

Perinatal Mental Health Care Guide 2022

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DEPARTMENT OF PSYCHIATRY
AND BEHAVIORAL SCIENCES
SCHOOL OF MEDICINE
UNIVERSITY OF WASHINGTON

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Perinatal Psychiatry Consultation Line

PAL for Moms Program
UW Psychiatry & Behavioral Sciences

(877) 725-4666

UW Perinatal Psychiatry Consultation Line (PAL for Moms), a Free Consult Line for Providers

The UW Perinatal Psychiatry Consultation Line (PAL for Moms) is a **free** state-funded program providing perinatal mental health consultation, recommendations, and referrals for providers caring for pregnant or postpartum patients.

HOW DOES IT WORK?

Call **877-725-4666** (PAL4MOM), available weekdays 9am - 5pm

Complete a brief intake

Consult with a UW perinatal psychiatrist (usually immediately, or within 1 business day)

Receive written documentation of recommendations and resources

WHO CAN CALL?

Any provider in Washington State who cares for pregnant or postpartum patients.

WHAT KIND OF QUESTIONS CAN I CALL ABOUT?

We consult on any behavioral health-related questions for patients who are pregnant, in the first year postpartum, or who have pregnancy-related complications (e.g. pregnancy loss, infertility). Topics may include:

Depression, anxiety, other psychiatric disorders (e.g., bipolar disorder, post-traumatic stress disorder), substance use disorders, or co-occurring disorders

Pregnancy loss, complications, or difficult life events

Weighing risks and benefits of psychiatric medication

Non-medication treatments

Local resources & referrals

Guidance on implementing mental health screening at your workplace

WHO PROVIDES THE TELEPHONE CONSULTATION?

Faculty members in the UW Department of Psychiatry and Behavioral Sciences with expertise in perinatal mental health. [Learn more.](#)

Introduction

This care guide is intended to help prenatal, primary care, and mental health providers screen for, diagnose, and treat pregnant and postpartum individuals with mental health problems. The guide is based on current evidence in the literature, as of the time of writing. We have attempted to distill current knowledge into focused, practical points. The guide is divided into modules, each covering a particular diagnosis/set of disorders or important topic in perinatal mental health.

Modules include:

- Overviews of disorders, including recommended approaches to diagnosis, differential diagnosis, and treatment
- Summaries and approaches to other concerns related to the perinatal period or reproductive hormonal effects on mental health
- Free-to-reproduce rating scales useful in indicating need for further diagnostic assessment and assessing response to treatment
- A general approach to prescribing during the perinatal period
- Organized, current evidence-based information about medications, including dosing, side effects, and effects/risks during pregnancy and lactation
- References and resources for providers and for patients

Care guide modules were written by PAL for Moms psychiatrists, as well as guest experts on specific topics. Modules were based on current literature (obtained by PubMed searches) and databases (e.g. Reprotox, LactMed). Each module was peer-reviewed by the PAL for Moms psychiatrist group:

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We hope that this guide is helpful and welcome any feedback. Please also feel free to call us at PAL for Moms (1-877-PAL4MOM/ 1-877-725-4666) with any questions that you have about individual patients/clinical situations, general issues, or resources and referrals.

Prescribing in the Perinatal Period

Most PAL for Moms calls include questions about effects of medications and about prescribing during pregnancy and breastfeeding. Each PAL for Moms care guide module that focuses on a specific disorder provides the most up to date information, as of the time of writing, about medications used to treat that disorder. In this section, we outline general guidelines for prescribing during the perinatal period and provide some resources to use in looking up the most recent information, and in finding medication fact sheets to give to your patients. The guidelines below reflect our overall approach, which is to use the lowest number and dosages of medications possible, while effectively treating the psychiatric disorder.

What are some general rules of thumb about prescribing during the perinatal period?

- 1. Consider risks during pregnancy whenever prescribing medication for someone of childbearing potential.** About 50% of pregnancies are unplanned. Considering, and informing people of childbearing potential about, risks of their medication(s) during pregnancy helps to maximize prescribing of safer medications and avoid patients' suddenly discontinuing needed medication if they find out they are pregnant.
- 2. Make any medication changes before pregnancy if possible.** This minimizes the number of exposures for the baby and maximizes stability for the parent. Changing a newer medication with less data regarding safety in pregnancy to an older medication with more safety data can be done before pregnancy, if desired. Making this change once the patient is already pregnant involves exposing the baby to two medications instead of one and potentially causing worsening of the parent's psychiatric condition.
- 3. Remember that an untreated/undertreated psychiatric disorder also poses risks to the parent and the baby.** Untreated/undertreated psychiatric disorders pose significant risks for parents and babies. For example, perinatal depression is associated with higher rates of preterm birth, low birth weight, problems with attachment and bonding, and increased rates of psychiatric disorders in childhood and adolescence. For this reason, it is important to treat psychiatric disorders effectively during the perinatal period.
- 4. Ideally, the patient should be psychiatrically stable for at least 3 months before trying to conceive.** Although this is not always possible, it decreases risk of relapse and exposure of the baby to risks of untreated/undertreated psychiatric illness.
- 5. Avoid polypharmacy whenever possible.** Prescribing the fewest medications possible to effectively treat the patient's psychiatric disorder reduces exposures for the baby. Reviewing the need for each medication is especially important when someone is taking multiple medications and/or more than one medication in a class (e.g. two or more antidepressants, two or more antipsychotics, multiple antianxiety/hypnotic medications, etc.)
- 6. Avoid Depakote.** Depakote (valproic acid) is a commonly prescribed mood stabilizer for patients with bipolar disorder. Depakote is a known teratogen (rate of malformations elevated in all dosage ranges and 25% at doses above 1450 mg/day) and is associated with significantly decreased IQ in children exposed in utero.

- 7. Optimize non-medication treatments.** At all times, and especially during the perinatal period, we want to maximize the use of evidence-based non-medication treatments such as psychotherapy. Most people with mild to moderate depression and anxiety respond to evidence-based psychotherapy and do not need medication if psychotherapy is available. Even if someone requires medication for effective treatment of their condition, non-medication treatments can help minimize numbers and dosages of medications and increase effectiveness of treatment.
- 8. If you are thinking of stopping your patient's psychotropic medications because they are pregnant, please call us first.** Discontinuing medications abruptly can precipitate relapse (another exposure for the baby and risk for the parent). Also, stopping some medications can cause withdrawal symptoms that are potentially dangerous (e.g. benzodiazepines) or unpleasant (e.g. antidepressants). We would be happy to help you sort out which medications to discontinue and safe tapering schedules.
- 9. Prescribing during the perinatal period requires a risk-risk discussion.** Informed consent during the perinatal period involves collaborating with the patient in discussing and weighing risks of medication for the fetus/baby, risks of the psychiatric disorder, and possible alternative treatments.
- 10. Use a patient-centered and team approach.** In addition to collaborative decision-making with, and support of, the patient, this includes involving family members and communicating with other care providers. It is important to educate the partner and/or family members about risks and benefits of treatment as well as warning symptoms of relapse. Communication with obstetric and pediatric providers minimizes the patient's hearing conflicting opinions and being confused and concerned.

References and resources:

Chisolm MS, Payne JL. Management of psychotropic drugs during pregnancy. *BMJ* 2016 Jan 20; 532:h5918. <https://doi.org/10.1136/bmj.h5918>

InfantRisk apps for healthcare providers and parents about safety of medications during pregnancy and breastfeeding. <https://www.infantrisk.com/infantrisk-center-apps>

LactMed database about safety of medications during breastfeeding. <https://www.ncbi.nlm.nih.gov/books/NBK501922/>

Reprotox database about medications during pregnancy, breastfeeding, and development. Requires subscription. <https://reprotox.org/>

MotherToBaby fact sheets for parents regarding risks of drugs (including non-prescribed drugs) during pregnancy and breastfeeding. <https://mothertobaby.org/fact-sheets/>

Resources

Psychiatry Consultation Services for Washington State Healthcare Providers

Psychiatry Consultation Line (PCL)

for prescribing providers with adult psychiatry and/or addictions questions

877-WA-PSYCH (877-927-7924) | pclwa@uw.edu

Staffed 24/7

www.pcl.psychiatry.uw.edu

Partnership Access Line (PAL)

for primary care providers with child and adolescent psychiatry questions

866-599-7257 | paladmin@seattlechildrens.org

8am - 5pm, Monday - Friday (excluding holidays)

www.seattlechildrens.org/PAL

PAL for Moms

for providers with behavioral health questions related to pregnancy and postpartum

877-PAL4MOM (877-725-4666) | ppcl@uw.edu

9am - 5pm, Monday - Friday (excluding holidays)

www.mcmh.uw.edu/ppcl

Psychiatry & Addictions Case Conferences

(UW PACC-ECHO)

for providers interested in didactic presentations and case-based learning

uwpacc@uw.edu

12:00-1:30 pm, Thursdays

ictp.uw.edu/programs/uw-pacc

UW Medicine
DEPARTMENT OF PSYCHIATRY
AND BEHAVIORAL SCIENCES



Seattle Children's
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Washington State
Health Care Authority

General Resources for Providers

LactMed

Peer-reviewed database that provides safety data on drugs and other chemicals during breastfeeding.

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

InfantRisk Center

Phone app and call center that provide evidence-based data on medication and drug safety in pregnancy and breastfeeding.

<https://www.infantrisk.com/>

Massachusetts General Hospital Center for Women's Mental Health

A reproductive psychiatry resource and information center.

<https://womensmentalhealth.org/>

Reprotox

Database about medications during pregnancy, breastfeeding, and development. Requires subscription.

<https://reprotox.org/>

Statewide UW Resources for Providers

PAL for Moms Perinatal Psychiatry Consultation Line: (877) 725-4666

Telephone consultation, recommendations, and referrals for healthcare providers caring for patients with behavioral health disorders during pregnancy and postpartum. Available weekdays 9 am- 5 pm.

<https://www.mcmh.uw.edu/ppcl>

UW Psychiatry Consultation Line (PCL): (877) 927-7924

Telephone consultation and recommendations for prescribers caring for adult patients (18+) with mental health and/or substance use disorders. Available 24/7.

<https://pcl.psychiatry.uw.edu/>

Partnership Access Line (PAL): (866) 599-7257

Telephone consultation and recommendations for primary care providers caring for children and adolescents with behavioral health disorders. Available weekdays 8 am- 5 pm.

<https://www.seattlechildrens.org/healthcare-professionals/access-services/partnership-access-line/>

UW Psychiatry and Addictions Case Conference-ECHO (UW PACC)

A free, weekly teleconference that includes an educational presentation by UW psychiatrists and case presentations. Archive of past presentations can be searched for presentations on the perinatal period.

<https://ictp.uw.edu/programs/uw-pacc>

Statewide Perinatal Mental Health Resources

UW Perinatal Telepsychiatry Clinic

A telepsychiatry clinic for perinatal patients that provides evaluations and 1-2 follow-up visits (rather than ongoing treatment). Referring providers receive a follow-up note with recommendations.

<https://www.mcmh.uw.edu/perinatal-telepsychiatry-clinic>

Perinatal Support Washington

Organization offers a warm line, perinatal mental health directory, provider trainings, and more.

<https://perinatalsupport.org/>

Prevention and Treatment of Traumatic Childbirth (PATtch)

An organization that offers information and trainings about traumatic births.

<http://pattch.org/>

Swedish Center for Perinatal Bonding and Support

Center offers reproductive psychiatry and a day treatment program for people with perinatal mood disorders.

<https://www.swedish.org/locations/center-for-perinatal-bonding-and-support>

Northwest Infant Survival and SIDS Alliance

Emotional support for those who are affected by pregnancy, infant, or child loss.

<https://nwsids.org/>

National Perinatal Mental Health Resources

Perinatal Support International (PSI)

Free online support groups, and information and resources for parents and professionals.

<https://www.postpartum.net/>

Mother To Baby: (866) 626-6847

Information center for community members that provides free safety data about medications and drugs during pregnancy and breastfeeding. Fact sheets about medications are also available.

<https://mothertobaby.org/>

RESOLVE: (866) 668-2566

A warm line for support around infertility, IVF, adoption, miscarriage, and third-party reproduction.

<https://resolve.org/support/helpline/>

Perinatal Substance Use Resources

Washington Recovery Helpline: (866) 789-1511

24/7 helpline for substance use and mental health referral and support.

<http://www.warecoveryhelpline.org/>

Swedish “Yes We Can” Consultation Line: (833) 937-9326

Provider to provider psychiatry consultation line for providers in WA state with questions about perinatal substance use disorders

The First Clinic

Legal aid to prevent substance-use-related family separation for families with a baby in the hospital

<https://thefirstclinic.org/>

Parent-Child Assistance Program (PCAP)

Free case management program for pregnant and parenting people with substance use disorders.

<https://depts.washington.edu/pcapuw/>

Pregnant and Parenting Women (PPW) Program

Residential and outpatient SUD treatment for Medicaid-eligible pregnant and parenting people.

<https://www.hca.wa.gov/assets/program/fact-sheet-ppw-services.pdf>

Chemical-Using Pregnant Women (CUP) Program

An inpatient treatment program for Medicaid-eligible people who are pregnant.

<https://www.hca.wa.gov/health-care-services-supports/apple-health-medicaid-coverage/chemical-using-pregnant-women>

Statewide General Mental Health Resources

County Crisis Lines

24-hour crisis hotlines for each county in Washington.

<https://www.hca.wa.gov/health-care-services-supports/behavioral-health-recovery/mental-health-crisis-lines>

Ingersoll Gender Center Health Care Provider Directory

A database of gender-affirming health care providers in WA. Database is searchable by mental health and reproductive health.

<https://ingersollgendercenter.org/ingersoll-directory/>

WA Mental Health Referral Service for Children and Teens: (833) 303-5437

A free service that connects families with outpatient mental health providers who have availability.

[Using WA Mental Health Referral Service for Children/Teens \(seattlechildrens.org\)](https://seattlechildrens.org/using-wa-mental-health-referral-service-for-children-teens)

Washington Counselors of Color Network

A database of multicultural counselors and counselors of color in Washington state.

<https://www.multiculturalcounselors.org/>

Other Perinatal Resources

Within Reach: (800) 322-2588

Hotline, online database, and free care coordination to help families across Washington navigate health and social service systems.

<https://withinreachwa.org/>

First Steps Maternal and Infant Care

Program assists people who are pregnant and on Medicaid in getting access to health and social services.

<https://www.hca.wa.gov/health-care-services-supports/apple-health-medicaid-coverage/first-steps-maternity-and-infant-care>

Early Head Start

Free early learning for qualifying children ages 0-3. Migrant and Seasonal Head Start and Tribal Head Start available for qualifying children ages 0-5.

<https://www.dcyf.wa.gov/services/earlylearning-childcare/eceap-headstart>

Mount Sinai Parenting Guides

Parent-facing guides about infant and toddler development and behavior

[Parent Guides | Mount Sinai Parenting Center](#)

Child Care Aware of Washington: (800) 446-1114

Hotline and database provide free tailored referrals for childcare and early learning to anyone in Washington state.

<https://childcareawarewa.org/>

Nurse-Family Partnership

A free home visiting program that provides visits by a nurse to qualifying families from pregnancy until a child is two years old. Program is available in many Washington counties.

<https://www.nursefamilypartnership.org/>

National Diaper Bank Network

Nonprofit that works to address diaper need. Maintains a database of community-based diaper banks, which distribute free diapers, that includes eight diaper banks across WA state.

<https://nationaldiaperbanknetwork.org/>

Perinatal Attention- Deficit/Hyperactivity Disorder (ADHD)

Laurel Pellegrino, MD

Perinatal ADHD

Less common: 3-4% prevalence in adult women is unchanged during pregnancy and postpartum
Comorbidities are common: 38% with any mood disorder, 47% with any anxiety disorder, and 15% with any substance use disorder

First, confirm the diagnosis:
 *Administer [Adult ADHD Self-Report Scale \(ASRS\)](#)—5 min, positive result warrants further consideration
 *Age of onset, school history
 *Impairment in two or more domains
 *Rule out other causes: sleep apnea, anxiety, depression, substance abuse

Possible pregnancy outcomes associated with untreated ADHD:
 *miscarriage
 *preterm birth
 *NICU admissions
 *poor maternal nutrition & decreased prenatal vitamin use

Next, assess level of impairment:
 Have they ever been off medications in the past? What happened?
 Do they need medications to function at work or at home?
 Are comorbidities worse off of medication (e.g. substance use)?
 Are they more impulsive or accident-prone off meds (e.g. driving)?

