

Screening and Diagnosis of Mental Health Conditions During Pregnancy and Postpartum

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The Society for Maternal-Fetal Medicine endorses this document.

The Committee on Women's Mental Health of the American Psychiatric Association reviewed and provided feedback on this document.

PURPOSE: To review evidence on the current understanding of mental health conditions in pregnancy and postpartum, with a focus on mood and anxiety disorders, and to outline guidelines for screening and diagnosis that are consistent with best available scientific evidence. The conditions or symptoms reviewed include depression, anxiety and anxiety-related disorders, bipolar disorder, suicidality, and postpartum psychosis. For information on psychopharmacologic treatment and management, refer to American College of Obstetricians and Gynecologists (ACOG) Clinical Practice Guideline Number 5, "Treatment and Management of Mental Health Conditions During Pregnancy and Postpartum" (1).

TARGET POPULATION: Pregnant or postpartum individuals with mental health conditions. Onset of these conditions may have predated the perinatal period or may have occurred for the first time in pregnancy or the first year postpartum or may have been exacerbated in that time.

METHODS: This guideline was developed using an a priori protocol in conjunction with a writing team consisting of one specialist in obstetrics and gynecology and one maternal-fetal medicine subspecialist appointed by the ACOG Committee on Clinical Practice Guidelines—Obstetrics and two external subject matter experts. ACOG medical librarians completed a comprehensive literature search for primary literature within Cochrane Library, Cochrane Collaboration Registry of Controlled Trials, EMBASE, PubMed, and MEDLINE. Studies that moved forward to the full-text screening stage were assessed by two authors from the writing team based on standardized inclusion and exclusion criteria. Included studies underwent quality assessment, and a modified GRADE (Grading of Recommendations Assessment, Development and Evaluation) evidence-to-decision framework was applied to interpret and translate the evidence into recommendation statements.

RECOMMENDATIONS: This Clinical Practice Guideline includes recommendations on the screening and diagnosis of perinatal mental health conditions including depression, anxiety, bipolar disorder, acute postpartum psychosis, and the symptom of suicidality. Recommendations are classified by strength and evidence quality. Ungraded Good Practice Points are included to provide guidance when a formal recommendation could not be made because of inadequate or nonexistent evidence.

This information is designed as an educational resource to aid clinicians in providing obstetric and gynecologic care, and use of this information is voluntary. This information should not be considered as inclusive of all proper treatments or methods of care or as a statement of the standard of care. It is not intended to substitute for the independent professional judgment of the treating clinician. Variations in practice may be warranted when, in the reasonable judgment of the treating clinician, such course of action is indicated by the condition of the patient, limitations of available resources, or advances in knowledge or technology. The American College of Obstetricians and Gynecologists reviews its publications regularly; however, its publications may not reflect the most recent evidence. Any updates to this document can be found on www.acog.org or by calling the ACOG Resource Center.

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INTRODUCTION

Perinatal mental health conditions affect more than one in five people (2–4). They can occur during pregnancy or within the first postpartum year, and they are inclusive of mental health conditions with onset that predates pregnancy. This document will focus on depression, anxiety and anxiety-related disorders, bipolar disorder, postpartum psychosis, and the symptom of suicidality.

Despite the availability of effective approaches for detection and treatment, perinatal mental health conditions are underrecognized and undertreated. Untreated and undertreated disease has significant deleterious short-term and long-term effects that can be mitigated with treatment, especially when initiated early. In addition to the significant mental health and quality-of-life effects on the perinatal individual, there is increased risk of poor engagement in medical care, exacerbation of medical conditions, smoking, substance use disorders, and severe maternal morbidity and mortality (5, 6). Mental health conditions are also associated with adverse obstetric, fetal, neonatal, and infant outcomes, including stillbirth, preterm birth, fetal growth restriction, low birth weight, small for gestational age, impaired bonding, adverse infant neurodevelopment, and increased mental health concerns for the offspring in the long term (6–8). In fact, untreated perinatal mental health conditions in mothers are considered an adverse childhood experience (ACE) for offspring. The negative effects can extend beyond the mother–child dyad to families and employers and include negative economic consequences for individuals, families, and society, especially in the context of untreated illness (9).

In their most severe forms, perinatal mental health conditions are a tragic and preventable cause of maternal and infant mortality (10, 11). In fact, suicide and overdose or poisoning are the most common causes of pregnancy-associated maternal mortality as determined by maternal mortality review committees (MMRCs) (11). Additionally, the Centers for Disease Control and Prevention (CDC) in collaboration with state MMRCs have determined all maternal mortality secondary to mental health conditions to be preventable (10, 12).

Given recommendations across numerous colleges, professional societies, and governmental organizations, screening efforts using validated tools have increased over the past decade, most notably for depression (13). Although screening itself is valuable, it is insufficient. Thus, screening should occur within systems that promote progression down the full mental health pathway, including detection, assessment, triage and referral, treatment access and initiation, symptom monitoring, and measurement-guided treatment adjustments until symptoms remit (14, 15).

The feasibility, effectiveness, acceptability, and sustainability of integrating mental health care into obstetric practice has been demonstrated (16). Furthermore, early identification and treatment have been shown to predict better outcomes (17, 18). Providing appropriate and timely educational materials related to perinatal mental health conditions can also help patients and family members identify the signs and symptoms of these common disorders (19). Without an intervention in place, less than a quarter of individuals with detected depression in outpatient perinatal care settings will have any treatment, as defined by an initial mental health visit, never mind symptom resolution (20). In addition, although depression is more common, screening or treatment rates are lower for populations experiencing or marginalized by racism and socioeconomic inequities (21–23).

This Clinical Practice Guideline was created to assist clinicians who work with pregnant and postpartum patients, including obstetrician–gynecologists, midwives, primary care clinicians, and behavioral health professionals, in screening for and assessing mental health conditions during the perinatal period. Substance use disorders are also mental health conditions; however, they are outside the scope of this document and are addressed in other American College of Obstetricians and Gynecologists (ACOG) guidance (24–30).

SUMMARY OF RECOMMENDATIONS

Evidence-Based Screening and Diagnostic Approaches to Perinatal Depression and Anxiety Disorders

ACOG recommends that everyone receiving well-woman, prepregnancy, prenatal, and postpartum care be screened for depression and anxiety using standardized, validated instruments. **(STRONG RECOMMENDATION, MODERATE- [DEPRESSION] AND LOW- [ANXIETY] QUALITY EVIDENCE)**

ACOG recommends that screening for perinatal depression and anxiety occur at the initial prenatal visit, later in pregnancy, and at postpartum visits. **(STRONG RECOMMENDATION, MODERATE- [DEPRESSION] AND LOW- [ANXIETY] QUALITY EVIDENCE)**

ACOG recommends that mental health screening be implemented with systems in place to ensure timely access to assessment and diagnosis, effective treatment, and appropriate monitoring and follow-up based on severity. **(STRONG RECOMMENDATION, MODERATE-QUALITY EVIDENCE)**



STRENGTH OF RECOMMENDATION

STRONG

ACOG recommends:

Benefits clearly outweigh harms and burdens. Most patients should receive the intervention.

ACOG recommends against:

Harms and burdens clearly outweigh the benefits. Most patients should not receive the intervention.

CONDITIONAL

ACOG suggests:

The balance of benefits and risks will vary depending on patient characteristics and their values and preferences.

Individualized, shared decision making is recommended to help patients decide on the best course of action for them.

QUALITY OF EVIDENCE

HIGH

Randomized controlled trials, systematic reviews, and meta-analyses without serious methodologic flaws or limitations (eg, inconsistency, imprecision, confounding variables)

Very strong evidence from observational studies without serious methodologic flaws or limitations

There is high confidence in the accuracy of the findings and further research is unlikely to change this

MODERATE

Randomized controlled trials with some limitations

Strong evidence from observational studies without serious methodologic flaws or limitation

LOW

Randomized controlled trials with serious flaws

Some evidence from observational studies

VERY LOW

Unsystematic clinical observations

Very indirect evidence from observational studies

GOOD PRACTICE POINTS

Ungraded Good Practice Points are incorporated when clinical guidance is deemed necessary in the case of extremely limited or non-existent evidence.

They are based on expert opinion as well as review of the available evidence.

Evidence-Based Screening and Diagnostic Approaches to Perinatal Bipolar Disorder

ACOG suggests that everyone receiving prenatal and postpartum care be screened for bipolar disorder using a standardized, validated instrument. (CONDITIONAL RECOMMENDATION, MODERATE-QUALITY EVIDENCE)

ACOG recommends screening for bipolar disorder before initiating pharmacotherapy for anxiety or depression, if not previously done. (STRONG RECOMMENDATION, MODERATE-QUALITY EVIDENCE)

Because bipolar disorder is associated with an increased risk of psychosis, suicide, and infanticide or homicide, consider consulting a mental health professional, including those available through Perinatal Psychiatry Access Programs, for assessment, management, and treatment guidance. (GOOD PRACTICE POINT)

Evidence-Based Screening and Diagnostic Approaches to Postpartum Psychosis and Perinatal Suicidality

ACOG recommends that, when someone answers a self-harm or suicide question affirmatively, clinicians immediately assess for likelihood, acuity, and severity of risk of suicide attempt and then arrange for risk-tailored management. (STRONG RECOMMENDATION, LOW-QUALITY EVIDENCE)

ACOG recommends that clinicians provide immediate medical attention for postpartum psychosis. (STRONG RECOMMENDATION, LOW-QUALITY EVIDENCE)

METHODS

ACOG Clinical Practice Guidelines provide clinical management recommendations for a condition or procedure by assessing the benefits and harms of care options through a systematic review of the evidence. This guideline was developed using an a priori protocol in conjunction with a writing team consisting of one specialist in obstetrics and gynecology and one maternal-fetal medicine subspecialist appointed by the ACOG Committee on Clinical Practice Guidelines—Obstetrics and two external subject matter experts. A full description of the Clinical Practice Guideline methodology is published separately (31). The following description is specific to this Clinical Practice Guideline.

Literature Search

ACOG medical librarians completed a comprehensive literature search for primary literature within Cochrane Library, Cochrane Collaboration Registry of Controlled Trials, EMBASE, PubMed, and MEDLINE. Parameters for the search included human-only studies published in English. The search was restricted to studies from 2000 to 2021. The MeSH terms and keywords used to guide the literature search can be found in Appendix A. An updated literature search was completed in November 2022 and reviewed by two members of the writing team using the same systematic process as the original literature search. A final supplemental literature search was performed in



January 2023 to ensure that any newly published, high-level sources were addressed in the Clinical Practice Guideline.

Study Selection

A title and abstract screen of all studies was completed by ACOG research staff. Studies that moved forward to the full-text screening stage were assessed by two authors from the writing team based on standardized inclusion and exclusion criteria. To be considered for inclusion, studies had to be conducted in countries ranked very high on the United Nations Human Development Index (32), published in English, and include participants identified as female or women. Although systematic reviews, randomized controlled trials, and observational studies were prioritized, case reports, case series, and narrative reviews were considered for topics with limited evidence. A PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) flow diagram of the included and excluded studies can be found in Appendix B. All studies that underwent quality assessment had key details extracted (study design, sample size, details of interventions, outcomes) and descriptions included in the summary evidence tables (Appendix C).

Recommendation and Manuscript Development

A modified GRADE (Grading of Recommendations Assessment, Development and Evaluation) evidence-to-decision framework was applied to interpret and translate the evidence into draft recommendation statements, which were classified by strength and evidence quality (33, 34). Ungraded Good Practice Points were incorporated to provide clinical guidance in the case of extremely limited or nonexistent evidence. They are based on expert opinion as well as review of the available evidence (35). The recommendations and supporting evidence tables were then reviewed, revised as appropriate, and affirmed by the Committee on Clinical Practice Guidelines–Obstetrics at a meeting. The guideline manuscript was then written and subsequently reviewed and approved by the Committee on Clinical Practice Guidelines–Obstetrics and other internal review bodies before continuing to publication. Committee membership includes a physician triple-boarded in obstetrics and gynecology, psychiatry, and addiction medicine. Board-certified psychiatrists served as reviewers for this Clinical Practice Guideline.

Use of Language

ACOG recognizes and supports the gender diversity of all patients who seek obstetric and gynecologic care. In original portions of this document, authors seek to use gender-inclusive language or gender-neutral language. When describing research findings, this document uses gender terminology reported by investigators. To review ACOG's policy on inclusive language, see [https://www.](https://www.acog.org/clinical-information/policy-and-position-statements/statements-of-policy/2022/inclusive-language)

[acog.org/clinical-information/policy-and-position-statements/statements-of-policy/2022/inclusive-language](https://www.acog.org/clinical-information/policy-and-position-statements/statements-of-policy/2022/inclusive-language).

CLINICAL OVERVIEW

Mental Health Conditions

Perinatal mental health conditions include mental health conditions occurring in pregnancy or in the first 12 months after delivery, regardless of whether onset occurred before pregnancy or during the perinatal period. The American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition* (DSM-5) does not generally recognize perinatal mental health conditions as separate diagnoses, but rather uses standard criteria with a peripartum-onset modifier (36). The American Psychiatric Association considers postpartum to be within 4 weeks of delivery; however, experts in the field, including the CDC, extend the postpartum period to 12 months after childbirth, inclusive of the “fourth trimester” and the full year assessed for maternal mortality (10, 12).

This Clinical Practice Guideline focuses on depression and anxiety as being within the evaluation and management scope of obstetric care clinicians. In addition, recognition and initial management of bipolar disorder, postpartum psychosis, and the symptom of suicidality are included—these are critical to recognize and address in perinatal settings, preferentially with additional support as available, including consultation and follow-up with mental health professionals.

Diagnostic details for the mental health conditions according to the DSM-5 are presented in Table 1. Depression and depressive disorders are associated with five or more symptoms that are present during the same 2-week period, represent a change from previous functioning, and at least one of the symptoms is depressed mood or loss of interest or pleasure (anhedonia). Anxiety and anxiety-related disorders refer to a group of illnesses associated with dysregulated sympathetic nervous system arousal and share features of excessive fear and worry along with related behavioral and cognitive disturbances. In the DSM-5, obsessive-compulsive and related disorders (OCD), and trauma- and stressor-related disorders such as posttraumatic stress disorder (PTSD) are distinguished from anxiety disorders (36). However, here they are included under anxiety-related disorders. Depression, anxiety, and anxiety-related disorders are associated with intrusive thoughts that are unwanted, disturbing, and even distressing. These thoughts can occur repetitively and without warning or instigation. They may be quite variable in their content, including harm to self or infant; it is important to discern the likelihood of these thoughts being acted on.

Bipolar spectrum disorders (henceforth referred to as bipolar disorder), including bipolar I disorder and bipolar II disorder, are complex and severe mental illnesses that



Table 1. Mental Health Conditions and Associated Diagnostic Criteria***Major Depressive Disorder**

A. Five (or more) of the following symptoms have been present during the same 2-week period and represent a change from previous functioning; at least one of the symptoms is either (1) depressed mood or (2) loss of interest or pleasure

Note: Do not include symptoms that are clearly attributable to another medical condition

1. Depressed mood most of the day, nearly every day, as indicated by either subjective report (eg, feels sad, empty, hopeless) or observation made by others (eg, appears tearful). (Note: In children and adolescents, can be irritable mood)
2. Markedly diminished interest or pleasure in all, or almost all, activities most of the day, nearly every day (as indicated by either subjective account or observation)
3. Significant weight loss when not dieting or weight gain (eg, a change of more than 5% of body weight in a month), or decrease or increase in appetite nearly every day. (Note: In children, consider failure to make expected weight gain)
4. Insomnia or hypersomnia nearly every day
5. Psychomotor agitation or retardation nearly every day (observable by others, not merely subjective feelings of restlessness or being slowed down)
6. Fatigue or loss of energy nearly every day
7. Feelings of worthlessness or excessive or inappropriate guilt (which may be delusional) nearly every day (not merely self-reproach or guilt about being sick)
8. Diminished ability to think or concentrate, or indecisiveness, nearly every day (either by subjective account or as observed by others)
9. Recurrent thoughts of death (not just fear of dying); recurrent suicidal ideation without a specific plan; a specific suicide plan; or a suicide attempt

B. The symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning

C. The episode is not attributable to the physiological effects of a substance or another medical condition

Note: Criteria A-C represent a major depressive episode

Note: Responses to a significant loss (eg, bereavement, financial ruin, losses from a natural disaster, a serious medical illness or disability) may include the feelings of intense sadness, rumination about the loss, insomnia, poor appetite, and weight loss noted in Criterion A, which may resemble a depressive episode. Although such symptoms may be understandable or considered appropriate to the loss, the presence of a major depressive episode in addition to the normal response to a significant loss should also be carefully considered. This decision inevitably requires the exercise of clinical judgement based on the individual's history and the cultural norms for the expression of distress in the context of loss.

