This teleconference is brought to you by the Wisconsin Department of Health Services (DHS), Division of Care and Treatment Services, Bureau of Prevention Treatment and Recovery and the University of Wisconsin-Madison, Department of Psychiatry.

Use of information contained in this presentation may require express authority from a third party.

2019, Charlotte Ladd, Reproduced with permission.
Call 877-820-7831 before 11:00 a.m.

Enter passcode 107633#, when prompted.

Questions may be asked, if time allows.

To ask a question, press *6 on your phone to unmute yourself. *6 to remote.

The link to the evaluation for today’s presentation is on the WPPNT webpage, under today’s date: https://www.dhs.wisconsin.gov/wppnt/2018.htm
TREATING PERIPARTUM MENTAL ILLNESS

Charlotte Ladd, MD, PhD
Perinatal Psychiatry = Preventative Psychiatry
Perinatal Medication = Controversy, Fear
Knowledge leads to Rational Decision Making
Prenatal Programming (Wadhwa)

**Fetus/Neonate**
- Changes in:
  1. Decreased brain and body weight
  2. Neuronal cell death
  3. Gene expression
  4. Neural circuitry
  5. Hormones and cytokines

---

**Environment**
- Maternal
  - Prenatal stress, inflammation, malnutrition
  - Elevated glucocorticoids, cytokines, others

---

**Fetus/Neonate**
- Changes in:
  1. Decreased brain and body weight
  2. Neuronal cell death
  3. Gene expression
  4. Neural circuitry
  5. Hormones and cytokines

---

**Environment**
- Adult
  - Depression and anxiety
  - HPA-axis regulation
  - Growth and metabolism
  - Cardiovascular function
  - Insulin resistance
  - Thermoregulation

---

**Fetus/Neonate**
- Changes in:
  1. Decreased brain and body weight
  2. Neuronal cell death
  3. Gene expression
  4. Neural circuitry
  5. Hormones and cytokines

---

**Environment**
- Maternal
  - Prenatal stress, inflammation, malnutrition
  - Elevated glucocorticoids, cytokines, others

---

**Fetus/Neonate**
- Changes in:
  1. Decreased brain and body weight
  2. Neuronal cell death
  3. Gene expression
  4. Neural circuitry
  5. Hormones and cytokines

---

**Environment**
- Adult
  - Depression and anxiety
  - HPA-axis regulation
  - Growth and metabolism
  - Cardiovascular function
  - Insulin resistance
  - Thermoregulation
“The field of perinatal psychiatry faces the challenge of trying to understand whether more adverse outcomes occur in women who take antidepressants but remain euthymic or in women who do not take antidepressants but remain depressed in pregnancy.”

“Too often, a pregnancy in the context of ongoing psychiatric treatment is experienced by the patient and her health care providers as a surprising event that can derail treatment, and care is often driven by fear rather than rational decision-making using evidence-based medicine.”

“The best model…is that of a collaborative decision-making partnership, which includes the patient’s preferences and values at the forefront, treatment options tailored to the situation, maximization of nonmedication options, and the rational use of medications.” Marlene Freeman (2009) J Clin Psychiatry 70(9): 1311-1312
Overview

- Risks of maternal perinatal mental illness
- Risks of antenatal pharmacologic treatment
- Postpartum treatment
- Case Review
- Resources
Risks of prenatal depression to the fetus

- Increased substance use and poorer prenatal care
- Poorer birth and neonatal outcomes:
  - Increased Preterm delivery
  - Low birth weight, SGA
  - Neonatal irritability and hypoactivity (Field T, review)
  - Elevated cortisol and lower vagal tone in newborn
  - Developmental delay at 18 months (Deave T)
- Prenatal depression is the single best predictor of postpartum depression
Sequelaes of maternal depression

- Increased externalizing behaviors in preschool (Essex)
- Increased internalizing behaviors in middle childhood
- Increased depression and cardiovascular disease in adulthood
- Chronicity of depression is the most robust risk factor
- Less than half the psychiatric risk to the offspring associated with maternal depression can be accounted for by psychosocial factors (Barker ED, Br J Psychiatry 2012, 200:124-129)
Transmission of Risk

- Lower TNFα in women whose depression was treated successfully with medication in pregnancy vs untreated women or nonresponders (Miller 2018)
- MDD is associated with higher CRF and cortisol levels which cross placenta and may alter neurodevelopment (Wadhwa)
- 42 CpG sites with significantly different DNA methylation levels in neonates exposed to non-medicated depression or anxiety relative to controls (Non 2014)
Transmission of Risk

