

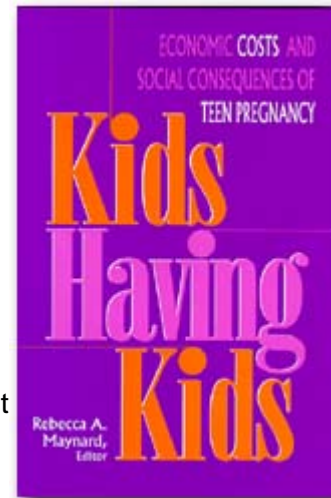


## Chapter One

### THE STUDY, THE CONTEXT, AND THE FINDINGS IN BRIEF

By Rebecca A. Maynard

Each year, about 1 million teenagers in the United States—approximately 10 percent of all 15- to 19-year-old women—become pregnant. Of these pregnancies only 13 percent are intended. The U.S. teen pregnancy rate is more than twice as high as that in any other advanced country and almost 10 times as high as the rate in Japan or the Netherlands. About a third of these teens abort their pregnancies, 14 percent miscarry, and 52 percent (or more than half a million teens) bear children, 72 percent of them out of wedlock. Of the half a million teens who give birth each year, roughly three-quarters are giving birth for the first time. Over 175,000 of these new mothers are age 17 or younger.



Teen pregnancy has come very much into the public debate in recent years, at least partly as a result of three social forces. First, child poverty rates are high and rising. Second, the number of welfare recipients and the concomitant costs of public assistance have risen dramatically. And third, among those on welfare we see a much higher proportion of never-married women, younger women, and women who average long periods of dependency. No work to date, however, has made a comprehensive effort to identify the extent to which these trends are attributable to teen pregnancy per se, rather than to the wider environment in which most of these pregnancies and the subsequent child rearing take place, or to look at the consequences of teen pregnancy for the fathers of the children and for the children themselves. *Kids Having Kids* begins to fill this gap.

#### ***GUIDANCE FROM PRIOR RESEARCH***

The *Kids Having Kids* research was undertaken in the context of literature describing trends in adolescent childbearing and factors that lead to or exacerbate these trends and their consequences. Aspects of the literature have helped shape this research. So, too, the results of the *Kids Having Kids* research underscore the emerging consensus that the poor outcomes observed for teenage parents and their children are the product of myriad factors, among which early childbearing is only one.

#### ***FACTORS RELATED TO THE TRENDS IN TEEN BIRTH RATES***

The likelihood that teenagers engage in unprotected sex, become pregnant, and give birth is highly correlated with multiple risk factors. These factors include growing up in a single-parent family, living in poverty and/or in a high-poverty neighborhood, having low attachment to and performance in school, and having parents with low educational attainment (Moore, Miller et al. 1995). For example, teenagers living in single-parent households are one and a half to two times more likely to become teenage parents than those in two-parent families (Zill and Nord 1994). Probabilities increase for those with low aspirations and low aptitude test scores. More important, each of these factors increases not only the risk of teen parenthood but also many other negative outcomes, such as poor school performance, weak social skills, and low earnings potential.

### **CONSEQUENCES FOR ADOLESCENT CHILDBEARING**

Earlier studies have found that adolescent mothers have high probabilities of raising their children in poverty and relying on welfare for support. More than 40 percent of teenage moms report living in poverty at age 27 (Moore et al. 1993). The rates are especially high among black and Hispanic adolescent mothers, more than half of whom end up in poverty and two-thirds of whom find themselves on welfare. Indeed, a recent study found that more than 80 percent of young teen mothers received welfare during the 10 years following the birth of their first child, 44 percent of them for more than 5 years (Jacobson and Maynard 1995).

This results from a combination of factors, including their greater-than-average income needs to support themselves and their children, lower earning potentials, and more limited means of support from other sources, including male partners. Adolescent mothers have an average of six-tenths more children than do older childbearers, and they have their children over a shorter time span. This fertility pattern both increases their income needs over the long haul and adversely affects the likelihood that they will complete high school and have decent earnings prospects (Nord et al. 1992; Rangarajan, Kisker, and Maynard 1992; Grogger and Bronars 1993; Geronimus and Korenman 1993; Hoffman, Foster, and Furstenberg 1993; Ahn 1994).

Although past literature is consistent in pointing out these poor outcomes for adolescent parents and their children, it is less clear how much of the poor outcomes observed for adolescent parents and their children is directly attributable to early childbearing as opposed to other background and contextual factors common among young mothers. The accumulating evidence suggests that at least half and plausibly considerably more of the poor outcomes can be attributed to factors other than the early childbearing-factors that in many cases may have contributed to the teen becoming a parent (Wolpin and Rosenzweig 1992; Bronars and Grogger 1994; Geronimus, Korenman, and Hillemeier 1994; Haveman and Wolfe 1994; Hoffman, Foster, and Furstenberg 1993). Four such factors are particularly noteworthy.