D. At least one major depressive episode is not better explained by schizoaffective disorder and is not superimposed on schizophrenia, schizophreniform disorder, delusional disorder, or other specified or unspecified schizophrenia spectrum and other psychotic disorders

E. There has never been a manic episode or a hypomanic episode

Note: This exclusion does not apply if all of the manic-like or hypomanic-like episodes are substance-induced or are attributable to the physiological effects of another medical condition

Generalized Anxiety Disorder

A. Excessive anxiety and worry (apprehensive expectation), occurring more than not for at least 6 months, about a number of events or activities (such as work or school performance)

B. Individual finds it difficult to control the worry

C. The anxiety and worry are associated with three (or more) of the following six symptoms (with at least some symptoms having been present for more days than not for the past 6 months)

Note: Only one item is required in children

(continued)



Mental Health Conditions and Associated Diagnostic Criteria* (continued)

<ol style="list-style-type: none"> 1. Restlessness or feeling keyed up or on edge 2. Being easily fatigued 3. Difficulty concentrating or mind going blank 4. Irritability 5. Muscle tension 6. Sleep disturbance (difficulty falling or staying asleep, restless, unsatisfying sleep)
D. The anxiety, worry, or physical symptoms cause clinically significant distress or impairment in social, occupation, or other important areas of functioning
E. The disturbance is not attributable to the physiological effects of a substance (eg, a drug of abuse, a medication) or another medical condition (eg, hyperthyroidism)
F. The disturbance is not better explained by another mental disorder (eg, anxiety or worry about having panic attacks in panic disorder, reminders of traumatic events in posttraumatic stress disorder, gaining weight in anorexia nervosa, physical complaints in somatic symptom disorder, perceived appearance flaws in body dysmorphic disorder, having a serious illness in illness anxiety disorder, or the content of delusional beliefs in schizophrenia or delusional disorder)
Anxiety and anxiety-related conditions: Posttraumatic stress disorder, obsessive compulsive disorder, panic disorder, agoraphobia, social anxiety disorder/social phobia, specific phobias, unspecified anxiety disorder
Bipolar I Disorder
Bipolar I disorder requires meeting criteria for a manic episode. The manic episode may have been preceded by or may be followed by hypomanic or major depressive episodes
Manic Episode
A. A distinct period of abnormally and persistently elevated, expansive, or irritable mood and abnormally and persistently increased activity or energy, lasting at least 1 week and present most of the day, nearly every day (or any duration if hospitalization is necessary)
B. During the period of mood disturbance and increased energy or activity, three (or more) of the following symptoms (four if the mood is only irritable) are present to a significant degree and represent a noticeable change from usual behavior
<ol style="list-style-type: none"> 1. Inflated self-esteem or grandiosity 2. Decreased need for sleep (eg, feels rested after only 3 hours of sleep) 3. More talkative than usual or pressure to keep talking 4. Flight of idea or subjective experience that thoughts are racing 5. Distractibility (ie, attention too easily drawn to unimportant or irrelevant external stimuli), as reported or observed 6. Increase in goal-directed activity (either socially, at work or school, or sexually) or psychomotor agitation (ie, purposeless non-goal-directed activity) 7. Excessive involvement in activities that have a high potential for painful consequences (eg, engaging in unrestrained buying sprees, sexual indiscretions, or foolish business investments)
C. The mood disturbance is sufficiently severe to cause marked impairment in social or occupational functioning or to necessitate hospitalization to prevent harm to self or others, or there are psychotic features
D. The episode is not attributable to the physiological effects of a substance or another medical condition
Note: A full manic episode that emerges during antidepressant treatment (eg, medication, electroconvulsive therapy) but persists at a fully syndromal level beyond the physiological effect of that treatment is sufficient evidence for a manic episode and, therefore, a bipolar I diagnosis
Note: Criteria A-D constitute a manic episode. At least one lifetime manic episode is required for the diagnosis of bipolar I disorder
Hypomanic Episode
A. Distinct period of abnormally and persistently elevated, expansive, or irritable mood and abnormally and persistently increased activity or energy, lasting at least 4 consecutive days and present most of the day, nearly every day

(continued)



Mental Health Conditions and Associated Diagnostic Criteria* (continued)

B. During the period of mood disturbance and increased energy and activity, three (or more) of the following symptoms (four if the mood is only irritable) have persisted, represent a noticeable change from usual behavior, and have been present to a significant degree:
<ol style="list-style-type: none"> 1. Inflated self-esteem or grandiosity 2. Decreased need for sleep (eg, feels rested after only 3 hours of sleep) 3. More talkative than usual or pressure to keep talking 4. Flight of idea or subjective experience that thoughts are racing 5. Distractibility (ie, attention too easily drawn to unimportant or irrelevant external stimuli), as reported or observed 6. Increase in goal-directed activity (either socially, at work or school, or sexually) or psychomotor agitation 7. Excessive involvement in activities that have a high potential for painful consequences (eg, engaging in unrestrained buying sprees, sexual indiscretions, or foolish business investments)
C. Episode associated with an unequivocal change in functioning that is uncharacteristic of the individual when not symptomatic
D. The disturbance in mood and the change in functioning are observable by others
E. The episode is not severe enough to cause marked impairment in social or occupational functioning or to necessitate hospitalization. If there are psychotic features, the episode is, by definition, manic
F. The episode is not attributable to the physiological effects of a substance (eg, a drug of abuse, a medication, other treatment) or another medical condition
<p>Note: A full hypomanic episode that emerges during antidepressant treatment (eg, medication, electroconvulsive therapy) but persists at a fully syndromal level beyond the physiological effect of that treatment is sufficient evidence for a hypomanic episode diagnosis. However, caution is indicated so that one or two symptoms (particularly increased irritability, edginess, or agitation following antidepressant use) are not taken as sufficient for diagnosis of a hypomanic episode, nor necessarily indicative of a bipolar diathesis</p> <p>Note: Criteria A-F constitute a hypomanic episode. Hypomanic episodes are common in bipolar I disorder but are not required for the diagnosis of bipolar I disorder</p>
Major Depressive Episode (as above—Major Depressive Disorder)
A. Five (or more) of the following symptoms have been present during the same 2-week period and represent a change from previous functioning; at least one the symptoms is either (1) depressed mood or (2) loss of interest or pleasure
Note: Do not include symptoms that are clearly attributable to another medical condition
<ol style="list-style-type: none"> 1. Depressed mood most of the day, nearly every day, as indicated by either subjective report (eg, feels sad, empty, hopeless) or observation made by others (eg, appears tearful). (Note: In children and adolescents, can be irritable mood) 2. Markedly diminished interest or pleasure in all, or almost all, activities most of the day, nearly every day (as indicated by either subjective account or observation) 3. Significant weight loss when not dieting or weight gain (eg, a change of more than 5% of body weight in a month), or decrease or increase in appetite nearly every day. (Note: In children, consider failure to make expected weight gain) 4. Insomnia or hypersomnia nearly every day 5. Psychomotor agitation or retardation nearly every day (observable by others, not merely subjective feelings of restlessness or being slowed down) 6. Fatigue or loss of energy nearly every day 7. Feelings of worthlessness or excessive or inappropriate guilt (which may be delusional) nearly every day (not merely self-reproach or guilt about being sick) 8. Diminished ability to think or concentrate, or indecisiveness, nearly every day (either by subjective account or as observed by others) 9. Recurrent thoughts of death (not just fear of dying); recurrent suicidal ideation without a specific plan; a specific suicide plan; or a suicide attempt
B. The symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning
C. The episode is not attributable to the physiological effects of a substance or another medical condition

(continued)



Mental Health Conditions and Associated Diagnostic Criteria* (continued)

Note: Criteria A-C represent a major depressive episode

Note: Responses to a significant loss (eg, bereavement, financial ruin, losses from a natural disaster, a serious medical illness, or disability) may include the feelings of intense sadness, rumination about the loss, insomnia, poor appetite, and weight loss noted in Criterion A, which may resemble a depressive episode. Although such symptoms may be understandable or considered appropriate to the loss, the presence of a major depressive episode in addition to the normal response to a significant loss should also be carefully considered. This decision inevitably requires the exercise of clinical judgement based on the individual's history and the cultural norms for the expression of distress in the context of loss

Bipolar I Disorder requires meeting criteria for a current or past hypomanic episode (see above) and criteria for a current or past major depressive episode (see above)

A. Criteria have been met for at least one manic episode (Criteria A-D under "Manic Episode" above)

B. At least one manic episode is not better explained by schizoaffective disorder and is not superimposed on schizophrenia, schizophreniform disorder, or other specified or unspecified schizophrenia spectrum and other psychotic disorder

Bipolar II Disorder

For a diagnosis of bipolar II disorder, it is necessary to meet the following criteria for a current or past hypomanic episode and the following criteria for a current or past major depressive episode:

Hypomanic Episode

A. A distinct period of abnormally and persistently elevated, expansive, or irritable mood and abnormally and persistently increased activity or energy, lasting at least 4 consecutive days and present most of the day, nearly every day.

B. During the period of mood disturbance and increased energy and activity, three (or more) of the following symptoms have persisted (four if the mood is only irritable), represent a noticeable change from usual behavior, and have been present to a significant degree:

1. Inflated self-esteem or grandiosity
2. Decreased need for sleep (eg, feels rested after only 3 hours of sleep)
3. More talkative than usual or pressure to keep talking
4. Flight of ideas or subjective experience that thoughts are racing
5. Distractibility (ie, attention too easily drawn to unimportant or irrelevant external stimuli), as reported or observed
6. Increase in goal-directed activity (either socially, at work or school, or sexually) or psychomotor agitation
7. Excessive involvement in activities that have a high potential for painful consequences (eg, engaging in unrestrained buying sprees, sexual indiscretions, or foolish business investments).

C. The episode is associated with an unequivocal change in functioning that is uncharacteristic of the individual when not symptomatic

D. The disturbance in mood and the change in functioning are observable by others.

E. The episode is not severe enough to cause marked impairment in social or occupation functioning or to necessitate hospitalization. If there are psychotic features, the episode is, by definition, manic.

F. The episode is not attributable to the physiological effects of a substance (eg, a drug abuse, a medication, other treatment) or another medical condition.

Note: A full hypomanic episode that emerges during the antidepressant treatment (e.g., medication, electroconvulsive therapy) but persists at a fully syndromal level beyond the physiological effect of that treatment is sufficient evidence for a hypomanic episode diagnosis. However, caution is indicated so that one or two symptoms (particularly increased irritability, edginess, or agitation following antidepressant use) are not taken as sufficient for diagnosis of a hypomanic episode, nor necessarily indicative of a bipolar diathesis.

Major Depressive Episode (as above—Major Depressive Disorder)

A. Five (or more) of the following symptoms have been present during the same 2-week period and represent a change from previous functioning; at least one of the symptoms is either (1) depressed mood or (2) loss of interest or pleasure.

Note: Do not include symptoms that are clearly attributable to a medical condition

(continued)



Mental Health Conditions and Associated Diagnostic Criteria* (continued)

1. Depressed mood most of the day, nearly every day, as indicated by either subjective report (eg, feels sad, empty, or hopeless) or observation made by others (eg, appears tearful). (Note: In children and adolescents, can be irritable mood.)
2. Markedly diminished interest or pleasure in all, or almost all, activities most of the day, nearly every day (as indicated by either subjective account or observation)
3. Significant weight loss when not dieting or weight gain (eg, a change of more than 5% of body weight in a month) or decrease or increase in appetite nearly every day. (Note: In children, consider failure to make expected weight gain)
4. Insomnia or hypersomnia nearly every day
5. Psychomotor agitation or retardation nearly every day (observable by others, not merely subjective feelings of restlessness or being slowed down)
6. Fatigue or loss of energy nearly every day
7. Feelings of worthlessness or excessive or inappropriate guilt (which may be delusional) nearly every day (not merely self-reproach or guilt about being sick)
8. Diminished ability to think or concentrate, or indecisiveness, nearly every day (either by subjective account or as observed by others)
9. Recurrent thoughts of death (not just fear of dying); recurrent suicidal ideation without a specific plan; a specific suicide plan; or a suicide attempt

B. The symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning

C. The episode is not attributable to the physiological effects of a substance or another medical condition

Note: Criteria A-C constitute a major depressive episode

Note: Responses to a significant loss (eg, bereavement, financial ruin, losses from a natural disaster, a serious medical illness or disability) may include the feelings of intense sadness, rumination about the loss, insomnia, poor appetite, and weight loss noted in Criterion A, which may resemble a depressive episode. Although such symptoms may be understandable or considered appropriate to the loss, the presence of a major depressive episode in addition to the normal response to a significant loss should be carefully considered. This decision inevitably requires the exercise of clinical judgment based on the individual's history and the cultural norms for the expression of distress in the context of loss.

Bipolar II Disorder

A. Criteria have been met for at least one hypomanic episode (Criteria A-F under "Hypomanic Episode" above) and at least one major depressive episode (Criteria A-C under "Major Depressive Episode" above)

B. There has never been a manic episode

C. At least one hypomanic episode and at least one major depressive episode are not better explained by schizoaffective disorder and are not superimposed on schizophrenia, schizophreniform disorder, delusional disorder, or other specified or unspecified schizophrenia spectrum and other psychotic disorder.

D. The symptoms of depression or the unpredictability caused by frequent alternation between periods of depression and hypomania causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.

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typically require lifelong treatment and pharmacotherapy. They are most often episodic, with exacerbations presenting at times of stress. Bipolar disorder is aptly named for the two poles or extremes of mood, from "low" mood (more accurately "depressive" episodes) to "high" mood (more accurately "manic" or "hypomanic" episodes) (36). Episodes tend to be at one pole or the other; thus, bipolar disorder may be mistaken for unipolar depression when it presents as a depressive episode. Women with bipolar disorder more often present with a depressive phenotype; thus, careful assessment for underlying bipolar disorder is

critical (2) because treating it as unipolar depression with antidepressant monotherapy can have significant negative consequences, including precipitation of mania, mixed states, rapid-cycling, or psychosis (37–40).

People with untreated or undertreated bipolar disorder are at increased risk of postpartum psychosis and suicidality (41, 42). Suicidality refers to suicidal ideation (thoughts of taking one's life), plans, or attempts. Post-partum psychosis is an obstetric and psychiatric emergency, with symptoms including delusional thoughts or bizarre beliefs, hallucinations, paranoia, rapid mood swings, irritability, hyperactivity,



and decreased need for or difficulty sleeping. Thoughts may include those of self-harm or harm to infant or others, with significant risk of acting on them. Postpartum psychosis typically occurs in the context of bipolar disorder and can occur in depressive, manic, or mixed-mood episodes (Box 1).

Before diagnosing a patient with a mental health condition, it is important to consider other medical conditions (eg, thyroid dysfunction, anemia), substances (eg, alcohol, opioids), or medications that can cause, mimic, or exacerbate mental health conditions and address them accordingly.

Epidemiology

Perinatal mental health conditions, inclusive of depression, anxiety disorders, and bipolar disorder, affect more than one in five perinatal individuals and are among the most common complications of pregnancy and the year after childbirth (2–4). Certain populations, such as adolescents, military veterans, and those marginalized by racism and socioeconomic disadvantage, are at higher risk for perinatal mental health conditions and have consistently higher rates (43–47). Over the past decade, the prevalence of perinatal mental health conditions has increased substantially across the United States. A serial cross-sectional analysis of nearly 8 million ($n=7,906,820$) delivery hospitalizations identified in the National Inpatient Sample, representing almost 40 million ($n=39,024,974$) deliveries in the United States occurring from 2006 to 2015, found that perinatal mood and anxiety

disorders increased from 18.4 per 1,000 deliveries (95% CI 16.4–20.0) to 40.4 per 1,000 deliveries (95% CI 39.3–41.6) and that severe mental illness increased from 4.2 per 1,000 deliveries (95% CI 3.9–4.6) to 8.1 per 1,000 deliveries (95% CI 7.9–8.4) (5).

Perinatal depression affects approximately one in seven women (14%), with onset occurring before pregnancy in 27%, during pregnancy in 33%, and postpartum in 40% (2). Pregnant patients tend to be more susceptible to anxiety and anxiety-related disorders compared with postpartum patients (3), and perinatal anxiety is a strong predictor of perinatal depression (48). Two thirds of women with perinatal depression have one or more comorbid psychiatric disorders. The vast majority of these (83%) are anxiety disorders, with half of these patients having comorbid generalized anxiety disorder (2). Conversely, more than one quarter (28%) of women with perinatal anxiety have comorbid depression (49).

Prevalence estimates of other types of anxiety disorders range broadly based on study populations and across anxiety and anxiety-related conditions, with specific phobias identified in 4.8% and PTSD identified in 1.1% of the included study populations (3). In longitudinal studies of prenatal populations, 17% screened positive for PTSD at clinical or subthreshold levels (50), and the prevalence of OCD was 3% and 7% in the prenatal and postpartum periods, respectively, with a cumulative incidence of new diagnoses of 9% by 6 months postpartum (51).

Box 1. Postpartum Psychosis

Postpartum psychosis is an obstetric and psychiatric emergency. It is a severe mental health illness. Symptoms usually start suddenly within 2 weeks of giving birth and often within hours or days. Symptoms include:

- A. Hallucinations, which can include seeing, hearing, feeling, or smelling things that others cannot because they are not there
- B. Delusions, which are thoughts or beliefs that are unlikely to be true
- C. Manic or high mood that can be associated with talking or thinking too quickly or too much and a general sense of being elevated, euphoric, or irritable
- D. Depressed or low mood
- E. Mixture of manic/high/irritable or depressed/low mood, with possible rapid cycling between
- F. Loss of inhibitions
- G. Feeling suspicious or fearful
- H. Restlessness
- I. Feeling confused
- J. Behaving in a way that is out of character or incongruent with usual approach or values

Data from National Health Service. Postpartum psychosis. Accessed March 7, 2023. <https://www.nhs.uk/mental-health/conditions/post-partum-psychosis/>



Bipolar disorder affects approximately 3% of the general population and 2% to 8% of the perinatal population, with one study noting rates as high as 18% (52). A systematic review and meta-analysis estimated bipolar disorder pooled prevalence at 2.6% (95% CI 1.2–4.5%) and bipolar-spectrum mood episodes (including depressed, hypomanic or manic, and mixed) at 20.1% (95% CI 16.0–24.5%) in perinatal individuals (4). Bipolar disorder is most often diagnosed between the ages of 18 and 30 years (53). For women, the perinatal period is associated with the highest lifetime risk of first onset and is well established as a time of increased vulnerability to relapse in those with known illness (53–56). Risk of relapse is 37% (95% CI 29–45%) overall, with marked differences in those not treated with pharmacotherapy in pregnancy (66%, 95% CI 57–75%) compared with those in which pharmacotherapy is continued (23%, 95% CI 14–37%) (57). Risk of psychiatric hospitalization is significantly greater in the postpartum period for patients with bipolar disorder than at any other points in their lives (58).

