Perinatal Depression for Ob-Gyn Providers

Amanda Yeaton-Massey, MD, PMH-C
Lucy Hutner, MD

Disclosures

- Lucy Hutner, MD: Co-Founder and Chief Medical Advisor of Phoebe, Inc.
- Amanda Yeaton-Massey, MD - none

How to use this material

- Review slides individually or as a self study group.
- For questions, go to normal view and read the notes.

Learning Objectives:

At the completion of this session, participants will be able to:

1. Describe the prevalence, risk factors, and screening methods for perinatal depression
2. Explain the obstetric and psychiatric impact of perinatal depression
3. Identify possible etiologies of perinatal depression
4. Discuss the diagnostic criteria and differential diagnosis of perinatal depression
5. Discuss first-line treatment options for perinatal depression

Outline

- Introduction/Overview
- Epidemiology
- Diagnostic Criteria
- Clinical Features
- Differential Diagnosis and Assessment
- Pathophysiology
- Treatment
- Key Clinical Points
- References
- Resources

Introduction/Overview

Perinatal depression

- Onset during the antepartum or and postpartum period
- Most common complication of pregnancy; affects roughly 15% of all births in the United States
- Associated with adverse obstetric and childhood outcomes
- Impacts entire family

Introduction/Overview

- The postpartum period is a particularly vulnerable time for perinatal mood disorders but depression is prevalent throughout
- Discontinuation of pharmacologic treatment during pregnancy associated with elevated rate of relapse
- The majority of women with perinatal depression are undiagnosed
- Of those diagnosed with depression few are treated

Case Example Part 1

JL is a 33 year old woman, G1P1, with a history of one episode of major depression at age 27, no suicide attempts or inpatient admissions, who presents at her six week postpartum visit for routine followup.

She reports that immediately after the baby was born, she felt "teary" but otherwise well. However, in the last couple of weeks, she reports having very low mood, and thinking that she is a "bad mother," unable to concentrate on daily tasks, low energy, and getting very poor sleep even when the baby is sleeping.

Case Example Part 1 (continued)

She reports fleeting thoughts of being “better off dead” at times but denies active suicidal ideation, intent or plan.

She has also felt very worried about the health of the baby and finds herself staring at the baby monitor or going to the crib repeatedly just to make sure the baby is still breathing.

Case Example Part 1 (continued)

- What parts of the history are suggestive of a major depressive episode in this patient?
- What safety concerns come to mind in this patient situation?

Epidemiology: rates/incidence

- 1 in 7 women experience perinatal depression
  - 19% endorse ideation of self harm
  - 66% comorbid anxiety
  - Symptom onset 27% on intake to care, 33% during pregnancy, and 40% postpartum
- Women with a history of depression have a 20x relative risk of postpartum depression
- 68% relapse rate for women who discontinue antidepressant medication

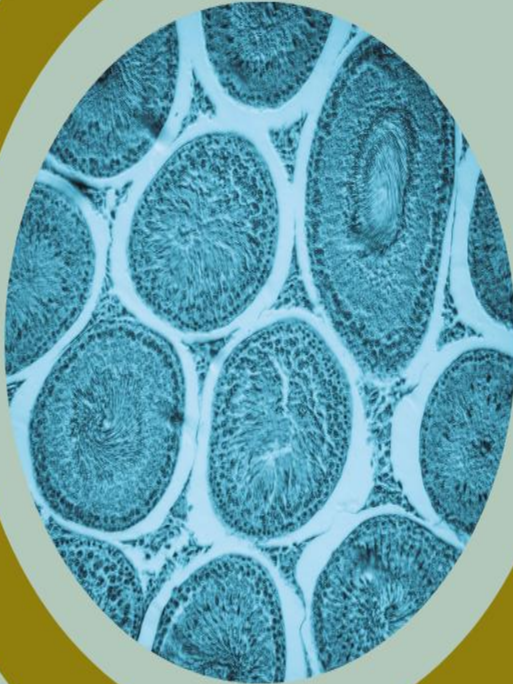
Epidemiology: risk factors

- Personal history of major depression
- Antenatal depression and/or anxiety
- Social risk factors: low SES, lack of social support, adolescent pregnancy, unwanted pregnancy, childhood trauma, intimate partner violence, military service, systemic racism
- Obstetric complications: including preeclampsia, preterm birth, pregnancy loss, traumatic delivery NICU admission

Screening

Universal screening for perinatal depression is essential

Why should I screen?



