Multipartnered Fertility Among Young Women With a Nonmarital First Birth: Prevalence and Risk Factors

CONTEXT: *Although early nonmarital fertility has been well studied, less attention has been paid to the subsequent fertility of young unwed mothers. In particular, the frequency with which these young women have subsequent births with a new partner (multipartnered fertility) and the risk factors associated with doing so are unknown.*

METHODS: *The proportion of young women who had a first birth and the proportion who subsequently had a child with a new partner were determined among a sample of participants in Waves 1 (1995) and 3 (2001–2002) of the National Longitudinal Study of Adolescent Health. Multivariate analyses identified characteristics associated with multipartnered fertility.*

RESULTS: *By Wave 3, when these young women were 19–25 years old, 29% had had a first birth, and 3% had had births with multiple partners. Among women with a nonmarital first birth, 14% subsequently had a birth with another partner, and 41% with two or more children had had multiple partners. The prevalence of multipartnered fertility differed sharply by race and ethnicity. Most new-partner births occurred outside of marriage, especially among black women. Respondents who had no contact with their partner after informing him of their first pregnancy or who had not wanted to have a child with him had an increased likelihood of multipartnered fertility.*

CONCLUSIONS: *The context in which first births occur sets the stage for subsequent childbearing. Programs that help women avoid having births in unfavorable circumstances, such as in early and unstable relationships, may reduce the prevalence of multipartnered fertility.*

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The rising proportion of births that occur outside of marriage among all age-groups in the United States has led many researchers and policymakers to shift their focus from teenage childbearing to the factors that have contributed to the delays and declines in marriage in this country and other Western nations.[1] Nonetheless, early nonmarital childbearing remains an important issue, especially in the United States, because young first-time mothers are more likely to have their births outside of marriage than within marriage, and because the conditions under which first births occur set the stage for subsequent fertility and union formation.[2] Women who have a nonmarital first birth are increasingly likely to have all subsequent births outside of marriage, although often in cohabiting unions.[3,4] Because nonmarital relationships, including cohabiting unions, are often quite fragile, women who have a nonmarital first birth are at risk for having their subsequent children with a new partner, a phenomenon known as multipartnered fertility.[5] The risk might be especially great for young mothers, as marital stability (and perhaps all union stability) is inversely related to age.[6,7]

Multipartnered fertility is a relatively new field of inquiry, in part because of data limitations. To study multipartnered fertility, researchers must obtain relationship information for all births, but fertility studies do not typically gather such information. Instead, fertility data are usually matched to information on coresidential (marital or cohabiting) unions, which makes it difficult to identify partners for births that occur outside of such relationships. Still, the limited research on multipartnered fertility paints a somber picture.

In a study of individuals who received welfare benefits in Wisconsin in the 1990s, Meyer and colleagues found that in about three-fourths of cases, the mother, the father or both had had children with other partners.[8] In an analysis of data from the Fragile Families and Child Wellbeing Study, which is following a representative sample of children born to unmarried parents in major cities, Mincy found that most mothers having a second or higher order birth had had at least one child with a man other than the father of their newborn and that the fathers of newborns were equally likely to have had children with other women.[9] Multipartnered fertility was relatively rare among teenage mothers (12%) but fairly common among black mothers (45%). Carlson and Furstenberg, also using Fragile Families data, found that multipartnered fertility was associated with being unmarried, with young maternal age at first birth and with the father's having a history of incarceration.[10] A few other studies that used Fragile Families data have touched on multipartnered fertility, linking it to reduced odds of cohabitation and

marriage after a nonmarital birth and reduced odds of father-child contact.[7,11–13] Findings from the 2002 National Survey of Family Growth show that for men, the prevalence of multipartnered fertility is particularly high among low-income and minority individuals: More than one-third of poor black males aged 35–44 reported having had children with more than one partner, and the prevalence seems to be rising among younger cohorts.[14] Together, these studies suggest that multipartnered fertility is fairly common, especially among disadvantaged subpopulations, and that it likely exacerbates the challenges that disadvantaged individuals and families already face, although no studies other than the Fragile Families work have explicitly examined multipartnered fertility among disadvantaged populations.

The research reported in this article combines work on early nonmarital childbearing and multipartnered fertility by examining the transition to a new-partner birth among young unwed mothers. The extensive literature on early nonmarital childbearing has shown that a number of demographic characteristics are risk factors, including living in a nontraditional family structure, being black or Hispanic, having low socioeconomic status and having a parent who receives public assistance.[3,15–17] Psychosocial and academic attributes that constrain nonmarital fertility among adolescents include high levels of school achievement, educational and occupational aspirations, self-esteem and religiosity.[18–20] Many teenagers who have a first birth have a second birth soon afterward; if the first birth was nonmarital, the odds that the second birth will be nonmarital are increased. At least two characteristics associated with nonmarital first births—race and socioeconomic status—are also predictors of subsequent nonmarital births, but gaps in knowledge remain because so few studies have examined higher parity births among unmarried mothers.[21–23] Research has generally not yet examined how nonsocioeconomic characteristics are related to subsequent births with a new partner, although it seems likely that disadvantaged women and those with poorer psychosocial well-being and lower educational and occupational aspirations have an elevated risk of experiencing multipartnered fertility.