Postpartum psychosis occurs in approximately 1–2 of 1,000 births and has been associated with increased risks of suicide and infanticide (59–61). Women with bipolar disorder have a markedly increased risk of postpartum psychosis (7–17% or almost one in five deliveries) compared with the general population (57, 62, 63). Those with a history of postpartum psychosis are at highest risk, with approximately one third (31%, 95% CI 22–42%) experiencing reoccurrence (57). A systematic review and meta-analysis that included six studies with 645 patients and 11–26 years of follow-up focused on recurrence risk in patients having experienced postpartum psychosis. Approximately half (43.5%) of women had “isolated postpartum psychosis,” meaning they experienced it only once without a recurrence (36.1% total sample) or experienced it again but exclusively in the postpartum period (7.1% total sample). The other approximately half (56.7%) experienced lifelong psychiatric conditions, which included episodes of mania, psychosis, or major depression, with psychosis occurring outside of the postpartum period (64).

The sequelae of mental health conditions can be devastating. Suicide and overdose associated with substance use disorder are the leading causes of maternal mortality; together they account for almost a quarter (22.7%) of pregnancy-related deaths (11). Maternal mortality review committees have determined that 100% of the deaths resulting from suicide, overdose, or both are preventable (10, 12). Baseline estimates of suicidal ideation based on the self-harm questions on depression screening instruments validated in pregnancy and postpartum range from 4.6% to 7% (65, 66). In a global systematic review and meta-analysis including 39 articles reporting on more than 19 million pregnancies, the prevalence of self-harm ranged from 0% to 24%. Rates of self-harm in pregnancy (14 studies) and the first postpartum

year (10 studies) were both 0–2.4%, with a higher proportion occurring postpartum. Rates were notably higher in women with serious mental illness: pregnancy (six studies) 0–23.8% (median 2.2%, interquartile range 0.3–7.9%) and postpartum (seven studies) 0–21.9% (median 8.0%, interquartile range 0–18%) (67). In a sequential case series of more than 10,000 mothers who underwent depression screening in the postpartum period, 3.2% had thoughts of self-harm. Self-harm ideation, inclusive of any answer other than “never,” was 19.3% and 30% in those who had EPDS (Edinburgh Postnatal Depression Scale) scores of 10 or higher and 13 or higher, respectively (2). Of note, suicidal ideation occurring during pregnancy has increased substantially over the recent 10-year-time period from 2008 to 2018, with the sharpest proportional increase among Black birthing persons (68).

Etiologies and Risk Factors

The pathophysiology and etiologies underlying perinatal mental health conditions are complex, multifactorial, and, in most cases, incompletely elucidated. Significant risk factors can be categorized into interdependent and overlapping domains that can include biological, psychosocial, and environmental (Fig. 1). Additionally, individuals often have numerous and overlapping risk factors.

Risk Factors and Correlates of Depression and Anxiety-Related Disorders

In a stepwise regression model used to identify predictors of perinatal depression, race (as a social construct), psychological intimate partner violence (IPV), and sexual IPV were most strongly associated (69). Women with both a family and personal history of depression or anxiety have been shown to have a more than twofold increased risk for antenatal depression (70, 71). Further, history of a mental health disorder, especially anxiety and depression, and history of psychiatric treatment either during a previous pregnancy or at any time are other well-established risk factors for perinatal depression. Other risk factors for increased depressive symptoms, a depression diagnosis, or both include young age (2, 71), veteran or veteran-dependent status (72), active-duty service, lack of or decreased partner support, unemployment (44), incarceration (73), and insomnia and other sleep problems (74), including high nocturnal rumination (75).

Risk factors more specific to anxiety, PTSD, or both in the perinatal period include previous pregnancy loss and miscarriage, ectopic pregnancy, unplanned or unwanted pregnancy, medical complications (including hyperemesis gravidarum), childhood abuse, IPV, sleep disorders, denial and acceptance coping styles, personality traits, inadequate social support, history of mental health problems (including preexisting anxiety), high perceived stress, and adverse life events (76–80). Mothers of



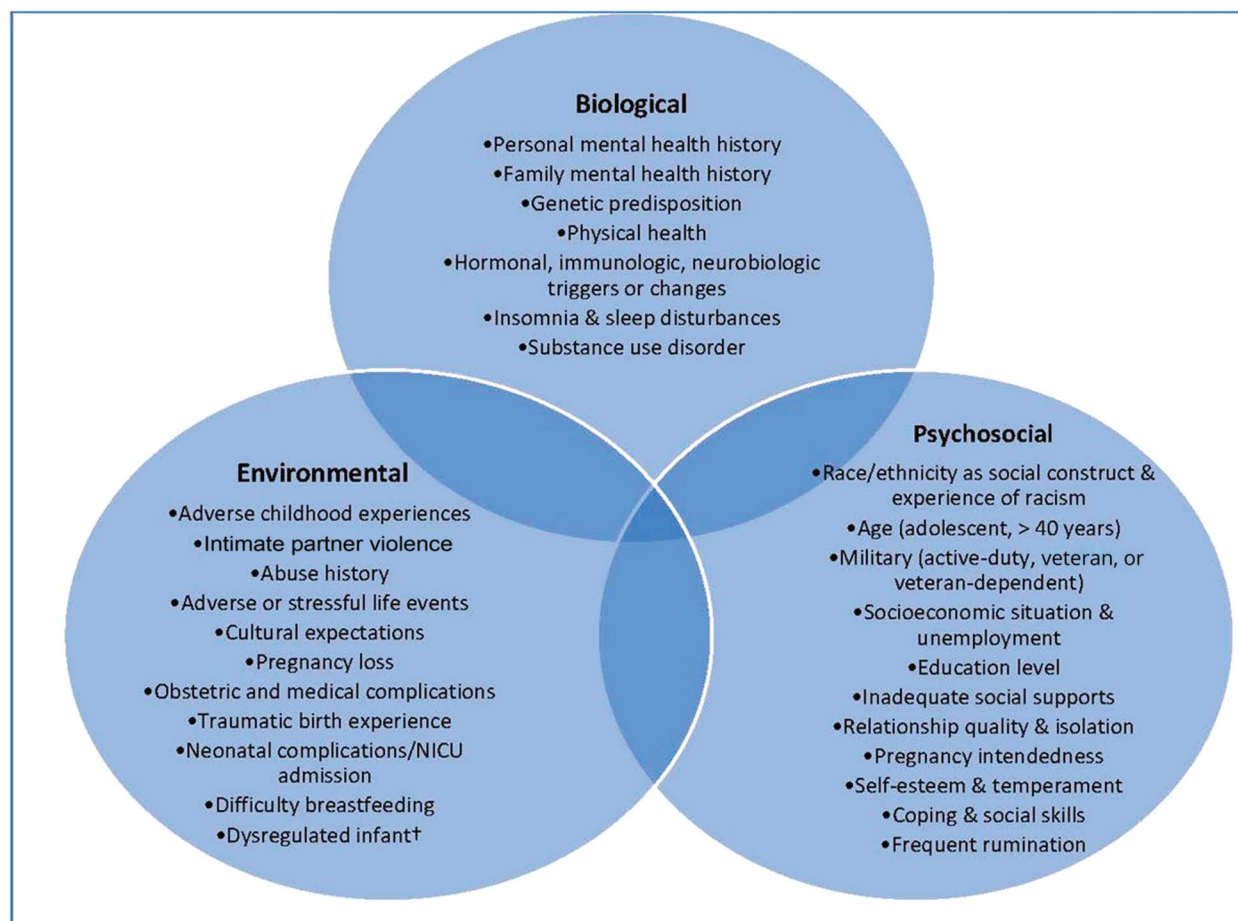


Fig. 1. Risk factors associated with perinatal mental health conditions. NICU, neonatal intensive care unit. *This is not intended to be an all-inclusive list of risk factors associated with perinatal mental health conditions. †Dysregulated most often refers to infants with colic, sleeplessness, feeding problems, and overactivity, among other issues.

Data from Bayrampour H, Vinturache A, Hetherington E, Lorenzetti DL, Tough S. Risk factors for antenatal anxiety: a systematic review of the literature. *J Reprod Infant Psychol* 2018;36:476–503. doi: 10.1080/02646838.2018.1492097 and Biaggi A, Conroy S, Pawlby S, Pariante CM. Identifying the women at risk of antenatal anxiety and depression: a systematic review. *J Affect Disord* 2016;191:62–77. doi: 10.1016/j.jad.2015.11.014 and Furtado M, Chow CH, Owais S, Frey BN, Van Lieshout RJ. Risk factors of new onset anxiety and anxiety exacerbation in the perinatal period: a systematic review and meta-analysis. *J Affect Disord* 2018;238:626–35. doi: 10.1016/j.jad.2018.05.073 and Kroll-Desrosiers AR, Crawford SL, Moore Simas TA, Clark MA, Bastian LA, Mattocks KM. Rates and correlates of depression symptoms in a sample of pregnant veterans receiving Veterans Health Administration care. *Womens Health Issues* 2019;29:333–40. doi: 10.1016/j.whi.2019.04.008 and Yuen M, Hall OJ, Masters GA, Nephew BC, Carr C, Leung K, et al. The effects of breastfeeding on maternal mental health: a systematic review. *J Womens Health (Larchmt)* 2022;31:787–807. doi: 10.1089/jwh.2021.0504.

newborns admitted to the neonatal intensive care unit with low Apgar scores, with severe neonatal complications, or both are also at increased risk of perinatal depression as well as PTSD (81). A positive PTSD screen has been associated with being of younger age, being of higher parity, speaking a language other than English, having more trauma experience in childhood and adolescence, having more interpersonal trauma, and a higher number of depression and anxiety symptoms (50).

As per a systematic review of 55 articles, breastfeeding was overall associated with fewer mental health

symptoms, especially those related to postpartum depression and anxiety. However, breastfeeding challenges and a discordance between lactating individuals' expectations and actual experience is associated with negative mental health outcomes (82).

Risk Factors and Correlates of Self-Harm and Suicide

In a global systematic review and meta-analysis, key correlates of self-harm during pregnancy and the postpartum period include a known mental health disorder, substance misuse, younger age, being unmarried,



obstetric and neonatal complications, and a history of self-harm or fetal or infant loss (67, 83). Additional associated risk factors for self-harm include a major depressive episode postpartum, early postpartum depressive symptoms, and stressful life events during pregnancy (66, 84).

In a study of pregnancy-associated violent deaths, individuals who died by pregnancy-associated homicide were most frequently young, Black, and had lower levels of education, whereas individuals who died by pregnancy-associated suicide were most frequently older and White. Pregnancy-associated suicide risk ranged from 1.6 to 4.5 per 100,000 live births compared with 5.3 to 5.5 per 100,000 females aged 10–54 years who did not experience a pregnancy. Risk of pregnancy-associated homicide was increased at 1.84 times that of nonpregnant and postpartum women, whereas pregnancy-associated suicide was decreased (relative risk 0.62, 95% CI 0.57–0.68) (85).

In a prospective randomized controlled trial of 267 women, those with insomnia and high rumination had a 35.6% risk of depression and a 17.3% risk of suicidal ideation compared with those who slept well and had low rumination (1.2% depression and 4.9% suicidal ideation) (75). Perinatal patients who are also veterans have higher risk of suicidal ideation (10%) and history of suicide attempts (30%) than nonveterans (86).

Self-harm history is an important indicator of suicide risk; one quarter (25%) of women self-harm in the 3 months preceding suicide, and acts of self-harm in women with an initial onset of a severe mental disorder are a risk factor for suicide later (87, 88). The suicide mortality ratio is significantly higher in women with moderate-to-severe mental illness compared with mothers with no psychiatric history (89). Among pregnancy-related mental health deaths, three fourths of patients had depression, more than two thirds had past or current substance use, and almost two thirds had Medicaid insurance (10, 90). Other risk factors for pregnancy-related mental health deaths include a history of prior suicide attempt, abrupt discontinuation of psychotropic medications during pregnancy, sleep disturbances, stillbirth, history of childhood abuse or ACE score 3 or higher or both, financial instability, and major illness in the newborn (91, 92). Deaths are more common in the second half of the first postpartum year (90, 93).

Risk Factors for Postpartum Psychosis

The most significant risk factors for postpartum psychosis are bipolar disorder, a personal or family history of bipolar disorder, and a previous episode of postpartum psychosis (91, 94). A systematic review and meta-analysis performed a comprehensive synthesis of evidence on association of prenatal or perinatal risk and protective factors for psychotic disorders. Ninety-eight risk or protective factors were eligible for analyses, and there was a significant association for most; however, the

majority were not amenable to intervention (eg, maternal age, paternal age, season of birth in the northern hemisphere, low birth weight, birth length) (95).

Prevention and Anticipatory Guidance

Given the complex biological, environmental, and psychosocial risks that comprise the pathophysiology of perinatal mental health conditions, efforts focused on prevention are, similarly, complex. In 2019, the U.S. Preventive Services Task Force (USPSTF) completed a report on interventions to prevent perinatal depression (96). Counseling interventions, primarily cognitive behavioral therapy and interpersonal therapy, were associated with a risk reduction (relative risk 0.61, 95% CI 0.47–0.78) for perinatal depression. Two specific interventions, the interpersonal therapy-based ROSE (Reach Out, Stay Strong, Essentials for mothers of newborns) program and the cognitive behavioral therapy-based Mothers & Babies program, decreased perinatal depression rates compared with control groups. These programs focus on the creation of healthy physical, social, and psychological environments for participants and their infants, with topics including stress reduction and management, support, the transition to parenthood, and conflict resolution. Although efficacy has been proven, implementation remains a challenge. The USPSTF specifically concludes with a class B recommendation to provide or refer perinatal individuals at “increased risk” to these counseling interventions (96). However, “increased risk” is not defined. Cost-effectiveness analyses on a theoretical cohort of pregnant adolescents have demonstrated effectiveness of counseling interventions for this high-risk group (97).

Other prevention strategies that have demonstrated significant improvement include a pilot randomized trial with prophylactic postpartum sertraline started on postpartum day 1 after breakfast (25 mg/day for 4 days, increased to 50 mg/day through week 4, then 75 mg/day for weeks 5–17, then tapered over 3 weeks and discontinued at week 20) compared with placebo in women with a history of postpartum depression but without antenatal depression. This intervention reduced postpartum depression recurrence (7% sertraline vs 50% placebo recurrence, difference in recurrence rate 0.43, 95% exact CI –0.01 to 0.84, $P=.04$) (98). Physical activity is associated with a reduction in depression scores overall, albeit not statistically significant, when comparing groups with and without perinatal depression (99). On the other hand, interventions such as birth-experience postpartum debriefing, and omega-3 fatty acid supplementation have not been associated with a decreased risk (96).

When pharmacotherapy is discontinued in the perinatal period, there is an increased risk of relapse and exacerbation of mental health conditions; thus, the



decision between pharmacotherapy continuation and discontinuation needs to be considered carefully, along with explicit discussion of risks of untreated disease. As noted in the Epidemiology section above, relapse risk for patients with bipolar disorder is markedly higher for those not treated with pharmacotherapy in pregnancy; therefore, continuation of effective pharmacotherapy for those with bipolar disorder is highly recommended to prevent exacerbation, relapse, and associated risks and negative outcomes. A history of bipolar disorder or postpartum psychosis merits close monitoring during the perinatal period, particularly in the third trimester and postpartum. If pharmacotherapy was not continued in pregnancy, recurrence risk can be reduced with initiation of a mood stabilizer postpartum (60, 100). Additionally, because sleep dysregulation may be a potential trigger for illness exacerbation or recurrence in bipolar disorder, sleep planning with support persons as available or, at times, having the patient forego an overnight feed or milk expression entirely to preserve a longer stretch of nightly sleep than is usual with a newborn can be considered.

Due to the potential for preventive efforts to improve outcomes, the comprehensive prenatal intake assessment should include questions about personal medical and mental health history, obstetric and perinatal mental health history, psychosocial history, and family history of mood and anxiety disorders, as well as current and prior medication use for such conditions to proactively address potential risk factors (101).

Health Equity

Populations marginalized by racism and socioeconomic disadvantage experience significant health inequities in the prevalence, screening, treatment, and outcomes related to perinatal mental health conditions (7, 102). Analysis of PRAMS (Pregnancy Risk Assessment Monitoring System) phase 8 2018 data, including 7,328 non-Hispanic Black respondents with live births from 11 states and New York City and controlling for potential confounders, showed that respondents who felt upset due to experiences of racism in the year before delivery had twofold higher odds of depression compared with those who did not (odds ratio 2.37, 95% CI 1.67–3.37) (21).

In a retrospective cohort study using the PHQ-9 (Patient Health Questionnaire-9) for depression screening, women who were non-White were less likely to be screened postpartum than White women, and women with Medicaid or Medicare insurance were less likely to be screened than women with private insurance (103). Interventions to improve or mitigate perinatal depression and anxiety are fraught with inequities in access, affordability, and comorbid conditions that exacerbate depression and anxiety, such as diabetes, obesity, and history

of trauma. In a retrospective administrative Medicaid claims analysis adjusting for clinical factors, Black and Latina women were less likely to receive postdelivery depression-related mental health care. Even when care was initiated, Black and Latina women were less likely to receive follow-up treatment or continued care and were less likely than White women to refill a prescription for antidepressant medications. Of note, treatment rates were suboptimal among all women with low-income in the study, regardless of race and ethnicity (22).

Another population that merits special attention are transgender and gender diverse perinatal individuals. There exists ever-increasing attention to and scholarship on transgender health and health care; however, the literature remains relatively limited, and even more so with regard to reproductive health care and perinatal mental health care specifically. Themes of dysphoria, visibility, and isolation are likely to be associated with increased risk and merit further investigation, monitoring, and intervention as needed (104).

To promote universal access and acknowledging that numerous approaches to screening and treatment exist and that there is not one screening or treatment approach that is generalizable to all, we recommend that clinicians standardize their approach in their own clinical settings. Although further research and evidence is needed in perinatal care settings, collaborative care models hold promise as an equity-promoting intervention for maternal mental health. Results from a retrospective cohort study (N=4,710) that included perinatal individuals who self-identified as Black or White and received perinatal care at an academic medical center demonstrated postintervention equity in screening and treatment. Before implementation of the collaborative care model, Black individuals were more likely to receive screening but less likely to receive treatment for a positive screen. After implementation, there were no significant differences between Black and White individuals in screening for depression or treatment in the context of a positive screen (23). Future research is also needed to develop screening tools that are more relatable and acceptable to perinatal individuals marginalized by racism and socioeconomic disadvantage.