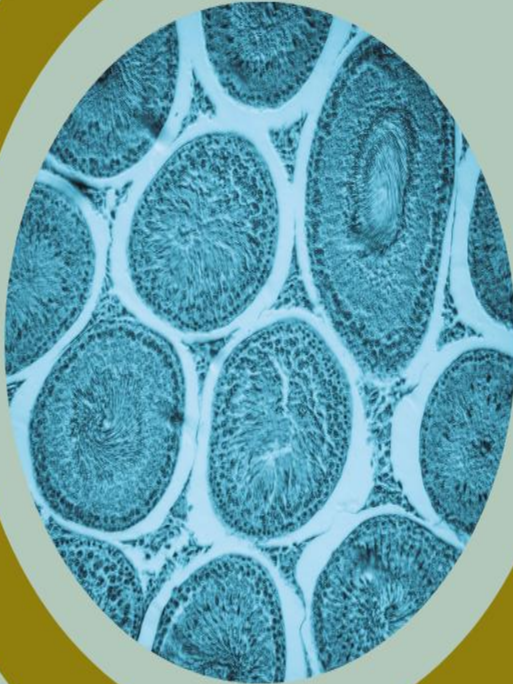
- Perinatal depression is highly prevalent and treatable
- You can't tell just by looking
- Sensitive and specific screening instruments exist
- Screening → diagnosis → treatment
- Treatment decreases suffering and improves perinatal outcomes

Who should I screen?

*Screen **all** women with a **validated** instrument in pregnancy and postpartum*

- Universal screening is recommended by the USPSTF, ACOG, and AAP

When should I screen?



Ideally screen at multiple points in the perinatal period:

- initial OB visit (including a mental health history)
- around 24-28 weeks
- around 35-37 weeks
- postpartum (2 and 6 weeks, if possible)

At minimum, screening should be at initial OB visit, once later in pregnancy and once in the postpartum visits (6 weeks)

How do I screen?

With a validated instrument such as:

- EPDS (Edinburgh Postnatal Depression Scale)
- PHQ-9 (Patient Health Questionnaire)
- BDI (Beck Depression Inventory)

Screening is not a diagnosis, all positive screening must be followed by a clinical evaluation and, if not done previously, screening for bipolar disorder

Screening: EPDS

Most common tool

- 10 questions, < 5 minutes to complete
- Translated into over 50 languages
- Validated in many different racial and ethnic groups worldwide
- Excludes neurovegetative and other physical symptoms
- Includes questions about anxiety (Q 3, 4, 5)
- “Positive” usually defined as >/= 10
- Always review question 10 - self harm

Screening: PHQ-9

Also commonly used

- 9 questions, < 5 min to complete
- Advantage is that it is also used outside of pregnancy
- Disadvantage is that it includes neurovegetative
- No anxiety questions (use with GAD-7 to screen for anxiety)
- "Positive" usually defined as >/= 10

Diagnosis

All positive screening needs to be followed with an assessment

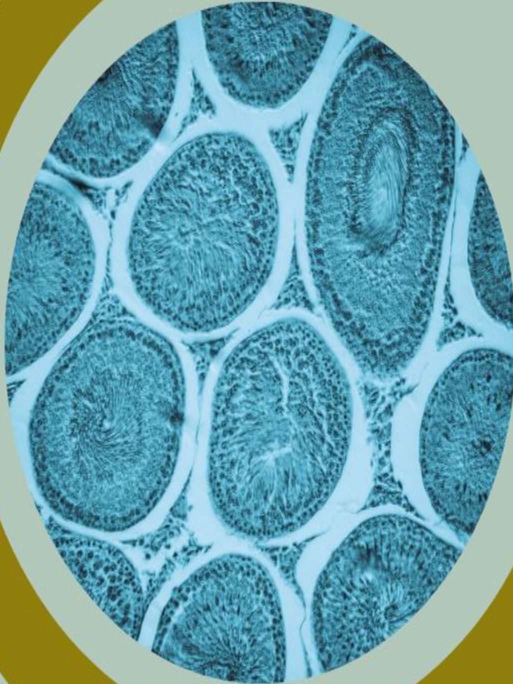
Diagnosis of depression

- 5 or more depressive symptoms for ≥ 2 weeks
- Symptoms must include depressed mood or loss of interest/pleasure
- Symptoms must result in significant distress or impairment
- No manic or hypomanic behavior

Diagnostic criteria for depression (DSM-5)

