Characteristics of Women Who Use Long-Acting Reversible Contraceptive Methods in the United States

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Abstract

Objective: To examine characteristics of U.S. women that are associated with use of long-acting reversible contraception and changes in these characteristics between 2002 and 2006–2008.

Methods: We analyzed data from two nationally representative samples of women aged 15–44 in the National Survey of Family Growth, including 7,643 women in 2002 and 7,356 women in 2006–2008. We conducted simple and multinomial logistic regression analyses to identify demographic and reproductive health characteristics associated with use of long-acting reversible contraception.

Results: Long-acting reversible contraception use among U.S. women using contraception increased from 2.4% in 2002 to 5.6% in 2006–2008. The largest increases in long-acting reversible contraception use during this time occurred among the youngest and oldest age groups, non-Hispanic white and non-Hispanic black women, foreign-born women, and those in the highest income group. High prevalence of long-acting reversible contraception use in 2006–2008 was seen among women who had given birth once or twice (10%), foreign-born women (8.8%) and Hispanic women (8.4%). After adjusting for key demographic and reproductive health characteristics, in comparisons to users of other contraceptive methods, and to those not using contraception who were at risk of unintended pregnancy, foreign-born women and women who experienced coitarche before age 18 were about twice as likely to be using long-acting reversible contraception as women without those characteristics.

Conclusion: A more diverse population of women used long-acting reversible contraception in 2006–2008 compared to 2002. However, there is likely more potential for increased uptake, especially among populations historically not considered to be candidates for these methods.

Introduction

Nearly half of all pregnancies occurring in the United States are unintended, totaling approximately 3.1 million per year (1) . Though half of all unintended pregnancies (52%) are attributable to nonuse of contraception, 43% are the outcome of inconsistent or incorrect method use (2;3). While the United States has a range of reversible methods available, many women continue to rely on less effective options. Indeed, about 80% of U.S. women using reversible methods use only three strategies: the pill, condoms, and withdrawal (4). With typical use, these methods can produce failure rates of up to 18% during the first year of use (5;6). In contrast, long-acting reversible contraception — specifically intrauterine devices (IUDs) and implants — have typical failure rates of 1% or less, primarily because of their low dependence on individual compliance (5;6). In 2002, only 1.3% of U.S. women ages 15-44 were using an IUD (7), a rate among the lowest of any developed country (8;9). This low utilization of available long-acting reversible contraceptive methods may contribute to high levels of unintended pregnancy in the United States.

The typical U.S. woman wants only two children; to achieve that goal, she must use contraception for approximately 30 years (2). The historical shift towards postponing and limiting childbearing in developed countries has increased the amount of time in women's lives during which they are at risk of unintended pregnancy. Therefore, methods that are effective over longer periods of time, specifically long-acting reversible contraception, would appear well-suited to serve these needs. Between 1995 and 2002, IUD use increased only slightly, from 0.5% to 1.3% (4). Using the most recent national data available, we examine current levels of use of long-acting reversible contraception, and changes in prevalence and correlates of use between

2002 and 2006–2008. We also identify specific populations of women who may benefit from efforts to increase use of these methods.

Materials and Methods

The data for this analysis are from the 2002 and 2006–2008 rounds of the National Survey of Family Growth. Nationally representative samples of 7,643 and 7,356 women aged 15–44 were interviewed in 2002 and in 2006–2008, respectively. Men were also surveyed for the National Survey of Family Growth, but the male sample was not included in this analysis. The face-to-face interviews used computer-assisted methods to collect information on a broad range of sexual and reproductive health topics, including partnership, pregnancy and contraceptive use history, childbearing intentions and desires, and use of family planning services. The National Survey of Family Growth used a multistage probability sample design and oversampled women, teens aged 15–19, blacks and Hispanics (10). The response rate for all female respondents was 76% (4). More detailed information on survey methodology, sampling design, estimation procedures and variance estimation is published elsewhere (10).

