Opioid Use Disorder in Pregnancy

Topic: Pregnancy, opioid use, and MAT

Overall Learning Objectives:

"The primary focus for families affected by OUD must shift from surveillance and stigma to evidence-based treatment and access to supportive services and resources" (Work et al., 2023)

1. ***Describe strategies for screening for drug use in pregnancy that utilize a non-judgemental and standardized approach.***
2. ***Define opioid use disorder (OUD) and describe the risks and adverse outcomes of opiate use in pregnancy.***
3. ***Describe treatment disparities for only pregnant patients with OUD.***
4. ***Understand the negative impact and racial disparities of CPS involvement related to drug use in pregnancy.***
5. ***Describe the medications for opioid use disorder MOUD in pregnancy, risks and benefits of treatment, and the role of harm reduction principles.***

Part A [Universal Screening]

Bianca is a 24-year-old female patient who presents to an OBGYN, Dr. S, for an initial prenatal visit. She recently found out that she was pregnant by an at-home pregnancy test. She is excited about her first pregnancy. Her doctor starts off the visit by collecting a detailed history of any past medical conditions, gynecological procedures, abnormal pap screens, any previous pregnancy history, family history, and begins a detailed social history. Based on her last menstrual period (LMP), Bianca is 14 weeks pregnant. As she does with all her patients, Dr. S asks Bianca about substance use.

1. How should Dr. S approach the discussion about substance use with Bianca?
2. Is there a role for urine drug screening in pregnancy?
3. What are standard screenings that should be done for a patient at 14 weeks coming in for their first OB visit?

Discussion points (*Opioid Use and Opioid Use Disorder in Pregnancy. Committee Opinion No. 711*, 2017)

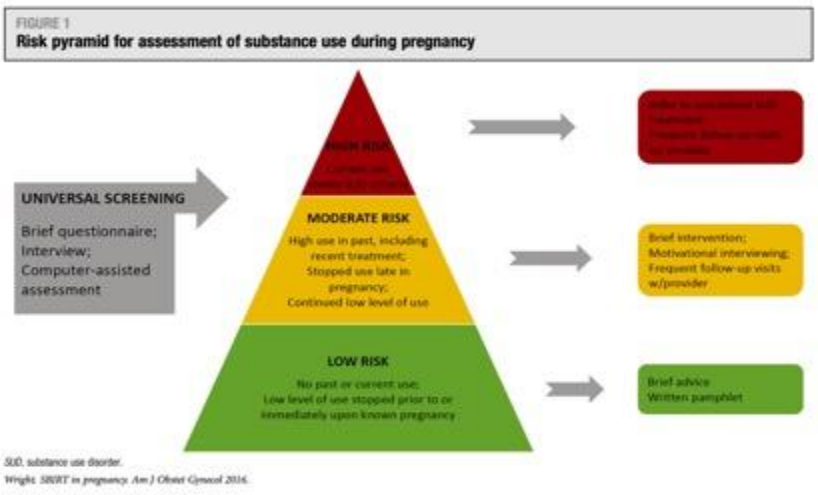
1. How should Dr. S approach the discussion about substance use
   - Mention she asks this to all demographic groups

- It is important to screen for substance use early in pregnancy and repeatedly, as patient behaviors can change

- Screening for substance use should be normalized by saying something to the effect of "I am going to ask you some questions that I ask all of my patients. These are not meant to embarrass or judge you but rather to help me take the best care of you that I can"

- [Add example questions for how to ask Bianca follow-up questions about how she uses drugs if she answers 'yes'] frequency, route of administration, reason for use

- Discussions surrounding substances should be free from stigmatizing and judgmental language. Words such as "abuse", "illicit drugs", "addict" and "clean" should be avoided.



2. Is there a role for urine drug screening in pregnancy?
   - Urine drug tests should not be used as screening for substance use in pregnancy. Tests are neither sensitive nor specific for common substances. For instance, tobacco and alcohol are not included in standard urine drug screen, the two most common substances used in pregnancy. Furthermore, false positives can be particularly devastating to a patient. Some states have mandatory reporting guidelines for drug use during pregnancy. Urine drug screens can over-involve CPS and promote institutional racism.

   - The best practice for drug screening during pregnancy is universal, voluntary screening using validated questionnaires at the first prenatal visit, such as the "5 P's Prenatal Substance Use Screen for Alcohol and Drugs:

     - 5Ps-Screening-Tool-and-Follow-Up-Questions.pdf

- This approach maximizes early identification, which can lead to effective interventions, while minimizing harm, stigma, and inequity.