In addition to socioeconomic and psychosocial characteristics, the conditions in which young women enter parenthood probably influence the path that their future fertility takes.[3] For example, early fertility not only increases a woman's risk of higher parity births but also may increase the odds that any future births will be with a different partner, because relationships between young unmarried parents are fragile. Whether the birth was wanted at the time and whether the mother was using contraceptives are also potentially important; although at-risk young women may not actively wish to become pregnant, they often do not use contraceptives effectively or at all.[24]

In addition, partner characteristics may influence the risk of multipartnered fertility. Relationships in which the partners are of different races or differ substantially in age may be more likely than other relationships to end, thus increasing the likelihood that subsequent births will be with a new partner.[25,26] Partner socioeconomic status is likely to be a factor as well, because men's socioeconomic status tends to be positively related to union stability.[27,28]

The strength of the partners' relationship may be the most important determinant of multipartnered fertility. Because coresidential relationships are more likely than noncoresidential relationships to endure, women who live with their child's father may have a lower likelihood of experiencing multipartnered fertility than women who do not live with their child's father.[5] Women in weaker relationships—such as those who had no contact with the father of their child after informing him of the pregnancy and those who had not wanted a child with their partner—are unlikely to continue in a relationship with the father and therefore face a greater likelihood that future births will occur with a new partner.

Thus, we hypothesize that maternal, partner and relationship characteristics at the time of first birth are strongly associated with the conditions of future births. Specifically, we predict that women in strong unions and those who are similar to their partner in age and race are less likely to have future births with a new partner compared with women in weak relationships and those who differ from their partner in age and race, and that women who give birth at an early age or who have an unplanned birth are more likely than women who are older or who have a planned birth to experience multipartnered fertility.

METHODS

Data

The data in this analysis are from the National Longitudinal Study of Adolescent Health (Add Health), a nationally representative study of more than 20,000 U.S. adolescents in grades 7–12 who completed extensive interviews in 1995 (Wave 1). Follow-up interviews were conducted in 1996 (Wave 2) and in 2001–2002 (Wave 3). Add Health used a multistage, stratified, school-based, cluster sampling design and is generally considered one of the best sources of information on the health of adolescents and young adults. However, because the study sample was based on school rosters, adolescents who had dropped out or were otherwise not attending school at Wave 1 were not included; thus, subgroups with high dropout rates, such as older students and Hispanics, may be underrepresented.[29]

Our analysis takes advantage of an almost unique feature of Add Health: Fertility information was collected in reference to specific relationships. That is, for each pregnancy, partner information is available. As a result, we can determine which young unwed first-time mothers had a subsequent birth with a new partner and how the likelihood of having done so was related to the conditions in which they entered parenthood.

In Wave 3 of Add Health, approximately 15,000 of the original respondents, then aged 18–26, were reinterviewed. Because of very small sample sizes and concerns about representativeness at the extremes of this age range, we restrict our analysis to the 6,442 women who were aged 19–25 at Wave 3 and who had ever had sexual intercourse. Moreover, we focus primarily on the 1,368 women who had had a nonmarital first birth and who did not give up their firstborn child for adoption.

We focus on women for two reasons. First, males are more likely than females to misreport or fail to report information about pregnancies, births and relationships.[30–32] Second, because the sample is fairly young and women tend to have partners who are 2–3 years their senior, rates of fertility are higher among young women than among young men.[33]

Measures

Our analyses include a number of characteristics measured at Wave 1 that are related to nonmarital and early childbearing.[34] Among these are the following social, demographic and family background characteristics: race, nativity, family structure, whether the respondent's parents had ever received public assistance, parental income* and the highest level of education attained by either of the respondent's parents. These characteristics are indexed to the first interview and as such were not measured at the same age for every respondent. Age is included in our analyses as a time-varying variable.

