

CoCM in Perinatal Practice

February 22, 2023

Samantha Shaw, MD

Welcome

- Please sign in:

If your full name is not displayed on Zoom, please take a moment to rename yourself by clicking on the 3 dots in the upper right corner of your picture and selecting “rename” so we know who you are

Please use the chat feature to sign in and **let us know who you are, what your role is, and where you are from**

- We encourage participants to keep their video on if comfortable
- Please keep yourself muted to reduce distractions
- Please place questions in chat and we will ensure that they are answered

Disclosure

The Michigan Institute for Care Management and Transformation (MICMT) and the Michigan Collaborative Care Implementation Support Team (MCCIST) have been contracted by Blue Cross Blue Shield of Michigan for this project.

This presentation is being recorded.



Thank you to Blue Cross Blue Shield of Michigan

Blue Cross Blue Shield of Michigan has contracted with the Michigan Collaborative Care Implementation Support Team (MCISST) and Mi-CCSI to provide training and implementation on the evidence-based treatment model of Collaborative Care to primary care practices throughout the state of Michigan.

We would like to thank BCBSM for their attention, initiation and support of this important work.



Perinatal in collaborative care 2023 disclosures

The nurse planner, content experts', faculty, and others in control of content have no relevant financial relationships with ineligible companies.

Successful completion of the course includes ***have audio and see the slides live; join the course by your individual computer***

Social Work participants:

must attend Day 1 of the training 8:00am – 9:30am: “Perinatal Collaborative Care: Symptomology, Screening & Assessment”
thereafter attendance at the entire session(s)
credit awarded as commensurate with participation

Nursing participants

attendance at the entire session(s)
credit awarded as commensurate with participation

Nursing:

Upon successful completion of this activity the participant may earn a maximum of 7.0 Nursing CE contact hour.

Michigan Institute for Care Management and Transformation is approved as a provider of nursing continuing professional development by the Wisconsin Nurses Association, an accredited approver by the American Nurses Credentialing Center's Commission on Accreditation.

Social Work:

Upon successful completion of this activity, participant may earn a maximum of 7.0 Social Work CE contact hours.

Michigan Institute for Care Management and Transformation is an approved provider with the Michigan Social Work Continuing Education Collaborative. Approved provider Number: MICEC 110216.

Perinatal in collaborative care 2023 instructions for Behavioral Health Care Managers and other practice staff:

Following the course completion on 3/1/2023

- You will receive an e-mail from the Michigan Institute for Care Management and Transformation
 - Please allow up to 24 hours to receive the e-mail. If you do not receive within 24 hours, please submit an inquiry via the [MICMT contact form](#).
- Please follow the link to complete the evaluation within (5) business days for each session you attend to earn credit.
- MICMT highly encourages you to **submit** an evaluation for the sessions you attend.

Perinatal in collaborative care 2023 instructions for physicians

- **Financial Disclosure Information:**

- *There are no relevant financial relationships with ACCME-defined commercial interests to disclose for this activity.*

- **Accreditation and Credit Designation:**

- The University of Michigan Medical School is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.
- The University of Michigan Medical School designates this live activity for a maximum of 5.50 *AMA PRA Category 1 Credit(s)*™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

- **Evaluation and Certificate:**

- Attendance must be registered within 6 months to be awarded credit. Please complete the following steps to fill out the course evaluation and print your certificate:
 - Login to your account at MiCME at <https://micme.medicine.umich.edu/>
 - Don't have an account? Click on the "Login or Create a MiCME Account" link at the top of the page and follow the instructions.
 - **Note: You must have a MiCME account to claim credit for any University of Michigan Medical School (UMMS) CME activity.**
 - **See CME Activity Information: Perinatal in Collaborative Care 2023 Feb. 22-28, 2023, handout for full details.**

For questions or concerns, please submit an inquiry via the [MICMT contact form](#).

Learning objectives – day 1

PCP, BHCM, BHCM Clinical supervisors

- Identify the unique factors of CoCM with the OB population, scope of application and approach considerations
- Identify symptoms/symptoms of perinatal/post-partum preexisting and new onset MH conditions
- Describe the impact of perinatal/post-partum mental health problems on obstetric, maternal and child outcomes
- Explain the importance of cultural humility and trauma informed care in perinatal care
- Discuss risk/resiliency factors for perinatal mental health and importance of patient centered assessment (e.g., How to talk with patients about medications)
- Explain the use of psychotropic medications during perinatal/post-partum
- Discuss the cost/benefit analysis of medication during perinatal/post-partum
- Recognize liability limits associated with the use of psychotropic medications during perinatal/post-partum

Learning outcome

- Participants will be able to translate key processes within their practice setting to integrate the Collaborative Care Model, for their perinatal patient visits.

Schedule for today

8:00 - 8:05 AM	Introduction of the day and housekeeping
8:05 - 8:35 AM	Introduction to CoCM in Perinatal Practice
8:35 - 10:00 AM	Symptomology, Screening and Assessment
10:00 - 10:05 AM	Break
10:05 - 11:00 AM	Psychopharmacology

Speaker Introduction



Samantha Shaw, M.D.

Clinical Assistant Professor

Perinatal and reproductive psychiatrist

Perinatal and Reproductive Psychiatry Clinic

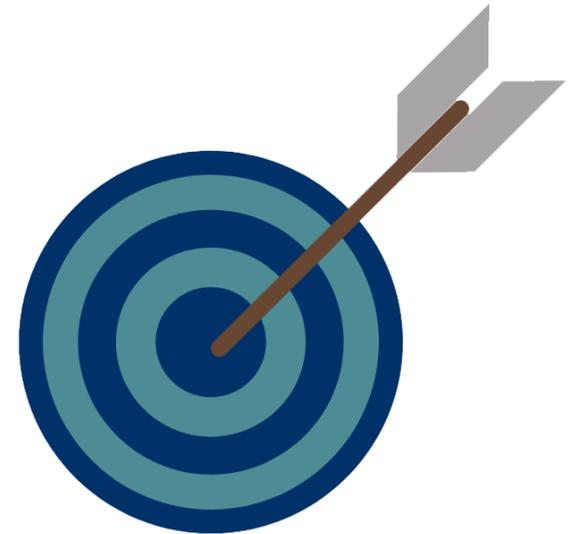
Department of Psychiatry

University of Michigan

Introduction to CoCM in perinatal practice

Goals for today

- **Identify the unique factors** of CoCM in the perinatal population.
- **Define the scope** of CoCM application and approach considerations.



Identifying patients for CoCM

Persons who are cared for **during perinatal period:**

- Pregnancy
- Postpartum (up to 1 year after childbirth depending on your service)
- Persons who have experienced reproductive loss (up to 1 year post loss)

AND have **co-occurring mental health needs:**

- CoCM is designed for **mild to moderate** presentations of:
 - Diagnosis of depression and/or anxiety (often historical per chart)
 - And/or current PHQ-9 and/or GAD-7 of score 10–14

Identifying patients for CoCM

Caveat: boundaries are at times blurry

- Pregnancy/birthing /postpartum hormonal changes may reactivate symptoms or make presentations more complex
- Mild symptoms may not meet criteria for MDD or GAD
 - Grief/loss, adjustment difficulties, mild depression/anxiety
- Moderate symptoms also may fall into different diagnosis categories
 - Bipolar II disorder, PTSD, personality disorders

Special considerations for treating perinatal patients

- **Flexibility needed**—e.g., may continue working with a patient who has suffered a loss then becomes pregnant again, etc.
- Awareness of **high prevalence of trauma** among women:
 - Past (developmental, relational), new (related to current perinatal episode), or ongoing (experiencing intimate partner violence)
 - Perinatal period may “re-activate” previous trauma; previous trauma may make women more susceptible to new trauma in the perinatal period
- Awareness of **racial differences** in the perinatal experience—discrepancy in mortality rates, systemic racism

Special considerations for treating perinatal patients

- Patients/providers may have **strong feelings about medications**
- Awareness of **identity changes**—unique experiences of what it is to be pregnant, what it is to be a parent, etc.
- Awareness of **body and life changes** (e.g., work, partner relationship, etc.)
- Awareness of **cultural differences**—variety of cultural practices and attitudes towards pregnancy and postpartum

What about moderate to severe patients?

Higher level of care—who are these patients?

- PHQ or GAD scores: **PHQ-9 and/or GAD-7 of 15+**
- Patients who are **not improving after 8-12 weeks**
- Patients who **are struggling to function**
 - Can't care for self
 - Can't care for child(ren)
- Patients with **safety risks/concerns**
 - Active safety concerns: Active suicidal ideation
 - Severe substance use disorders
 - Active psychosis-like delusions or mania
 - Significant developmental disabilities
 - Personality disorders requiring long-term specialty care
- Patients with **complex diagnoses**
 - Trauma/PTSD/personality disorder
 - Bipolar I – mania in past
 - Schizophrenia, schizoaffective disorder

Acute safety concerns: suicidal ideation

Suicidal ideation is a common symptom of depression

- Important to know when **immediate intervention** is needed.
 - PHQ-9, Question 9: Thoughts that you would be better off dead or of hurting yourself in some way?
- A **workflow for suicidal ideation** should be built into any Collaborative Care model as well as a **policy that all practice staff are familiar with.**

NOTE: a suicide prevention protocol is a required component of the CoCM initiative with BCBSM.

Higher level of care

- May place a **consult to MC3 Perinatal** for recommendations
- May be transferred to a **community psychiatrist**, if available
- May be eligible for **Community Mental Health**
- May be referred to **PHP, IOP, or inpatient psychiatric hospital**, with higher level of care arranged as follow-up (psychiatrist in the community)

MC3 perinatal

A same-day consultation service

- May place a consult to MC3 perinatal (free, same-day consultation with perinatal psychiatrist) via phone call or on-line request
 - Provider must enroll (fast, free) in MC3 perinatal program to access services
- Website also contains provider toolkit and psychopharmacology reference cards with information about safety of most psychotropics in the perinatal period



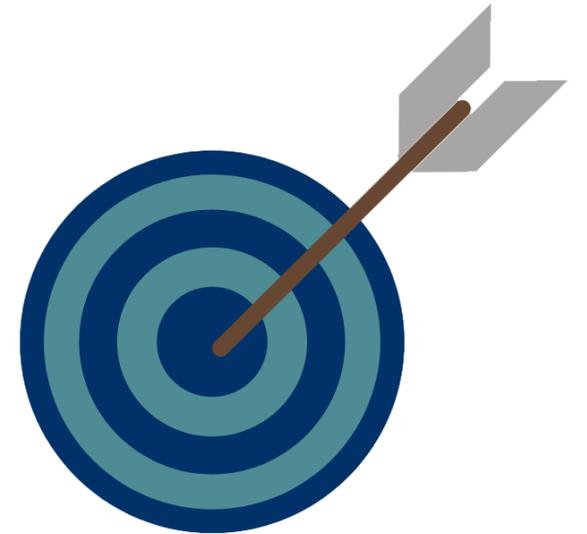
A screenshot of the MC3 perinatal website homepage. The top navigation bar includes links for SIGN UP, REQUEST CONSULTATION, RESOURCES, NEWS, ABOUT, CONTACT US, and BHC LOGIN, along with the Michigan Medicine logo. The main content area features a photograph of a pregnant woman's belly being touched by a healthcare provider. Text on the page reads "MC3 is for providers" and "Primary care providers in Michigan are eligible to participate in the program. This includes M.D.s, D.O.s, N.P.s, P.A.s and C.N.M.s in pediatric, OB/GYN, family medicine, internal medicine, and psychiatry practices." A "SIGN UP" button is visible in the bottom right corner of the image area. Below the screenshot, a teal button labeled "Request Consultation" is centered.

