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How Obstetric Settings Can Help Address Gaps in Psychiatric Care for Pregnant and Postpartum Women with Bipolar Disorder

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Abstract

Purpose—To elucidate: 1) the challenges associated with under-recognition of bipolar disorder in obstetric settings; 2) barriers pregnant and postpartum women with bipolar disorder face when trying to access psychiatric care; and, 3) how obstetric settings can identify of such women and connect them with mental health services.

Methods—Structured, in-depth interviews were conducted with 25 pregnant and postpartum women recruited from obstetric practices who scored ≥ 10 on the Edinburgh Postnatal Depression Scale and met DSM-IV criteria for bipolar disorder I, II or not otherwise specified using the Mini International Neuropsychiatric Interview. Quantitative analyses included descriptive statistics. Interviews were transcribed, and resulting data were analyzed using a grounded theory approach.

Results—Most participants (n=19, 79.17%) did not have a clinical diagnosis of bipolar disorder documented in their medical records nor had received referral for treatment during pregnancy (n=15, 60%). Of participants receiving pharmacotherapy (n=14, 58.33%), most were treated with an antidepressant alone (n=10, 71.42%). Most medication was prescribed by an obstetric (n=4, 28.57%) or primary care provider (n=7, 50%). Qualitative interviews indicated that participants want their obstetric practices to proactively screen for, discuss, and help them obtain mental health treatment.

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Ethical Approval: All procedures performed in studies involving human participants were in accordance with the ethical standards of The University of Massachusetts Institutional Review Board (who approved the study) and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Informed Consent: Informed consent was obtained from all study participants before they participated in the study.

Conflict of Interest: The first, third, fourth, and eighth authors have received salary and/or funding support from Massachusetts Department of Mental Health via the Massachusetts Child Psychiatry Access Program for Moms (MCPAP for Moms). The first author is also the statewide Medical Director of MCPAP for Moms. The first author has served on the Perinatal Depression Advisory Board for the Janssen Disease Interception Accelerator Program and Advisory Boards for Sage Therapeutics. She is also a council member of the Gerson Lerhman Group. The third author is the Lead Obstetric Liaison for MCPAP for Moms and has served on a Physician Advisory Board for Sage Therapeutics and is a consultant for two research projects. The fifth author has been the Program Director of MCPAP for Moms, and the eighth author has served as a Consultant for MCPAP for Moms. The seventh author serves as a consultant for Myriad Genetic, Inc. The second, fourth, and sixth authors declare that they do not have conflicts of interest.

Conclusions—Women face challenges in securing mental health treatment appropriate to their bipolar illness. Obstetric providers provide the bulk of medical care for these women and need supports in place to: 1) better recognize bipolar disorder 2) avoid inappropriate prescribing practices for women with undiagnosed bipolar disorder; and, 3) ensure women are referred to specialized treatment when needed.

Keywords

Bipolar disorder; Perinatal; Pregnancy; Postpartum; Obstetric; Treatment

INTRODUCTION

Bipolar disorder affects 3% of the general population and 23% of perinatal (pregnant or within a year of giving birth) women who screen positive for perinatal depression (Wisner et al., 2013). Bipolar disorder has deleterious effects on birth and child outcomes (Rusner, Berg, & Begley, 2016) and is associated with self-injury, substance use (Geddes, 1999), disruption of mother-child bonding (Geddes, 1999), suicide, and infanticide (Lindahl, Pearson, & Colpe, 2005; Spinelli, 2004). The perinatal period is the time of highest risk for first onset or recurrence of bipolar disorder episodes (Kendell, Chalmers, & Platz, 1987; Munk-Olsen, Laursen, Pedersen, Mors, & Mortensen, 2006). Bipolar disorder is the most potent, best-established risk factor for postpartum psychosis (Jones & Craddock, 2001). Treatment access and adequacy during the perinatal time period is a critical issue because discontinuation of pharmacotherapy increases risk for illness relapse (Jones, Chandra, Dazzan, & Howard, 2014). Despite the negative impact of untreated illness and availability of effective evidence-based treatments, bipolar disorder is currently under-detected, not addressed effectively, or exacerbated through inappropriate treatment (Byatt et al., 2012; Byatt et al., 2017; Weinreb, Byatt, Moore Simas, Tenner, & Savageau, 2014).