*Single Parenthood.* Over time, adolescent mothers have become increasingly likely to be single parents and the sole providers for themselves and their children. Most teen parents are unmarried five years after giving birth. Moreover, fewer than half of the teens who give birth out of wedlock marry within the next 10 years (Jacobson and Maynard 1995). Not surprisingly, therefore, marital status at the time of the first birth is a powerful predictor of subsequent poverty status and welfare dependence, regardless

of the age of the woman when she has her first child. More than two-thirds of all out-of-wedlock childbearers end up on welfare, as do 84 percent of young teen mothers who are unmarried when their first child is born. Especially notable about the adolescent mothers is that so many of them give birth out of wedlock and that, when they go onto welfare, they tend to do so for long periods of time—more than 5 of the 10 years following the birth of their first child.

Young mothers, in particular, have limited support either from the fathers of their children or from other adults. Among all unwed teen parents, only about 30 percent of single teen parents live with adult relatives, and less than one-third receive any financial support, including informal support, from the nonresident fathers of their children (Congressional Budget Office 1990).

*School Completion.* Young teen mothers have exceptionally low probabilities of completing their schooling and thus show weak employment prospects. Just over half of teenage mothers complete high school during adolescence and early adulthood; many who complete high school do so with only an alternative credential—the General Educational Development (GED) certificate (Cameron and Heckman 1993; Murnane, Willett, and Boudett 1994; Cao, Stromsdorfer, and Weeks 1995). Many of those who do complete regular high school have very low basic skills (Strain and Kisker 1989; Nord et al. 1992). The combination of low education credentials, low basic skills, and parenting responsibilities means that teenage parents have limited employment opportunities, primarily restricted to the low-wage market (Moore et al. 1993; Hoffman et al. 1993; Rangarajan et al. 1992).

*Social and Economic Circumstances.* The logical consequence of these outcomes is high poverty rates, even for those who are employed. Among adolescent mothers, almost two-thirds of blacks, half of Hispanics, and just over one-quarter of whites are still in poverty by the time they reach their late 20s (Moore et al. 1993). The poverty rates for the more than 60 percent of adolescent mothers who live on their own and for those who are not employed are particularly high. Poverty rates exceed the national average even among teen mothers who are employed (24 percent) and those living with a spouse (28 percent) or relative (34 percent) (Congressional Budget Office 1990).

The high poverty rates are accompanied by numerous other life-complicating factors, some caused by the poverty and some contributing to its perpetuation. Teenage parents are disproportionately concentrated in poor, often racially segregated communities characterized by inferior housing, high crime, poor schools, and limited health services. Many of the teens have been victims of physical and/or sexual abuse. For example, recent studies of Washington State welfare recipients estimate that half of those women who give birth before age 18 have been sexually abused and another 10 percent or more have been physically abused (Roper and Weeks 1993; Boyer and Fine 1992). Data from the National Survey of Children indicate that 20 percent of sexually active teenagers have had involuntary sex and over half of those who are sexually active before age 15 have experienced involuntary sex (Alan Guttmacher Institute 1994).

These statistics have been corroborated by recent experiences of paraprofessional home visitors working with a representative sample of teenage parent welfare

recipients in three cities (Johnson, Kelsey, and Maynard, forthcoming). In one of these sites, home visitors reported that roughly two-thirds of these teenagers are victims of physical and/or sexual abuse and as many as 20 percent are currently abused or at risk of being abused.

*Roles of the Fathers.* The male partners of teenage mothers tend not to be teens themselves. Even so, they generally are not a consistent source of support for the teenage mothers or their children. Only 20 to 30 percent marry the mother of their child, and only about 20 percent of the nonresident fathers are ordered by the court to pay child support. Those with orders pay only a small fraction of the award amount (Congressional Budget Office 1990).

Among those fathers whose children end up on welfare, only about one-third have regular contact with the mother by the time of the birth. Another third have intermittent contact, and the remaining fathers have no involvement whatsoever (Maynard, Nicholson, and Rangarajan 1993). Moreover, the father's rate of contact and support declines substantially over time.