- Obtaining a urine drug screen without a patient's consent is always unacceptable and may undermine the patient-provider relationship and worsen health outcomes for the patient. There are times when a urine drug test may be useful, but clear consent should be obtained from the patient, including explanations of what the results will be used for and to whom they will be available.

- Neither ACOG nor USPSTF recommends the use of urine drug tests as a screening tool in pregnancy. (*Screening for Illicit Drug Use - U.S. Preventive Services Task Force Recommendation Statement*, 2008; *Substance Use Disorder in Pregnancy*)

3. What are standard screenings that should be done for a patient at 14 weeks coming in for their first OB visit? (Lockwood & Magriples, 2020)
   - Labs: RhD, RBC antibody screen, blood type, complete blood count (CBC), UA for proteinuria and urine culture for asymptomatic UTI

   - Selective screening for thyroid disease, diabetes, lead levels

   - Confirm immunity to Rubella and Varicella

   - Rule out active infections- hepatitis A, measles, gonorrhea, toxoplasmosis, tuberculosis, bacterial vaginosis, trichomonas vaginalis, HSV, CMV, Chagas

   - Screen for cervical cancer, hepatitis B, hepatitis C, chlamydia, syphilis, HIV (shared decision making

   - Screening for hypertensive disorders with blood pressure measurement and risk stratification for preeclampsia

   - Genetic testing utilizing cell-free DNA is now covered by most insurances and offered as **an option** to screen for aneuploidy and cystic fibrosis, spinal muscle atrophy, hemoglobinopathies, and **the option** to check for genetic carrier screening of both parents.

Part B [Opioid Use Disorder During Pregnancy - Diagnosis, Risks, Adverse Outcomes]

Dr. S says to Bianca: "I'm going to ask you a few sensitive questions that I ask all of my patients. Your answers help me provide the best care for you during your pregnancy." Bianca nods. "Have you used any substances in the past few months? These might include tobacco, alcohol, cocaine, methamphetamines, or any opioids such as pills or fentanyl."

Bianca was nervous about being asked this question. She first used fentanyl about a year ago, at a party. She loved how it made her feel: relaxed and less anxious about everything going on in her life. It was a part of her life now, and she used almost daily. When she found out she was pregnant, she worried about how it could affect her baby. She also worried about what her doctor would say, and if she would be reported to Child Protective Services. She knew people who had grown up in foster care because their moms' used drugs. She tried to cut back, but she experienced withdrawal symptoms that were so uncomfortable she couldn't stand it.

1. What are some adverse outcomes associated with opioid use during pregnancy?
2. What withdrawal symptoms are associated with opioids?
3. How is Opioid use disorder defined? Does this patient meet the criteria?
4. What are some of the racial implications for BIPOC patient's during pregnancy?

Discussion points:

1. What are some adverse outcomes associated with opioid use during pregnancy?
   - Adverse outcomes associated with opioid use during pregnancy are fetal growth restriction, placental abruption, preterm labor, neonatal abstinence syndrome, and both conduct disorder and ADHD in children (*Opioid Use and Opioid Use Disorder in Pregnancy. Committee Opinion No. 711*, 2017)

   - Many of the adverse outcomes are confounded by complex social situations, decreased access to prenatal care, co-substance use and co-occurring mental health issues that can accompany opioid use during pregnancy (*Opioid Use and Opioid Use Disorder in Pregnancy. Committee Opinion No. 711*, 2017)

   - Other adverse effects of opioid use during pregnancy include the potential for involvement of Child Protective Services and increased likelihood of maternal-child separation after birth. CPS is known to have higher rates of involvement with Black families (Putnam-Hornstein et al., 2021). Providers should work collaboratively with patients to avoid CPS involvement whenever possible, as involvement can have long lasting detrimental effects on families. CPS reporting laws vary by every state and providers should do their own research in their state to ensure they understand the system they are working in.

