

Perinatal Substance Use Disorder: Focus on Postpartum Period

Camila Arnaudo, M.D. December 2021

Disclosures

• I have no relevant disclosures for this presentation.

Learning Objectives

- Examine components of post pregnancy recovery including postpartum depression
- Discuss support for families (mother, infant, father, other family members)
- Identify common barriers for ongoing treatment
- Explore evidence-based practices/treatment modalities

Substance Use Disorder in the perinatal period

- Significant focus is on the pregnancy and effects on neonate
- Our system does not tend to see the parent and child as a dyad
- If we consider medical contact with pregnant people...
 - Number of visits with prenatal care provider recommended by ACOG
 - Every 4 weeks until 28 weeks
 - Every 2 weeks until 36 weeks
 - Every 1 week delivery
 - For an average of 10-14 visits
 - Number of visits for postnatal care
 - One time at 6 weeks
- This is emblematic of the general approach to postpartum period in medicine, which puts much less intensity into monitoring this period
- · For many new parents however, the intensity is only increasing

The Fourth Trimester

- Period just following birth of the infant (lasting 3-12 months)
- Presents significant challenges to all new parents
- Several changes occur, including:
 - Disrupted sleep
 - Hormonal Changes
 - Adjustment to new parenthood (or parenthood to more dependents)
 - Triggering emotional reaction for parents with history of trauma
 - Risks for Intimate Partner Violence
 - Requirements to return to work
 - Financial stress

Postpartum Period for Parents with SUD

- Studies using interviews and questionnaires investigated the experience of new parents in the postpartum period
- Finding decrease drug use in 2nd and 3rd Trimester and increasing in the postpartum periods
- Perceived stress also is shown to decrease toward the end of pregnancy and then increase postpartum
- This pattern of stress is different for people with SUD compared to women who are pregnant and not experiencing SUD

Maternal Mortality in the postpartum period

Pregnancy-Associated Overdose Deaths:
Data from 6 States in the Rapid Maternal Overdose Review Initiative, 2015-2019



89%

of 104 overdose deaths during or within one year of pregnancy were potentially preventable.

Most (73%) pregnancy-associated overdose deaths occurred in the late postpartum period.

Pregnant at time of death
Pregnant within 42 days of death
Pregnant within 43 to 365 days
of death
73%

Substance use disorder contributed* to nearly all (94%) pregnancy-associated overdose deaths.[†]



Mental health conditions other than substance use disorder contributed* to nearly three-fourths (72%) of pregnancy-associated overdose deaths.[†]



*Contributed is defined as the MMRC responding "yes" or "probaby" to whether the circumstance contributed to the death. "For nearly week-thirds (66%) of pregnancy-associated overdose deaths, the MMRC responded that both substance use disorder and mental health conditions other than substance use disorder contributed to the death. Most (86%) pregnancy-associated overdose deaths had an opioid present in autopsy toxicology.



Autopsy toxicology results were missing for 9 deaths (4 with no autopsy, 4 with autopsy but missing toxicology, 1 unknown). Other substances included alcohol, benzodiazepines, buprenorphine/methadone, cocaine, amphetamines. cannabinoids, and other substances.

Individual characteristics of pregnancy-associated overdose deaths N = 104

Race/Ethnicity	N	%
Hispanic	7	7%
Non-Hispanic Black	12	12%
Non-Hispanic White	83	80%
Other	2	2%
Age at death (years)		
15-19	2	2%
20-24	20	19%
25-29	41	39%
30-34	27	26%
35-39	13	13%
≥40	1	1%
Education		
Less than high school	24	23%
Completed high school	49	47%
Some college	22	21%
Associate, Bachelor, or Advanced		
degree	9	9%
Medicaid during prenatal care or delive	ry	
Yes	68	65%
No	16	15%
Unknown	20	19%

Percentages may not sum to 100 due to rounding. Demographic information such as education and Medicaid participation are relevant for MMRCs as they develop recommendations for prevention (e.g., strategies to address gaps in healthcare access following loss of pregnancy-related Medicaid eligibility).