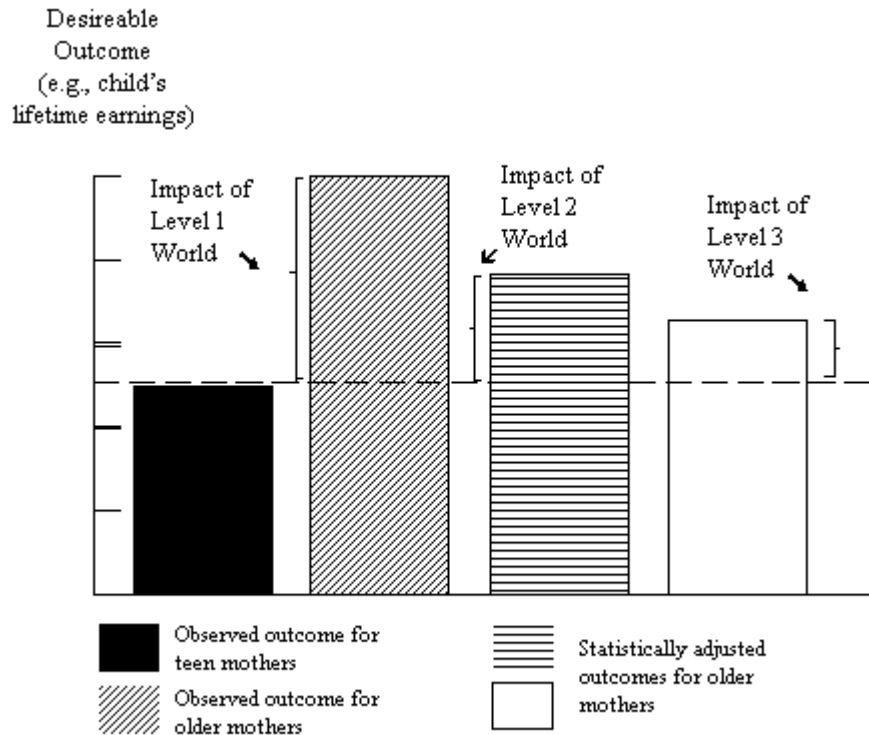
## **STUDY DESIGN**

Unlike most previous research, which compared teenage (under age 20) mothers with those who delay childbearing until age 20 or later, *Kids Having Kids* focuses on the more than 175,000 adolescent women annually who give birth before age 18 and places primary importance on assessing the likely consequences of delaying their childbearing for an average of about four years, or until they reach age 20 to 21. The particular focus on young teens reflects the strong public concern about the high rate of childbearing among young teens, the vast majority of which results from unplanned pregnancies. Still school age, unlikely to be married, even less likely to be prepared for parenthood, these very young mothers highlight the dimensions of teen pregnancy and parenthood in this country. The delay until age 20 or 21 was chosen as a goal that could plausibly be achieved by policy intervention.

One of the primary purposes of the study was to begin untangling the pathway of early parenting from the intricate web of social forces that influence the life course of the mothers, including the behaviors and choices leading to their adolescent parenting. Disentangling the various types of factors associated with teen childbearing in this way is extremely important for any policy discussion about the benefits to be expected from preventing teen pregnancy.

Policy intervention is only justified if there is evidence to suggest that preventing or reducing teen pregnancy and motherhood would indeed improve the lot of the mothers, fathers, and/or children. The analytical strategy for estimating the impacts of different policy alternatives comes down to three types of comparison. [Figure 1.1](#) show how these comparisons allow us to measure the potential impacts of different "policy" scenarios. The most radical of these scenarios would create a world in which all adolescent moms would *both* delay their first birth until their early 20s and look like their older childbearing counterparts in all other respects.

**Figure 1.1**  
**HYPOTHETICAL IMPACT ON CHILD'S LIFETIME EARNINGS OF THREE LEVELS**  
**OF "POLICY" CHANGE**



- Level 1: A world where teen mothers were equal to older mothers in age of first birth and *all* other characteristics and circumstances.
- Level 2: A world where teen mothers were equal to older mothers in age of first birth and characteristics that are changeable by policy (e.g., education, job opportunities, motivation).
- Level 3: A world where all births were delayed until age 20 to 21 but nothing else changed.

For example, they would have parents with similar levels of education; they would attend schools of similar quality; they would live in neighborhoods with similar economic opportunities and crime rates; and they would have similar cultural backgrounds. Total fantasy, of course, but useful to illustrate the extreme case. This comparison is readily measured and, indeed, the one that tends to shape public opinion. Under this scenario, the benefits of instituting the policy change are equal to the full difference in observed outcomes between early and later childbearers-as reflected in the research reviewed briefly above and measured by the Level 1 world in the figure.

Next, imagine a world in which we had a policy that would delay the first birth and at the same time compensate for or eliminate those differences between adolescent mothers

and later childbearers that are susceptible to short-term policy change. Such a change might be a successful pregnancy prevention program that addressed the full spectrum of closely linked factors—such as motivation, economic opportunities, and school quality issues—that contribute to the poor outcomes of early childbearers and that also may have contributed to the early childbearing. The hypothetical benefits of the policy are indicated by the Level 2 world in the figure. The contributing authors estimate the benefits of such a policy by comparing outcomes for adolescent moms with those for later childbearers, controlling statistically for factors not influenceable by the policy package (such as education of parents, race, cultural background, crime in the neighborhood).

