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# Teen and Non-Marital Childbearing

Melissa S. Kearney\*

There is a widespread consensus among the American public that rates of teen pregnancy and unintended pregnancies to young, unmarried women are too high. Approximately 30 percent of teenage girls in the United States become pregnant, and 20 percent give birth by age 20. In addition, half of all pregnancies in the United States are reported by the mother as unintended. More than one-third of these (1.1 million pregnancies in 2001) are to unmarried women in their twenties. Rates of teen pregnancy and unplanned pregnancy are higher among young unmarried women, lower income women, women with lower levels of education, and minority women.

The concern about rates of teen pregnancy and non-marital pregnancy is driven in large measure by the observed inferior outcomes for children born into disadvantaged situations — in particular, those born to young, unmarried mothers. In this research summary, I describe some of my work on the policy determinants of teen and non-marital childbearing and the socioeconomic differences in rates of teen childbearing and parental time investment in children.

## Policy determinants of Teen and Non-marital Pregnancy

There are several commonly suggested policy approaches to reducing the level of teen and unintended pregnancies. One is increased access to contraception. As an initial matter, the term “unintended” as captured in surveys is fraught with measurement and interpretation issues, and it is not always clear what is meant when a woman

reports her pregnancy to be unintended. Furthermore, there is ethnographic and anecdotal evidence that a substantial number of teen pregnancies may be deliberate. Policies on contraception will be effective only to the extent that teenagers or other young women are committed to avoiding pregnancy and to the extent that they serve women who were not already using contraception.

Research that I conducted with Phil Levine suggests that expanded access to publicly provided family planning services results in a moderate reduction in overall births and in births to teens.<sup>1</sup> Between December 1993 and March 2007, 25 states received waivers from the federal government to extend the coverage of family planning services to women who do not otherwise qualify for Medicaid health insurance coverage. We conduct difference-in-difference analyses to identify the causal impact of these waiver policies using a wide array of data sources, including Vital Statistics birth data, abortion data from the Guttmacher Institute, and microdata on sexual activity and contraceptive use from the 1988, 1995, and 2002 National Surveys of Family Growth (NSFG). Using data from the Centers for Medicaid and Medicare Services (CMS), we also confirm that these waivers increased the number of women receiving Medicaid-funded family planning services.

We find that extending Medicaid family planning services to women at higher levels of income dramatically increased the number of women receiving those services. By itself, this does not necessarily indicate an effect on behavior, as it could merely reflect a crowding out of privately provided services. However, we demonstrate that the waiver policies reduced overall births to non-teens by about 2 percent and to

teens by over 4 percent. Scaling these estimates by the estimated proportion of women in a state made newly eligible by expanded coverage, we find that births to newly-eligible non-teens fell by almost 9 percent. Moreover, our analysis of individual-level data from the NSFG implies that the reduction in fertility associated with income-based waivers is attributable to greater contraceptive use; we find no evidence of an effect on sexual activity. Based on the cost per recipient of family planning services, we find that each birth avoided would cost on the order of \$6,800.

Another policy approach to addressing teen and non-marital childbearing is to alter the financial costs and incentives for childbearing. This approach was taken during the reform of welfare, first as part of state waiver demonstrations and then with the 1996 national welfare reform legislation. In previous work I found that family cap policies implemented as part of welfare reform in the early- and mid-1990s were not effective at reducing birth rates among targeted women.<sup>2</sup> The family cap was the primary welfare reform policy targeted at reducing non-marital childbearing — it ended the practice of providing families on welfare with additional cash benefits when a new child was born into the family. The motivation behind the policy was to eliminate the financial incentive for conceiving an additional child while on welfare and thereby to reduce births among the target population.

I use the variation across states in the timing of family cap implementation to identify whether this policy leads to a reduction in births. The primary economic question is whether the availability of fewer resources at the margin decreases a woman’s propensity to bear additional children. The potential direct effect of the policy is to reduce

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higher-order births: a decrease in marginal resources raises the price of an additional child and may thereby deter a woman from having additional births. Insofar as the policy sends a message that welfare is less generous than previously, it may also lead a woman to delay childbearing until she is financially secure and thereby reduce first births as well.

The vital statistics birth data for the years 1989 to 1998 offer no evidence that family cap policies lead to a reduction in births among women ages 15 to 34. After I control for state effects, month effects, and state-specific linear time trends, I find that a decline in births of more than 1 percent can be rejected at the 95 percent confidence level. (The upper bound of the confidence interval is an increase in births of 1.1 percent.) This finding—of no effect on births—is maintained across multiple specification checks. The set of confidence intervals around six alternative estimates has a lower bound of a 1 percent decline and an upper bound of a 2 percent increase. I also find that the data reject large declines in higher-order births among demographic groups with relatively high welfare participation rates.

A third approach to addressing high rates of teen pregnancy involves targeted interventions, or programs run at the school or community level. In a recently completed draft for an NBER conference volume, I review the evidence on the effectiveness of teenage pregnancy prevention programs.<sup>3</sup> Teen pregnancy prevention programs can be usefully categorized into three types: 1) sex education programs with an abstinence focus; 2) sex education with a contraception focus; and 3) multi-component youth development programs that include sex education as one of many features. Some programs are based in schools and are compulsory, others are school-based but voluntary, and others are run through community centers and groups. There is substantial variation across programs in terms of the types of populations served, including racial and ethnic differences as well as ages of the teenagers

involved. My review of the most compelling evidence concludes that abstinence education programs tend to be ineffective at reducing rates of sexual activity. However, compared to non-abstinence-focused sexual education courses, these programs do not lead to lower rates of contraceptive use among sexually active teens, as some critics have claimed. Certain contraceptive-focused sex education programs may be effective at reducing risky sexual behavior among participants. And finally, a couple of high-profile multi-component interventions show promise of being effective, but would be very difficult and expensive to replicate in other settings.