- Approximately 11-13% of women with SUD receive treatment in the postpartum period
- Even for those engaged during pregnancy the majority stop treatment postpartum
- Drug induced deaths are leading cause of death in postpartum people with SUD from 6-12mo after birth

Barriers to treatment for postpartum people with SUD

- Stigma
- Decrease perceived need for treatment
- Fear of department of child services involvement
- Loss and grief toward children removed from their care
- Increase involvement with law enforcement due to punitive policies
- Insurance loss or changes
- Lack of individualized person centered trauma informed treatment for people in this period
- Lack of childcare
- Need to return to the workforce
- Financial stressors

Stigma and Isolation

- Social interactions are a powerful tool in the treatment of people with SUD
- Stigma both externalized and internalized impacts people's willingness to present for treatment and to be part of social networks
- Treatment helps to treat the internal stigma
- External stigma for patients with SUD needs to be attacked from multiple angles
 - Training medical personal to recognize and challenge their own biases
 - Promoting view of addiction as a chronic brain disease that can be treated
 - Insisting on an anti-racist approach to medicine as people of color are disproportionately affected by SUD
 - Decriminalization of substance use
 - Promoting the use of destigmatizing language and person first language

Volkow, 2020

Preferred Language

- Using non-judgmental language is one important way to decrease stigma and to show people who use drugs that you respect them as people.
- Examples:
 - Pregnant people/person vs.Pregnant Woman
 - Birth person or parent vs. Mother
 - Sobriety vs. Abstinent
 - Chaotic drug use vs. Recovery
 - Person first language (A person pregnant person in recovery)

BEST PRACTICES TO AVOID USING STIGMATIZING LANGUAGE

	Don't Use	Do Use	Why
е	"addict" "abuser" "junkie"	"person who uses heroin" "person with cocaine use disorder"	Using "person-first" language demonstrates that you value the person, and are not defining them by their drug use.
1	"got clean"	"not currently using drugs"	"Clean," implies that when someone is using they are "dirty."
	"addicted newborn" "born addicted" "crack baby"	"neonatal opioid withdrawal syndrome (NOWS)" "neonatal abstinence syndrome (NAS)" "baby with prenatal cocaine exposure"	Infants are not addicted; they have prenatal substance exposure and/or physiological dependence.
	"medication assisted therapy (MAT)"	"medication for opioid use disorder (MOUD)" "medication for alcohol use disorder"	These categories are value-neutral and precise. When discussing a specific medication, refer to it by both its generic and brand names.

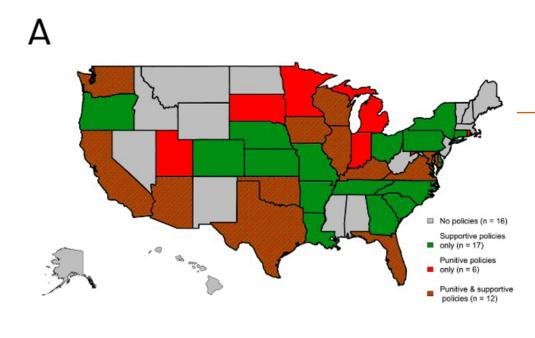
Substance Abuser Vs. Person with SUD

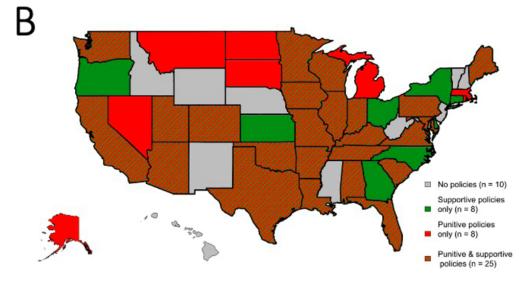
"Substance Abuser"

Mr. Williams is a substance abuser and is attending a treatment program through the court. As part of the program Mr. Williams is required to remain abstinent from alcohol and other drugs. He has been compliant with program requirements, until one month ago, when he was found to have two positive urine toxicology screens which revealed drug use and a breathalyzer reading which revealed alcohol consumption. Within the past month there was a further urine toxicology screen revealing drug use. Mr. Williams has been a substance abuser for the past few years. He now awaits his appointment with the judge to determine his status.

