Should we warn women against using marijuana during pregnancy?

Prevention and public education are the best tools for addressing the spread of many diseases and their consequences. For example, public education and other measures have led to the reduction of tobacco use and mortality rates attributable to tobacco-related cancers. It took a long time to achieve this, but as evidence of the negative effects of tobacco piled up, we acted resolutely and effectively. We now face a similar problem of epidemic proportion with the use of marijuana. Marijuana is portrayed as a mostly harmless substance compared with other drugs of abuse. We continued to hear about its possible beneficial effects for numerous conditions, yet the evidence of its benefits is frequently of low quality. Nevertheless, the drumbeat of positive press has led many states to legalize marijuana production, distribution, and use, perhaps because it brings substantial tax revenues.

The marijuana industry has been skillful in marketing “medical marijuana” and in promoting its presumed benefits. This has happened despite mounting evidence of the negative consequences of marijuana use, which are not “just” psychiatric. The latest warning has come from a Scientific Statement from the American Heart Association: “Patients with underlying ischemic disease could see an increase in angina, particularly when cannabis is smoked.”

Some evidence suggests that cannabis use may be a trigger for acute myocardial infarction and may be linked to a “higher risk of cerebrovascular accident and heart failure.”

Reports of the negative consequences of and warnings about marijuana use have focused on those who make a personal choice to use the substance. But what about those who are exposed to marijuana unwillingly, namely children who are exposed to it at home by relatives and others who are users, or fetuses exposed to marijuana prenataIy? We do not know much about the consequences of second-hand exposure to marijuana. However, the negative consequences of prenatal marijuana exposure are becoming evident. Several studies have reported evidence for negative consequences such as fetal growth reduction, or the development of delinquent behavior at age 14 years. One scientific review reported on the alterations of endocannabinoid neurotransmission at critical developmental ages (based on rodent studies). Another review reported that marijuana use during pregnancy and lactation...
Evidence of the negative impacts on pregnancy of marijuana use was significantly associated with an increased risk of preterm birth. Prenatal exposure to marijuana, compared with no reported use, was associated with greater frequency of small for gestational age, placental abruption, transfer to neonatal intensive care, and 5-minute Apgar scores of <4.9

The recent report on the negative effects of maternal marijuana use during pregnancy was a retrospective analysis of all live births in Ontario, Canada between 2007 and 2012.10 The incidence of autism spectrum disorder among children prenatally exposed to marijuana was 4.00 per 1,000 person-years compared with 2.42 among unexposed children (fully adjusted hazard ratio: 1.51).10 Although less statistically robust, the incidence of intellectual disability and learning disorders was also reported to be higher among those with prenatal exposure to marijuana.

The research on outcomes of prenatal exposure to marijuana is not extensive, yet evidence of negative outcomes is accumulating. Prenatal exposure to marijuana leads to damage of the developing brain during critical periods of development and increases the risk of various negative pregnancy-related outcomes. I believe that we have done a good job warning women about the risks of using tobacco and alcohol during pregnancy. It is time to start doing the same regarding marijuana use during pregnancy. In a recent review on marijuana use during pregnancy and its relationship with fetal developmental outcomes and psychiatric disorders, Corsi et al10 noted that the early detection of marijuana use in pregnant women is fundamental. They wrote, “It is also important to warn women about the risks of using cannabis during pregnancy in order to minimize the possible consequences, which mainly include affective disorders and ADHD [attention-deficit/hyperactivity disorder] and which depend on duration and intensity of the prenatal exposure. In this regard, awareness campaigns may be an essential tool. An active involvement is required from primary care, obstetricians, pediatric, mental health and drug dependence services.”7

Obstetrician-gynecologists have already taken steps in this direction, recommending that “obstetrician-gynecologists should be discouraged from prescribing or suggesting the use of marijuana for medical purposes during the period before pregnancy, and during pregnancy and lactation. Rather, pregnant women or women contemplating pregnancy should be encouraged to discontinue use of marijuana for medicinal purposes in favor of an alternative therapy for which there are better pregnancy-specific safety data.”12 Finally, on August 29, 2019, US Surgeon General VADM Jerome M. Adams issued an advisory against marijuana use during pregnancy.13

Psychiatrists should start to do the same and actively discourage marijuana use in women of reproductive age or those who are pregnant or planning pregnancy. Like the campaigns that discouraged the use of tobacco and alcohol in pregnancy, we also need a campaign to discourage these women from using marijuana and products containing cannabis. Failure to do so may have far-reaching consequences for our youth.

REFERENCES