Non-pharmacologic strategies for mild, moderate, and severe ADHD:
 *Psychoeducation
 *Cognitive Behavioral Therapy (CBT) for ADHD
 *Coaching
 *ADHD Support groups
 *Reduce workload or other workplace accommodations if possible
 *Use public transportation if driving concerns

Mild	Discontinue medication Optimize non-pharmacologic strategies
Moderate	Assess for comorbidities Optimize non-pharmacologic strategies Consider bupropion vs prn stimulant
Severe	Assess for comorbidities Continue stimulant at lowest effective dose (skip days when possible) Monitor maternal BP and weight gain Monitor fetal growth Optimize non-pharmacologic augmentation strategies

ADHD Medications in Pregnancy

	Early Pregnancy	Late Pregnancy	Breastfeeding?
Methylphenidate	No consistent association with overall defects (~6700 exposures); possible small increased risk of cardiac septal defects (NNH estimates range from 92-333); possible increased risk spontaneous abortions.	Small increased risk of preterm birth. Possible increased risk of preeclampsia, SGA, placental abruption, low Apgar score, NICU admission, CNS disorders, induced terminations	Low levels in breastmilk, undetectable in infant serum. Limited data without adverse effects.
Prescribed amphetamines	No consistent association with malformations (~5600 exposures).	Small increased risk of preterm birth and preeclampsia. Possible increased risk of SGA, placental abruption, NICU admission, CNS disorders.	Infant dose 5-15% maternal dose. Very limited data without adverse effects.
Bupropion	No consistent association with malformations (~2300 exposures).	No adverse effects (small studies)	Nursing infant exposed to 2% maternal dose; 2 case reports of seizures at 6 months
Atomoxetine	No consistent association with malformations (~450 exposures)	Mixed evidence (~700 exposures)	Unknown
Guanfacine	Too few exposures to say (~30)	Low birth weight (very small studies)	Unknown
Clonidine	No consistent association with malformations based on data from women with HTN	Reduced fetal growth	Excreted in breast milk. Adverse events reports (hypotonia, drowsiness, apnea, seizure)

Peripartum Agitation

Zoe Renner, MD

Peripartum Agitation: Overview of Basic Principles

What is Agitation?

- Definitions:
 - o Combative and aggressive behavior, physical restlessness, or extreme irritability (1).
 - o Increased verbal or physical activity accompanied by increased arousal and decreased functionality.
- Agitation in pregnancy should be considered an obstetric emergency due to risk of harm to mother and/or baby/fetus.
- Risks of untreated agitation are generally considered greater than one-time medication intervention.
 - o Agitation associated with complications such as preterm delivery, placental abnormalities, low birth weight, postnatal death, spontaneous abortion (4).
 - o Leaving alcohol withdrawal untreated leads to increased risk for preterm birth and low birth weight (1).
 - o One-time dose of anti-psychotic and/or benzo generally considered to be low risk.

What is Causing the Agitation? -- Determine Likely Underlying Etiology

- Rule out Underlying Medical Condition
 - o Delirium due to medical condition, amniotic or venous thromboembolism, pre-eclampsia/eclampsia, hyperthyroidism, trauma, infection, among others.
- Psychiatric Illness
 - o New onset vs exacerbation/decompensation of existing condition.
 - o Abrupt discontinuation of psychotropic medications due to concern over fetal risk (1).
 - o Post-partum psychosis
 - o "Personality" characteristics
- Drug Intoxication or Withdrawal
- Pain
- Traumatic Brain Injury (TBI)

Step 1: Verbal De-escalation and Behavioral Re-direction

- Safety First
- Respect Personal Space
- Speak Slowly in Calm, Low Voice
- Be Concise
- Be Present and Genuine
- Establish Trust
- Listen
- Validate
- Provide Accurate Reflections
- Normalize Reactions
- Identify Wants/Feelings
- Offer Choices/Options
- 'Agree' or 'Agree to Disagree'
- Do Not be Provocative

Examples of Verbal Strategies

- What helps you at times like this?
- I think you would benefit from medication, or I think you need a medication.
- I know you *feel* like ____ and that must be tough. Others in this predicament have also *felt* this way. In my experience, I have *found* that _____.
- Offer warm blanket, food, etc.

Ensure safety of yourself, staff & scene (1)

- Ensure patient and the room are free of safety hazards/weapons.
- Remain at a safe distance from patient with clear exit from room.
- Alert appropriate security personnel and/or have mechanism for alerting additional staff/security.

Step 2: General Principles of Pharmacological Interventions

- Goal: Address safety and allow for complete assessment/treatment of underlying cause.
- Choice of medication should ideally be suited to underlying etiology of agitation.
- When treating pharmacologically:
 - o Offer PO first to honor autonomy.
 - o Use IM/IV only if refusal of PO, Danger to Self (DTS) and/or Danger to Others (DTOs).
 - o If does not have decisional capacity (ex. floridly delusional), okay to start with IV option.
- General approach:
 - o Start with PRN option.
 - o Recommend scheduling medications if persistent, regularly occurring agitation.
 - o Taper/Discontinue once agitation has resolved for a few days.
- Consider onset of action
 - o IV works the fastest: approximately 5-20 minutes.
 - o PO generally takes at least 30 mins-1 hour.
- Put in a not to exceed (NTE) in order.
- Never feel like you have to order a medication immediately. If unsure, go lay eyes on the patient.
- **Pregnancy specifics:**
 - o Limit medications as able (ex. choose already prescribed medication).
 - o Potential options: diphenhydramine, haloperidol, olanzapine, lorazepam.
 - o One-time doses of benzodiazepines and anti-psychotics are generally considered low risk and not associated with an increased risk in congenital malformations.
 - o Contra-indicated: valproic acid

Step 3: Restraints: Last resort intervention only during pregnancy

- Use only if imminent risk to 1.) mother 2.) fetus/newborn 3.) staff or others AND failure of prior interventions/least restrictive options.
- DO: Use least restrictive options possible (fewer restraints the better). Continue frequent monitoring of patient/vital signs/fetal heart tones while in restraints. Ensure adequate comfort, hydration, nutrition, and medical stability throughout process. Limit/end restraints as much as possible.
- DO NOT USE: abdominal restraints, restraints that increase risk of falling forward (wrist restraints behind the back), four-point restraints, restraints during labor & delivery, use out of convenience or punishment (6).
- 20 weeks±: Place pregnant patient partway to the left with support under the right hip – right hip should be 10-12 cm off the bed with supporting pillows/blankets.
 - o Do not restrain in supine position or on right side due to risk of inferior vena cava compression syndrome (hypotension, tachycardia, fetal distress due to compression vena cava, blocking flow of venous blood to the heart; 5,6).

Be mindful of implicit bias and thoughtful about escalation of interventions

Pharmacological Interventions: Specific Medications*

- Choose medication based on most likely underlying cause of agitation when possible (ex. lorazepam for alcohol withdrawal). Limit medications as able (ex. choose already prescribed medication).
- **Mild: PO meds**
 - o Diphenhydramine 25 – 50 mg PO, IM (can worsen delirium)
- **Moderate: Consider IV/IM**
 - o Haloperidol 0.5 mg – 2 mg PO, IV, IM
 - o Olanzapine 2.5 mg – 5 mg Rapidly dissolving, PO, IM (do not co-administer IM olanzapine and benzodiazepine; following IM olanzapine, wait at least one hour and monitor for respiratory depression prior to use of benzo)
 - o Lorazepam 0.5 – 2 mg PO, IV, IM
- **Severe: IV/IM**
 - o Haloperidol +/- lorazepam +/- diphenhydramine

Pharmacological Interventions: Pregnancy Considerations

- Limit number of medications.
 - o Give patients known medications first to limit exposures to fetus (ex. patient already receiving olanzapine).
 - o Match IM/PO/IV medications.
- Anti-psychotics
 - o Most data on haloperidol, olanzapine, and quetiapine during pregnancy. One-time doses are generally low risk and not associated with an increased risk in congenital malformations compared to general population (risk 2-3%) (1, 7).
 - o 1st generation (haloperidol): less likely to have sedative or hypotensive effect compared to low potency anti-psychotic (4).
 - o Less clear data on risperidone; recommend to generally avoid given other options available (unless patient already scheduled on this medication). Risperidone has higher relative infant dose and some studies show small increased risk of cardiac malformations (7).
 - o If frequent administration of anti-psychotics in 3rd trimester, newborns should be monitored for theoretical risk of neonatal EPS. FDA warning (2011) about risk of exposure in 3rd trimester including neonatal EPS, sedation, breathing and feeding difficulties, increased/decreased muscle tone, agitation, tremor. These complications may resolve on their own or require additional hospitalization.
- Benzodiazepines
 - o One-time doses may not have adverse effects; no study has assessed risk of outcomes after one time exposure, though data on long term treatment is reassuring (1).
 - o Regular use early in pregnancy may be associated with spontaneous abortion.
 - o One study showed possible association of benzodiazepines with congenital malformations with co-administration of SRRI; however, this study has not been replicated (13).
 - o If frequent administration during third trimester, monitor newborns for floppy baby or neonatal withdrawal syndrome. Symptoms may include sedation, hypotonia, feeding difficulties.
- Contra-indicated: valproic acid (not generally used for acute agitation)
- Dosing: Medications metabolized by CYP P450 enzymes more rapidly metabolized during pregnancy and may require higher doses.
 - o Examples: CYP3A4 – clonazepam/quetiapine; CYP2D6 – risperidone; Glucuronidation – lorazepam)

**For more details about specific medications and effects during pregnancy, see table below.*

Peripartum Agitation Medications

Medication	Potential Indications	Maternal Acute Side Effects	Effects on Fetus/Birth in:		Starting Dose Ranges	Onset of Action	Notes
			Early Pregnancy	Late Pregnancy			
Haloperidol (1 st line if etiology of agitation unknown)	Mod/Severe Agitation Delirium/Organic etiology Primary Psych (ex. psychosis)	EPS (higher risk) Dystonia Sedation NMS Anti-cholinergic Effects QTc prolongation (worse with IV)	No evidence of increased congenital anomalies (evidence from retrospective study > 100 pregnancy, prospective study > 180 pregnancies, meta-analysis >130,000 pregnancies)	Risk of neonatal EPS for ongoing use; no data of increased risk from one time use. FDA warning (updated 2011) for EPS, sedation, breathing/feeding difficulties, agitation, tremor, change in muscle tone; may resolve spontaneously or require additional hospital care.	PO: 0.5-1 mg TID PRN IV: 0.5 - 2 mg TID PRN IM: 5 mg once time Can increase to 4-20 mg/day NTE: 20 mg/day	PO: 45 – 60 mins IV > IM: 15 – 30 mins	Get EKG baseline to evaluate QTc. Continue to monitor with increased doses. IV preferred over IM if IV available (IM higher risk of EPS) IM: recommend giving with diphenhydramine 25 – 50 mg to prevent EPS Consideration: Less likely to have sedative or hypotensive effects than low-potency anti-psychotics
Olanzapine (alternative choice)	Mod/Severe Agitation Primary Psych (ex. mood stabilization, psychosis)	Sedation Orthostatic hypotension EPS Metabolic syndrome	No evidence of increased risk of congenital anomalies. Multiple studies/reviews showed rates of ectopic, premature or post-term birth, spontaneous abortion does not appear higher. Canadian study of 166 pregnancies showed no increased risk for gestational DM/HTN, preterm birth.	Risk of neonatal EPS for ongoing use; no data of increased risk from one time use. FDA warning (updated 2011) for EPS, sedation, breathing/feeding difficulties, agitation, tremor, change in muscle tone; may resolve spontaneously or require additional hospital care.	PO: 2.5 – 5 mg PO or IM BID PRN Can increase to 10-20 mg/day NTE: 20 – 30 mg/day	PO: 30 mins – 1 hour IM: 15 – 30 minutes	Get EKG baseline to evaluate QTc. Continue to monitor with increased doses. Do not administer IM medication with benzodiazepine (risk of respiratory distress) Highest placental transfer (72.1%)

<p>Quetiapine (alternative choice)</p>	<p>Primary psych (mood stabilization)</p> <p>Delirium</p> <p>Anxiety</p>	<p>Sedation Weight gain Metabolic syndrome</p> <p>Possible risk of increased gestational diabetes</p>	<p>Not expected to increase risk of malformations (>5000 exposures, multiple case reports) based on limited data.</p>	<p>Risk of neonatal EPS for ongoing use; no data of increased risk from one time use</p> <p>FDA warning (updated 2011) for EPS, sedation, breathing/feeding difficulties, agitation, tremor, change in muscle tone; may resolve spontaneously or require additional hospital care.</p>	<p>25 – 100 mg PO</p> <p>NTE: 300 mg daily for agitation</p>		<p>Lowest possible placental transfer (3.7%)</p>
<p>Lorazepam (preferred benzo in pregnancy)</p>	<p>Alcohol or Benzo withdrawal</p> <p>Stimulant intoxication</p> <p>AMS 2/2 NMS, serotonin syndrome, catatonia</p> <p>Personality</p>	<p>Sedation Respiratory distress Memory Impairment Risk of falls/Incoordination Tolerance Dependence Withdrawal</p>	<p>In general, does not appear to be associated with increased congenital anomalies.</p> <p>Data on congenital malformation association in one study with SSRI and benzos but has not been replicated.</p> <p>Increased risk of spontaneous abortions.</p>	<p>Exposure associated with “floppy baby” syndrome and neonatal withdrawal (requiring ICU admission); more likely from long term use</p>	<p>0.5 – 2 mg PO, IV, IM up to 2-3 times daily</p> <p>Increase as needed to 2-6 mg daily divided in doses</p> <p>NTE: 10 mg/day in divided doses</p>	<p>PO: 15 – 30 mins</p> <p>IM, IV: rapid</p>	<p>Black box warning: avoid use with opioids; abuse/misuse potential</p>
<p>Diphenhydramine</p>	<p>Mild agitation Anxiety</p>	<p>Sedation Anti-cholinergic effects GI distress Impaired coordination</p>	<p>Limited published data in pregnancy.</p> <p>Generally, not expected to increase risk of congenital abnormalities. There are some reports of associations with cardiac malformations (d-transposition great arteries) and cleft palate, though data is not consistent</p>	<p>One case report of neonatal withdrawal symptoms (irritability, sedation, tremulous, diarrhea).</p>	<p>25 – 50 mg PO, IV, or IM Q1-4 hours</p> <p>NTE: 300 mg/day</p>	<p>PO: 15 – 20 mins</p> <p>IM, IV: rapid</p>	<p>Dose dependent anti-cholinergic effect can make delirium worse</p>

Peripartum Agitation References

1. Lisette, Rodriguez-Cabezas and Clark Crystal. Psychiatric Emergencies in Pregnancy and Post-Partum. Psychiatric emergencies in pregnancy and postpartum.pdf. *Clin Obstetrics gynecology* Sept 2018.
2. Cohen LS, Viguera AC, McInerney KA, et al. Reproductive Safety of Second-Generation Antipsychotics: Current Data from the Massachusetts General Hospital National Pregnancy Registry for Atypical Antipsychotics. *Am J Psychiatry*. 2016;173(3):263–270.
3. Wilson, Michael P, Kimberly Nordstrom, et al. Psychiatric Emergencies in Pregnant Women. <http://dx.doi.org/10.1016/j.emc.2015.07.010>. *Emergency Med Clin Elsevier Inc*. 2015
4. Niforatos, Joshua, Wanta, Jonathon, et al. How should I treat acute agitation in Pregnancy?. <https://consultqd.clevelandclinic.org/how-should-i-treat-acute-agitation-in-pregnancy/>
5. Aftab A, Shah AA., et al Behavioral emergencies: special considerations in the pregnant patient. *Psychiatry Clin North Am* 2017; 40(3):435–448.
6. Best Practices in the Use of Restraints with Pregnant Women and Girls Under Correctional Custody. [http://www.nasmhpd.org/sites/default/files/Best Practices Use of Restraints Pregnant%282%29.pdf](http://www.nasmhpd.org/sites/default/files/Best_Practices_Use_of_Restraints_Pregnant%282%29.pdf). *Bureau of Justice Assistance. U.S. Department of Justice*. 2014.
7. Huybrechts, Krista. Antipsychotic Use in Pregnancy and the Risk for Congenital Malformations. <https://jamanetwork.com/journals/jamapsychiatry/fullarticle/2545072>. *JAMA Psychiatry*. September 2016.
8. Ennis ZN, Damkier P. Pregnancy exposure to olanzapine, quetiapine, risperidone, aripiprazole and risk of congenital malformations: a systematic review. *Basic Clin Pharmacol Toxicol*. 2015;116(4):315-320.
9. Allen, Michael, Currier, Glenn, et al. The expert consensus guideline series: Treatment of behavioral emergencies 2005. November 2005. <https://pubmed-ncbi-nlm-nih.gov/offcampus.lib.washington.edu/16319571/>. *J Psychiatry Pract*. 2005 Nov;11 Suppl 1:5-108; quiz 110-2. doi: 10.1097/00131746-200511001-00002.
10. Garriga, Marina, Pachiarotti, Isabella, et al. Assessment and management of agitation in psychiatry: Expert consensus. <https://pubmed-ncbi-nlm-nih.gov/offcampus.lib.washington.edu/26912127/>. *World J Biology Psychiatry*. 2016.
11. Yan, Jun. FDA extends Black-Box Warning to All Anti-psychotics. <https://psychnews.psychiatryonline.org/doi/10.1176/pn.43.14.0001>. *Psychiatry News*, American Psychiatric Association. Jul 18, 2008.
12. Ries, Rose. Sayadipour, Amirali. Management of psychosis and agitation in medical-surgical patients who have or are at risk for prolonged QT interval. <https://www.ncbi-nlm-nih.gov/offcampus.lib.washington.edu/pubmed/25226194>. *J Psychiatr Prac*. 2014 Sep;20(5):338-44. doi: 10.1097/01.pra.0000454778.29433.7c.
13. Grigoriadis S, Graves L, Peer M, et al. Benzodiazepine use during pregnancy alone or in combination with an antidepressant and congenital malformations: systematic review and meta-analysis. *J Clin Psychiatry*. 2019;80(4):18r12412.

