Published in final edited form as:
Gen Hosp Psychiatry. 2010 ; 32(1): 9. doi:10.1016/j.genhosppsych.2009.07.005.

Patient perspectives on improving the depression referral processes in obstetrics settings: A qualitative study

Heather A. Flynn, Ph.D.,
Department of Psychiatry, University of Michigan, Ann Arbor, MI

Erin Henshaw, PhD,
Department of Psychology, Eastern Michigan University

Heather O'Mahen, PhD, and
Exeter University, Exeter, England

Jane Forman, PhD
Ann Arbor VA Medical Center, Ann Arbor, MI

Abstract

Objectives—Although depression screening in obstetrics settings has been recommended, little research exists to guide strategies for screening follow up and depression referral. The purpose of this qualitative study was to inform recommendations for depression screening follow up and referral in obstetrics settings based on responses from a key sample of women about influences on depression treatment use and engagement.

Methods—A stratified purposeful sampling based on pregnancy, socioeconomic status, and depression severity was used to identify 23 women who completed semi-structured interviews that centered on their beliefs about what would prevent or facilitate entry into depression treatment in the context of obstetrical care. We conducted a thematic analysis through an iterative process of expert transcript review, creation of and refining codes, and identifying themes.

Results—Two broad themes influencing depression treatment usage emerged including practical and psychological factors. Among practical factors, women reported a strong preference for treatment provided in the obstetric clinic or in the home with a desire for a proactive referral process and flexible options for receiving treatment. Psychological factors included differing conceptualizations of depression, knowledge about severity and treatment, and issues of stigma.

Conclusions—This study suggests that the current standard practice of depression screening and referral to specialty treatment does not match with perceived influences on treatment use among our sample of perinatal women. Recommendations derived from the results for improving follow up with screening and depression referral in obstetrics settings are provided as a platform for further research.

Introduction

The perinatal period is a critical time for the detection and treatment of depression among women because of the prevalence, impact on pregnancy outcomes, and the timely contact with

Corresponding author: Heather A. Flynn, PhD, Assistant Professor, Department of Psychiatry, University of Michigan Medical School, Rachel Upjohn Building, 4250 Plymouth Road, Ann Arbor, MI 48109, (734) 936-8702, hflynn@umich.edu.

the health care system (1,2). Despite support for the efficacy of depression treatments, research has consistently indicated that very few women link with care (3,4). Approximately 75% of depressed childbearing-aged women in obstetrics / gynecology settings are not detected or treated (3,5,6,7), constituting one of the most important and costly public health problems concerning perinatal women. Because of the risks, screening for depression in obstetrics settings has been commonly recommended in the research literature (for example, 8), adopted as best practice guidelines (9), and mandated as standard medical practice in some states in the US (10). However, few studies have provided guidance on optimal strategies for screening follow up, referral and linkage to treatment (11). Adequate depression care has been associated with improved depression and functioning outcomes in primary care samples (12), suggesting the importance of understanding how depression screening and referral processes might more effectively lead to treatment.

Thus, there is a clear momentum towards widespread implementation of screening for depression in prenatal care settings and strikingly little research that would inform clinicians about how to use screening results (i.e. screening feedback, referral and treatment linkage). The purpose of this qualitative study was to identify factors that influence the likelihood of seeking and participating in perinatal depression treatment among un-treated depressed women to begin to inform strategies to better address depression in the obstetrics setting. The study employed semi-structured interviews with pregnant and postpartum women to identify: (1) what women perceive as facilitators and barriers to treatment for depression in the perinatal period; and (2) areas of improvement in current practices to bridge the gap between screening and referral follow-through. Based on the results, we present recommendations for health care system-level improvements to the screening and referral process in prenatal care settings, with the ultimate goal of improving engagement with and adherence to depression treatment.