Maternal depression can alter the course of the newborn’s behavioral, endocrinologic, and psychological development in manner that may be phenomenologically adaptive to a species under environmental stress but maladaptive to the individual (Wadwha, Sapolsky)
Balancing Maternal and Fetal Health

- Maternal Depression
- Pharmacotherapy
- Substances
- Fetal Health
- Nutrition
- Prenatal Care
- Maternal health
Balancing Maternal and Fetal Health

Resolved depression \(\leftrightarrow\) Pharmacotherapy

- Substances \(\rightarrow\) Fetal Health \(\leftarrow\) Nutrition

- Prenatal Care \(\rightarrow\)

+ Maternal health
SSRIs in Pregnancy

Data: strengths and limitations
Pharmacokinetics
Birth outcomes
Neurobehavioral outcomes
SSRIs are among the best studied drugs in pregnancy.

Considerable data on TCAs, haloperidone.

Less data on newer antidepressants, antipsychotics.

Few controlled efficacy studies.

Existing studies are often confounded by maternal illness, substance use, age, poor prenatal care, and sampling bias.

Limited long term follow up studies.
Pharmacokinetics: SSRIs

- There is extensive passage of antidepressants into amniotic fluid: the fetus is essentially bathed in medication in utero.
- Rat studies suggest that the serotonin transporter is saturated in the fetal developing brain at doses of SSRIs equivalent to 10 mg paroxetine.
- Conversely, passage into breast milk is orders of magnitude less than placental passage “a drop in the bucket” compared to in utero exposure.
  - Sertraline and paroxetine are virtually undetectable in infant serum after breast feeding.
- Lowest effective doses are encouraged but don’t undertreat!
Birth outcomes: SSRIs

- **Loss of pregnancy***:
  - Increased risk of spontaneous abortion
  - Increased risk of miscarriage (12.4% vs. 8.7%, RR=1.45)

- **Gestational age***:
  - Preterm delivery rate is higher with SSRI, TCA, or SNRI exposure in some studies but not others

- **Growth effects***:
  - Decreased birth weight
  - Increased incidence of SGA (0.033 difference)

*confounded to some degree by substance use, poor prenatal care, and maternal illness
Poor Neonatal Adaptation Syndrome (PNAS)

- Transient, self-limited, usually mild
- Hours to days after birth
- 15-30% with SSRIs, SNRIs, mirtazapine, TCAs
  - Tachypnea, hypoglycemia, irritability, weak cry, convulsions
- No adverse effects 2 years later (Oberlander 2004)
- Most common with paroxetine and fluoxetine (Moses-Kolko, 2005)
- Less common with breast feeding (Smit 2015)
- Treatment is supportive
- Most data is cross-sectional and unblinded
Structural malformations: SSRIs

- Meta-analysis of SSRIs in first trimester: no increased risk of congenital birth defects (Einarson 2005)
- Slone Epidemiology Center Birth Defects Study: No increase in birth defects with SSRIs in pregnancy (Louik NEJM 2007)
- National Birth Defect Prevention Study: No increase in OR for sertraline, citalopram, escitalopram exposure in utero (Reefhuis BMJ 2015)
  - Increased OR for birth defects with paroxetine (N=214)
  - Increased OR for craniosynostosis and right ventricular outflow tract obstruction with fluoxetine (N=331)
Structural malformations: other antidepressants

- SNRIs (Lassen 2015) – no increased risk found
  - Venlafaxine (N=3186)
  - Duloxetine (N= 668)
- Bupropion
  - OR =1.6 for VSD (Louik 2014)
- TCAs – no increased risk found
- Mirtazapine (N= 300s) -no birth defects reported
Persistent pulmonary hypertension

- Increased endothelin-1 and decreased NO lead to increased pressure in the pulmonary vasculature, R to L shunting of blood, and neonatal hypoxia

- Up to 10% mortality rate, depending on cause (6% with meconium aspiration)

- Maternal risk factors: C-section, DM, NSAIDs, and tobacco

- OR = 6.1 with SSRIs in the second half of pregnancy (Chambers et al., NEJM 2006)

- Rate increases from 0.5-2 per 1000 to 3-6 per 1000

- FDA black box warning for PPHN was retracted in 2011
Neurodevelopmental outcomes

- Cognition: no adverse outcomes (Nulman)
- Behavioral: no adverse outcomes (Oberlander; Caspi)
  - Education
  - IQ
  - Temperament
  - Internalizing and externalizing symptoms

