Help Seeking Attitudes Among New Mothers with Postpartum Depression

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To the Graduate Council:

I am submitting herewith a dissertation written by Aubrey Elizabeth Jones entitled "Help Seeking Attitudes Among New Mothers with Postpartum Depression." I have examined the final electronic copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Social Work.

David A. Patterson, Mary Held, Major Professor

We have read this dissertation and recommend its acceptance:

Julia Jaekel, Laurie L. Meschke

Accepted for the Council:

Dixie L. Thompson

Vice Provost and Dean of the Graduate School

(Original signatures are on file with official student records.)
Help Seeking Attitudes Among New Mothers with Postpartum Depression

A Dissertation Presented for the
Doctor of Philosophy
Degree
The University of Tennessee, Knoxville

Aubrey Elizabeth Jones
May 2020
DEDICATION

I dedicate this work to my partner, Joshua, and our children.
ACKNOWLEDGEMENTS

I would like to acknowledge the numerous people and organizations who have supported throughout the course of my life which has led me to the completion of my doctoral education. First, I would specifically like to thank my committee members Dr. David Patterson, Dr. Mary Held, Dr. Julia Jaekel and Dr. Laurie Meschke for unending support and mentorship. I am grateful for the mentorship that has also been provided to me by Dr. Carole Myers and Dr. Virginia Ramseyer Winter. I would also like to acknowledge the College of Social Work and the faculty within the College for their support and assistance in my development as a scholar. To my fellow cohort members, Jayme Walters and Aaron Brown, I will forever be grateful for your support and commiseration throughout the last four years together. I am so proud of all that we have accomplished together and will continue to accomplish.

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To my parents, your individual journeys through recovery and single parenthood have provided me with examples of strength, determination, and persistence.

Finally, I would like to thank my husband, Joshua. None of this would be possible without you. Thank you for your never-ending support, being an excellent father, and for remaining a constant source strength for our family over the last four years.
ABSTRACT

**Background:** Postpartum depression is the most common complication associated with childbearing. Nearly 1 in 7 women will experience postpartum depression within the first 12 months post child-birth. When left untreated the consequences of postpartum depression affect the development of the offspring and for the mother, untreated postpartum depression can be deadly. Although the prevalence of postpartum depression is relatively high, few women seek treatment for this complication. The purpose of this study was to better understand what factors predict treatment seeking among new mothers. **Method:** An online survey of new mothers was conducted to assess their attitudes about receiving treatment for post-partum depression. A binary regression was conducted to determine the predictors of help-seeking behaviors among new mothers. The second analysis conducted was a hierarchical linear regression testing the interaction effect between perceived stigma and mental health literacy on attitudes toward help-seeking. **Results:** Based on a sample of 326 new mothers predictors for help seeking included increased levels of depression, favorable attitudes toward help-seeking and a history of treatment for depression. The interaction between stigma and mental health literacy was not statistically significant. **Conclusions:** Results indicate the severity of depression and favorable attitudes toward help-seeking were predictors of help-seeking behavior among postpartum women in this sample. The results of hierarchical regression suggest that decreased perception of stigma and increased mental health literacy can improve attitudes toward professional psychological help-seeking. Further research is needed to identify if increasing mental health literacy is an effective means to increase treatment seeking among women with postpartum depression.
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CHAPTER I: SYSTEMATIC REVIEW

Abstract

To synthesize the literature on barriers and facilitators to help seeking for women living in the United States with perinatal depression. Perinatal depression affects approximately 10 to 20 percent of women during pregnancy or the first 12 months postpartum. Increased attention has been given to the prevalence of and screening for perinatal depression, yet little research addresses help seeking for this issue. The overall barriers and facilitators of help seeking among these women have yet to be addressed in a systematic way. A systematic literature review was conducted to identify studies that focused on help seeking among women with perinatal depression. Pub Med; CINAHL; Web of Science; Scopus; Psych INFO; and Pro-quest Dissertation were used with Boolean operators. As a result, nineteen articles met the inclusion criteria discussed below and were included in this review. Barriers to help seeking for women with perinatal depression include social (e.g. stigma), structural (e.g. provider unavailable) and instrumental factors (e.g. cost). Facilitators of help seeking for women with perinatal depression were limited in scope. Recommendations for policy and the role of social workers are discussed.

Key Words: Perinatal depression; Pregnancy; Mental Health; Help seeking

Background

Perinatal depression encompasses major or minor depression during pregnancy (termed antenatal) or within the first 12 months post childbirth (termed postpartum) and is associated with low mood, loss of interest in activities, feelings of guilt, worthlessness, hopeless or inadequacy, changes in sleep, tearful, and thoughts of self-harm (Centre of Perinatal Excellence
Antenatal depression affects up to 20 percent of pregnant women while nearly 10 to 20 percent of women will experience postpartum depression (Gavin et al., 2005). Because perinatal depression is underreported and underdiagnosed, these estimates are considered to be conservative with scholars indicating the prevalence of perinatal depression is likely higher (Leung & Kaplan, 2009; Milgrom & Gemmell, 2014). Left untreated, perinatal depression poses a significant health risk to mothers and their offspring.

For women experiencing perinatal depression, the consequences are profound. Antenatal depression has been associated with poor self-care, improper nutrition (Milgrom & Gemmell, 2014; Zuckerman, Amaro, Bauchner, & Cabral, 1989), premature labor, and adverse obstetric outcomes (Chung, Lau, Yip, Chiu & Lee, 2001; Dayan et al, 2006; Kurki, Hiilesmaa, Raitasalo, Mattila, & Ylikorkala, 2000). Postpartum depression may result in increased suicidal ideations or suicide (Lembke, 2002; Wisner et al., 2013). The burden of perinatal depression extends beyond the mother and can impact the maternal-infant relationship which may result in psychological, behavioral, cognitive, social, and health problems in children (Ride & Lancsar, 2016). Perinatal depression may also cause a strain on the intimate partner relationship (Ride & Lancsar, 2016). Despite the severity of the consequences associated with perinatal depression, many women still suffer in silence.

“Help seeking is an adaptive coping process that is the attempt to obtain external assistance to deal with a mental health concern” (Rickwood, Thomas, & Bradford, 2012). Three types of help seeking have been described in the literature: formal help seeking (e.g. consulting a mental health provider or doctor), informal help seeking (e.g. social support systems) and self-help (Rickwood et al, 2012). Existing literature in the field of mental health help seeking has focused on various populations (e.g. adolescents, Vietnamese adults, those with epilepsy, and persons
with body dysmorphic disorder) and their help seeking behaviors. However, little is known about the help seeking behaviors among women with perinatal depression (Abrams, Doring, & Curran, 2009; McGarry, Kim, Sheng, Egger, & Baksh, 2009).

To further understand the current state of the literature and the help seeking behaviors among this population, the author conducted a systematic review to address the following questions: What is the current state of knowledge regarding help seeking behaviors among women with perinatal depression? And, what are the barriers and facilitators of help seeking among women with perinatal depression? To present our findings, this article relies on Lara-Cinisomo’s (2011) analytic framework to categorize barriers to help seeking as structural, instrumental, or social barriers. **Structural barriers** are barriers at the organizational level, such as lack of provider availability or responsiveness, language barriers, and lack of information about the services provided (Lara-Cinisomo, 2011). **Instrumental barriers** are pragmatic factors that may impact one’s ability to receive care such as health insurance coverage, finances, transportation, child care and other similar factors (Lara-Cinisomo, 2011). **Social barriers** refer to stigma, preference for type of care or care provider, lack of knowledge regarding mental health issues, perceptions of treatment, beliefs or attitudes regarding pharmacological treatment, lack of trust, attitudes and beliefs about help seeking and other similar barriers. For purposes of consistency, we will group the facilitator results into corresponding categories and consider the structural, instrumental and social factors that facilitate help seeking.

**Methodology**

The author searched Pub Med; CINAHL; Web of Science; Scopus; Psych INFO and included dissertations by searching Pro-quest Dissertation. The following search terms and Boolean operators were used: “perinatal depression” OR “post partum depression” OR “postpartum
depression” OR “prenatal depression” OR “antenatal depression” AND “help-seeking” OR “help seek*” OR “seek* treatment” OR “seek* help.” The search was limited to English-language, peer-reviewed journals and dissertations published between January 2008 and April 2018. No other restrictions were applied. A search using the Center for Disease Control and Prevention (CDC) Stacks public health publications was also performed. The literature search took place in April 2018.