Methods

Study Design and Sample

This was a descriptive qualitative study which used semi-structured interviews to explore pregnant and postpartum women's perceptions about what would prevent or facilitate their entry into depression treatment during the perinatal period. We used stratified purposeful sampling based on three factors: pregnancy status, socioeconomic status, and depression severity. These factors were selected for stratification based on their potential differential influences on treatment use (13). Women who met criteria for a current Major Depressive Disorder (MDD) were considered high severity; those with a previous major depressive episode and/or met criteria for minor depression were considered moderate severity, and those who had current mild depressive symptomatology based on an Edinburgh Postnatal Depression Scale-EDPS score of 9 or higher (14), but did not meet criteria for minor / major depression or previous episodes of MDD, were considered lower severity. As is the norm in qualitative research studies, we used *purposeful* sampling. , the goal of purposeful sampling is to sample a limited number of cases for in-depth analysis that can best help the investigator understand the central problem under study, contrasted with *representative* sampling, which produces a larger sample size to enable generalizations from study samples to populations. Institutional review board approval was obtained from the University of Michigan and all participating women provided written informed consent.

Data collection

Participants were initially recruited in the waiting areas of five obstetric clinics by research assistants. Two of the clinic sites were university hospital-affiliated, servicing primarily women with private or Medicaid insurance. Three of the clinics were private and part of a non-profit organization focused on treating underserved populations in urban settings, serving

predominately women with Medicaid. All clinic sites were staffed by obstetrician-gynecologists, nurse practitioners and nurse-midwives, and an on-site social worker. The five study clinics were similar in that each administered some standard depression screening tool to all new obstetrics patients at the first visit. All patients have the opportunity to discuss depression, including the screening results with a provider at the clinic. In most cases, depression is discussed at the clinics with the nurse or nurse practitioner. In addition, all clinics had either an on site or on-call social worker who was responsible for provision of case management, brief counseling and referral to specialty care services.

Women were eligible to participate in the study if they were over 18 years old, English speaking, and not currently receiving any form of mental health treatment (i.e. medication or counseling / psychotherapy). Research assistants administered the EPDS to 178 women, from which 43 (24%) scoring 9 or higher on the EPDS were included in the pool of eligible women. Master's and PhD level clinicians trained in its use administered the Structured Clinical Interview for DSM-V (SCID-15) to all eligible women (n=43) to determine depression diagnosis. A brief demographic questionnaire was also administered at the time of the interview. Using the stratified purposeful sampling method previously described, 23 SCID-interviewed participants were selected as they accrued during recruitment to fill the stratification cells (see Table 1).

A semistructured interview guide was developed by the investigators with the goal of eliciting perceptions of influences on and experiences with seeking and using depression treatment (see Table 3), based on a review of the literature and the investigators' clinical experience. The guide was initially developed by three of the authors, then reviewed and agreed on by the wider team, including a PhD-level social worker, master-level social worker, and a social scientist. We modified the interview guide iteratively as the interviews, and concurrent data analysis proceeded, to incorporate new information, and to focus progressively on emerging themes. Three major topic areas were explored: (1) experiences of the pregnancy and relationship to mood and anxiety symptoms, (2) perspectives on treatment / help seeking for depression and related issues, including perspectives on facilitating the process, and (3) changes related to childbirth that may impact help seeking.

Interviews were conducted by three of the authors (HF, EH, HO) and a social worker between May - August 2007 , lasted 75 min on average, and were audio-recorded and then transcribed verbatim. Interviews were completed in women's homes, private rooms in obstetrics clinics, or another location of participants' preference..

Data Analysis—We employed a thematic analysis approach, drawing on principles of grounded theory to identify themes individuals' accounts of their perceived barriers and facilitators of treatment. These principles included constant comparison of participant responses concurrent with data collection, and identification of themes from the data. Study findings were developed through a group consensus process with six content experts (two social workers, three psychologists, one social scientist). This process facilitated and enriched data interpretation, and documented sound evidence for findings.

