Prevention of Perinatal Mood and Anxiety Disorders and Maternal Suicide

Ariela Frieder, MD
PRISM for Moms
Frontier Psychiatry
Perinatal Period

Perinatal Mood and Anxiety Disorders affect more than one in five people.

Perinatal Mental Health Conditions are among the most common complications of pregnancy and the year postpartum.

Pregnancy used to be thought of as protective against mental illness.

New evidence suggests that the emergence of a new psychiatric illness or the relapse of a preexisting one during pregnancy and postpartum is highly prevalent (10-20%)
Prevalence

- Over the past decade, in a sample of almost 40 million deliveries in the US, perinatal mood and anxiety disorders increased from **18.4 per 1000 deliveries** to **40.4 per 1000 deliveries** and severe mental illness increased from **4.2 per 1000 deliveries** to **8.1 per 1000 deliveries**.
Perinatal Mood and Anxiety Disorders

Associated with negative pregnancy outcomes:

• Preterm Delivery
• Lower Birth Weight
• Smaller Head Circumference
• Low APGAR Scores
• Postpartum Depression
• Preeclampsia
• Severe forms of Hyperemesis Gravidarum.
• Planned C-section
• Miscarriage
• Increase admissions to the NICU
Perinatal Depression

• Depression: 12-15% of women in the perinatal period experience diagnosable levels of depressive symptoms.
• Depression: one of the most common complications of pregnancy in the developed world.
• Under diagnosed and under treated
• Increases the risk of tobacco, alcohol, and illicit drug use
• May contribute to inadequate prenatal care
• Increases the risk of self-injurious and suicidal behavior
Postpartum Depression

- Can cause considerable distress to mother, family, kids
- Tends to be long-lasting
- Short and long-term developmental, cognitive, and behavioral effects on the child
- Can lead to reduced interaction and irritability towards the child
- Usually associated with anxiety about baby’s health, guilt and fear and obsessions of harming the baby
- Both the chronicity and severity of PPD predict later cognitive performance in children.
Perinatal Anxiety

One in five women meet criteria for anxiety disorder.
Excessive worries about their babies and their ability to be a parent.
Trouble responding to novel situations.
Difficulties with infant soothing, interacting and communicating with their baby.
Impaired bonding with their babies.
Associated with functional impairment, suicide ideation and attempts.

Prenatal anxiety is strong predictor of PPD.
Bipolar Disorder (BD)

Associated with:
- Lower Fertility Rates
- Strong Genetic Loading
- Teratogenic Risk from Medications to Control the Condition

High Risk of:
- Recurrence if Treatment is Discontinued
- Relapse During the Postpartum Period (20%-80%)

Postpartum Psychosis
- Prevalence 10%-20%
- Associated with High Rates of Suicide and Infanticide
Bipolar Disorder (BD) during the pregnancy

More often smokers, overweight and misused alcohol and substances.

Increased risk of C-section, instrumental delivery, a nonspontaneous start to delivery and preterm delivery.

Untreated BD was associated with small for gestational age, microcephaly and hypoglycemia
Bipolar Disorder in the Perinatal Period

- Perinatal bipolar disorder is under-diagnosed, especially when the patient presents with depression
- The most common presentation of women with bipolar disorder during the perinatal period is a depressive episode
- Mood instability during pregnancy is the biggest predictor of postpartum episodes. Screen patients when they first present for care!!
Bipolar Disorder during Pregnancy & Postpartum

- In a group of women with bipolar disorder (n= 283 BPI and 338 BPII), 23% had illness during pregnancy and 52% had an episode of illness during the postpartum period.

- Childbirth is one of the most potent precipitants of hypomania or mania.

