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Mothers Know Best: Guidance for Healthcare Providers on Early Identification of Perinatal Mental Health Disorders

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Mothers Know Best: Guidance for Healthcare Providers on Early Identification of Perinatal Mental Health Disorders

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Abstract

Introduction: The perinatal period has been associated with an increased risk of developing psychiatric disorders among women. Perinatal mental health disorders (PMHD) are highly prevalent, yet highly underrecognized and untreated. The involvement of medical providers, especially obstetrics/gynecology and pediatric providers, in the early identification of PMHD is critical to ensure women with PMHD receive appropriate supports. However, providers lack the education, training, and ability to identify and screen for PMHD as well as the knowledge of appropriate referrals. **Objective:** This study explores the existing issues with healthcare providers' early identification practices of PMHD from the perspective of ten mothers and to with the purpose of making recommendations to improve the early identification process. **Results:** Qualitative analysis revealed two main themes: 1) the importance of perinatal mental health training for providers, and 2) the importance of ongoing, relational screening. **Conclusion:** There is an enormous need for increased involvement of medical providers in the early identification process. Medical providers should be provided with education and training to increase their PMHD screening practices, expand their knowledge on the presentation of PHMD and connect women with appropriate supports.

Keywords: perinatal, postpartum, pregnancy, anxiety, depression, obsessive-compulsive disorder, screening, identification, referrals, obstetrics, gynecology, pediatric

Mothers Know Best: Guidance for Healthcare Providers on Early Identification of Perinatal Mental Health Disorders

The perinatal period has been associated with an increased risk of developing psychiatric disorders among women as it is a time of major transition as well as biological and hormonal changes (Accortt & Wong, 2017; Rallis, Skouteris, McCabe & Milgrom, 2014). Common perinatal mental health difficulties include depression, anxiety, obsessive-compulsive disorder (OCD), and posttraumatic stress disorder (PTSD) (Brandes, Soares & Cohen, 2004; O'Hara & Wisner, 2014). Although all PMHD are highly prevalent and often co-occur (Dindo, Elmore, O'Hara & Scott, 2017; Meades & Ayers, 2011), past research has focused largely on perinatal depression (Agrati et al., 2015). Recently, researchers have started to explore other PMHD, such as anxiety, OCD, and PTSD; however, sufficient attention has not been given to these perinatal difficulties. The present study explored the existing issues with healthcare providers' early identification practices of PMHD from the perspective of ten mothers with the purpose of making recommendations to improve the early identification process. In particular, the study focused on perinatal depression and anxiety, particularly POCD. Below, we review the existing literature on the prevalence of PMHD, its impact on women and their families, PMHD screening practices, the involvement of OB/GYN and pediatrics healthcare providers in the early identification of PMHD, and barriers to identification, screening, treatment, and referrals of PMHD.

The Perinatal Period

There is inconsistency in the field regarding what is considered to be the perinatal period. The World Health Organization (n.d.) describes that the perinatal period commences at 22 completed weeks of gestation and ends seven days after birth. The Diagnostic and Statistical

Manual of Mental Disorders, 5th edition (DSM-5, American Psychiatric Association, 2013) indicates that in order to add a specifier of "with peripartum onset" to a mood disorder (e.g., major depressive disorder, bipolar disorder), symptoms have to have started in pregnancy or in the four weeks following delivery. Other researchers describe the perinatal period as the period between pregnancy through the first year postpartum (Ali, 2018; O'Hara & Wisner, 2014), and some others propose an even broader definition of the perinatal period. For example, Moran Vozar, and colleagues (2020) state that the term "perinatal" should encompass all of a woman's pregnancies (including miscarriage and other fetal loss) through two or more years postpartum and focus on whether the woman views her symptoms as related to the prior pregnancy, versus a specific time period. In sum, the definition of "perinatal" differs significantly among clinicians, researchers, and providers, which has a further impact on triage, screening, and treatment for perinatal mental health disorders (Moran Vozar et al., 2020). For the purpose of our study, we used a broader definition of "perinatal", such as Moran Vozar et al. (2020), which focuses on whether the woman views her difficulties as related to the prior pregnancy, versus a specific time period.

Prevalence of PMHD

The prevalence of PMHD reported in the literature varies considerably depending upon multiple factors, including the definition of the disorder, racial and cultural differences in the samples, the period over which the prevalence is determined, whether screening instruments were utilized as opposed to clinical interviewing, and whether prevalence was determined based on an established diagnosis as opposed to presence of symptoms only (Accortt & Wong, 2017; Marchesi et al., 2016; Moran Vozar et al., 2020: O'Hara & Wisner, 2014). The reported prevalence of perinatal depression ranges from 7 to 37% of pregnant and postpartum women within the first year after delivery (Avalos, Raine-Bennett, Chen, Adams, & Flanagan, 2016; Gavin et al., 2005; Lee

et al., 2007; O'Hara & Wisner, 2014). Anxiety disorders have been estimated to range from 6 to 54% (Accortt & Wong, 2017; Dennis, Falah-Hasssani, & Shiri, 2018; Lee et al., 2007). The prevalence of perinatal OCD (POCD) has been reported to range from 1.7% to 63.5% (Chaudron & Nirodi, 2010; Zambaldi et al., 2009). Finally, the prevalence of perinatal PTSD (P-PTSD) ranges between 3% to 39% (Moran Vozar et al., 2020). Even though there are significant differences among reported ranges in the literature, it is clear that perinatal mood and anxiety disorders are highly prevalent. Moreover, PMHD often co-occur, potentially exacerbating morbidities for women and their families (Dindo et al., 2017; Meades & Ayers, 2011). This has implications on prevention, identification, and treatment practices of PMHD as interventions that target a specific PMHD, such as perinatal depression, may not be enough and might to target the full spectrum of emotional difficulties that women may experience during the perinatal period. In sum, becoming a mother is often described as one of the happiest periods in a woman's life, yet in reality, it is not the case for many women.

Impact of PMHD on Women and their Families

PMHD affects the wellbeing of women as well as the wellbeing of the family as a whole (Cena et al., 2020). Associations have been found between maternal mental health issues and complications during pregnancy and labor, such as preeclampsia, high fetal heart rate, spontaneous preterm labor, and low infant weight (Accortt & Wong, 2017; Coleman, Carter, Morgan & Schulkin, 2008). Moreover, perinatal mental health issues can interfere with the parent-child relationship, with the risk of significant consequences over the years for the infant's neurodevelopmental, social, and emotional development (Accortt & Wong, 2017; Cena et al., 2020). More specifically, postpartum mood and anxiety disorders have been linked to difficulties in infancy, such as negative behavioral reactivity to novel situations, psychomotor difficulties,

attention-related concerns, linguistic difficulties, and learning problems (Cena et al., 2020; Coleman, Carter, Morgan & Schulkin, 2008). Given the extensive evidence on the relationship between maternal perinatal mental health and child development, treatment of perinatal mental health disorders is critical as it can decrease many of the negative sequalae and improve families' wellbeing.

Early Identification and Screening Practices

The greatest barrier to perinatal mental health treatment is identification (Accortt & Wong, 2017) as women who are not asked about their emotional wellbeing are less likely to seek support (Fairbrother, Corbyn, Thordarson, Ma, & Surm, 2019). Despite the high prevalence of perinatal mood and anxiety disorders, they are highly underdiagnosed and often underrecognized. In fact, fifty percent of women with perinatal mood and anxiety disorders are never identified (Accortt & Wong, 2017). Moreover, there is a lack of research and intervention programs designed to prevent perinatal mood and anxiety difficulties (Cena et al., 2020).