In addition, we include several psychosocial variables measured at Wave 1. We expected that religiosity, defined as the frequency of religious service attendance, and self-evaluated likelihood of marriage by age 25, measured on a scale of 1 (almost no chance) to 5 (almost certain), would be inversely related to multipartnered fertility. We also include several subjective measures that reflect the respondent's psychosocial well-being, with the expectation that having a stronger parental relationship and higher self-esteem would be negatively related to multipartnered fertility and that depression would be positively related. The parental relationship scale consists of eight items measured on a scale of 1 (strongly disagree) to 5 (strongly agree) and includes items such as "Most of the time, your mother/father is warm and loving to you" and "You are satisfied with the way you and your mother/father communicate with each other" (alpha=0.86). The self-esteem scale consists of eight items measured on a scale of 1 (strongly disagree) to 5 (strongly agree) and includes items such as "You have a lot of good qualities" and "You feel socially accepted" (alpha=0.85). The depression scale consists of 18 items measured on a scale of 0 (never or rarely) to 3 (most or all of the time) in response to the question "How often was each of the following things true during the past week?" It includes items such as "You thought your life had been a failure," "You felt lonely" and "You felt depressed" (alpha=0.86).

Academic characteristics included in the analyses, all measured at Wave 1, are the Peabody Picture Vocabulary Test score (a measure of verbal ability), grade point average (which ranged from 1.0–4.0 and was calculated from self-reported grades in science, math, English and history), whether the respondent had ever repeated a grade and whether the respondent had ever been suspended or expelled. In addition, we include a school trouble scale that consists of four items measured on a scale of 0 (never) to 4 (every day) in response to questions about how often the respondent had trouble getting along with teachers, paying attention in school, completing homework assignments and getting along with other students (alpha=0.69). We expected that better academic performance would discourage multipartnered fertility. We also include the respondent's self-evaluated likelihood of attending college, measured on a scale of 1 (low) to 5 (high), because career aspirations may conflict with early high fertility.

A number of sexual and fertility characteristics may be associated with the likelihood that an individual will have births with more than one partner; we expected that women whose sexual debut or first birth occurred at an early age would have an increased risk of multipartnered fertility. Early sexual experience was defined as having sex at age 15 or younger. Age at first birth and years since first birth (categorized as less than one, one, two, three, four, or five or more years, because the risk is nonlinear) reflect the amount of time in which the respondent has had the opportunity to have a second or higher order birth. We expected that women in weaker relationships would have an elevated likelihood of multipartnered fertility. To this end, we include several variables that measure the time of the strength of the respondent's relationship with the man with whom she had the nonmarital first birth: whether the respondent and her partner were cohabiting at the time of the first birth, whether the respondent had wanted the partner to be the father of her child and whether the respondent had any contact with the father between the time she informed him of the pregnancy and the birth.

Partner characteristics included in our analysis are education level, whether the partner was older than the respondent by at least four years and whether the partner was of a different race. We anticipated that having a better-educated partner would be associated with reduced odds of having a birth with a new partner (although not knowing the partner's education level was expected to be associated with increased odds, as it suggests that the relationship was relatively casual), and that racial differences or large age differences between the respondent and her partner would be associated with elevated odds

*Information about parental income was missing for about one-fourth of the sample. Missing values were imputed using information on respondents' education, parents' occupation, family structure, school, community and median block household income.

TABLE 1. Percentage of women aged 19–25, by selected fertility-related characteristics, according to race and ethnicity, Wave 3 of the National Longitudinal Study of Adolescent Health, 2001–2002

Measure	All (N=6,442)	White (N=3,541)	Black (N=1,504)	Hispanic (N=1,007)	Asian (N=390)
Had a first birth*	**29.3**	**26.0**	**40.7**	**35.4**	**16.2**
Noncoresidential	12.2	8.5	27.5	14.1	4.2
Cohabiting	9.1	8.3	10.6	13.0	6.0
Married	7.9	9.3	2.6	8.4	6.1
Had births with ≥2 partners	**3.2**	**2.7**	**6.6**	**2.3**	**0.1**
Had a birth with a new partner‡	**13.5**	**13.2**	**16.8**	**8.6**	**5.0**
Noncoresidential*	4.8	3.3	9.0	1.8	4.3
Cohabiting*	5.7	6.4	5.9	3.2	0.0
Married*	3.0	3.5	1.9	3.6	0.7

*p<.05 for differences across race and ethnicity. ‡Among women with a nonmarital first birth. *Notes:* All proportions are weighted to reflect the characteristics of the baseline sample; sample sizes are unweighted. Marital and cohabitation status refer to the time of the birth. Percentages may not add up to totals because of rounding.

of multipartnered fertility, because such differences may reduce the stability of the relationship.

We also include a measure of birth wantedness (the respondent was asked, "Did you want to have a child then?") and assess whether the respondent was using contraceptives when she became pregnant. We hypothesize that women who carry to term a pregnancy that they did not want but were not trying to avoid may be less likely to practice contraception in future relationships than women who were actively trying to avoid becoming pregnant when they conceived.