To facilitate analysis, we began by developing codes from the raw data, based on common themes we identified as analytically relevant to addressing our research questions. The credibility of study analyses wasere enhanced by detailed data from in-depth interviews, rigorous code development, the group consensus process, and the involvement of investigators with varying professional backgroundsbackgrounds in psychology, social work, psychiatry and perinatal health. As coding development proceeded, code definitions were influenced by useful sensitizing concepts from the literature, in addition to those emerging from the data. Two investigators independently read each of the interview transcripts, labeling with

preliminary codes segments of text pertinent to a single idea or theme (e.g., beliefs about depression). The language for code labels was derived both from participant responses, cognitive-behavioral theory of depression (e.g. depression beliefs), as well as from the broader perinatal depression literature (e.g. "stigma"). An iterative process was used to compare results until agreement was reached on code definitions. Four investigators then read the transcripts independently and labeled the text with preliminary codes. Codes were refined through an iterative group process until a consensus on code definitions was reached. Using the resulting codebook, at least two research team members independently coded each transcript and compared coding. Coder agreement, calculated using the last five interviews coded, was 81%. The final coded transcripts were entered into NVIVO software (QSR International) to assist with data analysis, and code reports were produced and summarized by the investigators. The research team met regularly to review the code summaries, and discuss and interpret the data in light of the original study purpose, with a focus on informing practical recommendations for depression referral following screening.

Results

Table 1 describes the results of our purposeful sampling stratified by pregnancy, depression, and poverty status. Other relevant participant characteristics are summarized in Table 2. Several consistent and prominent themes emerged regarding factors that influence patient reactions to and follow through with depression referrals in obstetrics settings. We present our results under two main themes: practical and psychological factors. Though women commonly reported specific themes as described below, a strong overarching theme was the need and preference for an individualized approach. That is, women showed varying and individual-specific influences (both practical and psychological) on reactions to depression treatment referral and follow through.

Practical considerations

Practical factors that emerged related to characteristics of the treatment. Women across our subgroups reported a number of practical considerations that influenced whether or not they accepted and followed through with a mental health referral: treatment location, proactive and timely assistance with the referral process, and provision of flexible treatment options.

Treatment location—When asked specifically about treatment location preferences, all women but one reported that they would prefer to receive mental health treatment in the obstetric clinic or in the home, not in mental health specialty or psychiatry sites. Several reasons for preferring obstetric clinic-based care were expressed, including immediacy of help, familiarity with clinic and staff, and convenience of receiving treatment in the same building, on the same day as their obstetrics appointment.

Notably, home-based treatment was mentioned as preferable to clinic-based care by some women, irrespective of whether they were pregnant or postpartum. Home-based treatment was seen by many women as convenient, comfortable, and useful for addressing issues postpartum such as infant sleep concerns. Several women reported appreciation for home-based help that they had received from caseworkers, maternal health programs, or midwives. However, other women reported that home visits would not be preferable due to concerns about the need to prepare their homes for visitors. Within the domain of treatment location, transportation was a notable theme among some women below the poverty line; it was not mentioned by higher-income women: Yeah, I don't have a car. I can't just get in my car and go. I would have to depend on somebody to take me or I would have to get on the bus. And me gettin' on the bus with my baby it's.....I don't like the bus.

Proactive and timely connections with referrals—A prominent theme in the interviews was a preference for the process of entering mental health treatment to be timely and to involve fewer steps for the patient. Women reported feeling less frustrated and more motivated to get treatment when obstetric providers were proactive about referrals. For example, preferences for immediate connection with an on-site social worker, provision of information about government assistance programs, and assistance with setting up appointments "on the spot" were commonly expressed. Sometimes a week or longer was reported as being too long for a woman to feel satisfied with a referral: I came in here and spoke to my doctor about it, back in May...she was, okay, I can give you a referral to see a social worker. No, I don't think that I should have to wait for a referral to see a social worker. And then she called like three or four days later and I think the turnaround was too long and when she called I didn't even want to be bothered, so I was like, oh no, nothing's wrong. Another woman reported: how am I going to do that when they don't call?, and when I do call I get a voice message...we're call you in 3 business days and I still haven't heard from the (clinic) in a month. Lack of follow through from clinic referral and social service systems was cited more often among women reporting incomes below the poverty line than among women reporting higher incomes.