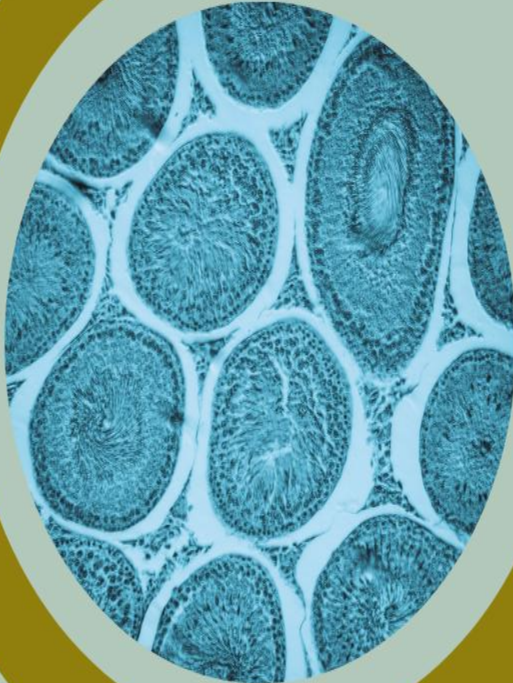
1. *Depressed mood most of the day, nearly every day* **and/or** *loss of interest or pleasure in most or all activities, nearly every day*
2. Insomnia or hypersomnia
3. Significant weight loss or gain, decrease or increase in appetite
4. Psychomotor retardation or agitation
5. Fatigue or low energy
6. Decreased ability to concentrate, think, make decisions
7. Thoughts of worthlessness or excessive or inappropriate guilt
8. Recurrent thoughts of death or suicidal ideation, or a suicide attempt

Diagnostic criteria



- “Peripartum onset” defined by Diagnostic and Statistical Manual (DSM-5) as onset of a major depressive episode during pregnancy or within four weeks of childbirth
- Problematic definition
  - conflates antenatal and postpartum depression, which may be two biologically distinct entities
  - does not capture full “postpartum” period
  - misses those with symptom onset later as a result of psychosocial triggers or later hormonal disruption due to weaning

Diagnostic evaluation



- Consider unique context of pregnancy and parenthood
- Talk about risk of untreated depression without making patient feel blamed
- Consider cultural factors
- Be mindful of stigma associated with “scary thoughts”
- Fear of being reported to Child Welfare/CPS
    - This is particularly salient for BIPOC patients given issues of systemic racism with CPS referrals

Clinical Features: Presentation

- Similar presentation to depression outside of pregnancy including low mood, anhedonia, poor energy and concentration, low motivation, feelings of low self-worth, and sometimes suicidal ideation
  - Changes in sleep, appetite, and libido, if present, can be difficult to discern from normal pregnancy
- Anxious distress is a common feature of perinatal depression
  - High rates of rumination and worry (often about the mother's or baby's health) and intrusive thoughts

Clinical Features: Presentation

- Recent research has begun to identify different clinical phenotypes within perinatal depression
- International consortium “Postpartum Depression: Action Towards Causes and Treatment” (PACT) identified five clinical phenotypes with different clusters of symptoms and timing of onset:
  - Severe anxious depression, moderate anxious depression, anxious anhedonia, pure anhedonia, and resolved depression
  - Anxiety and anhedonia especially prominent in women who had postpartum onset

Clinical Features: Differential Dx

- Baby blues
  - Affects up to 75% of women, mild mood lability in the immediate postpartum period, resolves by two weeks postpartum
- Anxiety disorder
  - Symptoms of anxiety disorders may overlap with those of depressive disorders, with a high rate of comorbidity between the two
- Medical disorder
  - Hypothyroidism, anemia, or the rare Sheehan's disorder, may present with symptoms such as lethargy and fatigue
- Substance use disorder
  - Intoxication or withdrawal from substances can be confused with symptoms of depression
- Bipolar disorder (screen with MDQ)
  - must rule out before starting antidepressant treatment

Clinical features: differential diagnosis

- Any woman presenting with depressive symptoms in the perinatal period may in fact have bipolar disorder
- High proportion of women with first-time depressive episode postpartum will later go on to be diagnosed with bipolar disorder
- Screening with the Mood Disorders Questionnaire and a careful clinical interview for symptoms of mania, hypomania, and rapid cycling may help clarify diagnosis in these cases
- Women with psychotic or mixed symptoms should be suspected of having postpartum psychosis, which is often part of bipolar disorder