Finally, we include a measure of the respondent's relationship status at Wave 3, classified as noncoresidential, cohabiting or married. These categories are assigned if applicable at any point during the past year and are mutually exclusive. Individuals who lived with a partner earlier in the year but subsequently lived alone are classified as cohabiting; respondents who cohabited and married in the same year are coded as married.

Analyses

In descriptive analyses, we produce estimates of the proportion of women who had a first birth, the proportion who had births with two or more partners and the proportion of those with a first nonmarital birth who had a subsequent birth with a new partner; estimates are given for all women as well as by race and ethnicity.* We examine, among women with a nonmarital first birth and at least one subsequent birth, the number of men with whom respondents had a child. We also examine key characteristics of first births and whether these characteristics are related, in a bivariate setting, to young women's transitions from a nonmarital first birth to a birth with a new partner. Finally, in a descriptive analysis, we compare the characteristics of partners who fathered all of a woman's children with the characteristics of the most recent partner of women who had births with multiple men. In all of these analyses, we use sampling weights that adjust for the sampling design and for the differential attrition that had occurred by Wave 3, and we correct all variance estimates for the clustered sampling design.

In multivariate analyses, we examine the characteristics associated with the transition from a nonmarital first birth to a birth with a new partner. The analytic sample is converted into woman-years; women enter the sample the year after a nonmarital first birth (assuming they do not have two births in one year) and leave the year of the Wave 3 interview or when they experience a birth with a new partner. We then use multinomial logistic regression of woman-years to estimate by relationship status the likelihood that a woman will have a subsequent birth with a new partner. The dependent variable includes four categories: no birth (the reference category), birth with a new partner outside of a coresidential union, birth with a cohabiting new partner and birth with a marital new partner. Because the relationship context of higher order births was missing or unclear for 114 cases, the sample size for this analysis is 1,254. Multivariate models are unweighted but include the appropriate covariates to adjust for the sampling design.

*We were unable to produce life-table estimates of the probability that an individual would have children with multiple partners. Life-table estimates require age- and duration-specific rates, and our cell sizes became very small, especially at the extremes of our sample's age range, when the sample was disaggregated by age at nonmarital first birth and by duration since first birth. The issue of cell size became even more problematic when the sample was disaggregated by socioeconomic and demographic factors.

RESULTS

Prevalence of Multipartnered Fertility

Twenty-nine percent of women in the sample had a birth, the majority of them (21% overall) outside of marriage (Table 1). More than half of nonmarital births were to women in noncoresidential relationships. The overall prevalence of multipartnered fertility was 3%, making it a relatively rare event in this general sample of young adult women.

Entry into parenthood and multipartnered fertility varied significantly by race and ethnicity. Forty-one percent of sexually active young black women and 35% of sexually active Hispanic women had had at least one

TABLE 2. Percentage distribution of women aged 19–25 with a nonmarital first birth and at least one additional birth, by number of partners, according to total number of births

No. of partners	Total no. of births			
	All (N=436)	2 (N=332)	3 (N=92)	4 (N=12)
1	59.1	60.9	53.8	47.6
2	38.0	39.1	34.4	36.4
3	2.9	0.0	11.7	16.0
Total	100.0	100.0	100.0	100.0

Notes: All proportions are weighted to reflect the characteristics of the baseline sample; sample sizes are unweighted. Percentages may not total 100 because of rounding.

child, compared with 26% of white women. Among black women, the majority of nonmarital births occurred in noncoresidential relationships, but among Hispanic and white respondents, nonmarital births were split nearly evenly between cohabiting women and those in noncoresidential relationships. The prevalence of multipartnered fertility was similar in white and Hispanic women (3% and 2%, respectively) but was much higher among black women (7%).

Although the prevalence of multipartnered fertility among all young women surveyed in Add Health was low, especially when compared with estimates from surveys that focused on mothers (such as Fragile Families),[10] this estimate is misleading, because the vast majority of women in the sample had not yet begun childbearing or had had only one birth. Among mothers aged 19–25 who had a nonmarital first birth, 14% subsequently had a child with a new partner. Such births were least prevalent among Asian (5%) and Hispanic (9%) mothers; prevalence was highest among white (13%) and black (17%) mothers. The high rate among black mothers is consistent with the high level of overall fertility in this group.

Births with a new partner occurred largely outside of marriage: Only 3% of women who were unmarried at their first birth had a marital second birth with a new partner by Wave 3, accounting for fewer than a fourth of all such births. However, many new-partner births occurred within the context of a coresidential relationship: About 6% of women who were unmarried at their first birth had a second birth with a new partner with whom they were cohabiting, representing about 40% of young women with a new-partner birth. Almost half of new-partner births among white mothers and two-fifths of those among Hispanic mothers occurred in cohabiting unions. Among unmarried Asian mothers, births with a new partner occurred almost exclusively in noncoresidential relationships, as did more than half of black mothers' new-partner births. Although levels of marital births with a new partner were similar among Hispanic and white mothers, these births represented a much smaller proportion of new-partner births for white mothers than for Hispanic mothers.

