Perinatal Depression for Ob-Gyn Providers

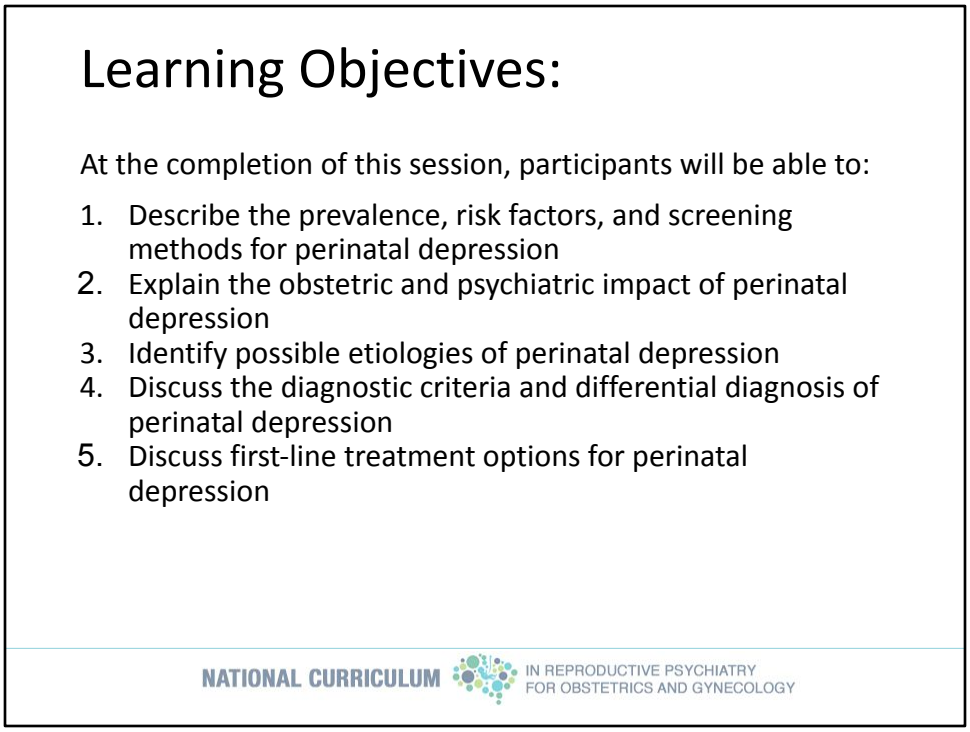
Amanda Yeaton-Massey, MD, PMH-C
Lucy Hutner, MD

NATIONAL CURRICULUM IN REPRODUCTIVE PSYCHIATRY FOR OBSTETRICS AND GYNECOLOGY

Perinatal Depression Chapter:
https://docs.google.com/document/d/1ZupSKeJeTL546k4miIFHR_a5PSrDgWHE/edit

Disclosures

- Lucy Hutner, MD is the co-founder and advisor of Phoebe, Inc and consultant/strategic advisor for Gemma, Inc.



Original language from NRCP:

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

1. Describe the prevalence of depression in antenatal and postpartum periods
2. List risk factors for depression in pregnancy and postpartum
3. Compare possible etiologies for the development of depression in pregnancy and postpartum
4. Select appropriate screening methods for depression in the perinatal population
5. Discuss the differential diagnoses of antenatal and postpartum depression
6. Explain the obstetric and psychiatric impact of

1. depression in the perinatal period

Recognize the potential for increased vulnerability during the postpartum period

After working through this presentation, learners (primarily psychiatric residents but also family practice, midwifery and obstetrical trainees) will be able to articulate the differences between immigrants and refugees, especially in relation to their stresses and legal concerns. Learners will recognize that certain stresses are more common in women from different regions of the world. They will develop a strategy for both open-ended, personalized assessment and screening for recognized psychiatric conditions using validated questions

Outline

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

Introduction/Overview

Perinatal depression

- Antenatal and postpartum
- Most common complication of pregnancy
- Associated with adverse obstetric and childhood outcomes
- Impacts entire family
- High economic burden if untreated

SNY comment: need references throughout the ppt. I started out identifying specific areas, but once I got further in the deck realized referencing needs to be added throughout.
SNY suggestion: could you modify the first bullet point to “onset during the antepartum or postpartum period” for clarity