Symptomatology, screening, and assessment

A brief review of possible presentations

Objectives

- 1) Identify symptoms/syndromes of perinatal/postpartum pre-existing and new onset mental health conditions.
- 2) Understand the impact of perinatal/postpartum mental health problems on obstetric, maternal and child outcomes.
- 3) Understand the importance of cultural humility and trauma-informed care in perinatal care.
- 4) Understand risk/resiliency factors for perinatal mental health and importance of patient-centered assessment (e.g., how to talk with patients about medications).



Baby blues

- Within the first two weeks postpartum
- Emotional instability, intense feelings (positive or negative), tearfulness
- Criteria for depression not met
- Likely due to hormonal fluctuations, sleep deprivation, huge life change

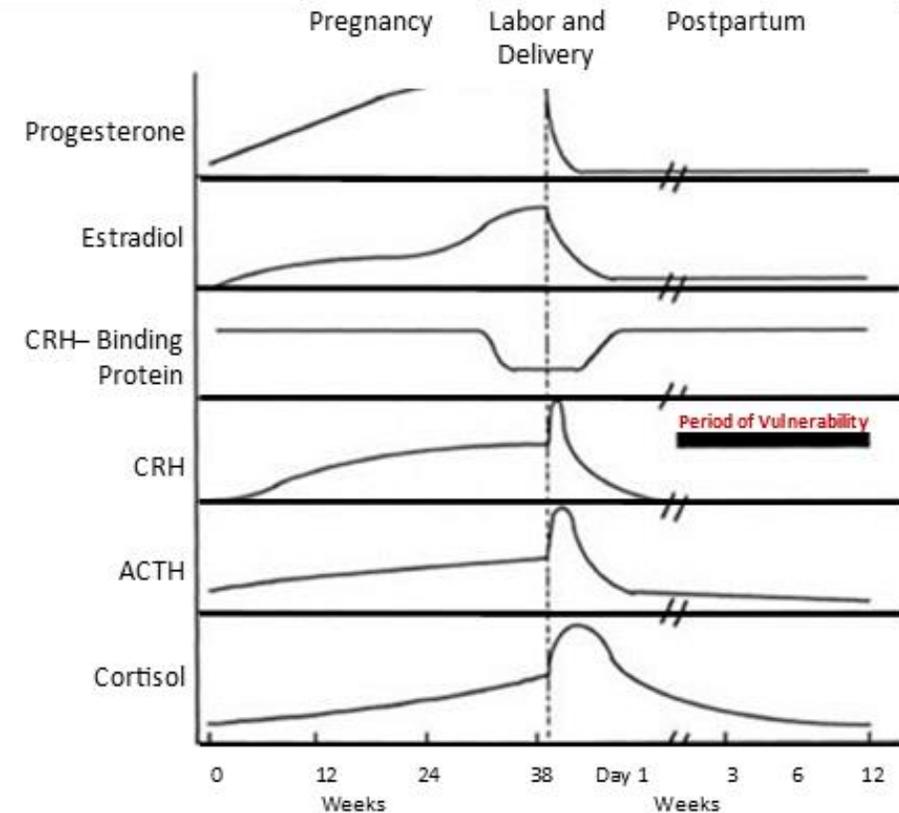


Figure 5. Hormonal changes and period of increased vulnerability to mood disorders and autoimmune phenomena during pregnancy and the postpartum period. The increasing levels of corticotrophin releasing hormone (CRH) in the last trimester, along with the decreasing levels of CRH binding protein, may participate in the initiation and progression of labor. The decreased secretion of estradiol and hypothalamic CRH in the postpartum period is associated with changes in the activity of the stress system, represented here by decreased CRH secretion. ACTH = adrenocorticotropic hormone.

Baby blues treatment

- Many times it resolves on its own.
- Bolstering mom's supports and making sure she is getting adequate sleep are good first steps.
- Continue to monitor patient for potential transformation into postpartum depression.

Perinatal depression

Major depressive disorder:

- DSM V: Five or more symptoms during the same 2-week period and at least one of the symptoms should be either (1) depressed mood or (2) loss of interest or pleasure. Must cause marked distress or dysfunction.
- SIGECAPS

S—sleep-too little/too much

I—loss of interest in things previously found pleasurable

G—excessive feelings of guilt

E—low energy

C—poor concentration

A—appetite-increase or decrease

P—psychomotor retardation; moving/responding very slowly

S—suicidal thoughts

Depression can occur during pregnancy as well as postpartum. The DSM V puts more strict time frames on when a depressive episode can be called postpartum depression. In practice, we tend to give this diagnosis if the episode occurs within the first year postpartum.

Depression screening: PHQ-9

- **Scoring**

- 0–9 none/mild
- 10–14 moderate
- 15–19 moderate/severe
- 20–27 severe

- **CoCM < 15**

- **0 on #9**

Over the <u>last 2 weeks</u> , on how many days have you been bothered by any of the following problems?		Not at all	Several Days	More than half the days	Nearly every day
1	Little interest or pleasure in doing things	0	1	2	3
2	Feeling down, depressed or hopeless	0	1	2	3
3	Trouble falling or staying asleep, or sleeping too much	0	1	2	3
4	Feeling tired or having little energy	0	1	2	3
5	Poor appetite or over eating	0	1	2	3
6	Feeling bad about yourself – or that you are a failure or have let yourself or your family down	0	1	2	3
7	Trouble concentrating on things, such as reading the newspaper or watching television	0	1	2	3
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	0	1	2	3
9	Thoughts that you would be better off dead or of hurting yourself in some way	0	1	2	3

PHQ9 – Total Score

Depression screening: EPDS

Takes 5 minutes to fill out.

Takes 3 min to score.

≥ 13 probable major depression

≥ 10 probable minor depression

Scoring

- CoCM score: 10–18
- 0 on #10
- EPDS ≥ 19 : severe depression

SPECTRUM HEALTH  SCORE _____

EDINBURGH POSTNATAL DEPRESSION SCALE

Today's Date: ____ / ____ / ____ Name: _____ Baby's Age: _____

As you have recently had a baby, we want to know how you are feeling now.
Please underline the answers which come closest to how you
have felt in the past seven days, not just how you feel today.

IN THE PAST SEVEN DAYS:

A. I have been able to laugh and see the funny side of things . . . 0 As much as I always could 1 Not quite so much now 2 Definitely not quite so much now 3 Not at all	F. Things have been getting on top of me . . . 3 Yes, most of the time I haven't been able to cope at all 2 Yes, sometimes I haven't been coping as well as usual 1 No, most of the time I have coped quite well 0 No, I have been coping as well as ever
B. I have looked forward with enjoyment to things . . . 0 As much as I ever did 1 Rather less than I used to 2 Definitely less than I used to 3 Hardly at all	G. I have been so unhappy that I have had difficulty sleeping . . . 3 Yes, most of the time 2 Yes, sometimes 1 Not very often 0 Not at all
C. I have blamed myself unnecessarily when thing went wrong . . . 3 Yes, most of the time 2 Yes, some of the time 1 Not very often 0 No, never	H. I have felt sad or miserable . . . 3 Yes, most of the time 2 Yes, quite often 1 Not very often 0 No, not at all
D. I have been anxious or worried for no good reason . . . 0 No, not at all 1 Hardly ever 2 Yes, sometimes 3 Yes, very often	I. I have been so unhappy that I have been crying . . . 3 Yes, Most of the time 2 Yes, Quite often 1 Only occasionally 0 No, Never
E. I have felt scared or panicky for no very good reason . . . 3 Yes, quite a lot 2 Yes, sometimes 1 No, not much 0 No, not at all	J. The thought of harming myself has occurred to me . . . 3 Yes, Quite often 2 Sometimes 1 Hardly ever 0 Never

M:\HCP\PPD\Edinburgh Postnatal Depression Scale.doc (10/16/2012)

Case #1: Lilly

Lilly is a 28-year-old first-time mom coming to see her OB for a postpartum mood check. She is 6 weeks postpartum and is not doing well. She comes in alone—her husband is watching their daughter. Lilly struggles to sleep due to worry that her daughter might stop breathing. She frequently checks on her daughter while she is sleeping to make sure she can see the baby's chest rise and fall. She has not yet left the house with the baby, as it's flu season, and she worries about her daughter getting ill. She has been wiping down all of the surfaces at home with bleach on a daily basis to try to prevent this. She feels exhausted and sick to her stomach with worry. She appears very thin. Her mind races with worst case scenarios, and because of this, she has found it hard to connect with her baby.

Poll

What is this patient's diagnosis?

- A) Postpartum depression
- B) Obsessive-compulsive disorder (OCD)
- C) Psychosis
- D) Postpartum anxiety
- E) Not enough information

Perinatal anxiety

General anxiety disorder (DSM V):

- Excessive anxiety and worry occurring most days for at least 6 months, about a number of events or activities (such as work or school performance)
- Difficult to control the worry
- Anxiety or physical symptoms cause clinically-significant distress or impairment in social, occupational, or other important areas of functioning
- Anxiety associated with three (or more) of the following (with at least some symptoms having been present for more days than not for the past 6 months):
 - Restlessness, feeling keyed up or on edge
 - Being easily fatigued
 - Difficulty concentrating or mind going blank
 - Irritability
 - Muscle tension
 - Sleep disturbance

Perinatal anxiety

NOTE: Perinatal anxiety tends to be specific to certain topics, usually the health and safety of the baby, and we tend to make the diagnosis if symptoms have been present for 1–2 weeks (vs. 6 months)