A more pointed way of examining births with a new partner is to look at the number of partners that women of different parities had. Among young women in Add Health who had a nonmarital first birth and at least one subsequent birth, 41% had children with two or more partners, and the proportion increases with higher parity (Table 2). Among women with three children (a very select group, given their young age), 46% had children with at least two partners, and about 12% had children with three partners; among those with four children, 52% had children with at least two partners, and 16% had children with three partners. There is also some indication of racial and ethnic differences (not shown); among mothers with two or more births, black women were more likely (50%) than white (38%) or Hispanic (27%) women to have had multiple partners.

TABLE 3. Percentage distribution of women who had nonmarital first births, by selected characteristics; and percentage of those with each characteristic who had births by two or more partners, by relationship status at new-partner birth

Characteristic	Nonmarital first births (N=1,368)	Births by ≥2 partners			
		All	Non-coresidential	Cohabiting	Married
Age					
13	0.1	0.0*	0.0	0.0	0.0
14	1.3	47.1	26.3	5.9	14.9
15	4.3	31.7	8.2	15.2	8.4
16	9.3	29.8	17.1	11.6	1.1
17	13.5	25.4	8.7	11.5	5.2
18	18.0	17.2	2.8	7.4	7.1
19	18.3	6.6	3.0	2.8	0.9
20	14.7	4.4	1.9	1.1	1.3
21	10.3	4.6	0.8	3.6	0.2
22	5.8	0.1	0.1	0.0	0.0
23	3.0	0.0	0.0	0.0	0.0
24	1.2	0.0	0.0	0.0	0.0
25	0.3	0.0	0.0	0.0	0.0
Wanted first birth					
Yes	36.3	12.6	4.6	5.1	2.9
No	63.7	14.0	5.0	6.0	3.0
Using contraceptives at conception					
Yes	58.6	13.6	5.2	5.0	3.3
No	41.4	13.4	4.2	6.7	2.5
Same race as partner					
Yes	81.5	14.1	4.8	5.8	3.5
No	18.5	10.7	4.9	5.2	0.6
Partner ≥4 years older					
Yes	30.5	15.5	6.8	5.6	3.2
No	69.5	12.6	4.0	5.7	2.9
Partner education					
Unknown	5.4	33.7*	12.4	17.8	3.4
<high school‡	28.8	13.2	4.7	6.1	2.5
High school	49.7	14.1	5.2	5.4	3.5
Any college	16.1	4.8	1.4	1.2	2.1
Relationship status					
Noncoresidential	57.2	17.3*	7.9†	6.4	3.0
Cohabiting	42.8	8.4	0.7†	4.7	2.9
Relationship continued after partner learned of pregnancy					
Yes	92.6	11.9*	4.6†	5.2	2.1
No	7.4	33.1	7.2†	12.5	13.5
Wanted partner to be father					
Yes	79.3	10.5*	3.8	4.3	2.4
No	20.7	25.1	8.9	11.0	5.2

*Chi-square test indicates significant difference among categories within this characteristic at p≤.05. †Chi-square test indicates significant difference in distribution across relationship categories for this characteristic at p≤.05. ‡Includes partners who obtained a general equivalency diploma. *Notes:* Characteristics were measured at first birth. All proportions are weighted to reflect the characteristics of the baseline sample; sample size is unweighted. Percentages may not add up to totals because of rounding.

Characteristics Associated with First Nonmarital Births And Multipartnered Fertility

As expected, the proportion of women who had had children with multiple partners was higher among those who began childbearing at a young age (Table 3), likely

TABLE 4. Selected characteristics among women aged 19–25 with a nonmarital first birth

Characteristic	% or mean (N=1,368)
Mean age‡	22.1
Race	
White	55.0
Black	30.8
Hispanic	14.2
Foreign-born	4.0
Family structure	
Both biological parents	34.2
Two-parent stepfamily	18.0
Single mother	31.7
Single father	3.3
Other	12.8
Parental income	
<$16,000§	26.2
$16,000–29,999	25.9
$30,000–39,999	15.8
$40,000–49,999	12.5
≥$50,000	19.6
Parental education	
<High school††	17.9
High school	50.5
Some college	18.3
College graduate	13.3
Parents ever on public assistance	18.2
Likely to attend college	65.9
Mean grade point average (range, 1–4)	2.6
Mean verbal ability score (range, 0–100)	96.0
Mean trouble in school score (range, 0–4)	1.1
Ever repeated a grade	29.1
Ever suspended or expelled	39.9
Likely to be married by age 25	43.6
Religious service attendance	
Never	27.8
<monthly	18.4
≥monthly but <weekly	21.5
≥weekly	32.3
Mean parental relationship quality score (range, 1–5)	4.0
Mean depression score (range, 0–3)	0.9
Mean self-esteem score (range, 1–5)	4.0
Mean age at first sex‡	15.3

