What Drives Racial and Ethnic Disparities in Prenatal Care for Expectant Mothers?

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Prenatal care — health care for pregnant mothers — is one of the most commonly used forms of preventive health care among women of reproductive age. Prenatal care represents an important opportunity to detect, monitor, and address risky health conditions and behaviors among expectant mothers that can impact birth outcomes.

Both delayed prenatal care (i.e., care initiated after the first trimester of pregnancy) and inadequate prenatal care are associated with poor infant health outcomes such as low birth weight. Although researchers continue to debate precise causal effects, studies suggest that prenatal care brings important benefits — including reductions in maternal smoking, lower rates of preventable pregnancy complications like high blood pressure, and better management of the mother's weight after giving birth. Furthermore, mothers who initiate care earlier are more likely to take their infants to well-baby visits after their babies are born.

As with other forms of healthcare, we see significant racial/ethnic disparities in access to and use of prenatal care. Although researchers have explored overall disparities in health outcomes rooted in differences in health insurance coverage, education, family income, and county-level poverty, more remains to be learned about how such factors affect various racial/ethnic inequalities. Such knowledge is critical for achieving national public health goals and for addressing gaps in health outcomes for pregnant women. My research explores this area and can point to solutions that can improve and equalize health care for various groups of women and their children.

Disparities in First Trimester Initiation and Adequacy of Prenatal Care

My research quantifies how various factors contribute to gaps in prenatal care among non-Hispanic white, non-Hispanic black, and Hispanic women. By combining county-level U.S. Census data with rich data on children born in 2001 from the Early Childhood Longitudinal Study, I am able to pinpoint factors that typically cannot be considered simultaneously. For example, I can explore the effects of both maternal access to transportation and the availability of physicians in various counties.

My results reveal significant disparities among black, Hispanic, and white mothers in terms of the start of prenatal care in the first trimester of pregnancy. Although approximately 89 percent of whites initiate care during the first trimester, only 75 percent of black mothers and 79 percent of Hispanic mothers do so. Mothers from these groups also experience disparities in the adequacy of prenatal care they receive. Approximately 79 percent of non-Hispanic whites experience at least adequate prenatal care, while only 68 percent of Hispanic mothers and 69 percent of black mothers receive adequate care. What explains these differences? Here are key findings from my research:
Socioeconomic characteristics like education, family income, and participation in the Special Supplemental Nutrition Program for Women, Infants, and Children explain far more of the racial/ethnic gaps in prenatal care than any other factors. These factors explain over half of black–white disparities and nearly half of Hispanic–white disparities in first trimester prenatal care initiation. Socioeconomic characteristics also explain far more of the racial/ethnic gaps in prenatal care adequacy than any other group of factors (although these factors account for considerably more of the black-white gap than the Hispanic-white gap).

Maternal health and characteristics of pregnancies (such as maternal age and number of previous pregnancies) explain 8.8 percent of black-white differences and 8.7 – 9.7 percent of Hispanic–white differences in the timing of the start of care in the first trimester. But differences in the adequacy of care are not related to maternal health or pregnancy characteristics.

Types of insurance coverage – whether women are covered by Medicaid, private insurance, or have no coverage — explain similar small percentages of differences in the timing of first trimester care, but again do not account for gaps in the adequacy of care.

The location of prenatal care facilities – in physicians’ offices and public health clinics — explained 4.7-6 percent of black–white gaps in timing of the start of care and and 2.9-4.9 percent of Hispanic–white disparities. Location of care explained about 8.3 percent of black–white gaps in the adequacy of care, but did not explain Hispanic-white gaps.

Maternal behaviors like smoking and state of residence and count-level conditions did not significantly contribute to racial and ethnic disparities in the initiation of prenatal care. But the availability of local gynecologists and state of residence did help to narrow black–white gaps in the adequacy of prenatal care, although these factors did not influence gaps in the adequacy of care between Hispanics and whites.

Addressing Socioeconomic Factors to Improve Prenatal Health

My research suggests that large and persistent socioeconomic disparities are primary contributors to racial/ethnic gaps in the timing and adequacy of prenatal care. This finding is not surprising — pregnant women with lower incomes and levels of formal education often do not have the resources necessary to obtain care early and often. However, participation in the Special Supplemental Nutrition Program for Women, Infants, and Children made a difference for pregnant women, suggesting that this public program can help meet the financial needs that remain an important barrier to timely and adequate prenatal care. My findings suggest that policymakers should endeavor to help disadvantaged populations gain expanded access to healthcare. Medicaid expansions through the 2010 Affordable Care Act provide one promising intervention. Although such expansions target childless poor and near-poor adults, women who receive coverage prior to pregnancy can end up enrolling earlier in prenatal care; and they can obtain continuing help with the management of chronic health problems, potentially improving outcomes when their babies are born. Ultimately, as my research shows, reducing economic inequality may help to close racial and ethnic disparities in prenatal care.