>
</tr>
<tr>
<td>Therapy for paternal depression is effective.</td>
</tr>
<tr>
<td>Neutral</td>
</tr>
<tr>
<td>Agree</td>
</tr>
<tr>
<td>The USPSF recommends all adults be screened for depression.</td>
</tr>
<tr>
<td>Strongly Disagree</td>
</tr>
<tr>
<td>Neutral</td>
</tr>
<tr>
<td>Agree</td>
</tr>
<tr>
<td>Strongly Agree</td>
</tr>
<tr>
<td>Paternal depression negatively impacts children of affected fathers.</td>
</tr>
<tr>
<td>Strongly Disagree</td>
</tr>
<tr>
<td>Neutral</td>
</tr>
<tr>
<td>Agree</td>
</tr>
<tr>
<td>Strongly Agree</td>
</tr>
<tr>
<td>I am confident in my ability to screen for paternal depression.</td>
</tr>
<tr>
<td>Strongly Disagree</td>
</tr>
<tr>
<td>Disagree</td>
</tr>
<tr>
<td>Neutral</td>
</tr>
<tr>
<td>Agree</td>
</tr>
<tr>
<td>Strongly Agree</td>
</tr>
<tr>
<td>I am aware of other providers who screen for paternal depression.</td>
</tr>
<tr>
<td>Strongly Disagree</td>
</tr>
<tr>
<td>Disagree</td>
</tr>
<tr>
<td>Neutral</td>
</tr>
<tr>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>
Evidence Rating Scale

**STRENGTH of the Evidence**

<table>
<thead>
<tr>
<th>Level</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Experimental study/randomized controlled trial (RCT) or meta analysis of RCT</td>
</tr>
<tr>
<td>II</td>
<td>Quasi-experimental study</td>
</tr>
<tr>
<td>III</td>
<td>Non-experimental study, qualitative study, or meta-synthesis.</td>
</tr>
<tr>
<td>IV</td>
<td>Opinion of nationally recognized experts based on research evidence or expert panel</td>
</tr>
</tbody>
</table>

**QUALITY of the Evidence**

<table>
<thead>
<tr>
<th>A High</th>
<th>Research</th>
<th>Consistent results with sufficient sample size, adequate control, and definitive conclusions; consistent recommendations based on extensive literature review that includes thoughtful reference to scientific evidence.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Summative reviews</td>
<td>Well-defined, reproducible search strategies; consistent results with sufficient numbers of well defined studies; criteria-based evaluation of overall scientific strength and quality of included studies; definitive conclusions.</td>
</tr>
<tr>
<td></td>
<td>Organizational</td>
<td>Well-defined methods using a rigorous approach; consistent results with sufficient sample size; use of reliable and valid measures</td>
</tr>
<tr>
<td></td>
<td>Expert Opinion</td>
<td>Expertise is clearly evident</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B Good</th>
<th>Research</th>
<th>Reasonably consistent results, sufficient sample size, some control, with fairly definitive conclusions; reasonably consistent recommendations based on fairly comprehensive literature review that includes some reference to scientific evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Summative reviews</td>
<td>Reasonably thorough and appropriate search; reasonably consistent results with sufficient numbers of well defined studies; evaluation of strengths and limitations of included studies; fairly definitive conclusions.</td>
</tr>
<tr>
<td></td>
<td>Organizational</td>
<td>Well-defined methods; reasonably consistent results with sufficient numbers; use of reliable and valid measures; reasonably consistent recommendations</td>
</tr>
<tr>
<td></td>
<td>Expert Opinion</td>
<td>Expertise appears to be credible</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>C Low quality or major flaws</th>
<th>Research</th>
<th>Little evidence with inconsistent results, insufficient sample size, conclusions cannot be drawn</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Summative reviews</td>
<td>Undefined, poorly defined, or limited search strategies; insufficient evidence with inconsistent results; conclusions cannot be drawn</td>
</tr>
<tr>
<td></td>
<td>Organizational</td>
<td>Undefined, or poorly defined methods; insufficient sample size; inconsistent results; undefined, poorly defined or measures that lack adequate reliability or validity</td>
</tr>
<tr>
<td>Expert Opinion</td>
<td>Expertise is not discernable or is dubious</td>
<td></td>
</tr>
</tbody>
</table>

Figure 2

Theory of Planned Behavior

Figure 3
Theory of Planned Behavior Applied to Paternal Depression Screening
Figure 4
Response to USPSF Recommendation.

![Bar chart showing responses to USPSF Recommendation](image)
Figure 5

Did Providers Have Any Training or Education Regarding Paternal Depression?

- No Response: 2
- No: 11
- Yes: 7

0 2 4 6 8 10 12
Figure 6
Average Score for Questions 6-14.
Figure 7
Average Scores for Beliefs/Attitudes, Norms, and Training/Confidence.
REFERENCES


http://people.umass.edu/aizen/tpb.diag.html#null-link

http://people.umass.edu/aizen/pdf/tpb.measurement.pdf

Ajzen, I. (n.d.). *Constructing a TPB Questionnaire.* Retrieved from Icek Ajzen:
http://people.umass.edu/aizen/pdf/tpb.measurement.pdf

http://people.umass.edu/aizen/tpb.html


Theory of Planned Behavior. Springer Images. Retrieved from