Several women reported that they had attempted to call a provided referral outlet for a mental health appointment, only to find that they were not eligible for care at the clinic to which they were referred. For some women, the experience of depressive symptoms was related to the desire to have clinic staff provide a more active referral: You don't even have the energy to try and find it, you just to want someone to bring it to your door or something.

Flexible Options—Different women reported mood-related benefit (or lack of benefit) from different kinds of interventions, such as psychotherapy, medications, groups, assistance with case management, or even one time conversations with obstetricians, implying the need for provision of a "menu" of treatment options: Maybe try to put the idea that it was my idea in my head...not say, "Here, do this and you will feel better." Here's a list of choices you can make and if you need to you can call me up and say, "Hey, how's it going." Another woman similarly illustrated the limitations of a single referral option: I had a hard time opening up to him and feeling comfortable with him (social worker). A lot of it was because I was on Medicaid, and there were not many choices.

In summary, practical barriers to care, although different for different women, were commonly expressed. Overall, the interview data showed a strong preference for treatment options to be flexible and to be provided either in home or in the obstetrics settings. For poorer women in particular, these options would help circumvent transportation barriers. Addressing theses practical barriers were considered helpful in light of disabling depressive symptomatology. The availability of more immediate access to help (as opposed to a long wait for an appointment) was also commonly expressed as a factor that would increase likelihood of taking advantage of services.

Psychological factors

In addition to practical considerations and preferences, we identified psychological themes related to reaction to and follow through with depression referral. Psychological factors were characterized by knowledge, beliefs and feelings. The two primary psychological themes centered on the need for information about illness and treatment, and concerns about stigma associated with treatment for depression.

Information about Depression and Treatment—A significant reported barrier to follow through with referrals was that women across the spectrum of depression severity, from MDD to elevated depressive symptoms, reported the need for information about how to gauge the

severity of their symptoms (including distinguishing between normative pregnancy experiences and depression) as illustrated by the following two quotes: 1) I don't know if I was depressed or not. Sometime I don't know if I'm depressed now and 2) Maybe I could ask my doctor about it, or something...if I should still be feeling this way, because everyone says, like when I mention it to my mom, she's just like "Oh... you're just going through the emotions. You're pregnant."

Women's beliefs about when they should seek treatment varied greatly. Women without previous treatment experience, for example, described depression treatment (e.g. psychotherapy or medications) as a last resort, something that should be considered when symptoms are overwhelming and severe, such as feeling suicidal or psychotic. Some women indicated that the benefits of treatment were unclear to them. One participant explicitly identified getting information about treatment and its effectiveness as an important step in engaging in treatment: I don't know what it [treatment for depression] would do, but, if it would help me, then I would definitely consider it.

Many women also evidenced need for information about medications for depression during pregnancy and breastfeeding: But the whole thing is right now I'm pregnant and I'm always worried about the kid and I don't want to be taking anything like, oh, you're gonna test this out and I don't wanna have any possibility of it hurting the kid. I mean I'd be willing to do something to help me out, take medication, I just, I would never do anything to hurt the kid. Even the slightest chance of, oh, well it might cause an abnormality, I'm like, no.

Concerns about stigma associated with treatment for depression—Several sub-categories of this theme emerged that may inform more effective ways to present and frame depression treatment referrals by obstetrics clinicians, and included: concerns about use of the term "depression", concerns that depression treatment signifies personal failure or failure as a mother, and concerns about how they will be perceived by others.

A theme among the interviews was the importance of language in determining how women respond to being offered treatment referrals. Although several women in this study self-described their symptoms as depression, others clearly did not identify with the term: Those are all characteristics of depression: overwhelmed, stressed, mood swings, sadness. That's all depression, but it's just when you say depression, it's like oh, God, I'm not depressed. I'm just stressed out. A woman with MDD expressed: I don't never consider what I go through far as depression. I just--I consider it a high level of stress, and maybe that's just how I label it because of the word 'depression'.