One of the ways to identify women that may be struggling with perinatal mental health disorders is through the administration of validated screening instruments. Although screening for PMHD is currently underway, it is not sufficient, and standards of screening are at times unclear. There is an overwhelming amount of potential perinatal mental health screening tools to choose from. However, there is lack of methodically sound studies examining their quality and diagnostic accuracy (Cena et al., 2020; Fairbrother et al., 2019; Kingston et al., 2015). Moreover, there is controversy over what cut-off scores to utilize (Accortt & Wong, 2017).

Transdiagnostic Perinatal Screening

To our knowledge, there are no transdiagnostic screening instrument designed for the perinatal period, which would be important given the high comorbidity among PMHD. However,

researchers have utilized the General Health Questionnaire (GHQ; Goldberg, 1972) in perinatal samples. The GHQ is a measure of non-psychotic psychopathology used for the general population. It has four different versions: 60-item, 30-item, 28-item, and 12-item versions. Meades and Ayers (2011) conduced a meta-analysis and evaluated thirteen studies that validated versions of the GHQ (except the 60-item version) in perinatal samples. They concluded that the GHQ, particularly the 12-item and the modified 30-items version are suitable as a screener for general perinatal psychopathology (Meades & Ayers, 2011)

Perinatal Depression Screening

For perinatal depressive symptoms, the Edinburgh Postnatal Depression Scale (EPDS; Cox, Holden, & Sagovsky, 1987) is the most widely used screening tool (Cena et al., 2020). It includes ten items, one of them inquiring about suicidality. Higher scores indicate higher risk of depression (Cox, Holden, & Sagovsky, 1987). The Patient Health Questionnaire - 9 Item (PHQ-9; Kroenke, Spitzer & Williams, 2001) is also widely used. In fact, it is the most used screening tool in primary care settings (Thase, 2016) and the third most common tool for postpartum depression (de Moraes, Lorenzo, Pontes, Montenegro, Cantilino, 2017) although it was originally designed for the general population.

Perinatal Anxiety Screening

With regard to anxiety screening tools, the State-Trait Anxiety Inventory (STAI, Spielberger, Gorsuch, Luschene, Vagg, & Jacobs, 1983), the Generalized Anxiety Disorder – 7 Items (GAD-7; Spitzer, Kroenke, Williams, & Löwe, 2006), and the three anxiety items from the EPDS are commonly used to screen for symptoms of anxiety during the perinatal period (Accortt & Wong, 2017; Fairbrother et al., 2019; Meades & Ayers, 2011). However, researchers have concluded that there are no anxiety instruments that utilize high enough quality evidence of

diagnostic accuracy (i.e., AUC≥0.8, J Index≥1, NPV≥8, LR+≥4.0) (Fairbrother et al., 2019; Meades & Ayers, 2011).

Perinatal Obsessive-Compulsive Disorder Screening

Research on POCD has generally used the Yale-Brown Obsessive-Compulsive Symptom Checklist (Y-BOCS-SC; Goodman et al., 1989) and the Obsessive Compulsive Inventory – Revised (OCI-R; Foa et al., 2002), which were developed to measure OCD in the general population (Fairbrother et al., 2019; Marchesi et al., 2016; Miller et al., 2013; Zambaldi et al., 2009). However, these generalized instruments have not been validated in women with perinatal OCD and may not capture the experiences that are specific to the postpartum period. The Perinatal Obsessive Compulsive Scale (POCS; Lord, Rieder, Hall, Soares & Steiner, 2011) is a self-report questionnaire with a prenatal and a postpartum version. To our knowledge, this is the only scale that has been developed for and validated in women with perinatal OCD.

Perinatal Posttraumatic Stress Disorder Screening

With regards to P-PTSD screening, the Impact of Events Scale (IES; Horowitz, Wilner & Alvarez, 1979) and the PTSD Checklist (PCL; Weathers, Litz, Herman, Huska, & Keane, 1993) are commonly used to assess P-PTSD symptoms (Accort & Wong, 2017; Fairbrother et al., 2019). However, these screeners have been designed for the general population. Thus, the Perinatal PTSD Questionnaire (Callahan et al., 2006) may be a better tool as it is specific to the perinatal period and might assist in a faster identification of symptoms of P-PTSD (Moran Vozar et al., 2020).

Clinical Interviewing

Another way to identify women who may be struggling with perinatal mental health difficulties is through a clinical interview. The Mini International Neuropsychiatric Instrument (MINI, Sheehan, 1998) is a brief structured diagnostic interview widely used to assess for the 17

most common psychiatric disorders in the DSM-5 and the ICD-10. Although it was originally designed for the general population, some studies have utilized it to assess perinatal mental health difficulties (Adysnki, Zimmer, Thorp & Santos, 2019; van der Zee-van den Berg et al., 2017). However, to our knowledge, no study has validated the tool in the perinatal population. Postpartum Support International (PSI), an organization that creates awareness among public and professional communities of perinatal mental health, designed a Perinatal Health Discussion Tool (PSI, n.d.) with the purpose of assessing for common perinatal mental health symptoms (e.g., intrusive thoughts of harm, hopelessness, irritability, foggy brain, delusions) as well as risk factors (e.g., history of mental health disorders, infant loss, relationship difficulties, baby in the NICU). Although this discussion tool is not validated, it is a great resource for providers to utilize during women's healthcare visits.

Importance of OB/GYN and Pediatric Involvement

The involvement of OB/GYN and pediatric providers in the identification and screening of perinatal mental health disorders is critical, as women have frequent contact with them during their childbearing years. In fact, in the United States, many women consider their OB/GYN provider to be their primary care provider during their reproductive years (Goodman & Tyler-Viola, 2010). The American College of Obstetricians and Gynecologists (ACOG) recommends that OB/GYN providers screen women "at least once during the perinatal period for depression and anxiety symptoms using a standardized, validated tool" (Committee on Obstetric Practice, 2018, p. e211). ACOG expresses the benefit of providers also completing a full assessment of mood and emotional well-being during the comprehensive postpartum visit for each patient, especially if a woman screens for depression and anxiety during pregnancy (Committee on Obstetric Practice, 2018). Similarly, the American Academy of Pediatrics (AAP) has suggested that pediatric providers

screen mothers for postpartum depression, preferably at every well-baby visit (Earls, 2010). However, recommendations to screen for other postpartum psychiatric complications such as anxiety and OCD has not been made by the AAP.

Lack Screening by Healthcare Providers

Despite the abundant evidence of the importance of routine perinatal mental health screening by medical providers, less than 20% of prenatal care professionals routinely conduct mental health screening (Kingston et al., 2015). Although, mental health issues are the most common complication of pregnancy and childbirth (Postpartum Support International, 2020), with significantly more cases than gestational diabetes (Accortt & Wong, 2017), routine diabetes screening is the standard of care while mental health screening during the perinatal period is uncommon (Goodman & Tyler-Viola, 2010). Leiferman, Dauber, Heisler and Paulson (2008) surveyed 232 primary care physicians (obstetricians, pediatricians, and family medicine practitioners) about their attitudes, beliefs, and current practices regarding the management of maternal depression. Results revealed that 40% of physicians endorsed rarely or never assessing for perinatal depression, even when 90% of them reported that it was their responsibility to recognize maternal depression. (Leiferman, Dauber, Heisler & Paulson, 2008). Coleman, Carter, Morgan and Schulkin (2008) found a similar screening rate than Kingston et al. (2015) when exploring OB/GYN's rate of anxiety screening during prenatal visits. In their study, they asked 307 OB/GYN's about their screening practices and found that only 20% of physicians reported screening patients for anxiety during pregnancy. More surprisingly, when participants were asked about their interest in screening for anxiety during prenatal visits, 21.4% responded having no or low interest (Coleman et al., 2008), suggesting a lack of awareness of the importance of addressing perinatal anxiety.