Perinatal Anxiety

Deborah Cowley, MD

Perinatal Anxiety

Anxiety symptoms and/or positive screen (GAD-7 > 10)

Differential Diagnosis:

- *Situational stress/Adjustment disorder (anxiety related to stressful life events, intimate partner violence/abuse, pregnancy-related anxiety)
- *Anxiety secondary to medical condition (e.g. hyperthyroidism)
- *Anxiety secondary to substance use/withdrawal, medications
- *Primary anxiety disorder (meets DSM-5 diagnostic criteria for panic disorder, generalized anxiety disorder, social anxiety disorder, specific phobia)
- *Anxiety secondary to another psychiatric disorder (if obsessions/compulsions, think of OCD; if trauma history, nightmares/flashbacks, think of PTSD)

Consider comorbidity: Depression common; many people with anxiety disorders have more than one

Mild anxiety:

- *Address stressors, provide information, problem-solving, increased social support
- *Relaxation, mindfulness, meditation, yoga
- *Consider psychotherapy

Moderate/severe anxiety:

- *Psychotherapy (especially cognitive-behavioral therapy (CBT))
- *Medication (weigh risks of untreated anxiety vs. risks of medications, alternative treatments)

Risks of untreated anxiety:

- *Decreased placental blood flow
- *Increased stress reactivity, HPA axis activation, cortisol levels
- *Increased rates of preeclampsia, gestational hypertension, preterm birth, low birth weight, prolonged labor, postpartum hemorrhage
- *Increased risk of postpartum depression; impaired attachment
- *Cognitive and motor delays, emotional and behavioral problems in child



Risks of medications in pregnancy and lactation:

- *SSRI antidepressants are first-line medication treatment for anxiety disorders
- *No consistent increase in rates of malformations
- *Persistent pulmonary hypertension of the newborn (PPHN; 2.9 vs. 1.8/1000)
- *Neonatal adaptation syndrome in 30%; worse if also taking benzodiazepines
- *Monitor breastfed infants for sedation/poor feeding
- *Other medications can be used for adjunctive/as-needed treatment of anxiety (see Perinatal Anxiety Medications table for risks of benzodiazepines and other anxiolytics)

Alternative treatments:

- *Psychotherapy (CBT)
- *Mindfulness, meditation, relaxation
- *Exercise, yoga

Goal:

- *Treat to remission
- *Track GAD-7 to measure progress/outcome
- *If not improved, add medication/ psychotherapy to existing treatment, try a second SSRI or an SNRI, and/or seek psychiatric consultation/referral

Perinatal Anxiety Medications

The first-line medication treatment for an anxiety disorder is an SSRI or venlafaxine. The anxiolytic medications below may be useful as adjunctive treatment, for occasional as-needed (PRN) use, or for patients who cannot tolerate or do not respond to first-line treatment.

Drug Name	Starting Dose (mg)	Up titration/dosing schedule	Side effects	Use in Pregnancy	Use during Lactation
BENZODIAZEPINES					
Alprazolam ^a (Xanax)	0.25-0.5 TID	Increase weekly as needed; max 4 mg daily in divided doses ^b	Benzodiazepine side effects include sedation, incoordination, memory impairment, tolerance, dependence, withdrawal; avoid use with opioids (black box warning)	No increase in malformations ^c Increased rate of spontaneous abortion Neonatal withdrawal, “floppy infant” syndrome; increase in NICU admissions	RID 3%; reports of infant sedation, withdrawal symptoms with weaning/discontinuation
Clonazepam ^a (Klonopin)	0.25 BID	Increase in increments of 0.125-0.25 mg BID to 1-2 mg daily as needed			Sedation, apnea reported in infants; monitor for sedation, poor feeding, poor weight gain
Diazepam ^a (Valium)	2-5 BID	2-10 mg 2-4 times daily			Sedation, weight loss reported in breastfed infants
Lorazepam ^a (Ativan)	0.5-1, 2-3 times daily	Increase as needed to 2-6 (max 10) mg daily in divided doses			Low levels in breast milk, no reports of sedation. Preferred benzodiazepine in lactation.
OTHERS					
Buspirone (Buspar)	7.5 BID	Increase by 5 mg every 2-3 days to 15 mg BID. After 3 weeks, increase further as needed; max 60 mg/day in divided doses	Dizziness, drowsiness, headache, nausea	Limited human data (3 case reports, one infant with malformations); no increase in malformations in animals	Limited data (2 case reports); low levels in breast milk; seizures in one infant exposed to multiple medications
Gabapentin ^a (Neurontin)	100, 1-3 times daily	Increase to 300-600 mg TID as needed	Dizziness, drowsiness	Possible inc in heart defects, preterm birth	Limited data; RID 1-4%; no adverse effects
Hydroxyzine ^a (Vistaril)	25	Increase to 50-100 mg up to QID as needed	Drowsiness, dry mouth	240 exposures, no overall increase in malformations	Reports of infant sedation, irritability
Pregabalin ^a (Lyrica)	25 BID	Increase as needed to 150- 600 mg daily in divided doses	Dizziness, drowsiness	>600 exposures; no consistent increase in malformations	Limited data; RID 7-8%; no reports about effects in infants
Propranolol ^a (Inderal)	10	10 mg as needed, one hour prior to event	Contraindicated with asthma, bradycardia, hypotension, CHF	No inc malformations; ± IUGR; neonatal bradycardia, hypoglycemia	Low levels in milk; bradycardia, sedation in 2 infants exposed to multiple medications
Quetiapine ^a (Seroquel)	25	Increase to 50-300 mg daily as needed	Sedation, weight gain, metabolic syndrome	>5000 exposures; no increase in malformations; neonatal syndrome	Low levels in milk; RID<1%; one infant with sedation

^aCan be scheduled or prescribed PRN (as needed); buspirone is not effective as a PRN medication

^bDose for panic disorder can be 5-6 mg daily (max 10 mg daily) in divided doses

^cIncrease in malformations reported with benzodiazepine + SSRI exposure, but not with benzodiazepine

Perinatal Anxiety Resources

Review article:

Thorsness KR, Watson C, LaRusso EM. Perinatal anxiety: approach to diagnosis and management in the obstetric setting. Am J Obstet Gynecol 2018; 219:326-345.

GAD-7 in other languages:

The GAD-7 anxiety screening questionnaire is available in multiple languages at:
<https://www.phqscreeners.com>

Patient manual:

Gyoerkoe K, Wiegartz P, Miller L. The pregnancy and postpartum anxiety workbook: practical skills to help you overcome anxiety, worry, panic attacks, obsessions, and compulsions. Oakland, CA: New Harbinger Publications; 2009.

Websites for patients:

Calm

For meditation, dealing with stress, sleep

<https://www.calm.com/>

Headspace

For stress, anxiety, sleep, learning meditation

<https://www.headspace.com/>

Assessing Safety

Cummings Rork, MD

Assessment of Safety Risk in Perinatal Populations

Key Facts:

- Suicide is the leading cause of direct death within first year of postpartum period (4.1 per 100,000 in WA state, ~13% of maternal deaths)
- Peak incidence of maternal self-harm-related death in WA state is between 9 and 12 months postpartum
- Postpartum women with a history of depression are at a 70% increased risk for death by suicide
- Women diagnosed with a postpartum mental disorder are 6.2x higher risk for self-harm compared to mothers without mental disorders
- Pregnant women with alcohol abuse are 3.7x more likely to feel suicidal compared to those without alcohol abuse
- In pregnancy-associated suicides, 54.3% of victims experienced problems with a current or former intimate partner that appeared to have contributed to the suicide
- For patients with untreated postpartum psychosis, 5% die by suicide

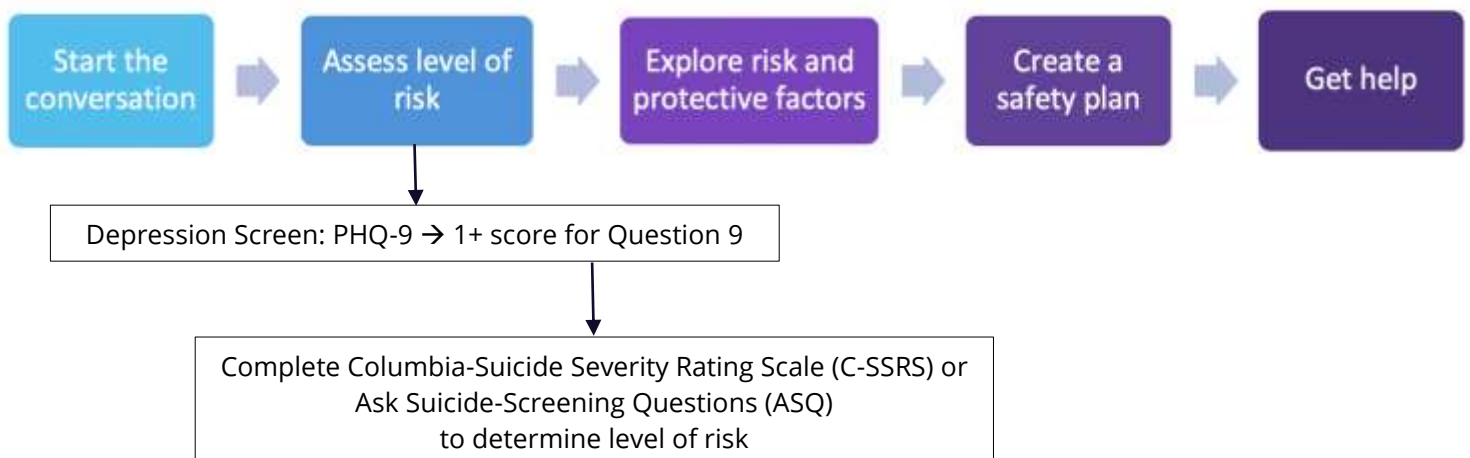
Warning Signs:

- Sadness
- Withdrawn
- Change in sleep or eating habits (esp. severe insomnia)
- Loss of pleasure of activities that normally bring joy
- Giving away possessions
- Helplessness
- Feelings of worthlessness
- Anger, seeking revenge
- Significant estrangement from infant
- Feeling trapped
- Overwhelming anxiety, panic, or agitation
- Alcohol or drug use increase
- Change in personality
- Strong feelings of guilt or shame
- Recklessness or impulsivity
- Purposelessness (feeling like a burden, family would be better without them)
- Psychosis

CRITICAL SIGNS

Hopelessness
Talking about death
Seeking methods for self-harm (searching online, obtaining a gun*)

*Women who die by suicide during the postpartum period use violent and lethal means more frequently than non-perinatal women



Assessment of Safety Risk in Perinatal Populations (Cont.)

Protective Factors	Risk Factors	
<ul style="list-style-type: none"> • Positive & available social support • Cohabitation with partner • Positive therapeutic relationship • Responsibility to others (family, children) • Fear of death • Positive problem-solving or coping skills • Hope for future, future-oriented • Intact reality testing • Fear of social disapproval • Religious beliefs against suicide • Life satisfaction 	<p><u>Predisposing Historical factors:</u></p> <ul style="list-style-type: none"> • Personal hx of suicidal ideation/behavior • Hx of mental disorder • Hx of substance use disorder & cannabis use • Lifetime hx of rape, or hx of childhood abuse • Medical illness (e.g. HIV+ status) • Death of family member by suicide • Younger age • Traditionally marginalized and underserved populations (e.g., LGBTQAI+, Black, Native American/Alaskan Native) • Veteran • Physician 	<p><u>Situational factors:</u></p> <ul style="list-style-type: none"> • Family or marital conflict • Unmarried • Recent IPV • Unemployment/financial instability • Social withdrawal/isolation • Medical problems • Legal issues • Loss (e.g. pregnancy loss) • Recent discharge from inpatient psychiatric unit <p><u>Other:</u> Depressive symptoms (SIGECAPS), feeling estranged/distant from child, psychosis, or suicide warning signs</p>

Health Consequences of Nonfatal Suicide Attempt

Obstetric health	Impact on Children
<p>Increased risk of:</p> <ul style="list-style-type: none"> • Antepartum hemorrhage • Placental abruption • Postpartum hemorrhage • Premature delivery • Low birth weight • Stillbirth • Poor fetal growth • Fetal abnormalities 	<ul style="list-style-type: none"> • Fetal death • Neurodevelopmental abnormalities

Safety Planning:

- Foster a sense of connectedness (e.g., hope, connect with family)
- Initiate or refer to specialty care
- Assess for firearms, medications, and other lethal means. Work to secure any lethal means.
- Collaborate in creating safety plan. See [Brown-Stanley](#) below for example.
- Discuss Reasons for Living

Brown-Stanley Patient Safety Plan Template:

<https://www.sprc.org/resources-programs/patient-safety-plan-template>

ASQ Suicide Risk Screening Tool:

<https://www.nimh.nih.gov/research/research-conducted-at-nimh/asq-toolkit-materials/>

Resources for Assessing Safety

Patient Resources:

Perinatal Support Washington Warm Line:

- 1-888-404-7763
- <https://perinatalsupport.org>

Washington State Crisis Line Access:

- 9-8-8 (7-1-1 for TTY)

King County Crisis Line:

- 866-4-CRISIS

National Suicide Prevention Lifeline:

- 9-8-8 (1-800-273-8255)
- Crisis support via text message: Text HOME to 741741
- Crisis support via chat: www.suicidepreventionlifeline.org

Washington Warm Line:

- 1-877-500-9276

Washington Recovery Help Line:

- 1-866-789-1511

Survivors of Suicide Support Groups:

For families/patients:

American Foundation for Suicide Prevention Directory:

<https://afsp.org/find-a-support-group/>

WA DOH Suicide Grief Support Resources:

<https://doh.wa.gov/you-and-your-family/injury-and-violence-prevention/suicide-prevention/suicide-prevention>

Crisis Line Support Group Directory:

<https://suicidepreventionlifeline.org/help-yourself/loss-survivors/>

2020 Mom Remembrance Wall:

<https://www.2020mom.org/remembrance-wall>

For clinicians:

Coalition of Clinician Survivors

www.cliniciansurvivor.org

Intimate Partner Violence Risk Assessment

Definition: The term “intimate partner violence” describes a single or repeated act of physical violence, sexual violence, stalking, psychological harm, or control of reproductive health perpetrated by a current or former partner or spouse. “Intimate partner” refers to an individual with whom one has a close personal relationship (i.e., spouse, former partner, family member).

Be vigilant:

- Cases of domestic violence have increased, and become more severe, during the coronavirus pandemic
- 3.7% to 8.3% prevalence of perinatal IPV, likely higher in LGBTQIA community
- Pregnancy is the 2nd most dangerous time in a violent relationship.
- IPV in pregnancy is more common than GD or preeclampsia
- BIPOC people suffer the impact of IPV disproportionately
- Homicide pregnancy-associated death ratio increased 63% in the past decade (1.8 → 3.0 per 100,000 births); rates are highest during pregnancy (56.8%) or after 6-weeks postpartum (34.9%); people who identify as non-Hispanic Black or younger age (15-24) are at highest risk of homicide
- IPV (esp physical abuse) is associated with suicidal ideation and deaths (increase frequency = increase risk)

Risk Factors for IPV:

- Prior IPV (which raises the risk of violence during pregnancy as much as 14 times)
- Young age, particularly adolescents
- Individuals who are single, unmarried, or who are living apart
- Fewer years of education (particularly if less than a high school education)
- Co-existing medical or obstetric complication
- Being publicly insured or on Medicaid
- Unplanned/Mistimed pregnancy or ambivalence about the pregnancy

Warning Signs/Indicators of IPV:

- Poor attendance/ nonattendance to clinic visits
- Repeat visits for minor injuries or concerns
- Nonadherence to care plan
- Repeat presentation with depression, anxiety, self-harm, or other psychosomatic symptoms
- Physical injuries that are untended and located in several locations of varying degrees of age, especially to neck, head, breasts, abdomen, and genitals → Minimalization of physical injuries
- Past poor obstetric outcomes (repeated miscarriage, stillbirths, preterm labor/birth, IUGR or low birth weight)
- Partner demanding to be included in visit or domineering during visit

Intimate Partner Violence Risk Assessment (Cont.)