SSRIs and SNRIs: Summary

- Small effects on pregnancy health and fetal growth
- 15-30% risk of transient “poor neonatal adaptation”
- 6 fold increase in persistent pulmonary hypertension but a low absolute risk of 3-6 per 1000
- No documented risk of structural malformations with sertraline, citalopram, escitalopram (large N)
- Most studies show no risk with fluoxetine
- Avoid paroxetine unless it is only effective agent
- No documented risk of structural malformations with venlafaxine or duloxetine (smaller N)
Other antidepressants: Summary

- **Tricyclic antidepressants:**
  - Useful for agitated depression or severe insomnia
  - Not associated with structural malformations or PPH

- **Atypical antidepressants:**
  - Bupropion
    - May be useful if patient also wants to quit smoking
    - Reduces nicotine exposure but does not increase rate of cessation (Nanovskaya 2016)
    - Also may be useful for comorbid ADHD
    - ? Risk of VSD (OR=1.6)
  - Mirtazapine: useful with comorbid hyperemesis gravidarum
Preconceptual treatment planning
Approach to depression in an unmedicated pregnant patient
Approach to depression in a medicated pregnant patient
Family planning

- 50% of pregnancies are unplanned. Women of childbearing age should be approached as if they were pregnant.
- CDC and ACOG recommend that every woman of reproductive age take 400 mcg of folic acid daily:
  - Reduces neural tube defects by 50-70%.
  - Reduces rate of autism spectrum disorders.
- Divalproex and carbamazepine should be avoided in women who might get pregnant.
- Reliable birth control should be encouraged in women suffering from severe depression, mania, or psychosis.
1. Assess severity
2. Length of treatment
3. Chronicity
4. Response to therapy

*Maximize treatment may entail switching medication, adding a medication, psychiatric hospitalization or, for a non-psychiatric clinician, urgent referral to a psychiatrist.

**A “reasonable period of stability” has not been empirically defined but is ultimately up to the patient and her clinician, and should take into consideration past episodes of illness and the time period required for her to re-establish normal functioning.
General Principles

- Discuss the risks of exposing the fetus to the mother’s mental illness vs the risks of exposure to medication
- Decision is driven by illness chronicity and severity as well as patient’s comfort level
- The more severe and chronic the illness, the more likely pharmacologic management will need to be continued in pregnancy and postpartum
Approach to a patient with MDD who is pregnant & unmedicated:

1. Assess severity
2. Willingness to take medication
3. Response to psychotherapy
4. R/o bipolar disorder
5. Comorbid conditions?
Treating Depression in Pregnancy

In a patient who is unmedicated:

- A trial of psychotherapy alone is warranted unless the depression is severe or patient prefers medication
- SSRIs (except paroxetine) or TCAs are first line
- Use information on previous successful trials to guide drug choice – this is no time to experiment!
- If there is no medication history, sertraline, fluoxetine, or citalopram are reasonable choices
- TCAs may be helpful for agitated depression, especially with insomnia
Approach to a patient with MDD who is pregnant and currently taking antidepressants

1. Assess severity
2. Willingness to continue medication
3. Response to therapy
4. Chronicity and recurrence
In a patient who is taking an antidepressant:

- If the patient chooses to continue medication, consider if the medication is working:
  - Yes: continue medication – switching can induce relapse
  - No: increase the dose if not maximized OR switch to a previously helpful medication or one with extensive safety data (fluoxetine, sertraline, citalopram)

- If the patient chooses to taper medication, do so slowly, reducing by 25% every 1-2 weeks and monitoring closely for worsening depression
Ways to Improve Maternal Mental Health

- Psychotherapy
- Exercise
- Increase light exposure
- Increase social supports
- Optimize nutrition, including prenatal vitamins
Ways to Optimize Fetal Health

- Prenatal care
- Prenatal vitamins
- Adequate hydration (64 oz recommended)
- Reduce stress
- Avoid substances
  - Tobacco
  - Alcohol
  - Marijuana
  - Other illicit drugs
  - Unnecessary OTC or prescription medication
Treating Bipolar Disorder in Pregnancy

Lithium
Lamotrigine
Haldol
Atypical antipsychotics
Risk of Recurrence in Women With Bipolar Disorder During Pregnancy: Prospective Study of Mood Stabilizer Discontinuation

Lithium: complete placental passage

![Graph showing the relationship between maternal and infant lithium concentrations. The graph includes data points from previous studies and the current study, with a regression line indicating the trend.]
Lithium: potential complications

