Marijuana use increases risks in pregnancy

May 2 2016

A dried flower bud of the Cannabis plant. Credit: Public Domain

Women using marijuana during pregnancy have an increased risk of spontaneous pre-term birth, according to new research.

"Women who continue to use marijuana at 20 weeks' gestation are five

times more likely to deliver pre-term than those who do not use it", says University of Auckland Professor Lesley McCowan, a specialist in maternal fetal medicine and an author of the paper.

She says widespread legalisation of marijuana internationally had raised safety concerns for marijuana use in pregnancy and the research was conducted as part of the prospective international birth cohort study known as SCOPE (Screening for Pregnancy Endpoints).

Professor McCowan is the New Zealand lead investigator of the SCOPE study that aims to develop screening tests to predict small- for-gestational- age neonates, pre-eclampsia, and spontaneous pre-term birth.

The research into the effects of marijuana before and during pregnancy used detailed information about marijuana use from the SCOPE database and was published online early this week by website Science Direct.

New Zealand's involvement in the study was funded by the New Enterprise Research Fund and the Health Research Council NZ.

This latest research looked at pregnancy outcomes for 5588 women in their first ongoing pregnancy. They were interviewed at about 15 and 20 weeks of pregnancy.

From this cohort there were 236 women with spontaneous pre-term births. Pre-term birth is an important pregnancy complication as it is associated with risk of the baby dying after birth or suffering long term and costly health consequences.

Researchers found that although the numbers were small, continued marijuana use at 20 weeks by pregnant women was associated with

spontaneous pre-term births, independent of whether the women smoked tobacco, and their socio-economic status.

"In this large group, maternal marijuana use was a major contribution to the risk of early birth and was consistent for cigarette smokers and non-smokers," she says. "Of particular concern was that women who continued to use marijuana had a higher risk of delivering very pre-term when the risks of long term consequences for the baby are greatest. "Our data indicate that increasing use of marijuana among young women of reproductive age may be a major public health concern in terms of early birth risk," says Professor McCowan.

She says that 4.5 percent of the New Zealand participants in the SCOPE study reported using marijuana in the three months before pregnancy or during the first half of pregnancy.

The New Zealand Health Survey from 2012-2013 reports that 13 percent of women aged 25-34 years have used marijuana in the last 12 months and 42 percent of adults reported that had used it at some time, so marijuana usage is common in New Zealand.

"Women who use marijuana should be encouraged to quit prior to pregnancy or to stop as early as possible in the pregnancy, since continued use of marijuana at 20 weeks gestation is associated with a five-fold increase in risk of spontaneous pre-term birth.

"In the group of women that we looked at, we estimate a 6.2 percent reduction in the incidence of spontaneous pre-term birth is possible, if women are not exposed to marijuana during early pregnancy," says Professor McCowan.

"In countries where authorities are considering decriminalisation of marijuana or have already done so, the risk to pregnant women and their

babies needs greater consideration," she says.

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More information:
www.sciencedirect.com/science/journal/aip/08906238 Shalem Yiner-Lee Leemaqz et al. Maternal marijuana use has independent effects on risk for spontaneous preterm birth but not other common late pregnancy complications, *Reproductive Toxicology* (2016). DOI: 10.1016/j.reprotox.2016.04.021

Provided by University of Auckland