Consequences of IPV

Mental Health:

- PTSD
- Anxiety
- Major Depressive Disorder
- Eating Disorders
- Suicide
- Substance Use Disorders

Obstetric Health:

- No or delayed prenatal care
- High blood pressure, edema
- Vaginal bleeding in 2nd or 3rd trimester
- Severe nausea, vomiting, or dehydration
- Kidney infection or UTI
- Premature rupture of membranes, premature birth
- Placental abruption
- Miscarriages
- Preterm birth
- Diminished intrauterine growth
- Homicide*
- Death of fetus
- Stillbirth

Impact on Children:

- Less likely to be breastfed
- Failure-to-thrive
- Death
- Increased risk for mental illness
- Sleep disturbances
- Higher irritability
- Deficits in executive functioning
- Deficits in cognitive functioning
- Delays in achieving developmental milestones
- Insecure or disorganized attachment
- Increased risk for additional adverse childhood events (e.g., child abuse)
- Increased risk for both using and experiencing IPV as an adult

Psychosocial Impact:

- Housing instability & homelessness
- Unemployment
- Loss or delay in educational opportunities
- Food insecurity
- Financial instability
- Unwanted entanglement in legal systems

*Homicide is a leading cause of death during pregnancy (estimated at 8.4% of total deaths); an intimate partner is responsible in up to 2/3rds of homicides

Intimate Partner Violence Risk Assessment (Cont.)

Considerations with Screening:

If your patient says “YES,” ask:

1. Are you safe now?
2. Would you like to talk about it?
3. When did this happen?
4. Have you talked with anyone else about this?
5. How are you coping?
6. What do you need right now?

- IPV screening is recommended for all women of childbearing age
 - Screen at least 1x/trimester and at postpartum visit
 - Think about including information in discrete areas in the clinic (i.e., restrooms/stall doors)
- Do not screen if another adult or child > 2 y/o is present
- Review the limits of confidentiality with the patient beforehand
- Be mindful of how you screen (self-report vs clinician-led questionnaire, before visit/in lobby, in office, survey that includes all types of violence, culturally adapted, gender-neutral, non-heteronormative)
 - See examples of screening tools in Additional Resources
- Ask behaviorally specific questions to yield more accurate responses (i.e., “Has your partner ever strangled you?” instead of “Has your partner ever abused you?”)
- Assess immediate safety and other health concerns/needs
- Offer choices (referrals, list of local resources e.g., crisis lines, shelter)
- Respect and recognize the patient’s autonomy in decision-making

Considerations with Documentation

- Be mindful of how to document your conversation and collaborate with the patient in your response
- Be aware of who may have access to the medical record
- Use recovery-oriented, non-stigmatizing terms (i.e., someone who uses/experiences violence, not victim/perpetrator)
- **Sufficient, detailed, and accurate**
- Include date(s) and description of event(s), use the patient’s words verbatim with quotations, and document detailed information of objective physical signs and behaviors (consider anatomical diagrams, photos)
- Collect and document information about the individual who used violence (name, address, relationship to patient, etc.)
- Other considerations: (in)consistency between subjective and objective findings, children in home, pregnancy status of patient, etc.

Safety Planning:

Safety is priority. Depending on what the individual wants to do, safety planning may include safety within the relationship, safety while leaving the relationship, and safety after leaving the relationship. Please visit “[More Resources for Providers](#)” for some safety planning forms (and attached at end of this guide).

Intimate Partner Violence Risk Assessment (Cont.)

How to Stay Safe Within the Relationship

- Identifying safe areas of the home
- Gathering important documents such as copies of birth certificates
- Making copies of important financial or ownership documents
- Providing assistance with contraceptive health and screening for sexual health issues
- Practicing how to escape if needed and have an escape bag packed
- Identifying individuals to call in an emergency including a local domestic violence shelter or national hotline with trained advocates such as the Natural Disaster Violence Hotline

How to Safely Leave the Relationship

- Contacting a local domestic violence shelter or national hotline
- Documenting any injuries (clinician can do this during the visit and place pictures in the medical record)
- Identifying a safe place to stay

How to Stay Safe After Leaving the Relationship

- Filing for a restraining order or order of protection
- Changing the route to work and/or school
- Changing the locks
- Alerting neighbors, family, co-workers, or school personnel to call the police if they see the individual

Intimate Partner Violence Resources

For Patients and Clinicians:

Domestic Violence Personalized Safety Plan

- http://www.ncdsv.org/images/dv_safety_plan.pdf

National Domestic Violence Hotline

- 1-800-799-SAFE (Voice) | Free. Confidential. 24/7.
- 1-800-787-3224 (TTY) | Free. Confidential. 24/7.

National Teen Dating Violence Hotline, online chat, and texting

- www.loveisrespect.org

National Sexual Assault Hotline

- 1-800-56-HOPE (4673) | Free. Confidential. 24/7.
- <https://rainn.org/get-help/national-sexual-assault-hotline/>

Database of Domestic Violence Programs and Shelters

- www.domesticshelters.org

WA Dept of Health List of Resources

(Domestic, Sexual, Prevention, Legal)

- <https://www.doh.wa.gov/YouandYourFamily/InjuryandViolencePrevention/SexualandDomesticViolence/Resources>
- <https://www.domesticviolenceinforeferral.org/>

Database of Sexual Assault and Domestic Violence Services in Washington

- Locate sexual assault service providers in WA: <http://www.wcsap.org/find-help>
- Locate domestic violence service providers in WA: <http://wscadv.org/washington-domestic-violence-programs/>

Assessment of Risk for Harm of Infants and Children

Key Facts:

- Infants are at risk for homicide more than any other age group
- The highest risk for infant homicide is during first 24hrs of life
- Homicide is the second leading cause of injury-related death for children <1 year
- For patients with untreated postpartum psychosis, 4% commit infanticide
- Aggressive or infanticidal ideation in women with depression or facing stress is common (26-43% incidence)
- 16-29% of filicides (the killing of a child age ≥ 1) occur in the context of maternal suicide

Maternal Characteristics

- Denial of pregnancy
- Late initiation of pregnancy care
- Depression
- Psychosis (delusions of threat to safety, auditory/command hallucinations)
- Suicidality
- Significant life stress
- Low SES
- Young age
- Unmarried
- Lower educational achievement
- Socially isolated
- IPV
- Family history of violence
- History or current child abuse/neglect
- Full-time caregiver/unemployment
- Persistent crying or other child factors (e.g., colic, autism)
- Child custody dispute
- Thoughts of revenge against spouse

Infant Characteristics:

1-day old, low gestational age, low birthweight, low apgar score, male sex, and/or Non-Hispanic Black race

Common Motives:

1. Altruistic: death of child out of love or belief this is in the best interest of the child; often planned or considered for some time
2. Acutely psychotic: no comprehensive motive (e.g., command auditory hallucinations); tends to be impulsive
3. Fatal maltreatment: death is not anticipated outcome, a result of abuse, neglect, or fabricated/induced illness or injury by caregivers (i.e., Munchausen by proxy syndrome)
4. Unwanted child: mother perceives child as burden
5. Spouse revenge: child is killed to specifically cause emotional harm to spouse; rare

Definitions:

Neonaticide: the killing of an infant during first 24hrs of life

Infanticide: the killing of an infant (age 1 day old to 1 year old)

Filicide: the killing of a child (age ≥ 1)

Sample Questions:

- Do you have any concerns about the safety of your child(ren)?
- Are you having any thoughts or fears of harming other people?
- Are you having any thoughts or fears of harming your child(ren)?
- Are there other people (or children) you want to die with you?
- Are there others you think would be unable to go on without you?
- What will happen to your child(ren) if you die?

Important Consideration:

Fear of removal of children from home is real and common. This may lead to concern about disclosure or minimization of symptoms or risky behaviors (e.g., substance use). If after risk assessment, referral for protective services is determined to be necessary, extra vigilance and care are required. Disruption of therapeutic alliance may occur, leading to avoidance of care or treatment, and potentially increase risk for maternal mental health disorder or suicide. Obsessive Compulsive Disorder is not a risk factor and having intrusive thoughts of hurting or harming the child does not lead to harm of the child. It is critical to distinguish these intrusive thoughts from psychotic symptoms.

Resources for Assessment of Risk for Harm of Infants and Children

Emergent/Crisis Resources

WA State Crisis Line Access:

9-8-8 (7-1-1 for TTY)

King County Crisis Line:

866-4-CRISIS

National Suicide Prevention Lifeline:

1-800-273-8255

Crisis support via text message: Text HOME to 741741

Crisis support via Chat: www.suicidepreventionlifeline.org

Non-Urgent Perinatal Support

Perinatal Support Washington:

1-888-404-7763

<https://perinatalsupport.org>

Other Support

Child Protective Services:

<https://www.dcyf.wa.gov/safety/report-abuse>

WA Warm Line:

1-877-500-9276

WA Recovery Help Line:

1-866-789-1511

Teen Link (ages 13-20):

1-866-833-6546

Child Help Hotline:

1-800-4-A-CHILD (1-800-422-4453)

The Period of Purple Crying

<http://www.purplecrying.info/>

References

Salihi, H., Gonzales, D. and Dongarwar, D., 2021. Infanticide, neonaticide, and post-neonaticide: racial/ethnic disparities in the United States. *European Journal of Pediatrics*, 180(8), pp.2591-2598.

Wilson, R., Klevens, J., Williams, D. and Xu, L., 2020. Infant Homicides Within the Context of Safe Haven Laws — United States, 2008–2017. *Morbidity and Mortality Weekly Report (MMWR)*. [online] CDC. Available at: <<https://www.cdc.gov/mmwr/volumes/69/wr/mm6939a1.htm#:~:text=The%20infant%20homicide%20rate%20on,any%20other%20time%20in%20life.>> [Accessed 19 May 2022].

Perinatal Bipolar Disorder

Amritha Bhat, MD

Perinatal Bipolar Disorder

Key facts: 60–70% of women with BD experience a mood episode during pregnancy and the postpartum period. Screen for bipolar disorder in all women with perinatal depression, especially if you are considering starting an antidepressant. For those who screen positive, prioritize safety assessment and management of sleep disturbance while awaiting psychiatric evaluation.

Diagnostic criteria for bipolar disorder:

Bipolar I disorder: at least one lifetime manic or mixed episode; Bipolar II disorder: at least one lifetime hypomanic episode and at least one episode of major depression.
Symptoms of mania (lasts 1 week or requires hospitalization): D = Distractibility, I = Irrresponsibility, G = Grandiosity, F = Flight of ideas, A = Activity increase, S = Sleep deficit, T = Talkativeness. Symptoms of hypomania – same as mania, for 4 days / without impairment

Effects of untreated bipolar disorder:

On mother: Risk of relapse, suicide, comorbidities
Antepartum hemorrhage, placental abnormalities
On baby: preterm birth, low birth weight, microcephaly, neonatal hypoglycemia

Risk assessment:

Also see [Assessing Safety](#) (Page 27)

Suicide risk: C-SSRS

Risk of infant harm – First determine if thought of harming infant is an intrusive thought (unwanted negative thoughts that are frequent and difficult to dismiss) or infanticidal ideation (due to a psychotic symptom). Ask questions assessing specific content of the thought, and emotional and behavioral responses to thoughts.

Examples of other questions that could be asked, taken from the Postpartum Bonding Questionnaire (Brockington et al 2006)

- Have you felt irritated by your baby?
- Have you had significant regrets about having this baby?
- Does the baby feel like it's not yours at times?
- Have you wanted to shake or slap your baby?
- Have you ever harmed your baby?

Screening tools:

CIDI (Composite International Diagnostic Interview) based screening tool for bipolar spectrum disorders – 3 minutes to complete, clinician administered.

MDQ (Mood Disorder Questionnaire) – 5 minutes to complete, self-report.

Critical to screen for comorbidities such as anxiety, substance use

Pharmacological treatments:

Use monotherapy where possible

Individual risk benefit analysis is important

Acute treatment of perinatal bipolar depression: lamotrigine or quetiapine

Acute treatment of mania or mixed: quetiapine, benzodiazepine, lithium

Maintenance: Lamotrigine, lithium, second generation antipsychotic

Non-pharmacological interventions:

Cognitive Behavior Therapy (CBT)

CBT – Insomnia

Interpersonal and Social Rhythm Therapy

Light therapy

Counsel on lifestyle issues and sleep, help plan how to implement these suggestions

A note on postpartum psychosis:

Also see [Postpartum Psychosis](#) (Page 65)

Rare (prevalence 0.1%) but a psychiatric emergency requiring hospitalization.

Rapid onset, highest risk in first 4 weeks postpartum, may occur up to 12 weeks postpartum

Higher risk in those with past episodes and bipolar disorder

Symptoms: mood swings, confusion, strange beliefs and hallucinations

Brockington, I. F., Fraser, C., & Wilson, D. (2006). The postpartum bonding questionnaire: a validation. *Archives of women's mental health*, 9(5), 233-242.

Chessick, C. A., & Dimidjian, S. (2010). Screening for bipolar disorder during pregnancy and the postpartum period. *Archives of women's mental health*, 13(3), 233-248.

Perinatal Bipolar Disorder Medications (See Page 67 for [Information on Antipsychotics](#))

Drug Name (Common brand name)	Starting Dose and titration	Common side effects / adverse effects	Use in Pregnancy	Use during Lactation
Lamotrigine (Lamictal)	25 mg / day for 2 weeks; 50 mg / day for 2 weeks; 100 mg for 1 week, 200 mg (usual maximum dose)	Serious rash including Stevens Johnson syndrome, nausea, dizziness, ataxia	No increased risk of congenital malformations 29% need dose increase during pregnancy. If dose was increased during pregnancy, taper by 25% immediately post-birth and gradually back to baseline within two weeks postpartum.	RID 1.8 – 21. Considered compatible. Monitor for sedation / rash in infant.
Lithium	Acute mania/mixed episodes / or acute bipolar major depression: Initial: 600 to 900 mg/day in 2 to 3 divided doses; increase based on response and tolerability by 300 to 600 mg every 1 - 5 days to usual therapeutic dose range of 900 mg/day to 1.8 g/day. ¹	Hypothyroidism, polyuria, weight gain, serotonin syndrome	Ebstein's anomaly ² – rate of 0.01 – 0.05% compared to a population risk of 0.005% Higher odds of: Any congenital anomaly (4.1%, OR 1.8, NNH 33) Cardiac anomaly (1.2%, OR 1.86, NNH 71) Increased rates of neonatal readmission No known effects on neurodevelopment Check levels monthly through 34 weeks then weekly. May need increased dose. Adequate hydration during labor, decrease dose to pre pregnancy dose after delivery.	RID 3 – 69. Not considered compatible.
Valproate (Depakote)	Not considered safe to start during pregnancy / in reproductive age people in general	Dry mouth, tremors, headache, weight gain	Dose dependent increased rate of congenital malformations – 5 to 25% (neural tube ³ cardiac and craniofacial) and neurodevelopmental problems (reduced IQ, autism spectrum disorders, and attention-deficit/hyperactivity disorder)	RID 0.1 – 3.9. Considered relatively safe, but not considered safe in people of reproductive potential. Monitor infant for sedation
Carbamazepine (Tegretol)	Not considered safe to start during pregnancy / in reproductive age people in general	Dizziness, ataxia, blurred vision, nausea, rash	Dose dependent increased rate of congenital malformations 3 to 9% (neural tube ³ , urinary tract and craniofacial malformations).	RID 1.1 – 7.3. Considered relatively safe. Monitor infant for sedation
Oxcarbazepine	Not safe to start during pregnancy / in reproductive age people in general	Dizziness, ataxia, blurred vision, nausea, rash	Insufficient information but appears to be less frequently associated with congenital malformations.	RID 1.5 – 1.7. Considered relatively safe. Monitor infant for sedation.

RID= relative infant dose; NNH – number needed to harm

1. Check serum levels - 0.8 and 1.2 mEq/L recommended; some respond to lower levels (eg, 0.6 mEq/L).

2. Displacement of the tricuspid valve into the right ventricle; prognosis depends on severity of the lesion. Obtain high resolution ultrasound and fetal echocardiogram at 16 weeks gestation.

3. Risk of neural tube defects may be reduced if folic acid 5 mg is taken for one month preconception and throughout first trimester. Obtain high resolution morphological ultrasound with assessment of nuchal translucency.

4/1/2022

Perinatal Bipolar Disorder Resources

Review article:

Review of psychotropic drug use for bipolar disorder in the perinatal period:

<https://www.sciencedirect.com/science/article/pii/S0146000520300112>

Patient handouts:

Handout from the International Society of Bipolar Disorders on healthy routines and rhythms during the pandemic and beyond:

https://www.isbd.org/Files/Admin/COVID_PSA/COVID_PSA_English.pdf

Wellness tracker from Depression and Bipolar Support Alliance that includes mood, medication and lifestyle trackers:

<https://www.dbsalliance.org/wellness/wellness-toolbox/wellness-tracker/>

Perinatal Cannabis Use

Jessie Goodman, MD

Perinatal Cannabis Use

What is cannabis?

- Cannabis is the most commonly used drug during pregnancy. Rates vary widely from 2-8 % of pregnant patients, but higher in those age 18-25 yo (up to 15%). Prevalence of use in pregnancy is increasing, and potency of cannabis is increasing.
- Cannabis is a plant that contains more than 80 biologically active chemical compounds. The most commonly known compounds are delta-9-tetrahydrocannabinol (THC) and cannabidiol (CBD).