The PRISMA flow chart depicted in Figure 1.1 (Appendix A) represents the selection of studies for this review. The initial database search returned 222 articles published in English after removing duplicates. The author and a secondary reviewer screened the abstracts independently and removed studies based on pre-defined inclusion and exclusion criteria described below. This resulted in 97 articles to be reviewed in full. At the outset of stage 2, both the author and secondary reviewer independently examined the 97 articles to determine if they met inclusion criteria. When disagreement occurred in either stage 1 or stage 2, the author and reviewer discussed the discrepancy and excluded studies that did not meet inclusion criteria.

Articles that met the following inclusion criteria were included as a part of the review:

1. Focus on perinatal women (i.e. pregnant women and/or women who had given birth in the last 12 months at the time of the study) with depression
2. Participants in the included articles must be at least 18 years of age or older
3. Focus is on mental health help seeking for women with perinatal depression OR discusses mental health help seeking as a result or finding (includes articles that talk about barriers or facilitators regarding seeking help; accessing non-traditional forms of mental health help such as ER, hospital, self-help etc.; articles that discuss options for improving or addressing depression care for perinatal women)
4. Included studies must be qualitative or quantitative papers; systematic reviews were not included
5. English Language
6. Articles are peer reviewed; dissertations; or government documents

The following exclusion criteria were utilized to exclude articles:

7. Theoretical articles on help seeking
8. Articles focused only on physical health or non-mental health help seeking
9. Articles published before 2008
10. Articles published outside of the United States
11. Articles that focus on depression among women who have miscarried or terminated a pregnancy or adoption
12. Non-depression focused
13. Sole focus on male postpartum
14. Articles that did not focus on the female’s behavior toward help-seeking

At the end of stage two, 78 documents were excluded on the premise of meeting one or more of the exclusion criteria. No studies were excluded based on the quality of the research. Stage two resulted in a total of nineteen relevant studies for inclusion in this review.

**Results**

Nineteen articles met inclusion criteria and are discussed further in this review. Collectively, the 19 articles identify help seeking experiences among women of varying racial identities and socioeconomic backgrounds. Each of the studies focused on help seeking behavior among women who had perinatal depression or showed symptoms of perinatal depression based on individual depression screening results. Studies included information related to barriers or facilitators of help seeking. Included in the review are cross sectional studies published between 2008 and 2017. Table 1.1 (Appendix A) provides more information about each of the articles included in the study.

**Barriers**

**Social Barriers**

Eighteen of the nineteen articles in this review discussed barriers to help seeking among women with perinatal depression. All eighteen articles discussed social barriers to help-seeking. Stigma was commonly reported as a barrier to help seeking (Abrams et al, 2009; Felder, 2015; Goodman, 2009; Guy, 2014; Henshaw, Durkin, & Snell, 2016; Kopelman et al, 2008; Liberto, 2011; Maloni, Przeworski & Damato, 2013; Rhinehart, 2009; Sampson, Duron, Torres &
Feelings of shame, guilt and embarrassment were also commonly cited reasons restricting help seeking for perinatal depression (Felder, 2015; Liberto, 2011; Maloni et al, 2013; Ta Park et al, 2017; Thomas et al, 2014). Fear was also reported numerous times. Some mothers reported fear of taking medication and the perceived side effects (Lara-Cinisomo et al, 2014; Ta Park et al 2017). However, more commonly, mothers feared that seeking help would have negative consequences such as losing parental rights to their children (Guy 2014; Kopelman et al, 2008; Lara-Cinisomo, 2014; & Sampson et al 2014). Other common social barriers were lack of knowledge regarding perinatal depression (Felder, 2015; Henshaw, 2016), cultural barriers (Abrams et al., 2009; Goodman, et al. 2013; Goyal, 2015; Sampson, 2014), preference for treatment (Abrams et al., 2009; Goyal, 2015; Henshaw et al 2016; Lara-Cinisomo et al, 2014; Maloni et al, 2013), perceptions of treatment, (Goyal, 2015; Guy, 2014) and lack of trust in clinicians (Kopelman et al., 2008; Lara-Cinisomo et al 2014). Stress (McGarry, 2009; Shivakumar et al., 2014; Stone et al., 2015), lack of social support (Goodman, 2009; Rhinehart, 2009; Sampson et al., 2014; Thomas et al, 2014), and lack of self-efficacy (Rhinehart, 2009; Thomas et al., 2014) were also identified.

**Instrumental Barriers**

Instrumental barriers to help seeking were reported within nine articles. All of the articles reported consistent instrumental barriers regarding inadequate health insurance coverage or financial restraints (Abrams et al. 2009; Felder, 2015; Goodman, 2009; Goodman et al., 2013; Kopelman et al., 2008; Maloni et al., 2013; Rhinehart, 2009; Shivakumar et al., 2014; & Ta Park et al., 2017) Six studies found that lack of childcare was a barrier for perinatal women (Abrams et al. 2009; Felder, 2015; Goodman, 2009; Kopelman et al., 2008; Maloni et al., 2013; &
Shivakumar et al., 2014). Time related issues were reported within five articles (Felder, 2015; Goodman, 2009; Kopelman et al., 2008; Maloni et al., 2013; & Rhinehart, 2009) Finally, scholars of four articles reported transportation as a barrier to help seeking among women with perinatal depression (Abrams, et al. 2009; Goodman, 2009; Kopelman et al., 2008 & Shivakumar et al., 2014).

**Structural Barriers**

Structural barriers were reported in eight articles. The most commonly cited structural barrier was lack of information about services (Abrams et al., 2009; Felder, 2015; Goodman, 2009; Kopelman et al., 2009; Maloni et al., 2013; & Ta Park et al., 2017). Issues with providers responsivity or ability to provide treatment were noted among Abrams et al., 2009; Felder, 2015; Guy, 2014; Kopelman et al., 2008; and Maloni et al., 2013. Other problems included lack of culturally responsive care (Abrams et al. 2009; Goodman, 2009; & Ta Park et al., 2017). Finally, Shivakumar et al (2014) identified that access to care was an issue for participants in their study.

**Facilitators**

**Social Facilitators**

Out of 19 studies, only nine discussed facilitators to help-seeking for perinatal depression. Social facilitators were the most commonly cited facilitator of help seeking among women with perinatal depression. Seven articles reported social facilitators that influenced help seeking among participants in their studies (Abrams, Doring, & Curran, 2009; Goodman, Dimidjian, & Williams, 2013; Liberto 2011; McGarry, Kim, Sheng, Egger, & Baksh, 2009; Shivakumar et al. 2014; Stone, Diopm Declercqm Cabral, Fox, & Wise, 2015; Thomas, Scharp, & Paxman 2014). Abrams et al. (2009) identified the participant’s preference for care in which participants commonly discussed the need to be able to talk with someone about their feelings and
experiences with depression. Goodmen et al. (2013) reported that gaining more knowledge about depression (e.g. symptoms of depression, prevalence, etc.) was a facilitator for participants. Other social facilitators included the severity of the depression, concerns from their social support system and encouragement from medical providers to seek help (Goodmen, et al. 2013; Thomas et al. 2014). Similarly, Thomas et al. (2014) also found that self-efficacy and spirituality promoted help-seeking behaviors. Trust in the provider or treatment was an important consideration for some participants. Referral from friends or family was highly regarded and lead to participants having more trust in treatment and provider (Shivakumar et al. 2014). Participants also stated that their social support system –whom they trusted– had encouraged them to seek help (Shivakumar et al. 2014). Stone et al. (2015) found that those who had experienced treatment in the past for mental health problems were more likely to engage in help seeking behaviors again, while McGarry (2009) identified that participants who sought help in pregnancy were more likely to seek help in the postpartum period. Finally, Liberto (2011) identified that women with a positive attitude regarding help seeking were more likely to seek help.

Structural Facilitators

Only three studies identified structural facilitators to help seeking (Henshaw et al., 2011; Lara-Cinisomo, Wisner, Burns & Chaves-Gnecco, 2014; Shivakumar, Brandon, Johnson & freeman, 2014). Henshaw et al 2011 and Shivakumar et al., 2014 both reported provider responsiveness as facilitators to help-seeking. Lara-Cinisomo et al. (2014) reported that help seeking was facilitated based on the location of services with participants reporting that they would be more likely to seek help if there was an in-home treatment option.
**Instrumental Facilitators**

Goodman, Dimidjian, & Williams (2013) was the only study to report instrumental facilitators, citing ease of pragmatic factors (transportation, child care, cost etc.) as facilitators.

**Who they sought help from**

Not all studies included in this review discussed who participants sought help from if they did engage in help seeking. Table 1.2 (Appendix A) depicts the type of help reported in the studies included in this review.