Measures

Our primary outcome of interest was current use of long-acting reversible contraception, defined as use of an intrauterine device (IUD) or subdermal implant as the principal method of birth control at the time of the interview. We excluded the injectable contraceptive Depo-Provera from the long-acting reversible contraception category because of its shorter efficacy period (three months vs. three years for the implant and five to ten years for IUDs). Women who

reported concurrent long-acting reversible contraception use and sterilization were omitted from all analyses. The National Survey of Family Growth questionnaire did not distinguish between the two types of IUD available in the U.S., the levonorgestrel intrauterine system (IUS) and the Copper-T IUD.

Independent variables examined in these analyses included sociodemographic characteristics (age, race/ethnicity, nativity, relationship status, educational achievement, current employment, poverty status, current insurance coverage and religious affiliation) and sexual and reproductive health characteristics (age at first intercourse, number of sexual partners in the past year, having ever experienced an unwanted pregnancy, history of abortion, parity, birth intentions, having visited a family planning clinic in the past year and having ever stopped using a non-long-acting reversible hormonal method — including pills, patches, rings and injectables — due to dissatisfaction).

Statistical analysis

In our primary analysis, we selected only current contraceptive users (all methods) from the National Survey of Family Growth to assess long-acting reversible contraception use as a proportion of all use in 2002 and 2006–2008. We used simple logistic regression analyses to estimate unadjusted odds ratios for the relationship between individual-level characteristics and use of long-acting reversible contraception and to determine significant differences in long-acting reversible contraception use by respondent characteristics.

In a subsequent analysis using only the 2006–2008 National Survey of Family Growth, we created four distinct categories of women based on their primary method of use to compare current long-acting reversible contraception users, current non-long-acting reversible hormonal

method users (including those using the pill, patch or injectable), current barrier/behavioral method users (including those using the male and female condom, spermicidal and other barrier methods, periodic abstinence or withdrawal) and women not using contraceptives at risk of unintended pregnancy (those not using contraception who had had sex within the last three months but were not seeking pregnancy, were not postpartum and had not undergone surgical sterilization). We used multinomial logistic regression to disentangle correlated effects and to identify demographic and reproductive health characteristics predictive of long-acting reversible contraception use. All independent variables examined at the bivariate level were initially entered into the multinomial model. Variables that were not significantly associated with any of the outcome categories at $p<0.1$ were excluded from the final model.

All analyses were conducted using the *svy* command prefix within Stata (version 11.1) to account for the National Survey of Family Growth's use of a multistage probability sample.

Results

Characteristics of long-acting reversible contraception users

Some 5.6% of current contraceptive users were using an IUD or implant in 2006–2008, an increase from 2.4% in 2002 (Table 1). Among current long-acting reversible contraception users in 2006–2008, 98% were using an IUD and 2% were using an implant (not shown).

Use of long-acting reversible contraception increased in every demographic group, though most dramatically among the youngest and oldest age groups (those younger than 24 and those age 35 or older), non-Hispanic white and non-Hispanic black women, those born in the United States and those in the highest income group. The highest prevalence of long-acting

reversible contraception use continued to be seen among Hispanic women (8.4%) and foreign-born women (8.8%).

In 2006–2008, there were no significant differences in long-acting reversible contraception use by age group, poverty level or insurance coverage. In contrast, in 2002, use of long-acting reversible contraception was significantly more prevalent among women in particular subgroups: aged 25–34, lower-income, without insurance, or covered with Medicaid. In 2006–2008, long-acting reversible contraception use was more common among married and cohabiting women compared to others.

Between 2002 and 2006–2008, the proportion of women using long-acting reversible contraception increased among all subgroups of women defined by sexual and reproductive health characteristics (Table 2). In 2006–2008, women who had sex for the first time at age 17 or younger were twice as likely to use long-acting reversible contraception as women who had experienced coitarche at an older age; this characteristic was not significantly associated with use of long-acting reversible contraception in 2002. Similarly, in 2006–2008 the odds of long-acting reversible contraception use differed significantly by the number of additional births expected, while there was no difference in the odds of use for this characteristic in 2002. In both time periods, the odds of long-acting reversible contraception use were significantly associated with total number of live births, with a visit to a clinic for family planning services in the past year, and with having ever stopped using a non-long-acting reversible contraceptive hormonal method due to dissatisfaction.