Perinatal Psychiatry Access Programs and Support Lines

Multi-level barriers to addressing perinatal mental health in obstetric settings exist and include limited obstetric care clinician training and limited standardized processes and procedures for integrating mental health care. Obstetric care clinicians may have limited referral networks and may encounter mental health professionals unwilling to treat pregnant individuals. Given these challenges, clinicians may have limited capacity and resources to ensure mental



health evaluation, treatment, follow-up, and care coordination. Thus, Perinatal Psychiatry Access Programs were developed. Perinatal Psychiatry Access Programs are clinician-facing resources that were designed to increase the capacity of obstetric care clinicians to care for pregnant, postpartum, or lactating persons and those planning pregnancy who have perinatal mental health and substance use disorders. Perinatal Psychiatry Access Programs aim to increase access by helping obstetric care clinicians effectively identify and manage these conditions through: 1) training and toolkits; 2) real-time psychiatric consultation; 3) resource and referral linkages to community-based mental health resources; and 4) workflow technical assistance. Numerous state and regional health care professional-facing Perinatal Psychiatry Access Programs (105), supported through various funding mechanisms, have emerged throughout the United States, and a national consultation line and patient-facing warm line exist through Postpartum Support International and the U.S. Department of Veterans Affairs (VA) Women's Mental Health Line for VA clinicians (106, 107). The Health Resources & Services Administration has a 24/7, free, confidential national maternal mental health hotline (1-833-943-5746 [1-833-9-HELP4MOMS]), in multiple languages by phone or text, for pregnant individuals, new mothers, and individuals who have given birth (108).

MCPAP for Moms (Massachusetts Child Psychiatry Access Program for Moms) was the first state-wide Access Program, on which others have been modeled. Use of MCPAP for Moms has been demonstrated to be acceptable to obstetrician-gynecologists and has facilitated clinicians' ability to provide evidence-based mental health treatment to their perinatal patients, including for more severe mental illness such as bipolar disorder (4, 109, 110). In a CDC-funded cluster randomized controlled trial (111), MCPAP for Moms improved depression symptomatology as evidenced by a clinically significant decrease of 4.5 points on the EPDS in study participants, all of whom were recruited based on a positive depression screen in the perinatal period.

CLINICAL RECOMMENDATIONS AND EVIDENCE SUMMARY

Evidence-Based Screening and Diagnostic Approaches to Perinatal Depression and Anxiety Disorders

Given the high prevalence of depression and anxiety and their comorbid occurrence throughout the life course, including during pregnancy and postpartum, their association with significant negative outcomes, and the benefits of identifying, preventing, or treating them early, there are near universal recommendations from multiple colleges, societies, and governmental organizations to screen for

depression and anxiety using validated instruments (112–118). The combined goals of these recommendations are to prevent, identify, diagnose, assess, and intervene to achieve symptom remission as soon as possible.

ACOG recommends that everyone receiving well-woman, prepregnancy, prenatal, and postpartum care be screened for depression and anxiety using standardized, validated instruments. (STRONG RECOMMENDATION, MODERATE- [DEPRESSION] AND LOW- [ANXIETY] QUALITY EVIDENCE)

Screening is important; patients identified as having a positive screen are more likely to have treatment recommended or provided by their obstetric care clinician, especially after universal screening practices are implemented (119, 120). Additionally, there is indirect and direct evidence suggesting that screening with or without additional treatment components is associated with depression risk reduction (121); screening itself is an intervention that decreases stigma and is associated with increased awareness and education. There are numerous acceptable screening instruments designed to detect perinatal depression and anxiety and for which there is significant relevant literature (Table 2). In this Clinical Practice Guideline the most commonly used and most widely studied will be discussed in detail, these specifically are the EPDS, the PHQ-9, and the GAD-7 (Generalized Anxiety Disorder-7) questionnaire. These instruments have been validated in many languages and in perinatal populations.

The PHQ-9 screens for depressive symptoms and has a self-harm question (122). The EPDS screens for depressive and anxiety symptoms and has a self-harm question; its results are comparable with a structured clinical interview for DSM-5 major depression diagnosis (123). In a meta-analysis (35 studies) comparing the PHQ-9 and EPDS, operating characteristics were nearly identical (124) and combined sensitivity and specificity were maximized at cutoff scores of 11 or higher to detect major depression (125). Both the PHQ-9 and EPDS can be helpful during clinical assessment, with a score of 10–14 often representing mild symptomatology, 15–19 representing moderate symptomatology, and higher than 19 being consistent with severe symptomatology as well as an increased risk for bipolar disorder. Both of these screens are available in multiple languages (126–133), are self-administered, take little time to complete, and can be scored by the clinical care team. Positive receptivity to these screens, by both patients and health care professionals, has been affirmed (134). Web-based and tablet-based e-screening are also acceptable to patients (135, 136), as is text message-based screening (137).

Because anxiety occurs in more than 37% of screened perinatal patients and is comorbid with depression in at least 28% of patients, it is important to screen for anxiety symptoms as well as for depressive symptoms (49). Three



Table 2. Commonly Used Perinatal Mental Health Validated Screening Instruments

PMH Condition	Screening Instrument	No. of Items/Self-Administered (Y/N)	Sensitivity and Specificity	Score for Positive Screen
Depression	EPDS	10/Y	Sensitivity: 55–98% Specificity: 68–97%	≥10
	PHQ-9	9/Y	Sensitivity: 53–77% Specificity: 85–94%	≥10
Anxiety	GAD-7	7/Y	Sensitivity: 73% Specificity: 67%	≥5
	EPDS— anxiety subscale (items 3, 4, 5)	3/Y	Not enough data to estimate; correlates with GAD-7	≥5
	STAI	20/Y	Sensitivity: 81% Specificity: 78%	≥40
Bipolar disorder	MDQ	3 (Q1 with 13 items)/Y	Sensitivity: 44–90% Specificity: 61–92%	≥7 of the 13 items in Q1
	CIDI	2–3 (branching logic)/N	Sensitivity: 69–100% Specificity: 98–99%	Yes to Q3 (Q3 is asked if Q1 or Q2 are affirmed)

Abbreviations: CIDI, Composite International Diagnostic Interview; EPDS, Edinburgh Postnatal Depression Scale; GAD-7, Generalized Anxiety Scale-7; MDQ, Mood Disorder Questionnaire; PMH, perinatal mental health; PHQ-9, Patient Health Questionnaire-9; Q, question; STAI, State-Trait Anxiety Inventory.

Data from Byatt N, Masters GA, Bergman AL, Moore Simas TA. Screening for mental health and substance use disorders in obstetric settings. *Curr Psychiatry Rep* 2020;22:62 and Byatt N, Mittal LP, Brenckle L, Logan DG, Masters GA, Bergman A, et al. Lifeline for moms perinatal mental health toolkit. University of Massachusetts Medical School; 2019. Accessed December 7, 2022. <https://www.umassmed.edu/lifeline4moms/products-resources/toolkits-and-apps/2019/11/lifeline4moms-perinatal-mental-health-toolkit/>

anxiety-related questions on the EPDS have been considered independently and prospectively as an anxiety subscale, and, when the summed questions score is 5 or higher, it correlates significantly with a positive GAD-7 screen (138–140). The three questions are usually 3, 4, and 5; however, they may be differently numbered depending on the layout of the tool used. Thus, they are listed here: “I have blamed myself unnecessarily when things went wrong,” “I have been anxious or worried for no good reason,” and “I have felt scared or panicky for no very good reason.” If not using the EPDS or if wanting to incorporate a specific anxiety screening instrument or both, the GAD-7 or the STAI-6 (State-Trait Anxiety Inventory, Short Form) are recommended in perinatal populations (141). GAD-7 scores can also be helpful during clinical assessment, with a score of 5–9 often representing mild symptomatology, 10–14 representing moderate symptomatology, and 15 or higher being consistent with severe symptomatology.

ACOG recommends that screening for perinatal depression and anxiety occur at the initial prenatal visit, later in pregnancy, and at postpartum visits. (STRONG RECOMMENDATION, MODERATE- [DEPRESSION] AND LOW- [ANXIETY] QUALITY EVIDENCE)

Because the onset of perinatal depression occurs nearly equally across the time periods of prepregnancy, in pregnancy, and postpartum, and because perinatal depression and anxiety are common and highly comorbid (2, 49), screening at multiple timepoints is recommended. Specifically, screen at the time of the first prenatal visit, again later in pregnancy near or in the third trimester, and at postpartum visits. Serial screening with the same validated screening questionnaire would ideally identify the majority of people with symptoms. Multiple screens over the course of the perinatal period also facilitate opportunities for anticipatory guidance.



ACOG recommends that mental health screening be implemented with systems in place to ensure timely access to assessment and diagnosis, effective treatment, and appropriate monitoring and follow-up based on severity.

(STRONG RECOMMENDATION, MODERATE-QUALITY EVIDENCE)

Although the screening instrument scores correlate with disease severity, they are screening instruments and not diagnostic instruments. Diagnosis of mental health conditions occurs through an evaluation of the patient, which includes a discussion or interview, and with consideration of the differential diagnosis. The interview should query about type, frequency, severity, and duration of symptoms and how symptoms affect daily functioning (36) (Fig. 2). The answers to these questions inform diagnosis and disease severity, which informs treatment. Questions should also query about recent stressors (eg, a new fetal diagnosis or pregnancy concerns may acutely increase symptoms) and supports. If not previously done at the obstetric intake visit and given increased relevance in the context of the positive screen, clinicians should elucidate relevant information about personal and family history of mental illness, previous psychiatry treatments that have and have not been effective, previous psychiatric hospitalization, and whether there is a past history of suicidal ideation or suicide attempt(s) (142).

Additionally, an evaluation for other potential etiologies such as thyroid dysfunction, severe anemia, and substance use disorder should be performed through symptom evaluation and, where clinically indicated, laboratory evaluation should be performed (eg, thyroid-stimulating hormone, hemoglobin or hematocrit, folate, B12, and iron). A validated substance use disorder screening instrument should also be administered, including 4Ps, NIDA Quick Screen, and CRAFFT (for women aged 26 years or younger) (25).

Counseling regarding symptoms and suggested approaches to symptom improvement is warranted in all patients. Of note, the treatment approaches to perinatal depression and anxiety are very similar. Patients should be referred to behavioral health resources, because psychotherapy is first-line treatment for depression and anxiety regardless of symptom severity. Pharmacotherapy concomitant with psychotherapy is indicated for many patients with moderate and severe symptoms, those who desire it for mild symptoms, and those who have required medication treatment previously. Obstetric care clinicians should be prepared to initiate pharmacotherapy for depression and anxiety, to refer to appropriate behavioral health resources when indicated, or both. Perinatal Psychiatry Access Programs are available to support obstetric care clinicians and to facilitate timely access to treatment. A full discussion regarding treatment is available in ACOG

Clinical Practice Guideline Number 5, "Treatment and Management of Mental Health Conditions During Pregnancy and Postpartum" (1). Once a perinatal individual screens positive, is assessed, and is diagnosed with a mental health condition, the screening instrument can be administered serially to help assess response to treatment and guide titration as needed.

Evidence-Based Screening and Diagnostic Approaches to Perinatal Bipolar Disorder

Bipolar disorder is a severe mental illness, with average age of onset corresponding with prime childbearing years. Women are at highest lifetime risk in the perinatal period, with new and recurrent episodes affecting twice as many individuals in the perinatal period than at other times (4, 53, 143–145). The incidence of conversion from major depressive disorder to bipolar disorder, with first onset of mania or hypomania symptoms in the perinatal period, especially postpartum, is greater than 7% (146, 147). Recognition of bipolar disorder through screening with a standardized, validated instrument or as reported by the patient through medical history and past or current prescribed psychopharmacotherapy is important, given the relatively high prevalence of bipolar disorder and its association with significant negative outcomes that increase maternal and infant mortality risk. Perinatal patients with bipolar disorder are at increased risk for recurrence or exacerbation of illness, which can include depression, hypomania or mania, mixed episodes, psychosis, psychiatric hospitalization, suicide, and infanticide. Bipolar disorder is the strongest predictor of postpartum psychosis (1–2/1,000 perinatal individuals) and infanticide (2–7/100,000 infants) (60, 62, 148, 149). Although a significant change in practice, screening all perinatal individuals for bipolar disorder combined with the other self-administered mental health screening instruments for depression and anxiety at the initial obstetric visit will facilitate increased detection. In parallel with this change in practice, referral to a psychiatrist for further assessment, diagnosis, and longer-term treatment is paramount in patients with either recognized bipolar disorder or a high suspicion for this disorder. Minimally, screening for bipolar disorder needs to be completed before initiating pharmacotherapy for depression and anxiety.

ACOG suggests that everyone receiving prenatal and postpartum care be screened for bipolar disorder using a standardized, validated instrument. (CONDITIONAL RECOMMENDATION, MODERATE-QUALITY EVIDENCE)

Standardized, validated screening instruments for bipolar disorder include the MDQ (Mood Disorder Questionnaire; three questions, the first with 13 items, self-administered, see <https://ajp.psychiatryonline.org/doi/epdf/10.1176/appi.ajp.157.11.1873>) and the CIDI (Composite



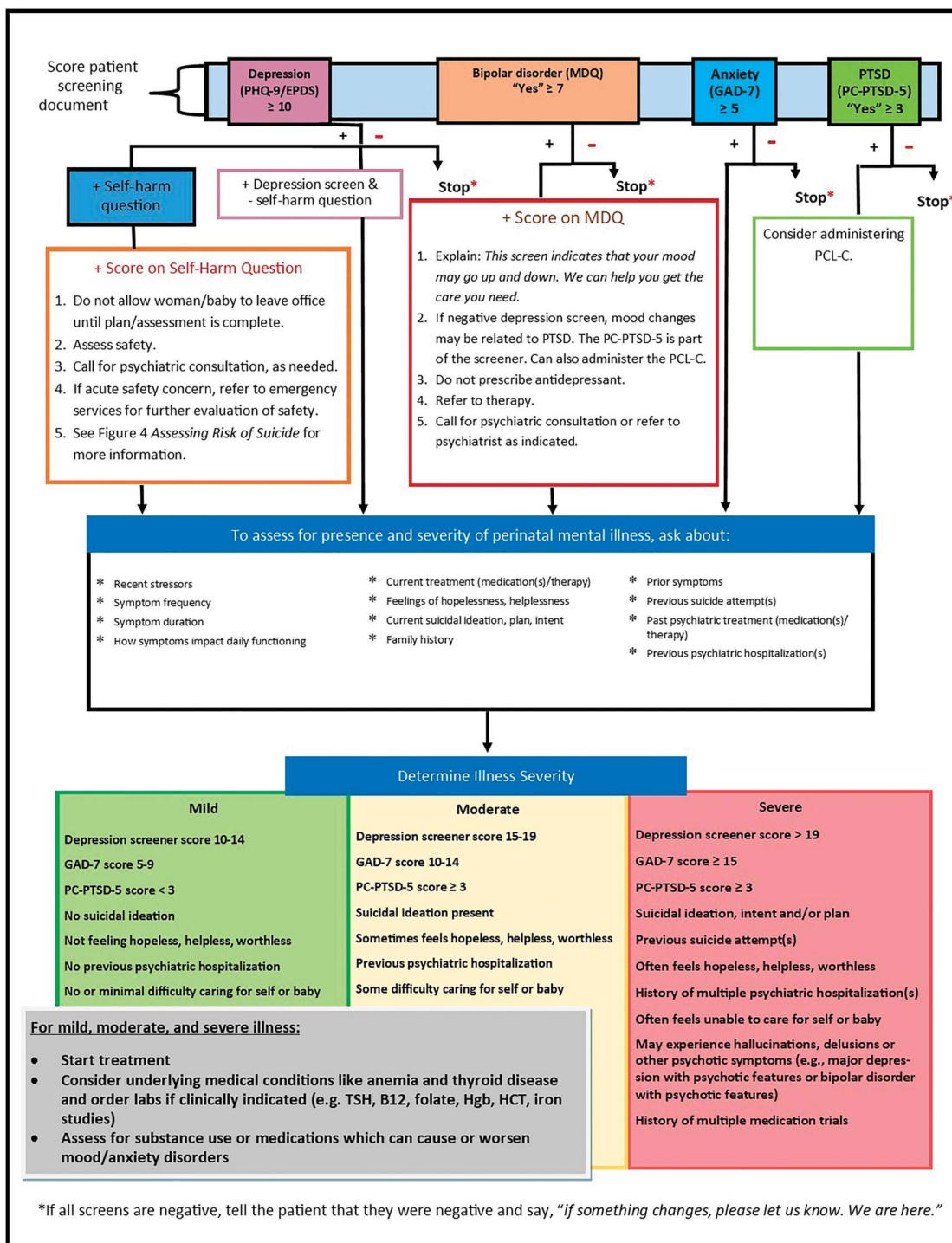


Fig. 2. Assessing perinatal mental health. B12, vitamin B12; EPDS, Edinburgh Postnatal Depression Scale; GAD-7, Generalized Anxiety Disorder 7; HCT, hematocrit; Hgb, hemoglobin; MDQ, Mood Disorder Questionnaire; PHQ-9, Patient Health Questionnaire-9; PTSD, post-traumatic stress disorder; PC-PTSD-5, Primary Care Post Traumatic Stress Disorder DSM-5; PCL-C, PTSD Check List-Civilian; TSH, thyroid stimulating hormone.

Modified from Byatt N, Mittal LP, Brenckle L, Logan DG, Masters GA, Bergman A, et al. Lifeline for Moms perinatal mental health toolkit. University of Massachusetts Medical School; 2019. Accessed March 20, 2023. <https://www.umassmed.edu/lifeline4moms/products-resources/toolkits-and-apps/2019/11/lifeline4moms-perinatal-mental-health-toolkit/>.