Several women reported that feeling down or depressed in pregnancy made them feel guilty or as if they were failures, particularly in the role of mother. This belief was commonly reported as a main factor that interferes with seeking treatment for perinatal depression. I think some of the women too, when they get down, they feel like if they go see someone, they feel like they are a failure.

Similarly, others mentioned that treatment would be more acceptable to them if treatment were presented as a positive, normal step for both mother and baby rather than as depression treatment: Make it feel like it is something good for you and the baby. Rather than just like, "Oh this is a therapy group."

Some women reported that they would be concerned about what others would think if they were to seek treatment or describe themselves as having depression. One woman expressed: What are they gonna think of me if I say this? I already feel like I'm cuckoo. What are they gonna say to me? They're gonna say I'm nuts, too.

Along this line, several women referenced highly publicized cases of postpartum depression and psychosis as reasons to be concerned about perceptions of others and therefore reluctant to discuss depression or seek treatment. In society, anything postpartum is oh, you're crazy, oh boy, you should be careful because you're going to go home and drown your children. You know, I mean it's such a stigma in the media and everything else. It's a total lack of education, you know.

Women also reported that they felt concerns from health care providers were driven primarily by risk management issues. Though this is often a reality of clinical care, some participants stated that they felt devalued or misunderstood when discussions indicated that they were being viewed as a liability. One woman contrasted talking with a close friend, which she found helpful, with talking to healthcare professionals: Yeah. They [close friends] don't over react and they don't flip out and think that I need to go to a mental ward...it's more just calling to say hi to each other, make sure that we can do it...you know that kind of thing, verses really when you talk to a health care person and then they are thinking they are a liability, that this person is not going to slit their wrists.

In summary, many women did not naturally relate their symptoms and experiences as "depression", and indicated that initial use of the term may interfere with a positive reaction to referral efforts and follow through with referrals. Overall, accurate information about depression severity, safety and efficacy of treatment options, relevance of depression treatment to positive motherhood, and addressing stigma concerns were common needs expressed by women in our sample. As with practical barriers, depression knowledge and stigma concerns were different for different women and may need to be addressed in an individualized way. Themes regarding women's preferences for treatment imply that a "one-size-fits-all" approach to treatment referral may not be effective in facilitating follow through.

Discussion

Overall, we found a good deal of variation in women's needs and preferences for referral process and provision of treatment options (e.g. in their feelings, experiences, and beliefs about depression and treatment). Therefore, our results suggest a need for individualizing the process of referral to treatment and for treatment options to each woman. The results of this study indicate several areas for improving the depression referral process following screening in obstetrics settings. First, women's stated preferences for obstetrics-based or home-based treatment in this study are in contrast with current practice, that is, referral to treatment to psychiatry or other specialty mental health settings. Given the often highly stressful life transition that women experience during pregnancy and postpartum, this appears to reflect preference for a familiar, easily accessible and comfortable setting. These findings are consistent with another recent mixed methods study, which found logistical factors such as lack of transportation, time off from work, and childcare to be barriers to seeking treatment, especially among low income women (16). It may be that a familiar setting may simply be an easier point of entry into mental health care. Secondly, women consider their symptoms of depression and motivation to address them to be time sensitive, preferring clinic staff to actively assist them with treatment without delay, preferably in conjunction with their obstetrics visits. The common referral process of providing a listing of contact information for mental health services, necessitating women to navigate insurance coverage and therapist availability, presents multiple obstacles. Other qualitative studies have similarly found that lack of knowledge about depression, need for normalization of symptoms, stigma / trust issues, and logistical barriers are important influences on perinatal depression treatment use (16-18). In order to address the logistical barriers found here and in other studies, a tailored, active referral process with ongoing monitoring may be more effective. An integrated care model with mental health clinicians available for individualized, brief consultation on site may serve to facilitate

treatment. In addition, women indicated that contemplating treatment for depression is a complex, emotionally taxing process that may threaten their views of themselves as mothers. Therefore, the process of communicating normalizing, non-stigmatizing depression information, using the patients own language initially in a way that emphasizes positive benefits to both mother and infant may be critical in determining whether women will follow through with treatment referrals or not.