"Substance Use Disorder"

Mr. Williams has a substance use disorder and is attending a treatment program through the court. As part of the program Mr. Williams is required to remain abstinent from alcohol and other drugs. He has been compliant with program requirements, until one month ago, when he was found to have two positive urine toxicology screens which revealed drug use and a breathalyzer reading which revealed alcohol consumption. Within the past month there was a further urine toxicology screen revealing drug use. Mr. Williams has had a substance use disorder for the past few years. He now awaits his appointment with the judge to determine his status.





- See this image and copyright information in PMC
- Figure 1. Overview of policy combinations in 2000 (panel A) and 2015 (panel B) Panel A. States with no policies related to substance use in pregnancy, supportive policies only, punitive policies only, and both types of policies in 2000. Panel B. States with no policies related to substance use in pregnancy, supportive policies only, punitive policies only, and both types of policies in 2015.
- These policies
 disproportionately affect black
 persons and people living in
 poverty

Punitive Polices include:

- (1) define substance use in pregnancy as child abuse or neglect, criminalize it, or consider it grounds for civil commitment
- (2) mandate testing of infants with suspected prenatal substance exposure or pregnant women with suspected substance use;
- (3) require reporting of suspected prenatal substance use to officials at local health and human services departments;

Postpartum Care and Support for Persons with SUD

- Integrated substance use disorder and mental health treatment into the postpartum treatment provided by obstetrical providers
- Tailored care that takes into consideration the special needs of postpartum individuals and their barriers
- Shift from abstinence only to a harm reduction based approach that meets patients where they are
- Provision of treatment in a setting that is safe, comfortable and accessible to postpartum people including telemedicine and in the obstetrical practice
- Starting to prepare people for this process during the prenatal period and working collaborative with obstetric, psychiatric, pediatric and pain management providers to ensure smooth progressing through the pregnancy and postpartum

Martin and Parlier-Ahmad, 2021

Expanded Perinatal Care Model

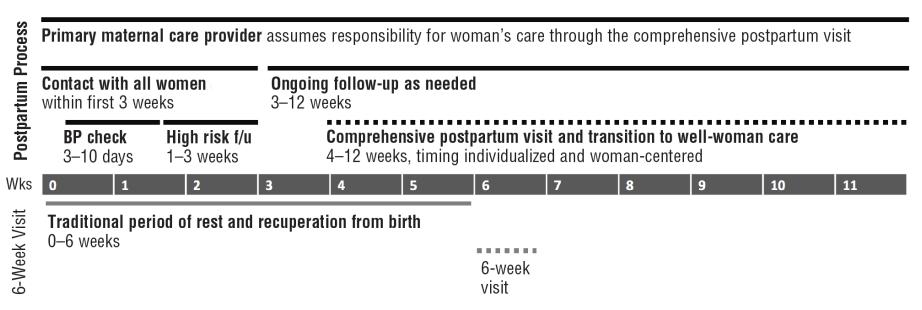


Figure 1. Proposed paradigm shift for postpartum visits. The American College of Obstetricians and Gynecologists' Presidential Task Force on Redefining the Postpartum Visit and the Committee on Obstetric Practice propose shifting the paradigm for postpartum care from a single 6-week visit (bottom) to a postpartum process (top). Abbreviations: BP, blood pressure; f/u, follow-up. \Leftarrow

Recommendations for Supporting Parents with SUD

- Increase frequency of postpartum visits
- Support with transportation, childcare and telehealth options
- Addressing SUD symptoms, triggers, and risk factors for resumption of drug use
- Screening for and providing referrals and treatment for comorbid psychiatric diagnoses
- Support with employment and financial supports
- Screenings and treatment for partners and other children
- Housing supports where needed
- Referral and supports for people experiencing IPV
- Group treatment and new parent groups where appropriate
- Adopting an individualized approach where people are offered services that meet their needs