- The risk of psychiatric hospitalization in the postpartum is greater than any other point of life for individuals with BD.
Postpartum Psychosis (PPP)

- **Psychiatric emergency!!!** → Increased risk of suicide and infanticide (4% of cases)
- Increased risk of delayed social, emotional, cognitive development on the child
- Incidence – 1-2 cases per 1000 births
- 50% have no prior psychiatric history!
- Risk of postpartum psychosis increased to 1/7 in those with past episode
- Risk factors: Bipolar disorder, personal or family history of BD, previous episode of PPP.
Postpartum Psychosis

- Abrupt onset – within 2 weeks postpartum in most cases
- Symptoms – irritability, mood lability, insomnia, mania, depression, mixed episodes with ego-syntonic delusions, disorientation, confusion, obsessive thoughts regarding infant, altruistic suicidal/homicidal ideation
- Looks like delirium and medical causes need to be ruled out!
Prevention of Postpartum Psychosis

- Recognize individuals at risk
- Pre-birth planning meeting including family, support system.
- Psychopharmacology: lithium.
- Observation and support
- Adequate sleep strategies.
Treatment of Postpartum Psychosis

- Pharmacotherapy: Lithium, sedating antipsychotic, benzodiazepine.
- Psychiatric hospitalization.
- Electroconvulsive Therapy.
- Evaluate for medical causes.
Pregnant individuals with Mood and Anxiety Disorders frequently think about suicide.

Perinatal Mood and Anxiety disorders can be severe and disabling requiring hospitalization.

Maternal suicide and overdose or poisoning are the leading cause of maternal mortality in the first postpartum year, with one in seven deaths due to suicide.

Death by suicide are more common in the second half of the first year postpartum.

The Center for Disease Control and Prevention (CDC) and the Mortality Review Committees (MMRCs) have determined all maternal mortality secondary to mental health conditions to be preventable.
Screening

• Early identification and treatment predict better outcomes.

• Screening alone is insufficient

• Screening should occur with systems that include: detection, assessment, triage and referral, treatment access and initiation, symptom monitoring and measurement-guided treatment adjustments until symptoms remit.
Screening

- Without an intervention in place less than 25% of individuals with depression in outpatient perinatal care settings will have any treatment.

- Screening and treatment rates are lower for populations experiencing or marginalized by racism and social inequalities.
American College of Obstetrics and Gynecology (ACOG) recommendations 2023

- Everyone receiving well-woman pre-pregnancy, prenatal, and postpartum care be screened for depression and anxiety using standardized validated instruments.
- Screening occur at the initial prenatal visit, later in pregnancy and at the postpartum visits.
- Screening will be implemented with systems in place to ensure timely access to diagnosis, effective treatment and appropriate monitoring and follow up.
- Everyone receiving prenatal and postpartum care be screened for bipolar disorder using a standardized validated instrument.
ACOG recommendations 2023

• Screening for bipolar disorder before starting pharmacotherapy for anxiety and depression if not previously done.

• When someone answers a self harm or suicide question affirmatively, clinicians should assess the likelihood, acuity and severity of risk of suicide attempt and then arrange for risk-tailored management.

• Clinicians provide immediate medical attention to postpartum psychosis.
How often should you screen?

- At intake
- After glucose test
- Two weeks postpartum (high-risk patients)
- Six weeks postpartum

80% of women with perinatal depression will not bring it up to their health care provider


Edinburgh Postnatal Depression Scale (EPDS)


Click the images above to view a larger PDF, or visit https://www.mpqhf.org/QIO/wp-content/uploads/2021/05/edinburghscale.pdf.
Suicide Risk

Yes to question 10 in EPDS

1. In the past two weeks, how often have you thought of hurting yourself?
2. Have you ever attempted to hurt yourself in the past?
3. Have you thought about how you could harm yourself?

Suicide Risk Assessment

- Suicide Ideation (SI) worsens with an increasing score on the overall depression screening tool. Look both at the overall score and the answer to the suicide question.
- Assess intent, plan, and likelihood of acting, frequency and intensity of thoughts.
- Differentiate between thoughts or desire to harm self versus to act with intention to cause death.
- Assess basic self care, support, treatment participation.
- Major risk factors for suicide: Intimate partner violence, anhedonia, lack of self care.
- Ask about preparations to death (will, suicide note), access to lethal means, securing childcare for children.
- Identify protective factors: spiritual beliefs, existing children, spouse, parents.
Patient Health Questionnaire-9