Introduction/Overview

- The postpartum period is a particularly vulnerable time for perinatal mood disorders but depression is prevalent throughout
- Discontinuation of 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.

as

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
  - 20% endorse ideation of self harm
  - 66% comorbid anxiety
- Up to 40% rate of postpartum depression for women with history of depression
- 68% relapse rate for women who discontinue antidepressant medication

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SNY comment- need references

Mughal S,Azhar Y,Siddiqui W.Postpartum Depression. [Updated 2021 Jul 2021. In:

StatPearls{Internet}

CDC as a reference

Epidemiology: risk factors

- Personal history of major depression
- Antenatal depression
- Antenatal anxiety
- Social risk factors: low SES, lack of social support, adolescent pregnancy, unwanted pregnancy, childhood trauma, intimate partner violence, systemic racism
- Obstetric/delivery complications-hx of PEC,PTD,fetal loss

Screening

Universal screening for perinatal depression is essential

Why should I screen?

- Perinatal depression is highly prevalent and treatable
- 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:

- on intake (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 and postpartum visits (2 and 6 weeks)

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"intake" initial OB or initial visit

How do I screen?

With a validated instrument such as:

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

All positive screening must be followed by a clinical evaluation

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SNY comment: I would recommend strengthening the sentence about f/u clinical evaluation. Might suggest adding "Screening positive does not equate to a diagnosis…"

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

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SNY: Might identify that the 3 anxiety questions represent the anxiety subscale. Would be helpful to provide guidance on scoring this separately.
OPM: I think more details on EPDS the better as this is most widely used; might want to mention this is validated for use over the phone (also for teens AND partners); 86% sensitive and 78% specific – but not diagnostic

Screening: PHQ-9

Also commonly used

- 9 questions, < 5 min to complete
- advantage is that it is also used outside of pregnancy
- no anxiety questions (use with GAD-7 to screen for anxiety)
- “positive” usually defined as >/= 10

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SNY comment: Given the data suggesting that about a quarter of women who screen positive on the EPDS during the perinatal period have bipolar disorder, I think it is warranted to recommend a positive depression screen should be followed by a quick one-time BD screen such as the MDQ

Diagnosis

All positive screening needs to be followed with an assessment

Diagnostic criteria (DSM-5)

Depressed mood most of the day, nearly every day **and/or** *loss of interest or pleasure in most or all activities, nearly every day*

PLUS

At least 5 of the following:

1. Insomnia or hypersomnia
2. Significant weight loss or gain, decrease or increase in appetite
3. Psychomotor retardation or agitation
4. Fatigue or low energy
5. Decreased ability to concentrate, think, make decisions
6. Thoughts of worthlessness or excessive or inappropriate guilt
7. 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

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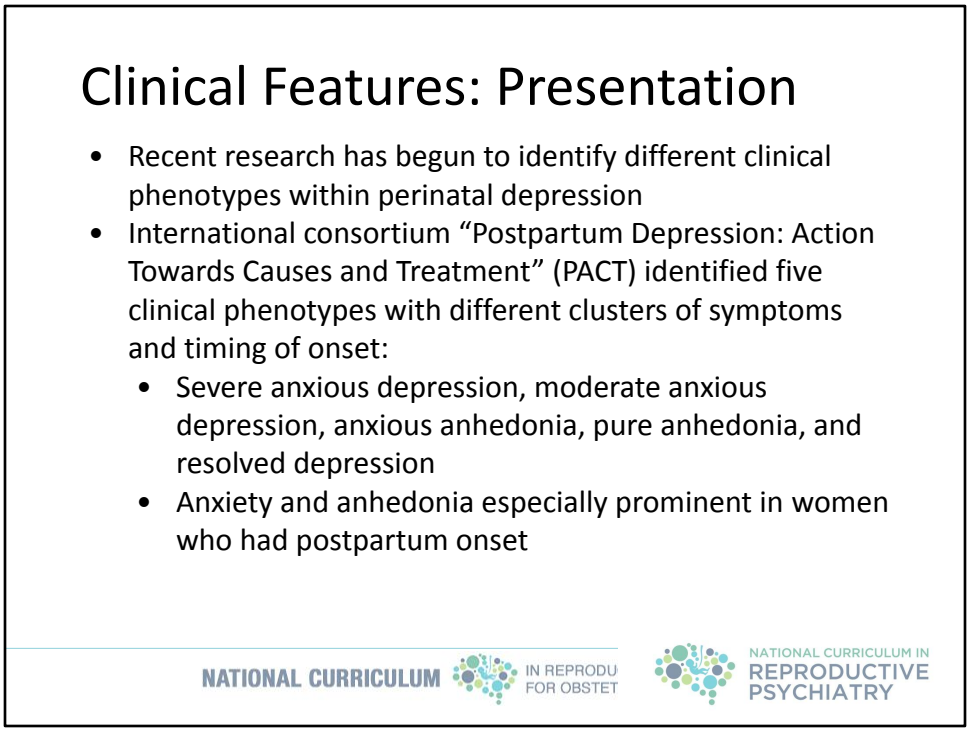
In postpartum a common worry may be about dropping baby….