Now, imagine that we had a highly effective, widely accepted, long-acting contraceptive that all sexually active teens used automatically, with no side effects, until they were 20 to 21. In this scenario, nothing else would change for the mother or her children except those things caused directly by the early childbearing. This comparison measures the consequence of adolescent childbearing itself. The benefits of such a policy are depicted for the Level 3 world in the figure.

The last comparison can be approximated by adding more statistical controls to the analysis, but it can only be made definitively if a comparison group is found that is like the young teen mothers in all respects, on average, except for the childbearing itself. The chapter assessing consequences for the mothers does this by using the subsequent experiences of teens who miscarry as a measure of what would have happened to the young teen moms if they had postponed childbearing. Miscarriages are generally considered to be close to random events that force a delay in the timing of the first birth but have no other major consequences. Without the miscarriage these women would have been young teen mothers. As a result of the miscarriage, all will experience a near random delay in childbearing, in many cases until the young women enter their twenties. The chapter on the likelihood of the children being incarcerated uses the fact that a woman who has more than one child is necessarily older when she gives birth to her second child, again allowing the analyst to separate the effect of early childbearing from the effects of other maternal characteristics. The difference between this impact and the larger impacts of the Level 1 and Level 2 worlds is attributable to factors *that will not go away simply by delaying the childbearing*.

### ***FINDINGS IN BRIEF***

The *Kids Having Kids* study consists of a background study of trends in teenage and adolescent childbearing and seven coordinated studies, each focusing on a particular dimension of adolescent childbearing. Each study is based on the best available data set to address that particular set of questions (shown in [table 1.1](#)). Each study also uses statistical analyses to control for a variety of non-pregnancy-related factors that might affect outcomes (shown in [table 1.2](#)).

### **Teen Pregnancy and Childbirth in the Larger Context of Social and Economic Change (Chapter 2)**

Although teen birth rates are much higher in the United States than in other developed countries, contrary to what many assume this does not represent a recent crisis. In fact,

the teen birth rate now is lower than 40 years ago. Nor is the difference between the United States and other developed countries the consequence of a more diverse population. Teen pregnancy rates for the white population are substantially higher in the United States than in European countries with comparable white populations. The major story, rather, is critical changes in the wider environment that make the implications of teen pregnancy and motherhood quite different from what they were a generation ago. Four, in particular, deserve emphasis.

The teenage population has been, and is again, increasing rapidly. Between 1950 and 1980, for example, it doubled (with adolescent females increasing from 5.3 million to 10.4 million and adolescent males increasing from the same base to 10.7 million). The numbers stayed about the same through the 1980s but are again increasing. During the decade of the 1990s, for example, the number of teen women is expected to increase by another million. Even if teen birth rates remain the same or fall, the number of children born to teen mothers will almost inevitably increase.

Changes in marriage rates and family structure have also affected the nature and consequences of teen pregnancy and childbirth. As the age of first marriage has risen, a greater proportion of teens remains unmarried. This carries the inevitable implication that births among teens are considerably more likely to occur outside marriage than in the past.

**Table 1.1**  
**STUDIES AND DATA SOURCES**

<b>STUDY</b>	<b>DATA SOURCE</b>
<i>Trends in Early Childbearing</i> (Susan W. McElroy and Kristen A. Moore) <sup>a</sup>	Vital Statistics: U.S. Bureau of the Census; various published reports
<i>Consequences for the Mothers</i> (V. Joseph Hotz, Susan W. McElroy, and Seth G. Sanders) <sup>a</sup>	National Longitudinal Survey of Youth (females ages 18 to 21 in 1979)
<i>Consequences for the Fathers</i> (Michael J. Brien and Robert J. Willis) <sup>a</sup>	National Longitudinal Survey of Youth (males age 27 in one year of the follow-up survey); 1989 National Maternal and Infant Health Survey (NMIHS), linked with Vital Statistics
<i>Consequences for the Offspring</i>	
<i>Lives as Children and Adolescents</i> (Kristen A. Moore, Donna R. Morrison, and Angela D. Greene) <sup>a</sup>	National Longitudinal Survey of Youth, 1990—Child Supplement (children ages 4 to 14); National Survey of Children, 1981 (children ages 12 to 16) and 1987 (children ages 18 to 22)
<i>Health and Medical Care</i> (Barbara Wolfe and Maria Perozek) <sup>a</sup>	1987 National Medical Care Expenditure Survey (children under age 14 with a mother under age 33)

<i>Child Abuse/Neglect and Foster Care</i> (Robert M. Goerge and Bong Joo Lee) <sup>a</sup>	Illinois Integrated Database on Children and Family Services; Illinois birth certificate data
<i>Incarceration</i> (Jeff Grogger) <sup>a</sup>	National Longitudinal Survey of Youth (males ages 27 through 34 in 1991)
<i>Success as Adults</i> (Robert Haveman, Barbara Wolfe, and Elaine Peterson) <sup>a</sup>	Panel Study of Income Dynamics (persons 0 to 6 years old in 1968 and surveyed each year through 1988)
<sup>a</sup> Study authors.	