**Limitations of included studies**

The articles included in this review are not without limitations. Each study was cross-sectional, limiting the ability to identify barriers and facilitators as they arise over time. The experiences of lesbian mothers, adoptive mothers, surrogate mothers, and those who conceived after experiencing fertility issues are often not captured in the literature and it is unclear if they participated in the studies reviewed. Low-income women and women of color are at an increased risk of experiencing perinatal depression. The studies reviewed did include some representation of women of color and low-income women yet, they had low sample sizes and are not generalizable. Several studies had low sample sizes, were qualitative and not all used standard measures to identify perinatal depression. Two studies indicate use of a self-report measure which is problematic as the literature suggests women with low mental health literacy may be unaware of their depressive symptoms (Guy, et al. 2014). Few studies identified facilitators of help seeking among this population and therefore, further research is needed. The studies included in this review are not geographically representative of the entire United States and significantly lack representation from mothers in Rural areas.
**Discussion**

This study examined the facilitators and barriers associated with help seeking for perinatal depression. The most common barriers identified were social barriers such as stigma, lack of knowledge regarding perinatal depression and, attitudes and beliefs regarding treatment. Stigma has been cited as a reason for not seeking help among numerous populations and depressed women in the perinatal period are no exception. The experience of motherhood as portrayed by society is one that is natural, satisfying, and joyful (Alang & Fomotar, 2015; Nicolson, 1990). Those who do not experience motherhood in this way may feel shame or receive negativity from others. Because the effects of stigma either real or perceived may result in further isolation and a failure to seek help, health care providers can decrease the stigma by talking about perinatal depression, the prevalence of perinatal depression, and treatment options. Discussions between providers and patients can reduce the stigma associated with perinatal depression while simultaneously addressing other common barriers such as lack of knowledge about perinatal depression and attitudes and beliefs regarding treatment.

Instrumental barriers are another important consideration for providers as many women cited pragmatic obstacles to obtaining help such as lack of child care or transportation. Interventions can be designed in such a way that these barriers are reduced by creating in home interventions where transportation and child care are not an issue. In-home programs were also highly favored by Latina women (Lara-Cinisomo, 2014). Researchers in countries like the Netherlands have seen success with in-home follow-up programs for new mothers regarding identification of perinatal depression, referral for treatment and treatment follow-up (Van Der Zee-Van et al. 2017).
The information gleaned from this review regarding facilitators for help seeking is a meaningful starting point for researchers. Social facilitators were the most commonly reported reasons that women sought help. Social facilitators refer to attitudes, beliefs, preferences, social support, trust in treatment/provider and other similar constructs. Future research needs to be conducted to further explore this area. By examining facilitators to help seeking for this population of women, providers could actively work to promote facilitators like trust, knowledge of perinatal depression and social support for women in the perinatal period. Furthermore, if providers screen for perinatal depression, promotion of facilitators (increased knowledge of perinatal depression or referrals to support groups, counseling etc.) could be used to help mothers seek immediate treatment and reduce the negative effects of depression. However, not enough research currently exists to say if this would be effective for women in the perinatal period.

**Limitations**

This study should be considered within the context of its limitations. The author set out to understand the facilitators and barriers of help seeking among women with perinatal depression in the United States. Due to the specific Country focus, several studies discussing help seeking among perinatal women were excluded thus limiting the potential information gleaned. There was a wide range of women included at varying points within the perinatal period making it difficult to fully examine barriers and facilitators across the perinatal period. Examining depression in perinatal mothers is another limitation of this study. While evaluating pregnancy and postpartum together is common, some scholars suggest separating the two due to the differences of barriers and facilitators for help seeking in pregnant mothers versus postpartum mothers. While this review was approached in a systematic way, there is always potential that relevant articles were excluded due to the chosen search criteria. Despite these limitations, this
review adds to the current body of literature that currently exists related to help seeking among women with perinatal depression.

Implications

The findings from this study have two important implications. First, understanding factors that influence the decision to seek help or impede one’s ability to do so has implications for public policy. Results indicate that women do not have a proper understanding of perinatal depression and factors associated with it such as prevalence, risk factors and treatment options. As such, state legislatures can support maternal mental health by enacting laws which increase public education through awareness campaigns; require screening in the perinatal period; and, ensure women receive patient education specific to perinatal depression.

Second, the results of this study have implications regarding training and education of social workers. Social workers are employed across various settings, making them more likely to work with new mothers than other professionals (Keefe, Polmanteer, & Brownstein-Evans, 2017; Lind & Bachman, 2012). With the growing awareness of perinatal mood disorders and social workers’ contact with new mothers, it is imperative that social workers receive training in perinatal mood disorders. Keefe, Polmanteer, & Brownstein-Evans (2017) have created a training that can be used for continuing education workshops. The training provides information describing what post-partum depression is, how social workers can screen new mothers for postpartum depression and provides interventions at the micro, mezzo and macro levels. It is recommended that social workers receive training on maternal mental health issues including screening and treatment options.
Conclusion

In summary, perinatal depression is a pertinent health concern for mothers and infants. Not only is perinatal depression underdiagnosed, but few women who experience perinatal depression seek help. Help seeking behaviors have been obstructed due to barriers such as stigma, lack of knowledge about perinatal depression, pragmatic issues and not enough information about services. However, help seeking was found to be associated with increased knowledge of perinatal depression, social support and positive beliefs about mental health treatment. The findings from this review can help inform future policy and practice interventions. Social workers in particular can use these findings to implement systems of care for mothers with perinatal depression and help new mothers seek help if they are suffering from perinatal depression.
References


Felder, J.N. (2015). Targeting barriers to care for pregnant women at risk for depression:

Examining the role of stigma and the feasibility of a web-based depression prevention program. *ProQuest Dissertation*


Women's Healthcare


Appendix A1: Table
<table>
<thead>
<tr>
<th>Methodology</th>
<th>First Author (year)</th>
<th>Article Type</th>
<th>Perinatal, Pregnant, Postpartum</th>
<th>Number of Participants</th>
<th>Measure</th>
</tr>
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<tr>
<td></td>
<td>Goodman (2009)</td>
<td>Peer Review</td>
<td>pregnant</td>
<td>508</td>
<td>EDPS</td>
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<td>Peer Review</td>
<td>pregnant</td>
<td>60</td>
<td>EDPS</td>
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<td></td>
<td>Liberto (2011)</td>
<td>Dissertation</td>
<td>postpartum</td>
<td>130</td>
<td>PDSS</td>
</tr>
<tr>
<td></td>
<td>Maloni (2013)</td>
<td>Peer Review</td>
<td>postpartum 2 weeks and 6 months</td>
<td>53</td>
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</tr>
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<td></td>
<td>McGarry (2009)</td>
<td>Peer Review</td>
<td>2 to 6 months postpartum</td>
<td>337 (unweighted)</td>
<td>PRAMS</td>
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<td></td>
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<td>Peer Review</td>
<td>postpartum</td>
<td>5395</td>
<td>PRAMS</td>
</tr>
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<td></td>
<td>Goyal 2015</td>
<td>Peer Review</td>
<td>postpartum</td>
<td>12</td>
<td>EDPS</td>
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<td></td>
<td>Guy 2014</td>
<td>Peer Review</td>
<td>perinatal</td>
<td>25</td>
<td>CES-D</td>
</tr>
<tr>
<td></td>
<td>Henshaw (2016)</td>
<td>Peer Review</td>
<td>postpartum</td>
<td>39</td>
<td>EDPS</td>
</tr>
<tr>
<td></td>
<td>Henshaw (2011)</td>
<td>Peer Review</td>
<td>postpartum up to 3 months</td>
<td>23</td>
<td>EDPS</td>
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<td>postpartum</td>
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<td>Peer Review</td>
<td>postpartum</td>
<td>36</td>
<td>Self-Report</td>
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<tr>
<td>Mixed Methods</td>
<td>Kopelman (2008)</td>
<td>Peer Review</td>
<td>6-26 weeks pregnant</td>
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<td></td>
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<td></td>
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This figure depicts the PRISMA flowchart for selecting included studies in the systematic review.
CHAPTER II:
Predictors of help-seeking behaviors among women with postpartum depression
Abstract

Perinatal depression is among the most common complications associated with child-bearing having a period prevalence rate of 21.9%. Despite the prevalence of postpartum depression, recognition and treatment remains low. This paper examines the predictors of help-seeking behavior among a sample of postpartum women. Participants were recruited via social media. Binary logistic regression was used to analyze the data. Results indicate the severity of depression and favorable attitudes toward help-seeking were predictors of help-seeking behavior among postpartum women in this sample.