Predictors of long-acting reversible contraception use as compared to other contraceptive methods and nonuse

Comparing long-acting reversible contraception users to users of three other specific contraceptive use groups (non-long-acting reversible hormonal method users, barrier/behavioral method users, and women not using contraceptives at risk of unintended pregnancy) showed patterns similar to the bivariate associations observed in 2006–2008 (Table 3).

After adjusting for key demographic and sexual and reproductive health characteristics, in comparison to non-long-acting reversible hormonal method users, women over the age of 35, married women, women who had ever experienced an unwanted pregnancy and women who had ever stopped using a non-long-acting reversible hormonal method due to dissatisfaction were all more likely to be long-acting reversible contraception users. In comparisons with barrier/behavioral method users, women with some college education, women who intended to have additional children and women who had visited a clinic in the past year for family planning services were all more likely, and non-Hispanic other/multiple race women were less likely, to be long-acting reversible contraception users.

Across all demographic and sexual and reproductive health characteristics, users of long-acting reversible contraception have the least in common with women not using contraceptives at risk of unintended pregnancy. Married or cohabiting women, women with at least some college education, women who had ever experienced an unwanted pregnancy, women who had visited a clinic in the past year for family planning services and women who had ever stopped using a non-long-acting reversible hormonal method due to dissatisfaction were all more likely to be users of long-acting reversible contraception than to be women not using contraceptives at risk of unintended pregnancy.

DISCUSSION

Use of long-acting reversible contraception has increased substantially between 2002 and 2006–2008, rising to the highest level of use in the United States since the early 1980s (11). This increase is due primarily to a surge in IUD use, since implant use barely registered in the National Survey of Family Growth in either year. A far more diverse population of women used long-acting reversible contraceptive methods in 2006–2008 as compared to 2002. The substantial increase in use of long-acting reversible contraception among women in the younger age groups, especially, may indicate providers' growing willingness to provide more effective long-acting reversible contraceptive methods to these women. This change is consistent with published recommendations on the topic (12;13). With childbearing occurring at later ages, the fertile period before childbearing can be as long as that after childbearing. As such, the "ideal candidate" for long-acting reversible contraception may just as likely be a younger woman as an older woman.

In 2002, the Copper-T IUD was the primary long-acting reversible contraceptive method available, and Hispanic women were far more likely to use IUDs than women in other race/ethnic groups. Higher rates of long-acting reversible contraception use among Hispanics are likely driven by the higher rates of long-acting reversible contraception use among foreign-born women. For example, 12% of Mexican women using contraceptives used the IUD in 2006 (14). However, by 2006–2008, the addition of the levonorgestrel IUS to the market (the FDA approved the device in 2000, with marketing beginning in 2001) may have softened that ethnic divide. U.S.-born women have higher rates of long-acting reversible contraception use than in previous years, and long-acting reversible contraception use has become more homogeneous across income levels and insurance coverage groups; these patterns suggest that the new device may be playing a role with its wider appeal. Many factors explain the general increase in use of

long-acting reversible contraception, but introduction of the levonorgestrel IUS was perhaps the most important one (15). Unfortunately, National Survey of Family Growth data do not distinguish between types of IUDs, so we are unable to confirm this hypothesis with these data.

Several sexual and reproductive characteristics emerged as predictive of long-acting reversible contraception use between 2002 and 2006–2008. The association between an early age at first intercourse and long-acting reversible contraception use is likely reflecting broader associations between this characteristic and contraceptive use. We conducted a supplementary analysis and found that women initiating sex at an earlier age were also more likely to use provider-controlled methods such as the pill, patch and injectables than those who experience coitarche at a later age.