2. What withdrawal symptoms are associated with opioids?
   - Withdrawal symptoms include: restlessness, anxiety, insomnia, diarrhea, abdominal pain, rhinorrhea, diaphoresis, tremors, tactile hypersensitivity (*Opioid Use and Opioid Use Disorder in Pregnancy. Committee Opinion No. 711*, 2017)

3. How is Opioid use disorder defined? Does this patient meet the criteria?
   - **Diagnostic Criteria:**

- Opioids are often taken in larger amounts or over a longer period of time than intended
- There is a persistent desire or unsuccessful efforts to cut down or control opioid use.
- A great deal of time is spent in activities necessary to obtain the opioid, use the opioid, or recover from its effects.
- Craving, or a strong desire to use opioids.
- Recurrent opioid use resulting in failure to fulfill major role obligations at work, school, or home.
- Continued opioid use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of opioids.
- Important social, occupational, or recreational activities are given up or reduced because of opioid use.
- Recurrent opioid use in situations in which it is physically hazardous.
- Continued use despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by opioids.
- Tolerance, as defined by either of the following:
    - A need for markedly increased amounts of opioids to achieve intoxication or desired effect
    - Markedly diminished effect with continued use of the same amount of an opioid
- Withdrawal, as manifested by either of the following:
    - The characteristic opioid withdrawal syndrome
    - The same (or a closely related) substance is taken to relieve or avoid withdrawal symptoms
    - (American Psychiatric Association, 2013)

4. What are some of the racial implications for BIPOC patients during pregnancy?
    - Pregnant people, particularly those of color, may face increased stigma and discrimination and potential child welfare involvement if they are taking medications for OUD. Also, the increased demands on time required to access treatment for OUD affects treatment rates for pregnant patients and may negatively affect the health of the pregnant person and their baby. As a result, this population often has had less access to medications for OUD and shorter retention in care (Substance Abuse and Mental Health Services Administration).

- *Black women are more likely to be drug tested prior to or shortly after childbirth compared to white women (Kunins et al., 2007). This relationship is also true for low socioeconomic class in general as these patients are less likely to be insured and have regular doctor's appointments, and more likely to seek prenatal care late. Late entry to or insufficient prenatal care is one of the most common indications for ordering drug tests on pregnant patients (Chin et al., 2022).*

- *Vulnerable pregnant populations (low-income, black, POC) subject to forced arrest and medical intervention, denied core constitutional rights and autonomy (Paltrow & Flavin, 2013).*

Part C [Treatment of OUD During Pregnancy]

Bianca tells Dr. S all of the above and asks if Dr. S can help her to quit using fentanyl.

- What is the recommended treatment for opioid use disorder in pregnancy?
- What medication therapies are available to pregnant patients? What are the benefits or drawbacks of these options?
- How can harm reduction be utilized to improve care for this patient?

Discussion points:

- Medication for Opioid Use Disorder (MOUD) is recommended over supervised withdrawal. Decades of research in both pregnancy and non-pregnant patients have shown that withdrawal is associated with higher rates of relapse, continued opioid use, lack of follow-up, overdose deaths (Terplan et al., 2018).
- Medications for opioid use disorder include methadone (a long-acting opioid agonist), and buprenorphine (a partial opioid agonist). Both are considered safe for use in pregnancy. While both medications have been found to improve outcome compared to no treatment for OUD, buprenorphine has shown lower risk of neonatal adverse outcomes (Suarez et al., 2022).
- There is no evidence of increased risk of birth defects with either methadone or buprenorphine. Naltrexone is not recommended due to insufficient safety data in pregnancy (Funk et al., 2023).
- The MOTHER trial was a randomized double-blinded control trial that compared rates of neonatal abstinence syndrome in neonates that had been exposed to buprenorphine vs. methadone. Findings included decreased severity of Neonatal Abstinence Syndrome (NAS) in babies exposed to buprenorphine, with decreased need for morphine replacement and decreased length of NICU stay (Jones et al., 2010).

- For maternal outcomes, there are no significant differences between buprenorphine and methadone in rates of relapse, cesarean delivery, maternal weight gain, number of prenatal visits, or analgesia use at delivery. Methadone is associated with more nonserious maternal adverse events, particularly cardiovascular events, but rates of serious maternal or neonatal adverse events do not differ. Methadone may have higher treatment retention rates in some studies (Ecker et al., 2019).

- Harm reduction is an important tenet of therapy in working with all patients who use substances. In this patient, incorporating harm reduction might look like

    - Assessing route of administration of fentanyl, and ensuring the patient has access to safe, sterile supplies if she continues using

    - Prescribing naloxone and educating the patient on overdose prevention strategies (fentanyl test strips, trying not to use alone)

    - Referring to harm reduction community center or peer support groups if she is interested

Part D [Access Issues with MOUD]

Initially, Bianca feels nervous about being on an opioid therapy such as buprenorphine or methadone, stating that it feels safer to just "quit completely". However, after appropriate counseling on medications available, and the increased risk of returning to use and overdose in patients that undergo supervised withdrawal, she decides that she will try buprenorphine. She knew people who had used methadone and liked it, but she didn't think that traveling to a clinic every day would be possible with her work schedule. Dr. S explains how to use the medication which comes as a sublingual film and the common side effects.