Clinical Features: Presentation

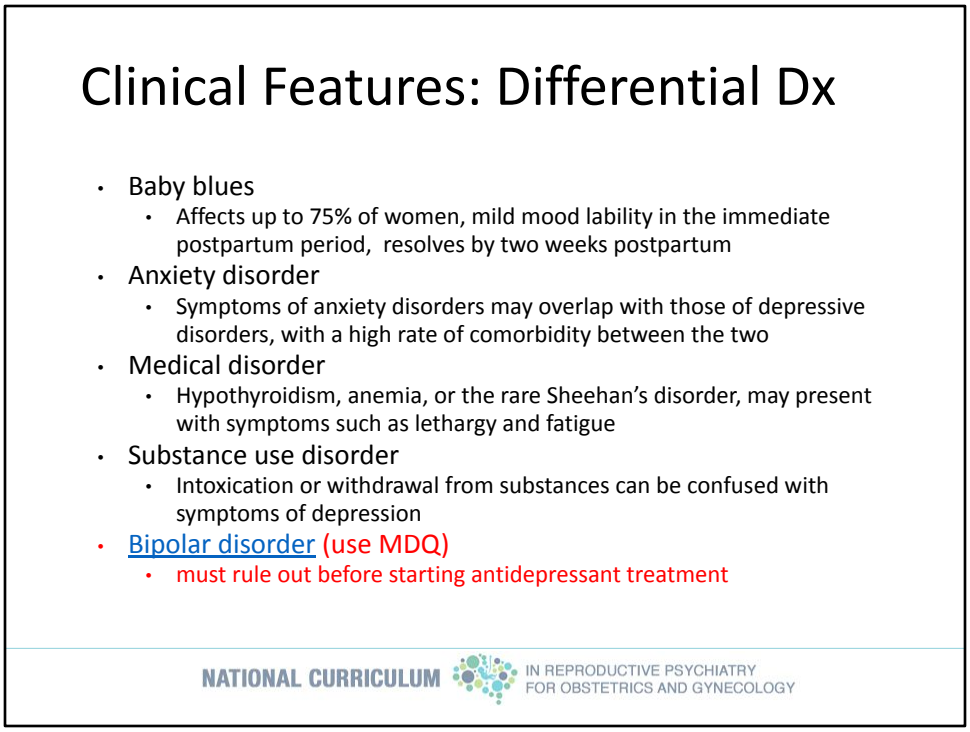
- Similar presentation to depression outside of pregnancy including low mood, anhedonia, poor energy and concentration, low motivation, feelings of low self-worth, and sometimes suicidal ideation
  - Changes in sleep, appetite, and libido, if present, can be difficult to discern from normal pregnancy
- 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



References: (Putnam et al. 2017).

Items for discussion:

1) **Diagnostic criteria: how far to go: own the issue or you refer to someone else to own**



References: (Nonacs and Cohen 1998)(Jordan and Minikel 2019). (Kang, Kim and Sunwoo 2020; Wilson, Lee and Bei 2019).