Not surprisingly, women who have given birth are more likely to be users of long-acting reversible contraception than those who have not. The increased rate of long-acting reversible contraception use seen among women who have given birth one or two times as compared to women with three or more births is likely due to higher rates of sterilization among women in this latter group (16). Women's desire for additional children has emerged as a predictive characteristic of long-acting reversible contraception use since 2002. The lower rates of long-acting reversible contraception use among women who expect to have three or more additional births as compared to women expecting fewer births is likely due to a recognized need for shorter-term contraceptive coverage (or none at all) among this group in order to achieve this goal.

Users of long-acting reversible contraception have more in common with users of more short-term contraceptive methods than they do with nonusers of contraception at risk of unintended pregnancy. Given the similarities in educational achievement between long-acting

reversible contraception users and non-long-acting reversible hormonal method users, less educated women may be less likely to choose prescription methods, perhaps due to limited knowledge about them (17). Women's increased likelihood of using a long-acting reversible contraceptive method vs. a non-long-acting reversible contraceptive hormonal method or no method at all if they had experienced an unwanted pregnancy indicates that these women may be more motivated to avoid an additional unwanted pregnancy in the future (18).

Several limitations are inherent in the analysis of cross-sectional data. Associations observed between respondent characteristics and contraceptive method use do not necessarily imply a causal relationship. Because of well-documented underreporting of abortion in the National Survey of Family Growth (19), any associations between this factor and long-acting reversible contraception use may not be robust. Because the 2006–2008 National Survey of Family Growth contained only five implant users, our findings cannot describe trends associated with this particular long-acting reversible contraceptive method. In addition, the National Survey of Family Growth made no distinction between the type of IUD being used (e.g. the copper IUD versus the levonorgestrel IUS), so we cannot determine whether these findings are more reflective of one product or the other. Future rounds of the National Survey of Family Growth will permit this distinction, however.

The potential for long-acting reversible contraceptive methods to decrease unintended pregnancy rates and subsequent abortions is gaining much-needed attention (20;21). Long-acting reversible contraceptive methods are in the top tier of contraceptive effectiveness, whereas short-acting methods are not. The dearth of long-acting reversible contraception options and acceptability in a recent 15-year period (1986 to 2000) compelled American women who wanted to avoid unintended pregnancy to rely on short-acting reversible methods or sterilization. Today,

long-acting reversible contraception, which fills the slot between these two other approaches, is more accessible, and the increased prevalence of use among women using contraception in the United States reflects this fact. However, there is likely more potential for increased use among women at risk of unintended pregnancy, especially among populations historically not considered to be candidates for long-acting reversible contraceptive methods, such as adolescent women, nulliparous women and women who are not married or cohabiting. Previous research identifying characteristics of women at risk of unintended pregnancy (22) should be revisited to help initiate discussion of long-acting reversible contraception use in these subgroups. Our finding that previous unwanted pregnancy is associated with long-acting reversible contraception use suggests that women who have had an unintended pregnancy may be among the most motivated to seek out the most effective methods of contraception, probably to prevent recurrence. Increasing awareness of the benefits and effectiveness of long-acting reversible contraception may encourage uptake in the United States and could contribute to improving the nation's reproductive health.

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Table 1. Percentages of current contraceptive users who are currently using long-acting reversible contraception, and unadjusted odds ratios (and 95% confidence intervals) of current use of long-acting reversible methods, by selected demographic characteristics, 2002 and 2006–08;

