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Concise Review for Physicians and other Clinicians: Postpartum Depression

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Abstract

Postpartum depression (PPD) is a common, potentially disabling and, in some cases, life-threatening condition. Fortunately, PPD is also readily detectable in routine practice, and is amenable to treatment by a wide variety of modalities that are effective for treating non-puerperal major depression. PPD screening can improve case identification (an Edinburgh Postnatal Depression Scale score of ≥ 13 indicates high risk of PPD) and when associated with a diagnostic and follow-up program, lead to improved clinical outcomes. Symptom severity, patient preference, past response to treatment, availability of local mental healthcare resources, and patient decisions about breastfeeding will drive management decisions. In general, cognitive-behavioral (CBT) and interpersonal therapy (IPT) are preferred psychotherapies for women with mild to moderate PPD, while antidepressants are appropriate in more severe cases. Many patients will require other types of assistance, such as parenting support, case management or care coordination, as many barriers to receiving adequate PPD treatment must still be overcome.

Keywords

postpartum depression; perinatal depression; diagnosis; treatment; management; primary care

INTRODUCTION

Postpartum depression (PPD), the onset of depressive episodes following childbirth, is the most common postnatal neuropsychiatric complication. PPD affects 10–20% of women after delivery, regardless of maternal age, race, parity, socioeconomic status, or level of education.¹ PPD can lead to impaired maternal functioning and child development.^{2,3} Yet, fewer than half of PPD cases are diagnosed in clinical practice, thus prompting vigorous efforts at improving case detection and implementing evidence-based treatment.³ This

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article provides a clinical update on the etiology, risk factors, diagnosis and treatment of PPD.

CLINICAL FEATURES

Diagnostic Criteria

There is no specific diagnostic classification for PPD. However, the signs and symptoms of PPD are identical to non-puerperal major depression,³ and major depressive episodes are diagnosed by employing the usual criteria, but with a pregnancy or postpartum onset specifier. Previously adopted diagnostic criteria for PPD (major depressive disorder, with postpartum onset) required onset of major depressive episodes within 4 weeks after childbirth (Table 1). The “postpartum onset” specifier has been criticized because a large number of diagnosed PPD episodes actually begin during pregnancy.⁴ Thus, recently updated diagnostic criteria in Diagnostic and Statistical Manual for Mental Disorders, 5th edition (DSM-5) now classify major depressive episodes “with peripartum onset,” encompassing cases with symptom onset during pregnancy or in the 4 weeks following delivery.⁴

Currently, depressive episodes occurring after the end of the fourth post-partum week would not meet DSM-5 diagnostic criteria for “peripartum onset.” The 4 week time frame following delivery for defining PPD, however, may be overly-conservative. Indeed, longer time frames (up to 12 months postpartum) have been used in research studies to define PPD.² Furthermore, the onset of depressive episodes remains high for several months after delivery in postpartum women (see below). And finally, in practical terms, women are usually available for depression screening between 4 and 12 weeks during routine post-partum follow-up, and it seems unlikely that the optimal time for PPD screening and evaluation would end at 4 weeks post-partum.

Onset and Course

The prevalence of PPD appears to peak at 2–6 months following delivery, and as many as 14.5% of postpartum women may experience a new depressive episode within 3 months after delivery.¹ Most patients experience mild depressive symptoms; however, 10–15% will have more severe symptoms that clearly worsen maternal functioning. PPD persists for over 7 months after delivery for 25–50% of women, and many remain depressed after one year.⁵

Consequences

PPD is associated with impaired mother-infant bonding, negative parenting practices, unsuccessful breastfeeding, and marital discord, as well as worse cognitive and social development in offspring.^{2,3} On the other hand, remission of maternal depression reduces the risk of behavioral problems and psychiatric symptoms in offspring.^{2,6} A prior episode of PPD increases the risk of future episodes of PPD, a future diagnosis of bipolar disorder, and non-puerperal major depressive episodes.⁷ PPD is a risk factor for maternal suicide, which accounts for up to 20% of postpartum deaths.⁸

DIFFERENTIAL DIAGNOSIS AND COMORBIDITY

Differential Diagnosis

Disturbed sleep and appetite are normal postpartum occurrences; however, onset of clinically significant depression and anxiety should prompt clinicians to consider a diagnosis of PPD. Coexisting medical conditions that can mimic or exacerbate PPD include postpartum thyroid disorders and anemia. Deficiencies in selected micronutrients (e.g., B vitamins, vitamin D, etc.) have been linked with non-puerperal major depression, but a firm association with PPD has not been established.