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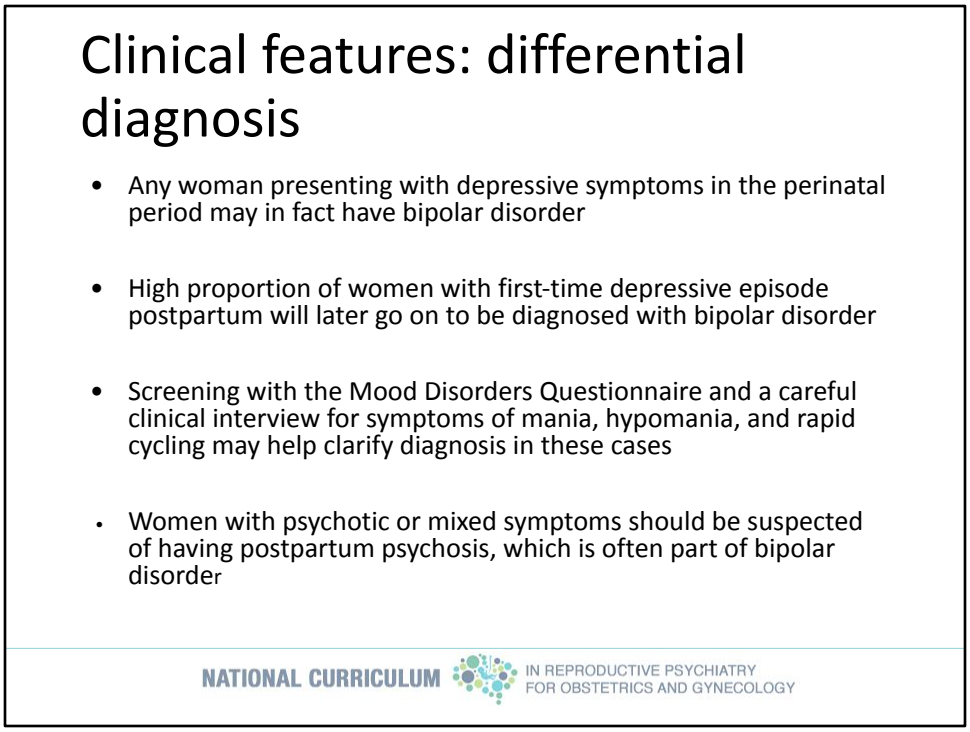

I believe there is data to support that women with BD are at high risk for a mood episode in the PP period, and the most common type of mood episode for women with BD in the PP period is a depressive episode. This might be useful to add to this slide.

- (Sharma and Baczynski 2019). (Sharma, Al-Farayedhi, Doobay and Baczynski 2018).

Items for discussion:

1) **Diagnostic criteria: how far to go: own the issue or you refer to someone else to own**

Clinical features: course prognosis

- 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 months

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OPM: Is this implying course prognosis without treatment? – presumably so but good to emphasize

Refererences: Beck 1998; Conroy et al. 2012; Goodman et al 2011; Grote et al. 2010; Murray and Cooper 1997). Hu, Li, Zhang and Yan 2015; Jarde et al. 2016)(Conroy et al. 2012, Zhu et al. 2014). (Hoffman, Dunn and Njoroge 2017). (Paulson, Bazemore, Goodman and Leiferman 2016; Torres et al. 2019), (Fisher et al. 2019).

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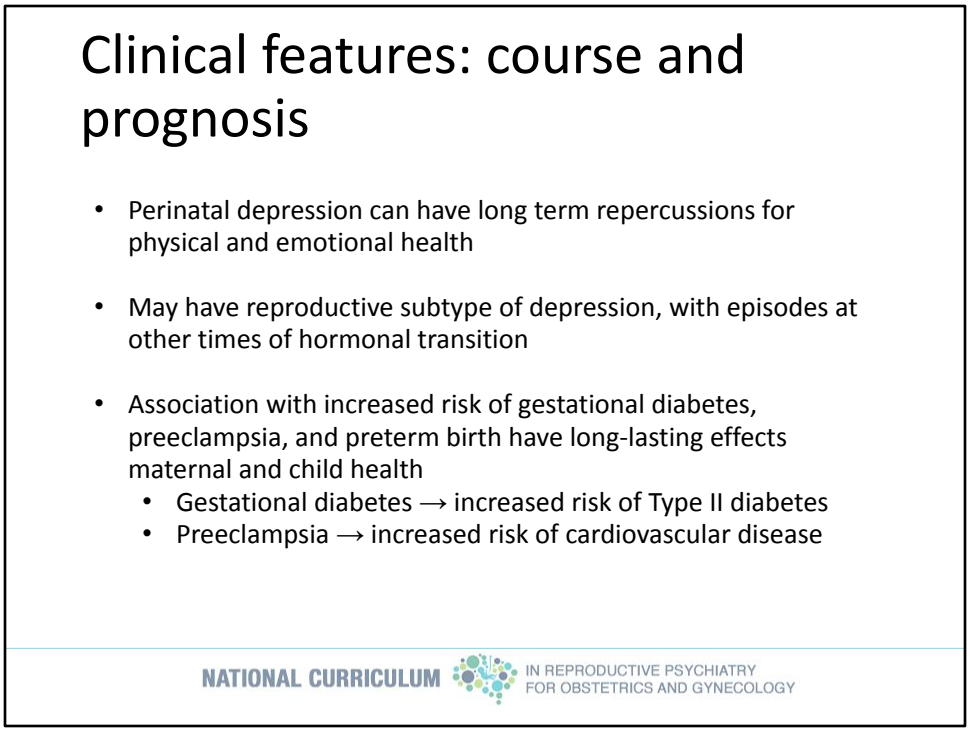