International Diagnostic Interview) (150, 151) bipolar stem (two to three questions with branching logic, health care professional-administered) (Table 3). The sensitivity and specificity of the MDQ range from 44% to 90% and from 61% to 92%, respectively, and can depend on the scoring method used (13, 152–157). Detection rates are improved using a cutoff score of 7 or more symptoms (question 1), without the supplementary questions regarding functional impairment (154, 158, 159). The sensitivity and specificity of the CIDI range from 69% to 100% and from 98% to 99%, respectively (13, 151). The MDQ and the CIDI query about lifetime experiences (ie, “have you ever...”), as compared with more discrete periods of time as the depression and anxiety screening instruments do (ie, 7 days–2 weeks). Therefore, screening for bipolar disorder technically needs to be done only once in the perinatal period, not repeatedly as with the depression and anxiety screens. It is prudent, however, to screen with each pregnancy, because the average age of onset corresponds with childbearing years. For example, a negative screen for bipolar disorder in an 18-year-old patient will not predict the result in a 25-year-old patient.

ACOG recommends screening for bipolar disorder before initiating pharmacotherapy for anxiety or depression, if not previously done. (STRONG RECOMMENDATION, MODERATE-QUALITY EVIDENCE)

If screening for bipolar disorder has not been performed at the first prenatal visit, it is imperative to screen before initiating any psychopharmacotherapy. This can be done with either a self-administered or clinician-administered instrument such as the MDQ or CIDI, respectively. Because bipolar disorder and depression both include depressive symptomatology, and because hypomania or mania may have anxiety-like features, bipolar disorder diagnoses are often missed and attributed to these more common diagnoses. First-onset nonpsychotic postpartum depressive disorder can be a marker of bipolar disorder (160).

It is important to note that almost a quarter (22.6%) of individuals with a positive perinatal depression screen will be found to have bipolar disorder if further evaluated. Individuals especially at risk for bipolar disorder are those who have higher scores on a validated depression screening tool (eg, EPDS > 19) (2). Conversely, not all persons with bipolar disorder will have a positive perinatal depression screen (145, 159). However, given that depression symptoms tend to be more prominent than manic symptoms, bipolar disorder is often mistaken for unipolar depression (161, 162).

Misdiagnosis can lead to treatment with antidepressant monotherapy, which is generally contraindicated because it may precipitate mania, mixed states, rapid cycling, or psychosis (37–40). Thus, before prescribing antidepressant monotherapy for presumed unipolar

Table 3. Composite International Diagnostic Interview (CIDI) Bipolar Screen*

Screen for bipolar disorder[†]

1. *Some people have periods lasting several days or longer when they feel much more excited and full of energy than usual. Their minds go too fast. They talk a lot. They are very restless or unable to sit still and they sometimes do things that are unusual for them, such as driving too fast or spending too much money. Have you ever had a period liked this lasting several days or longer?*

2. *Have you ever had a period lasting several days or longer when most of the time you were so irritable or grouchy that you started arguments, shouted at people, or hit people?*

If YES to questions 1 and/or 2

Continue screen for bipolar disorder[†]

3. *People who have episodes like this often have changes in their thinking and behavior at the same time, like being more talkative, needing very little sleep, being very restless, going on buying sprees, and behaving in ways they would normally think are inappropriate. Did you ever have any of these changes during your episodes of being (excited and full of energy/very irritable or grouchy)?*

If YES to question 3

The screen suggests the patient may have bipolar disorder

If currently symptomatic or anticipating prescribing for other perinatal mood or anxiety disorder, consider consultation with mental health professional, including those available through Perinatal Psychiatry Access Programs across the country.

*In this algorithm, the provider speaks the *italicized text*.

[†]Taken from the Composite International Diagnostic Interview-Based Bipolar Disorder Screening Scale (Kessler, Akiskal, Angst et al., 2006).

Modified from Massachusetts Child Psychiatry Access Project. MCPAP for Moms toolkit. MCPAP; 2014. Accessed February 7, 2023. <https://www.mcpapformoms.org/Docs/Adult%20Toolkit.pdf>



depression or anxiety, bipolar disorder screening is needed to avoid precipitating mania and psychosis, which can be associated with self-harm and infanticide. Pharmacotherapy with a mood stabilizer is generally indicated and the mainstay of treatment for bipolar disorder.

Because bipolar disorder is associated with an increased risk of psychosis, suicide, and infanticide or homicide, consider consulting a mental health professional, including those available through Perinatal Psychiatry Access Programs for assessment, management, and treatment guidance. (GOOD PRACTICE POINT)

The diagnosis of bipolar disorder can be complex and is often delayed for many years after an initial mood or other mental health episode. Given that pregnancy and childbirth are important influences on the onset, exacerbation, and course of bipolar disorder, it is important for obstetric care clinicians to be aware of, and to screen for, bipolar disorder. If bipolar disorder is suspected, consultation with or referral to a mental health professional for further assessment, management, and treatment guidance is indicated. Perinatal Psychiatry Access Programs have been established across the United States for the purpose of increasing the capacity of obstetric care clinicians to address perinatal mental health (109, 110). Information for the obstetric clinician interested in facilitating the timely treatment of patients with bipolar disorder during the perinatal period is also available in ACOG Clinical Practice Guideline Number 5, "Treatment and Management of Mental Health Conditions During Pregnancy and Postpartum" (1).

Evidence-Based Screening and Diagnostic Approaches to Postpartum Psychosis and Perinatal Suicidality

ACOG recommends that, when someone answers a self-harm or suicide question affirmatively, clinicians immediately assess for likelihood, acuity, and severity of risk of suicide attempt, and then arrange for risk-tailored management. (STRONG RECOMMENDATION, LOW-QUALITY EVIDENCE)

Suicide prevention requires screening, assessment, monitoring, and intervention for all perinatal individuals. Although severe symptomatology and psychosis can occur rapidly, the scenario is more commonly one of prolonged deterioration leading to suffering and crisis. Family members often feel helpless and uncertain as to how to respond. Anticipatory guidance and follow-up that includes partners and support persons, as well as resource provision to help before the crisis or deterioration, are both supportive and preventative.

Based on a sequential case series of more than 10,000 mothers who underwent depression screening in the postpartum period, approximately 3% had thoughts of self-harm. Suicidal ideation worsens with an increasing score on the overall depression screening instrument (2). When using the EPDS or PHQ-9, it is important to look at both the overall score and the answer to the suicide question specifically (question 10 for the EPDS, queried as, "The thought of harming myself has occurred to me," and question 9 for the PHQ-9, queried as, "Thoughts that you would be better off dead, or of hurting yourself."). It is possible to have a low-risk overall score and still have an affirmative response (anything but "never" or "not at all") on the self-harm question—this requires further assessment.

It is important to recognize that not all positive answers are cause for alarm and do not merit emergency mental health services. However, all do require an understanding of intent, plan, and likelihood of acting. If a patient answers the suicidality or self-harm question affirmatively on either the EPDS (question 10) or the PHQ-9 (question 9), the administering obstetric care professional should then inquire about the frequency and intensity of the thoughts and the potential intent, plan, and likelihood. A distinction between thoughts or desire to harm oneself (eg, cut or hit) as opposed to act with intention to cause death should be made. Assessment of basic self-care, support, and treatment participation are other factors associated with increasing or decreasing a patient's self-harm risk. The Columbia Suicide Severity Rating Scale or the Patient Safety Screener (Fig. 3) can help non-mental health clinicians assess whether emergent psychiatric evaluation is needed (163, 164). Follow-up questions, such as preparations for death, a will or suicide note, access to, or purchase of lethal means such as a firearm or poison, pill hoarding, and securing childcare for children left behind, can help determine imminent risk (Fig. 4).

Protective factors and deterrents to a suicide attempt include spiritual beliefs, existing children, a spouse, and living parents. Conversely, IPV is a major risk factor for suicidal ideation; therefore, additional attention should be paid to this risk factor when assessing suicide risk. Based on a review of data from the National Violent Death Reporting System, IPV was present in more than half (54.3%) of mothers who died by suicide (165, 166). In women with low-income in a university clinic, IPV increased the risk of antenatal suicidal ideation by 9.37-fold (167). Anhedonia and lack of self-care are other high-risk factors for suicide attempt and can sometimes present as lack of interest in bonding with the infant.

Outpatient care and monitoring is appropriate for those with suicidal ideation that is infrequent, without intent to act, and when the individual is able to name reasons for



PATIENT SAFETY SCREENER

This screener should be administered by the obstetric care clinician. For additional information on assessment and intervention, see Figure 4. Assessing Risk of Suicide.

*A patient presenting with a current suicide attempt is an automatic Yes on Items 2, 3, 4, 5, and 6.

A. DETECTION (PRIMARY SCREENING)			
Ask the following questions exactly as worded. If collateral information indicates ideation or attempt, document a "yes".			
1. In the past two weeks, have you felt down, depressed, or hopeless? (Not necessary to ask if PHQ9 was already administered – score it based on PHQ9 Item 2 response. 0=No, >0=Yes)			
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Patient unable to complete	<input type="checkbox"/> Patient refused
2. In the past two weeks, have you had thoughts of killing yourself? *			
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Patient unable to complete	<input type="checkbox"/> Patient refused
3. In your lifetime, have you ever attempted to kill yourself? *			
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Patient unable to complete	<input type="checkbox"/> Patient refused
3a. If yes, when did this happen?			
<input checked="" type="checkbox"/> Within past 24 hours (including today) <input type="checkbox"/> Within last month (but not today) <input type="checkbox"/> Between 1 and 6 months ago			
<input type="checkbox"/> More than 6 months ago <input type="checkbox"/> Patient unable to complete <input type="checkbox"/> Patient refused			
B. DETECTION RESULT			
"Yes" to Item 2 (ideation) OR "Within past 24 hours", "Within last month" or "Between 1 and 6 months ago" to Item 3a = <input checked="" type="checkbox"/> Positive screen -> Proceed to C. Stratification			
C. STRATIFICATION (SECONDARY SCREENING)			
Assess the following six indicators using all data available to you, including patient self-report, collateral information, medical record review, and current observations.			
	Yes	No	Unable to complete
4. Did the patient screen positive on BOTH active ideation AND a past suicide a past suicide attempt	1	0	
5. Has the individual begun a suicide plan? "Have you been thinking about how you might kill yourself?"	1	0	
6. Has the individual recently had intent to act on his/her ideation? Do you think you might act on your thoughts?	1	0	
7. Has the patient ever had a psychiatric hospitalization? Have you ever been hospitalized for a mental health or substance abuse problem?	1	0	
8. Does the patient have a pattern of excessive substance use? Has drinking or drug abuse ever been a problem for you?	1	0	
9. Is the patient irritable, agitated, or aggressive? Note: This is an observation	1	0	
Sum score (1 for each "Yes")	Total:		
Risk level based on highest level category endorsed: <input type="checkbox"/> Mild <input type="checkbox"/> Moderate <input type="checkbox"/> High			
D. STRATIFICATION RESULT			
	Mild risk	Moderate risk	High risk
Score from Section C	<input type="checkbox"/> 0 – 2	<input type="checkbox"/> 3 – 4	<input type="checkbox"/> 5 – 6
Critical items		<input type="checkbox"/> Suicide plan or intent (not both)	<input type="checkbox"/> Suicide plan and intent
			<input type="checkbox"/> Current attempt

Fig. 3. Patient safety screener. Reprinted with permission from UMass Chan Medical School. Data from Boudreaux ED, Larkin C, Camargo CAJ, Miller IW. Validation of a secondary screener for suicide risk: results from the Emergency Department Safety Assessment and Follow-up Evaluation (ED-SAFE). Jt Comm J Qual Patient Saf 2020;46:342-52. doi: 10.1016/j.jcjq.2020.03.008 and University of Oklahoma Health Sciences Center, Suicide Prevention Resource Center. The Patient Safety Screener: a brief tool to detect suicide risk. Accessed March 16, 2023. <https://sprc.org/micro-learning/the-patient-safety-screener-a-brief-tool-to-detect-suicide-risk>.

not going forward with an attempt. Appropriate outpatient treatments include pharmacotherapy, psychotherapy, or both. Another option for outpatient treatment is partial hospitalization programs, in which patients participate in intensive treatment during the day in an outpatient setting.

Once a concern for suicidal ideation is identified, suicide-risk assessment needs to go beyond screening. To prevent

a suicide attempt, treatment and intervention are necessary. In addition, whether emergent inpatient or outpatient care is indicated, it is appropriate to communicate with the patient's partner, preferred family, or other support person(s). Support people can assist with the evaluation by providing relevant collateral information about the individual at risk, as well as with removal of any potential suicide methods from the



**Reports thoughts of self-harm and/or +self-harm question on the EPDS/PHQ-9 (any response other than “never”)
Follow EPDS/PHQ-9 +self-harm with Patient Safety Screener to further stratify risk**

Ask about thoughts of self-harm or wanting to die

Thoughts of death or of self-harm are common among women with perinatal mental health conditions. The following wording can help to get information about these thoughts.

Introduce assessment to patient

“Many people have intrusive or scary thoughts. When people are sad or down, they often have thoughts about death or wanting to die. These thoughts can feel awful. They can sometimes feel reassuring or like an escape from a hard life or something else that feels too hard to bear. We are here to help you. We ask about these thoughts because they are so common.”

To build up to assessing suicide risk, ask:

1. “Have you been feeling sad or down in the dumps?”
2. “Is it difficult to shake those sad feelings?”
3. “Do you sometimes wish you weren’t here, didn’t exist?”
4. “Have you thought about ways to make that happen?”

To assess risk of suicide, ask:

1. “In the past two weeks, how often have you thought of death or wanting to die?”
2. “Have you thought about ways in which you could harm yourself or attempt suicide?”
3. “Have you ever attempted to hurt yourself or attempted suicide in the past?”
4. “What prevents you from acting on thoughts of death or wanting to die?”

Assess Risk

	LOW RISK	MODERATE RISK	HIGH RISK
Assessment	<p>Fleeting thoughts of death or wanting to die</p> <p>No current intent*</p> <p>No current plan**</p> <p>No history of suicide attempt</p> <p>Future-oriented (discusses plans for the future)</p> <p>Protective factors (e.g., social support, religious prohibition, other children, stable housing)</p> <p>No substance use</p> <p>Few risk factors (e.g., mental health or medical illness, access to lethal means, trauma history, stressful event)</p>	<p>Regular thoughts of death or wanting to die</p> <p>Has thoughts of possible plans yet plans are not well-formulated or persistent</p> <p>History of suicide attempt</p> <p>Persistent sadness and tension, loss of interest, persistent guilt, difficulty concentrating, no appetite, decreased sleep</p> <p>Sometimes feels hopeless/helpless</p> <p>Somewhat future oriented</p> <p>Limited protective factors (e.g., social support, religious prohibition, other children)</p> <p>+/- Substance use</p> <p>Anxiety/agitation/impulsivity</p> <p>Poor self-care</p> <p>Some risk factors</p>	<p>Persistent thoughts of death/that life is not worth living</p> <p>Current intent*</p> <p>Current well-formulated plan**</p> <p>History of multiple suicide attempts, high lethality of prior attempt(s)</p> <p>History of multiple or recent psychiatric hospitalizations</p> <p>Continuous sadness, unrelenting dread, guilt, or remorse; not eating, < 2-3 hours of sleep/night, unable to do anything, unable to feel pleasure or other feelings</p> <p>Hopeless/helpless all or most of the time</p> <p>Not future oriented (no plans for/cannot see future)</p> <p>No protective factors (e.g., social supports, religious prohibition, other children, stable housing)</p> <p>Substance use</p> <p>Not receiving mental health treatment</p> <p>Anxiety/agitation</p> <p>Many risk factors</p>

Ideation: Inquire about frequency, intensity, duration—in last 48 hours, past month, and worst ever

***Intent:** Inquire about the extent to which the patient 1) expects to carry out the plan and, 2) believes the plan/act to be lethal vs. self-injurious. Explore ambivalence: reasons to die vs. reasons to live.

****Plan:** Inquire about timing, location, lethality, access to lethal means (e.g., gun), making preparations (e.g., hoarding medications, preparing a will, writing suicide note).

Behaviors: Inquire about past attempts, aborted attempts, rehearsals (e.g., tying noose, loading gun) vs. non-suicidal self-injurious actions.

Fig. 4. Assessing risk of suicide. EPDS, Edinburgh Postnatal Depression Scale; PHQ-9, Patient Health Questionnaire 9. Modified from Byatt N, Mittal LP, Brenckle L, Logan DG, Masters GA, Bergman A, et al. Lifeline for Moms perinatal mental health toolkit. University of Massachusetts Medical School; 2019. Accessed March 20, 2023. <https://www.umassmed.edu/lifeline4moms/products-resources/toolkits-and-apps/2019/11/lifeline4moms-perinatal-mental-health-toolkit/>.

home. Family members and support persons should be given instructions on what to do if they have concerns about their loved ones' safety. Connecting these patients and their support persons to support and treatment resources and regularly re-evaluating and monitoring for treatment effect with screening instruments, assessment, and query is warranted.

ACOG recommends clinicians provide immediate medical attention for postpartum psychosis. (STRONG RECOMMENDATION, LOW-QUALITY EVIDENCE)

Postpartum psychosis refers to a severe episode of mania, depression, or a mixed episode accompanied by psychotic symptoms or psychosis that occurs without a mood episode. Typical onset is 3–10 days after birth, and

the DSM-5 specifies that this occurs “within the first 4 weeks post-birth” (36); however, similar to other perinatal mood and anxiety disorders, it can occur beyond 4 weeks postpartum. Other symptoms of postpartum psychosis include agitation and delusions, disorganized thoughts, bizarre behavior, and hallucinations. Patients usually have limited to no insight into their symptoms, which are a dramatic shift from their usual level of function (91). Symptoms often fluctuate over time, making prompt recognition of the utmost importance.