NATIONAL CURRICULUM IN REPRODUCTIVE PSYCHIATRY

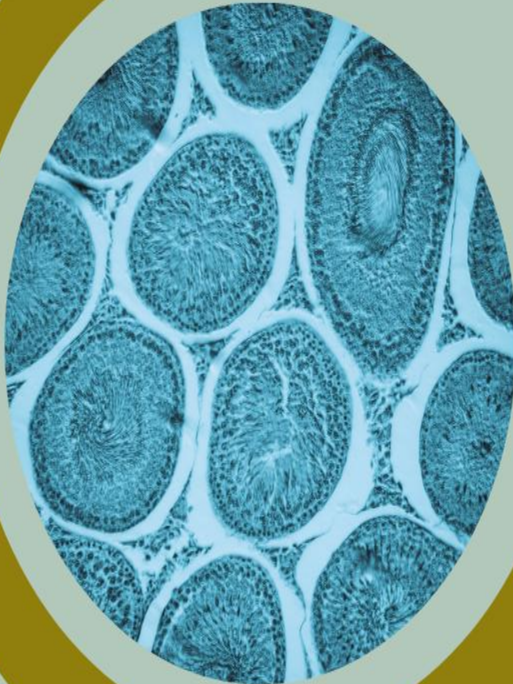
Clinical features: course prognosis

- Untreated or undertreated perinatal depression associated with adverse maternal and neonatal outcomes
- The natural course of the illness is not entirely clear, most studies have focused exclusively on the postpartum period
- 70-75% will have persistent depressive symptoms at 6 months postpartum
- Roughly half of women experience gradual remission, over a third have clinically significant depressive symptoms at 12 month

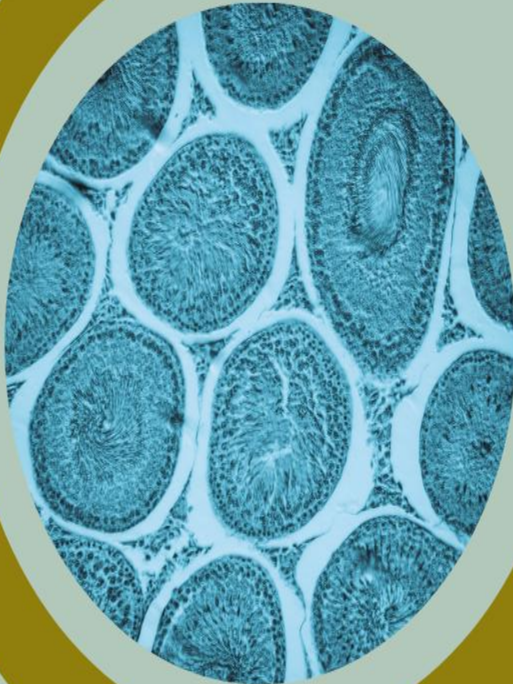
Clinical features: course and prognosis

- Perinatal depression can have long term repercussions for physical and emotional health
- May have reproductive subtype of depression, with episodes at other times of hormonal transition
- Association with increased risk of gestational diabetes, preeclampsia, and preterm birth have long-lasting effects maternal and child health
  - Gestational diabetes → increased risk of Type II diabetes
  - Preeclampsia → increased risk of cardiovascular disease

Pathophysiology



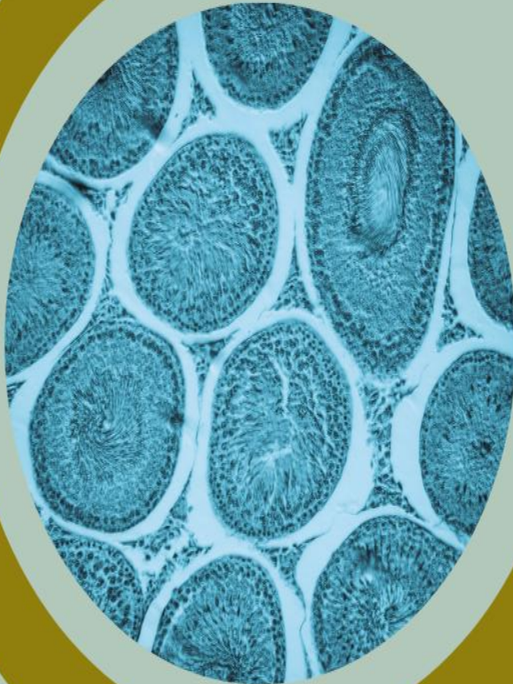
- Considerable research on the genetics/epigenetics of postpartum depression
- Genome-wide linkage and association studies have suggested linkage on areas of chromosomes 1 and 9, and a single nucleotide polymorphism study identified the potential involvement of two estrogen-responsive genes
- Candidate gene studies have implicated polymorphisms in a number of genes, including the serotonin transporter gene, the catechol-O-methyltransferase (COMT) gene, and the estrogen receptor alpha (ESR1) gene



