

Upward Mobility Benefits White Women's Infants, But Not Black Women's

Children born to white women who grew up in poverty but whose economic situation improved by adulthood have reduced odds of being low-birth-weight; in an analysis of data from the National Longitudinal Survey of Youth (NLSY), this association was unaffected by the inclusion of maternal background characteristics and health-related behaviors during pregnancy.¹ The same relationship does not hold for infants born to blacks, however. Rather, their likelihood of being low-birth-weight is associated with maternal marital status, household composition at the time of the birth and weight gain during pregnancy.

The NLSY followed a sample of young people from 1979 through 2002. To study the effect of women's upward socioeconomic mobility on their infants' birth weight, the researchers used data from respondents who had been 14–22 years old in 1979, had lived at age 14 in a poor household (i.e., one in which family income was less than 200% of

the federal poverty line) and had given birth at least once by 2002. Because they were interested in racial differences in this effect, they conducted separate analyses for whites and blacks; the analytic sample consisted of 574 births to white women and 1,270 births to blacks.

Among chronically poor women, both whites and blacks had family incomes of about \$19,000–20,000 in adulthood. Some 37% of births to whites in this category were to never-married women, and 47% were to currently married women; among blacks, the proportions were 74% and 15%, respectively. Sixty-two percent of births to chronically poor white women occurred in households that included the woman's spouse or partner, 23% in households that included one of the baby's grandmothers and 11% in households that included one of the baby's grandfathers. Twenty-two percent of births to comparable blacks were to women who lived with their spouse or partner, 47% to women who lived with their baby's grandmother and 16% to women who lived with their baby's grandfather.

Upwardly mobile white women (those whose family income in adulthood was at least 200% of the federal poverty level) had a median income of \$50,399, and their black counterparts had a median income of \$43,952. Among whites, the vast majority of births (93%) were to married women, and 4% were to never-married women; 65% of infants born to blacks had married mothers, and 30% were born to never-married women. Ninety-five percent of births to whites and 70% of births to blacks were to women who lived with their spouse or partner, 6% and 18% were to women who lived with the baby's grandmother, and 2% and 6% were to women who lived with the infant's grandfather.

Nearly half of babies born to chronically poor white women had mothers who had smoked while pregnant, and one-third had mothers who had consumed alcohol; for infants born to black women, the proportions were three in 10 and one-quarter, respectively. These behaviors were generally less common among upwardly mobile mothers. Regardless of mother's race, three-quarters of births to chronically poor women and nine in 10 of those to upwardly mobile women had been preceded by an adequate level of prenatal care (i.e., care had begun in the first trimester). The proportion

of births to women who had gained an inadequate amount of weight during pregnancy (as determined by a national standard based on prepregnancy body mass index) was four in 10 for black women who had not moved out of poverty and one in four for all other groups. Among infants born to chronically poor women, 12% of whites and 15% of blacks were low-birth-weight (less than 2,500 g at birth); among those born to upwardly mobile women, 5% and 10% were in this category.

In a logistic regression analysis that controlled for maternal background characteristics, the odds that infants born to white women were low-birth-weight declined by 52% for every one-unit increase in the natural logarithm of adult family income. The result was essentially unchanged in models that took into account the household composition at the time of the birth (i.e., the presence of the mother's spouse or partner, and of one of the infant's grandparents), the mother's health-related behaviors during pregnancy and the adequacy of her weight gain during pregnancy. When all of these factors were controlled for, the odds of low birth weight declined by 48% as the woman's family income increased and were nearly tripled if the woman had smoked while pregnant.

For infants born to blacks, by contrast, the likelihood of low birth weight was not significantly associated with the woman's adult family income. However, in each multivariate model, it was negatively associated with the woman's being married (odds ratio in the complete model, 0.4), living with a spouse or partner (0.5) and living with a grandmother of the infant (0.5). The odds of low birth weight were sharply elevated if the mother had gained an inadequate amount of weight during pregnancy (3.7).

"This study," the researchers remark, "provides preliminary evidence that unlike white women, black women are unable to translate upward socioeconomic mobility into beneficial birth outcomes." However, they add, "it does not explain why this is so." Although limitations of the data prevented them from exploring the reasons, they conjecture about a number of possibilities—factors that reduce black women's material resources, such as housing segregation; stressful psychosocial experiences, such as responses to discrimination, that may have adverse health effects and reduce the bene-

fits generally associated with upward mobility; and early health deterioration among black women, which may increase the risk of poor outcomes among those who postpone childbearing.—D. Hollander

REFERENCE

1. Colen CG et al., Maternal upward socioeconomic mobility and black-white disparities in infant birth-weight, *American Journal of Public Health*, 2006, 96(11):2032–2039.