Key Words: health behaviors; postpartum; help-seeking; depression; maternal health

Introduction

Postpartum depression is a treatable mental disorder affecting an estimated 21.9% of women in the first year postpartum (Gaynes et al., 2005; Wisner, et al. 2013). Postpartum depression is characterized by debilitating symptoms including sadness, hopelessness, decreased self-esteem and feelings of failure, poor concentration and appetite, social withdrawal and disturbed sleep—in extreme circumstances, postpartum depression has been associated with thoughts of self-harm and infanticide (Glavin, 2012; Lucero, Beckstrand, Callister, & Sanchez Birkhead, 2012; Sealy, Fraser, Simpson, Evans, & Hartford, 2009).

While the cause of postpartum depression is not known, it is likely a combination of physical and emotional factors (National Institute of Mental Health, 2019). Risk factors for postpartum depression may include depression during pregnancy, past history of postpartum depression, history of mood disorders prior to pregnancy, stressful life events concurrent with or shortly after pregnancy and birth, medical complications associated with pregnancy or birth, lack of social
support, and behavioral health problems (National Institute of Mental Health [NIMH], 2019). Some studies indicate low income, less than a high school diploma, and younger age are also risk factors (Dennis et al 2004; Gross et al 2002; Reid, & Meadows-Oliver, 2006; Troutman and Cutrona, 1990).

The American Psychiatric Associations Diagnostic and Statistical Manual of Mental Disorders, fifth edition (DSM-5) classifies postpartum depression as a major depressive episode “with peripartum onset if onset of mood symptoms occurs during pregnancy or within 4 weeks following delivery.” However, there is debate among scholars and clinicians regarding the time frame of onset (Wisner, Moses-Kolko, & Sit, 2010). Commonly, scholars will classify depression that occurs with the first 12 months as postpartum depression (Wisner et al., 2013). Nonetheless, the experience of depression has the potential to cause harm and should be treated (Stewart, & Vigod, 2016).

Multiple adverse outcomes are associated with postpartum depression for both women and their offspring including the interference of child development, increased rates of insecure attachment and poor cognitive performance among offspring (Bernard-Bonnin, 2004). For women, the consequences can be grave. Suicide accounts for nearly 20% of postpartum deaths and is the second leading cause of death for postpartum women (Lindahl, Pearson, & Colpe, 2005). Despite the seriousness of postpartum depression, it remains underdiagnosed often due to women and providers not recognizing the symptoms (Bennett, Marcus, Palmer, & Coyne, 2010; Chaudron et al., 2005; Murray, Woolgar, Murray, & Cooper, 2003; O’Hara & Swain, 1996; Vesga-Lopez, Blaco, Keyes, Olfson, Grant & Hasin, 2008).
Barriers and Facilitators of treatment seeking

A recent systematic review examined the barriers and facilitators associated with seeking help among pregnant and postpartum (perinatal) women (Jones, 2019). This review illustrates the common barriers reported among women in the perinatal period. The most commonly reported barriers were feelings of stigma, shame, embarrassment, guilt and fear (Abrams et al, 2009; Felder, 2015; Guy, 2014; Henshaw, Durkin, & Snell, 2016; Lara-Cinisomo et al, 2014;Liberto, 2011; Maloni, Przeworski & Damato, 2013; Rhinehart, 2009; Sampson, Duron, Torres & Davidson, 2014; Shivakumar et al 2014; Ta Park, Goyal, Nguyen Lien & Rosidi, 2017; & Thomas et al. 2014). Other commonly cited barriers included minimal knowledge regarding postpartum depression (Felder, 2015; Henshaw, 2016), decreased social support (Rhinehart, 2009; Sampson et al., 2014; Thomas et al, 2014) and low self-efficacy (Rhinehart, 2009; Thomas et al., 2014).

Reporting related to facilitators of help-seeking is limited when examining women within the perinatal period. Facilitators included an enhanced desire or need to discuss their experiences of depression with someone (Abrams et al. 2009). Additionally, increased level of knowledge about depression (Goodmen et al. 2013), severity of the depression (Thomas et al. 2014), increased self-efficacy (Thomas et al. 2014), favorable attitudes toward seeking help (Liberto 2011) and past experience with receiving treatment for mental health concerns (Stone et al. 2015) were all facilitators of seeking help for depression in the perinatal period.

Theory of planned behavior

The purpose of this study is to examine predictors of help seeking behavior among women in the postpartum period. The author used the theory of planned behavior (Ajzen,1991) as a conceptual framework for the development of this study. The Theory of Planned Behavior (TPB)
identifies three main factors that influence intention to complete a specific behavior: 1) attitude; 2) subjective norm; and 3) perceived behavioral control. Attitude includes how a person evaluates the outcomes of performing the behavior (i.e. help-seeking) while subjective norm is related to how the individual perceives the acceptability of the behavior through the eyes of their peers. Both attitudes and subjective norm are directly related to the final behavior through behavioral intentions. Perceived behavioral control is indirectly associated with the final behavior and is concerned with how the person perceives their individual ability to perform the behavior (Ying-Lin, Oveisi, Burri, & Pakpour, 2017). For this study, the author is specifically interested in the factors that are associated with help seeking behavior among women in the postpartum period. Factors included from the theory of planned behavior include attitudes and stigma. The TPB posits that knowledge is a precipitating factor that affects all components of the final theory model. Therefore within this study, the author included knowledge of mental health problems (mental health literacy) as a variable in the model. Self-efficacy was also included as a proxy variable for perceived control.

**Method**

**Sample**

Participants were recruited through convenience and snowball sampling strategies using two social media platforms—Facebook and Reddit. Women within the postpartum period were recruited through targeted messages displayed within virtual communities on each social media site. To qualify, participants were required to 1) be 18 years or older; 2) identify as a woman who has given birth in the last 12 months; and 3) must not be currently pregnant. Users within the virtual communities were able to share the recruitment information with others who they established as meeting the eligibility requirements. Social media has been described as an
emerging technique to identify and recruit participants for research involving human subjects (Gerhart, 2015).

Data Collection

A survey was developed by the author using validated scales measuring postpartum depression; mental health knowledge; stigma; and self-efficacy. Demographic variables of interest were included at the beginning of the survey. Upon approval from the Institutional review board, the author began data collection. The data for this study were collected online using QuestionPro, an online data collection analysis platform. Data were gathered confidentially, with no email addresses or IP addresses saved. Data collection began late January 2019 and continued through June 2019. A total of 20 Facebook Virtual Communities (VCs) were identified and asked permission to post. Recruitment messages were posted in all but 3 VC’s. Facebook targeted ads were also utilized for one month to increase response rate. It is unknown if the targeted ads were successful. In addition to Facebook, five VC’s in Reddit accepted requests to post recruitment material. The total sample is ($N = 326$).

Dependent Variables

Help-seeking behavior. To measure help-seeking behavior, participants were asked “Have you sought care or treatment or made an appointment with a health care professional for depressive symptoms since the birth of your baby?” Possible responses were dichotomous, yes or no.

Independent variables

Past treatment for depression. Some research indicates that women who had previously sought help for depression were more likely to seek help for postpartum depression (McGarry, Kim, Sheng, Egger, & Baksh, 2009; Stone, Diop, Declercq, Cabral, Fox, & Wise, 2015). Past
treatment was measured as a dichotomous variable and respondents were asked the following question “Have you been treated for depression in the past?” Response options were dichotomous (yes/no).

**Level of current depression.** The Edinburgh Postnatal Depression Scale (Cox, Holden, & Sagovsky, 1987) was used to measure current level of depression among participants. The Edinburgh Postnatal Depression Scale (EDPS) is a 10-item questionnaire created to detect symptoms of postnatal depression (Cox et al., 1987). Responses are scored as 0, 1, 2, or 3 based on severity of symptoms; items three, five and ten are reversed scored. The questionnaire includes statements such as “In the past seven days, I have been able to laugh and see the funny side of things” and “In the past seven days, I have felt sad or miserable.” A score greater than 10 indicates that the mother may be suffering a depressive illness (Yonkers, Vigod, & Ross, 2010). The Cronbach’s Alpha coefficient for the EDPS was 0.864 in a 1998 study conducted by Lee et al. Within this study, the Cronbach’s alpha was .90.