Lack of Healthcare Provider Education

Healthcare provider education and training on perinatal mental health and screening is lacking (Coleman et al., 2008), which is a barrier to identification (Leiferman, Dauber, Heisler & Paulson, 2015). Healthcare professionals lack knowledge regarding how to choose the appropriate screening tools, what cutoff scores to utilize for specific periods, as well as how to have ongoing conversations with women about perinatal mental health (Cena et al., 2020). Even though this is the case for all perinatal mental health disorders, it is particularly true for perinatal anxiety disorders. Coleman et al., (2008) also asked participants to rate their training to treat, recognize, and diagnose anxiety disorders. They found that most participants believed to have inadequate to barely adequate training to recognize, diagnose, and treat perinatal anxiety (59.9%, 68.6%, and 82.5%, respectively). In a subsequent study, Coleman, Carter, Morgan and Schulkin (2009) examined OB/GYN's accuracy in diagnosing mood and anxiety disorders during the pregnancy period though the utilization of clinical vignettes. They found that depression was correctly identified by over 90% of participants, whereas significantly fewer OB/GYNs correctly diagnosed panic disorder (55%) and generalized anxiety disorder (32%). It is important to note that although 90% of providers correctly identified vignettes that met criteria for depression, Coleman et al. (2009) found a greater likelihood to diagnose depression when symptoms do not fully meet diagnostic criteria as well as to prescribed prescribe medication for those cases (Coleman et al., 2009). To our knowledge, providers' knowledge about POCD and P-PTSD has not been explored in the literature.

Lack of Provision of Treatment and/or Referrals by Healthcare Providers

Provision of treatment (e.g., psychopharmacological) and mental health referrals by healthcare providers is vital to ensure women receive appropriate supports. To our knowledge,

only one study has examined professionals' treatment and referral rate. Goodman and Tyer-Viola (2010) explored rates detection, treatment, and referral of maternal depression and anxiety by OB/GYN providers. A sample of 491 women was screened for depression and anxiety using the EPDS and the anxiety portions of the PHQ-9 during the third trimester pregnancy and at six weeks postpartum. Providers were blind to screening results. Two months after delivery, participants' medical records were reviewed for documentation of psychiatric symptoms, diagnoses, psychiatric treatment, and mental health referrals at the two prenatal time points (Goodman & Tyer-Viola, 2010). Results revealed that the majority of women who screened positive for perinatal depression or anxiety were not identified by providers during both time points (41% and 29.4%, respectively; Goodman & Tyer-Viola, 2010). Moreover, only 15% of positively screened women had documented mental health treatment in their records during pregnancy, and 18% were referred to mental health or social services. Similarly, at six weeks postpartum, only 25.5% of women who screened positive for anxiety or depression had documented mental health treatment and 2% had a referral (Goodman & Tyer-Viola, 2010). Goodman and Tyer-Viola (2010) specified that the documented treatment were therapy and/or medication. However, they did not specify whether women were already receiving psychopharmacological treatment at the time of the OB/GYN appointments or if medication was offered and provided by their OB/GYN at the medical visit.

Another important finding with regard to OB/GYN provider referral practices is that Coleman, Carter, Morgan & Schulkin (2009) found that psychotropic medication treatment was reported twice as often as a referral to a mental health professional when OB/GYN's were asked about their course of action for perinatal anxiety. This indicates the need for greater provider awareness of the efficacy of psychotherapy. This is particularly important given that research has shown that women prefer individual psychotherapy services over medication to address perinatal

emotional difficulties. Goodman (2009) asked 509 pregnant women about which treatment modalities they would most likely participate in if they wanted help for depression during their perinatal period. Results revealed that most women (92%) indicated that they would likely participate in individual therapy if help was needed during the perinatal period. Only 35% stated that they would likely take medication if recommended, and 14% indicated that they would participate in group therapy. In sum, the provision of appropriate referrals, treatment, and psychoeducation of PMHD by medical providers is tremendously lacking.

Additional Barriers to Early Identification

In addition to understanding provider barriers to identification (e.g., lack of screening, poor education and awareness of PMHD), it is important to explore additional barriers that may be keeping mothers from sharing their experiences with their providers. Pregnant and postpartum women have reported that lack of knowledge to distinguish between normal difficulties associated with motherhood and difficulties that warrant professional help have kept them from sharing their emotional experiences with health care professionals (Accortt & Wong, 2017; Kingston et al., 2015). Similarly, they have added that family and friends labeling their struggles are "normal" contributes to their lack of reporting (Kingston et al., 2015). Women have also identified reluctance to disclose emotional experiences as well as tendency to minimize their difficulties due to fears of being judged, of having their children removed if deemed unfit, and of having their feelings trivialized or dismissed (Accortt & Wong, 2017; Austin, Highet & the Guidelines Expert Advisory Committee, 2011). Moreover, some women have reported that negative past experiences with health care providers as well as medical appointments being too brief have led to lack of trust in health professionals (Accortt &Wong, 2017).

In sum, PMHD are highly prevalent yet highly underrecognized and undertreated, which negatively impacts the functioning and wellbeing of women, their children, and their families. The involvement of medical providers in the detection of PMHD as well as in connecting women to appropriate mental health is critical in making sure that women receive appropriate supports. However, as the above research suggests, there is a big education gap in providers' awareness, screening practices, ability to identify, and connect women with supports. Thus, this paper explored the existing problems in the early identification process of PMHD with the purpose of making recommendations to improve providers' early identification practices. We defined the early identification process as one that includes awareness, screening, detection, and referrals. The present study particularly focused on POCD as well as comorbid depression and anxiety given that the qualitative data analyzed in this study is part of a larger mixed-methods study originally designed to further understand mood and anxiety disorders, especially POCD. To our knowledge, this is the first study that examined problems with the early identification of PMHD from women's perspectives based on their lived experiences and interactions with healthcare providers.

Method

Procedure

The sample is comprised of ten women who participated in a larger mixed-methods study designed in 2015. Approval was granted from The George Washington University's Institutional Review Board (IRB). The original study was designed to further understand postpartum mood and anxiety difficulties, particularly POCD. Two hundred and fifty one women were recruited through Postpartum Progress, a nonprofit that increases awareness of perinatal anxiety and mood disorders and provides a supportive forum for pregnant women and mothers. A flyer was posted on Postpartum Progress's forum and Instagram account inviting women to participate in a study that

aimed "to understand mothers' experiences with postpartum mood and anxiety disorders, especially postpartum OCD." Women were invited to complete a 20-minute online survey administered through Qualtrics. Those interested in participating on the study could click on a link included on the recruitment flyer. Before starting the online survey, women had to consent to their participation. Moreover, participants could skip any question and abandon the study at any time. The survey included a demographic questionnaire as well as screening measures of depression, anxiety, postpartum distress and POCD (described below). Upon completion, participants were provided the option to receive a $5 gift card from two large retailers.