References: (Payne, Palmer and Joffe 2009).(Chasan-Taber 2016; Perry, Khalil and Thilaganathan 2018).

Items for discussion:

1) **Diagnostic criteria: how far to go: own the issue or you refer to someone else to own**

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

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References: (McEvoy, Osborne, Nanavati and Payne 2017). (Carroll et al. 2006; Green and Galea 2008; Mahon et al. 2009; Mehta et al. 2014). (Hu et al 2019; Pinheiro et al. 2013; Zhang et al. 2015)Alvim-Soares et al. 2013; Comasco et al. 2011; Doornbos et al. 2009; Klein, Schmoeger, Kasper and Schosser 2016),

Items for discussion:

1) **Diagnostic criteria: how far to go: own the issue or you refer to someone else to own**

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

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References:

Items for discussion:

1) **Diagnostic criteria: how far to go: own the issue or you refer to someone else to own**
2) **1st bullet needs revision**

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

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References:

- (Bloch et al. 2000)

Items for discussion:

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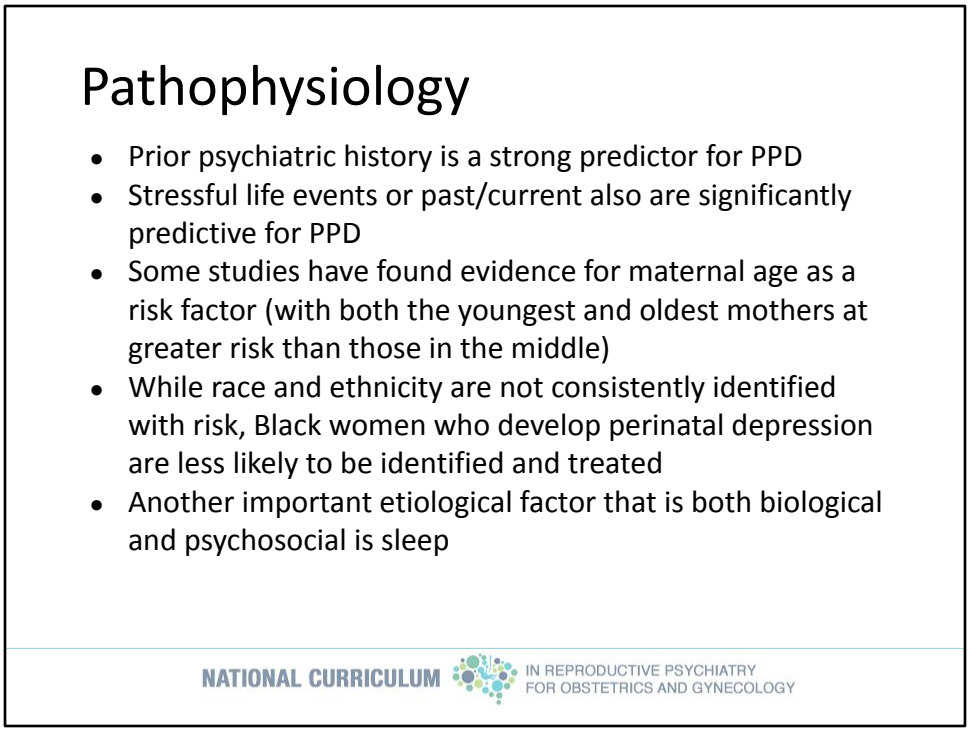