**Mental health literacy.** Knowledge of postpartum depression is an important aspect of seeking help. There are no known studies examine mental health literacy as a predictor of help seeking for postpartum women. Mental health literacy was measured using a 26-item multicomponent mental health literacy measure developed by Jung, von Sternberg & Davis (2016). The scale has six Likert-scaled response options for participants (strongly disagree, disagree, neutral, agree, strongly agree, and, I don’t know). Multiple components of mental health literacy are measured including knowledge and beliefs about symptoms of mental illness, treatment and resources. In past studies this measure has dichotomized participant responses by coding answers “agree” and “strongly agree” as 1 and all other responses as 0 (Jung, von Sternberg, & King, 2017). All items from the beliefs section of the scale were reverse coded. The
possible scoring ranged from 0-26 with higher scores indicating higher mental health literacy. For purposes of this study, this variable was treated as a continuous variable. According to Jung et al (2016), the Cronbach’s alpha was .83 and the measure indicated good construct, known groups and convergent validity. The scale was originally validated with a sample of public housing staff (Jung et al., 2016). The Cronbach’s alpha in this study was .73. Mental health literacy has been associated with help seeking with various populations (Burns & Rapee, 2006; Felder, 2015; Henshaw, 2016).

**Self-Efficacy.** The General Self-Efficacy Scale (GSE) created by Schwarzer and Jerusalem (1995) is a 10 item self-report measure of which assesses for optimistic self-beliefs and includes statements like, “I can usually handle whatever comes my way.” Responses are made on a 4-point Likert scale (1=Not at all true, Hardly true, Moderately true, 4= Exactly true). The sum of all items indicates the total score, which ranges between 10 and 40. A higher score indicates greater self-efficacy. The Cronbach’s alpha for the GSE is between .76 and .90 (Schwarzer and Jerusalem, 1995). According to the developers, the scale has been widely tested and validated over 1000 times (Schwarzer and Jerusalem, 2013). In this study, the Cronbach’s alpha was .89. Self-efficacy is a protective factor against PPD (Zhang & Jin, 2016). Self-efficacy has been shown to influence certain behaviors such as help-seeking (King, Strunk, & Sorter, 2011).

**Attitudes toward professional psychological help-seeking.** The Attitudes Toward Seeking Professional Psychological Help Shortened Form [ATSPPH-SF] is a 10-item scale developed by Fischer and Farina (1995) and adapted from Fischer and Turners 29-item scale measuring attitudes toward professional help seeking. The psychometrics of the shorter measure have been found to match those of the original version. Scores from the new scale correlated at .87 (Fischer & Farina, 1995). The Cronbach’s Alpha coefficient for the ATSPPH-SF was .87 in a study
conducted by Palmer, 2009 with Jamaican Americans. In this study, the Cronbach’s alpha was .86. Attitudes toward seeking help will be the dependent variable, measured continuously. The score is calculated by adding the total sum, with higher scores indicating more positive attitudes toward seeking help.

Analytic Strategy

All analyses were conducted using IBM SPSS (25.0). Descriptive statistics were generated, followed by binary logistic regression analysis. Binary logistic regression was the most appropriate statistical analysis for the dichotomous measure of help-seeking behavior. None of the relevant variables were missing more than 4% missing data. Mean scores were calculated for attitudes toward professional help-seeking, mental health literacy, self-efficacy, and level of depression.

Results

Descriptives. Table 2.1 (Appendix B) provides descriptive statistics for the independent variables included in the analysis. The sample represents participants who provided complete data for the analysis. For the dependent variable, 32.9% of participants indicated they had sought treatment or care for depression since their child was born (N = 325). The prevalence of probable major depression (EPDS score ≥ 13) within this sample was 24.8%. The prevalence of probable minor depression (EPDS score ≥ 10) within this sample was 38%. A number of participants (13.5%) indicated they had experienced thoughts of self-harm in the last seven days.

Bivariate Associations. Bivariate associations indicated significant associations between past treatment history, level of mental health literacy, level of depression, self-efficacy, and attitudes toward professional psychological help-seeking. Race (0= minority, 1= non-minority), marital
status (0= non-partnered, 1= partnered), level of education, sexual orientation (0 = heterosexual, 1 = bisexual), and occurrence of NICU placement (0 = no, 1 = yes) were not significantly associated with help-seeking at the bivariate level. Both respondents age and infant age were tested as continuous variables and were not significantly associated with help-seeking at the bivariate level.

**Binary Regression.** The binary logistic regression analysis supported an overall significant relationship ($X^2 = 112.478, p < .001$). Significant predictors included past treatment seeking, severity of depression and favorable attitudes toward professional psychological help seeking. Those who had sought treatment for depression in the past were almost 5 times more likely to seek treatment for postpartum depression compared to those who had not sought treatment in the past for depression ($OR = 4.91, P < .001$). For every one-point increase in depression level, the odds of seeking help increased by 18% ($OR = 1.18, p < .001$). With each point of attitudes toward professional psychological help-seeking becoming more favorable, the odds of help-seeking increase by 15% ($OR = 1.15, p < .001$). Level of mental health literacy and self-efficacy were not statistically significant in this model. Table 2.2 (Appendix B) provides the results of the logistic regression.

**Discussion**

The purpose of this study was to examine which variables predict professional help-seeking among women in the postpartum period. The prevalence of probable major depression (EPDS score $\geq 13$) within this sample was 24.8%. The prevalence of probable minor depression (EPDS score $\geq 10$) within this sample was 38%. Women in this sample indicate high levels of point prevalence for postpartum depression than previously estimated by Gaynes, et al. (2005). This could be due to the sampling techniques used in this study.
The EPDS suggests referring mothers for mental health care if they score ten or above on the EPDS (Yonkers, Vigod, & Ross, 2010). Mothers who indicate thoughts of self-harm on question 10 should also be recommended for mental health care. In our sample, 13.5% of mothers responded with “yes, quite often,” “sometimes,” or “hardly ever” to question 10 “in the last seven days, the thought of harming myself has occurred to me.” Responses to this question should be taken seriously and addressed immediately by professionals. Self-harm and more specifically, suicide is a significant issue affecting postpartum women (Lindahl, Pearson, & Colpe, 2005).

As hypothesized, results indicate the level of depression and attitudes toward professional psychological help-seeking are significantly associated with help-seeking behavior. More specifically, the results suggest that women with higher levels of depression are more likely to seek help from a professional. These results are consistent with other literature on postpartum depression help-seeking (Goodman et al., 2013; Thomas et al., 2014). Furthermore, results indicate that women with more favorable attitudes toward professional psychological help-seeking were more likely to seek help. These results are aligned with the theory of planned behavior, which posits that attitudes toward a behavior will influence the individual's decision to act (Ajzen, 1991).

Access to treatment is, in part, influenced by a woman’s ability to ask for help from health professionals. Contrary to our hypothesis, mental health literacy was not a significant predictor of help-seeking behavior within the full model. At the bivariate level, mental health literacy was associated with help-seeking behavior. While there is a large body of research investigating the relationship between mental health literacy and help-seeking, little research has been done to examine this relationship related to postpartum depression. Further research is needed to
establish if increased mental health literacy affects help-seeking among postpartum women. Additionally, self-efficacy was not a significant predictor of help-seeking behavior within the full model but was significant at the bivariate level.

**Practice implications**

Considering that social work practitioners are likely to interact with pregnant and postpartum women across a multitude of settings there is a need for more training on postpartum depression for social work practitioners. Because social workers have training and knowledge in service connection and mental health problems, training these practitioners is a practical step in increasing detection of postpartum depression and the risk factors associated with it that may present during pregnancy.

Increasing discussion about postpartum depression including the risk factors associated with it and the symptoms is another necessary step to improving recognition of the problem. Zauderer (2009) suggests that child-birth education courses present an opportunity to improve knowledge of postpartum depression among pregnant women and their partners. The author is in agreement and would recommend childbirth educators and courses include material on the signs and symptoms of postpartum depression including what treatment options are available and where to find treatment.

**Limitations**

This study should be considered within the context of its limitations. Help-seeking behavior was measured dichotomously (yes or no) and does not account for the time frame in which participants sought help, if the participants are still seeking help, and from whom they received help. Second, representation among minority populations is limited. Although the author targeted groups dedicated to these mothers, participation was low. Future research should consider other
recruitment techniques that establish trust and rapport between the researcher and women within minority populations to increase participation. Next, our participants were recruited through two social media platforms—Facebook and Reddit. Despite their popularity, our sample was limited to women who use only these two sites. In the future, the use of other social media sites is suggested in combination with more traditional recruitment techniques. Finally, the study utilized a cross-sectional design, thus preventing the inference of causality.