Participants (n=125) who endorsed moderate to severe POCD symptoms (score of ≥16 on the POCS) were invited to participate in a follow-up interview to further understand their experience with POCD as well as their interactions with the healthcare system. Sixty-two women (49.60%) expressed interest in the interview when completing the initial survey and provided their email address. Of the 62 women interested, ten (16.12%) were randomly selected to participate in the interview. Semi-structured interviews (described below) were conducted by the first author via phone or Skype. A consent form was emailed prior to the interview for participant review. Most women expressed verbal consent before starting the interview, and one woman emailed the signed consent form prior to the interview. The interviews lasted approximately 50 minutes, and participants were offered a $30 gift card from two large retailers as an appreciation gesture for their participation. Interviews were recorded, transcribed, and data were anonymized.

Measures

A demographic questionnaire (see Appendix A) was included and contained basic demographic information, treatment history, and current help-seeking behaviors.

Patient Health Questionnaire - 9 Item **(**PHQ-9; Kroenke et al., 2001): The PHQ-9 Item is a self-administered, nine-item-measure utilized to screen, diagnose, monitor and measure depression and its severity. Participants were asked to mark how often they have been bothered by nine problems (e.g., feeling tired, trouble concentrating, feeling sad) over the last two weeks. Scores of 5, 10, 15, and 20 are used as the cut-off points for mild, moderate, moderately severe, and severe depression, respectively. Further evaluation is recommended with scores higher than 10. The PHQ-9 is a reliable (internal reliability, α=0.89) and valid measure of depression severity (Kroenke et al., 2001).

Generalized Anxiety Disorder – 7 Item (GAD-7; Spitzer et al., 2006): The GAD-7 is a self-administered instrument used to screen and measure the severity of generalized anxiety disorder (GAD). Participants were asked to mark how often they have been bothered by seven problems (e.g., not being able to control worrying, fearing that something terrible might happen) over the last two weeks. Scores of 5, 10, and 15 are used as the cut-off points for mild, moderate, and severe anxiety, respectively. Further evaluation is recommended with scores higher than 10. The GAD-7 has excellent internal consistency (α=0.92) and test-retest reliability (α=0.83). It also has good construct and convergent validity (Spitzer et al., 2006).

The Postpartum Distress Measure (PDM; Allison, Wenzel, Kleiman & Sarwer, 2011): The PDM is a self-administered screening measure utilized to identify general postpartum distress and obsessive-compulsive factors. The questionnaire includes ten items; it askes women to mark how they have felt (e.g., “I feel sad and hopeless”, “I have thoughts about my baby that scared me”) over the past seven days compared to how they usually feel. Answers ranged from “this is true most of the time” to “no, this is not true.” This instrument measures two related factors: general distress (items 1 to 6) and obsessive-compulsive (items 8 to 10). The PDM has not been validated

and cutoff scores have not been suggested yet.

The Postnatal Obsessive-Compulsive Scale (POCS; Lord et al., 2011): The POCD is a screening measure developed specifically to assess OCD symptoms commonly experienced following the most recent pregnancy. Women were asked to report the presence or absence, as well as time of onset, of specific undesirable or troubling thoughts (e.g., baby being contaminated) and behaviors (e.g., repeatedly washing and cleaning your baby's environment). The measure included two scales that were scored on a scale of 0 to 4: 1) A severity scale, which asked 10 questions about the amount of time spent, resistance and control of the thoughts and behaviors, and 2) an interference scale, which asked 7 questions regarding how much the symptoms interfere with different aspects of life. The severity scale score is used as the final POCS score, and the interference scale score informs clinical judgment but is not included in the total POCS score. Amber Rieder, the co-author of this instrument, indicated that severity scale scores of 8, 16, 24, and 32 are used as the cut-off points for mild, moderate, severe, and extreme risk of PPOCD, respectively (personal communication, July 20, 2015). In this study, we used the cut-off score of ≥ 16 to indicate high risk for PPOCD as a proxy measure for the prevalence of significant PPOCD symptoms. Lord et al. (2011) reported that both scales have excellent internal consistency (α=0.95 and α=0.93, respectively). The severity scale has concurrent validity, as demonstrated by a significant and positive correlation ($r = 0.81$, $p<0.0001$) with the Yale-Brown Obsessive Compulsive Scale (Y-BOCS). The internal consistency of the severity and interference scales in this study were α=0.90 and α=0.85, respectively.

Semi-structured interviews (see Appendix B) were conducted which asked questions that targeted three goals: 1) mothers' experiences with postpartum OCD (i.e., obsessions, compulsions, and other feeling and difficulties they may have experienced), 2) their experiences interacting with the

healthcare system (e.g., did you ever share what you were going through with a health practitioner? How was their reaction? Did your receive treatment?), and 3) their recommendations (e.g., what recommendations would you make to better address postpartum OCD?). Interviews lasted, on average, 60 minutes. Information pertaining to the first goal (i.e., mothers' experiences with PPOCD) is not included in the present study as it has been explored in a previous study (Garcia, Le, & Mancuso, 2021). Instead, this study focuses on women's experiences interacting with the healthcare system, particularly with regards to the early identification process (i.e., awareness, identification, screening, and referrals), as well as their recommendations for providers to improve the early identification of perinatal mental health difficulties.

Qualitative data analysis and qualitative checks

Transcribed interviews were analyzed using inductive thematic analysis and consensus procedures. Inductive thematic analysis is a method utilized to identify and analyze themes within data by studying the participants' experience in context (Braun & Clarke, 2006). Two coders analyzed the interviews and generated codes in light of the research questions. No a-priori categories were used during the analysis. Instead, coders generated thematic patterns derived from interpretation and reflection on meaning. As such, the coding process was flexible and allowed revisiting the themes and generate new ones as needed. Any discrepancies with regards to themes were planned to be discussed until reaching consensus. However, there were no significant coding discrepancies.

Results

Description of Sample

As shown in Table 1, all ten women identified as White. They were 35 years old, on average. The majority (80%) was born in the United States. Ninety percent were living in the US

at the time of the interview (one woman was born in Germany and moved to the US at age one; one participant was born and raised in the United Kingdom and still lived there at the time of the interview). Eighty percent of women were married. The majority (90%) had a college degree or higher. Half of the participants were stay-at-home mothers, four were employed, and one was on maternity leave. At the time of the interview, mothers' youngest child was two and a half years old, on average.

Table 1. Sample Demographics (N=10)

Variable		**%**
Country of Birth	USA	80
	United Kingdom	10
	Germany	10
Race	White	100
Marital Status	Married	83.8
	Single	10
	Separated	4.6
	Divorced	1.7
Education	Some College	10
	College	60
	Masters	30
Employment Status	Stay at Home	50
	Full Time	20
	Part Time	20
	Maternity Leave	10

Variable	**M**	**S.D**
Age	35.10	4.72
Number of children	2.90	1.19
Age of youngest child	2.58	1.91

As shown in Table 2, participants scored an average of 12.6 on the PHQ-9 (SD = 6.9), falling in the moderate range of depression symptoms. On the GAD-7, they scored an average of 12.6 (SD=7.2), which falls on the moderate range of anxiety symptoms. On the PDM, women scored an average of 13.7 (SD=6.5). As indicated above, to our knowledge, authors of the PDM have not suggested cutoff scores yet as the measure has not been validated. Finally, participants scored an average of 26.9 (SD=7.1) in the POCS, falling in the severe range of risk of PPOCD.