‡Measured at Wave 3. §Poverty level for a family of four in 1994. ††Includes individuals who obtained a general equivalency diploma. *Notes:* Unless otherwise indicated, all characteristics were measured at Wave 1 and are presented as percentages. All values are weighted to reflect the characteristics of the baseline sample; sample size is unweighted.

reflecting both more time to experience a higher-order pregnancy and the instability of early unions. Differences between partners in age and race were not associated with multipartnered fertility, but partner education was an important factor (though it was not associated with a woman's relationship status at the time of a new-partner birth). A disproportionate number of young women who did not know their partner's level of education or whose partner had less than a high school education had births with more than one partner, whereas few whose first birth partner had attended college did so.

More than half of nonmarital first births among young women occurred outside of a coresidential union, and as hypothesized, women who were not cohabiting at their first birth were more likely than those who were living with their partner at first birth to have had births by multiple partners. Moreover, the proportion of new-partner births that occurred in a marriage was lower among women whose first birth had been in a noncoresidential relationship (3% out of 17%) than among women who had been living with the father of their first child (3% out of 8%). Young women who had had no contact with the father of their first child after informing him of the pregnancy or who had not wished to have a child with him also had an increased likelihood of multipartnered fertility; interestingly, women who had had no contact with their first child's father were particularly likely to be cohabiting or married when they had a child with a different partner. Overall, women who had a weak relationship with the father of their first child were much more likely than other women to report multipartnered fertility within the short time between Add Health waves.

The average age of young women who had had a nonmarital first birth by Wave 3 of Add Health was 22 (Table 4). Slightly more than half were white, about a third were black, and the rest were Hispanic (Asian women were excluded from the analyses as they had only 46 nonmarital first births and 14 higher parity births). Not surprisingly, these young mothers were fairly disadvantaged; only a third had lived with both biological parents at Wave 1, and one-fourth had grown up in an impoverished household. One-third had had a parent with more than a high school education. Although nearly two-thirds had expected to go to college, more than a quarter had repeated a grade, and four in 10 had been suspended or expelled from school. At Wave 1, these women reported having fairly good relationships with their parents, low levels of depression and high self-esteem. Their mean age at first sex was about 15.

The multivariate logistic regressions lend only modest support for our supposition that the characteristics associated with early nonmarital childbearing in prior research are also predictors of having a higher order birth with a new partner. Black mothers were marginally more likely than their white counterparts to have a birth with a new partner outside of a coresidential relationship rather than to have no new-partner birth, but they had 81% lower odds of having a marital new-partner birth (Table 5). Compared with mothers who had lived with

both biological parents, those who had lived in a stepfamily had nearly triple the odds of having a new-partner birth while cohabiting. Unmarried young mothers whose parents had had incomes below the poverty line at Wave 1 were more likely than those whose parents had had an income of at least $50,000 to experience a new-partner birth with a spouse (odds ratio, 7.3). There is some suggestion that women who had had trouble in school had elevated odds of multipartnered fertility.

It appears that circumstances surrounding the first birth are more salient than demographic or socioeconomic variables in shaping the subsequent pattern of fertility. However, even these characteristics are not as predictive as we expected, perhaps because the amount of time that had elapsed after the first birth was not very long for many of the women in the sample, and thus these women had relatively little opportunity to experience a higher order birth, let alone multipartnered fertility. If women in the sample had experienced more multipartnered fertility, we might have seen additional statistically significant associations. Young women were less likely to have a birth with a new partner in the year after their first birth than they were 1–2 years postpartum (odds ratios, 0.06–0.1). Mothers who reported that their nonmarital first birth had been unwanted were more likely to have a marital new-partner birth than no birth (3.9), perhaps because carrying an unwanted pregnancy to term reflects a strong profamily orientation. Women who had had no contact with the father of their first child after informing him of the pregnancy were more likely than women who had had an ongoing relationship with the father to have a cohabiting or marital new-partner birth (2.2 and 4.9, respectively).