Later postpartum period

- As described above it is one of the highest risk period for substance use and death for people with perinatal substance use disorder
- Challenges and needs in this period include
 - Insurance changes
 - Greater pressure to return to work
 - Increase number of custody loss of infants
 - Decrease available/required services
 - Decrease social support
 - Continued involvement with criminal justice
 - Continued challenges from psychiatric co-morbidities

Evidence Based Treatments for postpartum people with SUD

- Evidence Based Therapy
 - Cognitive behavioral therapy (CBT)
 - Contingency management
 - Motivational interviewing
- Trauma Informed Care
 - Childhood Trauma
 - IPV
 - Incarceration and criminal justice interactions
 - Birth trauma
 - Children removed from parental custody
- Integrated care for SUD and Psychiatric Co-Morbidities
- Pharmacology treatment
 - MAT
 - Psychiatric medications

Highlighting Motivational Interviewing

- A style of communication meant to enhance the person's internal motivation for change by expressing empathy through reflective listening
- Another approach that promotes decrease in stigma
- Can be done in 5 minutes in an office visit to engage patients to mobilize to change their behavior
- One key is unconditional positive regard decreases stigma and increases person's ability to share their struggle
- These techniques are in opposition to the scared straight model
- Develop discrepancy between patient's goals or values and their current behavior
- Avoid argument and direct confrontation
- Adjust to patient resistance rather than opposing it directly
- Support self-efficacy and optimism

https://nastoolkit.org/explore-the-toolkit/best-practice/8

Communication Style for Motivational Interviewing

- Asking Permission Permission is a deeply respectful foundation of mutual dialogue
- Engaging Engagement is the establishment of trust and a mutually respectful relationship
- Focusing Focus is the ongoing process of seeking and maintaining a direction for the exploration conversation
- Evoking Evoking refers to eliciting the patient's own motivation for change.
- Planning Planning is the process of deciding on a specific plan for change that the patient agrees is important and is willing to undertake.
- Linear and Iterative Processes Change talk within MI is both a linear and iterative process.

https://nastoolkit.org/explore-the-toolkit/best-practice/8

OARS for Motivational Interviewing

- Open-ended questions: keep the conversation moving forward and encourage self-exploration
- Affirmations: reinforce the patient's strengths, efforts, character, and worth
- Reflecting statements: help to stay focused on the patient and conveys understanding and empathy
- Summarizing: provide the big picture and to transition.

https://nastoolkit.org/explore-the-toolkit/best-practice/8

Psychiatric Comorbidities in Pregnant Women with OUD

- Range of rates of pregnant women with OUD and a psychiatric comorbidity was broad 21%-72%
- Mood Disorders were most commonly reported with rangers of 28—
 58% of samples
- Anxiety Disorders next most common with rages from 40—42% of samples
- PTSD diagnosis ranged from 3%-26%
 - These women more likely to have a second primary psychiatric diagnosis(50% vs. 27%)
- Personality disorders 23% in one study (Moylan)
- Treatment of OUD/SUD can actually increase symptoms of underlying psychiatric illnesses

Arnaudo et al, 2017

Impact of Co-occurring mental illness and SUD

- Co-occurring mental illness and SUD can lead
 - Increased intensity of presentation and severity of impairment
 - Worsening of treatment outcomes such as substance use recurrence and decrease treatment retention
 - Increase overdose risk
- Appropriate matching of evidence based behavioral treatment to the co-occurring mental illness leads to increase in retention and decrease substance use in SUD in pregnant people with SUD
- Increase access to the specialized treatments that doe exist is a priority
- Increase integration of behavioral health treatments into SUD and obstetric settings is effective means of increasing access and improving outcomes
- More research is needed to clarify how to match these treatments
 Arnaudo et al, 2017;
 Martin and Parlier-Ahmad, 2021