- **Cardiac malformations:**
  - RR=1.11 dose of 600 mg or less
  - RR=1.6 for 601-900 mg
  - RR=3.22 for > 900 mg

- **Absolute risk of Ebstein’s anomaly < 0.1%** (Cohen 1994)

- **Fetus:** neonatal goiter, fetal diabetes insipidus, neonatal hypoglycemia, hydronephrosis, hypotonia, atrial flutter

- **Pregnancy:** gestational diabetes, preeclampsia, preterm delivery, LBW, cyanosis, polyhydramnios

- **No evidence of adverse long term neurobehavioral outcomes in school age kids** (Shou, 1976)

- **Greatest risk is in the first month of pregnancy with variable risk in the remainder of the first trimester**

Lithium registry (Healthcare Technology Systems, Inc., Madison, WI 53717)
Guidelines for Li in late pregnancy

- Use minimum effective dose
- Monitor plasma [Li] closely throughout pregnancy as GFR changes (1.2 mEq/L is upper limit)
- Adjust Li dose as needed when used concomitantly with antihypertensives or in the presence of polyhydramnios
- Suspend Li administration 24-48 hours before scheduled delivery or at onset of parturition
- Check Li level on admission to L&D
- Administer IVF throughout labor and delivery
- Resume Li when medically stable after delivery

Newport DJ et al., Am J Psychiatry 2005
Lamotrigine

- Initial concern about increased incidence of cleft lip/palate by the North American Antiepileptic Drug (NAAED) Pregnancy Registry has not been substantiated.
- OR = 1.31 (1/550) all oral clefts (Dolk 2016).
- Meta-analysis of 21 studies: no increased risk of major malformations (Pariente 2017).
Valproate and Carbemazepine

- 4 fold increase in major congenital malformations as well as increased cognitive deficits later in life
- **Do not prescribe** to women of childbearing age unless a reliable form of birth control is used
- If either are necessary, then prescribe 4 mg folic acid daily to reduce the risk of neural tube defects
Antipsychotic use in pregnancy

- **FGAs**
  - 2011: FDA warning about EPS and withdrawal
  - Lower BW, increased risk of preterm birth (Habermann 2013)
  - No increased risk of congenital malformations
  - Haloperidone is generally preferred among perinatal specialists

- **Atypical antipsychotics:**
  - 2011: FDA warning about EPS and withdrawal
  - Increased risk of gestational diabetes (Boden 2012)
  - Associated with developmental delay until age 1 (Peng 2013; Johnson 2012)
  - Quetiapine has least placental passage =0.44 (Paulzen 2018)
Choosing an atypical antipsychotic

- **Seroquel:**
  - No increase in congenital malformations (Cohen 2018, Damkir 2018)
  - Low penetration into fetal circulation =0.18 (Paulzen 2018)

- **Olanzapine:**
  - No increase in congenital malformations (Damkir 2018)

- **Aripiprazole:**
  - No increase in congenital malformations (Damkir 2018)

- **Risperidone:**
  - Hyperprolactinemia
  - Associated with small increase in congenital malformations (Damkir 2018)

- **Ziprasidone:** limited data
Benzodiazepines

- Treat acute agitation, insomnia, or mood instability
- Safety data are controversial
- Initial reports of cleft lip and cleft palate with diazepam (OR = 4)
- Early reports suggested an overall risk of cleft lip/palate = 0.7% when fetus is exposed to benzodiazepines in the first trimester.
- **Meta-analysis** found an increased rate of cleft lip (OR = 1.76) with benzodiazepines in case control studies but not cohort studies. (Dolovich et al., 1998)
- Addition of 4 mg folate can potentially reduce risk
When used in 2\textsuperscript{nd} and 3\textsuperscript{rd} trimesters, main concerns are fetal side effects and dependence

Use minimum effective dose and monitor newborn closely for:

- toxicity (sedation, decreased muscle tone, and breathing problems)
- withdrawal (irritability, sleep disruption, and, less commonly, seizure)

Lorazepam (0.5-1mg) is used most commonly in clinical and emergency settings
Treating Insomnia

- Sleep is essential to good health!
- Review Sleep Hygiene first
- Tricyclic antidepressants
  - Amitriptyline (25-50mg)
  - Imipramine (25-50 mg)
- Benzodiazepines (lorazepam 0.5-1 mg)
- Diphenhydramine (25-50 mg)
Nonpharmacologic treatment options