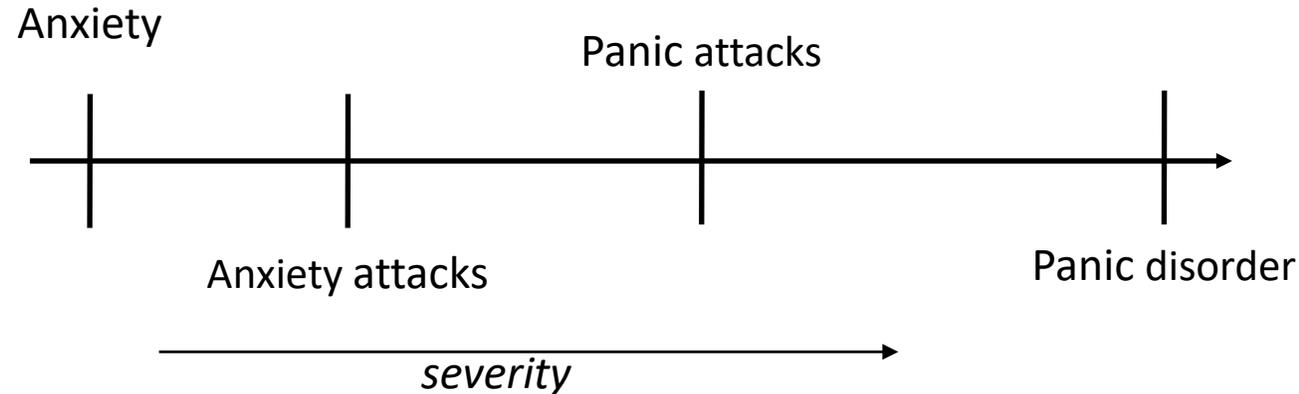
There is no formal DSM V designation for perinatal anxiety, but it is as common, or more common, than perinatal depression

Anxiety screening: GAD-7

- Scoring
 - 0–9 none/mild
 - 10–14 moderate
 - 15+ severe
- CoCM < 15

Over the <u>last 2 weeks</u> , on how many days have you been bothered by any of the following problems?		Not at all	Several Days	More than half the days	Nearly every day
1	Feeling nervous, anxious or on edge	0	1	2	3
2	Not being able to stop or control worrying	0	1	2	3
3	Worrying too much about different things	0	1	2	3
4	Trouble relaxing	0	1	2	3
5	Being so restless it is hard to sit still	0	1	2	3
6	Becoming easily annoyed or irritable	0	1	2	3
7	Feeling afraid as if something awful might happen	0	1	2	3

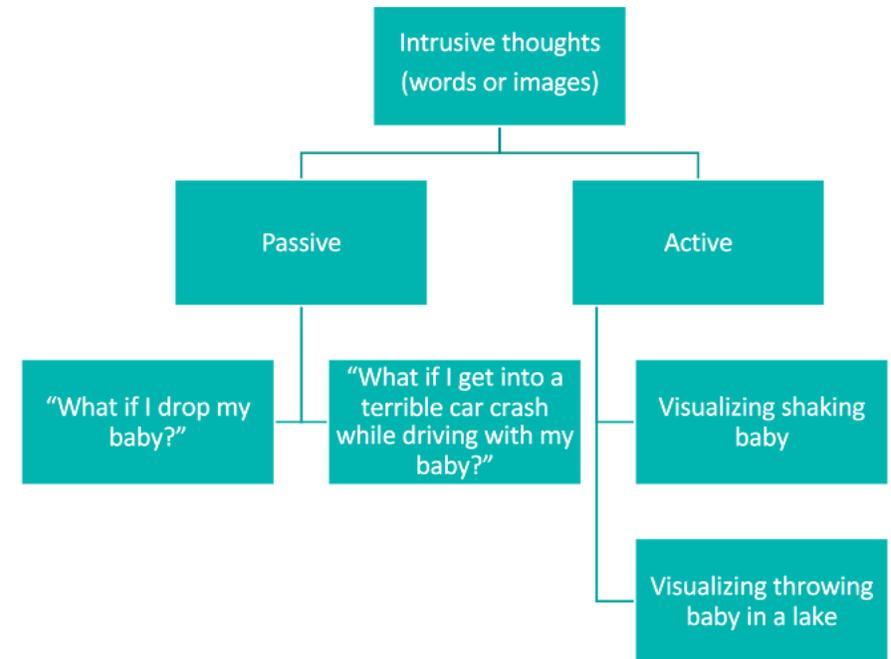
Anxiety and panic



- Anxiety attacks, panic attacks, and panic disorder
 - Anxiety attack: heightened state of anxiety that can last for several hours.
 - Panic attack: severe state of anxiety (patients believe they are dying or about to “go crazy”), doesn’t last for more than a few minutes. Usually includes physical symptoms of rapid heart rate, shortness of breath, sweating, tunnel vision.
 - Panic disorder: DSM V diagnosis involving relatively frequent panic attacks such that patient fears having more and avoids situations because of them (can lead to agoraphobia).

Intrusive thoughts

- Involuntary thoughts/images/ideas that are distressing and hard to get rid of
- Not diagnostic of any particular disorder, but are most common in anxiety disorders
- Anxiety and intrusive thoughts are heightened in late pregnancy & postpartum period



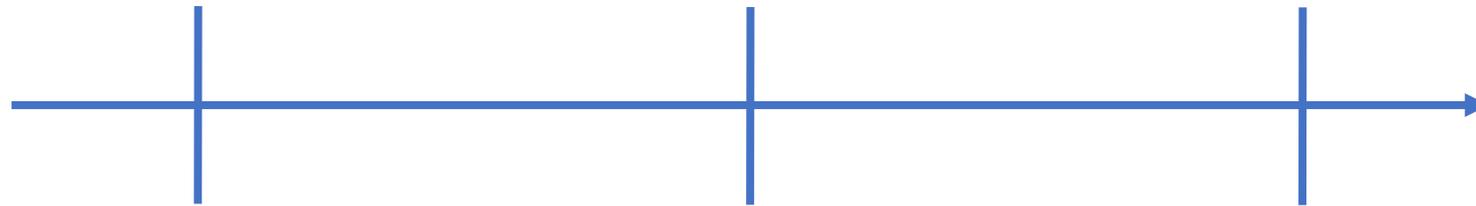
Intrusive thoughts and OCD

- When intrusive thoughts are very intense/frequent, they may be representative of a diagnosis of OCD:
 - Intense, recurrent obsessions
 - May have compulsions (behaviors) they do to try to soothe obsessions
 - Obsessions/compulsions
 - take up a lot of patient's day
 - cause distress/impair functioning
- OCD can have new onset (never had these symptoms before) in the perinatal period

Postpartum anxiety and psychosis: A continuum of worrisome thoughts

Anxiety: excessive worry about possible but relatively unlikely events

Psychosis: intense preoccupation with extremely unlikely/bizarre ideas (delusions)



OCD: “sticky” worry/fixation on moderately to highly unlikely events

Note that patients may fall into “gray areas” along the continuum, not fitting perfectly into any of these categories

Risk assessment for thoughts of infant harm

Low risk

- Ego dystonic/Intrusive (are upsetting to the patient)
- Mother doesn't want to harm baby, states she will not
- Mother has been avoiding certain objects or the infant, to avoid harm coming to them (i.e., putting away all knives)
- Generally, these are patients with isolated intrusive thoughts, anxiety, or OCD

*In this case, having these thoughts does not at all increase the risk that an individual will act on them

High risk

- Ego syntonic (thoughts are not upsetting or may be comforting to the patient)
- Patient has symptoms of psychosis (hallucinations, disorganized thinking, delusions)
- Patient thinks harming infant would benefit infant/society in some way (due to delusional beliefs)
- Has other bizarre beliefs
- Patient has a history of trauma and expresses wanting to get revenge on baby's other parent
- Generally, these are patients who are psychotic or who have severe personality disorders

****High risk patients should be directed to the nearest emergency room or have an ambulance called to escort them there****

Review of Case #1: Lilly

Lilly is a 28-year-old first time mom coming to see her OB for a postpartum mood check. She is **6 weeks postpartum** and is not doing well. She comes in alone—her husband is watching their daughter. Lilly **struggles to sleep** due to **worry** that her daughter might **stop breathing**. She **frequently checks** on her daughter while she is sleeping to make sure she can see the baby's chest rise and fall. She has not yet left the house with the baby, as it's flu season, and she worries about her daughter getting ill. She has been **wiping down** all of the surfaces at home with bleach **daily** to try to prevent this. She feels **exhausted** and **sick to her stomach with worry**. She appears very thin. Her **mind races** with worst case scenarios and because of this she has found it hard to connect with her baby.

Review questions (as poll/correct A in bold):

What is this patient's diagnosis?

- A) Postpartum depression
- B) Obsessive-compulsive disorder (OCD)
- C) Psychosis
- D) Postpartum anxiety**
- E) Not enough information

What are next steps/is disposition?

- A) Normalize patient's symptoms and tell her they will resolve on their own
- B) Refer patient to mental health treatment (e.g., CMH)
- C) Refer patient to CoCM**
- D) Send patient to the emergency room

Case #2: Ciara

Ciara is a 32-year-old, second-time mom who presents to her primary care doctor for concerns about some thoughts she has been having. She brings her 8-week-old and her husband in with her. Her husband takes care of the baby throughout the appointment; Ciara rarely looks over at the baby, even when it starts to cry. Ciara is tearful and tells you that for about two weeks now she has been having images flash through her mind of stabbing her daughter with a knife. She knows that she doesn't want to hurt her daughter but is terrified that these thoughts mean that she is going to. Because of this, she has locked up all the knives in the house and tries to avoid being alone with the baby. She generally has been trying to avoid caring for her daughter over this time for fear that she might hurt her in some way.

Questions:

What is this patient's diagnosis?

- A) Postpartum depression
- B) Obsessive-compulsive disorder (OCD)
- C) Psychosis
- D) Postpartum generalized anxiety
- E) not enough information

What are next steps/is disposition?

- A) Normalize patient's symptoms and tell her they will resolve on their own
- B) Refer patient to mental health treatment (e.g., CMH)
- C) Refer patient to CoCM
- D) Send patient to the emergency room

Case #3: Angela

Angela has a history of childhood neglect and abuse, depression, and anxiety. She has a baby that is 4 weeks old. Her pregnancy was uncomplicated, but her delivery was complicated by postpartum hemorrhage that was late in being discovered and ultimately required blood transfusion. She kept mentioning to her nurse that she felt light-headed, but her nurse kept reassuring her this was likely due to side effects of anesthesia. Finally, Angela noticed that there was blood soaking through her hospital sheets, at which time, Angela again alerted her nurse who paged the doctor, and the diagnosis of postpartum hemorrhage was made.

Since discharge to home, Angela has had nightmares of this event that wake her up from sleep. She has flashbacks to discovering the blood in her sheets and hearing that she was hemorrhaging and feels constantly on watch for another complication. She feels more irritable and on edge and has gotten into fights with her boyfriend. She is withdrawn from the baby and gets angry when it cries. She is moody and cries at times. She constantly worries that something bad will happen to her or her baby.

Questions (as poll):

Is the patient's childhood trauma history important to her current mental health issue?

- A) Yes
- B) No

What is her diagnosis?