Pathophysiology

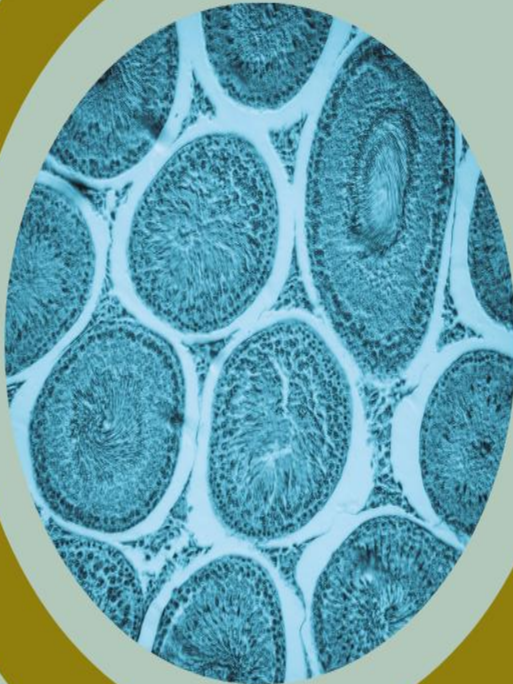
- Positive results in genetic studies when symptoms measured close to delivery but negative for depression that begin later
- May indicate genetic basis to postpartum depression with onset clearly linked to the hormonal trigger of childbirth
- Epigenetic biomarkers that consistently predict the development of PPD with an accuracy of over 80% have been identified
  - HP1BP3 and TTC9B genes

Pathophysiology



- Other biological risk factors drive increased vulnerability in postpartum period
- Precipitous drop in reproductive hormones shortly after delivery, 1000-fold for estrogen shortly after delivery
- While all women undergo these hormonal shifts only some women develop perinatal depression
- Study of women with history of PPD and healthy controls were subjected to an identical, pregnancy-mimicking hormone regimen, and only women with prior PPD became ill

Pathophysiology



- Prior psychiatric history is a strong predictor for PPD
- Stressful life events or past/current also are significantly predictive for PPD
- Some studies have found evidence for maternal age as a risk factor (with both the youngest and oldest mothers at greater risk than those in the middle)
- While race and ethnicity are not consistently identified with risk, Black women who develop perinatal depression are less likely to be identified and treated
- Another important etiological factor that is both biological and psychosocial is sleep

Treatment Considerations

- Determine risk of recurrence
- Assess severity of prior episodes
- Risk-risk analysis (risk of treatment vs risk of no treatment)
- Review past medication trials–personalized decision
- Identify factors that may mitigate risk including psychotherapy, exercise, mindfulness, social support
- Discuss options for pharmacologic treatment

Treatment options

- Wide array of treatment modalities for perinatal depression
- Psychoeducation is key as is self-care
- Psychotherapy for mild to moderate symptoms
- Add medication for moderate to severe symptoms
- Medication should never be withheld or discontinued for pregnancy status alone
- Target remission, follow with serial screening tools to track

Psychopharmacology options

Categories with substantial evidence to support use in pregnancy:

- Selective serotonin reuptake inhibitors (SSRIs)--less data on fluvoxamine
- Selective serotonin norepinephrine reuptake inhibitors (SNRIs), particularly duloxetine and venlafaxine
- Bupropion
- Tricyclic antidepressants

Breast/chest feeding transmission considerations

- Sertraline 0.6% vs. fluoxetine 12%

Psychopharmacology options

- For a patient who is SSRI naive, first line choices are sertraline or escitalopram
- If a patient has been on an SSRI that has worked in the past, try this medication again
- Goal is monotherapy with lowest effective dose and minimizing medication changes
- Beware of undertreatment, this is an exposure!

