Recent legalization of medical cannabis in MN and other forms of marijuana in other States has prompted many questions from WIC staff and participants about the safety of marijuana use during pregnancy and breastfeeding.

Marijuana use in pregnant and breastfeeding women is a concern due to the potential harmful effects of Tetrahydrocannabinol (THC) and other chemicals on the developing fetus. THC is the primary active substance in marijuana. It is absorbed into the body and is stored in fat tissue, including the brain, regardless of whether marijuana is ingested or smoked.

Adverse effects of alcohol and tobacco consumption during pregnancy are well documented, but the research on the fetal health outcomes related to marijuana exposure is limited.

The Colorado Department of Public Health recently developed public health statements based on a 2015 systematic review of available literature on marijuana use in pregnancy and breastfeeding. Below are key points.

**Pregnancy**

- There is no known safe amount of marijuana use during pregnancy.
- There are negative effects of marijuana, regardless of when during pregnancy it is used.
- THC passes from mother to the fetus through the placenta, exposing the unborn child.
- Marijuana use during pregnancy may be associated with
  - increased risk of heart defects in exposed offspring; and
  - increased risk of stillbirth.
- Maternal use of marijuana during pregnancy is associated with negative effects on exposed offspring, including:
  - decreased cognitive function and attention;
  - decreased academic ability; and
  - increased depression symptoms and delinquent behaviors.
These effects might not appear until adolescence.

**Breastfeeding**

- THC can pass to the baby through breastmilk, potentially affecting the baby.
Another View on Marijuana Use during Pregnancy and Breastfeeding

Dr. Lauren Jansson, MD, Director of Pediatrics, Johns Hopkins University School of Medicine, presented Perinatal Marijuana Use and Lactation at the UM Maternal Nutrition Intensive Course in July 2016. Her presentation is available to WIC staff until November 30, 2016 – refer here for instructions to view.

Key points from Dr. Jansson’s presentation:

General
- **Number of people using marijuana has increased** significantly during the last decade.
- **Marijuana use is common**: 10% of population reports using marijuana within the last year, 7% within the last month.
- **Marijuana potency has increased** 4 fold since 1970’s. Marijuana might be laced with other substances. Synthetic forms are becoming more popular, and may be more dangerous.
- **THC is one of 60 components in cannabis** that is stored in fat tissues and the liver. It can be detected in the body for 60 days.
- **Second hand marijuana smoke contains as many carcinogens** as second hand tobacco smoke resulting in similar health risks.

Pregnancy
- It’s difficult to define chronic vs recreational use, and self-report of use is **highly unreliable**.
- **Women are less likely to stop using cannabis during their pregnancy**, than they are to stop using alcohol & tobacco.
- 30% of those who used marijuana within the last year will develop “Cannabis Use Disorder” (chronic use or addiction) at some point. Woman who continue to use throughout pregnancy usually meet criteria for “Cannabis Use Disorder”, and will likely continue to use postpartum.

Postpartum/Breastfeeding
- THC concentration in breastmilk is estimated to be at 8.11 milk/plasma ratio. Based on this THC concentration in breastmilk, if a mom smokes a joint and then breastfeeds her infant, her infant’s exposure to THC would be **similar to an adult’s exposure after smoking one joint**. This is due to the infant’s small body weight compared to an adult.
- THC use results in impaired memory, altered judgement and sometimes paranoia, making it difficult for moms to interpret and respond to her infant’s cues.
- THC has a very long half-life. Urine will stay positive for 60 days. A mom in drug treatment must “pump and dump” for at least 60 days after chronic cannabis use before being allowed to breastfeed her baby. THC can be detected in a baby’s urine for 2-5 weeks after exposure.
Professional Organization’s Statements on Marijuana use and Breastfeeding

Many professional organizations have developed statements concerning marijuana use and breastfeeding, based on their review and interpretation of available research.

American Academy of Pediatrics (AAP)—“cannabis can be detected in human milk, and their use by breastfeeding mothers is of concern, particularly with regard to the infant’s long-term neurobehavioral development and thus are contraindicated.”

American Congress of Obstetricians and Gynecologists (ACOG) (2015)—“There are insufficient data to evaluate the effects of marijuana use on infants during lactation and breastfeeding, and in the absence of such data, marijuana use is discouraged.”

Academy of Breastfeeding Medicine (ABM) (2015)—“At this time, although the data are not strong enough to recommend not breastfeeding with any marijuana use, we urge caution.”

Dr. Thomas Hale, “Mothers should be strongly advised to avoid any form of THC while pregnant and breastfeeding. Mothers found positive for THC in urine screens should be strongly advised to avoid continued exposure to this drug while breastfeeding and should be counseled that continued exposure of their infants to cannabis may produce severe long-term neurobehavioral consequences.”

LactMed (2016)—“Marijuana use should be minimized or avoided by nursing mothers.”