- Psychotherapy
  - Interpersonal therapy
  - Cognitive behavior therapy
- Light therapy
- ECT (severe mood disorders)
Optimizing outcomes

- Encourage adequate fluid intake
- Daily PNV with at least 4 mg of folate
- Good nutrition; Sleep hygiene
- Exercise (preferably outdoors 20 min 3-5 times per week)
- Close follow up with psychiatrist or therapist
- Minimize other exposures: caffeine, alcohol, tobacco, OTC medications, and unnecessary prescription medications
Postpartum depression, anxiety & psychosis

Risk
Diagnosis
Treatment
Long term consequences
Postpartum depression

- 10-15% women
- Distinct from baby blues: later, more persistent, anhedonia, interferes with sleep and appetite
- Begin in the first 3-6 months postpartum
- Screen with EPDS = Edinburgh Postnatal Depression Scale
  - Emphasizes mood and cognitive features of depression rather than neurovegetative symptoms
  - Score >13 is suggestive of clinically significant depression warranting further assessment

Postpartum depression may be the first “early adverse life event” for the infant, contributing to psychiatric vulnerability later in life (Stowe Z).

Single best predictor of mental health problems in early and middle childhood (Essex MJ).
Transmission of Risk

- Depressed mothers have been found to be intrusive or withdrawn in interactions with their infants (Cohen 1986).
- In preclinical studies, changes in maternal nurturing permanently alter the offspring’s HPA axis in such a way as to make the individual more vulnerable to stress.
- Infants of depressed mothers display (Abrams, 1995):
  - increased gaze aversion
  - poorer orienting skills
  - depressed motor tone
  - lower activity levels
Postpartum risk assessment

- Postpartum depression often presents with intrusive thoughts of harming the newborn

- Screen for homicidal thoughts
  - Normalize them
  - Ask: “Do you ever have intrusive thoughts of harming your baby?”
  - Obtain details on thoughts, intent, distress with thoughts and whether partner is aware of these thoughts
  - Ask if she feels comfortable caring for her child

- Screen for suicidal thoughts
Postpartum anxiety

- **GAD:** mom fears often infant dying, unable to sleep
  - Challenge catastrophic thinking, encourage return to exercise ASAP
  - Engage partner or extended family in helping to care for the child. Complete FMLA paperwork if needed for caregivers
  - Initiate psychotherapy – psychoeducation, CBT, IPT
  - May use low doses of diphenhydramine or lorazepam at bedtime to facilitate sleep
  - Consider use of sertraline 25 mg QHS or other SSRI

- **OCD:** spike in incidence postpartum
  - Contamination fears > forbidden thoughts > symmetry
  - Intrusive thoughts of harming the infant are egodystonic
  - Normalize intrusive thoughts as part of illness
  - Good prognosis, responds to SSRI + CBT
Antidepressants and lactation

- Remember exposure via breast milk is “a drop in the bucket” compared with in utero exposure.
- No need to “pump and dump”.
- Can continue whatever drug was used in pregnancy with exception of lithium (requires high motivation and compliance).
- May return to paroxetine if much more effective.
- If selecting initial agent, best data for sertraline, paroxetine. Venlafaxine passes more freely into breast milk than others but can use if helpful.
Postpartum psychosis

- Psychiatric hospital admission is 7 fold more likely in the first month postpartum than in the pregnancy

- Incidence
  - 0.1% in the general population
  - 10% in women with bipolar disorder
  - 50% in women with previous postpartum psychosis

- Usually reflects bipolar disorder diathesis
  - Delusions of guilt or hyperreligiosity, perplexed affect, irritability, racing thoughts, inability to sleep
  - Refusal/ inability to be with the newborn
Postpartum Psychosis

- Often misdiagnosed as postpartum depression
  - More rapid onset: First two weeks postpartum
  - Family history of bipolar disorder or postpartum psychosis
- 4% rate of infanticide, making it a psychiatric emergency that requires hospitalization or separation from the newborn and intensive outpatient treatment
Postpartum Psychosis

- Pure mania much more common than pure depression in women admitted for postpartum psychosis; mixed symptoms are rare
- Mood incongruent delusions are common
- Women with depressive symptoms exhibit later median onset than women with manic symptoms: 18 vs. 7 days postpartum
- Psychotic depression also takes longer to remit: 115 days vs 34 days for pure psychotic mania
- Most women require both an antipsychotic and lithium + benzodiazepine (66%) to achieve remission