Signs and symptoms of several psychiatric conditions overlap with PPD, and must be ruled out. These include:

- **Post-partum blues** occurs in 50–80% of new mothers. Signs and symptoms appear within 1–2 days postpartum and include depressed mood, anxiety, tearfulness, irritability, poor appetite and sleep problems. These changes are mild and resolve spontaneously within 10–14 days;⁵ however, up to 25% of patients with postpartum blues develop PPD.⁹
- **Post-partum psychosis** is a rare (<2 cases per 1,000 postpartum women) but serious condition characterized by delusions, hallucinations, severe and rapid mood swings, sleep disturbances, and obsessive preoccupation about the baby. These signs and symptoms emerge within 1–4 weeks after delivery, and require urgent evaluation and hospitalization given a high risk of suicide and infanticide.¹⁰ Antipsychotic treatment is usually required to manage hallucinations, delusions, and agitation; electroconvulsive therapy may be needed if antipsychotics are ineffective or poorly tolerated.¹⁰ Risk of recurrence with future deliveries after an index postpartum psychosis episode is high.¹⁰ Therefore, women with a history of postpartum psychosis must be closely followed during the postpartum period.¹⁰
- **Bipolar disorders (type I or II)** are characterized by episodes of depression, mania, hypomania, and mixed episodes (depression concurrent with mania). Bipolar and major (unipolar) depressive episodes have the same general diagnostic criteria,⁴ but a history of manic, mixed, or hypomanic episodes distinguishes bipolar depressive episodes. This distinction is important because pharmacotherapy for bipolar and unipolar depression are markedly different. The post-partum is a period of high risk for the new-onset or recurrent bipolar depressive episodes, and in DSM-5, the peripartum onset specifier can be applied to both bipolar and unipolar depressive episodes.⁴ Brief screening tools for bipolar disorder are available,¹¹ but psychiatric referral may be needed to establish a bipolar disorder diagnosis.
- **Bereavement** may occur in response to termination or loss of pregnancy, or neonatal death. The rapid emergence of intense feelings of grief, poor sleep and appetite, and rumination about the loss can mimic PPD. Significant losses can also precipitate PPD episodes. Psychological support and careful follow-up are recommended.

Psychiatric Comorbidity

Anxiety disorders and substance abuse are common in women with PPD. Women with PPD frequently experience panic attacks, obsessions, or compulsions. Obsessions and compulsions may be particularly distressing, and can commonly include thoughts about harming oneself or the infant. However, they are recognized by the mother as intrusive and irrational, and these symptoms do not generally predict suicide or infanticide.⁵ Still, obsessions about harming oneself or the infant warrant careful evaluation to rule out postpartum psychosis.

Women with substance use problems, including use of alcohol, illicit drugs, and cigarettes, are at high risk for developing PPD.¹² Comorbid substance use worsens prognosis and treatment response in patients with non-puerperal major depression, and similar effects in women with PPD may be expected. Screening for comorbid substance use disorders can help tailor treatment interventions to address co-occurring disorders.

CAUSES AND RISK FACTORS

Etiology

The causes of PPD are unknown; however, the pathophysiology of PPD is thought to involve interactions between biological susceptibility and other risk factors (discussed below). Genetic factors; declines in reproductive hormone levels (i.e., estrogen, progesterone, testosterone); changes in thyroid, hypothalamic-pituitary-adrenal axis, and neuroactive steroid functioning; and abnormalities in neurotransmitter, cholesterol, and fatty acid activity are being investigated, but no single causal factor has emerged.¹³

Risk Factors

A large number of risk factors for PPD have been identified (Table 1). In general, past history of depression or anxiety problems (puerperal or non-puerperal), absent or inadequate support at home, ongoing stressful life events, low income, and emotionally abusive or other relationship problems with the partner appear to have moderate to strong predictive effects for PPD.^{2,14} Patients with a history of premenstrual dysphoric disorder or depressive symptoms while taking oral contraceptives may also be at higher risk for PPD.¹⁵ Other higher-risk groups include adolescent mothers and mothers of preterm babies.¹²

