New Study Finds that Pregnancy Complications Can Also Affect Child's Health Later in Life

National Harbor, Md. — Hypertensive disorders of pregnancy (HDP) and gestational diabetes (GDM) are two of the most common pregnancy complications and put pregnant people at increased risk of developing cardiovascular disease later in life.

Now, in a new study to be presented today at the Society for Maternal-Fetal Medicine’s (SMFM) annual meeting, The Pregnancy Meeting™, researchers will unveil findings that suggest these pregnancy complications may also result in worse cardiovascular health for the child.

In a secondary analysis of 3,317 maternal-child pairings from the prospective Hyperglycemia and Adverse Pregnancy Outcome Follow-up Study (HAPO FUS), researchers examined whether there was a connection between hypertensive disorders of pregnancy and gestational diabetes and a child’s cardiovascular health.

On the maternal side, 8 percent developed high blood pressure during pregnancy, 12 percent developed gestational diabetes, and 3 percent developed both high blood pressure and diabetes.

Researchers then examined the child’s cardiovascular health 10 to 14 years after delivery. Cardiovascular health was evaluated based on four metrics: body mass index, blood pressure, total cholesterol, and glucose level. Pediatric guidelines categorized each metric as ideal, intermediate, or poor. Researchers found that before the age of 12 (median age: 11.6), more than half of the children (55.5%) had at least one metric that was non-ideal, which puts them at greater risk of heart disease and stroke.

“These findings are important because traditionally, the thinking has been that a person’s risk of developing cardiovascular disease starts after birth — that everyone starts at the same point,” says the study’s lead author Kartik K. Venkatesh, MD, PhD, a maternal-fetal medicine subspecialist and assistant professor of obstetrics and gynecology and assistant professor of epidemiology, and Director of the Diabetes in Pregnancy Program at The Ohio State University Wexner Medical Center in Columbus. “These data suggest that’s not the case and that what happens in the womb can affect the child across their lifespan.”

The abstract was published in the January 2024 supplement of the American Journal of Obstetrics and Gynecology.
Additional news releases about select SMFM research being presented are posted on AAAS’s EurekAlert (subscription needed) approximately one week in advance of the embargo. Embargoes lift on the date and start time of the abstract presentation.

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About the Society for Maternal-Fetal Medicine
The Society for Maternal-Fetal Medicine (SMFM), founded in 1977, is the medical professional society for maternal-fetal medicine subspecialists, who are obstetricians with additional training in high-risk pregnancies. SMFM represents more than 6,000 members who care for high-risk pregnant people and provides education, promotes research, and engages in advocacy to advance optimal and equitable perinatal outcomes for all people who desire and experience pregnancy. For more information, visit SMFM.org and connect with the organization on Facebook, Twitter, and Instagram. For the latest 2024 Annual Meeting news and updates, follow the hashtag #SMFM24.