Professional societies and policymakers that recommend screening for perinatal depression note that it must be accompanied by plans to ensure accurate diagnosis and appropriate treatment. This cannot be accomplished without screening, referral, and treatment of bipolar disorder (Wisner et al., 2013). In 2015, the American College of Obstetricians and Gynecologists (American College of Obstetricians and Gynecologists Committee on Obstetric Practice, 2015), the US Preventive Services Task Force (Siu et al., 2016), and the Center for Medicaid Services (Wachino & Center for Medicaid and CHIP Services, 2016) began recommending depression screening for all perinatal women. In response, obstetric practices are beginning to identify depression and provide treatment. While this is a major step forward, it poses new challenges. Because major depressive disorder is phenotypically identical to bipolar disorder when individuals are depressed, depression screening procedures that do not specifically assess for bipolar disorder do not distinguish between these illnesses. As depression screening becomes routine, resultant failure to identify and treat occult bipolar disorder in perinatal women constitutes an emerging and unmet health care need.

To develop approaches for identifying and treating bipolar disorder during the perinatal time-period that are acceptable to patients and providers, we need to better understand their

perspectives regarding what would hinder, help, and be feasible. Obstetric providers are at the front line serving pregnant and postpartum women with bipolar disorder and may be able to play a critical role in helping them access appropriate mental health care. The purpose of the study is to elucidate in a sample of perinatal women with bipolar disorder: 1) the challenges associated with under-recognition of bipolar disorder in obstetric settings; 2) what barriers they face when trying to access psychiatric care; and, 3) their perspectives regarding how obstetric practices can facilitate the identification of bipolar disorder in this population and connect women with mental health care.

METHODS

A descriptive exploratory study was conducted with a convenience sample of English-speaking pregnant or postpartum women aged 18–55 recruited from November 2014 – July 2016. Women were recruited during pregnancy and up to 24 months after birth from five obstetric practices associated with a large tertiary care center. The study was approved by University of Massachusetts Institutional Review Board.

Each practice's depression screening protocol included administering the Edinburgh Postnatal Depression Scale (EPDS) (Cox, Holden, & Sagovsky, 1987) at 12–14 and/or 26–28 weeks gestational age and 6 weeks postpartum. Each practice informed patients of the study during depression screening and gave patients the opportunity to opt out of being contacted by a Research Coordinator. Patients that did not opt out and were deemed eligible based on prescreening were contacted by telephone and screened for eligibility using the 3-question Composite International Diagnostic Interview Based Bipolar Disorder (CIDI) Screening (Kessler et al., 2006). If the CIDI screen was positive, patients were invited to meet in-person and written informed consent was obtained from eligible patients. Women were eligible if they: 1) had an EPDS ≥ 10 when screened by the practice; 2) were 18–55 years old; 3) were English-speaking; 4) were pregnant or < 24 months postpartum; and, 5) met criteria for bipolar illness as determined by the Mini International Neuropsychiatric Interview at the time of the interview (M.I.N.I.) (Sheehan et al., 1998). The minimum cut-off on the EPDS used to indicate possible depression ranges from 9–13 in relevant literature. Consistent with recommendations by Gibson et al. (Gibson, McKenzie-McHarg, Shakespeare, Price, & Gray, 2009) and many studies in the peer reviewed literature (Burton et al., 2011; Chaudron et al., 2005; Chen et al., 2011; Flynn, O'Mahen, Massey, & Marcus, 2006; Glavin, Smith, & Sorum, 2009; Glavin, Smith, Sorum, & Ellefsen, 2010; Goodman & Tyer-Viola, 2010), we used a cut-off of 10 to ensure that we captured most or all women with scores requiring further assessment. Women who completed the study received a \$15 gift card.

Participants also completed the Barriers to Access to Care Evaluation (BACE). The BACE is a 30 item self-administered tool, with demonstrated reliability, validity, and acceptability (Sarah Clement et al., 2012), that assesses barriers to accessing mental health care, including a 'treatment stigma' subscale (S. Clement et al., 2012). BACE scores range from 0 to 3 with higher scores indicating more barriers or stigma. The EPDS (Cox et al., 1987) is a validated, self-administered 10-item screening questionnaire for which the scores range from 0–30, with higher scores reflecting greater symptom severity (Cox et al., 1987). The structured

interview obtained demographics and factors associated with mental health treatment participation. After excluding one participant due to the medical record being unavailable, pharmacotherapy during pregnancy and within one year postpartum was abstracted from the medical record for 24 participants.