CLINICAL EVALUATION

Screening

Depression screening in the general population is recommended by the U.S. Preventive Services Task Force,¹⁶ but routine PPD screening has not been widely adopted.³ Effectiveness studies of PPD screening have shown improved rates of depression diagnosis and treatment, and a few also demonstrate improved PPD outcomes.¹⁷ The impact of PPD screening programs on clinical outcome may depend on availability of adequate mental health resources, important non-clinical services (such as transportation, child care, case management, lactational, and parenting support), and insurance coverage.¹⁸

Screening should occur between 2 and 6 months after delivery at postpartum or well-child visits.³ Several effective PPD screening tools are available. The Edinburgh Postnatal Depression Scale (EPDS) is a 10-item self-report questionnaire that takes 5 minutes to complete.¹⁹ An EPDS score of ≥ 13 is an accepted cutoff score for identifying patients at risk for PPD.⁵ The PHQ-9 (with an elevated cutoff score of ≥ 10) is an alternative to the EPDS that may be more familiar to primary care clinicians and can also be used to assess depression severity and monitor effects of PPD treatment.²⁰ Special attention should be paid to affirmative responses to the EPDS and PHQ-9 items that addresses suicidal ideation, regardless of the total scores. Fathers are at risk for depression if their partners develop PPD,¹² and may also benefit from depression screening. PPD screening should not be undertaken until a program for PPD evaluation, diagnosis, and follow-up is linked to the screening program.²¹

Evaluation and Diagnosis

The EPDS and other screening measures provide a basis for further clinical evaluation, but should not be considered a substitute for a detailed clinical interview and diagnostic tests, where indicated. The objectives of the clinical evaluation are to: (a) establish that diagnostic criteria for PPD are met; (b) assess suicide and infanticide risk; (c) distinguish PPD from medical or other psychiatric disorders discussed above; and (d) identify important psychiatric comorbidities or associated symptoms (such as anxiety, obsessions, psychosis, and substance use disorders) (Table 1). All prescription and over-the-counter medications, drug use, smoking status (and amount smoked), and herbal or homeopathic remedies should be recorded during evaluation and throughout treatment.

The impact of maternal depressive symptoms on functional status during the postpartum period should also be assessed (Table 1). Important domains of maternal functioning include personal care and hygiene, care of the infant, breastfeeding success or difficulties, maintaining the household, participation in social activities, and ability to work.¹² Current stressors, level of social and financial support, and quality of relationships with the partner and others should be queried. The impact of depressive symptoms on daily functioning can be grossly estimated using the final item on the PHQ-9 that assesses how difficult depressive symptoms have made it to work, perform usual duties, or function in relationships.

Evaluation of past medical history should include any chronic or active medical problems, psychiatric diagnoses, and treatment (including hospitalizations, medications, and non-pharmacological treatments (*e.g.*, psychotherapy and electroconvulsive therapy, etc.). The effectiveness, tolerability, and reasons for discontinuing specific treatments are also included in this assessment. Past personal and family history of postpartum depression and postpartum psychosis should also be specifically examined.

MANAGEMENT

Treatment Approach

Patients who screen positive and meet diagnostic criteria for PPD need prompt treatment (Table 2). Achieving remission of maternal depression improves the psychiatric health of not only the mother, but also her children.⁶ Therefore, the goal of depression treatment is to

achieve remission of depressive symptoms. In general, treatment decisions are driven by the severity of PPD symptoms, patient preferences, past response to treatment(s), availability of local mental health resources, and patient choices about breastfeeding. Involving the patient's support system in treatment planning may help the patient feel less burdened with difficult decisions about which interventions to choose. Monitoring clinical response with validated patient-rated depression scales, such as the PHQ-9, can be a useful adjunct to clinical observation and more general patient self-report.

Mild to Moderate Depression

Psychotherapy is considered first-line for patients with mild (minimum diagnostic criteria met, negative impact on daily activities overcome with extra effort) or moderate PPD (symptoms cannot be overcome with extra effort, but are not incapacitating). CBT and IPT are time-limited approaches delivered over 10–20 weekly sessions. Both are associated with moderate to large reductions in PPD symptoms in controlled trials.^{22,23} For patients with PPD who elect to forego formal psychotherapy or in areas where CBT and IPT are unavailable, weaker evidence supports the use of non-directive counseling for short-term benefit, but longer-term effectiveness is uncertain.²³ If psychotherapy and counseling are unavailable or unacceptable to the patient, or if depressive symptoms become more severe, a trial of antidepressant can be considered.²⁴ These recommendations apply to women with mild to moderate PPD, whether or not they are breastfeeding.