Relationship status at the time of the first birth was very important: Women who had been cohabiting at their first birth were substantially less likely to have a nonmarital new-partner birth than those who had not been cohabiting (odds ratios, 0.2–0.4). Women's relationship status at Wave 3 was also significant. Interestingly, currently cohabiting women had elevated odds of having had a birth with a new partner outside of a coresidential relationship (2.0), but they did not have elevated odds of having had a birth with a new partner in a cohabiting relationship. Because the cohabitation question referred to living together at any point and for any duration during the year, this finding may reflect the inclusion of women who began cohabiting after having their new-partner birth or whose cohabitation ended during the pregnancy but prior to the birth. Women who were married during the year, not surprisingly, had substantially higher odds of having a marital new-partner birth than no birth compared with women who were not in a coresidential relationship (3.5).

Descriptive analyses not shown here reveal few differences between the characteristics of men who had fathered all of a woman's children and the characteristics of men who had fathered only the most recent child of a woman who had multiple births. A man was more likely to be at least four years older than his partner if he was the father of only the woman's most recently born child rather than the father of all of her children, but there were no significant differences in men's education or in the

TABLE 5. Odds ratios from multinomial logistic regression analysis assessing the likelihood of having a birth with a new partner among women aged 19–25 with a nonmarital first birth, by selected characteristics, according to relationship status with new partner

Characteristic	Noncoresidential	Cohabiting	Married
Race			
White (ref)	1.00	1.00	1.00
Black	1.93†	0.62	0.19*
Hispanic	1.00	0.53	1.11
Family structure			
Both biological parents (ref)	1.00	1.00	1.00
Two-parent stepfamily	1.18	2.79*	0.40
Single mother	1.28	2.00	0.47
Single father	0.64	1.53	1.89
Other	0.99	1.19	1.35
Parental income			
<$16,000‡	1.91	1.71	7.33*
$16,000–29,999	0.96	1.16	2.21
$30,000–39,999	1.03	2.35	2.78
$40,000–49,999	0.39	0.69	1.91
≥$50,000 (ref)	1.00	1.00	1.00
Trouble in school score	1.41†	1.26	1.65
Years since last births§			
<1	0.13***	0.06***	0.06***
1 (ref)	1.00	1.00	1.00
2	1.19	0.78	1.01
3	2.07	0.81	2.36
4	3.58†	1.17	1.69
≥5	3.41	0.85	7.09
Wanted first birth			
Yes (ref)	1.00	1.00	1.00
No	1.10	1.18	3.89*
Partner education			
Unknown	2.29†	2.07	1.79
<High school††	0.93	1.50	0.74
High school (ref)	1.00	1.00	1.00
Any college	4.46	0.30	0.15†
Relationship continued after partner learned of pregnancy			
Yes (ref)	1.00	1.00	1.00
No	1.02	2.19*	4.93**
Cohabiting first birth			
Yes	0.18**	0.39*	0.82
No (ref)	1.00	1.00	1.00
Current relationship status§			
Noncoresidential (ref)	1.00	1.00	1.00
Cohabiting	1.96*	1.31	0.47
Married	1.20	1.90	3.47*

*p≤.05. **p≤.01. ***p≤.001. †p≤.10. ‡Poverty level for a family of four in 1994. §Measured at Wave 3. ††Includes individuals who obtained a general equivalency diploma. *Notes:* ref = reference category. Unless otherwise indicated, all characteristics were measured at Wave 1. Characteristics with no reference category are continuous variables. Odds ratios for the following characteristics are not shown because of a lack of statistical significance: age, foreign-born, parental education, parents ever on public assistance, likely to attend college, grade point average, verbal ability score, ever repeated a grade, ever suspended or expelled, likely to be married by age 25, religious service attendance, parental relationship quality score, depression score, self-esteem score, age at first sex, age at first birth, using contraceptives at conception, wanted partner to be father, same race as partner and partner ≥4 years older.

likelihood that the mother and the partner were of the same race.

DISCUSSION

The prevalence and predictors of having children with more than one partner are an important and overlooked component of the changes in family structure that have occurred in the United States in recent decades. Changing social mores, especially those concerning nonmarital pregnancies, have increased the likelihood that parents (particularly those in low-income and minority communities) will have children with more than one partner.[9,14,24]

Our findings indicate that among young women, the prevalence of multipartnered fertility is low but differs markedly by race. Nearly 7% of black women aged 19–25 already had children with multiple partners, more than twice the proportion among white or Hispanic women. Fourteen percent of women who had had a nonmarital first birth went on to have another birth with a new partner, and the majority of these births were outside of marriage. Among women with a nonmarital first birth who had subsequent births, four in 10 had children with more than one partner. Black women were particularly likely to experience multipartnered fertility, in most cases outside of coresidential relationships. Several maternal and relationship characteristics at the time of first birth were associated with an increased likelihood of multipartnered fertility; in particular, women who had been very young at the time of their first birth and those who had had a weak relationship with the father were more likely than other women to have a birth with a new partner.