References: (as reviewed in (Guintivano, Manuck and Meltzer-Brody 2018). (Agrawal et al. 2014; Cerulli, Talbot, Tang and Chaudron 2011; Robertson-Blackmore et al. 2013; Woolhouse et al. 2012). (Guintivano, Manuck and Meltzer-Brody 2018)

Items for discussion:

1) **Diagnostic criteria: how far to go: own the issue or you refer to someone else to own**

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**

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Psychopharmacology options

- Categories with substantial evidence to support use in pregnancy:
  - Selective serotonin reuptake inhibitors (SSRIs)--less data on fluvoxamine
  - Selective serotonin neuroepinephrine reuptake inhibitors (SNRIs), particularly duloxetine and venlafaxine
  - Bupropion
  - Tricyclic antidepressants
- Breast/chest feeding transmission considerations
  - Sertraline 0.6% vs. fluoxetine 12%

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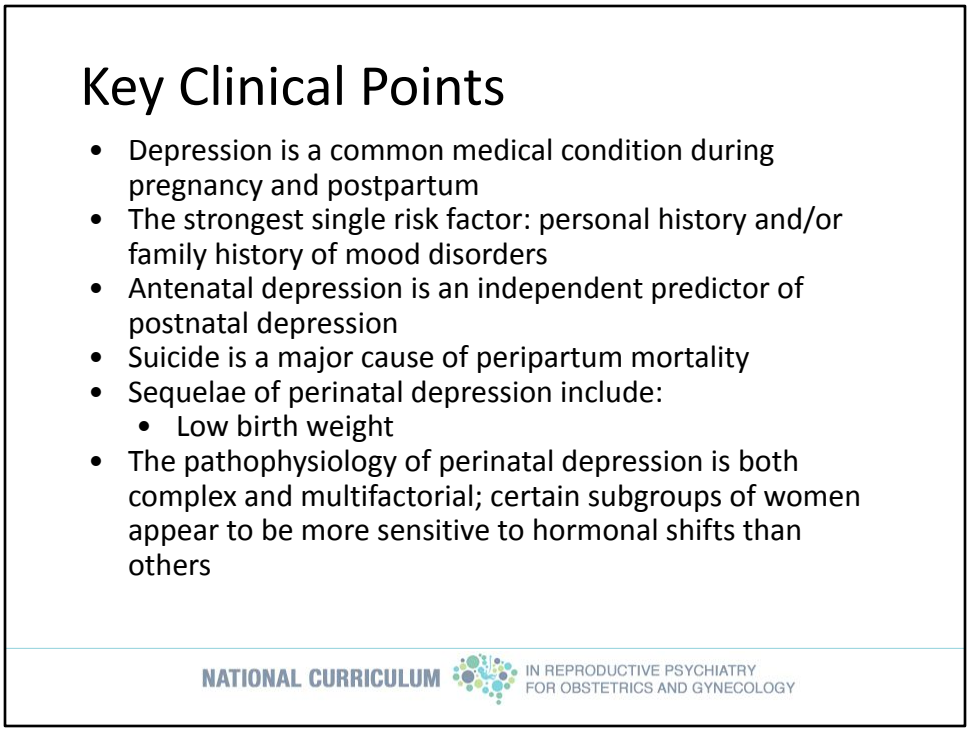
OPM: May want to mention the resources that exist for OB providers when it comes to initiating treatment >>> hyperlink MCPAP for Moms treatment guidelines or include this link (or a similar) toolkit for providers to further investigate https://www.mcpapformoms.org/Docs/AdultProviderToolkit12.09.2019.pdf

Psychopharmacology options

Less/limited evidence for:

- MAO-I inhibitors
- Other antidepressants e.g. mirtazapine, vortioxetine, vilazodone



OPM: sequelae looks incomplete – low birth weight, but other associations?

Items for discussion:

1) **Diagnostic criteria: how far to go: own the issue or you refer to someone else to own**
2) **Last bullet needs revision**

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%

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/