**Conclusion**

This study examined the predictors of help-seeking behavior among women in the postpartum period. Results indicated that the level of depression was significantly associated with seeking-help among other variables such as past treatment for depression, and positive attitudes toward professional psychological treatment seeking. Future research recommendations include further investigation into mental health literacy and its effects on increasing help-seeking behaviors among women with post-partum depression.
Reference


Appendix B: Tables
Table 2.1
*Characteristics of the Sample (N= 326)*

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*Variable(s): Past treatment for depression, MHLS, EDPS, ATSPPH, GSE.*
CHAPTER III:
Postpartum help-seeking
Abstract

Postpartum depression is the most common complication associated with child-bearing. The current study investigated attitudes toward professional psychological help-seeking and the effects of stigma and mental health literacy on postpartum women recruited from social media (N = 326). Hierarchical linear regression was used to analyze the data and the interaction effect of stigma and mental health literacy. Stigma was negatively associated with attitudes toward professional psychological help-seeking, while mental health literacy was positively associated with attitudes toward professional psychological help-seeking. The interaction effect was not statistically significant. The results yield implications for screening practices and reducing stigma for mental health care in the postpartum period.

Key Words: mental health literacy; postpartum; help-seeking; stigma; maternal health

Introduction

Though the arrival of a new child is usually considered a momentous occasion, that joy – for numerous women – can quickly be overshadowed by the experience of depression in the subsequent weeks and even months. Postpartum depression (PPD) is the most common complication of childbirth (ACOG, 2018; Thurgood, Avery, & Williamson, 2009). Approximately 13-16% of women experience PPD in the United States (Robertson, Grace, Wallington, & Stewart, 2004), which may be a conservative estimate (Abrams, Dorning, & Curran 2009). Several other scholars have estimated that up to 50% of PPD cases are underdiagnosed (Chaudron et al., 2005; Murray, Woolgar, Murray, & Cooper, 2003; O’Hara & Swain, 1996).
Symptoms of PPD may begin as early as the first few weeks postpartum or as late one year postpartum (Gaynes et al., 2005; Mayo Clinic, 2019). Postpartum depression is characterized by debilitating symptoms including sadness, hopelessness, thoughts of self-harm, thoughts of harming the infant, decreased self-esteem and feelings of failure, poor concentration and appetite, social withdrawal and disturbed sleep (Lucero, Beckstrand, Callister, & Sanchez Birkhead, 2012; Sealy, Fraser, Simpson, Evans, & Hartford, 2009). Despite being a common complication, treatment for postpartum depression remains low (Bina, 2014).

**Health Behavior and Help-seeking**

Health behaviors are the actions of individuals that affect their health (Short & Mollborn, 2015). Health behaviors, such as help-seeking, comprise nearly 30% of an individual’s health outcomes (Remington, Catlin, & Gennuso, 2015). Health behaviors such as engaging in substance use, diet, and safe sex have been widely studied (Ramseyer Winter, Jones & O’Neill; Grant & Nash, 2018). Behaviors such as help-seeking, have also been studied among various groups of people, including postpartum women (Grissette, Spratling, & Aycock, 2018). Yet, there is a shortage of quantitative literature regarding help-seeking for postpartum depression.

Help-seeking is a dynamic behavior in which an individual seeks assistance from others (Rickwood, Deane, Wilson & Ciarrochi, 2005). Help-seeking is described in three parts: (1) formal help-seeking in which persons consult a mental health or other health professional; (2) informal help-seeking such as the reliance on family, friends and other social support systems; and (3) self-help in which individuals may rely on coping techniques, self-help books, or the internet to find more information related to their mental health concerns. Research conducted with depressed mothers suggests that informal help-seeking is chosen more often than formal
sources (Felder 2015; Goyal, 2015; Henshaw, 2016; Sampson, 2014) However, formal help, such as services provided by a professional mental health professional, may be one of the best sources of support for women suffering from postpartum depression considering the complexity of depression postpartum and the potential for intergenerational effects (Ride & Lanscar, 2016). While a growing body of research has begun to discuss and identify screening mechanisms to identify women with PPD in medical settings, few studies examine the help-seeking behaviors among women with PPD (Liberto, 2011). Because the effects of postpartum depression can be severe if left untreated, the author investigated attitudes toward professional psychological help-seeking among postpartum women examining what factors contribute to favorable attitudes toward professional psychological help-seeking.

**Theory of planned behavior**

Ajzen’s (1991) theory of planned behavior (TPB) offers a useful framework to understand help-seeking attitudes among postpartum women. TPB is primarily concerned with understanding why individuals carry out a behavior. One of the primary predictors for behavior completion is intention to perform the behavior. (Ajzen, 1991). Before intentions can increase behavior, the individual must have favorable attitudes about the behavior (Ajzen, 1991). While other factors (subjective norm and perceived behavioral control) are also included as factors that influence intention, some studies have indicated that attitudes toward a certain behavior are the primary predictor for intention (Ajzen, 1991; Deane, Skogstad & Williams, 1999; Smith, Tran & Thompson, 2008). In this study, attitudes toward psychological help-seeking were examined and how stigma and mental health literacy affect attitudes toward psychological help seeking among postpartum women.
**Stigma**

Stigma associated with receiving treatment for mental health problems has long been identified as a barrier to seeking help (Komiya, Good & Sherrod, 2000; Stefl & Prosperi, 1985). In this study, perception of stigma associated with psychological help-seeking is examined. A previously conducted literature review identified stigma as a barrier to seeking help for postpartum depression (Jones, 2019). As such, the author asserts the importance of further examining how stigma affects attitudes toward help-seeking as it relates to postpartum depression.

**Mental Health Literacy**

The construct known as mental health literacy (MHL) arose through health literacy (HL). HL is “the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions” (Ratzan & Parker, 2000, p.6). According to Jorm (2000), similar in definition to health literacy, MHL is comprised of the following components:

“(a) the ability to recognize specific disorders or different types of psychological distress; (b) knowledge and beliefs about risk factors and causes; (c) knowledge and beliefs about self-help interventions; (d) knowledge and beliefs about professional help available; (e) attitudes which facilitate recognition and appropriate help-seeking; and (f) knowledge of how to seek mental health information” (Jorm 2000, p.396).

Limited research has been conducted applying the construct of MHL concerning postpartum depression and its effects on help-seeking behaviors. Given the scarcity of this research and the
consequences of untreated postpartum depression, there is a need to advance knowledge regarding this topic.

**Purpose of the Study**

The purpose of this study was to examine the role of stigma and mental health literacy on attitudes toward professional psychological health help-seeking. Despite being predictors of mental health help-seeking, few studies examine these variables. Furthermore, to the author's knowledge, no study to date has examined these variables with postpartum women. It was hypothesized that stigma would have a direct negative relationship on attitudes toward professional psychological help-seeking (ATPPHS), while mental health literacy would have a positive relationship with ATPPHS. The author also hypothesized that mental health literacy would moderate the relationship between stigma and ATPPHS.

**Methods**

**Sample**

Non-probability purposive and snowball sampling strategies were used to collect information from new mothers across the United States. Participants were recruited through two social media platforms, Facebook and Reddit. Virtual communities on each of these platforms were used to target women within the postpartum period. Users within the virtual communities were able to share the recruitment information with others who they identified as meeting the eligibility requirements. Participants were recruited through social media, as this was the most feasible method of data collection given the resources of the study.

**Data Collection**

The current study used a cross-sectional design with an online survey using QuestionPro. To qualify, participants were required to 1) be 18 years or older, 2) identify as a woman who has
given birth in the last 12 months, 3) must not be currently pregnant. The survey was available in English only. After obtaining approval from the Institutional Review Board, participants were recruited for six months starting in late January 2019 using www.Facebook.com (Facebook)– a popular social media platform. The author adhered to the policies of the platform and targeted virtual communities (VC) for new mothers. Upon identifying a virtual community for new mothers, the author requested permission from VC administrators. A total of 20 VCs were identified, and permission requested. Of these 20, administrators from one group denied access for the researcher to recruit, two VC’s have requests pending that remain unanswered. A total of 17 groups permitted access to recruit postpartum women.

Additionally, the author posted recruitment materials to a second social media platform www.Reddit.com (Reddit). Posts were made in five groups. Social media has been identified as an emerging technique to identify and recruit participants for research involving human subjects (Gearhart, 2015). A total of 326 postpartum women completed the survey.