Moderate to Severe Depression

Not breastfeeding—For women with moderate to severe PPD who are not breastfeeding, antidepressant medication with or without psychotherapy is recommended. This also includes women with initially mild PPD that increases in severity, or moderate PPD that is poorly responsive to psychotherapy alone. No single antidepressant has shown greater benefit over others for treating PPD. Therefore, antidepressants that have been helpful and well-tolerated in the past are preferred, with continuation of effective antidepressant treatment for at least 6 months to prevent relapses. For antidepressant-naïve patients, SSRIs such as fluoxetine, paroxetine and sertraline may be considered based on limited evidence in patients with PPD and established effectiveness for treating major depression in the general population.²³ Otherwise, family history of positive response to a given antidepressant for PPD or non-puerperal major depression can help guide antidepressant selection. If there is a strong preference for psychotherapy alone, this approach can be supported as long as depressive symptoms are carefully tracked.

Currently (or planning) breastfeeding—Addressing PPD symptoms in the context of breastfeeding can be challenging. Breastfeeding has numerous documented short- and long-term health benefits for mother and child. But these benefits must be weighed carefully against the risks of untreated PPD and the risks and benefits associated with antidepressants. All antidepressants are passed from maternal plasma to breast milk; thus, many women may prefer psychotherapy over medication while breastfeeding. Again, if there is a strong preference for psychotherapy alone, this approach is reasonable if depressive symptoms are closely monitored.

A role for antidepressants is more evident when depressive symptoms persist in spite of non-pharmacological interventions, and when maternal illness is clearly interfering with self-care, care of the infant, or interaction with the infant or other children. Use of a single agent with an acceptable lactation safety profile at a minimum effective dose is preferred. Antidepressants that have been effective and well-tolerated during past PPD or non-puerperal major depressive episodes are given higher priority, but should be initiated at low doses to limit adverse effects. Sertraline is thought to be relatively safe because of lower transplacental passage and fewer reported effects on the infant than other agents.^{25,26} Secondary options with most evidence of lactation safety include paroxetine, fluvoxamine, and nortriptyline.^{25,26} Paroxetine is a U.S. FDA pregnancy category D drug based on risk of congenital (primarily cardiac) malformations with first trimester use; however, this does not apply to the use of paroxetine during the postpartum period.

Mothers who are taking antidepressants should be closely followed. Effective antidepressant treatment should continue for at least 6 months to prevent relapse. Infant behavior should be monitored for side effects such as drowsiness, poor feeding/weight gain, and irritability. If high antidepressant doses or multiple medications are required, breastfeeding may need to be discontinued. Pumping and discarding breast milk during estimated times of peak antidepressant drug concentrations in milk or taking antidepressants immediately following breastfeeding are sometimes recommended to limit infant antidepressant exposure.²⁴ However, there is little evidence of benefit with either approach,²⁴ and lag times to peak drug concentration in breast milk vary by individual.²⁷

Additional Considerations

Other supports—Many women will benefit from parenting support, case management or care coordination services to secure or maintain insurance coverage, and facilitate referrals to local support groups, subsidized mental health centers, and other community-based resources. Patients and clinicians are encouraged to consult with their local social service agencies to identify additional resources, including public health nurses, that are available in some counties in the U.S. for following new mothers or mothers previously identified as being at higher risk for problems with their newborns.

Other interventions—Other non-pharmacological treatment approaches with preliminary supporting evidence include aerobic exercise, light therapy, and infant massage.²³ These can be used as an adjunct to psychotherapy or pharmacotherapy, but their effectiveness as stand-alone treatments for PPD has not yet been established. Electroconvulsive therapy (ECT) may be required in particularly severe cases, in consultation with a psychiatrist. Preliminary support for repetitive transcranial magnetic stimulation (rTMS) for treating PPD awaits replication in randomized trials.²⁸

Symptom worsening—The published literature provides little guidance for addressing worsening of PPD during active treatment. If depressive symptoms worsen, re-evaluating the diagnosis and patient adherence to treatment, assessing for comorbid psychiatric or substance use disorders that may have been previously missed, identification of new or previously unaddressed life stressors, and optimization of psychosocial treatment and other

supports (discussed above) are recommended. Worsening depression in women who receive psychotherapy alone should prompt discussion about the potential benefits and risks of supplemental antidepressant pharmacotherapy.