Table 2. Sample's Scores on Screening Measures

Measure	M	S.D
PHQ-9	12.6	6.9
GAD-7	12.6	7.2
PDM	13.7	6.5
POCS	26.9	7.1

Themes

Women shared their most common problems encountered with regards to early identification practices by their medical providers. Two major themes were found and represent the two main recommendations to improve healthcare providers early identification practices. These themes included the need for 1) increasing perinatal mental health training and 2) increasing relational screening training for healthcare providers. Figure 1 shows a graphic representation of the themes. The size of the circles varies depending on the number of women reporting the themes. Arrows indicate how themes are connected with each other. Figure 1 shows a graphic representation of the themes. The size of the circles varies depending on the number of women reporting the themes. Arrows indicate how themes are connected with each other.

Increasing Perinatal Mental Health Training for Healthcare Providers

When women described their experience interacting with their healthcare providers, they expressed concern about providers not being knowledgeable about PMHD. They explained that some of their providers were aware of perinatal depression yet were not aware of other perinatal mental health difficulties that they were experiencing (e.g., anxiety, anger, obsessions, compulsions, and panic). Thus, mothers shared feeling confused as they felt their providers did not understand what they were going through. Mothers also shared feeling invalidated and felt that providers missed important warning signs that should have triggered a conversation, screening, treatment, and referrals. Three subthemes were found that represented participants' experiences and recommendations related to increasing perinatal mental health training for healthcare providers: 1) Enhancing awareness of PMHD, particularly POCD, 2) Addressing warning signs, and 3) Validating Women

Enhancing Awareness of PMHD, particularly POCD. Participants described that their providers were overall uneducated about perinatal mental health. Furthermore, mothers that had conversations with their medical providers about perinatal mental health felt that their providers had an erroneous and narrow understanding of how perinatal difficulties present. Mothers explained that providers may be only aware of extreme cases such as the ones on the news about mothers hurting themselves or their children, and that most of them were not aware of other perinatal health difficulties, such as anxiety and OCD.

> I think like even healthcare professionals probably still see it as: "well she's not crying in my office and she's not saying that she's going to kill herself, so she's fine." And I think that the spectrum is so much larger than that. Right? Like you know, it's not just the

extreme cases. So, I think that awareness and education on the part of the healthcare professionals is huge.

They just see [postpartum mental health] as the depression, and they don't know that there are also all these other symptoms and aspects.

I think there is more conversation about PPD... But I worry that the conversation only being about postpartum depression is going to miss a huge piece of the puzzle. My postpartum didn't look like me holding my baby crying next to a rainy window in a dark room. It didn't look like that. It looked like hypervigilance, and energy, and panic, and rage. So, I worry that we're going to miss this top piece of the puzzle.

Addressing Warning Signs. Mothers described that providers often missed warning signs that should have prompted further screening, psychoeducation, treatment, and referrals. Some participants shared that they explicitly verbalized their difficulties, yet their providers did not follow up with additional questions or conversations around their needs. Other participants explained that although they may have not explicitly verbalized their struggles, they showed signs based on their history or presentation that merited further attention from providers, yet they were not addressed.

I was never screened… And my doctor was very well aware of my history [of depression, PTSD and borderline personality disorder] and that should have been a red flag.

> At [hospital] there was no talk of emotional wellbeing or emotional health while I was delivering. There was no concern for my obviously heightened sense of anxiety. I was terrified; I was visibly terrified, and nobody addressed that. In the postpartum ward, there was no talk about baby blues, or postpartum depression.

> A nurse came into the room to, you know, to check [baby's] vitals or whatever, and I was bawling my eyes out and she said, "Are you okay?" I said "Yes," and she walked out the door. I was bawling my eyes out.

> I said, "I have postpartum anxiety and depression"… They didn't ask any follow up questions. They didn't ask how it impacted the child. They didn't do any more screening.

Validating Women. Unfortunately, women reported feeling invalidated by their healthcare providers. Participants shared that when they showed signs of distress and demonstrated evidence that they needed support, providers made unhelpful comments that increased their negative feelings (e.g., shame, inadequacy). This kept them from speaking up and reaching out in future medical encounters.

> My second night in the hospital, one of the nurses came in and I was crying. I was just a total wreck, and she was like "is everything okay?" and I was like "yeah", and she just said, "it's just normal hormones, you're fine" and then walked out. So, I mean, when it came time for me to go to see my doctor, after those two experiences with the nurses, I am not going to tell anything… Because I am invalidated by two nurses on two different occasions.

> I remember going in [to the OB/GYN's office] and saying I'm really nervous all the time. And I'm not sleeping, and I'm just having all of these worries, and I'm just miserable, I'm miserable, and I think maybe there is something wrong with me. And she said to me, "You're pregnant, pregnant women can be emotional." And at the time I had no idea what I was going through, you know, I wasn't educated on all of this. And so, I took her word for it. And I took that to mean "this is normal suck it up, try harder.' And to this day I still find that extremely angering.

> I knew something wasn't right, and I even asked for help, and the doctor told me to suck it up, basically and so I tried to, and I was sick for like a year, and I didn't have to be.

Increasing Relational Screening Training for Healthcare Providers

Interviews revealed the increased need for providers to be trained in ongoing, more relational, early identification practices. Women shared a longing for conversational and more personal approaches to screening instead of providers solely relying on validated paper instruments. Moreover, they explained that it is pertinent for providers to know what questions to ask in order to get honest and comprehensive responses from patients. Participants also emphasized the importance of routine assessment of PMHD on every medical visit instead of just once. Finally, they suggested that providers should provide mothers with resources and referrals as well to help them connect with supports. Six subthemes were found that represented participants' experiences and recommendations related to increasing relational screening training for healthcare providers: 1) Addressing limitations of paper-based screening, 2) Asking thorough questions, 3) Promoting relational/conversational screening, 4) Increasing screenings and

involving pediatricians, 5) Increasing provision of referrals/follow-ups, and 6) Expanding treatment options

Addressing Limitations of Paper-Based Screening. All mothers who were screened with a validated screener reported that they were screened with the EPDS. Participants disliked the EPDS for many reasons. Some mothers expressed that the EPDS did not capture their struggles (e.g., panic, anxiety, obsessions, compulsions, irritability, anger) given that it was designed to only screen for depression. Other mothers reported that the EPDS uses confusing wording and that at times they did not fully understand what the items were asking. Moreover, participants shared that the EPDS did not draw honest answers from them as filling out a paper seemed too impersonal. They shared reluctance to endorse symptoms due to fear of being judged, especially if having suicidal ideation, and due to feeling that providers were just checking a box rather and showing empathy and interest in their emotional experience.

> [Healthcare providers] were using [the] Edinburgh, which does a really crappy job at screening for OCD and anxiety, and I'm not a healthcare professional but as someone who took the Edinburgh a few times it just didn't really seem to describe what I was going through… The Edinburgh is expecting some moms to diagnose themselves and generalize these experiences into like those seven questions or whatever it is. It doesn't really talk to the language that were speaking or the experiencing that were having. Does that make sense?