Discussing Marijuana Use with WIC Participants

Substance use questions and follow-up discussions can be very sensitive topics for staff and participants. A recent PCS webinar by Altarum provided some tips and suggestions for Addressing Sensitive Topics with participants. The PCS Webinar recordings will be available to view at a later date.

Other things to consider when discussing substance use include:

- WIC Policy MOM 6.4 requires that substance abuse information be discussed with participants at the family’s initial certification, and whenever an issue is identified. Best practice is to discuss it at each pregnancy certification.
- Keep assessments non-judgmental and education factual, but don’t minimize the risks.
- Encourage mom to discuss her marijuana use with her doctor, even if she reports only occasional use. (Self-report is highly unreliable)
- Offer referral resources “just in case” she might want them or knows a friend or family member who might need them.
- Write careful notes in participant’s record to facilitate continuity of care especially through the prenatal and postpartum period.
- Assess and discuss marijuana use and safety to the infant during the postpartum period, especially if mom stated that she used marijuana before or during pregnancy. Offer referrals, if needed, so the mom/baby dyad will have the support they need.
Example Conversation

CPA: The next few questions are about cigarette smoking, alcohol and drug use. (normalizing) We ask all our pregnant moms these questions. (transparency) WIC is a safe place to talk about any concerns you might have, including concerns about smoking and drug use. We ask these questions to everyone so we can offer referrals to women who may decide they want some extra help.

CPA: How many cigarettes did you smoke 3 months before you became pregnant?

Participant: I used to smoke a pack a day, but since I found out I was pregnant, I’ve been trying to cut back. I’m down to about a half a pack a day.

CPA: (reflection) You want a healthy baby and you are cutting back on smoking.

Participant: Yes, I know smoking cigarettes is not good for the baby.

CPA: How about marijuana? Or other drugs or medications not prescribed to you?

Participant: Well, sometimes on the weekends I’ll smoke a couple of joints, and once in a while during the week, especially if I’m really stressed out. I’ve heard it’s better than smoking cigarettes when you are pregnant. I don’t drink anymore though. I know that’s bad for the baby. And I don’t do drugs.

CPA: (reflection) You’ve cut back on smoking and drinking because you want a healthy baby. (Affirmation) Those are big changes.

CPA: You mentioned that you smoke marijuana when you feel stressed. (Probing with Open Ended Question) Can you tell me a little more about that?

Participant: Yes, it seems to relax me, and I even have a friend that has a prescription for medical cannabis because she has anxiety. (change talk) I’ve wondered whether it’s safe since I’m pregnant (ambivalence) but my Dr. didn’t really say anything.

CPA: (Asking Permission) Would it be ok if I share about marijuana use during pregnancy?

Participant: Sure. But since it’s becoming legal everywhere it must be ok, right?

CPA: (Normalizing) I can see how it seems that way and I’ve heard from other people who think that too.

(Education) There’s a lot we don’t know about the effects of marijuana on your unborn baby.

- For example, they don’t know if there is a safe amount of marijuana that you can smoke without potentially harming your baby. They just don’t know.
- What they DO KNOW is that THC—the stuff in marijuana that causes you to get high, can pass from mother to the unborn baby through the placenta, so your baby is exposed to THC if you smoke a joint. And the THC is stored in your baby’s fat cells so it stays in your baby’s body for a while.
- They also think that babies exposed to THC in the womb may have an effect on their abilities to learn and their attention span as they get older.

What are your thoughts on this information?

Participant: Ok, so they really don’t know whether it’s safe or not. (change talk) Maybe I can cut back on smoking pot while I’m pregnant, but I just hate it when I get all stressed out. The pot really helps.

CPA: (reflection) You’re not sure that smoking marijuana is a good idea right now while you are PG but you want relief from your stress.
Participant: Yes.

CPA: (Open ended question) What else might you do to help yourself relieve stress?

Participant: Well, I used to run cross country in high school. (change talk) That always made me feel better.

CPA: (Reflection) Exercise has helped you in the past.

Participant: Yes. But no way can I run now. I’m out of shape and pregnant. (goal setting) But maybe I could go for a walk with my dog.

CPA: (Reflection) Sounds like you would like to try going for a walk when you are feeling stressed rather than smoking a joint. You know what works for you and know how to figure out what is best for you and your baby.

Participant: Yes, I guess so. I just have to do it.

CPA: I would encourage you to have a conversation about your marijuana use with your Dr. He might be able to give you some suggestions to help manage your stress too. I also have a pamphlet that has some other referrals that you might be interested in. And if not for yourself, you might know someone else who would be interested in these resources. We are all here to help you be successful with changes you are trying to make so that you have a healthy baby.

Participant: Thanks. It feels good to do what I can to be a good mom.

References:

Colorado Retail Marijuana Public Advisory Committee Report

AAP statement on Marijuana

ACOG Committee Opinion on Marijuana

Academy of Breastfeeding Medicine

Infant Risk Center Thomas Hale

NIH LactNet