Psychopharmacology

- In late pregnancy, may need to increase antidepressant dose above therapeutic range
- If patient is on an antidepressant and doing well, do not switch
- If patient needs addition medication, increase medication as opposed to adding new medication
- Minimize exposure to medication and illness - the goal is wellness

Key Clinical Points

- Depression is a common medical condition during pregnancy and postpartum
- The strongest single risk factor: personal history and/or family history of mood disorders
- Antenatal depression is an independent predictor of postnatal depression
- Untreated perinatal depression is associated with adverse outcomes
- Suicide is a major cause of peripartum mortality
- The pathophysiology of perinatal depression is both complex and multifactorial; certain subgroups of women appear to be more sensitive to hormonal shifts than others

Key Clinical Points

- The Edinburgh Postnatal Depression Scale (EPDS) is an example of a validated and acceptable rating scale
- Mild depression can be treated with nonpharmacologic approaches such as interpersonal psychotherapy
- Women with moderate to severe symptoms will typically require pharmacologic treatment
- Selective serotonin reuptake inhibitors are generally considered first line agents to treat perinatal depression
- Risk of recurrence of perinatal depression in subsequent pregnancy: 30-40%

References:

Screening and Diagnosis of Mental Health Conditions During Pregnancy and Postpartum: ACOG Clinical Practice Guideline No. 4. Obstet Gynecol. 2023 Jun 1;141(6):1232-1261. doi: 10.1097/AOG.0000000000005200. PMID: 37486660.

Treatment and Management of Mental Health Conditions During Pregnancy and Postpartum: ACOG Clinical Practice Guideline No. 5. Obstet Gynecol. 2023 Jun 1;141(6):1262-1288. doi: 10.1097/AOG.0000000000005202. PMID: 37486661.

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 Nov;126(5):1048-1058. doi: 10.1097/AOG.0000000000001067. PMID: 26444130; PMCID: PMC4618720.

Cohen LS, Altshuler LL, Harlow BL, Nonacs R, Newport DJ, Viguera AC, Suri R, Burt VK, Hendrick V, Reminick AM, Loughead A, Vitonis AF, Stowe ZN. Relapse of major depression during pregnancy in women who maintain or discontinue antidepressant treatment. JAMA. 2006 Feb 1;295(5):499-507. doi: 10.1001/jama.295.5.499. Erratum in: JAMA. 2006 Jul 12;296(2):170. PMID: 16449615.

Lamere K, Golova N. Screening for Postpartum Depression During Infant Well Child Visits: A Retrospective Chart Review. Clin Pediatr (Phila). 2022 Oct;61(10):699-706. doi: 10.1177/00099228221097272. Epub 2022 May 19. PMID: 35588233.

Roca A, Imaz ML, Torres A, Plaza A, Subirà S, Valdés M, Martin-Santos R, Garcia-Esteve L. Unplanned pregnancy and discontinuation of SSRIs in pregnant women with previously treated affective disorder. J Affect Disord. 2013 Sep 25;150(3):807-13. doi: 10.1016/j.jad.2013.02.040. Epub 2013 Apr 6. PMID: 23566335.

Silverman ME, Reichenberg A, Savitz DA, Cnattingius S, Lichtenstein P, Hultman CM, Larsson H, Sandin S. The risk factors for postpartum depression: A population-based study. Depress Anxiety. 2017 Feb;34(2):178-187. doi: 10.1002/da.22597. Epub 2017 Jan 18. PMID: 28098957; PMCID: PMC5462547.

Wisner KL, Sit DK, McShea MC, Rizzo DM, Zoretich RA, Hughes CL, Eng HF, Luther JF, Wisniewski SR, Costantino ML, Confer AL, Moses-Kolko EL, Famy CS, Hanusa BH. Onset timing, thoughts of self-harm, and diagnoses in postpartum women with screen-positive depression findings. JAMA Psychiatry. 2013 May;70(5):490-8. doi: 10.1001/jamapsychiatry.2013.87. PMID: 23487258; PMCID: PMC4440326.

Yonkers KA, Gotman N, Smith MV, Forray A, Belanger K, Brunetto WL, Lin H, Burkman RT, Zelop CM, Lockwood CJ. Does antidepressant use attenuate the risk of a major depressive episode in pregnancy? Epidemiology. 2011 Nov;22(6):848-54. doi: 10.1097/EDE.0b013e3182306847. PMID: 21900825; PMCID: PMC3188383

NATIONAL CURRICULUM IN REPRODUCTIVE PSYCHIATRY

Resources

Postpartum Support International: https://www.postpartum.net/

MGH Women's Mental Health Center: www.womensmentalhealth.org

LactMed:

https://www.ncbi.nlm.nih.gov/books/NBK501922/

MotherToBaby:

https://mothertobaby.org/

MCPAP for Moms Toolkit: https://www.mcpapformoms.org/Toolkits/Toolkit.aspx