Demographic characteristics	Use of long-acting reversible method among current contraceptive users		Unadjusted odds ratios and 95% confidence intervals								
	2002	2006–2008	2002					2006–2008			
	%	%	OR		(CI)			OR		(CI)	
ALL	2.4	5.6									
Age											
15–19	0.3	3.6	--†					--			
20–24	1.9	6.0	--†					1.7	(	0.6	, 4.4)
25–29	4.8	6.6	**3.8*** **	(	2.2	, 6.5)		1.9	(	0.6	, 6.4)
30–34	3.8	6.6	**2.9** **	(	1.6	, 5.4)		1.9	(	0.5	, 6.9)
35–39	1.7	5.9	1.3	(	0.7	, 2.6)		1.7	(	0.9	, 2.9)
40–44	1.4	4.2	1.0	(	0.4	, 2.6)		1.1	(	0.3	, 4.2)
Race/ethnicity											
Non-Hispanic white, single race	1.6	5.1	--					--			
Non-Hispanic black, single race	1.5	5.2	0.9	(	0.4	, 2.0)		1.0	(	0.5	, 2.2)
Non-Hispanic other or multiple race	2.9	4.5	1.8	(	0.9	, 3.8)		0.9	(	0.5	, 1.6)
Hispanic	7.1	8.4	**4.6*** **	(	2.8	, 7.4)		**1.7***	(	1.1	, 2.6)
Born outside the U.S.											
No	1.6	5.1	--					--			
Yes	7.5	8.8	**4.8*** **	(	2.8	, 8.5)		**1.8***	(	1.1	, 3.1)
Relationship status											
Not married or cohabiting	1.4	3.2	--					--			
Married	3.1	6.8	**2.3** **	(	1.3	, 4.0)		**2.2** **	(	1.2	, 4.0)
Cohabiting	2.5	6.6	1.8	(	0.9	, 3.6)		**2.2***	(	1.1	, 4.4)
Education											
Not high school graduate	3.3	4.7	--					--			
High school graduate or GED	2.5	5.1	0.8	(	0.4	, 1.4)		1.1	(	0.6	, 2.1)
Some college	2.2	6.4	0.7	(	0.4	, 1.3)		1.4	(	0.8	, 2.5)
College graduate	2.1	5.8	0.6	(	0.3	, 1.2)		1.2	(	0.6	, 2.4)

Employment														
Not working full-time	2.4	6.1	--							--				
Working full-time	2.5	5.0	1.0	(	0.7	,	1.5	)		0.8	(	0.6	,	1.2)
Poverty status														
<100% of federal poverty level	4.7	6.1	--							--				
100-199%	3.0	6.3	0.6	(	0.3	,	1.2	)		1.0	(	0.6	,	1.7)
200-299%	1.9	4.3	**0.4***	(	0.2	,	0.8	)		0.7	(	0.4	,	1.2)
300% or higher	1.5	5.6	**0.3*****	(	0.2	,	0.5	)		0.9	(	0.5	,	1.7)
Current insurance coverage††														
Private	1.9	5.1	--							--				
Medicaid	3.8	6.7	**2.1****	(	1.3	,	3.2	)		1.3	(	0.8	,	2.1)
None	4.5	6.0	**2.4****	(	1.3	,	4.7	)		1.2	(	0.8	,	1.8)
Religious affiliation														
No religion	2.8	6.9	--							--				
Catholic	3.3	6.2	1.2	(	0.6	,	2.4	)		0.9	(	0.5	,	1.8)
Protestant	1.9	4.7	0.7	(	0.3	,	1.3	)		0.7	(	0.3	,	1.4)
Other	2.2	6.6	0.8	(	0.2	,	2.7	)		1.0	(	0.4	,	2.3)

Notes: Population includes all female respondents who reported current contraceptive method use, weighted to reflect the female civilian population of the United States. Long-acting reversible contraception includes IUDs and implants.

†The two youngest age groups in 2002 were combined for the reference group due to small numbers in these age categories.

††Women reporting "other" insurance were omitted due to limited reliability of analyses based on the small numbers in this category. Asterisks indicate significant differences at *p<0.05, **p<0.01, ***p<0.001. "--" denotes the reference category.