Perinatal cannabis use

- 30-60% of regular users continue during pregnancy
- Many pregnant patients have strong beliefs about using cannabis and associate its use as inherently safe.
- If providers do not raise the subject of use, many patients assume that it means there is no or low risk.
- Patients may hear conflicting advice regarding safety and use; keep the conversation open and engage in reflective listening
- ACOG, AAP, FDA, CDC, ABM all advise to avoid cannabis use in pregnancy and lactation

Risks of cannabis use in pregnancy: *

Perinatal Complication Risks	Developmental Outcome Risks
<ul style="list-style-type: none">• Fetal growth restriction• Low birth weight• Small for gestational age• Risk for stillbirth• Higher NICU admission rate• Neonatal withdrawal symptoms	<ul style="list-style-type: none">• Disruption in brain development• Reduction in verbal & visual reasoning• Memory and attention deficits• Executive function deficits• Increased risk for psychopathology

*Studies are not always well controlled and have limitations. Risks may be dose dependent.

Perinatal Cannabis Use (Cont.)

Screen all patients for substance use during pregnancy with NIDA quick screen or 4Ps. Recurrent screening should occur with ongoing or new concerns for substance use during pregnancy. Some pregnant people may choose to avoid substances during pregnancy but resume use after delivery, therefore screening must be repeated during the postpartum period.

(See Substance use in pregnancy guide for further information)

NIDA Quick Screen: <https://nida.nih.gov/sites/default/files/pdf/nmassist.pdf>

Ensure all patients are asked: Have you ever used cannabis?

If a patient endorses cannabis use:

Ask open ended questions using non-judgmental language. Use a harm reduction, trauma-informed, and culturally informed approach that is person-centered

- How often are you using and how much at a time?
- How do you use (edibles, smoking, vaping, dabbing, topical)?
- Are you using for recreation or to treat a condition such as:
 - nausea, pain, to improve appetite, anxiety, depression, managing withdrawal from other substances(Acknowledge these are medical conditions that require treatment and support, and explore treating the underlying condition with a more evidence-based alternative)
- Does your partner or other household members use?
- Are you interested in decreasing/stopping use or have you tried in the past? If Yes, see substance use disorders guide in pregnancy for resources and motivational interviewing techniques
- What have you already discussed with other providers?

Assess for possible cannabis use disorder (see below)

Cannabis use disorder (CUD)

Up to **18%** of pregnant patients using cannabis meet criteria for CUD

Screen using the CUDIT-R

<http://www.warecoveryhelpline.org/wp-content/uploads/2018/04/CUDIT.pdf>

For referral to treatment, see Resource Guide: <https://www.mcmh.uw.edu/care-guide>

Screen and treat for co-morbid disorders (including mood disorders, insomnia, nausea)

Medication treatment: no currently approved medications. Some limited evidence for gabapentin and N-acetylcysteine (NAC)

NAC: no evidence regarding risk for use in pregnancy

Gabapentin: limited data, possible increased risk of cardiac malformations, risk for pre-term birth, SGA, and NICU admission (particularly in late pregnancy). Limited data on use during lactation

Perinatal Cannabis Use (Cont.)

Cannabis and lactation:

Regardless of method of use, the active ingredients of cannabis pass into breast/chest milk.

- Babies are estimated to ingest 0.4%-8.7% of parental dose via milk
- **Discarding pumped milk does not eliminate risk of THC in milk.** THC remains in fatty tissue from 6 days to greater than 6 weeks, even after discontinuing use.

There are limited quality long-term studies on the safety of cannabis exposure via human milk.

Potential risks:

- adverse effects on neurodevelopment, including delayed motor development
- possible delayed growth

CBD (non-psychoactive cannabis component)

Used for pain, anxiety, insomnia, depression, PTSD, headaches, nausea, seizures disorders and many more conditions (studies are ongoing regarding outcomes and side effects in non-pregnant adults)

Scarce research of pure CBD use during pregnancy and lactation. Research is not conclusive as to safety or harm.

Possible risks in pregnancy:

- Animal research finds disruption in reproductive system of male fetuses
- Human tissue studies find decreased angiogenesis in umbilical cells, that may lead to pregnancy complications (placental insufficiency/pre-eclampsia) and dysregulation in the fetal immune system

If long term use, and experiencing N/V, consider cannabinoid hyperemesis syndrome:

Cannabinoid Hyperemesis Syndrome (CHS)

- Rare disorder with repeated regular use for at least one year
- Symptoms can include repeated episodes of nausea and /or vomiting, belly pain, diarrhea
- Consider in pregnant patients with long term cannabis use with pre-pregnancy nausea symptoms
- Main treatment: to discontinue cannabis use. See cannabis use disorder above.

Perinatal Cannabis Use Resources

Resources:

SAMHSA Cannabis in Pregnancy Evidence Based Resource Guide:

<https://store.samhsa.gov/sites/default/files/d7/priv/pep19-pl-guide-2.pdf>

ACOG Cannabis Committee Opinion:

https://www.acog.org/clinical/clinical-guidance/committee-opinion/articles/2017/10/marijuana-use-during-pregnancy-and-lactation?utm_source=redirect&utm_medium=web&utm_campaign=otn

Perinatal Services BC Cannabis Guide for providers:

<http://www.perinataleservicesbc.ca/Documents/Resources/HealthPromotion/cannabis-in-pregnancy-practice-resource.pdf>

Cannabis and Washington State Law:

<https://doh.wa.gov/you-and-your-family/marijuana/medical-marijuana/laws-and-rules/history-washington>

For patients:

Mother To Baby Cannabis Fact Sheet:

<https://mothertobaby.org/fact-sheets/marijuana-pregnancy/>

MGH Center for Women's Health: Cannabis Use and Brain Development

<https://womensmentalhealth.org/posts/essential-reads-emerging-evidence-of-the-long-term-effects-of-cannabis-on-the-developing-brain/>

MGH Center for Women's Health: Cannabis Use and Breastfeeding

<https://womensmentalhealth.org/posts/essential-reads-cannabis-and-breastfeeding/>

Perinatal Depression

Deborah Cowley, MD

Perinatal Depression

Common: 12-15% in pregnancy, 22% postpartum, in 5-10% of non-gestational parents, more common and lower rates of screening and treatment in BIPOC individuals

Screening:

PHQ-2 → PHQ-9/EPDS
Initial prenatal visit
At least once during pregnancy
Postpartum visit
Well child visits through 12 mos postpartum

Differential Diagnosis:

- *Major depressive disorder
- *Persistent depressive disorder
- *Adjustment disorder
- *Depression secondary to medical condition (e.g. hypothyroidism, anemia)/substance use
- *Depression secondary to another psychiatric disorder (e.g. bipolar disorder, PTSD)
- *Consider postpartum psychosis (emergency)

For positive screens, assess safety (See [page 27](#) for additional guidance)

[Columbia Suicide Severity Rating Scale \(CSSRS\)](#) or [Ask Suicide Screening Questions \(ASQ\)](#)

Ask about thoughts about harming baby:
"It can be very overwhelming to be a new parent. Sometimes people have upsetting thoughts about hurting their babies, either by accident or on purpose. Have you had thoughts like this?"
Refer to emergency services as needed

For mild depression:

Education: <https://www.nimh.nih.gov/health/publications/perinatal-depression/index.shtml>
Closer monitoring (PHQ-9/EPDS)
Exercise, behavioral activation
Social support
Address sleep issues
Rule out medical causes, bipolar disorder

Moderate/severe depression: Add medication and/or psychotherapy; shared decision-making with patient (and partner, as applicable), weighing risks of medications and untreated depression, and considering alternative/non-medication treatments

Risks of untreated depression:

- *Functional impairment, hospitalization, suicide
- *Poor prenatal care/self-care; smoking, substance use
- *Higher rates of miscarriage, preeclampsia, preterm birth
- *Problems with bonding/attachment
- *Longer hospital stays, more NICU admissions for baby
- *Increased rates of psychiatric disorders in children



May need increase in dose later in pregnancy

Risks of antidepressants:

- *Common and serious side effects
- *No consistent increase in rates of malformations
- *Persistent pulmonary hypertension of the newborn (PPHN; 2.9 vs. 1.8/1000)
- *Neonatal adaptation syndrome in 30%; worse if also taking benzodiazepines
- *Monitor breastfed infants for sedation/poor feeding; case reports of seizures with exposure to bupropion during lactation

Alternative treatments:

- *Psychotherapy (CBT, IPT, therapy that has helped in past)
- *Exercise, yoga, bright light, omega-3-fatty-acids (EPA:DHA>1.5)
- *For severe/treatment-resistant depression, consider ECT, TMS, brexanolone, day treatment/inpatient programs

Goal:

Treat to remission
Track PHQ-9/EPDS to measure progress/outcome

Perinatal Depression Medications

Drug Name	Starting Dose ^a (mg/day)	Up titration schedule	Use in Pregnancy	Use during Lactation
SSRIs^b				
Citalopram (Celexa)	10	Increase to 20 mg/day after one week Then, increase by 10-20 mg every 4 weeks ^c (max dose 40 mg/day) ^d	SSRIs not associated with increase in malformations	RID ^e < 10%; reports of sedation, fussiness, weight loss in infants; monitor weight gain, behavioral effects
Escitalopram (Lexapro)	5	Increase to 10 mg/day after one week Then, increase to 20 mg/day after 4 weeks ^c (max dose 20 mg/day)	May need dosage increase later in pregnancy	RID ^e < 10%; one report of necrotizing enterocolitis; monitor for sedation, irritability
Fluoxetine (Prozac)	10	Increase to 20 mg/day after one week Then, increase by 10-20 mg every 4 weeks ^c (max dose 80 mg/day)	Possible increased risk of persistent pulmonary hypertension of the newborn (PPHN); 2.9/1000 vs. 1.8/1000 baseline; lowest risk with sertraline	RID ^e may be > 10%; monitor for behavioral effects, adequate weight gain
Paroxetine (Paxil)	10	Increase to 20 mg/day after one week Then, increase dose by 10-20 mg every 4 weeks ^c (max dose 50 mg/day)		RID ^e generally 5% or less; few adverse effects; monitor for behavioral effects (e.g. insomnia, restlessness, increased crying)
Sertraline (Zoloft)	25	Increase to 50 mg/day after one week Then, increase by 25-50 mg every 4 weeks ^c (max dose 200 mg/day)	Transient neonatal adaptation syndrome (NAS) in 30% of exposed infants	Low concentrations in breast milk and infant; RID ^e generally 2% or less; few adverse effects in infants; considered preferred antidepressant in breastfeeding
SNRIs^b				
Duloxetine (Cymbalta)	30	Increase dose to 60 mg/day after one week (max 120 mg/day; rarely need > 60 mg/d)	NAS (see above); possible inc risk of heart defects, miscarriage, postpartum hemorrhage	Few reports; RID ^e < 1%; no adverse effects; monitor for sedation, adequate growth
Venlafaxine (Effexor) XR	37.5	Increase to 75 mg/day after one week Then, increase by 37.5-75 mg every 4 weeks ^c (max dose 225 mg/day)	Increased risk for PPHN, NAS (see above); increased risk of gestational hypertension	RID ^e 3-12%; rare adverse effects reported in infants; monitor baby for excessive sedation, adequate weight gain
OTHER^b				
Bupropion ^f (Wellbutrin) XL	150	Increase by 300 mg/day XL every 4 weeks ^c (max dose 450 mg/day)	No overall inc in malformations ?inc in LVOT ^g heart defects	RID ^e up to 5.1% 2 reports of seizures in breastfed infants
Mirtazapine ^h (Remeron)	7.5	Increase to 15 mg qhs after one week Then, increase by 15 mg every 4 weeks ^c (max dose 45 mg/day)	No increase in malformations NAS (see above)	Few reports; RID ^e < 2%; no adverse effects noted; monitor for behavioral effects, adequate growth

^aWith comorbid anxiety disorder, use lower starting dose

^bAntidepressants are associated with increased suicidal thinking and behavior in young adults; monitor closely for worsening or emerging suicidality

^cas needed to treat continued depressive symptoms

^dmaximum dose 40 mg/day due to risk of QT prolongation

^eRID = relative infant dose

^fdo not give if history of bulimia or seizures; seizure risk limits dose

^gLVOT = left ventricular outflow tract

^hincreases appetite, sedating; may help with hyperemesis, insomnia

4/15/22

Perinatal Depression Resources

Review article:

Mesches GA, Wisner KL, Betcher HK. A common clinical conundrum: antidepressant treatment of depression in pregnant women. *Seminars in Perinatology* 2020; 44:151229.

PHQ-9 in multiple languages:

<https://www.phqscreeners.com>

EPDS in multiple languages:

[Edinburgh Postnatal Depression Scale \(EPDS\) \(perinatalservicesbc.ca\)](http://perinatalservicesbc.ca)

Columbia Suicide Severity Rating Scale (CSSRS):

<https://cssrs.columbia.edu/documents/c-ssrs-screener-triage-primary-care/>

Ask Suicide Screening Questions (ASQ):

<https://www.nimh.nih.gov/research/research-conducted-at-nimh/asq-toolkit-materials>

NIMH brochure for patients about perinatal depression (available in English and in Spanish):

<https://www.nimh.nih.gov/health/publications/perinatal-depression/index.shtml>

Mothers and Babies Program

Information, training, and resources for therapy for perinatal stress and depression based on cognitive behavioral therapy and attachment theory

<http://www.mothersandbabiesprogram.org/>

Article about interpersonal therapy (IPT) for postpartum depression:

This is an article for providers that describes interpersonal therapy (IPT) for postpartum depression, its rationale, structure, and content.

Stuart S. Interpersonal psychotherapy for postpartum depression. *Clin Psychol Psychother* 2012; 19:134-140.

Article about importance of and prescribing sleep for postpartum depression:

Leistikow N, Baller EB, Bradshaw PJ, et al. Prescribing sleep: an overlooked treatment for postpartum depression. *Biological Psychiatry* 2022, doi.org/10.1016/j.biopsych.2022.03.006

Perinatal Eating Disorders

Megan Riddle, MD, PhD

Perinatal Eating Disorders

Prevalence:

The perinatal period carries increased risk for development of new eating disordered behaviors or recurrence of illness previously in remission. Rates in pregnancy: 0.6-11.5% Rates postpartum: Up to 12.8%

Risk factors:

- Personal or family history of eating disorders
- Psychiatric comorbidities
- Trauma history
- LGBTQ

Differential:

Anorexia nervosa (AN)
Bulimia nervosa (BN)
Binge eating disorder (BED)
Avoidant Restrictive Food Intake Disorder (ARFID)
Other Specified Feeding & Eating Disorder—includes atypical anorexia
Appetite changes secondary to depression
Hyperemesis gravidarum

Assess Symptoms: Frequency, duration, intensity
Restriction—Skipping meals/snacks? Portion sizes? Are others concerned about intake? Limiting types of food? Eating the same thing every day?
Bingeing—Frequency, amount, eating in secret?
Purging—Vomiting, laxatives, diuretics, diet pills, exercise?

Medical complications: Thorough screen for medical complications
AN/Atypical AN/ARFID: Organ dysfunction related to malnourishment
BN: Complications of purging, electrolyte abnormalities

Pregnancy Complications:

AN: hyperemesis, antepartum hemorrhage, preterm birth, microcephaly, SGA
BN: hyperemesis, preterm birth, microcephaly
BED: tobacco use, maternal hypertension, need for c-section, higher gestational weight for age
All: ↑ risk of postpartum depression & anxiety

Screening: Personal history of eating disorder (ED) is biggest risk factor for ED symptoms in pregnancy. Include standardized ED screener at intake, such as Eating Disorder Screen for Primary Care:

1. Are you satisfied with your eating patterns?
 2. Do you ever eat in secret?
 3. Does your weight affect the way you feel about yourself?
 4. Have any members of your family suffered with an eating disorder?
 5. Do you currently suffer with or have you ever suffered in the past with an eating disorder?
- “No” to q1 = abnormal
“Yes” to q2-5 = abnormal
2 abnormal answers = positive screen. Further follow up recommended

Interventions: Depend on severity of illness, medical stability, psychiatric comorbidities, ability to modify behavior independently

- Referrals to registered dietitian with ED expertise, therapy, psychiatry
- If medical complications of ED or interference with functioning, consider referral to a higher level of care
- Blinded weights with a focus on baby's growth rather than weight gain
- Meal plan with frequent meals throughout the day—even for individuals whose primary ED behavior is identified as bingeing and/or purging, restriction is often a part of this cycle
- Treat psychiatric comorbidities—depression, anxiety, OCD

Birth control:

Patients with EDs are at increased risk of unplanned pregnancy. Patients with amenorrhea/ oligomenorrhea patients may still be ovulating.