Because the majority of postpartum psychosis cases are new diagnoses and because the condition is rare, occurring in 1–2 per 1,000 births, universal screening is not recommended. On the other hand, a thorough past medical and obstetric history are indicated at the time of the new obstetric visit to ascertain whether risk factors



Ask about unwanted or intrusive thoughts

Unwanted or intrusive thoughts, including those of harming the baby, are common (up to 70%) among postpartum women. Most women will not act on these thoughts because they are usually due to anxiety, depression, and obsessive/compulsive disorder, which is very different than thoughts of harming the baby that are due to psychosis/delusions. The following wording can be used to get information about whether these thoughts are present and how current and concerning they are.

"People often have intrusive thoughts or thoughts that seem to pop in from nowhere. Women often have thoughts about something bad happening to their baby. These thoughts can feel awful and sometimes feel as if they could be an escape from something too hard to bear. We are here to help you. We ask about these thoughts because they are so common."

- Have you had any unwanted thoughts?
- Have you had any thoughts of harming your infant, either as an accident or on purpose?
- If the patient answers yes to the above question, follow up with:
 - How often do you have them?
 - How recently have you had them?
 - How much do they scare you?
 - How much do they worry you?

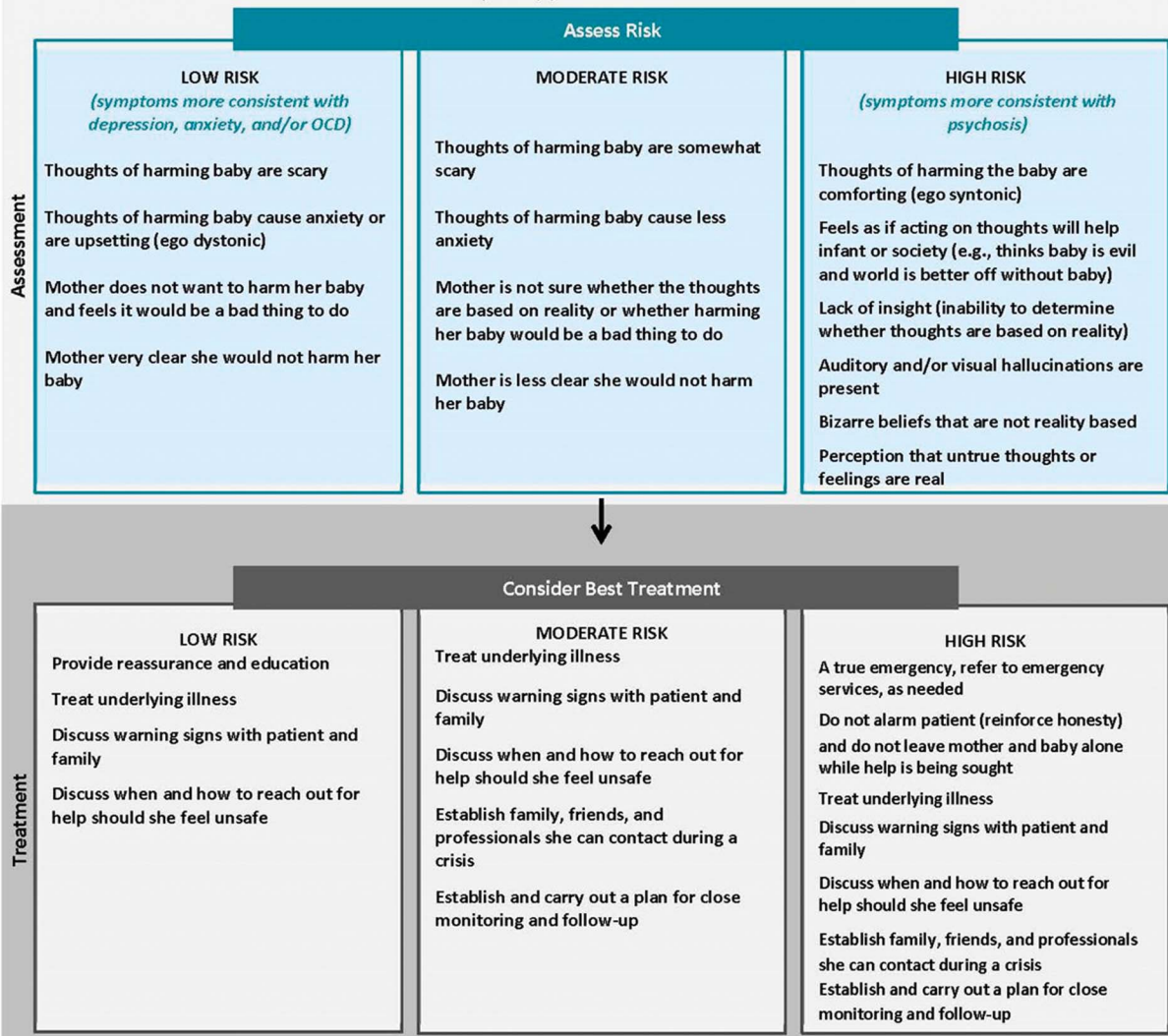


Fig. 5. Assessing risk of harm to baby and asking about unwanted or intrusive thoughts. Modified from Byatt N, Mittal LP, Brenckle L, Logan DG, Masters GA, Bergman A, et al. Lifeline for Moms perinatal mental health toolkit. University of Massachusetts Medical School; 2019. Accessed March 20, 2023. <https://www.umassmed.edu/lifeline4moms/products-resources/toolkits-and-apps/2019/11/lifeline4moms-perinatal-mental-health-toolkit/>.



Box 2. Emergent Psychiatric Evaluation

Emergent psychiatric evaluation is warranted for those:

- With suicidal ideation with an intent and plan.
- Who are unable to state reasons why they would not proceed with a suicide attempt.

In patients for whom emergent consultation is warranted, pharmacotherapy and emergent care should be obtained as soon as possible and maintained until further psychiatric assessment is completed.

exist, such as bipolar disorder or history of postpartum psychosis. Patients with a history of postpartum psychosis or mania have an overall relapse risk of 31% (95% CI 22–42) and those with a history of bipolar disorder and postpartum psychosis have rates as high as 41–87%, and thus warrant specialty psychiatric care during pregnancy and postpartum (57). This should include being seen by a psychiatrist if possible. A prebirth planning meeting including the patient, support person(s), mental health professionals, and the obstetric care team should be held to coordinate a postpartum psychosis–prevention plan, including pharmacology, observation and support, and discussion of adequate sleep strategies. Among the various treatment options, lithium immediately after delivery has the strongest evidence for postpartum psychosis prevention for those at greatest risk (94).

When a patient with possible or probable postpartum psychosis is encountered, the clinician seeing the patient should get an emergent psychiatric consultation or otherwise connect with emergency medical or emergency mental health services. Postpartum psychosis requires immediate emergent evaluation, admission, and treatment to assure safety of the patient and infant and to optimize treatment, including pharmacologic intervention. Intensive monitoring is needed given the risk of suicide and infanticide. The patient should not be left alone and should not be left unattended with the infant.

Other conditions that can mimic postpartum psychosis symptoms include delirium and intoxication with alcohol, benzodiazepines, cocaine, and cannabis, so an assessment for substance use should be included with the evaluation to rule out drug-induced psychosis (91). Once patient and infant safety are attended to initially, an extensive interview of the partner or family members present is also included as part of the psychiatric evaluation, diagnosis, and risk assessment of this condition. Psychiatric inpatient evaluation may also include a physical examination, head imaging, complete blood count, complete metabolic panel, thyroid-stimulating hormone level, and ammonia level as part of the examination; some also consider lumbar puncture and electroencephalogram (60).

Initiation of short-term benzodiazepines or an antipsychotic medication is the first-line treatment for postpartum psychosis and can be administered by an

obstetric care clinician while awaiting psychiatric consultation. Foregoing breastfeeding overnight as part of sleep preservation and support can also be helpful in the early phase of treatment and stabilization. If treated quickly and appropriately, full remission is usually achieved by 2 months postpartum (60, 94).

Intrusive thoughts can be confused with psychosis or delusional thoughts. Unwanted or intrusive thoughts, including those of harming the infant, are very common and are often related to fears of something happening (168). Intrusive thoughts can occur in the absence of a mental health condition; however, they are also associated with perinatal depression, anxiety, and OCD (169). Most women who find these thoughts distressing (ie, ego dystonic) will not act on them; as such, there is low risk of infant harm. Figure 5 shows wording that can be used to obtain information about whether these thoughts are present and how current and concerning they are.

In summary, intrusive thoughts not associated with psychosis are common. They can be indicative of severe distress and severe illness associated with depression, anxiety, and OCD. They most often do not indicate risk of actual harm to the infant, although they do merit further inquiry and evaluation. On the other hand, postpartum psychosis is an urgent or emergent condition that may be identified first by the obstetrics team, with a patient presenting (or being brought in by a support person) with limited to no insight into their symptoms, which are a dramatic shift from their usual level of function (91) (Box 2). Symptoms often fluctuate over time, making prompt recognition of the utmost importance. Collaboration with the inpatient psychiatry team or consultation with a liaison psychiatry team is imperative for the long-term care of patients with postpartum psychosis.

REFERENCES

1. Treatment and management of mental health conditions during pregnancy and postpartum. Clinical Practice Guideline No. 5. American College of Obstetricians and Gynecologists. *Obstet Gynecol* 2023;141:1262–88. doi: 10.1097/AOG.0000000000005202
2. Wisner KL, Sit DKY, McShea MC, Rizzo DM, Zoretich RA, Hughes CL, et al. Onset timing, thoughts of self-harm, and diagnoses in postpartum women with screen-positive depres-



sion findings. *JAMA Psychiatry* 2013;70:490–8. doi: 10.1001/jamapsychiatry.2013.87

3. Fawcett EJ, Fairbrother N, Cox ML, White IR, Fawcett JM. The prevalence of anxiety disorders during pregnancy and the postpartum period: a multivariate Bayesian meta-analysis. *J Clin Psychiatry* 2019;80:18r12527. doi: 10.4088/JCP.18r12527
4. Masters GA, Hugunin J, Xu L, Ulbricht CM, Moore Simas TA, Ko JY, Byatt N. Prevalence of bipolar disorder in perinatal women: a systematic review and meta-analysis. *J Clin Psychiatry* 2022;83:21r14045. doi: 10.4088/JCP.21r14045
5. McKee K, Admon LK, Winkelman TNA, Muzik M, Hall S, Dalton VK, Zivin K. Perinatal mood and anxiety disorders, serious mental illness, and delivery-related health outcomes, United States, 2006–2015. *BMC Womens Health* 2020;20:150–6. doi: 10.1186/s12905-020-00996-6
6. Jahan N, Went TR, Sultan W, Sapkota A, Khurshid H, Qureshi IA, Alfonso M. Untreated depression during pregnancy and its effect on pregnancy outcomes: a systematic review. *Cureus* 2021;13:e17251. doi: 10.7759/cureus.17251
7. Simonovich SD, Nidey NL, Gavin AR, Pi eros-Lea o M, Hsieh WJ, Sbrilli MD, et al. Meta-analysis of antenatal depression and adverse birth outcomes in US populations, 2010–20. *Health Aff* 2021;40:1560–5. doi: 10.1377/hlthaff.2021.00801
8. Jarde A, Morais M, Kingston D, Giallo R, MacQueen GM, Giglia L, et al. Neonatal outcomes in women with untreated antenatal depression compared with women without depression: a systematic review and meta-analysis. *JAMA Psychiatry* 2016;73:826–37. doi: 10.1001/jamapsychiatry.2016.0934
9. Luca DL, Margiotta C, Staatz C, Garlow E, Christensen A, Zivin K. Financial toll of untreated perinatal mood and anxiety disorders among 2017 births in the United States. *Am J Public Health* 2020;110:888–96. doi: 10.2105/AJPH.2020.305619
10. Trost SL, Beauregard JL, Smoots AN, Ko JY, Haight SC, Moore Simas TA, et al. Preventing pregnancy-related mental health deaths: insights from 14 US Maternal Mortality Review Committees, 2008–17. *Health Aff* 2021;40:1551–9. doi: 10.1377/hlthaff.2021.00615
11. Trost S, Beauregard J, Chandra G, Njie F, Berry J, Harvey A, et al. Pregnancy-related deaths: data from maternal mortality review committees in 36 US states, 2017–2019. Accessed December 7, 2022. <https://www.cdc.gov/reproductivehealth/maternal-mortality/erase-mm/data-mmrc.html>
12. Davis NL, Smoots AN, Goodman DA. Pregnancy-related deaths: data from 14 U.S. maternal mortality review committees, 2008–2017. Accessed December 7, 2022. <https://www.cdc.gov/reproductivehealth/maternal-mortality/erase-mm/mmr-data-brief.html>
13. Byatt N, Masters GA, Bergman AL, Moore Simas TA. Screening for mental health and substance use disorders in obstetric settings. *Curr Psychiatry Rep* 2020;22:62. doi: 10.1007/s11920-020-01182-z
14. Byatt N, Xu W, Levin LL, Moore Simas TA. Perinatal depression care pathway for obstetric settings. *Int Rev Psychiatry* 2019;31:210–28. doi: 10.1080/09540261.2018.1534725
15. Cox EQ, Sowa NA, Meltzer-Brody SE, Gaynes BN. The perinatal depression treatment cascade: baby steps toward improving outcomes. *J Clin Psychiatry* 2016;77:1189–200. doi: 10.4088/JCP.15r10174
16. Moore Simas TA, Flynn MP, Kroll-Desrosiers AR, Carvalho SM, Levin LL, Biebel K, Byatt N. A systematic review of integrated care interventions addressing perinatal depression care in

ambulatory obstetric care settings. *Clin Obstet Gynecol* 2018;61:573–90. doi: 10.1097/GRF.0000000000000360

17. Logsdon MC, Foltz MP, Scheetz J, Myers JA. Self-efficacy and postpartum depression teaching behaviors of hospital-based perinatal nurses. *J Perinat Educ* 2010;19:10–6. doi: 10.1624/105812410X530884
18. Farr SL, Denk CE, Dahms EW, Dietz PM. Evaluating universal education and screening for postpartum depression using population-based data. *J Women's Health* 2014;23:657–63. doi: 10.1089/jwh.2013.4586
19. Camp JM. Postpartum depression 101: teaching and supporting the family. *Int J Childbirth Educ* 2013;28:45–59.
20. Byatt N, Levin LL, Ziedonis D, Moore Simas TA, Allison J. Enhancing participation in depression care in outpatient perinatal care settings: a systematic review. *Obstet Gynecol* 2015; 126:1048–58. doi: 10.1097/AOG.0000000000001067
21. Bower KM, Geller RJ, Jeffers N, McDonald M, Alhusen J. Experiences of racism and perinatal depression: findings from the Pregnancy Risk Assessment Monitoring System. *J Adv Nurs* 2023 Jan 11 [epub ahead of print]. doi: 10.1111/jan.15519
22. Kozhimannil KB, Trinacty CM, Busch AB, Huskamp HA, Adams AS. Racial and ethnic disparities in postpartum depression care among low-income women. *Psychiatr Serv* 2011;62:619–25. doi: 10.1176/ps.62.6.pss6206_0619
23. Snowber K, Ciolino JD, Clark CT, Grobman WA, Miller ES. Associations between implementation of the collaborative care model and disparities in perinatal depression care. *Obstet Gynecol* 2022;140:204–11. doi: 10.1097/AOG.0000000000004859
24. Alcohol abuse and other substance use disorders: ethical issues in obstetric and gynecologic practice. Committee Opinion No. 633. American College of Obstetricians and Gynecologists. *Obstet Gynecol* 2015;125:1529–37. doi: 10.1097/01.AOG.0000466371.86393.9b
25. Opioid use and opioid use disorder in pregnancy. Committee Opinion No. 711. American College of Obstetricians and Gynecologists. *Obstet Gynecol* 2017;130:e81–94. doi: 10.1097/AOG.0000000000002355
26. Substance abuse reporting and pregnancy: the role of the obstetrician–gynecologist. Committee Opinion No. 473. American College of Obstetricians and Gynecologists. *Obstet Gynecol* 2011;117:200–1. doi: 10.1097/AOG.0b013e31820a6216
27. Marijuana use during pregnancy and lactation. Committee Opinion No. 722. American College of Obstetricians and Gynecologists. *Obstet Gynecol* 2017;130:e205–9. doi: 10.1097/AOG.0000000000002354
28. Methamphetamine abuse in women of reproductive age. Committee opinion No. 479. American College of Obstetricians and Gynecologists. *Obstet Gynecol* 2011;117:751–5. doi: 10.1097/AOG.0b013e318214784e
29. At-risk drinking and alcohol dependence: obstetric and gynecologic implications. Committee Opinion No. 496. American College of Obstetricians and Gynecologists. *Obstet Gynecol* 2011;118:383–8. doi: 10.1097/AOG.0b013e31822c9906
30. Tobacco and nicotine cessation during pregnancy. ACOG Committee Opinion No. 807. American College of Obstetricians and Gynecologists. *Obstet Gynecol* 2020;135:e221–9. doi: 10.1097/AOG.0000000000003822
31. American College of Obstetricians and Gynecologists' Evidence-Based Medicine Expert Work Group. Clinical practice guideline methodology: methodology. *Obstet Gynecol* 2021;138:518–22. doi: 10.1097/AOG.0000000000004519