Referral—Psychiatric referral should also be considered for patients with severe depression, depression that is not responding adequately to initial treatment, comorbid obsessions, or other comorbid psychiatric illnesses. Patients who express suicidal ideation or homicidal ideation, auditory hallucinations or delusional thoughts, or bizarre behavior indicative of psychosis require emergency mental health evaluation and very careful follow-up.⁵ Some will require hospitalization for intensive mental health care.¹⁰ Obtaining periodic psychiatric consultation or use of telehealth capabilities, if available, may be useful if regular follow-up visits with a psychiatrist are infeasible.

Patients presenting on maintenance antidepressant treatment—For patients who are receiving maintenance pharmacotherapy due to a history of severe, recurrent, or difficult-to-treat depression, continuation of such treatment into the post-partum period may be the safest approach. This may be particularly so for patients with a history of relapse after antidepressant discontinuation.

Prevention—For women with a past history of PPD or non-puerperal major depression who are at high risk for subsequent PPD episodes, the optimal preventive approach has not been established. IPT and postpartum home visits can prevent PPD onset based on results of a recent meta-analysis.²⁹ However, interventions of this scope, particularly home visits, are difficult to implement in everyday practice. There are still few randomized trials of antidepressants for preventing recurrence of PPD in high-risk patients.

CONCLUSION

PPD is a common, potentially disabling and, in some cases, life-threatening condition. Fortunately, PPD is also readily detectable in routine practice, and amenable to treatment by a wide variety of modalities that are effective for treating non-puerperal major depression. PPD screening improves case identification and can lead to better clinical outcomes, although many barriers to receiving adequate PPD treatment must often be overcome. CBT and IPT are preferred psychotherapies for women with mild to moderate PPD, while antidepressants are appropriate for more severe cases. In addition to symptom severity, treatment decisions will be driven by patient preference, past response to treatment, availability of local mental healthcare resources, and patient decisions about breastfeeding.

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ABBREVIATIONS

CBT cognitive-behavioral therapy

EPDS	Edinburgh Postnatal Depression Scale
IPT	interpersonal therapy
PPD	postpartum depression
SSRI	selective serotonin reuptake inhibitor

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LEARNING OBJECTIVES

On completion of this article, you should be able to 1) describe the clinical features, onset, and course of postpartum depression, 2) identify appropriate tools and how they are used in screening for postpartum depression, 3) outline a clinical system to conduct appropriate screening and evaluation of postpartum depression, and 4) evaluate and select appropriate initial interventions for patients diagnosed with postpartum depression.