**Table 1.2**  
**CONTROL VARIABLES USED IN THE ANALYSES**

	Consequences		Consequences for the Offspring				
	for the Mother	for the Father	Level of Children and Adolescents	Health and Medical Care	Abuse/Neglect and Foster Care Placement	Incarceration	Success as Adults
<b>Demographic Characteristics</b>							
Marital Status		X <sup>a</sup>		X			
Race/ethnicity	X	X <sup>a</sup>	X <sup>a</sup>	X	X	X	X
AFQT	X	X					
Child's age			X <sup>a</sup>	X <sup>a</sup>			
Birth Order				X	X	X	X
Mother's age at birth	X <sup>a</sup>	X <sup>a</sup>	X <sup>a</sup>	X <sup>a</sup>	X <sup>a</sup>	X <sup>b</sup>	X
<b>Family Background</b>							
Living arrangement as teen	X	X	X				X
Mother's education	X	X	X				X
Father's education	X	X					X
Mother's achievement test score							X
Family income	X						
Year lived in poverty							X
Mother in welfare/family in poverty	X						X
Religion		X					X
Number of children				X		X	
Have resources		X					
<b>Other</b>							
Region of residence		X		X	X	X	
Child's health			X				
Birth year					X	X	
State per capita spending on family planning							X
Neighborhood unemployment rate							X
State maximum welfare benefits							X
<small>a. Variable was used as a subgroup identifier.  b. Variable was used only in models that included controls for selection bias.</small>							

No Javascript? [Click here to see Table 1.2](#)

Women with young children are also increasingly likely to work outside the home, in part because of rising wages relative to men and in part because of increasing



educational levels among women. Single women are more likely to be in the labor force than married women, continuing a long-term trend. But among women with young children, participation rates are higher for married than for unmarried women—a difference that is widening over time.

Finally, because of structural changes in the economy, the employment and earnings potential of people with the least education have worsened.

The combination of these trends has led to two major consequences. The rising rate of out-of-wedlock childbearing and age of marriage has made it much more likely that teen mothers will have only their own earnings to support themselves and their children. And the stronger link between dropping out of school and unemployment, low wages, and poverty has put teen mothers at much greater risk of becoming dependent on welfare.

### **Consequences for the Mothers (Chapter 3)**

If young women who are "at risk" of becoming teen mothers are somehow convinced to delay their childbearing, how substantially would their life prospects be changed and how much would this affect what the government spends on cash welfare and food stamps for these women? The authors address this question using an innovative evaluation design in which teen women who miscarried become a comparison group for teen women who gave birth. This allows the effect of the birth itself to be separated from all other factors.

The descriptive statistics that begin the discussion confirm the evidence from previous research reviewed earlier that teen mothers do worse along many dimensions than mothers who delay childbearing. But analysis of the miscarriage data contradicts the conventional wisdom that these women would themselves be better off if they delayed their childbearing to a later age and nothing else changed.

Failure to delay childbearing significantly reduces the likelihood that a woman will ever obtain a high school diploma, according to the authors. But teen mothers are more likely to obtain a GED diploma. With respect to earnings, early childbearers, according to this study, start their labor market careers later, but tend to work more hours and earn more overall than comparable women who postponed childbearing as a result of a miscarriage. These results on earnings are paralleled by findings on welfare receipt. Although teen childbearers have a different pattern of cash welfare and food stamp receipt over time, they depend on welfare no more overall than do women who delay childbearing. The combined effects of teen childbearing on tax revenues from mothers' earnings, and on AFDC and food stamp benefits add up to a small net gain to the government.

The authors do identify some effects of early childbearing that are likely to have adverse consequences for teen mothers and their children. Most notably, because of their early childbearing teen mothers will spend a larger fraction of their life as a single mother than if they had delayed their childbearing. As the authors themselves note, "given that teen mothers have less formal education, work more hours, and are more likely to be and remain single parents than if they had delayed their childbearing, it is

natural to ask if the failure of these women to postpone parenthood may pose threats to the development and well-being of their children." The rest of *Kids Having Kids* examines the likely consequences of teen childbearing for the fathers and the children, including any public costs incurred as a result.