Perinatal Eating Disorder Resources

Patient resources:

National Eating Disorder Association:

<https://www.nationaleatingdisorders.org/pregnancy-and-eating-disorders>

<https://www.nationaleatingdisorders.org/blog/decentering-weight-in-prenatal-care>

Further reading:

Kimmel MC, Ferguson EH, Zerwas S, Bulik CM, Meltzer-Brody S. Int J Eat Disord. Obstetric and gynecologic problems associated with eating disorders. 2016 Mar;49(3):260-75.

Mantel Ä, Hirschberg AL, Stephansson O. Association of Maternal Eating Disorders with Pregnancy and Neonatal Outcomes. JAMA Psychiatry. 2020 Mar 1;77(3):285-293.

Meltzer-Brody S, Zerwas S, Leserman J, Holle AV, Regis T, Bulik C. Eating disorders and trauma history in women with perinatal depression. J Womens Health (Larchmt). 2011 Jun;20(6):863-70.

Pettersson CB, Zandian M, Clinton D. Eating disorder symptoms pre- and postpartum. Arch Womens Ment Health. 2016 Aug;19(4):675-80.

Family Assessment

Amritha Bhat, MD

Family Assessment

Key fact: Perinatal mental health problems have effects on gestational parents, non-gestational parents, on the child, and on the family. Emerging evidence indicates high rates of depression among adoptive parents and similar negative effects on the child. Paying attention to infant behavior and caregiver – baby interactions during perinatal care provides an opportunity for promotion of the relationship between caregivers and babies, and, if needed, early intervention.

Caregiver – Baby interaction (Dyadic interaction)

Foundation for cognitive and emotional development and for secure attachment.

Caregiver mental health problems can impair dyadic interactions.

Components of dyadic interaction:

- Contingent responsiveness
 - Attention to infant and ability to understand cues
- Respect
 - Acceptance of range of infant behavior
- Empathy
 - Understands infant's state of mind and reflects it back, helping infant feel understood
- Time
 - Sufficient contact time with baby to develop understanding of baby
- Tolerance for mistakes
 - Tolerates mistakes and allows for repair

Signs of impaired dyadic interaction

- Infant has difficulty signaling/communicating his/her needs to caregiver.
- Caregiver unreliable, inconsistent, or inappropriate in responding to infant's cues.
- Infant persistently avoids looking at caregiver (or vice versa)
- Infant presents fearful or apprehensive of the caregiver (e.g. looks dazed or flustered when caregiver approaches, freezing, stereotyped behaviors, contradictory behavior such as sideways or aborted approaches to the caregiver)
- Frightening or frightened caregiver behavior (e.g. dissociation, threatening expressions or voice)
- Caregiver experiences infant as rejecting, 'manipulative' or vindictive

Perinatal mental health in fathers / non gestational parents:

- Up to 10% experience depression between first trimester and one year postpartum
- Correlated with (and higher rates with) maternal depression.
- May present as irritability, social isolation, drug and alcohol use.
- Depressed fathers are more likely to engage in domestic violence, and discourage their partner from breastfeeding
- There is an association between paternal postpartum depression (PPD) and behavioral and emotional problems in children
- Same screening tools (PHQ-9, EPDS) can be used to identify depression in the non-gestational parent
- Risk factors for paternal depression include not wanting the pregnancy, marital conflict, comorbid maternal prenatal depression, history of depression, and unemployment.
- American Academy of Pediatrics recommendation is to screen caregivers at 1, 2, 4 and 6-month well child visits
- There is a lack of research on perinatal mental health of lesbian gay bisexual transgender and queer parents

Family Assessment Resources

Promoting First Relationships:

Training program for providers who work with parents and young children

www.pfrprogram.org

Research-based Bringing Baby Home workshops:

<https://www.gottman.com/professionals/training/bringing-baby-home/>

Mount Sinai Parenting Guides:

Information on infant behavior and development for parents

<https://parenting.mountsinai.org/parent-guides/>

Information for fathers from the American Academy of Pediatrics:

[A special message to new dads \(American Academy of Pediatrics\)](#)

Hormones and Mood

Amritha Bhat, MD

Hormones and Mood

Key fact: Certain individuals may be vulnerable to dysregulation of mood during times of hormonal fluctuation (windows of vulnerability such as menarche, premenstrual, postpartum, menopause).

Premenstrual Dysphoric Disorder (PMDD)

Affects 5 - 12% women. Always rule out underlying mood disorder with premenstrual worsening, use prospective recording of symptoms for accurate diagnosis (Daily Record of Severity of Problems OR Premenstrual Symptoms Screening Tool)

Diagnostic criteria:

1. Symptoms in the majority of menstrual cycles, present in the week before menses, improve after the onset of menses, absent 1 week post menses. At least one of

- Marked mood lability
- Marked irritability or anger or increased interpersonal conflicts.
- Marked depressed mood, feelings of hopelessness, or self-deprecating thoughts
- Marked anxiety, tension, and/or feelings of being keyed up or on edge

2. One (or more) of the following symptoms, to reach a total of five symptoms when combined with above symptoms

- Decreased interest in usual activities
- Subjective difficulty in concentration
- Lethargy, easy fatigability, or marked lack of energy
- Marked change in appetite; overeating; or specific food cravings
- Hypersomnia or insomnia
- A sense of being overwhelmed or out of control
- Physical symptoms such as breast tenderness or swelling, joint or muscle pain, a sensation of "bloating," or weight gain.

3. Symptoms associated with clinically significant distress or interference with work, school, usual social activities, or relationships.

PMDD Treatment

Continuous or luteal phase (2 weeks pre menses) SSRIs (fluoxetine, sertraline, paroxetine), venlafaxine, oral contraceptives (ethinyl estradiol 20µg+drospirenone 3 mg)
Calcium 1000 – 2000 mg / day
Chasteberry
Danazol 200–400 mg/d
Severe, non-responsive: Leuprolide 3.75 mg monthly depot with add back estrogen/ progesterone. Intractable: Bilateral Salpingo-oophorectomy/Hysterectomy.

Hormonal contraception

- Individuals with a history of depression should monitor mood closely after starting a hormonal contraceptive.
- Risk of mood worsening higher in adolescents
- If possible, avoid long-acting hormonal contraceptives in those with mood disorders

Hormonal contraception and psychotropic drug interactions:

Lamotrigine: Oral contraceptives can reduce the serum levels of lamotrigine: dose of lamotrigine may need to be increased.

At higher baseline doses of lamotrigine, monitor for side effects / toxicity in pill free week.

Carbamazepine, Oxcarbazepine and Topiramate can decrease plasma levels of hormonal contraceptives and adversely affect their effectiveness

Hormonal treatment for Postpartum Depression (PPD): Brexanolone: Intravenous formulation of allopregnanolone. FDA approved for PPD. 60-hour iv infusion in certified facility. Improvement in depression within a week, benefit lasting through one month follow up in clinical trials. Side effects sedation, loss of consciousness. Safety in breastfeeding not established. Oral formulation, zuranolone, in clinical trials.

Hormonal treatment for perimenopausal depression:

Hormone Replacement Therapy for *prevention* of depression may be considered in early menopausal transition for

- women with histories of major depression
- those with more severe vasomotor symptoms
- stressful life events occurring in the prior 6 months

Hormonal *treatment* for perimenopausal depression in women who don't want to take antidepressants or do not tolerate / respond to antidepressants, or as augmentation of SSRIs/SNRIs: Transdermal estradiol (plus progestin as indicated)
Risks: breast cancer, thromboembolism, cardiovascular disease.

Perinatal Obsessive-Compulsive Disorder (OCD)

Carmen Croicu, MD

Perinatal OCD

Perinatal period is a high-risk time for the onset or exacerbation of OCD and the risk is higher in the postpartum period than during pregnancy; rates of postpartum OCD exacerbation between 25% and 75%. Consider screening for OCD in patients presenting with anxiety and depression (high rates of comorbidity with anxiety disorders and MDD).

Screening tools for perinatal OCD

Perinatal Obsessive-Compulsive Scale (POCS): self-report, validated for perinatal population, 23 items, positive screen > 9 (high specificity for OCD, needs diagnostic assessment)

Yale-Brown Obsessive-Compulsive Scale (Y-BOCS): interviewer-rated scale, 10 items, gold standard for symptom severity measurement, > 25-35% decrease in score = response to treatment, < 8 = remission of OCD

Risks of untreated OCD

adverse pregnancy outcomes (preterm delivery, low-birth weight, preeclampsia), reduced ability to care for the newborn, negative impact on mother-infant bonding

Unique features of perinatal OCD

Pregnancy: gradual onset

-contamination obsessions and cleaning rituals (frequent)

Postpartum: rapid onset (within 4 weeks)

-frequent occurrence of aggressive obsessions and intrusive thoughts/fears of accidentally harming the baby

-avoidance behaviors (e.g. bathing), mental rituals, compulsive checking of infant

-contamination obsessions and cleaning compulsions, checking compulsions

Differential diagnosis of intrusive thoughts about harming the baby

OCD: thoughts of harm are ego dystonic (foreign/disturbing to the patient, inconsistent with their beliefs and values); feelings of guilt and shame, good insight, compulsive rituals, no risk of infant-harming behaviors

Postpartum psychosis: thoughts of harm are ego syntonic (acceptable to the patient); poor insight, no feelings of guilt and shame, delusions and/or hallucinations, no compulsive rituals, increased risk of harm, never leave the mother alone with the baby

Postpartum depression: associated depressive symptoms, no delusions and/or hallucinations or mood-congruent psychotic symptoms, low risk of harm but high risk with associated psychotic symptoms

Fluvoxamine (not included in antidepressant table): limited data, no major malformations with exposure (n~500); low levels in breastmilk (dose<300mg/daily), one infant with diarrhea and vomiting (dose 50mg/daily) but no other adverse effects

Screening for OCD symptoms and intrusive thoughts of harming the baby

"Are you having any thoughts that keep bothering you that you'd like to get rid of but cannot?"

"Do you do things over and over again because you feel anxious if you don't (for example, checking on your baby, washing your hands)?"

"Sometimes parents have scary thoughts or images of harm coming to their baby, accidentally or deliberately. Have you had any thoughts like that?"

Perinatal OCD (Continued)

Guidelines for management of perinatal OCD

First-line evidence-based therapies: CBT, specifically exposure and response prevention (ERP), SSRIs

CBT/ERP: 1st line treatment for mild-moderate OCD, highly effective

CBT/ERP + SSRI: for moderate-severe OCD

SSRIs: preferred when the severity of symptoms prevents the mother from engaging in CBT/ERP

Other interventions: psychoeducation provided to mother and families about the nature of infant-focused obsessions

Pharmacological treatment:

SSRIs: 1st line, no data suggesting one SSRI is superior to another, higher dose than used for depression

See antidepressant table in the depression care guide

Fluvoxamine (not included in antidepressant table): limited data, no major malformations with exposure (n~500); low levels in breastmilk (dose<300mg/daily), one infant with diarrhea and vomiting but no other adverse effects

Clomipramine: limited data and less well tolerated compared to SSRIs, increased risk of major malformations (OR 1.4) including cardiovascular defects (OR 1.6), more severe and prolonged neonatal adaptation syndrome; limited data about risks in lactation, no adverse effects in 4 infants

Treatment-resistant OCD

-address specific treatment for comorbid disorders

-add CBT/ERP (if not already initiated) to SSRI

-longer trial of SSRI, dose optimization, switch to a new SSRI

-augmentation of SSRI with atypical antipsychotics: very limited data, quetiapine augmentation (average dose of response 100mg daily) after inadequate response to SSRI (n=17 postpartum women)

-initiate psychiatric referral or psychiatric consultation

Perinatal OCD Resources

Review articles:

Brok EC, Lok P, Oosterbaan DB, et al. Infant- related intrusive thoughts of harm in the postpartum period: a critical review. *J Clin Psychiatry*. 2017;78(8):e913–e923. <https://doi.org/10.4088/JCP.16r11083>

Stein DJ, Costa DLC, Lochner C, et al. Obsessive-compulsive disorder. *Nature Reviews* 2019; 5:52; <https://doi.org/10.1038/s41572-019-0102-3>

Fairbrother N, Collardeau F, Woody SR, Wolfe DA, Fawcett JM. Postpartum Thoughts of Infant-Related Harm and Obsessive-Compulsive Disorder: Relation to Maternal Physical Aggression Toward the Infant. *J Clin Psychiatry*. 2022 Mar 1;83(2):21m14006. doi: 10.4088/JCP.21m14006. PMID: 35235718.

Fineberg NA, Van Ameringen M, Drummond L, et al. How to manage obsessive-compulsive disorder (OCD) under COVID-19: a clinician's guide from the International College of Obsessive-Compulsive Spectrum Disorders (ICOCS) and the Obsessive-Compulsive and Related Disorders Research Network (OCRN) of the European College of Neuropsychopharmacology. *Comprehensive Psychiatry* 2020; 100: 152174

Patient manuals:

Break Free from OCD: Overcoming Obsessive Compulsive Disorder with CBT Paperback – September 1, 2012 by Dr. Fiona Challacombe, Dr. Victoria Bream Oldfield, Professor Paul Salkovskis: https://www.amazon.com/Break-Free-OCD-Overcoming-Compulsive/dp/0091939690/ref=sr_1_1?dchild=1&qid=1618855536&refinements=p_27%3ADr.+Fiona+Challacombe&s=books&sr=1-1&text=Dr.+Fiona+Challacombe

Treatments that Work Exposure and Response (Ritual) Prevention Therapy (2012) by Edna B. Foa, Elna Yadin, Tracey K. Lichner: https://www.amazon.com/Exposure-Response-Prevention-Obsessive-Compulsive-Disorder/dp/0195335287/ref=sr_1_2?dchild=1&keywords=Treatments+that+work+ocd&qid=1590530983&s=books&sr=1-2

Websites for patients:

Royal College of Psychiatrists' page on Perinatal OCD
<https://www.rcpsych.ac.uk/mental-health/problems-disorders/perinatal-ocd>

International OCD Foundation page with fact sheets, brochures, apps, books about OCD; guidance in finding treatment
<https://iocdf.org/>

NIMH webpage about OCD with links to brochure, books
<https://www.nimh.nih.gov/health/topics/obsessive-compulsive-disorder-ocd/index.shtml>

Perinatal Posttraumatic Stress Disorder (PTSD)

Carmen Croicu, MD

Perinatal PTSD

Common: prevalence 4-6%; higher rates 1-6 months postpartum; 18% if risk factors for PTSD

Risk factors

Subjective experience of childbirth (negative emotions or experience of labor, loss of control, fear of childbirth for self and/or baby)

Maternal mental health (prenatal depression, perinatal anxiety, postpartum depression)

Trauma history and PTSD (previous traumatic events, childhood sexual trauma, prenatal PTSD, previous traumatic birth experience)

Delivery mode and complications (emergency C-section, complications with pregnancy and/or baby)

Screening

[PTSD Checklist Civilian \(PCL-5\)](#): positive screen > 33, self-report, used in the perinatal population but not specifically validated

Perinatal Posttraumatic Stress Disorder Questionnaire (PPSDQ/PPQ)

positive screen >19, self-report, specific diagnostic tool for perinatal PTSD but not widely used
Screen for comorbidities: depression (highly comorbid), anxiety, substance use

Assessing DSM-5 criteria for PTSD

Traumatic event/Trauma exposure

Duration >1 month, Distress/Impairment

Symptom criteria

≥1 intrusion (flashbacks, nightmares) *and*

≥ 1 avoidance (trauma reminders) *and*

≥ 2 cognitions/mood (detachment, anhedonia, negative emotions) *and*

≥2 arousal (hypervigilance, sleep difficulties)

Risks of untreated PTSD

Risks to mother: avoidance of prenatal care and postpartum checks, postpartum depression, substance use, preterm labor, fear of childbirth (tokophobia)

Risks to fetus: lower birth weight, preterm birth, negative impact on mother-infant bonding, lower rates of breastfeeding

Guidelines for management of perinatal PTSD (if PCL-5>33 and/or clinical diagnosis of PTSD)

First-line evidence-based therapies: SSRIs, Trauma-focused psychotherapies (TFPT)

Initiate SSRI if TFPT not available, not preferred or not appropriate

Other interventions: education, Imagery rehearsal therapy (IRT), CBT-I, non trauma-focused therapy, social support

Evidence-based trauma-focused psychotherapies:

all effective in reducing PTSD symptoms

- Exposure therapy (ET): effective in postpartum women regardless of whether birth was objectively traumatic
- Trauma-Focused Cognitive Behavioral Therapy (TFCBT): effective for women at risk for experiencing a traumatic birth
- Eye Movement Desensitization and Reprocessing (EMDR): could be especially effective for hyperarousal

Avoid starting prazosin (adjunctive agent for PTSD-related nightmares) **during pregnancy and lactation:**

- few reports from hypertension treatment during pregnancy
- no safety data in pregnancy and lactation
- case report of a patient who had symptoms consistent with hypotension with a dose increase of prazosin in the first trimester. The fetus died and had multiple malformations consistent with hypoxia.
- consider risk/benefit analysis if pregnant while stable on prazosin; lower dose than usual if prescribed during pregnancy; monitor blood pressure carefully for hypotension.