Twenty-minute in-depth interviews in which participants responded to study probes regarding the barriers and facilitators to mental health treatment were also conducted. Recordings were cleaned of any identifying data, transcribed, and checked for accuracy. Transcripts were uploaded into Dedoose (“Dedoose,” 2012), a web-based software program that facilitates mixed methods data management for further coding, elaboration and specification of concepts and relationships. Interview content was organized theoretically, using a modified grounded theory approach with a phenomenological emphasis (Morgan, 1988). Using methods described by Miles & Huberman (Miles, 1994), categorizing began with an initial set of preliminary codes for themes suggested from the literature, research aims and previous work. Codes were added as they emerged from the data until saturation was achieved, and initial transcript sections were re-categorized using the reformulated codes. Each transcript was coded by two researchers, who achieved at least a 90% agreement rate in independent coding. Dedoose allows for the assembling of coded segments into selected configurations that facilitates identification of recurring patterns/ clusters.

Mean and standard deviation was calculated for continuous variables and percentages for categorical variables. Mean BACE scores were calculated for 3 subscales (stigma, instrumental barrier, and attitudinal barrier) and total score. Reliability of the BACE was measured using Cronbach’s alpha for the BACE total scale (0.91), BACE stigma sub-scale (0.91), BACE instrumental barriers scale (0.77), and BACE attitudinal barriers scale (0.82). Reliability for the EPDS was (0.86).

RESULTS

The population studied represented a diverse sample (Table 1). Based on the M.I.N.I., all participants met diagnostic criteria for bipolar illness and most had comorbid illnesses (Table 2). The total BACE score and stigma, instrumental barriers and attitudinal barriers and access to care subscales were low. While the majority had received a mental health diagnosis (n=21, 84.0%) or psychiatric treatment (n=21, 84.0%) in their lifetime, only seven (28.0%) were referred for treatment during pregnancy and only six (20.83%) had a clinical diagnosis of bipolar disorder documented in their medical record (Table 3). Of those who were prescribed medication (n=14, 58.33%), most were treated with an antidepressant alone (n=10, 71.42%), a management approach that is not consistent with current treatment guidelines for bipolar disorder (*Bipolar disorders in adults: NICE Guideline, 2015*).

Qualitative Data

Participant interviews revealed themes that reflect barriers and facilitators to their obstetric providers addressing mental health during perinatal period. While all participants had a diagnosis of bipolar disorder based on the M.I.N.I., most were unaware of their diagnosis and thus focused on concerns about depression rather than bipolar disorder.

Patient-level Barriers

Self-blame, stigma, fear, and lack of support prevent women from seeking

help: Participants felt embarrassed that they were experiencing psychiatric symptoms due to a perception that women should not need emotional support during pregnancy or the postpartum period. They reported being scared to reach out for help due to fear of being judged.

“I don’t think that it was that no one was there... it was more of me being scared of reaching out to people and letting them know that I don’t have the perfect family. I think it was that fear.”

Lack of support from their spouse or partner contributed to these fears and made it even more challenging to seek help. Several women reported that their partner discouraged them from seeking help because their partner said they, “don’t need it... and just need to calm down and stop crying.”

Limited time and resources, competing demands, child care responsibilities, and being pregnant made it even harder for women to prioritize and take care of themselves and their mental health so they, “put it on the backburner... because there is no time for me.” Women also blamed themselves and wondered, “why am I feeling like that? Is it because I want attention or am being dramatic?”

Provider-level Barriers

Mood disorders and the risks and benefits of treatment are not discussed or addressed

by obstetric providers: Participants perceived lack of discussion of options as a major omission in their prenatal care.

“They didn’t offer much advice or anything about the medication... they just kind of said what medication are you on and put it in the computer, and didn’t really talk to me about it or anything. I would like to hear his opinion, how he feels about the medication... and the depression and all those kinds of things... I didn’t really get that.”

Several participants noted that their provider did not ask questions about or provide information about their mood disorder or the risks and benefits of the psychiatric medications they were taking during pregnancy or breastfeeding. One participant stated, “I do wanna breastfeed, but I get scared because I don’t know... what that [medication] is going to do my child and I don’t want my child to have issues any issues with the medication going through my breast.”

Lack of follow-through of screening results among providers: Participants felt discouraged when their provider did not pay attention to the answers to the depression screen or did not discuss the results. One participant shared her experience:

“They do the survey... but they don’t discuss [it]... they just give you the survey, “Here fill this out.” There’s no discussion about it...”

Multiple participants felt they filled out the screen and “that was it.” They also noted that other important topics related to their emotional health and overall well-being were not discussed such as “the obvious, are you nauseous, gain weight, lose weight, whatever... it is never really [discussed].”

