The Weakening Link: The Sequencing and Timing of First Sex, First Marriage, and First Births Among Women in the United States

Gladys Martinez National Center for Health Statistics <u>gmm7@cdc.gov</u>

Casey Copen National Center for Health Statistics <u>ibx7@cdc.gov</u>

** NOTE FOR THE PAA SESSION ORGANIZER **

The analyses in this submission are based on the 2006–2008 National Survey of Family Growth (NSFG). The full four-year file of the NSFG (2006–2010) is expected to be released within one to two months. We will use the full 4-year file for the presentation if the paper is accepted.

Abstract

Using data from the 1988, 1995, 2002 and 2006-2008 National Survey of Family Growth, we examine the sequencing patterns of first sexual intercourse, first marriage and first birth and how these patterns have changed over time, focusing specifically on race differentials. For non-Hispanic black women in 1988, the most common sequencing used to be premarital sex followed by marriage (28%) but in 2006-2008, the most common pathway was premarital sex followed by a premarital birth (32%). We plan to use a series of logistic regression models to explore the demographic characteristics, contraceptive use, and intendedness of births among women who have had a premarital first birth, and among women who have not had a birth. These models will shed light on the factors that influence the transition to marriage among women.

Introduction

Family life in the United States has undergone rapid changes as noted by decreased age at first sexual intercourse, delayed or forgone marriage and increases in nonmarital childbearing. While in the 1950's the majority of childbearing occurred within marriage, in the last several decades childbearing has been increasingly decoupled from marriage for large segments of the population. The increase in nonmarital births, as well as an increase in the age at first marriage, suggests the linkage between marriage and childbearing in the U.S. is weakening or may have been replaced by a new 'normative' sequence. Rather than just one normative path, there are multiple pathways to parenthood. A large body of literature has explored the determinants and variation in the rise in nonmarital childbearing over the last several decades (Smock, 2010; Santelli, 2009). This paper contributes to the literature by exploring racial differences and trends over time in the linkage between the timing of first sex, first marriage, and first births. We focus not only on the marital status of the first birth but also on the different paths women experienced from the time they became sexually active.

A trend that has been relatively consistent across race and ethnic groups is the decline in the age at first sexual intercourse over time. Since the mid-1950's, women's age at first sex declined until roughly the late 1980's after which there was a plateau (Abma et al., 1997, Abma et al., 2004, Chandra et al., 2005). Concurrent with this trend is the increase in the proportion of teenagers engaging in premarital sexual intercourse (Santelli, 2010). According to data from the 2006-2008 National Survey of Family Growth (NSFG), 75% of never-married women had had sex by age 20. These data suggest that premarital sex is very common; the increased tolerance for premarital sex is reflected in people's attitudes towards sexual activity outside of marriage. About 60% of women and 68% of men in the U.S. aged 15-44 agreed or strongly agreed with the statement, "it is all right for unmarried 18 year olds to have sexual relations if they have strong affection for each other" (Abma et al., 2010).

Alongside the decrease in the age at first sex, the median age at first marriage continues to rise. The median age at first marriage increased to 26 years for women and 28 years for men in 2010 (U.S. Census Bureau, 2010). The increase in nonmarital cohabitation has largely contributed to the decline in the proportion of people's lives spent in marriage (Bumpass et al, 1991). As a result of sexual intercourse occurring earlier, marriage occurring later in the life course, and increases in cohabiting unions, the period of time women are at risk of a nonmarital birth has increased. Increases in contraceptive use have allowed women the ability to be sexually active for a longer period of time without having a birth. Recent data from the 2006-2008 NSFG shows that more women are using a method at first sex and a higher proportion of sexually active teenagers are using more effective methods of contraception at last sex, such as oral contraceptives and other hormonal methods (Mosher & Jones, 2010; Abma, et al., 2010).

There is considerable variation in childbearing patterns by race and ethnicity. There has not only been an increase in the births taking place outside of marriage – most often in

cohabiting unions – but also an increase in the proportion of nonmarital births that are wanted, or intended (Smock, 2010). This paper uses data from four rounds of the NSFG to explore the sequencing of first sex, first marriage, and first birth among U.S women 15-44 years of age. Socio-demographic variation in these sequencing patterns, including differences by race and ethnicity, nativity (among Hispanics), education, contraceptive use, and birth intentions are explored.

Research Questions

This paper will address the following research questions:

- 1) How do the timing and sequencing of first sex, first marriage and first births vary by Hispanic origin and race?
- 2) What are the characteristics that distinguish women who marry after having a premarital birth from women who have a premarital birth who do not go on to marry?
- 3) What characteristics are associated with whether future births are intended among sexually active married and unmarried women who have never had a birth?

