

Perinatal Substance Use

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Maternal Healthcare Conference

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medicine.musc.edu/departments/psychiatry/cecar/conferences/maternal-stress-conference

This conference, presented by the MUSC Department of Psychiatry and Behavioral Sciences Office of Continuing Education, will address the challenges and opportunities that arise for front-line providers within maternal healthcare.

Expert speakers will discuss employing multi-disciplinary collaborations to improve perinatal outcomes for women and birthing people with lived experiences of mental health and substance use disorders.

Speakers Include:

Laura Carlson, MD
Stephanie Berg, MD
Rubin Aujla, MD
Victoria Bowen, LPC
Tara Ancrum, LPC
Kerry Blome, LISW

Ashley Jones, MD
Jess Obeysekare, MD
Dawn Boender, MD
Sara Witcraft, PhD
Marguerite Pierce
Courtney King, PhD

Neha Hudepohl, MD
Kelly Helms LISW-CP
Abbie Lee-Rodgers, MD
Christina Tolbert, MD
Connie Guille, MD
Marie Hayes, PhD

Topics Include:

Maternal Morbidity and Mortality in South Carolina
Identification and Treatment of Perinatal Mood and Anxiety Disorder
Identification and Treatment of Perinatal Substance Use Disorder
Improving Maternal Mental Health Outcomes for Black Women through Culturally Competent Care
Evolving Systems of Care for Perinatal Mental Health and Substance Use Disorders

Questions? psych-events@musc.edu



Outline

- Cannabis use- pregnancy and postpartum
 - Associated outcomes
 - Practice guidelines
 - Clinical Recommendations
 - Future Directions
- Practice Challenge
 - Retention in treatment for perinatal opioid use disorder

Perinatal Cannabis Use

CANNABIS BACKGROUND

- Cannabis or Marijuana is harvested from the leaves and flowers of the Hemp plant
- Tetrahydrocannabinol (THC) is the active ingredient- found throughout the plant



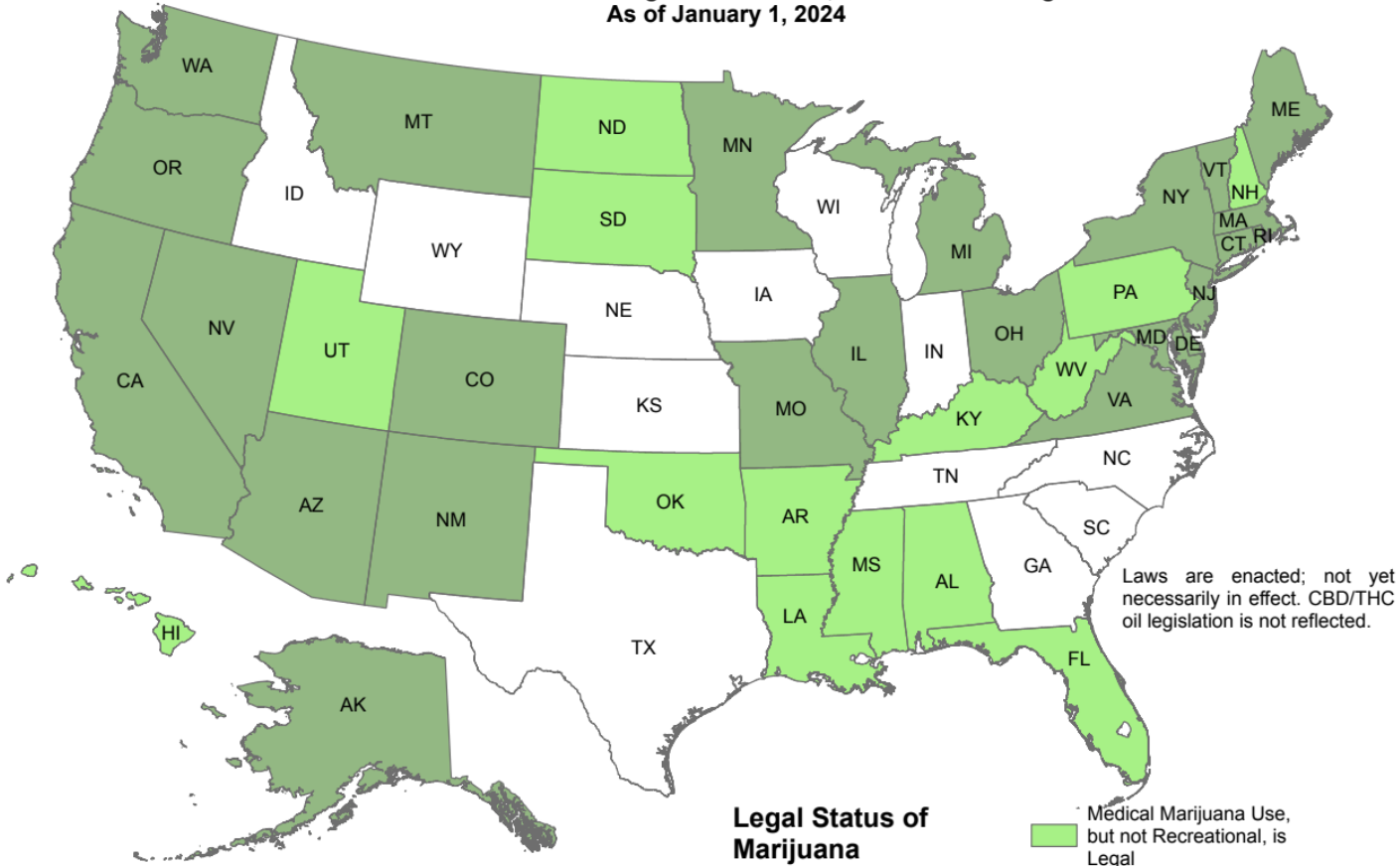
CANNABIS BACKGROUND

- Most commonly used substance in the U.S.
- THC acts on the endocannabinoid system
- Delta-9-THC: psychoactive metabolite of cannabis
 - acts on cannabinoid receptors within the central nervous system and peripheral tissues

