Relationships and Low Birth Weight

There was a statistically significant difference according to race and ethnicity in the percentage distributions of women by relationship type and relationship duration (Table 3). For example, higher percentages of non-Hispanic white women than non-Hispanic black or Hispanic women were married and in relationships in duration of from five to 10 years at the time of conception (Table 3).

We calculated the unadjusted odds ratios for low birth weight associated with selected characteristics for a woman’s most recent singleton live birth for all women and separately for non-Hispanic white women, non-Hispanic black women and Hispanic women. Here, we present the results pertaining to the relationship variables. Among all women, low birth weight was more likely among infants both of women who were cohabiting and of women who had some other type of nonmarital relationship with the baby’s father at the time of conception than among married women (odds ratios, 1.6). Within racial and ethnic groups, the unadjusted odds ratios for low birth weight according to relationship type were not statistically significant. These results differ from those presented in Table 1, which may be because the small sample size for women whose infants had low birth weight was not adequate to detect a significant difference in percentages at the 5% alpha level.

The unadjusted odds ratios for low birth weight among all women according to relationship duration were not statistically significant. However, among non-Hispanic white women, low birth weight was more than four times as likely among those with relationships of 12 months or less at conception than among those in relationships of longer than 10 years. There was no difference in the unadjusted odds ratios for low birth weight among non-Hispanic black or Hispanic women according to relationship duration.

As shown in Table 4 (page 286), after adjusting for selected characteristics, we found that the effects of relationship type and relationship duration were statistically significant for non-Hispanic white women and Hispanic women. Among non-Hispanic white women, low birth weight was less likely among those who were married at the time of conception, low birth weight was less likely among among Hispanic women who were in nonmarital, noncohabiting relationships. In contrast, low birth weight was less likely among Hispanic women in relationships of one year or less at the time of conception than among those in relationships of more than 10 years.

Discussion

Not all nonmarital relationships are associated with an elevated risk of low birth weight. In unadjusted and adjusted analyses of racial and ethnic groups, low birth weight was no more likely among women who were cohabiting at the time of conception than it was among women who were married at the time of conception. In addition, among non-Hispanic black women, low birth weight was no more likely among women in nonmarital, noncohabiting relationships at conception than among married women. Furthermore, although the unadjusted odds ratios for relationship type were statistically significant when data for all women were analyzed, the adjusted odds ratios were not.

Our findings provide further evidence that being unmarried, per se, is not detrimental to infant health. Rather, our findings and related research suggest that other factors account for the higher rates of low birth weight among unmarried women compared with married women.

An advantage of using the 1995 NSFG instead of vital statistics data is that we were able to examine the association between relationship characteristics and low birth weight, having controlled for several other variables. From our findings, however, we do not know the extent to which individual variables account for differences in the unadjusted and adjusted results. Future research could examine the influence of specific factors, such as maternal smoking and location of most prenatal care visits.

Hispanic women in noncohabiting relationships were at increased risk of low birth weight. A possible explanation is that Hispanic women in nonmarital, noncohabiting relationships who become pregnant may receive less social or economic support from family and friends or experience more stress associated with not living with the baby’s father than do non-Hispanic women in similar types of relationships. Research that examines the broader social context in which Hispanic women conceive and nurture pregnancies may identify differences between women in cohabiting and other nonmarital relationships that we did not explore here.

Surprisingly, compared with the infants of non-Hispanic white women who were married at the time of conception, infants of non-Hispanic white women who were in nonmarital, noncohabiting relationships were less likely to have low birth weight. It may be that this group of unmarried women includes a greater proportion of professional women who have higher incomes and better resources than other unmarried women. These women may be more likely to have other supportive relationships. Research that examines these factors may help explain our findings.

Our findings with respect to relationship duration for both non-Hispanic white and Hispanic women also are puzzling. These results may reflect the interaction among age, birth order and relationship variables, but because sample sizes were small, we did not examine interactions among variables. The relationship duration results for Hispanic women also may be affected by the small number of cases, especially when all variables are cross-classified.

In general, a limitation of the NSFG is its relatively small sample size for examining events such as low birth weight. Although p-values less than 0.05 allow us to conclude that there is a relationship between variables, the wide confidence bands for some odds ratios indicate that precision could be im-