- The PHQ-9 is a standardized clinical depression assessment that screens for clinical depression for adolescents (age 12 years and older) and adults.
- Screening should be completed for all patients at their initial visit, during each trimester and in the postpartum period.
- The PHQ 9 tool is used to screen or diagnose depression, measure the severity of symptoms, and measure a patient’s response to treatment.
- Score of 10 or higher: Recommendation is weekly screening, but no less than monthly screening.
Patient Health Questionnaire-9

**Patient Health Questionnaire-9 (PHQ-9)**

Over the last 2 weeks, how often have you been bothered by any of the following problems? (Use "0" to indicate your answer)

<table>
<thead>
<tr>
<th>Item</th>
<th>Not at all</th>
<th>Several days</th>
<th>More than half the days</th>
<th>Nearly every day</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Little interest or pleasure in doing things</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2. Feeling down, depressed, or hopeless</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3. Trouble falling or staying asleep, or sleeping too much</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4. Feeling tired or having little energy</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>5. Poor appetite or overeating</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>6. Feeling sad about yourself — or that you are a failure or have set yourself or your family down</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>7. Trouble concentrating on things, such as reading the newspaper or watching television</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>8. Moving or speaking so slowly that other people could have noticed? Or the opposite — being so fidgety or restless that you have been moving around a lot more than usual</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>9. Thoughts that you would be better off dead or of hurting yourself in some way</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Score: ___

If you checked off any problems, how difficult have these problems made it for you to do your work, take care of things at home, or get along with others?

<table>
<thead>
<tr>
<th>Not difficult at all</th>
<th>Somewhat difficult</th>
<th>Very difficult</th>
<th>Extremely difficult</th>
</tr>
</thead>
<tbody>
<tr>
<td>[]</td>
<td>[]</td>
<td>[]</td>
<td>[]</td>
</tr>
</tbody>
</table>

Developed by Drs. Robert L. Spitzer, Janet B.W. Williams, Kurt Knapp and colleagues, with an educational grant from Pfizer Inc. No permission required to reproduce, translate, display or distribute.
# PHQ-9 Scoring

<table>
<thead>
<tr>
<th>Total Score</th>
<th>Depression Severity</th>
<th>Proposed Treatment Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-4</td>
<td>Minimal Depression</td>
<td>No further action</td>
</tr>
<tr>
<td>5-9</td>
<td>Mild Depression</td>
<td>Watchful waiting, repeat PHQ-9 at follow up, education</td>
</tr>
<tr>
<td>10-14</td>
<td>Moderate Depression</td>
<td>Prepare treatment plan, consider counseling, psychoeducation, assertive follow-up and/or pharmacotherapy</td>
</tr>
<tr>
<td>15-19</td>
<td>Moderately Severe Depression</td>
<td>Active treatment including pharmacotherapy and/or counseling</td>
</tr>
<tr>
<td>20-27</td>
<td>Severe Depression</td>
<td>Pharmacotherapy, counseling and referral to mental health specialist</td>
</tr>
</tbody>
</table>
## Treatment Response

<table>
<thead>
<tr>
<th>PHQ-9 Score at 4-6 weeks</th>
<th>Treatment Response</th>
<th>Treatment Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drop of 5 points from baseline</td>
<td>Adequate</td>
<td>No treatment change needed; Follow-up in four weeks</td>
</tr>
<tr>
<td>Drop of 2-4 points from baseline</td>
<td>Possibly Inadequate</td>
<td>May warrant an increase in antidepressant dose or increase therapy intensity; Follow up in 2-4 weeks</td>
</tr>
<tr>
<td>Drop of 1 point from baseline</td>
<td>Inadequate</td>
<td>Increase dose; Augmentation; Informal or formal psychiatric consultation; Add psychotherapy if not done Follow up in 1–2 weeks</td>
</tr>
</tbody>
</table>

Clinical improvement is a score reduced by 10 points OR a 50%+ reduction in score within three months of starting treatment
Generalized Anxiety Disorder-7

- The Generalized Anxiety Disorder-7 (GAD-7) scale is an initial screening tool for generalized anxiety disorder. It is a self-reported questionnaire for screening and severity measuring of generalized anxiety disorder. Screening should be completed for all patients coming for prenatal and postpartum care.
# GAD-7 Scale

## General Anxiety Disorder (GAD-7)

<table>
<thead>
<tr>
<th>Name</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. Over the last 2 weeks, how often have you been bothered by the following problems?