Not recognized by the federal government as legal but legalized for medicinal or recreational purposes in 38 states, with CBD or THC oil legalized in more states

States with Legalized Smoking and/or Vaping of Marijuana

American Nonsmokers' Rights Foundation, www.no-smoke.org
As of January 1, 2024



Laws are enacted; not yet necessarily in effect. CBD/THC oil legislation is not reflected.

Legal Status of Marijuana

- Marijuana use is not Legal
- Medical Marijuana Use, but not Recreational, is Legal
- Recreational and Medical Marijuana Use is Legal

To see a map of state and local laws prohibiting smoking and vaping marijuana, visit <https://no-smoke.org/wp-content/uploads/pdf/marijuana-smokefree-laws-map.pdf>

Note: American Indian and Alaska Native sovereign Tribal laws are not reflected on this map.

Note: In total, 38 states allow medical marijuana use.

SEX AND GENDER DIFFERENCES

- Sex and gender differences exist in use
 - Females- stress reduction; Males- enhance positive affect
- Females:
 - Faster progression to dependence
 - More severe withdrawal
 - Poorer response to treatment

CANNABIS USE DURING PREGNANCY

- Approximately 18% or 1 in 6 use cannabis while pregnant
 - Increasing at rates similar to the general public
- Confusion around safety in pregnancy and postpartum
 - National Surveys of Drug Use and Health from 2005 to 2012: percentage of women who reported “no risk” of harm rose from 25.8% in 2005 to 65.4% in 2012



CANNABIS USE DURING PREGNANCY

- Perceived benefits in pregnancy for management of nausea, pain and sleep disruptions
 - Providers have been found to recommend for management of pain or nausea in pregnancy
- Cannabis in pregnancy associated with negative health outcomes for mother and child
 - **THC crosses the placenta and enters fetus at ~10% of maternal levels**
 - Fetal brain development impacted by THC exposure- concentration and location of endocannabinoid receptors during fetal development

ADVERSE OUTCOMES- MATERNAL

- Co-occurring mental health conditions common in cannabis users
 - Anxiety, depression, psychosis etc.
- Cannabis may be reportedly used to treat symptoms, but in fact it often **exacerbates** mental health symptoms which can have downstream affects to parent and child
- Endocannabinoid system is involved in reproduction, including implantation and maintenance of a pregnancy – theoretical risk not definitively backed by data

ADVERSE OUTCOMES- OFFSPRING

- Low birth weight, preterm birth, lower Apgar scores, and NICU admission
- Neurodevelopmental problems: Visual problem solving, visual–motor coordination, and visual analysis, decreased attention span, behavioral challenges
- One study found greater rates of autism, learning and intellectual disabilities
- Cognitive challenges found into young adulthood
- Newborns with in-utero exposure to THC can undergo a neonatal abstinence like syndrome characterized by tremors, increased startle reflex and reduced habituation to light.

POSTPARTUM CANNABIS USE

- Postpartum relapse rates for those who achieve abstinence during pregnancy are high- 79% within 4.5 months PP
- Data suggests reasons for use include for stress management, as a sleep aid and management of pain associated with childbirth
 - 83.8% report stress and anxiety relief as the most common reason for postpartum cannabis use
- PP use is perceived as safe, but is associated with negative outcomes for parent and child

CANNABIS USE DURING LACTATION

- Cannabinoids are lipophilic and cross the blood brain barrier
- THC is excreted and concentrated in breast milk
 - Up to 8x the concentrations of maternal plasma
 - Detectable up to 6 days following use (long half-life)
- Concerns about impacts to brain development through exposure (second hand or via breast milk)

RECOMMENDATIONS



ACOG	Women attempting pregnancy, currently pregnant, or breastfeeding avoid marijuana use
American Academy of Pediatrics	Recommends against marijuana use in women who are breastfeeding
The Food and Drug Administration (FDA)	Strongly advises against the use of cannabidiol (CBD) in any form during pregnancy or while breastfeeding

PRACTICE RECOMMENDATIONS

- Shared decision-making approach for cannabis using pregnant and postpartum people- abstinence versus harm reduction
 - Risks, benefits, interventions available
- Assess for anxiety, depression, sleep disturbance, psychosis, other substance use if a patient reports cannabis use
 - Referral to treatment!
- Awareness of Cannabinoid hyperemesis syndrome- symptoms and differential assessment from hyperemesis for chronic cannabis users

FUTURE DIRECTIONS

- Most existing research is cross-sectional, self-report, and temporal relationships between factors influencing use and return to use postpartum have not been explored
- Understand differences in perceptions or use between states with legalization and without
- Explore interventions to support postpartum women to manage symptoms (stress, sleep, pain, anxiety, depression etc.)
- Increase education to birthing people and providers to facilitate shared decision making around peripartum cannabis use



Questions?

Practice Challenge:

Retention in treatment for perinatal
opioid use disorder

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