> Really with those screenings making them broader, because they really do just focus on very specific symptoms of depression when there's a lot more. I also dealt with a lot of

> rage too, which is never in the screenings. So, broadening it to get all of the different symptoms that we might have.
>
> Also, with the paper, they kind of give it to you to fill out, and you know they don't want to deal with it. You get that sense, especially if it's the pediatrician, they are there to deal with the baby, and they don't want to deal with my issues.
>
> I think [the Edinburgh] is a complete waste of time… I lied on mine because one of the questions at the very end, "Have you have thoughts of hurting yourself?" At that point I hadn't, you are having a stranger… assessing you and your baby's development and you're not going to answer that honestly"

Asking Thorough Questions. Participants also explained that when providers asked them about their difficulties, they did not ask questions that would pull for the appropriate information. They recommended providers to ask more thorough questions that may lead to a deeper understanding of their experience.

> Now I know when I'm feeling anxious because I'm well versed in that and I speak that language now. I didn't know, if the doctors said, "well are you feeling anxious?", I would have been like "I? Noo!" I mean, like when you go into your PCP, the PCP doesn't ask you "So do you have strep throat?", "Do you have a sinus infection?" They ask you "How long have you had this cough?" and "Does it hurt when I press here?" I think we are asking moms the wrong questions.

> I think not asking "how you're feeling?" because it's easy to say, "I'm feeling fine." But specifically, you know, "have you been feeling sad?" Like drawing out questions because asking "how you're feeling?" is really not going to draw out an honest answer from anybody. It's easy to say, "I'm okay" and then they just drop it. And they don't ask any more. They just take you as you're ok or you're fine and just let you go your own way. Like they don't ask any kind of any other question.

> Or if they just said, "how are you *really* feeling? How are you *really* doing?" You know like that kind of thing I might have opened up.

Promoting Relational/Conversational Screening. All participants agreed that it would be more beneficial for screening to occur in the form of an empathic and compassionate dialogue rather than from paper screeners or bullet pointed, close-ended questions from a provider's protocol. Mothers explained that being able to trust their provider and feeling that their providers care about them, are critical pieces in order for them to feel comfortable in sharing their difficulties and asking for help.

> I think that it's better done as an ongoing dialogue, "tell me how many hours you're sleeping at night? When the baby sleeps are you able to sleep? Are you getting all of the chores done that you want to get done around the house? Are you feeling overwhelmed? I think If we talk less about the symptoms and more just about like the care providers having conversation with their patients about their experience in kind of just plain mom English. Talking in the ways that moms talk. I think that could go a long way.

> The only way you can really get to root of what someone is suffering is to take away the paper, sit down and talk about it. You know, you can gain a lot more if you just are sitting down and have a sense of how you feel.

> I think would be really helpful to just really focus on the new mother and really make it a point to show that they care about what they are asking. It's not just putting a piece of paper in their face. It's them actually wondering how they are doing.

Increasing Screenings and Involving Pediatricians. Women expressed the importance of screening at every medical visit. Participants differed with regards to their symptom onset, some starting to experience difficulties early in pregnancy and some weeks after delivery. One mother reported that she was screened only once, right after delivery, when she was feeling happy. She explained that it was not until six weeks later that she started to experience difficulties, but she was never screened again. Mothers shared that pediatricians should play a role in the early identification process as they see the mothers more often after delivery.

> What I would like to see ultimately, is kind of just this conversation that is constantly ongoing… It should be a conversation every single obstetrician appointment, every single midwife appointment… It's an ongoing piece of the puzzle… They are making us pee in a cup every time we go, they are taking you know blood samples every time that we go. Right, they are testing for gestational diabetes, you know, they are testing for all these other things, and anxious thoughts are not necessary a part of that conversation.

> Because the pediatrician sees the mom the most on that first year of the baby's life, they need to check in with mom, and just ask her how is she doing, how is she holding up, how is she sleeping, is she eating? I think they need to be asking the same questions as well. Because after the six-week checkup, you're not seeing your OB anymore unless you become pregnant again or for yearly exam. So, pediatricians need to get on board.

> I think the biggest gap is with pediatricians. I don't think pediatricians want to touch it at all. I think that they feel that their patients are the children and not the moms. My pediatrician has never once asked me how I was doing, ever, ever, ever. Pediatricians see the moms a lot more at the beginning than the OB/GYNs do.

Increasing Provision of Referrals/Follow-ups. Women reported that once they disclosed their difficulties with their providers, the providers did not connect them with a mental health professional and/or did not follow up to check whether they had found mental health support. Mothers explained how difficult it was for them to find appropriate mental health support as they did not have the time or the energy to navigate the system.

> After [baby] was born and I started to realize that something was wrong about five months. I started to call health care clinics from the phone book, which was probably the hardest phone calls I ever made was to call this health care clinic and say, "I think I have postpartum depression. I think I'm crazy," and the answer I got was there is a 6 week waiting list. I got through like four different phone calls and I just broke down in tears, like nobody would help me… I needed somebody to facilitate me getting into places, which is

> infuriating. It's completely infuriating… I was in no state of mind to have to try to navigate the healthcare system.

> I think follow ups are very important… No one is suggesting you do anything it just felt so difficult... How do you expect someone that is taking care of the child to have the energy and the intention to set up an appointment?

> [The midwives] mentioned "Oh maybe you should have a psychiatric appointment set up for a certain time after you have the baby, maybe just have it setup in advance". They never followed up, they never gave me any names, and they never asked me if I did that, they never really pursued it.

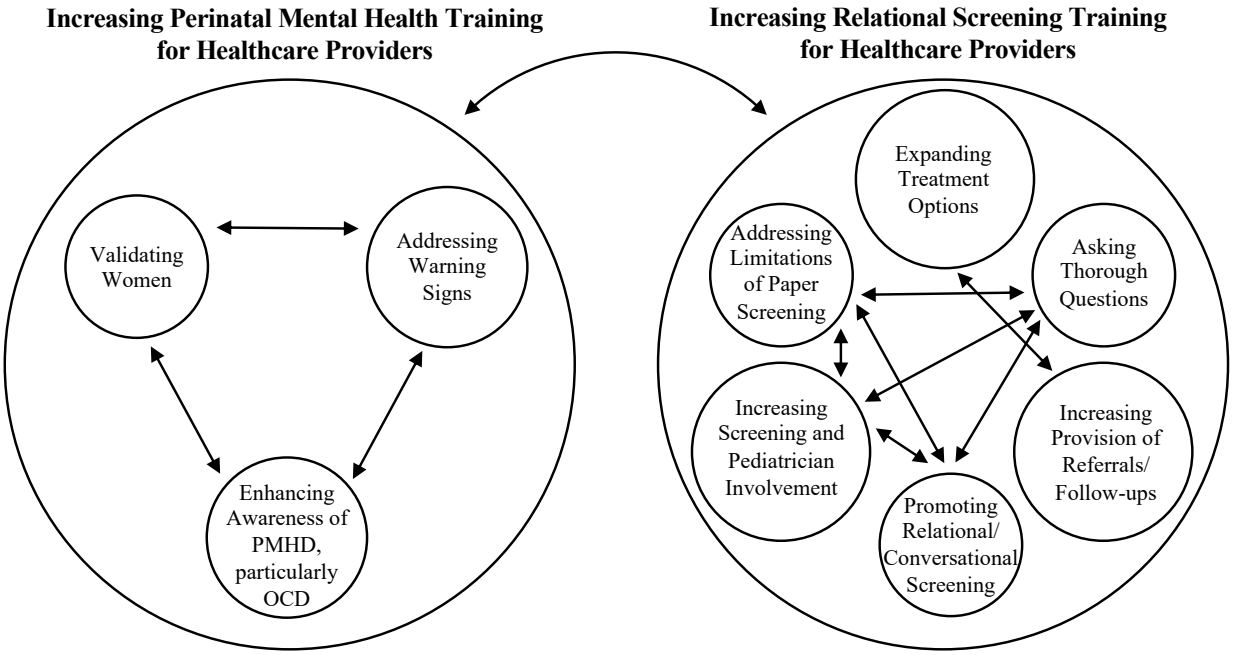
Expanding Treatment Options. Mothers added that when their providers offered treatment options, medication management was the only treatment option discussed. Participants expressed the importance of providers providing more comprehensive referral sources and treatment psychoeducation, such as psychotherapy and support groups.