#### **Consequences for the Fathers (Chapter 4)**

This chapter distinguishes two perspectives when assessing the consequences of teen parenting for fathers. The first is the fathers' perspective: What are the consequences for men who father children when they are themselves teenagers? The second is the mothers' perspective: What resources are potentially available from their partners and how do these resources vary with the age at which the women become mothers?

Although men who have children as young teens begin their careers by having higher incomes and working more hours than those who delay, men who wait to have a child have higher levels of education, earn more, and work more hours by the time they reach their late 20s. The important question for policy is how much this difference has to do with differences in the characteristics of those who become young fathers and those who do not, and how much with the fact of the birth and whether the man takes responsibility for the child by marrying the mother.

The authors pursue answers to these questions with a series of statistical analyses designed to isolate the various influences at work. When differences in the characteristics of the fathers are taken into account, the authors find evidence of only modest effects of fathering a child in and of itself on the educational level and earnings trajectories of the fathers in later life. There does, however, seem to be a substantial "marriage penalty" for those who choose to take responsibility for their children by marrying the mother. Irrespective of their other characteristics, these men earn more by working substantially more hours than their counterparts with the same characteristics who do not accept responsibility for the child, suggesting that they work more in order to provide for the children they have chosen to support.

In examining the child support implications of early childbearing, the authors focus on the men who father the children of teen mothers, and how delayed childbearing would affect their earnings patterns during the first 18 years of those children's lives. This information is then used to estimate differences in the amount they would pay in child support (assuming full enforcement of Wisconsin's relatively generous child support system).

These fathers have little to provide in their early years, but their incomes, and therefore the potential amount of the child support payments, uniformly increase with the age of the woman at the child's birth. If a 17-year-old mother delayed childbearing until she reached the age of 20 to 21, for example, simulations suggest that she would receive almost \$200 a year more over the 18-year period following the child's birth. This assumes full enforcement of Wisconsin's child support obligations under both scenarios. If the comparison is between young teen childbearing and current enforcement versus delayed childbearing and full enforcement, of course, the additional child support would be substantially greater.

## **Consequences for the Lives of the Children (Chapter 5)**

To assess the effects of early childbearing on the children themselves, the authors of this chapter look at four types of outcomes: the quality of the home environment provided to the child; the child's cognitive development and educational attainment; physical and psychological well-being; and behavior problems and substance abuse. They consider these potential impacts for the children when young as well as when adolescents. And they examine whether firstborns fare differently from their siblings.

Their major findings are in the areas of home environment and cognitive and educational development. When the mother's background characteristics are controlled, the quality of the home environment (including both emotional support and cognitive stimulation) is over 4 points lower (on a normal scale where the mean is set at 100) for the offspring of young teen mothers than for children whose mothers were 20 to 21 at their birth. The children of young teen mothers also score lower in mathematics and reading recognition (4 points) and in reading comprehension (3 points) in the period up to age 14. These differences carry over into adolescence in the form of greater likelihood of repeating a grade and being rated unfavorably by teachers in high school. Birth order is not important. These deficits are found for subsequent children as well as the firstborn children of young teen mothers.

## **Children's Health and Medical Outcomes and Costs (Chapter 6)**

This chapter compares the health of the children of teen mothers from birth to age 14 with the health of children of the same age born to nonteen mothers. Health measures include whether or not the children are in excellent health, whether or not they are in fair to poor health, whether they have an acute condition, and whether they have a chronic condition.

The overall proportion of children reported to be in excellent health is substantially greater for the offspring of nonteen mothers than for the offspring of young teen mothers. The children of nonteen mothers are also somewhat less likely to be reported as in fair or poor health. The children of nonteen mothers are more likely, however, to have a reported acute or chronic condition than the children of young teen mothers.

A wide range of measures of medical care utilization also are explored in this chapter, including visits to doctors, clinics, and emergency rooms, and hospital stays. Except for emergency room visits, of which there is greater use by the infants of teen mothers than by other groups, all indicators of utilization show that the children of nonteen mothers have higher utilization rates. (The earlier finding that the children of nonteen mothers have more acute and more chronic conditions than the children of young teen mothers may be reflecting these utilization differences at least in part.)

How do these utilization differences translate into sources of payment and costs of care? Children of nonteen mothers have more of their care paid for directly by their families (47 percent versus 38 percent) and by private insurance (32 percent versus 16 percent). In sharp contrast, much more of the care of young teen parents was paid for by public sources (49 percent versus 20 percent). Consistent with these findings, the costs of medical care were greater for the children of nonteen mothers than for young

teen mothers, but the amount paid by other members of society was greater for children born to young teen mothers than for children born to nonteen mothers.