**Measures**

**Attitudes toward help-seeking.** The Attitudes Toward Seeking Professional Psychological Help Shortened Form [ATSPPH-SF] is a 10-item scale developed by Fischer and Farina (1995) and adapted from Fischer and Turners 29-item scale measuring attitudes toward professional help-seeking. The psychometrics of the shorter scale have matched those of the original version. Scores from the new scale correlated at .87 (Fischer & Farina, 1995). The Cronbach's Alpha coefficient for the ATSPPH-SF was .87 in a study conducted by Palmer (2009) with Jamaican Americans. Attitudes toward seeking help will be the dependent variable, measured continuously. Items were rated on a 4-point Likert-type scale (3 = Agree, 0 = Disagree). Items 2, 4, 8, 9, and 10 were reverse scored. The score was calculated by adding the total sum, with higher scores
indicating more positive attitudes toward seeking help. In the present study, the Cronbach’s alpha was .86.

**Mental Health Literacy.** Mental Health literacy was measured using a 26-item scale developed by Jung, von Sternberg & Davis (2016). The items have six Likert-scaled response options for participants (strongly disagree, disagree, neutral, agree, strongly agree, and, I don't know). Multiple components of mental health literacy are measured, including knowledge and beliefs about symptoms of mental illness, treatment, and resources. In past studies, this measure has dichotomized participant responses by coding answers "agree" and "strongly agree" as one and all other responses as 0 (Jung, von Sternberg, & King, 2017). All items from the beliefs section of the scale were reverse coded. The possible dichotomized score ranged from 0-26 with higher scores indicating higher mental health literacy. For purposes of this study, this variable was treated as a continuous variable. According to Jung et al. (2016), Cronbach's alpha was .83, and the measure indicated good construct, known groups, and convergent validity. Mental health literacy has been associated with help-seeking with various populations (Burns & Rapee, 2006; Felder, 2015; Henshaw, 2016). The Cronbach’s alpha in this study was .73.

**Stigma.** Stigma was measured using an adapted version of the Stigma Scale for Receiving Psychological Help (SSRPH) for Personal Counseling. This is a 5-item scale with a 4-point response option Strongly Disagree, Disagree, Agree, Strongly Agree. This scale had an internal consistency of $\alpha = .72$ (Komiya et al., 2000). Construct validity has been established, resulting in a negative relationship between the ATSPPHS and the SSRPH ($r = -.40$, $p < .0001$; Komiya et al., 2000). This finding is in alignment with the literature, which has cited more stigma is related to less positive attitudes toward help-seeking (Surapaneni, 2015). The scale was modified to
assess public stigma associated with postpartum depression as shown in Appendix A with the original scale shown in Appendix B. This scale has been modified in the past to fit with other studies such as in Surapaneni (2015) where the author measured stigma to receiving career counseling. The Cronbach’s alpha in this study was .84.

**Postnatal Depression.** The Edinburgh Postnatal Depression Scale (EDPS) is a 10-item questionnaire created to detect symptoms of postnatal depression (Cox et al., 1987). Responses are scored as 0, 1, 2, or 3 based on the severity of symptoms; items three, five, and ten are reversed scored. The questionnaire includes statements such as "I have been able to laugh and see the funny side of things" and "I have felt sad or miserable." A score greater than 13 indicates that the mother may be suffering a depressive illness. The Cronbach's Alpha coefficient for the EDPS was 0.864 in a 1998 study conducted by Lee et al. Participants' scores will be split into two groups, those with scores of 13 or greater will be included in the "high risk" scoring group and those with scores of 12 and below will be included in the "low risk" scoring group. At the end of the study, regardless of the score, participants were given a list of resources for postpartum depression. The Cronbach’s alpha in this study was .90.

**Demographic Variables**

All socio-demographic variables were collected via self-report on a demographic form. The demographic information collected includes maternal age based on self-report, infant age based on infant date of birth, race/ethnicity, marital status, education level, past treatment for depression and current depression treatment, sexual orientation, income, and current health insurance status.
Data Analysis

IBM SPSS (25.0) was used to conduct missing data analysis and produce descriptive and frequency statistics. Results revealed less than 5% missing data on all scale items. The mean score of all scale (EPDS; Stigma; MHL; ATPPSH) items were calculated. The result of Cooks Distance and Mahalanobis Distance tests indicated no influential outliers. Data from 326 postpartum women residing in the US were used for data analysis. A hierarchical regression analysis was conducted to analyze the effect of perceived stigma and level of mental health literacy on attitudes toward professional psychological help-seeking. The first step of the regression consisted of stigma. Mental health literacy was added as the second step, and the interaction of stigma and mental health literacy was added as the third step.

Results

The majority of the sample was Caucasian (89.6%), heterosexual (93.6%) women with an average age of 31.45 (SD = 4.56; Range: 20-45). Over two-thirds (69.6%) of the participants had a 4-year college degree or higher. Nearly 44% of participants had been treated for depression in the past, and 32.8% of participants had sought treatment for depression since the birth of their child.

Generally, women in the sample experienced high rates of postpartum depression. The prevalence of probable depression (EPDS score \( \geq 10 \)) within this sample was 38%. Women in this sample experienced a moderate amount of perceived stigma related to help-seeking for postpartum depression (\( \bar{x} = 10.39, SD = 3.38 \)). Mental health literacy was relatively high for the sample (\( \bar{x} = 21.48, SD = 3.47 \)). Participants also reported favorable attitudes toward
professional psychological help-seeking ($\bar{x} = 22.43$, SD = 5.48). Table 3.1 (Appendix C) shows the full descriptive statistics for participants.

The overall regression model predicted approximately 33.5% of variance in attitudes toward professional psychological help-seeking ($R^2 = .335$, $F$ (3,315) = 52.93, $p < .001$). The hierarchical multiple regression revealed that at stage one, stigma contributed significantly to the regression model ($F$ (3, 317) = 66.250, $p < .001$) and accounted for 17.3% of the variance in attitudes toward professional psychological help-seeking. Introducing the Mental Health Literacy variable predicted approximately 16% of the variance in attitudes toward professional psychological help-seeking, and this change in $R^2$ was significant ($\Delta F$ (3, 316) = 75.84, $p < .001$, $\Delta R^2 = .16$). Finally, adding the interaction between stigma and mental health literacy in step three, the $R^2$ change was not statistically significant ($\Delta F$ (3, 315) = 1.038, $p = .309$, $\Delta R^2 = .002$). Table 3.2 (Appendix C) shows the regression analysis showing stigma, mental health literacy, the interaction effect, as predictors of attitudes toward professional psychological help-seeking.

A post-hoc analysis was conducted to determine if an interaction effect occurred at varying levels of mental health literacy. The author converted all variables to z-scores and created two groups (low MHL, high MHL) using the standard deviation of .5 as the cutoff point. The results of this analysis were approaching significance. Further research should be done to examine the effects of the interaction among a sample with lower mental health literacy knowledge.

**Discussion**

Results from the study indicate that higher levels of perceived stigma are associated with less favorable attitudes toward professional psychological help-seeking. Additionally, higher levels of mental health literacy were associated with more favorable attitudes toward
professional psychological help-seeking. The author hypothesized that the interaction between stigma and mental health literacy would be significant; however, the interaction was non-significant, failing to reject the null hypothesis. Despite this finding, it is possible that the mental health literacy knowledge in this sample was not diverse enough to detect an interaction effect. The sample was comprised of well-educated women which may have influenced their knowledge of mental health problems and how to access services. More research should be conducted on the effects of mental health literacy on attitudes toward help-seeking behaviors.

There are several implications to be discussed regarding results of this study. As previously cited above, TPB posits that favorable attitudes are an important precipitator to behavior intentions and eventually taking action to carry-out the behavior. The focus of this study was to examine how stigma and mental health literacy affect attitudes toward professional psychological help-seeking. As such, the results indicate that high levels of knowledge regarding mental health problems enhance personal attitudes toward seeking help for postpartum depression. As a result, the author suggests that health care professionals provide pregnant and postpartum women with information regarding postpartum depression, the consequences, signs, symptoms and information on treatment options. Providing women with this information may improve their knowledge of postpartum depression and reduce the stigma around seeking help.

Public health efforts to reduce stigma related to mental health care for postpartum depression are also strongly encouraged. Past public health campaigns have shown effectiveness in influencing health behaviors such as the truth campaign designed to reduce teen smoking (Farrelly, Davis, Haviland, Messeri & Healton, 2005). Similarly, a campaign designed to reduce the stigma related to men seeking help for mental health issues entitled “Man Therapy” was
found to be well-received and increased attitudes about seeking help among viewers of the campaign (Spencer-Thomas, Hindman, and Conrad, 2014). Maryland and Washington state both have depression helplines for women suffering from postpartum depression and run websites dedicated to providing information about postpartum depression. The city of Houston to provide resources to community members and practitioners about postpartum depression. The blue dot project is another campaign designed to increase awareness of postpartum depression and is run through social media (Mental Health America, 2008). The presence of these efforts is encouraging however, the presence of a national campaign dedicated to reducing stigma about seeking help is highly recommended.