Bergink, J Clin Psychiatry 72, 2011
Postpartum psychosis

- **Mood stabilizers**
  - Antipsychotics are first line: haldol, risperidone, olanzapine, quetiapine. If not better in 1-2 weeks, add either
  - Lithium – use if nursing is ceased. Check Anti-TPO Ab – predict low T4 w/ Li
  - Antiepileptics: Divalproex and Carbemazepine
    - Check infant drug levels and liver enzymes q1-3 months
    - Mom must use birth control

- **Risk of recurrence is up to 50%:**
  - Treat prophylactically beginning 1 mo before birth OR
  - Monitor closely (twice a week postpartum) with the help of husband or other family member
Postpartum Psychosis: Etiology

- Most common in first pregnancy
- 19% of women with postpartum psychosis exhibit elevated thyroid peroxidase (TPO) antibodies; half of these also exhibit thyroid dysfunction.
- At 9 months postpartum, the rate of autoimmune thyroid dysfunction (AITD) in postpartum psychosis remained elevated (29% vs 13%) with thyroid dysfunction in 19% of women with postpartum psychosis and only 3% in the control group.
- Significance on mood or vulnerability to postpartum psychosis is unclear

Bergink, Br J Psychiatry, Feb 2011
Psychotropics in Lactation

- **Typical Antipsychotics:**
  - Haldol is preferred, avoid chlorpromazine and other low potency antipsychotics if possible

- **Atypical Antipsychotics:**
  - Infant dose ~ 0.1-1% of maternal dose for risperidone, olanzapine, & quetiapine

- **Benzodiazepines:**
  - Undetectable in infant serum in 9 out of 10 infants (Birnbaum, Pediatrics 1999)
  - Usually no subjective sedation after nursing with lorazepam or clonazepam alone (Kelly, J Pediatrics 2012)
  - Avoid in premature infants or infants with hyperbilirubinemia

- **Lamotrigine:** monitor infant for Stevens Johnson Syndrome (never reported but infant’s blood level = 20-50% of moms)
Case 1: prenatal depression

- 32 yo woman with h/o recurrent MDD well treated with 200 mg sertraline plans for first pregnancy. She feels strongly that she does not want to take medication in pregnancy and tapers off sertraline before conception. By the end of the first trimester she is severely depressed. Sertraline is reintroduced and titrated. She does not feel comfortable taking a “full” dose of sertraline until after delivery; her depression does not remit until after she returns to 200 mg postpartum.
Case 1: Errors

- Assuming sertraline is worse than prenatal depression
- Expecting that she can remain euthymic without sertraline
- Using a non therapeutic dose of sertraline
- In this case, her fetus was exposed not only to sertraline but also to severe prenatal depression
- Had she remained on 200 mg sertraline in pregnancy her fetus would most likely only have been exposed to sertraline
Case 2: panic disorder

- 26 yo with h/o panic disorder well controlled with 100 mg sertraline plans a pregnancy
- She strongly desires to taper off medication
- In the second trimester she develops severe panic and is unable to sleep
- Resuming sertraline is insufficient. Clonazepam, quetiapine, and diphenhydramine are also prescribed with limited benefit. Still cannot sleep
- Child has to go to the NICU because of dependence on clonazepam at birth
Case 2: Errors

- Going off sertraline: if she had stayed on sertraline it is much less likely that her panic would have returned
- Fetus was exposed to 4 medications instead of 1
- Fetus was dependent on clonazepam at birth
- Counsel patients that panic disorder will recur in 50% of patients who stop their antidepressant and in the case of recurrence, may require more medication to get it under control
Case 3: postpartum psychosis

- 30 yo woman is hospitalized 1 week after delivery for what is initially diagnosed as postpartum depression
- At the initial post-discharge outpatient visit she describes out of body experiences related to childbirth and is hyperreligious and perplexed on interview
- Olanzapine is initiated and titrated to 10 mg QHS, resolving her hyperreligiosity.
Case 3: continued

- Olanzapine alone did not fully abate hyperreligiosity. Lithium was added and her MSE returned to normal.
- Olanzapine was eventually cross tapered to aripiprazole for SE management.
- In the years after her child was born, she demonstrated intermittent manic symptoms and was eventually diagnosed with bipolar disorder I.
- In preparation for a second pregnancy her medication was changed to quetiapine + lithium.
Resources

- www.womensmentalhealth.org
- Don’t rely exclusively on the FDA pregnancy categories. The ratings for many psychiatric drugs are often based on limited or unpublished data
- Julianne Zweifel 824-6160