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## Educational Attainment, Employment, and the Benefits of Birth Control in America

Pregnancy planning in general, and the use of birth control in particular, are directly linked to a wide array of benefits to women, men, children, and society, including fewer unplanned pregnancies and abortions, more educational and economic opportunities for young women, improved maternal and infant health, greater family wellbeing, and reduced public spending.

Given that the large majority of both men and women are sexually active (for example, more than three-quarters of young adults age 18 to 24 have had sex in the past 12 months<sup>1</sup>), birth control is central to realizing these benefits. In fact, the Centers for Disease Control and Prevention (CDC) recognizes the development of modern contraception as one of the 10 greatest public health achievements of the 20<sup>th</sup> century.<sup>2</sup>

Nonetheless, the United States has long reported high levels of unplanned pregnancy<sup>3</sup> and very uneven use of contraception. For example, even though most unmarried women in their 20s say they don't want to get pregnant and despite the availability of many forms of birth control—including some that are highly effective—only half of those who are sexually active report using reliable contraception consistently.<sup>3</sup> Unplanned pregnancy is nearly 100 percent preventable, yet...

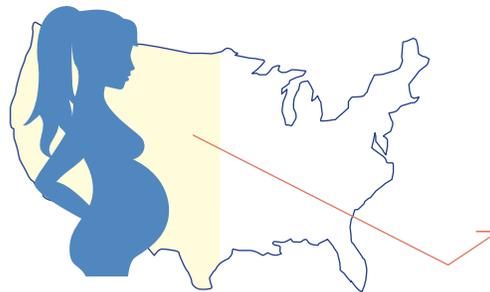
- Roughly half of all pregnancies in the United States are reported by women to be unplanned—that is, a pregnancy that a woman herself said she was not intending or actively trying to achieve.<sup>4</sup>
- Among unmarried young women age 20 to 29, the percentage of pregnancies that they report as being unplanned is nearly 70%. This totaled roughly 1.3 million unplanned pregnancies in 2008 alone, and unplanned pregnancy among young adults has been trending up for the past few years, not down.
- Nearly half (44%) of unplanned pregnancies among unmarried young women result in an abortion, leading to nearly 600,000 abortions each year.
- In addition, unplanned pregnancy is responsible for more than half of all births to unmarried women in their twenties, or more than 500,000 births each year<sup>5</sup>
- Women using birth control carefully and consistently account for only 5% of all unplanned pregnancies.<sup>6</sup>

### Advancements in Women's Education and Employment

Since the early 1970s, women's educational attainment and labor market participation have increased dramatically:

- Between 1970 and 2012, the proportion of women 25 and older with at least a high school diploma increased from 55% to 88%, and the proportion with at least a bachelor's degree increased from 8% to 31%.<sup>7</sup>
- Over roughly that same period, the percent of women age 16 and older who were employed increased from 41% to 53%.<sup>8</sup>
- Wages for working women age 25 and older also increased during this period by roughly 40%, net of inflation.<sup>9</sup>

Because modern contraception can help young women time when they become parents, it can enable them to complete their education before starting a family and, in turn, improve the employment and financial prospects of themselves and their families. To be sure, the evidence is imperfect—we do not have randomized trials of women with and without access to contraception, or even recent examples of large comparison groups who have little or no access, especially here in the United States. Even so, the weight of the evidence across numerous studies shows significant employment and educational gains have followed directly from women's ability to better time their entry into parenthood, and that the availability of contraception has played a clear role in such progress, even after netting out the influence of other characteristics.



**Roughly half of all pregnancies in the US are reported by women themselves as unplanned.**

The wage gains associated with pregnancy planning and prevention extend across the socioeconomic spectrum.



For young adults, even modest increases in the availability of contraception lead to significant and lasting educational and employment gains for women.

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## The Benefits of Timing Entry Into Parenthood

Women's growing success in both education and employment has clearly depended to some degree on being able to postpone first births until after completing their education and/or gaining a foothold in the labor market.

- Since 1970 the mean age at which women first had a child increased from 21 to 26 years of age<sup>10</sup> while the share of first-time mothers with more than 12 years of education increased from 26% to 52% (measured through 2003, the most recent year for which we have comparable data on educational attainment).<sup>11</sup>
- Economists find that women do significantly better in the labor market when they can better time their entry into parenthood.<sup>12</sup> Recent research suggests a 3% increase in weekly wages and a 9% increase in career earnings *for each year of delayed childbearing*, even after accounting for differences in other background characteristics that could affect women's earnings.<sup>13</sup>
- Furthermore, this wage premium extends across the socioeconomic spectrum. Women from many parts of the working world who chose to delay childbearing—those in managerial, clerical, and service occupations—experience wage gains from delays in

childbearing, as did those whose high school aptitude scores fell into the lower, middle, and upper percentiles, though gains were smaller among those with lower scores.<sup>14</sup>

- Naturally, a woman's prospects in the labor market and her decision about when to become a parent are intertwined—women who delay parenthood may tend to be those who have a greater stake in or connection to the labor market. Results that try to control for such differences by focusing strictly on more *random delays* in parenthood (for example delays resulting from miscarriages) find smaller benefits of delay (though still significant) and find that the benefits are limited to more advantaged women.<sup>15</sup>
- However, using contraception to better time when one becomes a parent is hardly a random event, and results based on miscarriages do not necessarily reflect the potential benefits of delaying parenthood *among women seeking to do so*. For these women, the balance of the research suggests significant benefits of being able to time entry into parenthood.