> I think that a lot of times, OBs refer people to psychiatrists for medication, you know, a lot of people don't want to go on medication, so then they say, "I don't want to go on medication." But what about therapists, support groups and all those other things? I think there should be a lot more of it, and I do think that hospitals have a great opportunity to breach that gap.

I had a 6-week follow-up and I was still kind of weepy. I was like, "I'm just anxious," and she was kind of obnoxious. She was like, "You know you were anxious during your pregnancy…" She didn't really do much like we had my 6-week follow up and she was just kind of like, "Oh yeah you stay on your Celexa," and it just wasn't, it just wasn't enough."

[My OB/GYN] didn't give me any tools other than prescribe me the medication, she didn't give me any tools for dealing with it, so it didn't seem helpful… There was no talking about therapy. They have a social worker that works in their office, and they didn't even offer me an appointment with her.

Figure 1. Graphic Representation of Themes.



Discussion

The purpose of this study was to further understand the existing issues with healthcare providers' PMHD early identification practices from the perspective of women, and to make recommendations to improve the early identification process. We conceptualized early identification as the process that involves awareness, screening, detection, and provision of referrals. Perinatal mental health disorders are widely prevalent, yet most women with PMHD do not receive treatment. The biggest barrier to treatment is lack of identification therefore, addressing problems within the early identification process is crucial to ensure appropriate treatment of PMHD.

The involvement of healthcare providers, particularly OB/GYN and pediatric providers, in the early identification of PMHD is vital given their increased interaction with women during their childbearing years. Unfortunately, information gathered from mothers in this qualitative study confirmed that healthcare providers' awareness, screening practices, ability to identify, and provision of referrals for PMHD is lacking, which is consistent with previous studies (Coleman et al., 2008; Coleman et al., 2009; Goodman & Tyer-Viola, 2010; Kingston et al., 2015; Leiferman, Dauber, Heisler & Paulson, 2008)

We suggest that increasing provider education on PMHD is an important first step to address the current lack of early identification of PHMD. All participants reported feeling that their healthcare providers did not possess adequate and comprehensive knowledge and understanding of PMHD, particularly anxiety and OCD. This is consistent with findings from previous studies (see Leriferman et al., 2008). Participants added that most of their providers were aware of depression yet were not aware of other difficulties that occur may in the perinatal period (and that they were experiencing), such as irritability, anger, anxiety, panic, intrusive thoughts,

and avoidance behaviors. This is not surprising given that the literature on PMHD has mostly focused on depression and has not given sufficient attention to other perinatal difficulties such as anxiety, OCD and PTSD. We believe that perinatal mental health training should be mandated for OB/GYN, pediatric, and primary care providers of all levels (e.g., physicians, nurses, midwives, physician assistants) and that it should include information about all perinatal mental health difficulties.

Our findings also support the importance of routine screening across the perinatal period. ACOG recommends that OB/GYN providers screen women at least once during the perinatal period. However, once is not enough. The onset of PMHD varies significantly, as some women may start experiencing difficulties at the beginning of pregnancy while others start struggling months after delivery. Thus, mental health screening should be incorporated in every OB/GYN visit. Moreover, the involvement of pediatric providers is crucial given that they interact with mothers more than OB/GYN providers during their postpartum years. AAP suggests that pediatric providers screen mothers for postpartum depression, preferably at every well-baby visit. However, we encourage pediatric providers to not only screen for depression but to also screen for other PMHD, such as anxiety, OCD, and PTSD.

When providers screen for PMHD, most rely on validated paper and pencil screening instruments. In fact, the EPDS is the most widely utilized screener during the perinatal period (Cena et al., 2020). However, our findings suggest that most mothers who completed the EPDS actually disliked it. Some of the reasons participants shared were that the EPDS uses complicated language and wording that may be hard for women to understand, and that it does not address other emotional and behavioral difficulties (e.g., anxiety, anger, OCD, panic) besides perinatal depression. Thus, we suggest that the use of generalized mental health screeners may be more

appropriate. The GHQ 12-item and modified 30-item versions have been validated in the perinatal population by multiple studies that have concluded that they are suitable screeners for general perinatal psychopathology (cites). Administration of a transdiagnostic instrument, such as the GHQ, may be later followed by a more specific screener (e.g., EPDS for depression, POCS for OCD, STAI for anxiety, and the Perinatal PTSD Questionnaire for PTSD) depending on the areas of concern. Moreover, it may be beneficial to inform patients that screening is a routine aspect of care to reduce any associated stigma or barriers to completion (Kendig et al., 2017).

Although there is controversy over which screening measures to use for different perinatal mental health disorders and what cutoff scores to utilize, we suggest that the aim is not necessarily to come up with a diagnosis, but rather to identify women who may need further support. Therefore, even though we support the use of validated screening instruments, we highly encourage a relational, conversational approach to identification. As one of the participants from this study mentioned, “It’s not just putting a piece of paper in their face. It’s [providers] actually wondering how they are doing.” A compassionate, culturally-sensitive, and open conversational screening as well as psychoeducation should be conducted by a trusted provider (e.g., midwife, physician, nurse) at every medical visit. This should be integrated in various settings, such as the NICU, maternity wards, pediatric settings, and OB/GYN’s offices. The Perinatal Health Discussion Tool (PSI, n.d.) is a is a great resource for providers to utilize during women’s healthcare visits.

We are aware that physicians may encounter barriers such as limited time and work overload, which may make the implementation of routine relational screening difficult. Thus, we suggest creating efficient protocols and systems to facilitate and monitor the implementation of early identification practices. A viable option for physicians might be delegating screening to other

trusted health providers (e.g., medical assistants, nurses, integrated behavioral health practitioners) is likely a viable alternative. Moreover, insurances or institutions may implement programs to incentivize screening by providing additional reimbursements to providers that document having screened patients in their medical visits. For example, multiple states (e.g., Colorado, Illinois, North Dakota, Louisiana, Oklahoma, North Dakota, and Virginia) have implemented Medicaid reimbursement plans for providers that document screening pregnant and postpartum women for depression (Center for Medicaid and CHIP Services, 2016; Colorado Department of Public Health and the Environment, 2013). We advocate for reimbursement initiatives to be implemented nationally, not only for screening of depression but of all PMHD, in order to incentivize medical providers to integrate routing screening into their medical practices.

Once women who may be struggling are identified, the provision of appropriate referrals is of high importance. Participants from this study highlighted how difficult it was for them to find appropriate services. Women struggling with PHMD are juggling the multiple responsibilities that parenting brings in addition to the emotional and behavioral difficulties that they may experience. It is unrealistic to expect that these women will have the energy, time, capacity, and knowledge to navigate the healthcare system and find appropriate mental health support. Thus, providers should provide referrals and facilitate women get connected with support. Kingston et al., (2017) suggest that healthcare settings develop a management algorithm for patients with positive screening results, facilitating appropriate interventions and referrals . These algorithms should delineate additional assessments that mandate immediate escalation of care, treatment options, and available emergency support in the event of safety risks (Kingston et al., 2017). The Massachusetts Child Psychiatry Access Project for Moms provides an of symptoms and EPDS screening cutoffs

reflective of each level of a positive screening result along with a stepped-care approach to treatment (https://www.mcpapformoms. org/Toolkits/Toolkit.aspx).