- A) GAD
- B) PTSD
- C) Borderline personality disorder
- D) MDD

Trauma

- **Trauma is common among women**
 - 25% have been sexually abused in childhood
 - 20% experience IPV in their lifetime
 - 4–8% experience IPV during pregnancy
 - 30% of births subjectively experienced as traumatic
- **How common is PTSD in women?**
 - Lifetime prevalence of 12% (males ~6%)
 - Childhood sexual abuse strongest single predictor
 - 3% have new onset PTSD after traumatic birth
 - Overall, 3–7% have perinatal PTSD
 - PTSD is a waxing and waning chronic disorder: pregnancy, antenatal care, and birth are potential major triggers for symptom exacerbation



Intimate partner violence screen

- May occur before, begin in, or continue into the perinatal period
- Must screen for
- Screen adapted from “Responding to Intimate Partner Violence During Telehealth Clinical Encounters”

Intake only	Yes	No
1. In the LAST year have you been afraid of someone close (or less close) to you?		
2. In the LAST year have you been hit, slapped, kicked, pushed, shoved, or otherwise physically hurt by someone close (or less close) to you?		
3. In the LAST year have you been frequently made upset, ashamed, or embarrassed by someone close (or less close) to you?		
4. In the LAST year have you been forced to have sex by someone close (or less close) to you?		

Intake and monthly	Yes	No
5. Do you currently feel safe?		

Simon, M. A. (2021, June 8). Responding to Intimate Partner Violence During Telehealth Clinical Encounters. *JAMA*, 325(22), 2307. <https://doi.org/10.1001/jama.2021.1071>

Symptoms of PTSD

- Trauma involving threat and overwhelm
- Intrusive re-experiencing and fearfulness
- Emotional numbing and avoidance
- Negative alteration in mood and cognition (e.g., persistent self-blame, negative mood)
- Negative alteration in arousal and reactivity (e.g., hypervigilance, recklessness, destructive behaviors)
- Lasting more than one month (of note: up to one month is called acute stress disorder)

Primary Care PTSD screen

Scale

Sometimes things happen to people that are unusually or especially frightening, horrible, or traumatic. For example:

- a serious accident or fire
- a physical or sexual assault or abuse
- an earthquake or flood
- a war
- seeing someone be killed or seriously injured
- having a loved one die through homicide or suicide

Have you ever experienced this kind of event?
YES / NO

If no, screen total = 0. Please stop here.

- If no to first section, screen is negative, and complete
- If yes to first section, score is the number of yes responses to questions 1-5
- Cutoff for further questioning is a score of 4 or more

If yes, please answer the questions below.

In the past month, have you...

1. Had nightmares about the event(s) or thought about the event(s) when you did not want to? YES / NO
2. Tried hard not to think about the event(s) or went out of your way to avoid situations that reminded you of the event(s)? YES / NO
3. Been constantly on guard, watchful, or easily startled? YES / NO
4. Felt numb or detached from people, activities, or your surroundings? YES / NO
5. Felt guilty or unable to stop blaming yourself or others for the event(s) or any problems the event(s) may have caused? YES / NO

Trauma- and stressor-related disorders

DSM V: “Unspecified Trauma- and Stressor-Related Disorder”

- Symptoms cause significant stress/dysfunction, but patient does not meet criteria for PTSD/acute stress disorder, etc.
- Helpful when provider does not have sufficient information to make a more specific diagnosis (briefer interactions, emergency room settings)

Personality disorders

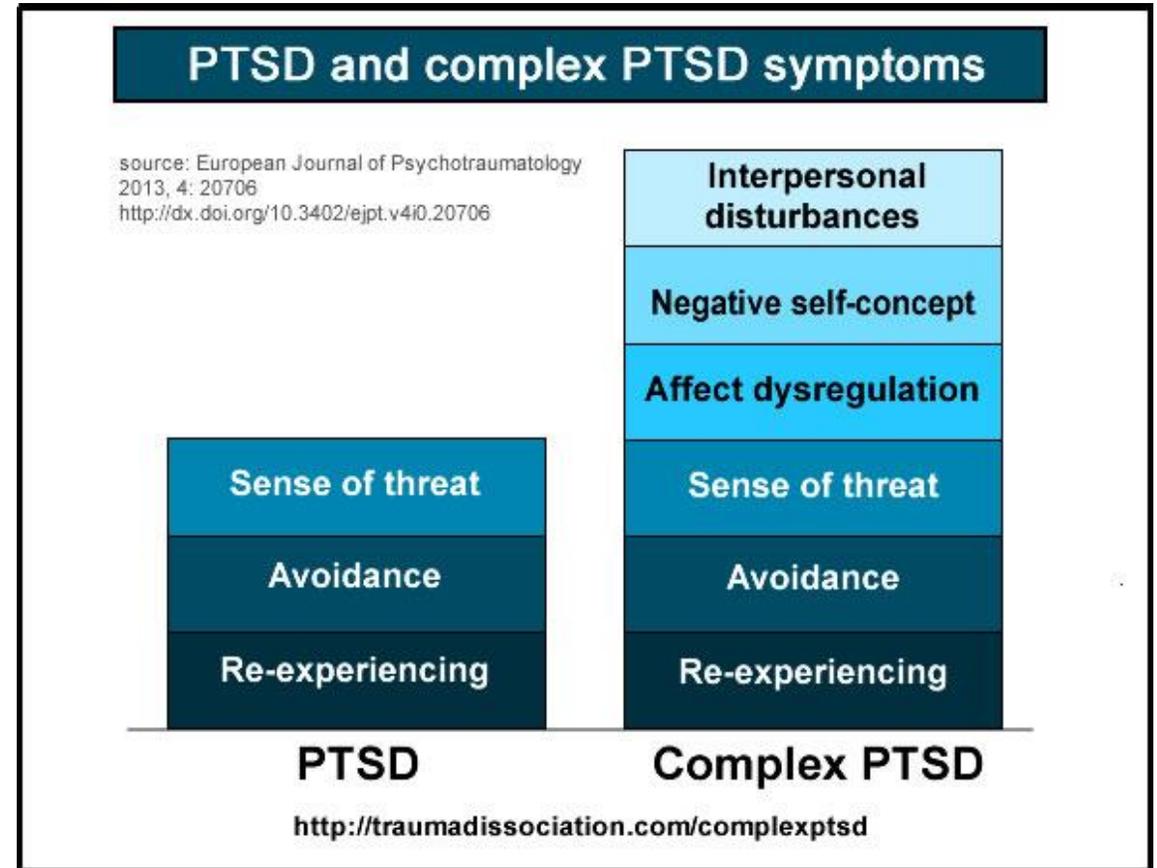
Most interfering with perinatal care: Borderline personality disorder

DSM V: Pervasive pattern of instability of interpersonal relationships, self image, and affects, and marked impulsivity beginning by early adulthood, five or more of the following:

- Frantic efforts to avoid abandonment
- Unstable/intense personal relationships in which alternate between extremes of idealization and devaluation
- Identity disturbance-unstable self image/sense of self
- Impulsivity in at least 2 areas that are self damaging (spending, sex, substance abuse, reckless driving, binge eating)
- Recurrent suicidal behavior, gestures, or threats, or self harming behaviors
- Affective instability-marked reactivity of mood, usually intense but relatively short-lived episodes of dysphoria, irritability, anxiety
- Chronic feeling of emptiness
- Inappropriate intense anger or difficulty controlling anger
- Transient, stress-related paranoid ideation or severe dissociative symptoms

The concept of complex PTSD

- Multiple traumatic events occurring over a period of time
- For example, multiple incidents of child physical abuse and child sexual abuse, prolonged domestic violence, torture, genocide, etc.



PTSD, trauma- and stressor-related disorders, and personality disorders

- Trauma history is extremely important as it greatly impacts the treatment plan
- Of note, the argument has been made that the above diagnoses may exist and evolve in the same individual over time
 - PTSD symptoms can improve over time such that a patient no longer meets criteria for the disorder, but rather, only qualifies for “unspecified trauma- and stressor-related disorder”
 - Because borderline personality disorder is generally rooted in a history of childhood trauma, one could argue that it is also an “unspecified trauma- and stressor-related disorder”

Bipolar disorders

BOTH episodes of depression AND episodes of mania or hypomania

- Depression—as described before
- Mania/hypomania-periods of 3+ days of:
 - Decreased need for sleep
 - Increased activity
 - Increased rate of speech
 - Elevated/euphoric mood OR irrationally irritable mood
 - Excessive spending/risk taking (causing significant consequences)
 - Increased sex drive
 - MAY have psychotic symptoms (paranoia, delusions of grandeur, hallucinations)

Bipolar disorder screening

Mood disorder questionnaire (MDQ) is done if suspicion arises for bipolar disorder

This instrument is designed for screening purposes only and is not to be used as a diagnostic tool.

How to Use

The questionnaire takes less than 5 minutes to complete. Patients simply check the yes or no boxes in response to the questions. The last question pertains to the patient’s level of functional impairment. The physician, nurse, or medical staff assistant then scores the completed questionnaire.

How to Score

Further medical assessment for bipolar disorder is clearly warranted if patient: • **Answers Yes to 7 or more of the events in question #1 AND** • **Answers Yes to question #2 AND** • **Answers Moderate problem or Serious problem to question #3**

Name: _____ Date: _____

Instructions: Check (✓) the answer that best applies to you.

Please answer each question as best you can.

	Yes	No
1. Has there ever been a period of time when you were not your usual self and...		
...you felt so good or so hyper that other people thought you were not your normal self or you were so hyper that you got into trouble?	<input type="radio"/>	<input type="radio"/>
...you were so irritable that you shouted at people or started fights or arguments?	<input type="radio"/>	<input type="radio"/>
...you felt much more self-confident than usual?	<input type="radio"/>	<input type="radio"/>
...you got much less sleep than usual and found you didn't really miss it?	<input type="radio"/>	<input type="radio"/>
...you were much more talkative or spoke faster than usual?	<input type="radio"/>	<input type="radio"/>
...thoughts raced through your head or you couldn't slow your mind down?	<input type="radio"/>	<input type="radio"/>
...you were so easily distracted by things around you that you had trouble concentrating or staying on track?	<input type="radio"/>	<input type="radio"/>
...you had much more energy than usual?	<input type="radio"/>	<input type="radio"/>
...you were much more active or did many more things than usual?	<input type="radio"/>	<input type="radio"/>
...you were much more social or outgoing than usual, for example, you telephoned friends in the middle of the night?	<input type="radio"/>	<input type="radio"/>
...you were much more interested in sex than usual?	<input type="radio"/>	<input type="radio"/>
...you did things that were unusual for you or that other people might have thought were excessive, foolish, or risky?	<input type="radio"/>	<input type="radio"/>
...spending money got you or your family in trouble?	<input type="radio"/>	<input type="radio"/>
2. If you checked YES to more than one of the above, have several of these ever happened during the same period of time? <i>Please check 1 response only.</i>	<input type="radio"/>	<input type="radio"/>
3. How much of a problem did any of these cause you — like being able to work; having family, money, or legal troubles; getting into arguments or fights? <i>Please check 1 response only.</i>		
<input type="radio"/> No problem <input type="radio"/> Minor problem <input type="radio"/> Moderate problem <input type="radio"/> Serious problem		
4. Have any of your blood relatives (ie, children, siblings, parents, grandparents, aunts, uncles) had manic-depressive illness or bipolar disorder?	<input type="radio"/>	<input type="radio"/>
5. Has a health professional ever told you that you have manic-depressive illness or bipolar disorder?	<input type="radio"/>	<input type="radio"/>

This questionnaire should be used as a starting point. It is not a substitute for a full medical evaluation. Bipolar disorder is a complex illness, and **an accurate, thorough diagnosis can only be made through a personal evaluation by your doctor.**

Adapted from Hirschfeld R, Williams J, Spitzer RL, et al. Development and validation of a screening instrument for bipolar spectrum disorder: the Mood Disorder Questionnaire. *Am J Psychiatry*. 2000;157:1873-1875.