To better isolate the impact of having a mother who first gave birth as a teen, the analysts also provide estimates that control for a variety of factors that can be expected to have independent effects on medical care use and costs. The multivariate findings confirm that the children of young teen mothers are much less likely to have excellent health than the children of nonteen mothers, a finding that extends beyond the firstborns to later children in the family.

If a mother who was younger than 18 at her first birth were to postpone childbearing until after age 21, according to simulations by the authors based on their multivariate results, she would use more medical care on behalf of her children and the costs of her children's care would increase. But the expenses paid by others for the care of her children would decrease by almost 50 percent—a large enough reduction to imply an absolute reduction in the amount others would have to pay for her children's medical care. These simulations, it should be noted, are based on the assumption that current teen mothers would "act" like older mothers, not only in their fertility behavior but also in the education attainment, earnings, and insurance.

### **Abuse and Neglect of the Children (Chapter 7)**

This chapter uses Illinois state records to assess the impact of teen childbearing on child abuse and neglect cases and foster care placement. This is one of the few data bases that provides detailed family information. In addition, the overall demographic characteristics of the Illinois child population are very comparable with those of those of the population in the nation.

The authors' descriptive statistics indicate that children born to young teen mothers are much more likely to be indicated victims of abuse and neglect than those born to nonteen mothers. And new families in which the mother's age was under 18 at the time of first birth are also much more likely to become an indicated case of child abuse and neglect than other families. The unadjusted data also show that once a child is in foster care, the duration of the foster care placement is higher for children of young teen mothers than for other children.

When birth order is controlled, it becomes apparent that subsequent children of mothers who bore their first child as a young teen are considerably more likely to be victims of abuse and neglect than the firstborns of those mothers. When other demographic factors are also controlled, the size of the differences between the children of young teen mothers and the children of nonteen mothers is reduced, but the children of young teens are still considerably more likely than the children of nonteens to be victims of abuse and neglect and to be placed in foster care. The duration of time in foster care is no longer significantly different for the two groups, however.

As can be expected given these results, simulations of the costs of abuse/neglect and foster care placement indicate that society would reap substantial savings if childbearing could be delayed. If women now bearing children at age 17 or younger delayed childbearing until at least ages 20 to 21, the annual savings in foster care

nationwide could reach about \$1 billion. A similar delay could reduce the costs of abuse/neglect investigations by almost \$100 million a year. The causal chain leading to incidents of reported abuse and neglect and to foster care placement is as yet unclear, however. These simulations assume that a policy that leads to childbirth delays will also ameliorate whatever it is that leads to child abuse/neglect and foster care placement,

### **The Children's Risk of Incarceration (Chapter 8)**

This chapter begins by presenting descriptive statistics showing that the children of young teen mothers are almost three times as likely to be behind bars at some point in their adolescence or early 20s as are the children of mothers who delayed childbearing. When the analysis controls for a number of important background factors the link between young teen childbearing and incarceration remains, although the extent of the difference is greatly reduced.

In a further effort to tease out the effect of teen childbearing per se, the author takes a novel approach to controlling for unobservable characteristics of the mother that may be correlated with her early age at first birth. He uses a comparison group consisting of the subsequent children of mothers who first gave birth as a young teen. The mothers are the same. They are simply older. The link between young teen childbearing and higher incarceration rates among the offspring remains, although its magnitude is further reduced.

On the basis of this last comparison, the author performs a series of simulations to assess the expected savings from the reduced risk of incarceration implied by postponing the age of first childbirth. The savings are considerable. If young teens delayed their first childbirth until ages 20 or 21, their child's risk of incarceration would fall by an estimated 12 percent and the correction costs incurred by more than \$900 million. These savings almost certainly understate the full crime-related costs of early childbearing. They also represent only a fraction of the correctional costs currently incurred by the sons of young teen mothers. This is because the age of the mother has less of an effect on delinquency than other differences in the circumstances facing the children of young teen versus nonteen mothers.

### **The Life Chances of the Children (Chapter 9)**

Does having a young teen mother affect the chances of her children having a successful adulthood? This is the question to which the authors of this chapter seek an answer. They measure success along four dimensions for which data were gathered when the children were in their mid-20s: graduating from high school, not giving birth as a teen, not giving birth as an unmarried teen, and being economically active (specified as certain combinations of educational activity, or working outside the home, and/or parenting a preschooler).

The authors approach this task in three stages. First, they estimate the gross differences between the success of the two groups of children as young adults. Then, they add controls to adjust for the influence of background and personal characteristics of the mother. Finally, they add controls to adjust for aspects of the state/local policy environment that might influence children's choices in adolescence.

The gross differences indicate that being a child of a young teen mother substantially reduces the chances of success as a young adult educationally, economically, and in terms of family formation. When mothers' characteristics are controlled, the children of teen mothers are still less likely to succeed along all four dimensions, although the differences between the children of young teens and nonteens are smaller. Introducing the policy variables again shrinks but still does not remove the difference in the chances of success between the two groups of children.