Pharmacological treatment:

- SSRIs (sertraline, fluoxetine)
- Venlafaxine
- See medication table in Perinatal Depression Care Guide for information about SSRIs, venlafaxine

Interventions not effective: debriefing, counseling, trazodone, benzodiazepines

Pregnancy Loss

Aba Nduom, MD

Pregnancy Loss

- There is a wide range of normal reactions to pregnancy loss. Some people will conceptualize it as their baby died and will even assign a sex and choose a name. Others will be more detached and focus on believing that their body did what it had to do. The depth of grief is only loosely correlated with the facts of the pregnancy and the loss.
- Always take cues from the patient, and even ask them what they would like to hear now. Ask both open ended and close ended questions. "What questions/fears do you have?" "What worries you the most right now?" "Would you like to discuss trying to conceive again?" If possible, offer to schedule another follow up appointment to answers questions they might not be ready to discuss right now.
- Most patients take comfort in being told that miscarriage is common and that there was nothing they did to cause it. However, few patients take comfort in being told that their body did the right thing by miscarrying a potentially abnormal pregnancy, as they see their body as what created the abnormal pregnancy in the first place.
- When the evidence base is slim or controversial, offer the patient clear options and rationale rather than absolute guidelines. For example, "Most people choose to wait for at least one period after their miscarriage before trying to conceive again. It makes it easier to date the next pregnancy and helps reassure you that your body has recovered. It is also okay to take more time to grieve and rest. There is no data that shows that it is easier to conceive immediately after a miscarriage."
- Be honest when recommendations are based in what insurance may or may not cover, as the reassurance from certain tests or procedures (for example, testing the products of conception after a first miscarriage) may be worth the out-of-pocket cost for some patients.
- Most women do not require psychiatric care after a single miscarriage, but some do. These losses can either cause a decompensation of a previous mental health diagnosis or can be the initial precipitation event for a new diagnosis. Consider having a standard list of self-help and professional resources to offer routinely, especially if the patient will not be having a follow up appointment to further discuss the miscarriage.
- For appointments related to pregnancy or infant loss, when possible, try to room the patients quickly to avoid leaving them in the waiting room. While they will not be able to avoid pregnant women forever, returning to your clinic or the hospital is often very stressful, and these little policy changes can make a world of difference for them. If possible, avoid rooming them in the same room where they found out about their loss. You can also consider turning down the volume on dopplers for heartbeat checks so that they are less likely to be heard between rooms.
- If a partner is present, remember to address them and their possible grief as well.

Additional Considerations

Terminations for Medical Reasons (TFMR): Patients who decide to terminate a pregnancy for medical reasons (either for their own health or due to medical findings about the fetus), typically experience these losses similar to those who experience spontaneous pregnancy losses and stillbirths, but often with an added layer of potential social stigma. These are situations in which the pregnancy was very much wanted, and TFMR often happens at a point in the pregnancy where they have either socially announced their pregnancy or were about to. Most parents who choose to TFMR are confident that they made the right decision, and also feel deep grief about their loss.

Elective Terminations: Several studies have shown that when elective terminations (terminations for social/personal reasons) are pursued without coercion, there is minimal to no long-term mental health impact. At the same time, some people, especially those who feel that they may have made a different decision if social or financial situations were different at the time of the pregnancy, may have more complicated feelings in the aftermath. Follow your patient's lead in how they talk about the termination, and do not assume guilt or emotional conflict.

Pregnancy After Loss: Pregnancy after loss often comes with a mix of joy and fear. Not only is there usually anxiety that the same type of loss may happen again, but often times, people have heightened anxiety about other potential adverse outcomes that can happen during pregnancy, or postpartum. Some people feel significant relief once they pass the timeframe of their previous loss(es), but this is not the case for everyone. And in the case of those who experienced stillbirth, the entire pregnancy may be experienced as a time of concern.

Common Medical Terms

Chemical/Biochemical Pregnancy – A very early miscarriage before anything can be seen on ultrasound. More commonly noticed these days due to the combination of the increased sensitivity of home pregnancy tests, and more people tracking their cycles more closely, and therefore testing earlier.

Miscarriage/Spontaneous Abortion – Pregnancy loss prior to 20 weeks gestational age. Most commonly happens prior to 10 weeks.

Threatened Miscarriage/Threatened Abortion – Bleeding during early pregnancy. May resolve without any consequences or may be the precursor to a miscarriage.

Missed Miscarriage/Missed Abortion – Fetal demise prior to the 20th week without spontaneous expulsion of the products of conception.

Blighted Ovum – A pregnancy characterized by the development of the gestational sac without an embryo.

Recurrent Pregnancy Loss – (old diagnosis: Habitual Aborter) The threshold number of losses varies from 2 to 3.

Stillbirth – Pregnancy loss after the 20th week.

Incidence

- Early Pregnancy loss (within the first trimester) is most common, and may be up to 31% especially when biochemical pregnancies are taken into account. Once a pregnancy is visualized on ultrasound with a reassuring heartbeat, the rates drop significantly.
- The rate of second trimester miscarriages is less than 1%.
- The stillbirth rate in the US is 6.0 per 1000 births, approximately 50% of which occur between 20 and 27 weeks gestation.
- With each subsequent pregnancy loss, the risk of having another one increases.

Pregnancy Loss Resources

Local organizations:

Parent Support of Puget Sound

Support groups and resources for those who have experienced miscarriage or infant loss.

<http://psopugetsound.org/>

National organizations:

RESOLVE: 1-866-668-2566

A national helpline providing peer support for people experiencing infertility or miscarriage.

<https://resolve.org/>

Virtual support groups:

Postpartum Support International (PSI) online support groups

Online support groups for pregnancy and infant loss and fertility challenges

<https://www.postpartum.net/get-help/psi-online-support-meetings/>

Workbooks:

Coping With Infertility, Miscarriage, and Neonatal Loss: Finding Perspective and Creating Meaning by Amy Wenzel

<https://www.amazon.com/Coping-Infertility-Miscarriage-Neonatal-Loss/dp/143381692X/>

Books:

The Brink of Being: Talking About Miscarriage by Julia Bueno

<https://www.amazon.com/dp/B07JVZGX1C/>

The Miscarriage Map: What To Expect When You Are No Longer Expecting by Sunita Osborn

<https://www.amazon.com/Miscarriage-Map-Expect-Longer-Expecting-ebook/dp/B07W4RV5DQ>

You Are Not Alone: Love Letters From Loss Mom to Loss Mom by Emily Long

<https://www.amazon.com/You-Are-Not-Alone-Letters-ebook/dp/B01CKR76P2/>

About What Was Lost: Twenty Writers on Miscarriage, Healing, and Hope by Jessica Berger Gross

<https://www.amazon.com/About-What-Was-Lost-Miscarriage-ebook/dp/B000SEGUS4/>

Empty Cradle, Broken Heart: Surviving the Death of Your Baby by Deborah Davis (Author)

<https://www.amazon.com/Empty-Cradle-Broken-Heart-Surviving-ebook/dp/B01MXLRP37/>

More about stillbirth, but some women who miscarry find reading about that helpful as well:

An Exact Replica of a Figment of My Imagination: A Memoir by Elizabeth McCracken

<https://www.amazon.com/Exact-Replica-Figment-My-Imagination-ebook/dp/B001DR7K02/>

Articles:

Eighteen Attempts at Writing About a Miscarriage by Alice Bradley

<https://www.thesunmagazine.org/issues/408/eighteen-attempts-at-writing-about-a-miscarriage>

Dear Newly Bereaved Parent by Angela Miller

<https://stillstandingmag.com/2016/01/27/dear-newly-bereaved-parent/>

The Japanese Art of Grieving a Miscarriage by Angela Elson

<https://www.nytimes.com/2017/01/06/well/family/the-japanese-art-of-grieving-a-miscarriage.html>

Mourning my Miscarriage by Peggy Orenstein

<https://www.nytimes.com/2002/04/21/magazine/mourning-my-miscarriage.html>

The Heartbreak of Almost: A Modern Miscarriage Story by Nora McInerney

<https://medium.com/@noraborealis/the-heartbreak-of-almost-a-modern-miscarriage-story-d9cf5bb3d85d#.7hp46nsh1>

That Time We Didn't Become Parents on Social Media by Kelly Ferraro

<https://medium.com/@kellylferraro/that-time-we-didn-t-become-parents-on-social-media-bf18b1fb32a0#.tanuitv9x>

The Internet Still Thinks I'm Pregnant by Amy Pittman

<https://www.nytimes.com/2016/09/04/fashion/modern-love-pregnancy-miscarriage-app-technology.html>

"There Was No Child, I Told Myself": Life and Marriage after Miscarriage by Christen Decker Kadkhodai

<https://www.theguardian.com/lifeandstyle/2016/jul/16/miscarriage-pregnancy-motherhood-loneliness>

Podcasts:

Terrible, Thanks for Asking (Not specifically about miscarriage, but generally about coping with loss and hardship)

<https://podcasts.apple.com/us/podcast/terrible-thanks-for-asking/id1126119288?mt=2>

Sisters in Loss

<https://sistersinloss.com/blog/>

The Still Mama Tribe (again, more about stillbirth but some episodes about miscarriage)

<https://thestillmamatribe.wixsite.com/stillmamatribe/podcast>

Specific Episodes:

Katie's Crib: Miscarriages: You are not Alone with Amy Mass & Jackie Seiden

<https://podcasts.apple.com/us/podcast/miscarriages-you-are-not-alone-w-amy-mass-jackie-seiden/id1367251383?i=1000411993304>

Dear Sugars: Redux: When Your Loved Ones Just Don't "Get It"

<https://podcasts.apple.com/us/podcast/redux-when-your-loved-ones-just-dont-get-it/id950464429?i=1000497826030>

Postpartum Psychosis

Ramanpreet Toor, MD

Postpartum Psychosis

Prevalence rare, 1-2 per 1000 births. Symptoms occur within 2 weeks of delivery. Sudden onset and rapid deterioration. PSYCHIATRIC EMERGENCY!!

Risk factors

Primiparity
Prior postpartum psychosis
History of mania (bipolar disorder) or psychosis
Family history of postpartum psychosis
Discontinuation of medications

Etiology

Unclear
Since childbirth is trigger, mechanism of onset is considered to be related to specific physiological changes leading to disease in genetically vulnerable population.

Differential Diagnosis

Postpartum depression
Postpartum OCD (Obsessive-Compulsive Disorder)
Other medical cause:
Infections
Autoimmune
Medication reaction (steroids)
Sheehan's Syndrome
Encephalitis
Metabolic

Clinical Presentation

Usually within 2 weeks after delivery; symptoms change rapidly

Early Symptoms:

Insomnia/sleep deprivation, Anxiety, Mood fluctuations, Irritability

Subsequent Symptoms:

- Disorganization
- Abnormal thought content (delusions, hallucinations)
- Obsessive thoughts related to infant, childbirth
- Delirium—disorientation, disturbance in attention, cognition, disorganized behavior. All symptoms developed over short time.
- Thoughts of harm to self or infant

Laboratory Testing

Complete Blood Count (CBC)
Comprehensive Metabolic Panel (CMP)
Thyroid: TSH, T4, Thyroid Peroxidase (TPO) antibodies
Ammonia levels
Urinalysis

Imaging:

If neurological symptoms

Risk Assessment

High risk of self or infant harm

Inquire about thoughts of self-harm or harm to infant

Suicide risk: Screen with [C-SSRS](#)

Risk of infant harm: First, determine if thought of harming infant is an intrusive thought (unwanted negative thought that is frequent and difficult to dismiss) or infanticidal ideation (due to a psychosis).

Ask questions assessing specific content of the thought, and emotional and behavioral responses to thoughts.

Decisional capacity assessment

Assess capacity to make decisions for any procedures during pregnancy and postpartum. Also assess capacity to parent if psychotic symptoms are present

Treatment:

Inpatient psychiatric admission

Medication

- Antipsychotics: Atypical > Typical
- Lithium: Combined with antipsychotic or monotherapy, especially in bipolar disorder
- Benzodiazepine: promotes sleep, short-term treatment, preferably one with short half-life like lorazepam

Prevention

Pharmacological Prophylaxis:

- In chronic bipolar disorder: during pregnancy and postpartum
- In postpartum psychosis limited to postpartum periods only: Start immediately postpartum

Adequate sleep

Family support

Close monitoring by providers (OB and pediatrician)

Long-term outcomes after first onset postpartum psychosis:

- 56.7% develop lifelong severe psychiatric disorder, most often bipolar disorder
- 6.1% have recurrent psychosis only during the postpartum period
- 36% with no recurrence

Postpartum Psychosis References

Bergink V, Rasgon N, Wisner KL. [Postpartum Psychosis: Madness, Mania, and Melancholia in Motherhood.](#) Am J Psychiatry. 2016 Sep 9.

Osborne LM. [Recognizing and Managing Postpartum Psychosis: A Clinical Guide for Obstetric Providers.](#) Obstet Gynecol Clin North Am. 2018 Sep;45(3):455-468.

Gilden J, Kamperman AM, Munk-Olsen T, Hoogendijk WJG, Kushner SA, Bergink V. [Long-Term Outcomes of Postpartum Psychosis: A Systematic Review and Meta-Analysis.](#) J Clin Psychiatry. 2020 Mar 10;81(2).

Antipsychotic Medication Table

Typical Antipsychotic (Brand Names)	Therapeutic dose range for psychosis	Pregnancy	Breastfeeding
Haloperidol (Haldol)	4-20 mg/day Doses can be higher in more severe symptoms	Higher risk for extrapyramidal signs	<10 mg daily produce low levels and no adverse effects Negative effects when combined with other antipsychotics Monitor drowsiness and developmental milestones
Atypical Antipsychotics (Brand Names)			
Risperidone (Risperdal)	3-6 mg	Effective for psychosis, acute agitation Possible increase risk of cardiac malformation	Doses up to 6 mg produced low levels in milk Limited data
Quetiapine (Seroquel)	ER:400-800 mg IR: 300-750 mg	Lowest placental transfer Risk of metabolic syndrome	Doses up to 400 mg produced low levels in milk No adverse effects noted
Aripiprazole (Abilify)	10-30 mg	Lower risk of metabolic syndrome Risk of akathisia Possible low risk of neurodevelopment disorder (Straub et al 2022)	Doses up to 15 mg produced low levels in milk It can LOWER SERUM PROLACTIN
Olanzapine (Zyprexa)	10-20 mg	Effective for mood stabilization, psychosis Sedating Metabolic syndrome! Highest placental transfer: 72.1%	Doses up to 20 mg showed low levels in milk Recommended first line in breastfeeding
Ziprasidone (Geodon)	40-80 mg	Lower risk of metabolic syndrome Limited data	Other antipsychotics preferred given very little data
Clozapine (Clozaril)	300-450 mg/day	Effective for treatment resistant schizophrenia Risk of agranulocytosis for which close monitoring is needed	Limited data Sedation and risk of agranulocytosis

No human data for newer antipsychotics including: Asenapine, Cariprazine, Lurasidone, Brexiprazole.

Perinatal Schizophrenia

Ramanpreet Toor, MD

Perinatal Schizophrenia

Epidemiology: Peak onset childbearing age (26-32 years), almost 50% with diagnosis get pregnant. Risk of relapse in pregnancy if untreated. Most pregnancies are unplanned, poor prenatal care, high risk of rapid repeat pregnancy

Diagnostic criteria:

2 or more of following

- Delusions
- Hallucinations
- Disorganized thinking
- Grossly disorganized or catatonic behavior
- Negative symptoms

Markedly low level of functioning in one or more major areas compared to before symptoms

Symptoms continue for 6 months or more

Pregnancy complications: more frequent smoking, alcohol and substance addictions. More Gestational hypertension, 2-fold increased risk of GDM, Genito-urinary infection, IUGR, threatened pre-term labor

Delivery Complications: Stillbirths or medical abortions, Unexplained fetal/infant death, fetal deaths from severe neurological malformation

Neonatal/neurodevelopment complications: Low birth weight, SGA, Preterm birth, development delay, higher risk of intellectual disability, Congenital malformations (6 studies), behavioral problems

Risk assessment:

Worsening symptoms can lead to denial of pregnancy, poor antenatal care. Thoughts about harming baby related to command hallucinations or delusions possible. Important to monitor psychotic symptoms and evaluate safety throughout pregnancy and postpartum

[Columbia Suicide Severity Rating Scale \(C-SSRS\)](#)

Evaluate for thoughts about harming baby: Ask about hallucinations and specifically about command hallucinations (for example voices can tell patients to harm baby). Ask questions assessing specific content of the thought, and emotional and behavioral responses to thoughts.

Decisional capacity assessment:

Assess capacity to make decisions for any procedures during pregnancy and postpartum. Also assess capacity to parent if psychotic symptoms present

Assessment of level of functioning, quality of parenting ability and need for social work or child protective services involvement

Treatment:

Individual risk-benefit analysis. In schizophrenia benefits of psychopharmacology mostly outweigh the risk. Increased risk of exacerbation of symptoms for 1 year postpartum so close monitoring recommended.