Case #4: Sindhu

Sindhu has no history of mental health problems. She gave birth to her first child 3 months ago. She developed postpartum depression 6 weeks postpartum and was prescribed sertraline 50mg at bedtime. She reaches out to her BHC a week later stating that she can't sleep and feels "wired" and more anxious; but feels slightly less depressed.

Questions

What could this patient's symptoms represent?

- A) Over-activation from sertraline
- B) SSRI-induced mania
- C) Short lived side effect of sertraline
- D) All of the above

What further questions do you want to ask?

- A) How long she has been experiencing these symptoms
- B) If she has ever felt like this before or has a history of mania/bipolar disorder
- C) If she has been speaking fast, spending a lot of money, taking risks
- D) All of the above

Case #5: Naia

Naia is a 32-year-old with a history of depression who gave birth two weeks ago and is presenting for a postpartum check up. She appears anxious and her eyes dart around the room. She is unkempt. She brings her son with her and holds him close to her. It is summer, but she has him bundled up in multiple layers of clothing. The baby's face is flushed. She looks at you intently and asks, "are there any cameras in here?" Naia only sleeps "when it's safe" and can't really tell you how many hours she is getting. She is not breastfeeding.

The father of the baby is not involved, and Naia's parents live an hour away. She is currently living with a roommate. She has a few local friends. When you ask Naia what she does during the day, she abruptly starts crying and shaking and tells you she "can't do anything" because it's "not safe." When you look at her chart, it appears she has lost 15lbs since she was discharged after her delivery.

You encourage Naia to try to take some deep breaths. You reassure her that she is safe right now. You try to engage her in more questions, but she doesn't answer them. You ask if you can call her roommate. Patient's roommate states that she is worried about Naia. Naia is usually very neat but lately has been leaving her room and the kitchen a mess. She hears the baby crying a lot at night.

Questions (poll/correct answer in bold):

What is this patient's diagnosis?

- A) Postpartum depression
- B) Obsessive-compulsive disorder (OCD)
- C) Psychosis**
- D) Postpartum anxiety
- E) Not enough information

What are next steps/is disposition?

- A) Normalize patient's symptoms and tell her they will resolve on their own
- B) Refer patient to mental health treatment (e.g., CMH)
- C) Refer patient to CoCM
- D) Send patient to the emergency room**

Perinatal psychosis (usually postpartum)

- Usually rapid postpartum onset (first couple weeks)
- Hallucinations—hearing, seeing things that are not really there
 - Especially concerning if voice(s) telling them to do things (command auditory hallucinations)
- Delusions—false beliefs that are held despite significant evidence to the contrary (i.e., paranoia)
- Bizarre/non-sensical behavior
- In most cases, for patients who do not have a history of these symptoms, they are reflective of a previously undiagnosed/bipolar disorder (as opposed to schizophrenia, etc.)

Postpartum psychosis: a psychiatric emergency (send to ED)

Because individuals with psychosis do not perceive their environment correctly, they are not equipped to appropriately care for an infant

- Do not accurately assess danger in the environment, so can put themselves and child(ren) in dangerous situations
- Can perceive danger in safe environments, making them less likely to seek care
- Can become so preoccupied with symptoms that they are not capable of being sufficiently attentive to child(ren)-->neglect
- Can develop delusions/hallucinations that lead them to harm their child(ren)

Review case #5: Naia

- Patient needs to be evaluated at an ED and needs admission
- Let patient know that you believe that she is quite ill and needs to be evaluated at the hospital
- Continue to reassure her that you are doing your best to help keep her safe
- IN PERSON: Fill out a petition, call an ambulance to take patient to ED
- REMOTELY: Encourage patient to present to ED; if she will not go, could have police do a welfare check

ADHD

- Prevalence
 - 4.4 percent among 18- to 44-year-olds in United States
 - Majority of people diagnosed with ADHD in childhood continue to meet criteria as adults
- Comorbidity
 - Mood disorders, odds ratio (OR) = 2.7 to 7.5 (95% CI 3.0-8.2)
 - Anxiety disorders, OR = 1.5 to 5.5 (95% CI 2.4-5.5)
 - Intermittent explosive disorder, OR = 3.7 (95% CI 2.2-6.2)
 - Substance use disorders
 - Any substance use disorders (SUD), OR = 3.0 (95% CI 1.4-6.5)
 - Can be hard at times to differentiate from PTSD

ADHD symptoms in adult life

- Executive dysfunction
 - Poor sustained attention
 - Poor organizing/prioritizing/time management
 - Poor task follow-through/completion
- Inattention
 - Not completing tasks in a timely manner
 - Driving errors (traffic and speeding tickets)
 - Frequently losing things
 - Struggling to focus on one thing at a time (e.g., has to be on phone while watching TV or fidgets during meetings)
- Impulsivity
 - Engaging in activities with high potential for negative consequences
 - Premature termination of relationships/jobs
- Hyperactivity
 - Fidgety/restless
 - Talking too much/interrupting others
- Emotional dysregulation
 - Mood lability/irritability
 - Low motivation

ADHD screening

- We do not regularly screen patients for ADHD
- However, it can significantly affect patient's ability to function, as well as mood, anxiety, and substance use
- Therefore, it is important to pay attention to this diagnosis and treat as is appropriate (discuss with perinatal psychiatrist)
- It may be reasonable for some patients to continue stimulant medications during pregnancy/postpartum

Case #6: Ashanti

Ashanti has her intake into the program when she is 8 months pregnant. She was late to getting prenatal care. She endorses symptoms of “mood swings” and states that she has a history of bipolar disorder. When asked about substance use, she pauses for a long time before answering, and finally states that she did abuse cocaine at one time but has discontinued in pregnancy.

Questions: (discussion)

How confident do you feel in Ashanti's diagnosis of bipolar disorder and why?

- A) Confident, as this is what patient reported she was diagnosed with.
- B) Not confident, as substance intoxication can mimic manic symptoms, so a diagnosis of bipolar disorder may be incorrect if it was made during a period of substance abuse.

What do you think are the chances that she is still using substances?

Do you discuss this further with her?

Substance misuse in pregnancy: potential red flags

Patients who are abusing substances may:

- Seek prenatal care late in pregnancy
- Have poor adherence to appointments
- Experience poor weight gain
- Exhibit symptoms of sedation, intoxication, withdrawal, or erratic behavior
- Have track marks from intravenous injection or lesions from interdermal injections or “skin popping,” abscesses, or cellulitis.
- May have positive results of serologic tests for HIV, hepatitis B, or hepatitis C

Risky behaviors: pregnancy and addiction

- Risky behaviors undertaken to support habit:
 - Prostitution
 - Theft
 - Violence

Such activities expose women to sexually transmitted infections, becoming victims of violence, and legal consequences, including loss of child custody, criminal proceedings, or incarceration.

Substance use disorders

- Especially important to identify and treat in pregnancy due to:
 - Impact on fetus
 - Risk of harm to fetus related to high-risk behaviors associated with substance use
- High comorbidity with mental health issues
- If suspicion for use or routinely suggested question:
 - “At our clinic as part of standard of care all patients are asked about their use of prescribed and non-prescribed substances as it may impact the health of mom and baby. Is it okay that we talk about any use of such substances now?”

Substance use screening: 4 Ps and CRAFFT

4 Ps

Parents: Did any of your parents have a problem with alcohol or other drug use?

Partner: Does your partner have a problem with alcohol or drug use?

Past: In the past, have you had difficulties in your life because of alcohol or other drugs, including prescription medications?

Present: In the past month, have you drunk any alcohol or used other drugs?

Scoring: Any “yes” should trigger further questions

This does not have to be asked verbatim

C: Have you ever ridden in a CAR driven by someone (including yourself) who was high or had been using alcohol or drugs?

R: Do you ever use alcohol or drugs to RELAX, feel better about yourself, or fit in?

A: Do you ever use alcohol or drugs while you are by yourself? Or ALONE?

F: Do you ever FORGET things you did while using alcohol or drugs?

F: Do your FAMILY or FRIENDS ever tell you that you should cut down on your drinking or drug use?

T: Have you ever gotten in TROUBLE while you were using alcohol or drugs?

Scoring: Two or more YES answers suggest a serious problem and need for further assessment

For individuals under 26

Substance use screening: NIDA quick screen

- If patient says “Yes” to one or more days of heavy drinking, patient is an at-risk drinker
- If patient says “Yes” to use of tobacco, patient is at risk
- If the patient says “Yes” to use of illegal drugs or prescription drugs for non-medical reasons, inquire further which ones—**cocaine, stimulants/crystal meth, pain medicines, heroin, fentanyl**—and when last
- Note that marijuana has been legalized in Michigan since this screen was created, so must be asked about in a separate question

Quick Screen Question:	Never	Once or twice	Monthly	Weekly	Daily or Almost Daily
In the past year, or since you became pregnant, how often have you used the following?					
Alcohol - For men, 5 or more drinks a day - For women, 4 or more drinks a day					
Tobacco Products					
Prescription Drugs for Non-Medical Reasons					
Illegal Drugs					

80% of women with SUD have a lifetime history of trauma

Substance Use

30-60% of women with PTSD have SUD

Trauma
Social Determinants of Health



PTSD

PTSD and depression 60% overlap

Depression
Anxiety

Perinatal illness presents often as comorbid conditions; therefore, **always probe for more than depression alone**

Why is it important to treat mental health conditions in the perinatal period?