Data

The data used in this analysis comes from the 1988, 1995, 2002, and the 2006-2008 National Survey of Family Growth conducted by the National Center for Health Statistics. Data were collected through in-person interviews of a nationally representative sample of the household population 15 to 44 years of age in the United States. The sample for the NSFG was based on 8,450 women in 1988, 10,847 women in 1995, 7,643 women in 2002 and 7,356 women in 2006-2008. The overall response rate for the 2006-2008 NSFG was 75%.

Preliminary Findings

Figure 1 shows the sequencing of first sexual intercourse, first marriage, and first birth among women who had ever had sexual intercourse using the 1988, 1995, 2002 and 2006-2008 NSFG. Among these women, the most common sequencing of events was premarital first sexual intercourse followed by marriage: 48% in 1988, 44% of women in 2002 and 35% in 2006-2008. The second most common path was premarital sexual intercourse followed by neither baby nor marriage: 22% of women in 1988 and 2002, and 20% of women in 2006-2008. On average, women who have had premarital sex but had not gotten married nor had a birth were younger than age 25 (67%) and among those who had sex in the last 3 months, 51% had used a condom and 39% had used an oral contraceptive at their last sexual intercourse. Interestingly, one-fifth of women in this group had used an emergency contraceptive method, such as Plan B, suggesting that a sizable proportion of this group have had unprotected or sex with less effective methods, and are at increased risk of unintended pregnancies.

Insert Figure 1 here

In 2006-2008, there were large race differences in the sequencing of first sex, births and marriage. For Hispanic and non-Hispanic white women the most common sequencing of events was premarital sex followed by marriage: 49% among whites and 31% among Hispanics. For non-Hispanic black women, in 1988 the most common sequencing used to be premarital sex followed by marriage (28%), but in 2006-2008, the most common pathway was premarital sexual intercourse followed by a nonmarital birth (32%). Vital statistics data provides additional evidence in the differentials in nonmarital childbearing by race and ethnicity. The percent of all births that are to unmarried women was 29% for non-Hispanic whites, 53% for Hispanics, and 73% for non-Hispanic black women in 2009 (Hamilton, et al., 2010).

Figure 2 shows the long-term trend in age at initiation of sexual activity: the earliest cohort of women represented in the graph reached age 15 in the 1980s and the most recent cohort of women reached age 15 in 2006-2008. As expected, we see a clear increase in the cumulative proportion of women who were sexually experienced (had sex at least once) at each age from 15 to 30 from 1988 to 2006-2008. For example, in 1988, 44% of women 18 or older had had sexual intercourse (after menarche) by age 18 compared to 53% of women in 2006-2008. By age 30, virtually all women had had sexual intercourse, regardless of whether they ever married.

Insert Figure 2 here

Concurrent with growing proportions of women who have initiated intercourse through the teen years and beyond, there have been increases in the proportion of women at each age who have never been married. While in 1988 31% of women had their first marriage by age 20, by 2006-2008 only 13 percent of women were married by this age. In addition, there is a growing proportion of women who do not marry at all. In 1988, 71% of women had had sex by age 20 and only 31% had married– a difference of 40 percentage points. In 2006-2008, 74% of women had had sex by age 20 and only 13% had ever been married by this age– a difference of 63 percentage points. Thus, there is a growing gap between timing of first sex and timing of first marriage.

Preliminary conclusions using 2006-2008 show that a women's level of education, the context of her childhood (living with both parents and whether her parents were married at her birth), and her cultural background (i.e., Hispanic origin and race) influence the way that women transition into first sex, first marriage, and first births. The declining age at first sex and increase in the age at first marriage has given way to an increase in the risk of nonmarital births. However, women today have an increasingly diverse set of contraceptive choices. These changes suggest greater flexibility in timing and sequencing of the life course transitions among young adults. Data from the newest round of the 2006-2010 NSFG will shed light on the multiple realities of early fertility, such as those experienced by women who have a premarital birth. Special attention will be paid to the differences among racial and ethnic groups and how

the timing and sequencing of these life transitions have changed over time. <u>Analytic Plan</u>

This paper has three goals. First, we want to describe the sequencing and timing of first sex, first marriage and first births by race and ethnicity, as shown in Figures 1 and 2. In the full paper, we will be including tables on the interval between first sex and first marriage to also show the length of time that sexually experienced adults are at risk of a premarital birth and how this varies by race and ethnicity.