System-level Barriers

Unable to find providers who treat pregnant women with mood disorders: Participants noted that depression screening had limited utility because they did not know where to go for help. One participant noted:

“I saw that some other women in the group had problems with like waiting times to get into groups or services, which seemed unreasonable. Especially during postpartum when time is very important.”

Barriers to accessing mental health care included participants’ limited knowledge regarding available providers, in addition to encountering unresponsive providers, and long wait times for appointments.

Patient-level Facilitators

Feeling empowered by knowledge about illness and importance of treatment: Women felt empowered when they had information and knowledge about mental health complications during pregnancy and available treatments. They noted that it helped when friends, family members, or partners checked in on them periodically and asked about their mental health or suggested they reach out for help.

“The knowledge of mental health. I think it is probably the biggest thing, knowing, recognizing the signs and symptoms. Just knowing that I needed to seek help before it got worse.”

Openness to discussing their mental health concerns among themselves and other women was greatly valued by many participants and was noted to help them feel better that they “feel the same that I am [feeling].”

Provider-level Facilitators

Obstetric providers detecting and discussing mood disorders and referring women for treatment: Participants suggested obstetric providers encourage women to disclose their concerns about their mental health and let them know where they can go to seek help. Women wanted their obstetric provider to refer them for treatment and be the gateway for more specialized treatment when needed.

“It is more not [being] sure what the first step is... whether you should... call my primary care or do I call my OB and ask him to refer me to someone. Or how do I know [whether] it’s covered by insurance. It’s just not really clear what the steps are in doing that. Maybe if someone talked to me about some the options and I... had some supports as to who to who I go to and what the steps [are] to get the help that I need, that would help.”

Women also wanted their obstetric provider to be more insistent about them getting treatment. Participants suggested that obstetric providers discuss mental health disorders that can occur before, during and after birth with women and their partners or family. They noted this would help them seek help and act on any concerns that may arise.

System-level Facilitators

Increasing awareness of mood disorders through education and provision of resources: Participants wanted to be informed about the available treatment for mood disorders and how to seek help should they occur. Several noted that, “doctors should have something [to give them] and should talk about it at every visit,” even when there is no psychiatric history. Participants noted how helpful it would be if obstetric providers routinely discussed mental health resources and treatment options and start this early in pregnancy to help women and their supports recognize mood disorder symptoms and seek help.

“Every time they go to doctor visits, the Ob/Gyn needs to talk about it, at every visit. Even if the woman looks happy, there’s always something. I think if the doctors would mention it all the time, every pregnancy, it would get through their head that maybe it’s a serious thing.”

Screening coupled with coordination and consistent follow-up of care: To engage and support women getting treatment, participants suggested that screening should be coupled with a follow-up discussion, education, coordination of treatment and periodic check-ins and/or follow-up phone calls to ensure that women got connected with treatment.

“...especially when I was having trouble and there was a lot of pressure on my husband. I feel like that shouldn’t be only for people who can afford it, I think that should be somehow accessible to everybody with a psychiatric problem.”

DISCUSSION AND CONCLUSION

While all women in our sample met the criteria for bipolar disorder based on the MINI, they: 1) were not clinically diagnosed with bipolar disorder; and, 2) did not receive targeted treatment for bipolar disorder. Despite having met the criteria for bipolar disorder on the M.I.N.I., most women had not been given a clinical diagnosis of bipolar disorder (72.0%). This is consistent with prior work in general adult populations in which misdiagnosis of bipolar disorder is common (Hirschfeld, Lewis, & Vornik, 2003; Hirschfeld & Vornik, 2004), with typically a 10 year lag between onset of illness and receipt of correct diagnosis (N. Ghaemi, Sachs, & Goodwin, 2000; S. N. Ghaemi, Boiman, & Goodwin, 2000). Almost half the sample (42%) received inappropriate / relatively contraindicated medication treatment (i.e., antidepressant monotherapy) (*Bipolar disorders in adults: NICE Guideline*, 2015). Similarly, almost half (42%) received no medication treatment, which is also inconsistent with current treatment guidelines.