A mother's mental health throughout the perinatal period has the potential for long-term consequences

Risks of untreated mental health disorders on obstetric, neonatal outcomes

- Inadequate weight gain
- Risk for preeclampsia
- Pre-term birth (PTB)
- Low birth weight (LBW)
- Small for gestational age (SGA)
- Increased uterine artery resistance
- Elevated maternal prenatal cortisol and neonatal cortisol

PTSD in pregnancy interferes with healthy pregnancy

Associated Complications	PTSD n=455	Control n=638	p*	Adjusted odds ratio**
Ectopic	10%	6%	.008	1.7
Miscarriage	16%	9%	<.001	1.9
Excessive vomiting	9%	2%	<.001	3.9
Preterm contractions	30%	23%	.004	1.4
Fetal growth impact	17%	11%	.007	1.5

* *Significant after Bonferroni correction*

** *Adjusting for age, ethnicity, victimization, and drug use during pregnancy.*

** *All variables significant at $p < .001$.*

PTSD in postpartum interferes with healthy bonding and adaptation

- More likely to have co-morbid depression
- Higher likelihood for relapse with substance use, even if mother in recovery during pregnancy
- Less likely to breastfeed
- PTSD interferes with infant bonding
 - Particularly if the baby is a trigger (traumatic childbirth or perinatal loss)
- PTSD interferes with positive parenting
 - More intrusive or avoidant
 - Less warmth and sensitivity

Impact of mental health disorders on child and maternal outcomes

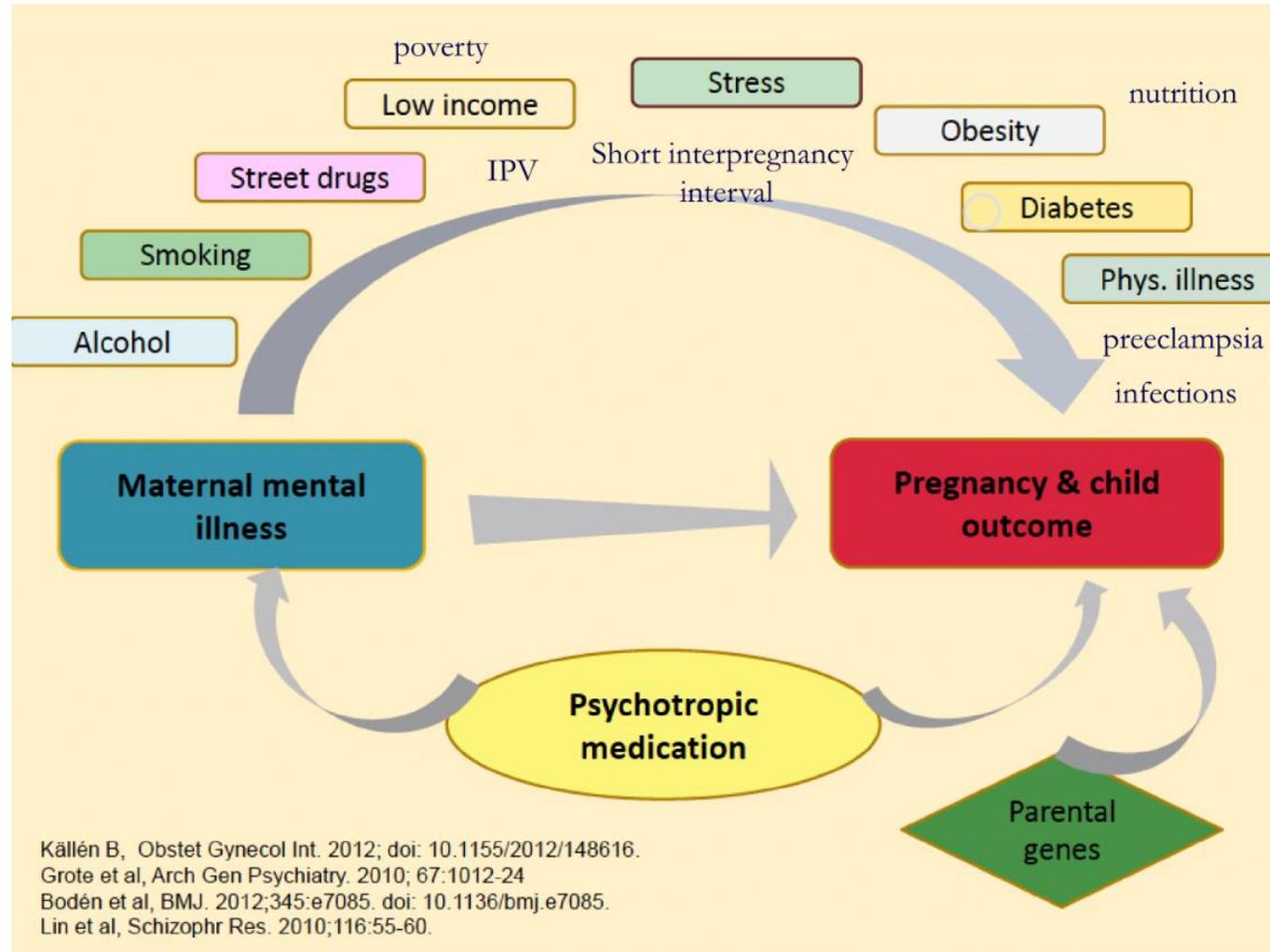
- Difficult infant temperament
- Increased risk for later child behavior problems
- Negative effects on child cognition
- Impaired mother-infant interaction
- Decreased rates of breastfeeding

Does maternal perinatal depression have negative impact on the child?

Yes, but.....effect is moderated by:

- Poverty
- Social isolation
- Mom's young age
- Infant boys more vulnerable
- Mother's depression severity & chronicity
- Comorbidity with other MH problems
- Trauma exposure
- Parenting support

Impact on the pregnancy and child is shaped by many factors



Essential knowledge for the treatment of perinatal mental health disorders

The perinatal period and psychosocial factors

- We conceptualize most mental health episodes as arising from both organic predispositions and psychosocial stressors
- The perinatal period is a time of significant increase in psychosocial stressors
- Therefore, the careful prescriber will thoroughly assess whether or not psychosocial stressors exist and if/how they can be addressed before considering or recommending medications
 - Interventions on stressors can be much more powerful than medications

Sleep

- Depression is associated with insomnia, which worsens depression
 - Insomnia or sleep deprivation can induce depression
- Be aware of how method of feeding affects sleep (exclusive breastfeeding can make getting good sleep challenging)
- Patients may be getting less sleep due to anxiety causing them to frequently check to make sure baby is ok at night
- **Approach:**
 - Explore partner relationship dynamics and their willingness/ability to share the responsibility of waking with baby at night
 - Goal of at least one 4-hour block of uninterrupted sleep
 - Fear of not waking up to infant cry due to a sleep aid is a common concern of parents—start at very low doses, make sure baby is not sleeping in bed with parent, have parent use infant monitor and/or enlist partner as back up when first trying medication

Breastfeeding

Breastfeeding is ideal in most cases, when it works for both mom and baby. However, for some parent and baby pairs, it can prove challenging and cause or worsen mental health issues.

- May be physically painful or emotionally painful (patients with trauma history)
- May limit ability to get longer stretches of sleep
 - This is a big concern for mental health, especially Bipolar Disorder, as sleep deprivation can induce mania
- Babies who struggle to gain weight
 - Anxiety can be fueled by limited milk supply/production and worry about how much milk baby is getting—“invisible intake”
- Complicated by:
 - Patient or others’ expectations/shame
 - Patient or others’ concerns about health and bonding

Breastfeeding: approach

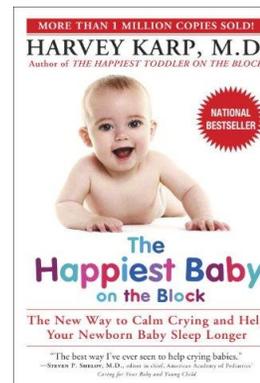
- Lactation consultants, doulas
- Cost-benefit analysis
 - Sensitive, non-judgmental discussion with patient is essential
 - Fed is best
 - Remember that how and what you say to patients about this issue will deeply impact them

The fussy baby

Maternal depression rates are higher in mothers of babies with colic, even months after the colic/crying subsides

Approach:

- Happiest Baby on the Block (re-working cognitive distortions)
- 5 S's
- Also, purple crying acronym



THE LETTERS IN PURPLE STAND FOR

PURPLE

PEAK OF CRYING

Your baby may cry more each week, the most in month 2, then less in months 3-5.

UNEXPECTED

Crying can come and go and you don't know why.

RESISTS SOOTHING

Your baby may not stop crying no matter what you try.

PAIN-LIKE FACE

A crying baby may look like they are in pain, even when they are not.

LONG LASTING

Crying can last as much as 5 hours a day, or more.

EVENING

Your baby may cry more in the late afternoon and evening.

THE WORD PERIOD MEANS THAT THE CRYING HAS A BEGINNING AND AN END



SWADDLING



SIDE/STOMACH POSITION



SHUSHING SOUNDS



SWINGING



SUCKING

The fussy baby

Approach

- Distress tolerance/taking a break
 - Crying plan

Babies Cry. → This is My Crying Plan! (Share it with anyone who cares for your baby)

My Baby's Name Is:

All babies cry, some more than others. Crying is a baby's language. When my baby cries she may be lonely, scared, tired or he may cry for no reason that we can figure out. So if my baby cries these are some things to try:

1 First, check my baby's physical needs.

- Is she hungry?
- Does he need to burp?
- Is her diaper dirty or wet?
- Is he too hot or too cold?
- Are there any signs of sickness? (vomiting or fever) Seek medical care immediately, if there are concerns.



Email Your Crying Plan

Print Your Crying Plan

2 I have checked the **Calming Techniques** that work best for my baby. (Please mark your choices.)

- Swaddling
- Use of "white noise"
- Gently swing or rock her
- Take him for a stroller ride
- Place her in a car seat and go for a car ride
- Breast feeding and/or skin to skin holding
- Other:

Sometimes when nothing else works, **my baby really enjoys:** (Please complete with your best solutions.)

It is more important to stay calm than it is to quiet the baby. Sometimes babies cry for no apparent reason. When this happens, feeling frustrated is normal. **Never Shake a Baby!**

3 To calm yourself try:

- Going outside for fresh air
- Taking several deep breaths
- Counting to 100
- Washing your face or taking a shower
- Exercise. Do sit ups or walk up and down stairs a few times

4 Also try using some of the following **Coping Techniques:**

- Put the baby down in a safe place like a crib, and check back when I am feeling calm
- Call a friend or neighbor
- Call the doctor if crying lasts over 3 hours
- Other:

I will call the following people, if I need help. The first name on my list is my friend or neighbor. (Please list the first name and phone number)

1-800-4-A-Child - 24/7 Parent Hotline

I commit to keeping my baby safe.

Signature:

Date:

Signature:

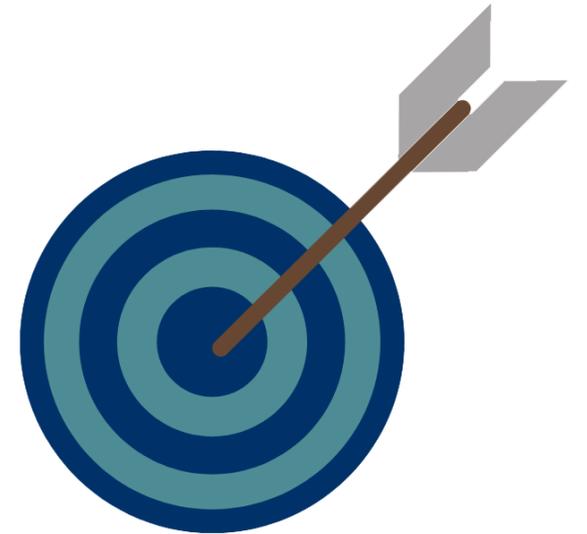
Date:



Perinatal psychopharmacology overview

Objectives

- 1) Understand the use of psychotropic medications in the perinatal period
- 2) Understand the risk-risk analysis of using psychotropic medications in the perinatal period
- 3) Understand how to talk to patients about medications
- 4) Understand challenges of the collaborative care model and liability limits



Perinatal approach to treatment

- Assess the family system as a whole to identify and target specific psychosocial stressors
- Optimize non pharmacologic measures first
 - Psychoeducation (i.e., sleep, breastfeeding, fussy babies)
 - Diet and exercise
 - Mindfulness/meditation exercises
 - Psychotherapy
 - Individual
 - Group
 - Support groups
 - Complementary and alternative treatments—supplements, etc.
- Use medications only when needed and in the lowest doses needed

Why so much conflicting data about medication safety?

