MARIJUANA USE, PREGNANCY, AND DAMAGE TO HUMAN REPRODUCTION

Marijuana (Cannabis) is a plant that contains more than eighty biologically active chemical compounds. The most commonly known compounds are cannabidiol (CBD) and tetrahydrocannabinol (THC). We are now seeing CBD-containing products everywhere. CBD can be found in many different products, like drugs, foods, products marketed as dietary supplements, and cosmetics. These products often make questionable health promises about CBD. The federal Food and Drug Administration (FDA) strongly advises against the use of marijuana in any form during pregnancy or while breastfeeding. While breastfeeding, it is important to know that breastmilk can contain THC for up to six days after use. This THC may affect a newborn's brain development and result in hyperactivity, poor cognitive function, and other long-term consequences. Additionally, marijuana smoke contains many of the same harmful components as tobacco smoke. Neither marijuana nor tobacco products should be smoked around a baby or children. [1]

Research shows that infants exposed to THC before birth can suffer a wide array of neurocognitive and neurobehavioral deficits that cascade throughout childhood and adolescence, resulting in adverse social, health and economic consequences. Prenatal marijuana use has been linked with: [2]

- 1. Impairing fetal neurodevelopment
- 2. Risk for miscarriage increases if marijuana is used early in pregnancy
- 3. Developmental and hyperactivity disorders in children
- 4. Low birth weight
- 5. Premature birth
- 6. Greater risk of stillbirth
- 7. Learning deficits
- 8. Altered responses to visual stimuli, increased trembling, and a high-pitched cry
- 9. Children have gaps in problem-solving skills, memory, and the ability to remain attentive
- 10. Increased likelihood of a person using marijuana as a young adult, even when other factors that influence drug use are considered
 - 11. Decreased motor development
- 12. The American Medical Association has warned marijuana use may be linked with low birth weight, premature birth, behavioral and other problems in young children.
 - 13. Childhood attention problems and lower scores on problem-solving measures.
 - 14. Birth defects
 - 15. Childhood cancer.
 - 16. Anemia
- 17. Reproductive toxicity in early gestation and has been found to affect the creation of sperm in males

Use of marijuana by pregnant women is on the rise

Marijuana has been touted by some in the marijuana industry as a "medicine" for the nausea or morning sickness connected to pregnancy and some women are using it in the first trimester of their pregnancy which is the period of greatest risk to the fetus. There is a general increase in marijuana use among pregnant females due to the increasingly permissive legal landscape regarding marijuana. [3]

Damage to the child's heart

The first trimester during which morning sickness most often occurs is the trimester during which the fetus is most vulnerable to developmental malformations. For example, there is a continued rise in a category of heart Ventricular Septal Defects (VSDs) that is included as one suspected outcomes of marijuana use during pregnancy. There was shown to be 2-fold increase in risk of isolated simple VSDs for maternal self-reported marijuana use. In addition, marijuana use has been shown to be a factor in Ebstein's Anomaly a heart defect in which the tricuspid valve, the valve between the upper right chamber (right atrium) and the lower right chamber (right ventricle) of the heart, doesn't work properly. [4]

Other research

- 1. Prenatal marijuana exposure can set a person up for later **marijuana addiction and other addictions** as well. [5]
- 2. The association of marijuana with **impaired fetal growth** is accepted by leading authorities. [6]
 - 3. There is a risk of **congenital inherited cancers**. [7]
- 4. There is the risk of damage from synthetic cannabinoids. This epigenetic toxicological effect has also been verified for synthetic cannabinoids. [8]
- 5. Testicular cancers there is an association of marijuana use and the incidence of testicular germ cell tumors. [9]
 - 6. There is an association with marijuana use and sperm toxic effect. [10]
- 7. In a study nonmedical staff at marijuana dispensaries were recommending marijuana to pregnant women for nausea. Medical experts warn against it. [11]
- 8. An article in <u>Modern Health Care</u> states that a recent study shows that if a nursing woman uses marijuana, her baby through her breast milk, will consume traces of THC for at least six weeks and possibly longer. **Prenatal exposure to THC can affect the child's neurobehavior and child development up through the teen years**. [12]

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