Our second goal is to use logistic regression to predict the odds of marrying among never-married women whose first birth was nonmarital. These models will include variables on the interval of time she was sexually active (e.g. time from sexual initiation to the first birth), contraceptive use, birth intentions and other demographic characteristics, such as the respondent's family background, race/ethnicity and nativity (among Hispanics). These analyses will shed light on the question: Why do some women marry after a nonmarital birth while others do not? Special attention will be paid to understanding how the factors to legitimize non-marital births have changed since the mid-1980's.

Third, we will use multivariate regression models to explore how fertility intentions vary by the demographic characteristics and contraceptive use among two groups of women: 1) women who are sexually active, unmarried and childless; and 2) women who are married and childless. The fertility intentions of sexually active women who are unmarried are important because these intentions, even among teenage women, are highly predictive of their fertility behaviors (Barber, 2001). The fertility intentions of married women are also important because these women are more likely to meet their fertility intentions than are unmarried women (Schoen et al, 1999). These models will provide more detailed information on the demographic characteristics and contraceptive use behaviors among these two groups of women in the 2006-2010 NSFG. The marriage and fertility histories in the NSFG are an ideal resource to examine the timing and sequencing of these important life transitions among American women and how these patterns have changed over time.

References

Abma J, Chandra A, Mosher W, Peterson L, Piccinino L. Fertility, family planning, and women's health: New data from the 1995 National Survey of Family Growth. Vital Health Stat 23(19). National Center for Health Statistics. 1997.

Abma J, Martinez G, Mosher W, Dawson B. Teenagers in the United States: Sexual activity, contraceptive use, and childbearing, 2002. Vital Health Stat 23(24). National Center for Health Statistics. 2004.

Abma JC, Martinez GM, Copen CE. Teenagers in the United States: Sexual activity, contraceptive use, and childbearing, National Survey of Family Growth 2006–2008. National Center for Health Statistics. Vital Health Stat 23(30). 2010.

Barber, JS. Ideational influences on the transition to parenthood: Attitudes toward childbearing and competing alternatives.

Bumpass LL, Sweet JA, Cherlin A. The role of cohabitation in declining rates of marriage. Journal of Marriage and Family 53(4):913-27. 1991.

Chandra A., Martinez G., Mosher W., Abma J., Jones J. Fertility, Family Planning, and Reproductive Health of U.S. Women: Data from the 2002 National Survey of Family Growth. Vital Health Stat 23(25). National Center for Health Statistics. 2005.

Hamilton BE, Martin JA, Ventura SJ. Births: Preliminary data for 2009 [online]. National vital statistics reports; vol 59 no 3. National Center for Health Statistics. 2010.

Mosher WD, Jones J. Use of contraception in the United States: 1982–2008. National Center for Health Statistics. Vital Health Stat 23(29). 2010.

Santelli JS, Orr M, Lindberg LD, Diaz DC. Changing behavioral risk for pregnancy among high school students in the United States: 1991 – 2007. Journal of Adolescent Health. 45(1): 25-32. 2009.

Santelli, JS, Melnikas, AJ. Teen fertility in transition: Recent and Historic Trends in the United States. Annual Review of Public Health. 31: 371-383. 2010.

Schoen, R, Astone, NM, Kim, YJ, Nathanson, CA, Fields, J. Do fertility intentions affect fertility behavior? Journal of Marriage and Family. 61: 790-799.

Smock PJ, Greenland FR. Diversity in pathways to parenthood: Patterns, implications and emerging research directions. Journal of Marriage and Family. 72: 576-593. 2010.

U.S. Census Bureau, Current Population Survey. Estimated median age at first marriage, by sex: 1890 to the present. March and Annual Social and Economic Supplements, 2010 and earlier. Available from: <u>http://www.census.gov/population/socdemo/hh-fam/ms2.xls</u> 2010.

Figure 1. Distribution of the sequencing of events for women aged 15-44 among women who ever had sexual intercourse, by Hispanic origin and race: United States 1988, 1995, 2002, and 2006-08.



Note: Category sex-baby includes women who had premarital sex and a premarital birth but did not go on to get married. The category sex-marr Includes women who had premarital sex and then married regardless of whether or not they went on to have a baby within the marriage.

Figure 2. Cumulative percent of women* whose first marriage and first sex was before each specific age: United States 1988 and 2006-2008



Denominator for each percent includes only those having reached the specified age to which the percent pertains. Universe is all women ages 15-44.

Source: National Survey of Family Growth, 1988 and 2006-2008