## The Role of Family Planning

The majority of young adults are sexually active. Consequently, contraception is central to women's ability to control when they become parents, and to the educational and employment benefits they experience as a result. It is difficult to estimate the full impact of family planning on education and employment

because we have no comparison group to illustrate what life would be like in the absence of access to contraception, at least here in the United States. Most of the available evidence focuses on a unique moment in history primarily during the late 1960s and early 1970s when access to the pill was expanding incrementally across states. (In particular, over that time period, more and more states were allowing unmarried women access to the pill at age 18 instead of at age 21, through changes in age of majority and consent laws.<sup>16</sup>) Numerous studies have found that even this modest increase in the availability of contraception during young adulthood led to significant and lasting educational and employment gains among women. Specifically, the most recent studies find that:

- Women with early access to the pill during this period were significantly more likely to enroll in college—an estimated 10% to 20% more women enrolled in college at age 21 as a result of expanded access to the pill, net of other factors, explaining up to one-third of the increase in young women's college enrollment during the 1970s. They were also one-third less likely to drop out within the first year. Similarly, enrollment in job training programs was 15% higher.<sup>17</sup>
- After reaching age 21, all unmarried women had legal access to the pill, so it is not surprising that the educational attainment gap narrowed later in life. Once unmarried women reached age 30 or older, early access to the pill was significantly associated with an estimated 2% to 3% increase in the proportion of women holding four-year

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Birth control helps women time when they become parents, complete their education, and improve the financial and employment prospects of themselves and their families.



The proportion of women graduating high school and college increased dramatically since access to birth control pills expanded.

degrees, net of other factors.<sup>18</sup> Even so, it is noteworthy that expanding pill access by just a few years in early adulthood led to significant improvements in women's educational attainment that persisted into one's thirties and beyond.

- The educational benefits of early pill access are not limited to women from advantaged economic circumstances—in fact, it was women from the most economically *disadvantaged* backgrounds who experienced the largest gains in education.<sup>19</sup> It should also be noted, however, that gains in education were limited to women with high school aptitude scores in the middle or upper range—those with scores in the lowest range did not experience educational gains due to early pill access.
- Given these advancements in education, it is not surprising that early pill access is also associated with a growing share of women in professional occupations and especially nontraditional professions (those other than nursing and teaching).<sup>20</sup> In fact one study estimated that increased availability of the pill was responsible for roughly one-third of the increase in professional employment among women between 1970 and 1990.<sup>21</sup>
- More broadly, research shows significant increases in employment and wages among women who had early access to the pill, though these

benefits typically didn't show up until later in life, presumably because many of these women initially delayed entry into the labor force in order to pursue more education.

- By their early forties, working women who had early pill access earned 11% more each year compared to working women who didn't, all else being equal.<sup>22</sup>
- These benefits extended to women with high school aptitude scores in both the middle and upper tiers, but not to women with aptitude scores in the lowest tier.<sup>23</sup>

## What It All Means

**Bottom line: The capacity to plan and space pregnancies—which is typically achieved through the use of birth control—has significant and meaningful benefits for women, children, families, taxpayers, and more.**<sup>24</sup> Pregnancy planning increases the overall educational status of women and communities; it advances the health and wellbeing of children and families; it saves money; and it reduces abortion. As such, birth control deserves widespread support, expressed in a number of ways including minimal cost and access barriers, a prominent place in public health priorities and health care services, and broad political support.

But it is also true that for the most disadvantaged women and communities, the widespread use of birth control

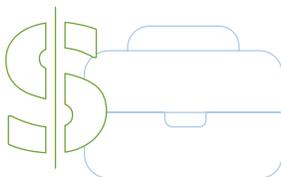
alone is not a panacea. For these women and communities, realizing the full benefit of pregnancy planning, spacing, and prevention also requires additional efforts to promote educational attainment, better schools, stronger families, economic opportunities, job readiness, and more. Put another way, birth control alone cannot solve crushing poverty, but it can open the door to increased opportunity.

## Notes

<sup>a</sup> Unplanned pregnancy (also known as unintended pregnancy) refers to a pregnancy that a woman herself reports was not intended at the time of conception. Unplanned pregnancy includes both mistimed pregnancies (that is, the woman reported she did not want to become pregnant at the time the pregnancy occurred but did want to become pregnant at some point in the future) as well as unwanted pregnancies (that is, the woman reported at time of conception that she did not want to become pregnant then or at any time in the future). Many studies summarized here report the effects of unplanned pregnancy overall, while some focus specifically on either unwanted or mistimed pregnancies, as noted previously.

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**Pregnancy timing matters: There is a 3% increase in weekly wages and a 9% increase in career earnings for each year of delayed childbearing.**



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