- No randomized, double-blind, placebo-controlled trials
- Many studies are retrospective database and case-control studies
- Studies monitor prescriptions and diagnoses, not medication exposures and symptoms (databases)
- Unsystematic (if voluntary reporting)
- Confounds (particularly illness exposure)



Review of safety data for antidepressants

- Teratogenicity (congenital malformations)
- Pregnancy/childbirth complications
- Neonatal adaptation syndrome (NAS)
- Persistent pulmonary hypertension of the newborn (PPHN)
- Long-term developmental effects



Teratogenicity

- Baseline population risk for any malformation is 2-4% among healthy, unexposed women
- Overall—teratogenicity risk for SSRI/SNRI/TCA , *if at all*, low
- FDA removed categories A, B, C, D, X as of 7/1/2015
 - Rationale: these aren't simple "grades"
 - Each medication requires careful risk-benefit analysis and "subsequent counseling of pregnant women and nursing mothers who need to take medication, thus allowing them to make informed and educated decisions for themselves and their children"

Pregnancy/childbirth complications

- Spontaneous abortions
 - No difference between various classes of antidepressants
 - None of the studies took confounders into consideration
 - Poor health habits, psychiatric illness, smoking, etc.
- Preterm birth
 - Associated with late pregnancy SSRI use in 8 studies
 - Same rate of risk exists in untreated depression
- Low birth weight
 - Effect is minimal (< 75g/2.6 oz.) and disappears when control group are untreated depressed mothers

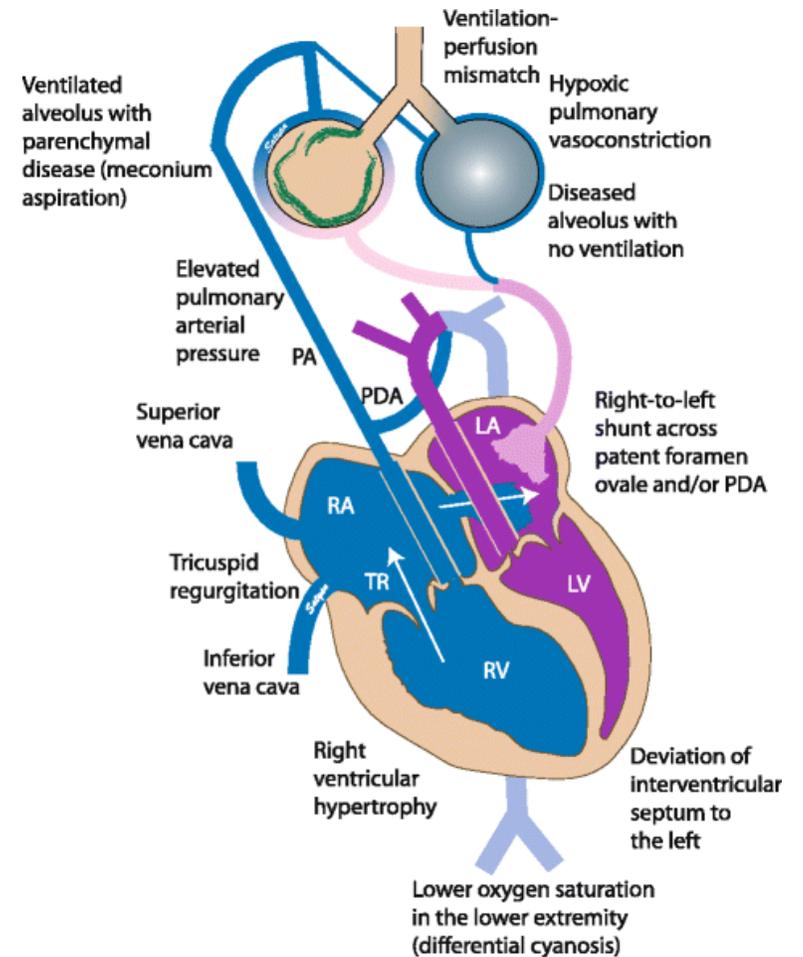
Neonatal adaptation syndrome (NAS)

- Withdrawal/discontinuation syndrome
 - Tremors, irritability, sleep disturbance, poor muscle tone
 - Respiratory distress/seizures (in severe cases)
 - Usually does not require intervention
- Per the literature, this is reported in up to 30% of infants exposed to antidepressant exposure in utero
 - In our clinical experience, incidence is less than 1%
 - Symptoms are commonly mild (10% or less are severe) and self-limited
 - No reported long-term sequelae



Persistent pulmonary hypertension of the newborn (PPHN)

- Abnormal flow through fetal circulatory pathways → Hypoxemia
- Can be severe and may not respond to conventional respiratory support
- Risk for babies born to mothers taking SSRIs in late pregnancy:
 - 3.0 per 1000 live births vs 1.2-1.9 per 1000 live births in control infants
- Never seen this in our clinical experience



Long-term development

- Literature available on SSRIs, SNRIs, and TCAs
- No differences in cognitive and language development
- No differences in IQ
- No differences in temperament, mood, reactivity, distractibility, or behavioral problems
- Autism?
 - Only 0.72% prevalence in general population vs. 1–1.2% in exposed population
 - These studies frequently have **significant limitations**:
 - Not comparing women taking antidepressants with women who have **similarly severe** depression and are not taking medication

What about the safety in pregnancy of other classes of medications?

- Benzodiazepines
 - Can be safe in small doses (avoid Alprazolam)
 - Consider short-term benzodiazepine as a bridge until SSRI is working
- Mood stabilizers
 - Lamictal is very safe
 - Lithium has some limited risks; can be used carefully when there are no good alternatives
 - Depakote and carbamazepine are not safe
- Antipsychotics
 - Second generation antipsychotics are safer than first generation
 - Olanzapine and quetiapine have best safety data, aripiprazole too
- Stimulants
 - Fairly safe—only use if patient unable to function without them and there are no safer treatment alternatives

Safety of medications in breastfeeding

- Most medications are excreted in very small amounts in breastmilk (less than 10% of dose mom is taking)
- Most psychotropic medications (antidepressants, antipsychotics, benzodiazepines) are safe in breastfeeding (short and long term)
 - Mood stabilizers are more complicated
- There is no evidence to support the practice of “pumping and dumping”
- Stimulants may decrease breastmilk supply
- Medications with antihistamine properties may decrease breastmilk supply
 - Benadryl, hydroxyzine

Risk-risk discussion



NO RISK-FREE ZONE!!!

Medications for depression/anxiety

- SSRIs (Selective Serotonin Reuptake Inhibitors)
 - Sertraline (Zoloft)
 - Citalopram (Celexa)
 - Escitalopram (Lexapro)
 - Paroxetine (Paxil)
 - Fluoxetine (Prozac)
- SNRIs (Serotonin–Norepinephrine Reuptake Inhibitors)
 - Duloxetine (Cymbalta)
 - Venlafaxine (Effexor)
 - Desvenlafaxine (Pristiq)

Medications for depression/anxiety

- Bupropion (Wellbutrin)
- Mirtazepine (Remeron)
- Vortioxetine (Trintellix)
- TCAs (Tricyclic antidepressants)—3rd Line—only consider after failing multiple SSRIs/SNRIs
- MAOIs (Monoamine oxidase inhibitors)—4th Line—rarely used)

Resources

<https://mc3.depressioncenter.org>

<https://mc3.depressioncenter.org/pharma-cards/>



Psychopharmacology
Reference Cards



M | MICHIGAN MEDICINE
UNIVERSITY OF MICHIGAN

DEPARTMENT OF PSYCHIATRY

Updated June 2022

Generic (Trade)	S: start dose(mg), T: target dose(mg/day)	Titration Schedule	N: Notes; S: side effects; R: risks	P: pregnancy data; L: lactation data
Fluoxetine (Prozac)	S: 10, T: 20-60	10mg q 2 weeks	N: long half-life—self tapering; S: can be activating	L: likely greater amount in breast milk (10%) although this does not correlate with harmful effects
Sertraline (Zoloft)	S: 25-50, T: 100-200	25-50mg q 2 weeks	S: can be activating or sedating or cause emotional numbing; more GI effects than others	L: negligible amounts transmitted into breast milk (<1%)
Escitalopram (Lexapro)	S: 5, T: 10-20	5-10mg q 2 weeks	N: quite well tolerated	
Citalopram (Celexa)	S: 10, T: 20-60	10mg q 2 weeks	S: due to warnings about inc. Qtc, may consider getting EKG at doses above 40mg	
Mirtazapine (Remeron)	S: 7.5, T: 15-45	7.5mg q 2 weeks	N: causes sedation and increased appetite—helpful for anxious/depressed patients with insomnia who are not eating; S: weight gain	
Duloxetine (Cymbalta)	S: 30, T: 60-120	30mg q 2 weeks	N: helpful for chronic/neuropathic pain	P/L: less data than SSRI's but no significant documented risks—use second line
Venlafaxine (Effexor, Effexor XR)	S: 75, T: 150-300	XR: 75mg q 2 weeks Non XR: 37.5mg q 2 weeks	S: may cause hypertension, XR less likely to cause withdrawal when tapered	P/L: less data available than SSRI's, with no significant documented risks
Bupropion (Wellbutrin SR, Wellbutrin XL, Zyban)	S: 150, T: 150-450, SR BID dosing	150mg q 2 weeks	N: activating properties help with low energy/motivation/lack of focus. Can be used alone or to augment SSRI/SNRI; S: can increase anxiety and lowers seizure threshold	P: Not to exceed 450 mg (seizure risk), greater concern for seizure in those with a history of seizure or those engaging in purging behaviors. Helpful for smoking cessation in pregnancy. May help ADHD and other addictive disorders, such as overeating in pregnancy.
Paroxetine (Paxil, Paxil CR)	S: 10, T: 20-40 CR: 25	10mg q 2 weeks CR: 12.5 mg q 2 weeks	S: can be sedating, cause withdrawal effects due to short half life, CR form less likely to cause withdrawal when tapered	P: Older data demonstrated potential for a 1.5- to 2.0-fold increase risk in cardiovascular malformations, leading to a 2005 warning. Recent data show no consistent information to support teratogenic risks.

