Anemia, Hypertension Contribute to Racial Disparities in Pregnancy and Birth

Anemia and hypertension during pregnancy increased risk for severe birth complications in non-white populations.

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A pair of studies published in Obstetrics and Gynecology highlights two common medical conditions that contribute to racial disparities in childbirth complications despite being treatable—hypertension and iron-deficiency anemia.

The Stanford Medicine studies show that hypertension and anemia are not only more common in pregnant people from non-white racial/ethnic groups but can increase rates of severe birth complications, such as preeclampsia and hemorrhage, according to a Stanford Medicine news release.

Researchers suggest that limited access to prenatal care among minority women may contribute to racial disparities in pregnancy and childbirth.

What's more, preexisting medical guidelines for treating pregnant women with anemia and hypertension may also increase the risk for complications. Indeed, guidelines for treating prenatal anemia differed by race until 2021, though they "hadn't been demonstrated to have biological plausibility," according to the lead author of the anemia study, Irogue Igbinosa, MD, an instructor in obstetrics and gynecology. Recent studies dispute these race-based recommendations.

"The more evidence we use to standardize our approach to prenatal care, the more we can address and dismantle the effects of implicit bias on health care delivery," Igbinosa said.

The anemia study involved about 4 million pregnancies and births in California from 2011 to 2020. Researchers found that anemia in pregnancy was common, affecting 12.6% of Latino and 21.6% of Black pregnant patients. Those with anemia were also more likely to experience severe birth complications compared with those without. Among Black and Latino mothers, anemia explained about 20% of the risk for severe birth complications, specifically hemorrhage requiring a blood transfusion.

“About one in five or one in six cases of severe birth complications are due to anemia,” Igbinosa said. “That really stood out.”

The prevalence of hypertension similarly varied by race and ethnicity, according to the study.

Analyzing records on nearly 8 million pregnancies in California, Michigan, Oregon, Pennsylvania and South Carolina from 2008 to 2020, researchers found that patients with chronic hypertension were much more likely to experience a number of pregnancy and birth complications.

Those with chronic hypertension were 10 times more likely to experience severe preeclampsia or eclampsia, almost six times more likely to have acute kidney failure and about five times more likely to have pulmonary edema.

“Clearly, just focusing on the bigger picture of birth complications and maternal mortality is not enough,” said hypertension study lead author Stephanie Leonard, PhD, MS, an assistant professor of obstetrics and gynecology. “We have to understand what drives the inequalities and tailor our interventions to them.”
