Most US infant death rates not likely to fall enough to meet goal

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Infant mortality rates for black women are unlikely to decline sharply enough to achieve the federal government's targeted rate in 2020, according to a new study by alumnus Shondra Loggins, right, and Flavia Cristina Drumond Andrade, a professor of kinesiology and community health.

The infant mortality rate set forth as a national goal in the federal government's Healthy People 2020 initiative is likely to be attained by only one demographic group – highly educated white mothers, the authors of a new study say.

Healthy People is an ongoing campaign to improve the health of all Americans by 2020 and an initiative of the Department of Health and

Human Services. Healthy People's objectives include decreasing the national mortality rate during the first year of life from the current 6.7 to fewer than 6.0 deaths per 1,000 live births.

However, only the demographic group comprising children of white women with a high school education or greater is likely to achieve the targeted rate, predict researchers Shondra Loggins and Flavia Cristina Drumond Andrade at the University of Illinois.

Loggins is a recent graduate from the doctoral program and Andrade is a professor, both in the department of kinesiology and community health.

Currently at about 4.1 deaths per 1,000 live births, the IMR for children of white women with high school educations or greater is expected to drop to 3.9 by 2020, according to the study.

By contrast, the researchers indicate that the rate for black women with equivalent education will drop from the current rate of 9.4 to 8.3 deaths per live births – an improvement, but still more than double the rate for their white counterparts.

Likewise, by 2020, the overall IMR for black women is expected to be twice the rate for whites – 11.8 and 5.1 infant deaths per 1,000 births, respectively.

"So looking to the future, what we would expect diverges with the goals of Healthy People 2020," Andrade said. "What we can see is that white women, especially the highly educated women, will actually reach the goal. Black women will not."

Using data from the linked birth and infant death files at the U.S. Centers for Disease Control and Prevention, Loggins and Andrade examined trends and racial disparities in IMRs across all states for the

period 1995-2009. The researchers then calculated projected rates through 2020 and compared their projected rates to the benchmarks in the Healthy People initiative.

From 1995-2009, IMRs among white women in the U.S. dropped by nearly 12 percent, to 5.5 deaths per 1,000 births.

While the IMR for blacks dropped nearly 15 percent during that period, to 12 deaths per 1,000 live births, it remained more than double the rate for whites.

"In exploring possible reasons for the racial disparities, we focused on three established risk factors – marital status, maternal education and prenatal care – but found that these factors only partially explained the disparities," Loggins said.

From 1995-2009, the IMRs plummeted more than 33 percent for blacks and 40 percent for whites who had eight years' education or less. Still, the IMR for blacks was significantly higher than the rate for whites, at 11 deaths per 1,000 live births versus seven infant deaths for whites.

Significant decreases also occurred among college-educated blacks and whites, for which the rates fell by more than 28 percent and 21 percent, respectively, to about eight deaths per 1,000 live births for blacks and to about three deaths for whites.

In exploring possible links to marital status, the researchers found that rates for married and unmarried women of both races dropped dramatically as well, yet the IMRs for blacks persistently remained higher than those for whites.

Loggins explored other data sets in her dissertation, from which the current study was drawn, and found that "the racial disparity persisted,

even if the mother's boyfriend provided financial or emotional support during the delivery and afterward, if family members were around, if the mother was working or not and the number of hours she worked during the pregnancy, and if she had smoked or used drugs."

Loggins and Andrade predict that IMRs in the U.S. will continue on a downward trajectory through 2020, and they predict that the national rate will drop to 5.4 deaths per 1,000 live births, well below the Healthy People 2020 target.

Resolving the racial disparities in IMRs, though, will require a multifaceted strategy that addresses various risk factors at the individual and societal levels, the researchers said.

Providing access to prenatal care will be vital, since IMRs are almost four times higher among women who do not receive any prenatal care.

"Making health care, including prenatal care, available to uninsured women under the Affordable Care Act and through the expansion of Medicaid is a step in the right direction," said Loggins, who is a research data analyst for the Counseling Center on campus.

Making contraceptives available and affordable also could reduce the numbers of unplanned pregnancies, and, ultimately some infant deaths, Andrade said.

"Also, we can continue investing in education," Andrade said. "If we curb the dropout rates and make sure that minorities have access to higher education, we can close some of the gaps. And it's clear, in other studies, that smoking is a very important risk factor, so public service campaigns aimed at limiting women's use of cigarettes are crucial."

More information: Loggins S, Andrade FC. "Despite an overall

decline in U.S. infant mortality rates, the Black/White disparity persists: recent trends and future projections." *J Community Health*. 2014 Feb;39(1):118-23.

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