Analysis

We conducted bivariate logistic regression analyses to determine the likelihood of pregnancy associated with young women’s family socioeconomic status, mothers’ parenting characteristics and sibling relationship qualities. Then, we conducted multivariate logistic regression analyses to determine the likelihood of pregnancy associated with a family history of teenage births. Because we were interested in the risk of pregnancy given particular combinations of family history variables, we computed three separate models specifying three unique reference categories: having neither a mother nor a sister who had had a teenage birth; having both a mother and a sister who had had a teenage birth; and having only a mother who had had a teenage birth. All equations controlled for youths’ age and race and ethnicity, because age was strongly correlated with pregnancy, and race and ethnicity were significantly associated with a family history of teenage births.

To assess the mediating effects of socioeconomic characteristics and mothers’ parenting characteristics on the association between a family history of teenage births and a young woman’s early pregnancy risk, we constructed stepwise regression models. First, we controlled for youths’ age, and race and ethnicity. Next, we added mothers’ educational level and family income. Finally, we added the four mothers’ parenting scores. If the association between a family history of teenage births and the likelihood of pregnancy diminishes in the presence of these mediators, then we can conclude that these factors account for or contribute to the association.

We conducted additional analyses to examine whether particular characteristics of the relationship with an older sister are associated with youths’ likelihood of pregnancy. These analyses included the four sibling relationship measures, the measure of whether the older sister was a teenage parent and a term for their interaction. The interaction term tests whether the combined association of sister’s childbearing status and frequent sibling companionship, for example, with youths’ pregnancy status is greater than the association between pregnancy and each predictor alone. These analyses controlled for youths’ age, race and ethnicity, and whether the mother had been a teenage parent.

RESULTS

Descriptive and Bivariate Analyses

Fifty-four percent of the older sisters of the 127 young women who were the focus of this study reported having their first birth at age 18 or younger; among these sisters, the average age at childbirth was 16 (standard deviation, 1.4; range, 13.6–18.9 years). Similarly, 54% of young women’s mothers reported having their first child at age 18 or younger; among these mothers, the average age at first birth was 17 (standard deviation, 1.1; range, 14.4–18.7 years). Among the young women, 26% had neither a mother nor a sister who had had a teenage birth, 21% had only a sister who had had a teenage birth, 21% had only a mother who had had a teenage birth, and 32% had both (Table 1).

In bivariate analyses by race and ethnicity, a significantly greater proportion of black youth than of Latinas had a sister who had had a teenage birth (68% vs. 47%; p<.05—not shown), race and ethnicity was not associated with having a mother who had had a teenage birth (65% for blacks and 50% for Latinas). A greater proportion of black youth than of Latinas had both a sister and a mother who had had teenage births (51% vs. 26%; p<.01).

Of the young women who completed the study at ages 18–20, 36% had experienced a pregnancy before age 19. Among these, the mean age at pregnancy was 16 years (standard deviation, 1.6; range 13.0–18.5 years). Thirty-three percent of Latinas and 44% of blacks reported a pregnancy; this difference was not significant. Eighteen percent of young women who had no family history of teenage births experienced a teenage pregnancy; the proportions of young women who experienced teenage pregnancy among those who had either a mother or a sister who had had a teenage birth or both are 23%, 44% and 53%, respectively. The difference in teenage pregnancy by family history of teenage births was statistically significant (p<.01).

In additional bivariate analysis (Table 2), all four maternal parenting measures—being single, lax parenting, approval of teenage sex/parenting, and low value of education—were significantly associated with young women’s increased risk of teenage pregnancy (odds ratios, 1.5–3.8). Thus, for each one point increase in lax parenting, for example, a young woman’s odds of early pregnancy increase 1.8 times. Two of the four sibling relationship measures—companionship and rivalry—were