Medications for mood disorders/bipolar

- Lithium
- Antiepileptics
- Antipsychotics—second generation

Generic (Trade)	S: start dose(mg), T: target dose(mg/day)	Titration Schedule	N: Notes; S: side effects; R: risks	P: pregnancy data; L: lactation data
Lithium (Eskalith, Lithobid)	S: 150-300, T: 900-1200, blood level 0.6-1.2 mEq/L	150-300mg q 3-7 days	N: narrow therapeutic window; S: thyroid malfunction, toxicity with NSAID's, GI upset	P: small increase cardiac malformations (1.15 % vs 1.9%), need to carefully monitor levels during pregnancy, delivery due to shifts in blood volume; L: high rate of excretion into breastmilk; breastfeeding not recommended or if mom wants to BF need to monitor carefully baby for tox effects (sedation, feeding problems, lethargy, seizures) and measure blood levels
Valproic acid (Depakote, Depakene) DO NOT PRESCRIBE TO WOMEN OF CHILDBEARING AGE	S: 250-500, T: 500-1000, blood level 50-120 mg/L	250-500mg q 3-4 days	S: weight gain, hair loss; R: hepatitis, pancreatitis	P: risk of neural tube defects 10% esp in 1st trimester (as well as facial and cardiac abnormalities), IUGR, mental retardation, neonatal toxicity, not recommended; L: theoretical risk infant hepatotoxicity /thrombocytopenia
Carbamazepine (Tegretol) DO NOT PRESCRIBE IN PREGNANCY/BF MOTHERS	S: 100mg, T: 300-1200	100mg q 5-7 days	S: glaucoma; R: Stevens–Johnson syndrome, agranulocytosis	P: risk of defects 6% (neural tube, craniofacial), risk fetal vitamin K deficiency/bleeding, IUGR, neonatal toxicity; L: high levels in breastmilk-need to monitor baby's bloodwork
Lamotrigine (Lamictal) regarded as first choice for mood stabilization, esp for bipolar depression	S: 25, T: 200 (as 100mg bid)	25mg/day x 2wks, then 50mg/day x 2 weeks, then 100mg/day x 2 weeks, then 100mg bid	R: Stevens–Johnson syndrome	P: no increased risk of malformation, some risk for neonatal toxicity (rare); L: infant levels are 30% of mom's dose; theoretical risk of SJS but no cases reported; not absolute contraindication for BF
Topiramate (Topamax)	S: 25-50, T: 50-400	25-50mg q 3-7 days	S: sedating; R: increased ammonia, metabolic acidosis, glaucoma, kidney stones	P: some reports of increased risk of cleft palate, low birth weight; L: small case series showed no adverse effects

Generic (Trade)	S: start dose(mg), T: target dose(mg/day)	Titration Schedule	N: Notes; S: side effects; R: risks	P: pregnancy data; L: lactation data
Risperidone (Risperdal)	S: 0.5-1, T: 1-6	0.5-1mg q 3-5 days	S: ↑prolactin, ↑metabolic risk	
Aripiprazole (Abilify)	S: 1, T: 2-15	1-5mg q 3-5 days	S: akathisia	L: may decrease breastmilk supply
Ziprasidone (Geodon)	S: 20 QD, T: 20 BID - 60 BID	20mg BID q 3-5 days	N: relatively weight neutral; S: ↑Qtc	
Quetiapine (Seroquel)	S: 12.5-25, T: 12.5-300	12.5-50mg q 3-5 days	N: may use in small doses as PRN for anxiety (ie 12.5mg TID PRN), moderate doses for sleep aid (25-50mg), higher doses for mood stabilization (100-300mg); S: sedation, weight gain	P: has lots of safety data; best risk/benefit ratio
Olanzapine (Zyprexa)	S: 2.5, T: 2.5-10	2.5-5mg q 3-5 days	S: ↑metabolic risk, sedation	P: has most safety data
Paliperidone (Invega)	S: 1, T: 3-9	1-2mg q 3-5 days	S: ↑prolactin	
Lurasidone (Latuda)	S: 20, T: 40-120	20mg q 3-5 days	N: must be taken with at least 350cal meal; S: some sedation	
General safety data/Reference	Antipsychotics have been shown to confer no increased risk of congenital malformations to babies exposed to them in utero, with the exception of risperidone, which seemed to confer some increased risk of overall and cardiac malformations (RR 1.26) (Huybrechts KF, Hernández-Díaz S, Paterno E, et al. Antipsychotic Use in Pregnancy and the Risk for Congenital Malformations. JAMA Psychiatry. 2016;73(9):938–946). Less data is available on the effect of these medications on potential pregnancy complications.			

Medications for anxiety/sleep

- Benzodiazepines
- Trazodone (Desyrel)
- Gabapentin (Neurontin)
- Zolpidem (Ambien)

Generic (Trade)	S: start dose(mg), M: maximum dose(mg/day)	Frequency	N: Notes; S: side effects; R: risks	P: pregnancy data; L: lactation data
Alprazolam (Xanax) DO NOT USE	S: 0.25-0.5, M: 1 TID		N: recommend not to use this short acting medication due to increased risk of rebound anxiety and tolerance/addiction	P: avoid in first TM to prevent potential for malformation (risk less than 0.7%), and use low dose in late pregnancy or BF . (risk with high doses near time of delivery- floppy baby syndrome and infant sedation) L: ok in small doses, in high doses risk infant sedation
Lorazepam (Ativan)	S: 0.25-0.5, M: 1 TID	May take up to 3x/day; prefer standing dosing over PRN	N: highly effective, especially upon initiation of SSRI, for anxiety and for rumination	same as above
Clonazepam (Klonopin)	S: 0.25-0.5, M: 1 TID	May take up to 3x/day; prefer standing dosing over PRN	N: longer acting than Ativan-may provide better coverage for consistently highly anxious patients; Highly effective, especially upon initiation of SSRI, for anxiety and for rumination	same as above
Zolpidem (Ambien)	S: 5, M: 10	Bedtime	N: patient may sleep walk Rapid onset of action	P: limited data, but so far no evidence for increased risk of malformation; L: OK in small doses as low transfer to BM
Gabapentin (Neurontin)	S: 100, M: 900 TID	May take up to 3x/day, PRN	N: good option for patient with history of substance abuse; S: few to no side effects	P: limited data but so far no evidence for increased risk of malformation;

Meds 101

- Golden Rule
- **Start low, go slow, keep going**
 - Takes 6 weeks to effect but should see something in 2–4 weeks

Most commonly-used medicines in CoCM:

- Depression/SSRI: sertraline and escitalopram
- Anxiety: lorazepam & clonazepam (or quetiapine & gabapentin)
- Sleep: trazodone, doxylamine (Unisom), quetiapine

Review: perinatal approach to treatment

- Assessing the family system as a whole to identify and target specific psychosocial stressors
- Optimize non pharmacologic measures first
 - Psychoeducation (i.e., sleep, breastfeeding, fussy babies)
 - Diet and exercise
 - Mindfulness/meditation exercises
 - Psychotherapy
 - Individual
 - Group
 - Support groups
 - Complementary and alternative treatments—supplements, etc.
- Use medications only when needed, and in the lowest doses needed

Treatment guidelines

MILD-MODERATE ILLNESS/SYMPTOMS

Psychotherapy + Complementary Alternative Approaches (CAM)

- Brief supportive therapy/CBT/IPT/DBT/Psychodynamic, support groups, insomnia treatment, assistance with sleep or breastfeeding, Complementary Alternative Approaches (CAM)

MODERATE-SEVERE ILLNESS/SYMPTOMS

Psychotherapy + antidepressant therapy; CAM as add-on treatment

- Those who have recurrent depressive disorder may require long-term antidepressant therapy, and this should only be discontinued for next pregnancy after a full risk-benefit analysis given the high relapse rate (~70%)

SEVERE OR TREATMENT RESISTANT DEPRESSION (TRD), BIPOLAR DEPRESSION, MANIA, OR PSYCHOSIS

Combination of antidepressants, antipsychotics, mood stabilizers, hypnotics, anti-anxiety medication. and ECT can be considered; psychotherapy & CAM as add-ons

Broad strokes

- Patients who are successfully treated with safe medications during pregnancy should generally not change medications for the purpose of breastfeeding
- Postpartum patients who start pharmacotherapy should be treated with medications that were efficacious in the past
- Psychotropic polypharmacy should be avoided, if possible
- There is little evidence to support either timing of drug administration or discarding breastmilk (“pump and dump”)

Talking to patients about taking medications in the perinatal period

- “Is it OK if I share some information with you about the safety of taking medications in pregnancy and breastfeeding?”
- “It is important to know that there are also risks to having untreated or undertreated depression/anxiety in the perinatal period.”
- “The postpartum period can be very challenging. I want to make sure you are in the best place possible mentally to cope with those challenges.”

Talking to patients about taking medications in the perinatal period

- “The risks associated with taking medications in pregnancy are similar to those of having untreated mental illness. The exception is poor neonatal adaptation syndrome which is rare, usually mild, and has no long-term impact on the child.”
- “You have the final say in all decisions regarding whether you take medications during this time. I will respect and support your decision.”
- “If I feel that your symptoms are severe or not getting better without medication, I may remind you that medication is an option.”

Common patient misconceptions about medications

- Addiction
 - Most psychotropic medications are not addictive or habit forming
- Have to be on it forever
 - Patients who have mild illness and/or no history of mental health problems are often able to eventually discontinue a medication
- Have to “rely” on a medication
 - Mental health is an illness like any other, so it is reasonable to use a medication to treat it (i.e., you would not decline insulin for diabetes)

Common patient misconceptions about medications

- “Selfish” to take a medication due to potential harm to baby
 - Having untreated depression/anxiety poses risks to baby
- The medication will make me feel numb/not myself
 - While this is a potential side effect, it is not common, and we want to hear about any side effect you experience so that we can make adjustments if needed

Challenges of the collaborative care model for PCPs

- Discomfort with prescribing recommended medication? Bottom line:
 - There is no risk-free zone—untreated illness also has consequences
 - Most psychotropic medications are safe in pregnancy and when breastfeeding
 - “Fetal/infant exposure always occurs, be it to treatment or to illness” —Zack Stowe, personal quote, 2001
 - **Of note:** 50% of pregnancies are unplanned, thus early exposure has often already occurred
- Treatment decision must be evaluated individually, considering:
 - Current symptoms
 - Past treatment history and course of illness
 - Personal and family considerations
 - Access to reliable alternatives such as therapy, self-care, stress reduction, support
 - Of note: one size does not fit all
- The consulting psychiatrist is here to support your decision making
 - However, at the end you are the prescriber and make the decision based on your assessment weighing all the pros and cons

You have two (or more) patients

- Treatment potentially **benefits** both the mother and fetus/child
- Failure to treat poses **potential risks** to both the mother and fetus/child



Questions/discussion

Disclaimer

Each physician organization and/or practice is solely responsible for all billing practices and medical care and services delivered to its patients and all decisions related to such medical care and services. Neither MICMT, the Regents of the University of Michigan, or Mi-CCSI shall be responsible for any delivery of medical care or other services to any patient, or any decisions, acts or omissions of persons in connection with the delivery of medical care or other services to any patient.





Thank You!

Contact Us

Maria Muzik

muzik@med.umich.edu

Samantha Shaw-Johnston

samantsh@med.umich.edu