Given that all the women in our sample screened positive for depression and were not diagnosed with bipolar disorder, it is understandable that some received treatment with antidepressant medication. Antidepressant medication is an appropriate, evidence-based

treatment for unipolar depression but not for bipolar disorder. Research suggests a lack of efficacy of antidepressant treatment for bipolar depression (Sachs et al., 2007; Sidor & MacQueen, 2011) with concomitant risk of cycling / switching between episodes of depression or hypomania / mania (Leverich et al., 2006; Schneck et al., 2008). Use of antidepressant monotherapy in bipolar disorder, type II has more supporting evidence (Amsterdam & Shults, 2010; Amsterdam, Wang, & Shults, 2010) with lower risk of switching in bipolar disorder, type II relative to type I (Altshuler et al., 2017) (Altshuler et al., 2006). However, increased rates of suicidal ideation and attempts are associated with antidepressant exposure (Bauer et al., 2006; Pacchiarotti et al., 2011). Currently, evidence-based guidelines recommend use of antidepressants only in conjunction with mood stabilizers (*Bipolar disorders in adults: NICE Guideline*, 2015). Thus, in our study, most women with bipolar illness were neither correctly identified nor offered evidence-based treatment for bipolar disorder because they were either not treated or treated with antidepressants alone (68.0%). Although this was a severely ill population in which most participants had a history of psychiatric treatment with pharmacotherapy and a past suicide attempt, most also reported that they were not given the opportunity to discuss medication treatment options during pregnancy.

Despite these challenges, women reported experiencing low stigma and the majority received at least some form of mental health treatment. Most treatment was provided by non-psychiatric providers, suggesting that obstetric practices play a critical role in providing psychiatric care to this population. This is major progress and an important step in increasing access to mental health care for perinatal mood disorders. Our qualitative data suggest that women want their obstetric providers to proactively screen for, discuss, and help them obtain mental health treatment.

Although obstetric providers' increased comfort in treating perinatal depression is a major advance, our data suggest that it also may be associated with an increased risk of delivering inappropriate treatment to women with undiagnosed bipolar disorder, including antidepressant monotherapy. Our data are particularly concerning because our study sample was a high-risk population in which the majority had attempted suicide or had been psychiatrically hospitalized, both of which are predictors of poor course and outcomes.

Bipolar disorder is a complicated illness that can be difficult to diagnose (Smith et al., 2011). Patients that screen positive for bipolar disorder will generally need to be assessed by a psychiatric provider for diagnostic clarification. While it may not be appropriate or feasible for obstetric providers to diagnose bipolar disorder, it is imperative that they screen for it before initiating treatment with an antidepressant. Screening with a validated screening tool would allow obstetric providers to determine when it is appropriate to initiate treatment with an antidepressant versus refer for assessment and treatment with a psychiatric provider. This approach is consistent with the Maternal Mental Health Safety Bundle (Kendig et al., 2017) which recommends screening for bipolar disorder in obstetric settings.

Study strengths include that we obtained both qualitative and quantitative data, allowing for more in depth understanding of participants' experiences. Our study is limited by a small sample of women with severe psychiatric illness drawn from a single geographic region,

which limits generalizability. Further investigation in larger and more diverse samples in different geographic regions is needed to increase the generalizability of our findings.

Although we purposefully sampled women with bipolar disorder, our qualitative findings may also apply to other psychiatric illnesses that occur during pregnancy and the postpartum period. For example, because there was no comparison group, it is possible that the barriers to care in our sample are similar to those experienced by women who do not meet criteria for bipolar disorder. Differentiating the barriers experienced by women with and without unrecognized bipolar disorder would also have allowed us to better understand the different barriers experienced by these subsets of women in our sample. Including data on the perspectives of obstetric providers would also have enhanced our findings. Regardless, our study builds on previous research to better understand the experiences of perinatal women with bipolar disorder.

Our data suggest that pregnant women with bipolar face many challenges in securing mental health care treatment appropriate to their needs. To promote maternal, and ultimately child health, bipolar disorder must be recognized, treated and carefully monitored. Obstetric providers are at the front line serving these vulnerable women with complex conditions. As recommended in the Maternal Mental Health Safety Bundle (Kendig et al., 2017), these settings can and should be leveraged as a place to detect bipolar disorder and refer patients for treatment. Obstetric providers play a pivotal role in this process. Our data suggests that obstetric providers need to identify women with bipolar disorder and help link women with needed psychiatric care to: 1) avoid inappropriate and potentially dangerous prescribing practices for the women who have undiagnosed bipolar disorder; and, 2) ensure women are referred to the specialized treatment they need.