32. United Nations Development Programme. Human Development Index (HDI). Human development reports. Accessed March 15, 2023. <https://hdr.undp.org/data-center/human-development-index#/indicies/HDI>
33. Guyatt GH, Oxman AD, Vist GE, Kunz R, Falck-Ytter Y, Alonso-Coello P, et al. GRADE: an emerging consensus on rating quality of evidence and strength of recommendations. *BMJ*. 2008;336:924–6. doi: 10.1136/bmj.39489.470347
34. Guyatt G, Oxman AD, Akl EA, Kunz R, Vist G, Brozek J, et al. GRADE guidelines: 1. Introduction-GRADE evidence profiles and summary of findings tables. *J Clin Epidemiol* 2011;64:383–94. doi: 10.1016/j.jclinepi.2010.04
35. Guyatt GH, Schünemann HJ, Djulbegovic B, Akl EA. Guideline panels should not GRADE good practice statements. *J Clin Epidemiol* 2015;68:597–600. doi: 10.1016/j.jclinepi.2014.12.011
36. American Psychiatric Association. Diagnostic and statistical manual of mental disorders, text revision (DSM-5-TR™). 5th ed. American Psychiatric Association Publishing; 2022
37. Patel R, Reiss P, Shetty H, Broadbent M, Stewart R, McGuire P, Taylor M. Do antidepressants increase the risk of mania and bipolar disorder in people with depression? A retrospective electronic case register cohort study. *BMJ Open* 2015;5:e008341. doi: 10.1136/bmjopen-2015-008341
38. Pacchiarotti I, Valenti M, Colom F, Rosa AR, Nivoli AM, Murru A, et al. Differential outcome of bipolar patients receiving antidepressant monotherapy versus combination with an antimanic drug. *J Affective Disord* 2011;129:321–6. doi: 10.1016/j.jad.2010.07.036
39. Ghaemi SN, Boiman EE, Goodwin FK. Diagnosing bipolar disorder and the effect of antidepressants: a naturalistic study. *J Clin Psychiatry* 2000;61:804–8. doi: 10.4088/jcp.v61n1013
40. Ghaemi SN, Rosenquist KJ, Ko JY, Baldassano CF, Kontos NJ, Baldessarini RJ. Antidepressant treatment in bipolar versus unipolar depression. *Am J Psychiatry* 2004;161:163–5. doi: 10.1176/appi.ajp.161.1.163
41. Chaudron LH, Pies RW. The relationship between postpartum psychosis and bipolar disorder: a review. *J Clin Psychiatry* 2003;64:1284–92. doi: 10.4088/jcp.v64n1102
42. Admon LK, Dalton VK, Kolenic GE, Ettner SL, Tilea A, Haffajee RL, et al. Trends in suicidality 1 year before and after birth among commercially insured childbearing individuals in the United States, 2006–2017. *JAMA Psychiatry* 2021;78:171–6. doi: 10.1001/jamapsychiatry.2020.3550
43. Dinwiddie KJ, Schillerstrom TL, Schillerstrom JE. Postpartum depression in adolescent mothers. *J Psychosomatic Obstet Gynecol* 2018;39:168–75. doi: 10.1080/0167482X.2017.1334051
44. Kroll-Desrosiers AR, Crawford SL, Moore Simas TA, Clark MA, Bastian LA, Mattocks KM. Rates and correlates of depression symptoms in a sample of pregnant veterans receiving Veterans Health Administration care. *Womens Health Issues* 2019;29:333–40. doi: 10.1016/j.whi.2019.04.008
45. Heck JL. Postpartum depression in American Indian/Alaska Native women: a scoping review. *MCN: Am J Maternal/Child Nurs* 2021;46:6–13. doi: 10.1097/NMC.0000000000000671
46. Melville JL, Gavin A, Guo Y, Fan MY, Katon WJ. Depressive disorders during pregnancy: prevalence and risk factors in a large urban sample. *Obstet Gynecol* 2010;116:1064–70. doi: 10.1097/AOG.0b013e3181f60b0a
47. Gavin AR, Melville JL, Rue T, Guo Y, Dina KT, Katon WJ. Racial differences in the prevalence of antenatal depression. *Gen Hosp Psychiatry* 2011;33:87–93. doi: 10.1016/j.genhosppsy.2010.11.012
48. Robertson E, Grace S, Wallington T, Stewart DE. Antenatal risk factors for postpartum depression: a synthesis of recent literature. *Gen Hosp Psychiatry* 2004;26:289–95. doi: 10.1016/j.genhosppsy.2004.02.006
49. Venkatesh KK, Nadel H, Blewett D, Freeman MP, Kaimal AJ, Riley LE. Implementation of universal screening for depression during pregnancy: feasibility and impact on obstetric care. *Am J Obstet Gynecol* 2016;215:517.e1–8. doi: 10.1016/j.ajog.2016.05.024
50. Wenz-Gross M, Weinreb L, Upshur C. Screening for post-traumatic stress disorder in prenatal care: prevalence and characteristics in a low-income population. *Matern Child Health J* 2016;20:1995–2002. doi: 10.1007/s10995-016-2073-2
51. Fairbrother N, Collardeau F, Albert AYK, Challacombe FL, Thordarson DS, Woody SR, Janssen PA. High prevalence and incidence of obsessive-compulsive disorder among women across pregnancy and the postpartum. *J Clin Psychiatry* 2021;82:20m13398. doi: 10.4088/JCP.20m13398
52. Merikangas KR, Jin R, He JP, Kessler RC, Lee S, Sampson NA, et al. Prevalence and correlates of bipolar spectrum disorder in the world mental health survey initiative. *Arch Gen Psychiatry* 2011;68:241–51. doi: 10.1001/archgenpsychiatry.2011.12
53. Rusner M, Berg M, Begley C. Bipolar disorder in pregnancy and childbirth: a systematic review of outcomes. *BMC Pregnancy Childbirth* 2016;16:331–1. doi: 10.1186/s12884-016-1127-1
54. Kendell RE, Chalmers JC, Platz C. Epidemiology of puerperal psychoses [published erratum appears in *Br J Psychiatry* 1987;151:135]. *Br J Psychiatry* 1987;150:662–73. doi: 10.1192/bjp.150.5.662
55. Munk-Olsen T, Laursen TM, Pedersen CB, Mors O, Mortensen PB. New parents and mental disorders: a population-based register study. *JAMA* 2006;296:2582–9. doi: 10.1001/jama.296.21.2582
56. Hultman CM, Sparen P, Takei N, Murray RM, Cnattingius S, Geddes J. Prenatal and perinatal risk factors for schizophrenia, affective psychosis, and reactive psychosis of early onset: case-control study prenatal and perinatal risk factors for early onset schizophrenia, affective psychosis, and reactive psychosis. *BMJ* 1999;318:421–26. doi: 10.1136/bmj.318.7181.421
57. Wesseloo R, Kamperman AM, Munk-Olsen T, Pop VJ, Kushner SA, Bergink V. Risk of postpartum relapse in bipolar disorder and postpartum psychosis: a systematic review and meta-analysis. *Am J Psychiatry* 2016;173:117–27. doi: 10.1176/appi.ajp.2015.15010124
58. Munk-Olsen T, Laursen TM, Mendelson T, Pedersen CB, Mors O, Mortensen PB. Risks and predictors of readmission for a mental disorder during the postpartum period. *Arch Gen Psychiatry* 2009;66:189–95. doi: 10.1001/archgenpsychiatry.2008.528
59. Brockington I. Postpartum psychiatric disorders. *The Lancet* 2004;363:303–10. doi: 10.1016/S0140-6736(03)15390-1
60. Bergink V, Rasgon N, Wisner KL. Postpartum psychosis: madness, mania, and melancholia in motherhood. *Am J Psychiatry* 2016;173:1179–88. doi: 10.1176/appi.ajp.2016.16040454
61. Brockington I. Suicide and filicide in postpartum psychosis. *Arch Womens Ment Health* 2017;20:63–9. doi: 10.1007/s00737-016-0675-8
62. Di Florio A, Gordon-Smith K, Forty L, Kosorok MR, Fraser C, Perry A, et al. Stratification of the risk of bipolar disorder recurrences in pregnancy and postpartum. *Br J Psychiatry* 2018;213:542–7. doi: 10.1192/bjp.2018.92
63. Jones I, Craddock N. Familiality of the puerperal trigger in bipolar disorder: results of a family study. *Am J Psychiatry* 2001;158:913–7. doi: 10.1176/appi.ajp.158.6.913
64. Gilden J, Kamperman AM, Munk-Olsen T, Hoogendijk WJG, Kushner SA, Bergink V. Long-term outcomes of postpartum



psychosis: a systematic review and meta-analysis. *J Clin Psychiatry* 2020;81:19r12906. doi: 10.4088/JCP.19r12906

65. Tabb KM, Gavin AR, Faisal-Cury A, Nidey N, Chan YF, Malinga T, et al. Prevalence of antenatal depression and suicidal ideation among racially and ethnically diverse WIC enrolled women receiving care in a Midwestern public health clinic. *J Affective Disord* 2019;256:278–81. doi: 10.1016/j.jad.2019.06.012
66. Gelabert E, Gutierrez-Zotes A, Navines R, Labad J, Puyan M, Donadon MF, et al. The role of personality dimensions, depressive symptoms and other psychosocial variables in predicting postpartum suicidal ideation: a cohort study. *Arch Womens Ment Health* 2020;23:585–93. doi: 10.1007/s00737-019-01007-w
67. Ayre K, Gordon HG, Dutta R, Hodsoll J, Howard LM. The prevalence and correlates of self-harm in the perinatal period: a systematic review. *J Clin Psychiatry* 2019;81:19r12773. doi: 10.4088/JCP.19r12773
68. Tabb KM, Dalton VK, Tilea A, Kolenic GE, Admon LK, Hall SV, et al. Trends in antenatal depression and suicidal ideation diagnoses among commercially insured childbearing individuals in the United States, 2008–2018. *J Affective Disord* 2023;320:263–7. doi: 10.1016/j.jad.2022.09.120
69. Castello JC, Jacobsen KH, Gaffney KF, Kodadek MP, Sharps PW, Bullock LC. Predictors of depression symptoms among low-income women exposed to perinatal intimate partner violence (IPV). *Community Ment Health J* 2016;52:683–90. doi: 10.1007/s10597-015-9977-y
70. Jeong HG, Lim JS, Lee MS, Kim SH, Jung IK, Joe SH. The association of psychosocial factors and obstetric history with depression in pregnant women: focus on the role of emotional support. *Gen Hosp Psychiatry* 2013;35:354–8. doi: 10.1016/j.genhosppsy.2013.02.009
71. Long MM, Cramer RJ, Bennington L, Morgan FG, Wilkes CA, Fontanares AJ, et al. Perinatal depression screening rates, correlates, and treatment recommendations in an obstetric population. *Families, Syst Health* 2020;38:369–79. doi: 10.1037/fsh0000531
72. Gisseman J, Fletcher T, Schmolze A, Cooper D, Aden J, Cox-Bauer C. Depression screening during pregnancy: compliance and effectiveness in a military population. *Mil Med* 2021;186:e951–5. doi: 10.1093/milmed/usaa509
73. Meine K. Pregnancy unshackled: increasing equity through implementation of perinatal depression screening, shared decision making, and treatment for incarcerated women. *Nurs Forum* 2018;53:437–47. doi: 10.1111/nuf.12271
74. Lewis BA, Gjerdingen D, Schuver K, Avery M, Marcus BH. The effect of sleep pattern changes on postpartum depressive symptoms. *BMC Womens Health* 2018;18:12–6. doi: 10.1186/s12905-017-0496-6
75. Kalmbach DA, Cheng P, Ong JC, Ciesla JA, Kingsberg SA, Sangha R, et al. Depression and suicidal ideation in pregnancy: exploring relationships with insomnia, short sleep, and nocturnal rumination. *Sleep Med* 2020;65:62–73. doi: 10.1016/j.sleep.2019.07.010
76. Intimate partner violence. Committee Opinion No. 518. American College of Obstetricians and Gynecologists. *Obstet Gynecol* 2012;119:412–7. doi: 10.1097/AOG.0b013e318249ff74
77. Farren J, Jalbrant M, Falconieri N, Mitchell-Jones N, Bobdiwala S, Al-Memar M, et al. Posttraumatic stress, anxiety and depression following miscarriage and ectopic pregnancy: a multicenter, prospective, cohort study. *Am J Obstet Gynecol* 2020;222:367.e1–22. doi: 10.1016/j.ajog.2019.10.102
78. Bayrampour H, Vinturache A, Hetherington E, Lorenzetti DL, Tough S. Risk factors for antenatal anxiety: a systematic review of the literature. *J Reprod Infant Psychol* 2018;36:476–503. doi: 10.1080/02646838.2018.1492097
79. Biaggi A, Conroy S, Pawlby S, Pariante CM. Identifying the women at risk of antenatal anxiety and depression: a systematic review. *J Affective Disord* 2016;191:62–77. doi: 10.1016/j.jad.2015.11.014
80. Furtado M, Chow CH, Owais S, Frey BN, Van Lieshout RJ. Risk factors of new onset anxiety and anxiety exacerbation in the perinatal period: a systematic review and meta-analysis. *J Affective Disord* 2018;238:626–35. doi: 10.1016/j.jad.2018.05.073
81. Sharp M, Huber N, Ward LG, Dolbier C. NICU-specific stress following traumatic childbirth and its relationship with post-traumatic stress. *J Perinatal Neonatal Nurs* 2021;35:57–67. doi: 10.1097/JPN.0000000000000543
82. Yuen M, Hall OJ, Masters GA, Nephew BC, Carr C, Leung K, et al. The effects of breastfeeding on maternal mental health: a systematic review. *J Women's Health* 2022;31:787–807. doi: 10.1089/jwh.2021.0504
83. Martini J, Bauer M, Lewitzka U, Voss C, Pfennig A, Ritter D, Wittchen HU. Predictors and outcomes of suicidal ideation during peripartum period. *J Affective Disord* 2019;257:518–26. doi: 10.1016/j.jad.2019.07.040
84. Palladino E, Varin M, Lary T, Baker MM. Thoughts of self-harm and associated risk factors among postpartum women in Canada. *J Affective Disord* 2020;270:69–74. doi: 10.1016/j.jad.2020.03.054
85. Wallace ME, Hoyert D, Williams C, Mendola P. Pregnancy-associated homicide and suicide in 37 US states with enhanced pregnancy surveillance. *Am J Obstet Gynecol* 2016;215:364.e1–10. doi: 10.1016/j.ajog.2016.03.040
86. Szpunar MJ, Crawford JN, Baca SA, Lang AJ. Suicidal ideation in pregnant and postpartum women veterans: an initial clinical needs assessment. *Mil Med* 2020;185:e105–11. doi: 10.1093/milmed/usz171
87. Weiss SJ, Simeonova DI, Koleva H, Muzik M, Clark KD, Ozerdem A, et al. Potential paths to suicidal ideation and suicide attempts among high-risk women. *J Psychiatr Res* 2022;155:493–500. doi: 10.1016/j.jpsychires.2022.09.033
88. Borschmann R, Molyneaux E, Spry E, Moran P, Howard LM, Macdonald JA, et al. Pre-conception self-harm, maternal mental health and mother-infant bonding problems: a 20-year prospective cohort study. *Psychol Med* 2019;49:2727–35. doi: 10.1017/S0033291718003689
89. Johannsen BMW, Larsen JT, Laursen TM, Bergink V, Meltzer-Brody S, Munk-Olsen T. All-cause mortality in women with severe postpartum psychiatric disorders. *Am J Psychiatry* 2016;173:635–42. doi: 10.1176/appi.ajp.2015.14121510
90. Khalifeh H, Hunt IM, Appleby L, Howard LM. Suicide in perinatal and non-perinatal women in contact with psychiatric services: 15 year findings from a UK national inquiry. *The Lancet Psychiatry* 2016;3:233–42. doi: 10.1016/S2215-0366(16)00003-1
91. Rodriguez-Cabezas L, Clark C. Psychiatric emergencies in pregnancy and postpartum. *Clin Obstet Gynecol* 2018;61:615–27. doi: 10.1097/GRF.0000000000000377
92. Howard LM, Khalifeh H. Perinatal mental health: a review of progress and challenges. *World Psychiatry* 2020;19:313–27. doi: 10.1002/wps.20769
93. Grigoriadis S, Wilton AS, Kurdyak PA, Rhodes AE, VonderPorten EH, Levitt A, et al. Perinatal suicide in Ontario, Canada: a 15-year population-based study. *CMAJ* 2017;189:E1085–92. doi: 10.1503/cmaj.170088