   - Feeling nervous, anxious, or on edge
   - Not being able to stop or control worrying
   - Worrying too much about different things
   - Trouble relaxing
   - Being so restless that it's hard to sit still
   - Becoming easily annoyed or irritable
   - Feeling afraid as if something awful might happen

Add the score for each column

<table>
<thead>
<tr>
<th>Total Score (add your column scores)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not difficult at all</td>
</tr>
<tr>
<td>0</td>
</tr>
</tbody>
</table>

2. If you checked off any problem on this questionnaire so far, how difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?

   - 0
   - 1
   - 2
   - 3

---

GAD-7 developed by Dr. Robert L. Spitzer, Dr. K. K. Kroenke, et al.
# GAD-7 Scoring

<table>
<thead>
<tr>
<th>Total Score</th>
<th>Anxiety Severity</th>
<th>Proposed Treatment Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-4</td>
<td>Minimal</td>
<td>No further action</td>
</tr>
<tr>
<td>5-9</td>
<td>Mild</td>
<td>Watchful waiting, periodic re-screening, education, and/or evaluation</td>
</tr>
<tr>
<td>10-14</td>
<td>Moderate</td>
<td>Develop treatment plan, consider counseling, education, assertive follow-up and/or evaluation, pharmacotherapy</td>
</tr>
<tr>
<td>15-21</td>
<td>Severe</td>
<td>Immediate institution of treatment including pharmacotherapy or counseling</td>
</tr>
</tbody>
</table>

[1] Anxiety and Depression Association of America. Clinical Practice Review for GAD. Available at: https://adaa.org/resources-professionals/practice-guidelines/gad
GAD-7

- Score of 10 or higher: Recommendation is weekly screening, but no less than monthly screening
- Use clinical judgment in consideration of risk factors, comorbid conditions, and life events to determine if additional screening of high-risk patients is warranted
- Clinical improvement is a score reduced by 10 points OR a 50%+ reduction in score within three months of starting treatment
Mood Disorder Questionnaire

- Standardized, validated screening instrument for Bipolar Disorder
- Imperative to screen at least once in the perinatal period and before initiating antidepressant medication.
- 22.6% of individuals with a positive depression screen will be found to have bipolar disorder.
- Especially at risk for BD are those with higher scores on a validated depression screening tool.
Mood Disorder Questionnaire (MDQ)

The Mood Disorder Questionnaire (MDQ) was developed by a team of psychiatrists, researchers and consumer advocates to address the need for timely and accurate evaluation of bipolar disorder.

Clinical Utility
- The MDQ is a brief self-report instrument that takes about 5 minutes to complete.
- This instrument is designed for screening purposes only and is not to be used as a diagnostic tool.
- A positive screen should be followed by a comprehensive evaluation.

Scoring
In order to screen positive for possible bipolar disorder, all three parts of the following criteria must be met:
- "YES" to 7 or more of the 13 items in Question 1 AND "YES" to Question number 2 AND "Moderate Problem" or "Serious Problem" to Question 3

Psychometric Properties
The MDQ is best at screening for bipolar I (depression and mania) disorder and is not as sensitive to bipolar II (depression and hypomania) or bipolar not otherwise specified (NOS) disorder.

Prevalence Rates
- Outpatient Diagnostic scoring primarily a mood disorder population2
  - Sensitivity 0.73
  - Specificity 0.90
- General Population3
  - Sensitivity 0.28
  - Specificity 0.97
- 17 Bipolar Disorder Patients4
  - Overall Sensitivity 0.58
  - Overall Specificity 0.67
- General Hospital Patients Requiring Treatment for Depression4
  - Sensitivity 0.68
  - Specificity 0.63

PRISM FOR MOMS

Visit the PRISM Psychiatric Consultation Line website for more information: https://prismconsult.org/
Questions?

Thank you!
References