Based on these results, the following process for depression referral following screening is recommended. These recommendations may be used as an initial, empirically derived approach that may be specifically tested in future studies.

1. Provide referral options that include on-site mental health treatment or psychiatry consultation whenever possible. Use existing home based services for ongoing symptom monitoring, referral and / or treatment. Women preferred active, timely, and convenient referrals. Providing treatment in conjunction with a woman's obstetrics visits may result in higher treatment engagement. Ideally, many women seem to prefer to meet with someone at the same visit that they discuss mood issues with their provider. Providing several referral options (such as group or individual psychotherapy; case management; multiple locations) to women and allowing them to choose appears to be preferred.

2. Provide individualized feedback, options, and connection to relevant resources during the course of obstetrical care and consultation. Within the context of discussing screening results, clinicians can assess / elicit a woman's specific needs, provide treatment and other service needs options, and assess individual-specific barriers to treatment such as transportation or financial burden. Referral to social services and local resources may provide the additional support needed to fully address multiple needs that may impact well-being (such as housing, nutrition, childcare).

3. Monitor and assist with referrals for depression regularly throughout prenatal care. Many women in this study reported confusion or ambivalence about whether they were experiencing depression or would benefit from treatment. Screening at regular intervals throughout the perinatal period screening may facilitate ongoing communication between clinic staff and the patient

4. Normalize and provide education about normative mood changes in pregnancy as distinguished from perinatal depression. Women reported both confusion about normative pregnancy experiences as distinguished from depression symptoms (e.g., fatigue, confusion about mood in the context of hormonal changes), as well as concerns and fears of consequences of depression based on publicized cases of severe postpartum psychiatric illness. Therefore, accurate information about depression in the context of pregnancy would be useful.

5. Elicit from women how they view and label their symptoms, what they think will help, and individual barriers and concerns. Women reported that they want to feel they are heard and understood as individuals by healthcare providers. Feedback may initially include the patient's language (e.g., use of the term "stress" instead of depression), and eliciting from the patient what she believes would be helpful or desirable in handling her mood changes (e.g. ***What do you think would be most helpful for you?***"). "Checking in" with feedback by inquiring about whether she has additional questions or reservations about the options provided for her was reported as useful.

These recommendations can be incorporated into a systematic approach to following up depression screening results and referring depressed women. The key difference between this proposed approach and traditional screening and referral is an emphasis on individualized

assessment and referral, considering both practical and psychological influences on treatment, and providing multiple treatment options including active on-site and / or home based referrals. Clearly, there are a number of health care system-level barriers that can interfere with the feasibility of these recommendations. For example, many obstetrical sites do not have the resources for an on-site social worker. However, it is possible to train nurses and / or medical assistants to systematize and improve depression referral processes within the parameters of their existing clinical responsibilities.

Our findings should be interpreted in the context of the study limitations. We conducted a qualitative study to understand explore pregnant and postpartum women's beliefs about what would prevent or facilitate their entry into depression treatment during the perinatal period. Accordingly, our goal was not to generalize findings from a study sample to a population, as is common with quantitative studies. Rather, our intent was to provide information that could not be produced through quantitative study, thereby offering decision-makers and researchers with a starting point for strategies to address low rates of treatment linkage and engagement. One of the ways in which qualitative findings are judged to be generalizable or applicable outside the study sample is based on whether the reader recognizes the phenomenon described and finds it useful for understanding or changing a certain practice. Findings from a qualitative study can therefore be thought of as "lessons for other settings" or "working hypotheses" (19). Several characteristics of the clinics in which participants received care, (such as routine screening for depression and the availability of an on-site or on-call social worker), may affect whether and how clinic managers adapt recommendations. For example, women receiving care in clinics that already provide an array of on-site depression treatment services may not face this barrier. Also, although women in this study described similar barriers across the clinics in our sample, there are likely additional barriers we did not identify.