Together, these results suggest that some mothers are moving from relationship to relationship rather quickly (given that only 6–7 years elapsed between Waves 1 and 3). This is consistent with ethnographic work demonstrating that women in some segments of the population have children with partners with whom they do not necessarily have (or expect to have) strong relationships; instead, they migrate from relationship to relationship, often in hopes of improving their prospects of settling into a stable relationship with a man who is a good provider for their children.[24] Having a child from a prior relationship does not seem to affect a young woman's ability to attract a mate (although it may affect the quality of her mates), but her age and the presence of stepchildren may ultimately result in an unstable union.[35]

Our findings both confirm and complement the results from studies of Fragile Families data.[9–12] As in the Fragile Families studies, women who began childbearing early (and outside of marriage) had an increased likelihood of having children with multiple partners. More important, however, our study reveals that the path to multipartnered fertility often begins with having a child under less-than-ideal circumstances and with a less-than-desirable partner. This particularly seems to be the case for disadvantaged young women, for whom educational and occupational prospects are especially dim. Of course, it is entirely possible that additional factors, unmeasured in our study, undermine a woman's ability to form strong relationships and hence increase her risk of multipartnered fertility. Still, we would claim that the context in which first births occur is important in and of itself, because it sets the stage for subsequent childbearing.[3] Early and unstable relationships—the likelihood of which may be influenced by personal characteristics as well as by social, economic and cultural factors—are a powerful determinant of multipartnered fertility.

Limitations

A major limitation to this work is the young age of the sample. The young women had not had many years in which to experience higher parity births, let alone multipartnered fertility, and additional women in the sample (even those who were childless at Wave 3) undoubtedly will go on to have children with multiple partners. The study is also limited in that it included only individuals who were in school in 1995. As such, women at the upper end of the study's age range (who probably have a higher risk of multipartnered fertility) and Hispanic women (who tend to have higher fertility* than other racial and ethnic groups) were underrepresented. Thus, not only will the lifetime prevalence of multipartnered fertility in this population increase as the cohort ages, but the prevalence very likely will be even higher in the general population.

It is also important to keep in mind that the fathers of many children represented here may also have children with other partners, resulting in even greater family complexity. The data do not allow us to determine the fertility history of women's partners, but the limited research to date suggests that the prevalence of multipartnered fertility among men is similar to that among women.[9] This may especially be the case among young women whose partners are older than they are.

CONCLUSION

With the passage of the Deficit Reduction Act of 2005, signed in February 2006, the federal government plans to spend $500 million over the next five years to promote marriage. As such, it is becoming increasingly important to understand the factors that affect union decisions, and one potential barrier is the presence of children from prior relationships. The results presented here suggest that women who have a weak relationship with the father of their first child often go on to have a birth with another man, which can result in the formation of a potentially unstable stepfamily.[36] Programs that fail to take into consideration the complexities of life in a stepfamily

*However, the high fertility rate among Hispanic men may not translate into a high prevalence of multipartnered fertility, and this observation may extend to women as well (source: reference 14).

might succeed in encouraging unmarried couples to wed but result in unstable marriages. If multipartnered fertility increases over time, we might expect to see further declines in marriage rates or a bifurcation in rates by race and socioeconomic status.

From the perspective of public policy, the issue of multipartnered fertility among young women presents a clear dilemma. On the one hand, having children by different fathers can present daunting challenges for young mothers. Having to negotiate paternal support and involvement with different men is stressful and may result in differential levels of paternal involvement for children who live in the same household but do not share the same father. Moreover, if mothers who are searching for a new partner are perceived as having too much "baggage" because they have children from a prior relationship, having children with more than one father may be a negative signal for new partners. Thus, discouraging multipartnered fertility, especially when it occurs outside of marriage, may seem a worthy goal. Multipartnered fertility may be problematic even when it occurs partially or wholly within marriage: The complexities of managing visitation and, especially, child support payments,[8] combined with the usual challenges faced by stepfamilies,[36] may adversely affect family stability and child well-being.

On the other hand, is it not reasonable to expect that a young woman who is no longer involved with the father of her first child will want to have additional children in the future? Even if a woman does not desire more children herself, she may have additional children because her partner desires offspring or because of ineffective (or no) contraceptive use. Therefore, public policy should focus on preventing the conditions that increase the likelihood of multipartnered fertility in the first place (i.e., factors that lead individuals to enter parenthood under less-than-favorable conditions) rather than pursuing approaches that would seek to prevent young women from having additional births after they become unwed mothers. Our study contributes to an understanding of the mismatch between current policy assumptions (such as those in the child support system) and the reality of emerging family forms.[8] It also helps identify groups that are most likely to experience multipartnered fertility, which should aid policymakers and program providers in identifying women who might face the unique challenges that multipartnered fertility may bring and who may benefit from additional, tailored support and resources.

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