These multivariate findings suggest that, even given the differences in the mothers' characteristics and the policy environment in which the children were raised, delaying childbearing from ages 16 to 17 until ages 20 to 21 would increase the probability that the children would graduate from high school by about 9 percent. The probability of the daughters giving birth as a teen would drop by about 22 percent. The probability that the daughters would give birth out of wedlock as a teen would fall by about 10 percent. And the probability of being economically inactive as young adults would decrease by about 19 percent.

### **Adding Up the Costs (Chapter 10)**

The purpose of the final chapter in the book is to develop, from the separate components of the picture provided by the contributing authors, an overall sense of the range of savings that could be achieved if public policy interventions were able to prevent young teens from having children until they were age 20 or 21. Previous attempts to estimate the costs of early childbearing have focused rather narrowly on public welfare costs. The range of outcomes examined in the *Kids Having Kids* studies allows a much broader perspective.

Deriving a more comprehensive set of cost estimates is an extremely complex enterprise, however. Because of data limitations and methodology differences among the component studies, as well as a whole variety of assumptions that always have to be made in order to build a comprehensive cost picture, there is no "best" answer to the cost question. Therefore, this chapter first provides "baseline" cost estimates that combine the impacts as estimated by the contributing authors with only a minimum set of assumptions necessary to fit them into a cost-accounting framework. It then provides an additional range of estimates that illustrate how the findings change as assumptions underlying the separate analyses are altered.

For the baseline estimates as well as for the sensitivity analysis, two policy scenarios are costed out. The first, which yields lower bound savings estimates, is that policy intervention succeeds in delaying childbearing until the mother is age 20 to 21 but makes no other changes to the wider environment. The second, which yields higher estimated savings, assumes that the policy that is successful in postponing the age of the first childbirth also addresses the maximum set of policy-influenceable factors that lead to poor outcomes (such as motivation, educational opportunities, and various social and economic support needs).

*Baseline Estimates.* The lower bound estimates indicate that early childbearing alone costs U.S. taxpayers nearly \$7 billion annually for social services and forgone tax revenues. The upper bound estimates indicate that taxpayers potentially could save as

much as \$15 billion annually if they were successful in both preventing young teen childbearing and addressing many of the other problems that contribute to the poor outcomes observed for teen parents. The record of interventions to date, however, suggests that even strong policies may leave us closer to the lower bound estimates than to this higher figure.

The costs of society are about twice the costs to taxpayers—an estimated \$15 billion a year due to early childbearing itself, and up to \$30 billion a year if all the risk factors amenable to policy influence were successfully eliminated.

This study indicates that the economic welfare of the teens would not be greatly affected by policies that prompted them to delay childbearing. Policies that delayed their childbearing but changed nothing else would in fact leave the teens with about \$850 a year less income. If they simultaneously addressed the maximum set of related disadvantages that conceivably could be affected by policy, the young women could find themselves with roughly \$1,000 more income annually during their early parenting years.

*Sensitivity Analysis.* The sensitivity analysis experimented with six different assumptions. The first reflects experts' disagreements about the estimated effect of early parenting on the mothers' earnings and welfare receipt and assumes the mothers lose more than in the baseline estimates. The second assumes that early parenting makes no difference to the income available to the mothers from a resident spouse. The third cuts in half the measured effect on fathers' earnings from delayed parenting by the mothers. The fourth adds an estimate of criminal justice costs over and above those associated with incarceration. The fifth adds an estimate for child welfare costs in addition to those for foster care. The sixth ignores the estimated long-term gains to the children being born to older mothers.

Combining the assumptions included in the sensitivity analysis in various ways, not surprisingly, produces a wider range of estimated savings. The lower bound costs borne by taxpayers range from 12 percent below to 32 percent above the \$7 billion a year baseline estimate. The lower bound costs to society range from 24 percent below to 15 percent above the \$15 billion a year baseline estimate.

*The Basic Message.* The cost chapter provides a good summary of the book's basic message. The economic costs for the mothers of early childbearing are small to nonexistent. Rather, the consequences for them are nonmonetary and often not observable for several years following their first birth. Young teen mothers are much less likely to complete high school, spend more of their early years of parenthood single, and have their children over a somewhat shorter period of time. During their children's elementary and middle school years, early child bearers also spend slightly more time out of the home and in the labor force than if they had delayed childbearing. So too, they create less supportive home environments for their children.

What is unambiguously clear—from both the cost analysis and from the companion studies reported earlier in the book—is that young teen childbearing has significant adverse consequences for the children and that these consequences are costing taxpayers and society enough to merit close policy attention.

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