

Women with gestational diabetes have increased risk of recurrence in subsequent pregnancies

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There is an increased risk of recurring gestational diabetes in pregnant women who developed gestational diabetes during their first and second pregnancies, according to a Kaiser Permanente study appearing online in the *American Journal of Obstetrics and Gynecology*.

The study of 65,132 women found that compared to women without gestational diabetes in their first and second pregnancies, women who developed gestational diabetes during their first but not second pregnancies had a 630 percent increased risk for developing gestational diabetes during their third pregnancy. This risk was even more pronounced - 25.9-fold - in the third pregnancy for women who had gestational diabetes in their first and second pregnancies.

The risk of gestational diabetes recurring was substantial among Hispanic and Asian Pacific Islander women compared with their white counterparts. Researchers also found that in this study population, gestational diabetes was more likely to occur in women who are aged 30 and older, and had a longer interval between any two of their successive pregnancies.

Gestational diabetes mellitus, known as GDM, is defined as glucose intolerance that typically occurs during the second or third trimester of pregnancy. It causes complications in as much as seven percent of pregnancies in the United States. It can lead to early delivery, Cesarean



sections and type 2 diabetes, and can increase the child's risk of developing diabetes and obesity later in life.

For this study, researchers analyzed the <u>electronic medical records</u> of 65,132 women who delivered babies at Kaiser Permanente Southern California medical facilities between 1991 and 2008.

The findings lend credence to the importance of educating and counseling pregnant women about whether they have an increased risk of recurrent gestational diabetes in subsequent pregnancy.

"Because of the silent nature of gestational diabetes, it is important to identify early those who are at risk and watch them closely during their prenatal care," said study lead author Darios Getahun, MD, MPH, research scientist/epidemiologist in the Kaiser Permanente Southern California Department of Research & Evaluation. "Well-controlled gestational diabetes may prevent complications that result in fetal and maternal morbidity, such as high blood pressure during pregnancy, urinary tract infections, cesarean delivery, big babies, birth trauma, and a variety of other adverse outcomes, including future diabetes."

This is the first study to examine the race/ethnicity difference in the recurrence of gestational diabetes in the first-two or first-three pregnancies. Previous studies examined the recurrence of gestational diabetes in subsequent pregnancies without regard to their past gestational diabetes history (other than these two subsequent pregnancies.) This study shows that the magnitude of association of the recurrence risk of gestational diabetes in successive pregnancies is modified by the number of successive pregnancies, and this risk differs by race/ethnicity.

"Clinicians should be aware and counsel potential pregnant women about their increased risk and that early detection and initiation of treatment is



important because unrecognized or untreated gestational diabetes is likely to lead to adverse maternal and fetal outcomes," said Dr. Getahun. "Although maternal deaths are low, fetal and neonatal mortality remains much higher than in the general population."

This study is part of ongoing research at Kaiser Permanente to understand, prevent and treat gestational diabetes. A recent Kaiser Permanente study of 1,145 pregnant women found that women who gain excessive weight during pregnancy, especially in the first trimester, may increase their risk of developing diabetes later in their pregnancy. Another published Kaiser Permanente study of 16,000 women in Hawaii found that more than 10 percent of women of Chinese and Korean heritage may be at risk for developing gestational diabetes. Another published Kaiser Permanente study of 10,000 mother-child pairs showed that treating gestational diabetes during pregnancy can break the link between gestational diabetes and childhood obesity. That study showed, for the first time, that by treating women with gestational diabetes, the child's risk of becoming obese years later is significantly reduced.

Provided by GolinHarris International

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