Moreover, it is important for providers to offer referrals for various treatment options. Based on our findings, when participants' providers offered treatment options, medication management was the only treatment option discussed, which most times did not fit their treatment preferences or needs. This is consistent with findings from Goodman's (2009) study, which found that most women prefer individual psychotherapy over medication when it comes to treatment of perinatal depression. Thus, offering more comprehensive referral sources, such as medication management, individual psychotherapy, mother-infant therapy, psychoeducation, and support groups is highly recommended.

We are aware that providers may encounter difficulties with regard to the provision of appropriate referrals. First, keeping referral resources up to date can be challenging. Thus, providers can turn to state, national, or international organizations (e.g., Maternal Mental Health Framework in Colorado, Postpartum Support International) that keep up to date referral lists available for the public. Private payers also may maintain listings of mental health care providers with experience in treating perinatal mood and anxiety disorders (Kendig et al., 2017). Moreover, we are aware that there are additional systemic issues that make the referral process difficult, such the lack of mental health providers trained in perinatal mental health, of economically accessible services, of insurance reimbursement for mental health services and of culturally sensitive services. The availability of mental health resources varies among communities. In areas where resources are scarce, healthcare providers may need to consider how distance-mediated resources, such as telemedicine can begin to fill this gap (Kendig et al., 2017). Researchers, clinicians, and

legislators should advocate for increased affordable and culturally-sensitive perinatal mental health services.

While this study adds important information to improve the PMHD early identification process, it also has limitations. First, our small sample consisted of ten White women who were predominantly well-educated, married, and recruited from a postpartum website dedicated to the provision of information and support for PMHD. Given the homogeneity of the sample as well as its small size, results may not be generalizable. Past research has found that access to perinatal mental health care is rarer among minority groups (Kozhimannil, Trinacty, Busch, Huskamp, and Adams, 2011; Sambrook Smith, Lawrence, Sadler, & Easter, 2019). For example, Kozhimannil, et al. (2011) found low levels of treatment for postpartum depression in low income mothers of varying ethnicities. The researchers suggest that White mothers with postpartum depression receive care at higher rates than Black and Latino mothers, indicating distinct racial-ethnic disparities (Kozhimannil et al., 2011; Sambrook Smith et al., 2019). Women from low income and minority groups may face additional barriers to care, including as increased stigma, communication problems, differences in cultural values, and other logistical issues, such as access to insurance coverage, time constraints, childcare, and transportation (Kozhimannil et al., 2011). Given this information, our sample does not give a representative account of the experiences and considerations of mothers with PPOCD. It would certainly be worth exploring similar research questions with a more diverse sample.

Moreover, given that our study focuses on the retrospective accounts of mothers, there is potential for recall and response biases. Participants were asked to report their experiences with their most recent child, but for some women, some years passed from this reporting. Nevertheless, participants in the current study were invested in sharing their experiences of POCD and responded

to the recruitment flyer, which were still vivid several years later, indicating the long-term impact of POCD. Finally, the present study focused on postpartum depression and anxiety, particularly OCD. Although lessons learned from mothers may be adapted to the early identification process of other PMHD, findings might not be completely generalizable to other PMHD. Future studies can address these limitations to extend the generalizability of the findings.

In sum, this study confirms the need for increased attention to early identification practices of PMHD in healthcare settings. In particular, it highlights the importance of expanding provider education and training on perinatal mental health, such as common disorders, their clinical presentation, common risk factors, relational screening practices, as well as provision of appropriate referrals and handoffs to ensure treatment. This study was the first to look at problems with early identification of PMHD from the mothers' perspectives as well as using a qualitative approach. Given the existing research on the negative impact of PMHD on the mother-child relationship and the whole family's wellbeing, it is necessary for healthcare providers, researchers, and state-level organizations to take action and promote appropriate perinatal mental health services and protocols in order to increase awareness, detection, screening, and treatment.

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Appendix A

Demographic Questionnaire

1. Age:
2. Ethnicity:
    a. Hispanic/Latino
    b. Not Hispanic/Latino
3. Race:
    a. White
    b. Black or African American
    c. American Indian or Alaska Native
    d. Asian
    e. Native Hawaiian or Other Pacific Islander
    f. Two or more race
4. Were you born in the United States (USA)?
    a. Yes
    b. No
        i. Where? List country.
        ii. How long have you been living in the USA? __ years, ___ months
5. Current state of residence:
6. What is the highest level of education that you have completed?
    a. Some high school
    b. High school
    c. Some college

   d. College
   e. Masters
   f. Doctorate

7. What is your marital status?
   a. Single
   b. Married
   c. Separated
   d. Divorced
   e. Widow
8. Are you currently pregnant?
   a. Yes
      i. How many weeks pregnant are you?
   b. No
9. How many children do you have?
10. Age of the oldest child:
11. Age of the youngest child
12. What is your employment status? (check all that apply)
   a. Full time
   b. Part time
   c. Unemployed
   d. Unemployed
   e. Student
   f. Stay at home

g. Disabled

h. Other:

i. Currently on parenting leave

13. What is your income annually?

    Could not find measure

14. How would you rate your health?

a. Excellent

b. Very Good

c. Good

d. Average

e. Poor

f. Very Poor

15. Have you had a serious illness?

a. Yes

    i. What?

b. No

16. Have you ever had psychological treatment?

a. Yes

b. No

17. Are you currently in psychological treatment?

a. Yes

b. No

18. Have Child Protective Services (CPS) been involved with your child/children?

a. Yes

b. No

Appendix B

Interview Protocol

Thank you so much for agreeing to participate. Remember you can stop the interview at any time if you don't feel comfortable. Are you ready to start?

Pregnancy

- When did you find out that you were pregnant? How did you feel when you found out that you were pregnant?
- Can you tell me more about your baby?
- What's the most positive experience about being a mother?
- What has been difficult or stressful about being a mother? Can you tell me more?

[Follow up if she mentions any words related to depression, sadness, or anxiety – find out about when this started/how long.]

Anxiety/depression/OCD

- When you mention [anxiety/sadness/depression], can you tell me more about what you mean?
- When did this started? How long?

[If it started before giving birth, did it get worse or better after giving birth?]

-Did it interfere with your personal life? Tell me more about that

[Follow up if she mentions any words related to postpartum OCD]

- Tell me more about your obsessions and compulsions? (Find out what were they about, how many times a day, etc.)
- Where you afraid that you might hurt your baby?

Health Care System

- Did you ever share what you were going through with a health practitioner?

- How was your experience in sharing that with them?

- How was their reaction?

Treatment

- Did you ever receive treatment for Postpartum OCD?

- What kind of treatment?

- How was your experience with the treatment?

- What recommendations would you make to better address postpartum OCD?

- In general, do you think there are adequate services for screening, preventing, and treating postpartum OCD?

Legal System

- Did you have any experience Child Protective Services (CPS) or other legal entity?

[if yes, explore the situation and related feelings/actions/resolutions]

At end of interview: Is there anything else that you'd like to add? Thank you again for your time.