Another limitation is the lack of a contrasting group of women who were currently receiving treatment at the time of the interviews in our sample. The overall aim of this study was to provide information specifically on women with varying levels of current depression who were not currently using depression services. Improving strategies to engage that target population is the public health focus of this research. Nonetheless, many of the women in our sample had prior experiences with treatment (n=15, 65%), and our coding and thematic analyses included those reports. Although these data are not necessarily equivalent to accounts of women receiving treatment at the same time period and in the same contexts as those we interviewed, it did inform our analysis. In terms of demographic characteristics, roughly half of our sample included first time mothers, African_American women, women with public insurance, some college education and women who were married or had a live-in partner. The results, therefore, may not be generalizeable to women from other racial / ethnic groups or to women not seeking prenatal care.

Limitations notwithstanding, our study identified several important themes regarding patient perspectives on depression referral processes influences in prenatal care settings Future studies should specifically aim to test whether or not such recommended strategies improve on the current low rates of depression treatment linkage and engagement. This is important given the research showing that engagement in evidence-based depression treatment does improve maternal and possibly infant outcomes.

Acknowledgments

This work was supported by the National Institutes of Health (Flynn MH076219)

References

(1). Kelly RH, Russo J, Holt VL, et al. Psychiatric and substance use disorders as risk factors for low birth weight and preterm delivery. Obstetrics & Gynecology 2002;100:297–304. [PubMed: 12151153]

(2). McKee MD, Cunningham M, Jankowski K, et al. Health-related functional status in pregnancy: relationship to depression and social support in multi-ethnic population. Obstetrics & Gynecology 2001;97:988–993. [PubMed: 11384708]

(3). Smith MV, Rosenheck RA, Cavaleri MA, et al. Screening for and detection of depression, panic disorder, and PTSD in public-sector obstetric clinics. Psychiatric Services 2004;55:407–414. [PubMed: 15067153]

(4). Young AS, Klap R, Sherbourne CD, et al. The quality of care for depressive and anxiety disorders in the United States. Archives of General Psychiatry 2001;58:55–61. [PubMed: 11146758]

(5). Spitzer RL, Williams JB, Kroenke K, et al. Validity and utility of the PRIME-MD patient health questionnaire in assessment of 3000 obstetric-gynecologic patients: the PRIME-MD Patient Health Questionnaire Obstetrics-Gynecology Study. American Journal of Obstetrics & Gynecology 2000;183:759–769. [PubMed: 10992206]

(6). Kelly RH, Zatick DF, Anders TF. The detection and treatment of psychiatric disorders and substance use among pregnant women cared for in obstetrics. American Journal of Psychiatry 2001;158:213–219. [PubMed: 11156803]

(7). Marcus SM, Flynn HA, Blow FC, et al. Depressive symptoms among pregnant women screened in obstetrics settings. Journal of Women's Health 2003;12:373–380.

(8). Wisner KL, Chambers C, Sit DK. Postpartum depression: a major public health problem. Journal of the American Medical Association 2006;296:2616–2618. [PubMed: 17148727]

(9). Depression Guideline Panel. Clinical practice guideline no. 5. Vol. 1-2. US DHHS; Rockville, MD: 1993. Depression in primary care. AHCPR publication nos. 93-0550, 93-0551

(10). Department of Health and Senior Services. State of New Jersey. Apr. 2006 Section 2 of P.L.2000, c.167 (C.26:2-176)

(11). Gaynes BN, Gavin N, Meltzer-Brody S, Lohr KN, et al. Perinatal depression: prevalence, screening accuracy, and screening outcomes. Evidence Report Technology Assessment 2005;119:1–8. [PubMed: 15760246]