Table 1

Keys to the diagnosis of postpartum depression

1. Establish diagnostic threshold for major depressive disorder (MDD): five or more of 9 signs or symptoms (a thru i below) persisting for 2 weeks, with at least one being an essential diagnostic feature (a or b below):		
• Essential diagnostic features:		
a. Persisting depressed mood	<i>Have you been feeling depressed or down most of the day, nearly every day? How long has it lasted?</i>	
b. Persisting anhedonia	<i>Have you lost interest or pleasure in things that you usually enjoy? How long has it lasted?</i>	
• Additional diagnostic signs and symptoms:		
c. Changes in appetite or body weight (increase or decrease)	<i>Has your appetite changed from normal during the time you have been feeling depressed? Have you started eating (more/less) than usual? Did you intend to (gain/lose) weight?</i>	
d. Persisting insomnia or hypersomnia	<i>Have you noticed any changes in the amount of quality of your sleep during the time you have been feeling depressed? How many yours a night compared to normal? Do you have problems falling asleep, staying asleep, or waking up too early (or a combination of these)?</i>	
e. Changes in psychomotor activity (agitated or slowed)	<i>Have you been so fidgety or restless that you couldn't sit still? Have others noticed (what did they say)? Have you or others noticed that you have been talking or moving more slowly than usual?</i>	
f. Persisting fatigue or energy loss	<i>Have you felt tired or run down all the time, or nearly every day, during the time you have been feeling depressed?</i>	
g. Feelings of worthlessness or excessive guilt	<i>Have you been feeling worthless on a daily or near-daily basis during the time you have been feeling depressed? Have you been feeling more guilty than usual about mistakes, things you have done, or even things you have not done?</i>	
h. Persisting problems concentrating or making decisions	<i>Has it been harder for you than normal to maintain your focus or think through things during the time you have been feeling depressed? Has it been harder to make everyday decisions?</i>	
i. Recurring thoughts of death or suicide	<i>Have you been thinking a lot about death, or that you might be better off dead? Have you been thinking of hurting yourself? Have you done anything to hurt yourself? Are you having these thoughts now?</i>	
2. Establish peripartum onset of depression according to updated (DSM-5 criteria):		
Previously adopted (DSM-IV-TR) diagnostic criteria	Updated (DSM-5) diagnostic criteria	
• MDD with <u>post-partum</u> onset: onset of depressive symptoms within 4 weeks postpartum.	• MDD with <u>peripartum</u> onset: onset of depressive symptoms during pregnancy or within 4 weeks postpartum.	
3. Link depressive signs and symptoms with maternal dysfunction: "Has your depression caused you to have any problems with..."		
• ...your ability to take care of yourself, eat right, or maintain your hygiene?	• ...your relationships, such as family, friends, or your partner? ...maintaining connection with others in your life?	
• ...your ability to take care of your baby, or feel close to (him/her)?	• ...your ability to work, study, or keep up around the house?	
• ...your ability to breastfeed (for those who choose to)?	• ...your ability to deal effectively with life stressors and solve problems (specify the most important problems)?	
4. Estimate the severity of symptoms based on their level of impact on daily functioning:		
Mild: mild disability, but can function normally with considerable extra effort.	Moderate: clear maternal dysfunction; cannot be overcome with extra effort, but not incapacitated.	Severe: inability to function in most if not all important life domains; suicidal thinking is often prominent.
Otherwise, the 10th item on the PHQ-9 ("...how difficult have these problems made it for you...") can be used to estimate depressive symptom severity: Mild = PHQ-9 item 10 "somewhat difficult" Moderate = PHQ-9 item 10 "very difficult" Severe = PHQ-9 item 10 "extremely difficult"		
5. Rule out postpartum thyroid disorders, anemia, and other medical illnesses that overlap with depression.		

<ul style="list-style-type: none"> • Consider: complete blood count (TSH), thyroid stimulating hormone (TSH), vitamin D level, vitamin B12 and folate level, and other laboratory screening tests as otherwise indicated. 	
6. Rule out psychiatric disorders that overlap with major depression (as discussed in the article text).	
<ul style="list-style-type: none"> • Screening questions for past mania or hypomania can include: 	<i>Have you ever had a period of time in your life when you were not feeling like yourself because your mood and your energy were unusually high, and the speed of your thoughts were unusually fast? Did others tell you or become concerned that you were behaving abnormally or talking too fast?</i>
7. Screen for common comorbid psychiatric disorders (e.g., anxiety and substance use disorders, as discussed in article text), and associated illness features of potential concern (obsessions thoughts of harming the infant, psychotic signs and symptoms).	
<ul style="list-style-type: none"> • Screening questions for pathological anxiety can include: 	<i>Do you also have problems with anxiety, panic attacks, or worry that you can't seem to control? Do these problems interfere with your ability to function in any way? How often does this occur?</i>
<ul style="list-style-type: none"> • Screening questions for alcohol abuse can include: 	<i>How often do you have a drink? Has your drinking caused problems for you? Have you felt you ever needed to cut back or stop drinking because of this? Have you taken a drink to try to reduce your depression? Has anyone expressed concern about your drinking?</i>
<ul style="list-style-type: none"> • Screening questions for other substance abuse can include: 	<i>Have you ever used street drugs? Have you ever gotten hooked on a prescribed medicine or taken one to get high (specify name of medicine[s])? Have you ever taken more than you were supposed to?</i>
<ul style="list-style-type: none"> • Screening questions for obsessive thinking (not necessarily a diagnosis of obsessive-compulsive disorder) can include: 	<i>Have you ever been disturbed by thoughts that made no sense, but kept coming back, even when you tried to ignore them? Like being contaminated by germs, or hurting someone else even if you really didn't want to? Some women even have thoughts about harming their baby that really upset them because they don't want to do that—have you also had these kinds of thoughts?</i>
<ul style="list-style-type: none"> • Screening questions for psychosis can include: 	<i>Do you ever hear things that others can't, such as noises or voices of other people? Do you ever hear voices that tell you to harm yourself or your baby? Have you been concerned about people talking about you, spying on you, or planning to do bad things to you? Do you receive special messages from the TV, radio, newspaper or the internet? Have you felt that you were especially important or powerful in some way, or had special powers to do things that others can't do? Have you been concerned that you have terrible disease or physical problem doctors can't explain or fix? Have you been concerned that you have committed some sort of crime or done something so terrible that you need to be punished?</i>