In sum, the past two decades have seen numerous and varied efforts—by community groups, schools, non-profits, and all levels of government—to bring down rates of teen pregnancy and childbearing in this country. Research in this area, at this stage, is far from being able to offer a conclusive answer to the question of what drove the rise and subsequent decline in teen pregnancy. Nor can we conclusively answer why the level of teen childbearing and unintended (as reported by the mother) childbearing are so much higher in the United States than in other developed countries. A long-term goal of my research is to address this issue of international comparisons.

### Socioeconomic Differences

The economics literature on teen and non-marital childbearing has tended to focus on policy and environmental determinants in a rational choice framework. But parallel literatures in other social as well as clinical sciences emphasize the role of socioeconomic disadvantage and related factors during childhood. Socioeconomic disadvantage can lead to early childbearing through a number of different mechanisms. The poor may lack the resources available to know about the different opportunities available to them or to take advantage of those opportunities. This could hinder their ability to make optimal choices

regarding, for example, contraceptive use, educational attainment, and labor market training. Alternatively, schools and labor market conditions in their communities may be sufficiently weak that staying in school and avoiding early childbearing might not be seen as offering any real benefit. In addition, some ethnographic evidence suggests that those who grow up in disadvantaged situations are simply more inclined to have children because of what might be appropriately described as differences in preferences.

Levine and I confirm an empirical relationship between individual rates of socioeconomic disadvantage and rates of early childbearing but find that socioeconomic disadvantage plays only a small role in the aggregate.<sup>4</sup> Using the Panel Study of Income Dynamics (PSID) we observe that growing up in socioeconomic disadvantage is associated with substantially higher rates of teen childbearing. The main empirical contribution of this paper is a cohort-based analysis: we want to know whether cohorts of women with higher rates of socioeconomic disadvantage at birth subsequently have higher rates of early childbearing. We use Vital Statistics microdata from 1968 through 2003 to conduct an analysis of the relationship between rates of socioeconomic disadvantage of a birth cohort and the cohort's early childbearing experiences. As a proxy for disadvantage at birth, we use four alternate factors, all based on the mother's characteristics: having been born to a mother with a low level of education; to an unmarried mother; to a mother under age 18; or to a mother under age 20.

Our cohort-based analysis implies an even tighter correlation between rates of background disadvantage and early childbearing than is observed in the PSID data at the individual level. But, when our analysis econometrically controls for fixed state and year of birth effects, the relationship between rates of disadvantage and early childbearing is found to be quite modest. For example, a 10 percent increase in the proportion

of women who were themselves born to a teen mother (a measure of disadvantage) is associated with a less than 1 percent increase in the proportion who give birth before age 18 (a measure of early childbearing). This suggests that broader, societal forces are far more important in determining rates of early childbearing than rates of socioeconomic disadvantage. Our results lead us to conclude that the impact of a fairly large shock to socioeconomic disadvantage would have only a modest impact on rates of early childbearing.

Another area of socioeconomic differences in childrearing behaviors involves parental time-use patterns.<sup>5</sup> Jonathan Guryan, Erik Hurst, and I use data from the recent American Time Use Surveys as well as from Multinational Time Use Surveys to examine parental time allocated to the care of their children. We draw three major empirical conclusions about parental child care time. First, higher earnings or earnings potential are associated with more time spent with children, even though higher earning parents also work more hours in the labor market. Second, this relationship appears to hold within the United States, across other countries, and within other countries examined. And third, this positive gradient of parental time

use and education or income in time spent in child care is the opposite of the gradient observed for typical leisure and home production activities.

Using a Beckerian framework of time allocation, we conclude that child care is best modeled as being distinct from either typical home production or leisure activities. In addition, our results suggest that time spent with one's children is more highly valued by individuals with a higher opportunity-cost of their time, as measured by earnings potential. What might account for this? It could arise if caring for children is a "luxury good," if more educated parents have a lower elasticity of substitution between own and market-based child care (or just a higher relative preference for time spent with their children), or if the returns to investing in the children of more educated parents are relatively higher. The fact that the children of higher-educated parents receive more time with the active attention of their parents, or conversely, that the children of lower-education parents receive less, may have important implications for the intergenerational transmission of human capital.

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<sup>1</sup> M. S. Kearney and P. Levine,

*"Subsidized Contraception, Fertility, and Sexual Behavior,"* earlier version released as NBER Working Paper No. 13045, April 2007, forthcoming in Review of Economics and Statistics.

<sup>2</sup> M.S. Kearney, "Is There an Effect of Incremental Welfare Benefits on Fertility Behavior? A Look at the Family Cap," NBER Working Paper No. 9093, August 2002, and Journal of Human Resources, 2004, 39(2): pp. 295–325.

<sup>3</sup> M.S. Kearney, "Teen Pregnancy Prevention as an Anti-Poverty Intervention: A Review of the Evidence," forthcoming in Targeting Investments in Youth: Fighting Poverty when Resources are Limited, Phillip Levine and David Zimmerman eds., University of Chicago Press.

<sup>4</sup> M. S. Kearney and P. Levine, "Socioeconomic Disadvantage and Early Childbearing," NBER Working Paper No. 13436, September 2007, forthcoming in An Economics Perspective on the Problems of Disadvantaged Youth, Jonathan Gruber ed., University of Chicago Press.

<sup>5</sup> J. Guryan, E. Hurst, and M.S. Kearney, "Parental Education and Parental Time with Children," NBER Working Paper No. 13993, May 2008, and Journal of Economic Perspectives 22(3), Summer 2008, pp. 23–46.