Highlight Medication Assisted Treatment for Opioid Use Disorder

TABLE 2 Comparison of FDA-approved medications for the treatment of opioid use disorders

Medication	Mechanism of action at μ-opioid receptor	Phase of treatment	Formulations	Dosages commonly used	Adverse effects	Regulations/ availability
Methadone	Agonist	Detoxification, maintenance	Oral	Detoxification: 20 - 40 mg/d, maintenance: 80 - 120 mg/d	Respiratory suppression, sedation, prolonged QTc, constipation, hyperhidrosis, sexual dysfunctions	Only available at designated federally regulated opioid treatment sites
Buprenorphine	Partial agonist	Detoxification, maintenance	Sublingual, buccal	2 - 32 mg/d	Constipation, nausea, precipitated withdrawal	Requires DATA 2000 waiver + DEA X-number, available for office-based treatment
Naltrexone	Antagonist	Relapse prevention, maintenance	Oral, intramuscular	25 - 100 mg/d PO, 380 mg/mo IM	Nausea, anxiety, insomnia, precipitated withdrawal	None, office-based treatment

Data 2000, Drug Addiction Treatment Act of 2000; DEA, Drug Enforcement Administration.

https://www.psychiatrictimes.com/view/opioid-use-disorder-update-diagnosis-and-treatment

Medication for Opioid Use Disorder in postpartum period

- Dosage of both methadone and buprenorphine need to be increase and split during pregnancy due to changes in liver metabolism of these medications
- We do know:
 - There is tremendous variability in individual dosage needs due to variability in liver metabolism and receptor profiles
 - Dosages for methadone and buprenorphine are generally decreased
 - These decreases tend to lead to decrease in treatment retention
- Much research is needed to further inform of us of optimal management

Martin and Parlier-Ahmad, 2021

References

- Wu ZH, Wu R, Brownell E, Oncken C, & Grady J (2021). Stress and drug use from prepregnancy, during pregnancy, to postpartum. Journal of Racial and Ethnic Health Disparities, 8, 454–462. 10.1007/s40615-020-00802-x [PubMed: 32594376]
- Martin CE, Parlier-Ahmad AB. Addiction treatment in the postpartum period: an opportunity for evidence-based personalized medicine. Int Rev Psychiatry. 2021 Sep;33(6):579-590. doi: 10.1080/09540261.2021.1898349. Epub 2021 Jul 8. PMID: 34238101; PMCID: PMC8490333.
- Arnaudo CL, Andraka-Christou B, & Allgood K (2017). Psychiatric comorbidities in pregnant women with opioid use disorders: Prevalence, impact, and implications for treatment. Current Addiction Reports, 4(1), 1–13. 10.1007/s40429-017-0132-4 [PubMed: 28357191]
- Optimizing postpartum care. ACOG Committee Opinion No 73. ACOG 2018;131; e140-50

References

- Faherty LJ, Stein BD, Terplan M. Consensus Guidelines and State Policies: The Gap Between Principle and Practice at the Intersection of Substance Use and Pregnancy. Am J Obstet Gynecol MFM. 2020 Aug;2(3):100137. doi: 10.1016/j.ajogmf.2020.100137. Epub 2020 May 17. PMID: 33089133; PMCID: PMC7571448.
- Carter EB, Tuuli MG, Caughey AB, Odibo AO, Macones GA, Cahill AG. Number of prenatal visits and pregnancy outcomes in low-risk women. J Perinatol. 2016;36(3):178-181. doi:10.1038/jp.2015.183

References

- Volkow ND. Personalizing the Treatment of Substance Use Disorders.
 Am J Psychiatry. 2020 Feb 1;177(2):113-116. doi:
 10.1176/appi.ajp.2019.19121284. PMID: 32008390.
- Volkow ND. Stigma and the Toll of Addiction. N Engl J Med. 2020 Apr 2;382(14):1289-1290. doi: 10.1056/NEJMp1917360. PMID: 32242351.