Another recommendation for health professionals includes increasing the frequency of screening pregnant and postpartum women for postpartum depression. Current recommendations include screening postpartum women at their 6-week postpartum appointment. However, postpartum depression may have an onset beyond 6-weeks postpartum and go undetected. Some scholars have discussed the potential for screening at well-baby visits throughout the first year as women are more likely to attend those visits and the newborn is seen frequently throughout the first year. While well-baby visits offer an opportunity to detect postpartum depression benefiting the baby and mother, there are some ethical concerns regarding pediatricians screening adult women. Alternatively, the author suggests implementation of screening for new mothers throughout the first year postpartum. Social workers at the hospitals where women deliver could be critical in contributing to the screening of postpartum women and referral for services or immediate intervention if necessary. Currently, Israel mandates screening for postpartum
depression in all mother and child healthcare centers (Glasser, et al., 2018) providing the US with an example to consider replicating.

Limitations

This is a cross-sectional sample of women capturing their attitudes of help-seeking, mental health literacy, and stigma experiences at one point in time. Participants were a convenience sample recruited using Facebook and Redditt, which are online social media platforms designed for virtual social connection. Only those women utilizing social media were able to access the survey, limiting the participation of women who do not use social media. Response bias is a threat to validity in this sample, and it's possible that women only participated in the study if they had a direct interest in the topic. Women with limited access to the internet may have been excluded from the study. Finally, women in this study was highly educated with high levels of mental health literacy scores. This may have impacted the ability to detect an interaction effect. Additionally, this study cannot be generalized to women outside of this study.

Conclusion

Postpartum depression is the most common complication associated with child-bearing. The long-term effects, if left untreated, can be severe. The results of this study suggest that decreased perception of stigma and increased mental health literacy can improve attitudes toward professional psychological help-seeking. Further research is needed to examine mental health literacy and its effect on attitudes toward professional psychological help-seeking in addition to its long-term effect on help-seeking behaviors. The findings of this study are important to consider in respect to maternal and child health and family well-being as postpartum depression affects the entire family.
References


https://www.mayoclinic.org/diseases-conditions/postpartum-depression/symptoms-causes/syc-20376617

Mental Health America (2008) Maternal depression, making a difference through community action: A planning guide. Retrieved from:

https://www.mhanational.org/sites/default/files/maternal_depression_guide.pdf


Appendix C: Tables
Table 3.1  
*Characteristics of the Sample (N= 326)*

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Past Treatment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>183</td>
<td>56.3</td>
</tr>
<tr>
<td>No</td>
<td>142</td>
<td>43.7</td>
</tr>
<tr>
<td>Level of Education</td>
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<td></td>
</tr>
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<td>Less than a high school diploma</td>
<td>1</td>
<td>0.3</td>
</tr>
<tr>
<td>High School Diploma/GED</td>
<td>25</td>
<td>7.7</td>
</tr>
<tr>
<td>Some College/ 2-year degree</td>
<td>72</td>
<td>22.1</td>
</tr>
<tr>
<td>Four Year Degree</td>
<td>125</td>
<td>38.5</td>
</tr>
<tr>
<td>Graduate Degree or higher</td>
<td>102</td>
<td>31.4</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minority</td>
<td>34</td>
<td>10.4</td>
</tr>
<tr>
<td>Non-Minority</td>
<td>289</td>
<td>88.7</td>
</tr>
<tr>
<td>Marital Status</td>
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<td></td>
</tr>
<tr>
<td>Non-Partnered</td>
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<td>3.4</td>
</tr>
<tr>
<td>Partnered</td>
<td>314</td>
<td>96.3</td>
</tr>
<tr>
<td>Sexual Orientation</td>
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<tr>
<td>Bisexual</td>
<td>17</td>
<td>5.3</td>
</tr>
<tr>
<td>Heterosexual</td>
<td>305</td>
<td>94.7</td>
</tr>
<tr>
<td>NICU</td>
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<td></td>
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<tr>
<td>No</td>
<td>279</td>
<td>86.4</td>
</tr>
<tr>
<td>Yes</td>
<td>44</td>
<td>13.6</td>
</tr>
<tr>
<td>Infant age in days</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>326</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>202.87</td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td>100.99</td>
<td></td>
</tr>
<tr>
<td>Maternal Age</td>
<td>233</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>31.45</td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td>4.56</td>
<td></td>
</tr>
</tbody>
</table>
Table 3.2

Summary of Hierarchical Regression Analysis for Variables Predicting Attitudes Toward Professional Psychological Help-Seeking (N = 326)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 1</th>
<th></th>
<th></th>
<th>Model 2</th>
<th></th>
<th></th>
<th>Model 3</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE B</td>
<td>β</td>
<td>B</td>
<td>SE B</td>
<td>β</td>
<td>B</td>
<td>SE B</td>
</tr>
<tr>
<td>Stigma</td>
<td>-.67</td>
<td>.08</td>
<td>-.42**</td>
<td>-.55</td>
<td>.076</td>
<td>-.34**</td>
<td>-.54</td>
<td>.077</td>
</tr>
<tr>
<td>MHL</td>
<td>.64</td>
<td>.73</td>
<td>.41**</td>
<td>.624</td>
<td>.074</td>
<td>.40**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stigma x MHL</td>
<td></td>
<td></td>
<td></td>
<td>0.18</td>
<td>.18</td>
<td>.05</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$R^2$</td>
<td>.17</td>
<td></td>
<td>.33</td>
<td>.33</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$F$ for change in $R^2$</td>
<td>66.25**</td>
<td></td>
<td>75.84**</td>
<td>1.04</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note: Stigma and mental health literacy were centered at their means.  
*p < .05.  **p < .01.
CHAPTER IV: CONCLUSION

The first chapter of this dissertation presented the results of a systematic review of the barriers and facilitators to help-seeking for perinatal depression. In summary, perinatal depression is a pertinent health concern for mothers and infants. Not only is perinatal depression underdiagnosed, but few women who experience perinatal depression seek help. Help seeking behaviors have been obstructed due to barriers such as stigma, lack of knowledge about perinatal depression, pragmatic issues and not enough information about services. However, help seeking was found to be associated with increased knowledge of perinatal depression, social support and positive beliefs about mental health treatment. The findings from this review can help inform future policy and practice interventions. Social workers in particular can use these findings to implement systems of care for mothers with perinatal depression and help new mothers seek help if they are suffering from perinatal depression.

The second chapter of this dissertation examined the predictors of help-seeking behavior among women in the postpartum period. Results indicated that the level of depression was significantly associated with seeking-help among other variables such as past treatment for depression, and positive attitudes toward professional psychological treatment seeking. Future research recommendations include further investigation into mental health literacy and its effects on increasing help-seeking behaviors among women with post-partum depression.

The third chapter of this dissertation examined the role of stigma and mental health literacy on attitudes toward help-seeking for postpartum depression. Postpartum depression is the most common complication associated with child-bearing. The long-term effects, if left untreated, can be severe. The results of this study suggest that decreased perception of stigma and increased
mental health literacy can improve attitudes toward professional psychological help-seeking. Further research is needed to examine mental health literacy and its effect on attitudes toward professional psychological help-seeking in addition to its long-term effect on help-seeking behaviors. The findings of this study are important to consider in respect to maternal and child health and family well-being as postpartum depression affects the entire family.
VITA

Aubrey Jones was born and raised in Menifee, CA. At seventeen she left California for a new life in Missoula Montana where she attended the University of Montana obtaining a Bachelor of Art’s degree in Communication Studies and Psychology. While at the University of Montana, Aubrey served as an AmeriCorps Vista member for the UM Allies program. Following this, she worked as a victim advocate for survivors of sexual abuse and sex trafficking and eventually as a research assistant for a non-profit agency in Jacksonville, FL. Aubrey went on to earn a master’s degree in social work from the Florida State University. Aubrey has worked in integrated healthcare in various roles including as a medical social worker and crisis responder. Her medical work and feminist perspective led to her research interests regarding women’s health.

Aubrey Jones' research focuses on reproductive health including mental health and access to healthcare services in rural communities. Her overall research mission is to enhance the health and wellbeing of women and families through prevention research and policy.

Aubrey has taught several courses independently, at both the Master’s and Bachelor’s level, and in face-to-face and online formats. She enjoys mentoring students, particularly those who come from disadvantaged backgrounds similar to her own and students who identify as LGBTIQ.