# Breastfeeding and THC use in the NICU

By

Deepa Nagar, MD, MBA, FAAP NICU Medical Director/Chair Department of Peds @ St Rose Siena Pediatrix Corporate Director

#### CDC

- Using marijuana (in any form-edibles, oils,etc) while breastfeeding can allow harmful chemicals to pass from the mother to the infant through breast milk or secondhand smoke exposure.
- To limit potential risk to the infant, breastfeeding mothers should be advised not to use marijuana or products containing cannabidiol (CBD) in any form while breastfeeding
- These chemicals have the potential to affect a variety of neurodevelopmental processes in the infant.
- Tetrahydrocannabinol (THC)- main active component of marijuana
  - is stored in body fat and slowly released over unknown period of time
- Cannabidiol (CBD):
  - Contain contaminants (e.g., pesticides, heavy metals, bacteria, and fungus)
  - Dangerous to the mother and her infant
- Data on the effects of marijuana and CBD exposure to the infant through breastfeeding are limited and conflicting.
- Marijuana use may also impair a mother or other caregiver's judgement and ability to care for an infant.

#### **FDA**

- FDA strongly advises that during pregnancy and while breastfeeding, you avoid using CBD, THC, or marijuana in any form
- <u>U.S. Surgeon General</u>: Marijuana use During Pregnancy
  - may affect fetal brain development (THC can enter the fetal brain from the mother's bloodstream)
  - may increase the risk of a newborn with low birth weight.
  - may increased risk for premature birth and potentially stillbirth.
- Breastmilk can contain THC for up to 6 days after use. (or > 6 wks)
  - Newborn's brain development: hyperactivity, poor cognitive function, and other long-term consequences.
- Other than the one approved prescription drug, CBD products have not been evaluated or approved by FDA for use as drug products. This means that we do not know:
  - if they are safe and effective to treat a particular disease
  - what, if any, dosage may be considered safe
  - how they could interact with other drugs or foods
  - whether they have dangerous side effects or other safety concerns

- American College of Obstetricians and Gynecologists (ACOG)
  - <u>recommends</u> that obstetrician-gynecologists counsel women <u>against</u> using marijuana <u>while trying to get pregnant, during pregnancy, and while they are</u> <u>breastfeeding</u>.

- The American Academy of Pediatrics (AAP)
  - <u>recommends</u> women who are pregnant or breastfeeding avoid marijuana use

### The American Academy of Pediatrics (AAP)

- NO Amt of Marijuana has been proven safe to use during pregnancy or while breastfeeding
  - Use for morning sickness
    - Never been studied or determined to be safe
  - Not safer than tobacco
    - When smoked carbon monoxide blood concentrations are 5X higher than when tobacco smoked → less oxygen to baby
  - Brain Development:
    - Problem-solving skills, memory, visual perception, behavior, attention, executive function, and impulse control especially as they become teenagers
- THC concentration in Marijuana has Quadrupled since 1980s when studies conducted

## Marijuana use

- Marijuana use ranged between 15% and 28%
- 48% to 60% of marijuana users report continuing use during their entire pregnancy, believing it to be safer than tobacco
- Longitudinal Development and Infancy Study (UK): Moore et al
  - found that <u>most pregnant women</u> who used cocaine, ecstasy, methamphetamine, and other stimulants <u>stopped using by the second</u> trimester
  - BUT: 48% of previous marijuana users continued to use marijuana as well as alcohol (64%) and tobacco (46%) throughout their entire pregnancy.

## Breast feeding at discharge

Year	2020 (n=449)	2021 (n= )
MBM- Yes	54.9% (n=274)	58% (n=309)
MBM- No	45.1% (n=225)	42% (n=227)
Drugs	14%	23%
THC		60%

#### Cases in the NICU

- 33wk infant
- Term infant Hypothermia
- 24wk infant