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Table 1

Description of study participants (N=25) demographics

Variable	Mean	Std Dev
Age	30.96	5.84
Postpartum weeks (N=13)	36.23	25.71
Weeks pregnant (N=12)	21.75	6.78
Number of pregnancies (Median, IQR)	3	1.5–5
Number of births (Median, IQR)	2	1–3
	N	%
Race		
Black or African-American	2	8.0
White	16	64.0
Other/ Unknown	7	28.0
Hispanic/ Latina	9	36.0
Pregnant	12	48.0
Living with partner	19	76.0
Health insurance		
Medicaid or Medicare	12	48.0
Private health insurance	11	44.0
Combination	2	8.0
Household Income		
Less than \$15000	4	16.0
\$15000 – \$30000	7	28.0
\$30000 – \$60000	4	16.0
More than \$60000	7	28.0
Don't know	3	12.0
Relationship status		
Married	9	36.0
Divorced	4	16.0
Separated	1	4.0
Never Married	2	8.0
Not married but in a long-term relationship	8	32.0
Other	1	4.0
Education		
Less than high school	4	16.0
High school diploma or GED equivalent	5	20.0
Some college or technical/trade school	6	24.0
Associate Degree or higher	10	40.0

Percentages may not add up due to missing values

Std Dev=Standard Deviation

Table 2

Psychiatric history of study participants based on MINI (N=25)

Variable	Mean	Std Dev
EPDS Sum Score	15.84	5.90
	N	%
Bipolar disorder, type I	14	58.33
Bipolar disorder, type II	5	20.83
Bipolar disorder, not otherwise specified	5	20.83
Major depressive episode, current	15	60.0
Manic episode, lifetime	14	56.0
Hypomanic episode, lifetime	15	60.0
Dysthymia, current	1	4.0
Ever made a suicide attempt	13	52.0
Past psychiatric hospitalization	8	32.0
Lifetime panic disorder	13	52.0
Social phobia, current	10	40.0
Generalized	9	90.0
Non-generalized	1	10.0
Post-traumatic stress disorder	9	36.0

Percentages may not add up due to missing values

Std Dev=Standard Deviation

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Table 3

Access to mental health treatment and satisfaction study (n=25)

Variable	Mean	Std Dev
BACE, total score, mean	0.90	0.57
BACE, stigma score, mean	0.97	0.75
BACE, instrumental barrier, mean	0.73	0.62
BACE, attitudinal barrier, mean	0.94	0.65
	n	%
Seen a psychiatrist	7	28.00
Medication provider during pregnancy or postpartum		
Primary care provider	3	27.27
Obstetric provider	2	18.18
Mental Health provider	6	54.55
Received a mental health diagnosis from a provider during lifetime	21	84.00
Depression	18	72.00
Bipolar	7	28.00
Received any treatment for depression / mania / psychosis during lifetime		
Yes	21	84.00
Medication	2	9.09
Counseling	2	9.09
Both	18	81.82
Talked to provider about treatment during pregnancy	10	40.00
Referred for treatment during pregnancy	7	28.00
Currently receiving psychotherapy	9	37.50
Currently receiving pharmacotherapy	7	28.00
The risks, benefits and alternatives to psychiatric medication treatment in pregnancy were discussed		
Strongly disagree	1	4.17
Disagree	8	33.33
Agree	7	29.17
Strongly Agree	8	33.33

Variable	Mean	Std Dev
The risks, benefits and alternatives to psychiatric medication treatment during breastfeeding were discussed		
Strongly disagree	2	8.00
Disagree	5	20.00
Agree	6	24.00
Strongly Agree	6	24.00
N/A (because still pregnant)	6	24.00
Did not receive help for emotional / mental health 3 months prior to pregnancy	10	40.00
Among those who saw a doctor (n=16)		
Satisfaction level with treatment and services from health care provider prior to becoming pregnant		
Satisfied	10	62.50
Neither satisfied or dissatisfied	1	6.25
Very dissatisfied	3	18.75
Help received from healthcare provider		
A lot	4	25.00
Some	7	43.75
A little	2	12.50
Not at all	2	12.50
Don't know/remember	1	6.25
Prescribed medication during pregnancy or postpartum period	14	58.33
Medication prescribed by obstetric provider	11	78.57
Medication prescribed by primary care provider	7	50.0
Medication prescribed by psychiatric provider	2	14.29
No diagnosis of bipolar disorder documented in medical record	19	79.17
Treated with antidepressant alone	10	41.67
Treated with antidepressant medication in conjunction with a mood stabilizer or antipsychotic medication	3	12.50
Treated with a mood stabilizer alone	1	4.17
Prescribed a benzodiazepine	5	20.83
Prescribed a non-benzodiazepine sedative-hypnotic	1	4.17
Discontinued medication during pregnancy	6	25.0