94. Luykx JJ, Di Florio A, Bergink V. Prevention of infanticide and suicide in the postpartum period-the importance of emergency care. *JAMA Psychiatry* 2019;76:1221-2. doi: 10.1001/jamapsychiatry.2019.1929
95. Davies C, Segre G, Estrad A, Radua J, De Micheli A, Provenzano U, et al. Prenatal and perinatal risk and protective factors for psychosis: a systematic review and meta-analysis. *The Lancet Psychiatry* 2020;7:399-410. doi: 10.1016/S2215-0366(20)30057-2
96. O'Connor E, Senger CA, Henninger ML, Coppola E, Gaynes BN. Interventions to prevent perinatal depression: evidence report and systematic review for the US Preventive Services Task Force. *JAMA* 2019;321:588-601. doi: 10.1001/jama.2018.20865
97. Franta G, Hersh AR, Cirino NH, Caughey AB. Prevention of perinatal depression with counseling in adolescents: a cost-effectiveness analysis. *J Maternal-Fetal Neonatal Med* 2022;35:9593-9. doi: 10.1080/14767058.2022.2049746
98. Wisner KL, Perel JM, Peindl KS, Hanusa BH, Piontek CM, Findling RL. Prevention of postpartum depression: a pilot randomized clinical trial. *Am J Psychiatry* 2004;161:1290-2. doi: 10.1176/appi.ajp.161.7.1290
99. Daley AJ, Foster L, Long G, Palmer C, Robinson O, Walmsley H, Ward R. The effectiveness of exercise for the prevention and treatment of antenatal depression: systematic review with meta-analysis. *BJOG: An Int J Obstet Gynaecol* 2015;122:57-62. doi: 10.1111/1471-0528.12909
100. Bergink V, Bouvy PF, Vervoort JS, Koorengevel KM, Steegers EA, Kushner SA. Prevention of postpartum psychosis and mania in women at high risk. *Am J Psychiatry* 2012;169:609-15. doi: 10.1176/appi.ajp.2012.11071047
101. Dunkel Schetter C, Tanner L. Anxiety, depression and stress in pregnancy: implications for mothers, children, research, and practice. *Curr Opin Psychiatry* 2012;25:141-8. doi: 10.1097/YCO.0b013e3283503680
102. Hansotte E, Payne SI, Babich SM. Positive postpartum depression screening practices and subsequent mental health treatment for low-income women in Western countries: a systematic literature review. *Public Health Rev* 2017;38:3. doi: 10.1186/s40985-017-0050-y
103. Sidebottom A, Vacquier M, LaRusso E, Erickson D, Hardeman R. Perinatal depression screening practices in a large health system: identifying current state and assessing opportunities to provide more equitable care. *Arch Womens Ment Health* 2021;24:133-44. doi: 10.1007/s00737-020-01035-x
104. Greenfield M, Darwin Z. Trans and non-binary pregnancy, traumatic birth, and perinatal mental health: a scoping review. *Int J Transgender Health* 2021;22:203-16. doi: 10.1080/26895269.2020.1841057
105. UMass Chan Medical School. Lifeline for Moms: our national network of Perinatal Psychiatry Access Programs. Accessed January 6, 2023. <https://www.umassmed.edu/lifeline4moms/Access-Programs/network-members-us>
106. Postpartum Support International. Get help. Accessed March 14, 2023. <https://www.postpartum.net/get-help>
107. U.S. Department of Veterans Affairs. Women veterans health care: mental health. Accessed March 14, 2023. <https://www.womenshealth.va.gov/WOMENSHEALTH/topics/mental-health.asp>
108. Health Resources & Services Administration. Frequently asked questions about the national maternal mental health hotline. Accessed March 7, 2023. <https://mchb.hrsa.gov/national-maternal-mental-health-hotline/faq>
109. Byatt N, Straus J, Stopa A, Biebel K, Mittal L, Moore Simas TA. Massachusetts Child Psychiatry Access Program for Moms: utilization and quality assessment. *Obstet Gynecol* 2018;132:345-53. doi: 10.1097/AOG.0000000000002688
110. Byatt N, Biebel K, Moore Simas TA, Sarvet B, Ravech M, Allison J, Straus J. Improving perinatal depression care: the Massachusetts child psychiatry access Project for moms. *Gen Hosp Psychiatry* 2016;40:12-7. doi: 10.1016/j.genhosppsych.2016.03.002
111. Moore Simas TA, Brenckle L, Sankaran P, Masters GA, Person S, Weinreb L, et al. The PProgram in Support of Moms (PRISM): study protocol for a cluster randomized controlled trial of two active interventions addressing perinatal depression in obstetric settings. *BMC Pregnancy Childbirth* 2019;19:256. doi: 10.1186/s12884-019-2387-3
112. Siu AL, Bibbins-Domingo K, Grossman DC, Baumann LC, Davidson KW, Ebell M, et al. Screening for depression in adults: US preventive services Task Force recommendation statement. *US preventive services Task Force (USPSTF). JAMA* 2016;315:380-7. doi: 10.1001/jama.2015.18392
113. Joffres M, Jaramillo A, Dickinson J, Lewin G, Pottie K, Shaw E, et al. Recommendations on screening for depression in adults. *CMAJ* 2013;185:775-82. doi: 10.1503/cmaj.130403
114. National Institute for Health and Care Excellence. Antenatal and postnatal mental health: clinical management and service guidance. Clinical guidance [CG192]. Accessed December 7, 2022. <https://www.nice.org.uk/guidance/cg192>
115. Royal Australian and New Zealand College of Obstetricians and Gynaecologists. Mental health care in the perinatal period. Best practice statement. Accessed December 7, 2022. <https://rancog.edu.au/wp-content/uploads/2022/05/Mental-Health-Care-in-the-Perinatal-Period-C-Obs-48.pdf>
116. Earls MF, Yogman MW, Mattson G, Rafferty J, Baum R, Gambon T, et al. Incorporating recognition and management of perinatal depression into Pediatric practice. *Pediatrics* 2019;143:e20183259. doi: 10.1542/peds.2018-3259
117. American College of Nurse-Midwives. Position statement. Mental health during childbirth and across the lifespan. Accessed March 20, 2023. <https://www.midwife.org/acnm/files/acnmlibrarydata/uploadfilename/000000000324/PS-Mental%20Health%20During%20Childbirth%20and%20Across%20Life-span.pdf>
118. Registered Nurses' Association of Ontario. Assessment and interventions for perinatal depression. Best practice guideline. 2nd ed. Accessed December 7, 2022. <https://mao.ca/bpg/guidelines/assessment-and-interventions-perinatal-depression>
119. Miller ES, Wisner KL, Gollan J, Hamade S, Gossett DR, Grobman WA. Screening and treatment after implementation of a universal perinatal depression screening program. *Obstet Gynecol* 2019;134:303-9. doi: 10.1097/AOG.0000000000003369
120. Avalos LA, Raine-Bennett T, Chen H, Adams AS, Flanagan T. Improved perinatal depression screening, treatment, and outcomes with a universal obstetric program. *Obstet Gynecol* 2016;127:917-25. doi: 10.1097/AOG.0000000000001403
121. O'Connor E, Rossom RC, Henninger M, Groom HC, Burda BU. Primary care screening for and treatment of depression in pregnant and postpartum women: evidence report and systematic review for the US Preventive Services Task Force. *JAMA* 2016;315:388-406. doi: 10.1001/jama.2015.18948
122. Flanagan T, Avalos LA. Perinatal obstetric office depression screening and treatment: implementation in a health care



system. *Obstet Gynecol* 2016;127:911–5. doi: 10.1097/AOG.0000000000001395

123. Lyubenova A, Neupane D, Levis B, Wu Y, Sun Y, He C, et al. Depression prevalence based on the Edinburgh Postnatal Depression Scale compared to Structured Clinical Interview for DSM Disorders classification: systematic review and individual participant data meta-analysis. *Int J Methods Psychiatr Res* 2021;30:e1860. doi: 10.1002/mpr.1860
124. Wang L, Kroenke K, Stump TE, Monahan PO. Screening for perinatal depression with the Patient Health Questionnaire Depression Scale (PHQ-9): a systematic review and meta-analysis. *Gen Hosp Psychiatry* 2021;68:74–82. doi: 10.1016/j.genhosppsych.2020.12.007
125. Levis B, Negeri Z, Sun Y, Benedetti A, Thombs BD, DEPRESSION Screening Data EPDS Group. Accuracy of the Edinburgh Postnatal Depression Scale (EPDS) for screening to detect major depression among pregnant and postpartum women: systematic review and meta-analysis of individual participant data. *BMJ* 2020;371:m4022. doi: 10.1136/bmj.m4022
126. Venkatesh KK, Phipps MG, Triche EW, Zlotnick C. The relationship between parental stress and postpartum depression among adolescent mothers enrolled in a randomized controlled prevention trial. *Matern Child Health J* 2014;18:1532–9. doi: 10.1007/s10995-013-1394-7
127. La Porte LM, Kim JJ, Adams M, Du H, Silver RK. The pattern of depression screening results across successive pregnancies. *Am J Obstet Gynecol* 2012;206:261.e1–4. doi: 10.1016/j.ajog.2011.12.005
128. Miller LJ, McGlynn A, Suberlak K, Rubin LH, Miller M, Pirec V. Now what? Effects of on-site assessment on treatment entry after perinatal depression screening. *J Women's Health* 2012; 21:1046–52. doi: 10.1089/jwh.2012.3641
129. Spooner S, Rastle M, Elmore K. Maternal depression screening during prenatal and postpartum care at a Navy and Marine Corps military treatment facility. *Mil Med* 2012;177: 1208–11. doi: 10.7205/milmed-d-12-00159
130. Tzilos GK, Zlotnick C, Raker C, Kuo C, Phipps MG. Psychosocial factors associated with depression severity in pregnant adolescents. *Arch Womens Ment Health* 2012;15:397–401. doi: 10.1007/s00737-012-0296-9
131. Conde A, Figueiredo B, Tendais I, Teixeira C, Costa R, Pacheco A, et al. Mother's anxiety and depression and associated risk factors during early pregnancy: effects on fetal growth and activity at 20–22 weeks of gestation. *J Psychosomatic Obstet Gynecol* 2010;31:70–82. doi: 10.3109/01674821003681464
132. Chaudron LH, Szilagyi PG, Kitzman HJ, Wadkins HIM, Conwell Y. Detection of postpartum depressive symptoms by screening at well-child visits. *Pediatrics* 2004;113:551–8. doi: 10.1542/peds.113.3.551
133. Teissèdre F, Chabrol H. Detecting women at risk for postnatal depression using the Edinburgh Postnatal Depression Scale at 2 to 3 days postpartum. *Can J Psychiatry* 2004;49:51–4. doi: 10.1177/070674370404900108
134. Long MM, Cramer RJ, Jenkins J, Bennington L, Paulson JF. A systematic review of interventions for healthcare professionals to improve screening and referral for perinatal mood and anxiety disorders. *Arch Womens Ment Health* 2019;22:25–36. doi: 10.1007/s00737-018-0876-4
135. Kingston D, Austin MP, Veldhuyzen van Zanten S, Harvalik P, Giallo R, McDonald SD, et al. Pregnant women's views on the feasibility and acceptability of web-based mental health e-screening versus paper-based screening: a randomized controlled trial. *J Med Internet Res* 2017;19:e88. doi: 10.2196/jmir.6866
136. Kingston D, Biringer A, Veldhuyzen van Zanten S, Giallo R, McDonald S, MacQueen G, et al. Pregnant women's perceptions of the risks and benefits of disclosure during web-based mental health e-screening versus paper-based screening: randomized controlled trial. *JMIR Ment Health* 2017;4:e42. doi: 10.2196/mental.6888
137. Lawson A, Dalfen A, Murphy KE, Milligan N, Lancee W. Use of text messaging for postpartum depression screening and information provision. *Psychiatr Serv* 2019;70:389–95. doi: 10.1176/appi.ps.201800269
138. Mazzoni SE, Bott NL, Hoffman MC. Screening for perinatal anxiety. *Am J Obstet Gynecol* 2021;224:628–9. doi: 10.1016/j.ajog.2021.03.004
139. Sinesi A, Maxwell M, O'Carroll R, Cheyne H. Anxiety scales used in pregnancy: systematic review. *BJPsych Open* 2019;5: e5. doi: 10.1192/bjo.2018.75
140. Swalm D, Brooks J, Doherty D, Nathan E, Jacques A. Using the Edinburgh postnatal depression scale to screen for perinatal anxiety. *Arch Womens Ment Health* 2010;13:515–22. doi: 10.1007/s00737-010-0170-6
141. van der Zee-van den Berg AI, Reijneveld SA, Boere-Boonekamp MM, Groothuis-Oudshoorn CG, Reijneveld SA. Postpartum depression and anxiety: a community-based study on risk factors before, during and after pregnancy. *J Affective Disord* 2021;286:158–65. doi: 10.1016/j.jad.2021.02.062
142. Alliance for Innovation on Maternal Health. Perinatal mental health conditions. Accessed March 20, 2023. <https://safe-rbirth.org/psbs/perinatal-mental-health-conditions/>
143. Masters GA, Brenckle L, Sankaran P, Person SD, Allison J, Moore Simas TA, et al. Positive screening rates for bipolar disorder in pregnant and postpartum women and associated risk factors. *Gen Hosp Psychiatry* 2019;61:53–9. doi: 10.1016/j.genhosppsych.2019.09.002
144. Tebeka S, Strat YL, Dubertret C. Developmental trajectories of pregnant and postpartum depression in an epidemiologic survey. *J Affective Disord* 2016;203:62–8. doi: 10.1016/j.jad.2016.05.058
145. Merrill L, Mittal L, Nicoloso J, Caiozzo C, Maciejewski PK, Miller LJ. Screening for bipolar disorder during pregnancy. *Arch Womens Ment Health* 2015;18:579–83. doi: 10.1007/s00737-015-0527-y
146. Inglis AJ, Hippman CL, Carrion PB, Honer WG, Austin JC. Mania and depression in the perinatal period among women with a history of major depressive disorders. *Arch Womens Ment Health* 2014;17:137–43. doi: 10.1007/s00737-013-0408-1
147. Sharma V, Xie B, Campbell MK, Penava D, Hampson E, Mazmanian D, Pope CJ. A prospective study of diagnostic conversion of major depressive disorder to bipolar disorder in pregnancy and postpartum. *Bipolar Disord* 2014;16:16–21. doi: 10.1111/bdi.12140
148. Jones I, Chandra PS, Dazzan P, Howard LM. Bipolar disorder, affective psychosis, and schizophrenia in pregnancy and the post-partum period. *The Lancet* 2014;384:1789–99. doi: 10.1016/S0140-6736(14)61278-2
149. Porter T, Gavin H. Infanticide and neonaticide: a review of 40 years of research literature on incidence and causes. *Trauma Violence Abuse* 2010;11:99–112. doi: 10.1177/1524838010371950
150. Kessler RC, Akiskal HS, Angst J, Guyer M, Hirschfeld RM, Merikangas KR, Stang PE. Validity of the assessment of bipolar spectrum disorders in the WHO CIDI 3.0. *J Affective Disord* 2006;96:259–69. doi: 10.1016/j.jad.2006.08.018



151. Kessler RC, Calabrese JR, Farley PA, Gruber MJ, Jewell MA, Katon W, et al. Composite International Diagnostic Interview screening scales for DSM-IV anxiety and mood disorders. *Psychol Med* 2013;43:1625–37. doi: 10.1017/S0033291712002334
152. Hirschfeld RM, Williams JB, Spitzer RL, Calabrese JR, Flynn L, Keck PE, et al. Development and validation of a screening instrument for bipolar spectrum disorder: the Mood Disorder Questionnaire. *Am J Psychiatry* 2000;157:1873–5. doi: 10.1176/appi.ajp.157.11.1873
153. Hirschfeld RMA, Vornik LA. Recognition and diagnosis of bipolar disorder. *J Clin Psychiatry* 2004;65(suppl 14):5–9.
154. Frey BN, Simpson W, Wright L, Steiner M. Sensitivity and specificity of the Mood Disorder Questionnaire as a screening tool for bipolar disorder during pregnancy and the postpartum period. *J Clin Psychiatry* 2012;73:1456–61. doi: 10.4088/JCP.12m07856
155. Sharma V, Xie B. Screening for postpartum bipolar disorder: validation of the Mood Disorder Questionnaire. *J Affective Disord* 2011;131:408–11. doi: 10.1016/j.jad.2010.11.026
156. Zimmerman M, Galione JN, Ruggero CJ, Chelminski I, Dalrymple K, Young D. Are screening scales for bipolar disorder good enough to be used in clinical practice? *Compr Psychiatry* 2011;52:600–6. doi: 10.1016/j.comppsy.2011.01.004
157. Hirschfeld RM. Bipolar spectrum disorder: improving its recognition and diagnosis. *J Clin Psychiatry* 2001;62(suppl 14):5–9.
158. Zimmerman M, Galione JN. Screening for bipolar disorder with the mood disorders questionnaire: a review. *Harv Rev Psychiatry* 2011;19:219–28. doi: 10.3109/10673229.2011.614101
159. Clark CT, Sit DK, Driscoll K, Eng HF, Confer AL, Luther JF, et al. Does screening with the MDQ and EPDS improve identification of bipolar disorder in an obstetrical sample? *Depress Anxiety* 2015;32:518–26. doi: 10.1002/da.22373
160. Liu X, Agerbo E, Li J, Meltzer-Brody S, Bergink V, Munk-Olsen T. Depression and anxiety in the postpartum period and risk of bipolar disorder: a Danish nationwide register-based cohort study. *J Clin Psychiatry* 2017;78:e469–76. doi: 10.4088/JCP.16m10970
161. Gordon-Smith K, Perry A, Di Florio A, Forty L, Fraser C, Casanova Dias M, et al. Symptom profile of postpartum and non-postpartum manic episodes in bipolar I disorder: a within-subjects study. *Psychiatry Res* 2020;284:112748. doi: 10.1016/j.psychres.2020.112748
162. Salim M, Sharma V, Anderson KK. Recurrence of bipolar disorder during pregnancy: a systematic review. *Arch Womens Ment Health* 2018;21:475–9. doi: 10.1007/s00737-018-0831-4
163. Bjureberg J, Dahlin M, Carlborg A, Edberg H, Haglund A, Runeson B. Columbia-Suicide Severity Rating Scale Screen Version: initial screening for suicide risk in a psychiatric emergency department. *Psychol Med* 2021;52:3904–12. doi: 10.1017/S0033291721000751
164. Boudreaux ED, Larkin C, Camargo CAJ, Miller IW. Validation of a secondary screener for suicide risk: results from the emergency department safety assessment and follow-up evaluation (ED-SAFE). *Jt Comm J Qual Patient Saf* 2020;46:342–52. doi: 10.1016/j.jcjq.2020.03.008
165. Palladino CL, Singh V, Campbell J, Flynn H, Gold KJ. Homicide and suicide during the perinatal period: findings from the national violent death reporting system. *Obstet Gynecol* 2011;118:1056–63. doi: 10.1097/AOG.0b013e31823294da
166. Gold KJ, Singh V, Marcus SM, Palladino CL. Mental health, substance use and intimate partner problems among pregnant and postpartum suicide victims in the National Violent Death Reporting System. *Gen Hosp Psychiatry* 2012;34:139–45. doi: 10.1016/j.genhosppsych.2011.09.017
167. Alhusen JL, Frohman N, Purcell G. Intimate partner violence and suicidal ideation in pregnant women. *Arch Womens Ment Health* 2015;18:573–8. doi: 10.1007/s00737-015-0515-2
168. Fairbrother N, Collardeau F, Woody SR, Wolfe DA, Fawcett JM. Postpartum thoughts of infant-related harm and obsessive-compulsive disorder: relation to maternal physical aggression toward the infant. *J Clin Psychiatry* 2022;83:21m14006. doi: 10.4088/JCP.21m14006
169. Miller ES, Chu C, Gollan J, Gossett DR. Obsessive-compulsive symptoms during the postpartum period. A prospective cohort. *J Reprod Med* 2013;58:115–22

Appendices

Supplemental Digital Content

- A. Literature search strategy: <http://links.lww.com/AOG/D139>.
 B. PRISMA diagram: <http://links.lww.com/AOG/D140>.
 C. Evidence tables: <http://links.lww.com/AOG/D141>.

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