Psychopharmacology: Antipsychotics

-High potency typical antipsychotics preferred (e.g. Haloperidol)

- Atypical antipsychotics: start quetiapine or olanzapine if not on medication

- Long-Acting Injections: Very limited data. Consider continuing if patient stable prior to pregnancy. Levels more stable in pregnancy.

- **Psychotherapy:** More supportive approach and CBT can also help in psychosis

References

Fabre C et al. [Pregnancy, delivery and neonatal complications in women with schizophrenia: a national population-based cohort study](#). The Lancet Regional Health- Europe 10. Sep 2021.

Gentile et al. [Schizophrenia and motherhood](#). Psychiatry and clinical neuroscience. 2019

Gupta et al. [Rapid repeat pregnancy in women with schizophrenia](#). Schizophrenia Research 212. 86-91. 2019.

Jones et al. Perinatal Mental Health 2. [Bipolar disorder, affective psychosis and schizophrenia in pregnancy and the post-partum period](#). Lancet. Vol 384. Nob 2014.

Straub et al. [Association of Antipsychotic Drug Exposure in pregnancy with risk of neurodevelopmental disorder](#). JAMA In Med. Mar 2022.

Uguz F. [Antipsychotic use during pregnancy and the risk of gestational diabetes mellitus. A systematic review](#). 2019

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Antipsychotic Medication Table

Typical Antipsychotic (Brand Names)	Therapeutic dose range for psychosis	Pregnancy	Breastfeeding
Haloperidol (Haldol)	4-20 mg/day Doses can be higher in more severe symptoms	Higher risk for extrapyramidal signs	<10 mg daily produce low levels and no adverse effects Negative effects when combined with other antipsychotics Monitor drowsiness and developmental milestones
Atypical Antipsychotics (Brand Names)			
Risperidone (Risperdal)	3-6 mg	Effective for psychosis, acute agitation Possible increase risk of cardiac malformation	Doses up to 6 mg produced low levels in milk Limited data
Quetiapine (Seroquel)	ER:400-800 mg IR: 300-750 mg	Lowest placental transfer Risk of metabolic syndrome	Doses up to 400 mg produced low levels in milk No adverse effects noted
Aripiprazole (Abilify)	10-30 mg	Lower risk of metabolic syndrome Risk of akathisia Possible low risk of neurodevelopment disorder (Straub et al 2022)	Doses up to 15 mg produced low levels in milk It can LOWER SERUM PROLACTIN
Olanzapine (Zyprexa)	10-20 mg	Effective for mood stabilization, psychosis Sedating Metabolic syndrome! Highest placental transfer: 72.1%	Doses up to 20 mg showed low levels in milk Recommended first line in breastfeeding
Ziprasidone (Geodon)	40-80 mg	Lower risk of metabolic syndrome Limited data	Other antipsychotics preferred given very little data
Clozapine (Clozaril)	300-450 mg/day	Effective for treatment resistant schizophrenia Risk of agranulocytosis for which close monitoring is needed	Limited data Sedation and risk of agranulocytosis

No human data for newer antipsychotics including: Asenapine, Cariprazine, Lurasidone, Brexiprazole.

Sleep in the Perinatal Period

Katherine Palm-Cruz, MD

Managing Sleep Disturbances in the Perinatal Period

Sleep disturbances

→ very common during pregnancy: Up to 78% of women (worse in third trimester)

→ fragmented sleep common postpartum

Poor sleep during pregnancy associated with: depression, SGA, pre-eclampsia, gestational diabetes, increased inflammation, and preterm birth

Address/Treat any contributing medical conditions:

- RLS
- Sleep apnea
- Nighttime GERD
- Back pain

Assess/Treat any comorbid mental health conditions:

- Depression
- Anxiety
- Bipolar disorder
- PTSD (nightmares)
- Substance use

Psychological/Behavioral Interventions – first line treatment

- **Sleep hygiene**
 - Regular sleep schedule in calm, dark environment
 - Bed should be only for sleep (avoid screen use in bed)
 - Eliminate caffeine after noon
- **Pregnancy comfort measures**
 - Use pillows to take pressure off knees/back
 - Reduce liquid intake in evenings to minimize nighttime trips to bathroom
- **Cognitive Behavioral Therapy for Insomnia**
- **Exercise** (at least a few hours or longer before bed) – associated with longer sleep continuity in pregnancy
- **Postpartum**
 - Ensure adequate time for sleep – split infant night care between caregivers (use formula/pump so others can assist with feeding)
 - Ask about bed-sharing with infant which can interfere with sleep and recommend avoiding, especially if using sedating medications.

If hypnotic medications are necessary – use low dose for short period along with behavioral interventions

See medication chart for details on medications

Insomnia Medications and the Perinatal Period

Medication	Pregnancy	Lactation	Dose	Side Effects
<p><u>Benzodiazepines</u> *Lorazepam preferred benzodiazepine in pregnancy</p>	<p>See information on benzodiazepines in Perinatal Anxiety Medications Table</p> <p>In general, do not appear to be associated with congenital malformations Appear to be associated with increased risk of spontaneous abortion Possibly associated with preterm birth</p>	<p>See information on benzodiazepines in Perinatal Anxiety Medications Table</p> <p>Lorazepam preferred benzodiazepine in breastfeeding – produces low levels in breastmilk</p>	varies	<p>*FDA boxed warnings in general population: -abuse, misuse, addiction, physical dependence, and withdrawal -Opiate and benzodiazepine combination</p> <p>*Side effects: Sedation, poor coordination, risk of falls, memory impairment</p>
<p><u>“Z Drugs”</u> Nonbenzodiazepine Benzodiazepine Receptor Agonists *Zolpidem preferred Z drug in pregnancy</p>				<p>*Likely increased risk of falls *Impaired cognitive function *headache, drowsiness, dizziness, and nausea. *Complex Sleep Behaviors: sleepwalking, sleep driving, sleep cooking</p>
Zolpidem	Based on limited human data no increased risk of congenital malformations. Inconclusive data about increase of risk for preterm birth, small for gestational age, low birthweight	Doses in breastmilk are low and adverse effects are not expected. Monitor infant for sedation	5mg	
Eszopiclone	Limited data is based on zopiclone studies and is not expected to increase risk of congenital malformations. Less data than zolpidem.	No data about use in breastfeeding – recommend starting with a different medication	1-3mg	
Zaleplon	Limited data does not show increased risk of congenital malformations	Produces low levels in breastmilk and has a short half-life. Adverse effects to infant are not expected.	5-20mg	
<p><u>Antihistamines</u> Doxylamine Hydroxyzine Diphenhydramine</p>	Limited published data in pregnancy. Most data does not show a consistent association with birth defects. There are some isolated associations reported of cardiac malformations and non-cardiac malformations, but data has not been consistent.	Passes into breastmilk – associated with dose dependent sedation and irritability. Higher doses could decrease milk supply	<p>Doxylamine 25mg Hydroxyzine 25-50mg Diphenhydramine 25-50mg</p>	<p>*sedation *dizziness * impaired coordination *GI distress *thickened bronchial secretions</p>

Medication	Pregnancy	Lactation	Dose	Side Effects
Melatonin	Recommend avoiding in pregnancy until more data is available since exogenous melatonin could theoretically interfere with fetal circadian rhythms.	Melatonin is a normal component of breastmilk, but it is unclear the effect of exogenous melatonin. There was a case report of bleeding possibly related to melatonin		*vivid dreams *irritability *headache *sedation
Trazodone	Very limited data in pregnancy, but not expected to increase risk of congenital malformations	Limited data, but produces low levels in breastmilk and not expected to cause adverse effects	25-100mg	*drowsiness *dizziness *orthostatic hypotension *GI symptoms
Mirtazapine	*antidepressant – consider in patients with insomnia comorbid with depression. Can also help with nausea Limited data in pregnancy, but does not appear to be associated with increased risk of congenital malformations. There are conflicting reports about slight possible increase in spontaneous abortion, preterm and low birth weight. Also risk of postnatal adaptation	Limited data, but doses of up to 120mg produce low levels in breast milk and not expected to cause adverse effects	7.5mg – 15mg (for insomnia, up to 45mg for depression)	*somnolence *increased appetite *constipation
Quetiapine	*due to side effects, recommend not using for insomnia alone, unless there is another indication for quetiapine (psychosis, bipolar disorder, antidepressant augmentation, treatment refractory anxiety) *based on limited data, no increased risk of congenital malformations. *possible increased risk of gestational diabetes *FDA warning for all atypical antipsychotics (including quetiapine): 3 rd trimester exposure increases risk of adverse effects in infant – EPS, sedation, breathing and feeding difficulties, sedation, agitation, tremor	Doses of up to 400mg produce low levels in breastmilk	*depends on indication (doses can range from 25mg – 800mg)	*FDA warning for all atypical antipsychotics: 3 rd trimester exposure increases risk of adverse effects in infant – EPS, sedation, breathing and feeding difficulties, sedation, agitation, tremor *side effects

The following medications for insomnia have no data in pregnancy and lactation and thus should be avoided if possible: **suvorexant, lemborexant, ramelteon**

Sleep Resources

VA based CBT-I app:

<https://mobile.va.gov/app/cbt-i-coach>

Patient handouts on pregnancy and sleep:

<https://www.sleepfoundation.org/pregnancy>

<http://www.sleephealthfoundation.org.au/pdfs/Pregnancy-and-Sleep.pdf>

Substance Use in Pregnancy

Nadejda Beshpalova, MD

Substance Use in Pregnancy

Screening, Brief Intervention, Referral to Treatment (SBIRT) model

All pregnant people should be screened for risky substance use at the first prenatal or preconception counseling visit (NIDA Quick Screen, 4 P's)

Rates of Use by Pregnant Patients

~15% tobacco/nicotine, 9% alcohol, 5% illicit substances

Negative Screen – no current use, low-level use prior to pregnancy

-Provide education – recommendation is to avoid alcohol, tobacco, cannabis, and illicit substances in pregnancy

-Offer MotherToBaby fact sheets (available for most commonly used substances at <https://mothertobaby.org/fact-sheets/>)

Currently Misusing Substances – Brief Intervention

“Is it okay if we talk more about this?”

“Would you be interested in help quitting/decreasing use?”

“How ready are you to make this change on a scale from 1 to 10?”

“How confident are you that you can make this change on a scale from 1 to 10?”

Referral to Treatment

-Provide medications if possible/indicated (see attached)

-Consider referral to treatment program (outpatient, intensive outpatient, inpatient)— resources attached)

-Warm handoff recommended

Risks of Substance Misuse in Pregnancy

*Overdose – make sure patient has Narcan kit <https://stopoverdose.org/>

*Lower engagement with appropriate prenatal care

*Infection with injection use

*Legal problems/loss of parental rights

*Risks to pregnancy/child depend on substance and frequency/amounts

Positive Screen – current use and/or history of heavy use or SUD diagnosis

Further Assessment

-Open-ended questions, avoid judgmental language

“What substances have you been using in the last 2-3 months?”

“How is substance use affecting your life?”

“Are you currently in treatment or have you had prior treatment?”

If using currently:

“How often are you using each substance and how much at a time?”

“How are you using these substances?” (ingesting, smoking, injecting)

Not Currently Misusing Substances – high risk history only or currently engaged in treatment

-If engaged in treatment – coordinate with SUD treatment provider, encourage continuing engagement

Plan and Follow Up – Collaborative with Patient

-If referred out follow up with patient to ensure they made connection

-Repeat screen at least every trimester

-Ask about cravings

-Screen for comorbid mental health conditions

-Make sure patient has Narcan kit if using opioids (including prescription) or any illicit substances given high risk of fentanyl contamination

-Call Perinatal PCL with questions

Substance Use Screening

NIDA Quick Screen: <https://www.drugabuse.gov/sites/default/files/pdf/nmassist.pdf>

4 P's for Substance Abuse:

1. Have you ever used drugs or alcohol during **P**regnancy?
2. Have you had a problem with drugs or alcohol in the **P**ast?
3. Does your **P**artner have a problem with drugs or alcohol?
4. Do you consider one of your **P**arents to be an addict or alcoholic?

Scoring: Any "yes" should be used to trigger further discussion about drug or alcohol use.

-Treatment Resources in Washington State:

WA Recovery Helpline: <https://www.warecoveryhelpline.org/>

SUD Treatment with Medicaid: <https://www.hca.wa.gov/health-care-services-supports/behavioral-health-recovery/substance-use-treatment>

Chemical-using Pregnant (CUP) Women Program: <https://www.hca.wa.gov/health-care-services-supports/apple-health-medicare-coverage/chemical-using-pregnant-women>

Parent-Child Assistance Program (PCAP): <https://depts.washington.edu/pcapuw/>

-Peer Support:

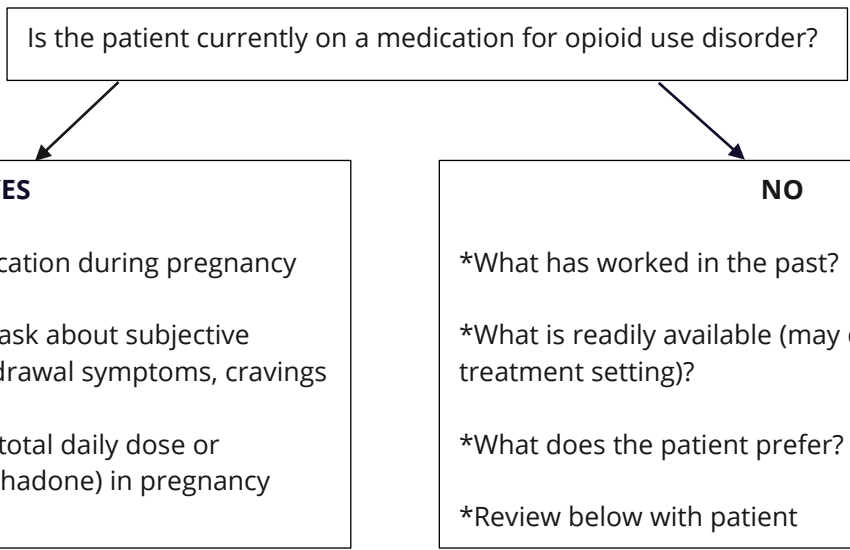
Alcoholic/Narcotics Anonymous: www.aa.org; www.na.org

SMART Recovery: www.smartrecovery.org

-Nicotine cessation:

Quit for Two: <https://women.smokefree.gov/pregnancy-motherhood/quitting-while-pregnant/quit-for-two>

Selecting a Medication for Opioid Use Disorder in Pregnancy



Considerations	Buprenorphine	Methadone
Prescribing setting	Office-based	Through Opioid Treatment Programs (pregnant patient have priority for access)
Dosing in pregnancy	May need to be increased	May need to be increased and converted from daily to twice per day
Risk of drug-drug interactions and QTc prolongation	Lower	Higher
Risk of overdose	Lower	Higher
Risk of sedation	Lower	Higher
Treatment retention	Lower	Higher
Risk of NOWS	Lower	Higher
Need to be in withdrawal to start	Yes *low-dose (micro) induction is a way to avoid this	No
Breastfeeding	Breastfeeding ok (and should be encouraged to decrease NOWS) if no other contraindications	Breastfeeding ok (and should be encouraged to decrease NOWS) if no other contraindications

Non-judgmental Language

Terms to Avoid:	Instead Use:
Alcoholic/drug addict/drug abuser	Person who uses substances
Addicted baby/born addicted	Child affected by maternal opioid use/Neonatal Opioid Withdrawal
Drug problem	Risky use/nonmedical use
Drug of choice	Substances used
Clean/dirty urine	Positive/Negative/Aberrant
Substitution/Replacement therapy	Medication for SUD/OD, Medication-Assisted Treatment

Contact Perinatal PCL with questions:

Call 877-725-4666 or email ppcl@uw.edu

References:

Hostage JC, Brock J, Craig W, Sepulveda D. Integrating Screening, Brief Intervention and Referral to Treatment (SBIRT) for Substance Use into Prenatal Care. *Matern Child Health J.* 2020 Apr;24(4):412-418. doi: 10.1007/s10995-020-02892-9. PMID: 32026324.

Rodriguez CE, Klie KA. Pharmacological treatment of opioid use disorder in pregnancy. *Semin Perinatol.* 2019 Apr;43(3):141-148. doi: 10.1053/j.semperi.2019.01.003. Epub 2019 Jan 21. PMID: 30755340.

Jones HE, Kaltenbach K, Heil SH, Stine SM, Coyle MG, Arria AM, O'Grady KE, Selby P, Martin PR, Fischer G. Neonatal abstinence syndrome after methadone or buprenorphine exposure. *N Engl J Med.* 2010 Dec 9;363(24):2320-31. doi: 10.1056/NEJMoa1005359. PMID: 21142534; PMCID: PMC3073631.

SAMHSA Clinical Guidance for Treating Opioid Use Disorder in Pregnant and Parenting Women and their Infants. <https://store.samhsa.gov/sites/default/files/d7/priv/sma18-5054.pdf>