Table 2

Key general management considerations for postpartum depression

1. Factors to consider when planning treatment:		
• Severity of depressive signs and symptoms		• Concurrent medical and psychiatric diagnoses
• Prior depression history/response to treatment		• Current medications (including over-the-counter)
• Patient preferences regarding treatment		• Local mental healthcare resources
• Severity of depressive signs and symptoms		• Psychosocial supports
• Choices about breastfeeding		
2. Involve the patient's support system in treatment planning decisions, when appropriate.		
3. Consider case management or care coordinator for women who are eligible for such services based on economic, logistic, and clinical factors.		
4. Generate a reasonable menu of treatment options based on depressive symptom severity and decision to breastfeed. For example:		
Severity	Breastfeeding (Y/N)	Options
Mild to moderate	Yes or No	<ul style="list-style-type: none"> • Psychotherapy (interpersonal [IPT] or cognitive-behavioral therapy [CBT]) considered first-line. • Weaker evidence supports non-directive counseling for short-term benefit
Moderate to severe	No	<ul style="list-style-type: none"> • Antidepressant medication, with or without psychotherapy • Psychotherapy alone is still reasonable for many, so long as depressive symptoms are carefully tracked. • Adding an antidepressant becomes higher priority in patients not responding well to psychotherapy
Moderate to severe	Yes	<ul style="list-style-type: none"> • Antidepressant medication, with or without psychotherapy • Many women elect not to receive antidepressants. If this occurs, psychotherapy alone is still reasonable, so long as depressive symptoms are carefully tracked. • Antidepressants are higher priority when depressive symptoms persist or worsen in spite of non-pharmacological treatment, or when depressive symptoms are severe • Hospitalization, antipsychotic medication, and/or ECT if psychotic symptoms are present
5. Consider other psychosocial treatment options based on individual patient factors and available resources.		
Consider...	When...	
Group psychotherapy	<ul style="list-style-type: none"> • Depressive symptoms are mild to moderate • May benefit patients who struggle with isolation and low psychosocial support 	
Marital or couples therapy	<ul style="list-style-type: none"> • Same as above, but prioritize if marital strain or difficulties with partner are clearly contributing to depression • IPT can address interpersonal contributors to depression if the patient prefers an individual psychotherapy approach, if the spouse/partner is unwilling or unavailable for therapy, or if local resources do not support marital/couples therapy. 	
Non-directive counseling	<ul style="list-style-type: none"> • Depressive symptoms are mild, and symptoms can be carefully tracked 	

	<ul style="list-style-type: none"> • Other resources are available should longer-term depression management be needed
Community supports	<ul style="list-style-type: none"> • These are not generally considered stand-alone treatments for PPD. • Local support groups and organizations can be helpful by providing peer-to-peer support and, occasionally, assistance with logistical difficulties
6. When choosing among antidepressants, consider past treatment response and available lactational safety data:	
<ul style="list-style-type: none"> • Previously effective antidepressants (PPD or non-puerperal major depression) should generally be given higher priority. • Otherwise, sertraline, paroxetine, fluvoxamine, and nortriptyline have the most evidence of lactation safety based on low (though not absent) infant exposure through breastfeeding and fewest reported adverse effects. 	
7. Nursing infants of mothers who are treated with antidepressants should be monitored for side effects (below). Infant blood levels of antidepressants do not generally need to be monitored.	
• Drowsiness	• Poor feeding
• Irritability	• Poor weight gain
8. Consider referral to specialty mental health services when:	
• Severe depression	• Suicidal or homicidal ideation (urgent)
• Depression not responding to first-line treatment	• Infanticidal ideation (urgent)
• Comorbid anxiety or obsessions	• Psychotic signs and symptoms (urgent)
• Comorbid substance abuse	
• Bipolar disorder suspected	• When uncomfortable managing the case