- What barriers are there to prescribing buprenorphine as a health care provider?

- Any licensed provider can prescribe; X-waiver no longer required! Prior to the elimination of the X-waiver requirement in 2023, less than 2% of OB/GYNs who accept Medicaid were able to prescribe buprenorphine and those were skewed to suburban areas (Nguemeni Tiako et al., 2020).

- How does one start a patient on buprenorphine? What is precipitated withdrawal and how is it relevant to beginning MOUD therapy with buprenorphine?

- Buprenorphine Quick Start Guide (Substance Abuse and Mental Health Services Administration).

- Precipitated withdrawal refers to opiate withdrawal experienced when starting a Mu-opioid receptor partial agonist in an opiate-tolerant individual. Buprenorphine is a partial agonist, meaning it does not activate the receptor to the same degree as a full agonist (fentanyl, heroin, oxycodone). Since buprenorphine has such high affinity for the receptor, it can displace full agonists but is not able to activate the receptor to

the same degree. Therefore, it is recommended to wait a certain amount of time since using the full agonist before initiating buprenorphine. This amount of time depends on the half-life of the full agonist.

- There are a number ways to begin initiation of MOUD, and a tailored approach should be utilized using a shared decision-making approach that considers a patients prior treatment experience, current use patterns, and access to care.

- For **buprenorphine initiation**, the patient must be in mild to moderate opioid withdrawal to avoid precipitated withdrawal. Micro-dosing protocols, which use very low initial doses with gradual up-titration, are increasingly used to minimize withdrawal symptoms and can be safely implemented in the inpatient setting. Supportive medications for withdrawal symptoms (e.g., antiemetics, clonidine) may be used adjunctively (Lee et al., 2025).

- For **methadone initiation**, dosing is typically started at 20–30 mg daily, with careful titration to avoid oversedation, and may require inpatient monitoring for patients with high opioid tolerance or comorbidities. Dose adjustments are often necessary as pregnancy progresses due to increased drug clearance. Doses may need to be adjusted to account for higher fentanyl use in some patients (Crotty et al., 2020)

- The American Society of Addiction Medicine emphasizes that a medical and psychosocial assessment should be performed, but initiation of MOUD should not be delayed for completion of these assessments. Emergent or urgent medical conditions must be addressed first, but otherwise, MOUD should be started as early as possible in pregnancy (Crotty et al., 2020)

Part E [Conclusion]

Bianca goes to the pharmacy, but they don’t carry buprenorphine because of their fear of DEA. Bianca must get it routed to another pharmacy before she can obtain it. After finally getting access to MOUD for her OUD, she is able to get off fentanyl without significant cravings and has an uncomplicated delivery. The baby is healthy and is not displaying any symptoms of opiate withdrawal. She is concerned about breastfeeding, but her OB assures her that buprenorphine has been studied and is shown to be safe with breastfeeding (Drugs and Lactation Database (LactMed®), 2006). In fact, breastfeeding is associated with decreased hospital length of stay and reduced need for NICU admission in infants with prenatal opioid exposure, likely due to the combined effects of nonpharmacologic soothing, improved feeding, and maintenance of the mother-infant dyad (Mascarenhas et al., 2024; Meek & Noble, 2022; Patrick et al., 2020). She continues her MOUD because it has been so effective at keeping her from using and craving fentanyl.

Learning points (Knittel et al., 2022; Poorman, 2021)

- Opioid use during pregnancy is associated with fetal growth restriction and preterm birth. **Opioid overdose is one of the leading causes of maternal mortality**.

- Both buprenorphine and methadone are safe and effective in managing the symptoms of opioid use disorder in pregnancy and while breastfeeding and are the gold standards of care. Treatment with these medications should not be delayed.

- **Only half of pregnant patients with OUD receive therapy**, reflecting barriers in access, and misinformation among providers and patients.

- Informed consent must be obtained before ordering urine drug screening tests in pregnant people.

- Black, Latinx and Indigenous families have much higher rates of involvement with child protective services and custody loss, largely driven by reports of drug use during and after pregnancy. Care must be taken when considering CPS involvement so as to not reproduce disparities and institutional racism.

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