(12). Rost K, Nutting P, Smith J, et al. Improving depression outcomes in community primary care practice: a randomized trial of the quest intervention. Journal of General Internal Medicine 2001;16:143–149. [PubMed: 11318908]

(13). Flynn HA, Blow FC, Marcus SM. Rates and predictors of depression treatment among pregnant women in hospital-affiliated obstetrics practices. General Hospital Psychiatry 2006;28:289–295. [PubMed: 16814627]

(14). Cox JL, Holden JM, Sagovsky R. Detection of postnatal depression. Development of the 10-item Edinburgh Postnatal Depression Scale. Br J Psychiatry 1987;150:782–786. [PubMed: 3651732]

(15). First, MB.; Spitzer, RL.; Gibbon, M., et al. Structured Clinical Interview for DSM-IV-TR Axis I Disorders, Research Version, Non-patient Edition (SCID-I/NP). Biometrics Research, New York State Psychiatric Institute; New York: 2002.

(16). Kopelman RC, Moel J, Mertens C, et al. Barriers to care for antenatal depression. Psychiatric Services 2008;59:429–432. [PubMed: 18378843]

(17). Sword W, Busser D, Ganann R, McMillan T, Swinton M. Women's care-seeking experiences after referral for postpartum depression. Qualitative Health Research 2008;18(9):1161–1173. [PubMed: 18689530]

(18). Dennis CL, Chung-Lee L. Postpartum depression help-seeking barriers and maternal treatment preferences: a qualitative systematic review. Birth 2006;33(4):323–331. [PubMed: 17150072]

(19). Patton, MQ. Qualitative Research and Evaluation Methods. 3rd ed.. Sage Publications; Thousand Oaks, CA: 2002.

Table 1

Purposeful sampling by pregnancy, depression, and poverty status

		Pregnancy Status						
		Pregnant			Postpartum			
		Depression Severity						
		High[a]	Medium[b]	Low[c]	High[a]	Medium[b]	Low[c]	total
US Poverty Guidelines	Above	3	3	1	2	3	1	13
	Below	5	3	1	0	1	0	10

[a] Current Major Depressive Episode

[b] Current Minor Depressive Episode and/or previous Major Depressive Episode

[c] EPDS> 9 but no Major Depressive Disorder history or current Major or Minor Depressive Episode

Table 2

Characteristics of interview participants

Characteristic	n
Race/Ethnicity	
Black/African-American	11
White/Caucasian	8
Multiracial	1
Asian-American	1
American Indian	2
Relationship status	
Married	8
Never married	8
Living with partner	6
Separated	1
First time mother	
Yes	10
No	13
Education	
Some high school	6
High school diploma/GED	3
Some college	8
College and beyond	6
Previous mental health treatment	
Yes	15
No	8
Insurance	
Public	12
HMO	10
Private	1

Table 3

Representative Interview Guide Questions

- Experiences of the pregnancy and associated difficulties
  - ○What was your reaction to your pregnancy?
  - ○How has your mood been?
  - ○What difficulties / troubles/problems have you been having that you feel contribute to your mood? (assess core beliefs around these)
  - ○What do you do / have you done to deal with / overcome these problems? What has/has not been helpful for you?
- Perspective on what would help depression and on treatment
  - ○What do you think would be helpful to you in dealing with ...(depression, stress, difficulties, adjustment to pregnancy)
  - ○Do you want treatment for depression / think treatment would work for you? Why or why not?
  - ○What would make it easier / more likely that you would seek treatment? What might get in the way?
  - ○Where would be the most convenient place for you to receive treatment, if you could receive it anywhere?
  - ○How would treatment need to be presented to you?
- Changes related to childbirth
  - ○Tell me about how you see your life changing after the baby arrives.
  - ○What will change for you that might create more stress / depression / be very difficult for you?
  - ○What do you think would help with adjusting to parenthood (or another child)?
  - ○In regards to pregnancy and parenthood, what would you like to learn more about?