Table 2. Percentages of current contraceptive users who are currently using long-acting reversible contraception, and unadjusted odds ratios (and 95% confidence intervals) of current use of long-acting reversible methods, by selected sexual and reproductive health characteristics, 2002 and 2006–08;

Sexual and reproductive health characteristics	Use of long-acting reversible method among current contraceptive users		Unadjusted odds ratios and 95% confidence intervals							
	2002 %	2006-2008 %	2002 OR		(CI)			2006–2008 OR		(CI)	
ALL	2.4	5.6									
Age at first intercourse†											
<15–17	2.5	7.4	0.9	(	0.6	,	1.4	)	**2.1***	(1.2	, 3.6)
18–44	2.9	3.6	--						--		
Number of male sexual partners in last year											
<2	2.6	5.9	--						--		
≥2	1.4	4.0	0.5	(	0.2	,	1.3	)	0.7	(0.3	, 1.4)
Ever experienced unwanted pregnancy											
No	2.5	5.2	--						--		
Yes	2.4	6.9	1.0	(	0.6	,	1.5	)	1.3	(0.8	, 2.3)
History of abortion											
No	3.3	7.0	--						--		
Yes	2.5	9.4	0.7	(	0.4	,	1.3	)	1.4	(0.8	, 2.5)
Total number live births											
0	0.6	0.5	--						--		
1–2	3.4	10.0	**5.8*****	(	2.6	,	12.9	)	**22.1*****	(8.1	, 60.8)
3 or more	3.0	4.2	**5.0*****	(	2.2	,	11.4	)	**8.7*****	(3.3	, 22.8)
Intentions for additional births††											
Does not intend to have (more) children	2.8	6.0	--						--		
Intends to have (more) children	2.3	5.0	0.8	(	0.5	,	1.3	)	0.8	(0.6	, 1.2)
Number of additional births expected											
0	2.3	5.1	--						--		

1 or 2	3.2	7.8	1.4	(	0.9	,	2.2	)		**1.6****	(	1.2	,	2.2	)
3 or more	1.0	1.5	0.5	(	0.2	,	1.1	)		**0.3****	(	0.1	,	0.8	)
Visited clinic in past 12 months for family planning services?															
No	1.6	3.4	--							--					
Yes	4.4	10.8	**2.9*****	(	2.0	,	4.3	)		**3.4*****	(	2.4	,	4.8	)
Ever stopped using non-long-acting hormonal method due to dissatisfication?															
No	1.6	3.7	--							--					
Yes	4.5	9.1	**3.0*****	(	2.0	,	4.5	)		**2.6*****	(	1.7	,	3.9	)

Notes: Population includes all female respondents who reported current contraceptive method use, weighted to reflect the female civilian population of the United States. Long-acting reversible contraception includes IUDs and implants.
†Age at first sex is limited to respondents age 20 and older.
††Women reporting "don't know" in response to pregnancy intentions were omitted due to limited reliability of analyses based on the small numbers in this category. Asterisks indicate significant differences at *p<0.05, **p<0.01, ***p<0.001. "--" denotes the reference category.

Table 3. Adjusted odds ratios and 95% confidence intervals of selected respondent characteristics and current long-acting reversible contraception use as compared to the associations between these selected characteristics and other contraceptive method use and nonuse; 2006–2008

	Long-acting reversible method users vs. non-long-acting hormonal method users		Long-acting reversible method users vs. barrier or behavioral method users		Long-acting reversible method users vs. contraceptive nonusers at risk for unintended pregnancy	
Characteristic	OR	(CI)	OR	(CI)	OR	(CI)
DEMOGRAPHIC						
Age						
15–24	--		--		--	
25–34	1.1	(0.5, 2.5)	1.0	(0.5, 2.0)	0.9	(0.4, 1.9)
35–44	**2.1***	(1.0, 4.4)	1.5	(0.8, 2.9)	0.8	(0.4, 1.6)
Race/ethnicity						
Non-Hispanic white, single race	--		--		--	
Non-Hispanic black, single race	1.3	(0.6, 2.9)	1.1	(0.5, 2.5)	0.7	(0.3, 1.6)
Non-Hispanic other or multiple race	1.1	(0.6, 2.0)	**0.5***	(0.2, 0.9)	0.6	(0.3, 1.3)
Hispanic	1.4	(0.8, 2.5)	1.5	(0.8, 2.6)	1.8	(1.0, 3.4)
Born outside the U.S.						
No	--		--		--	
Yes	**2.6*****	(1.6, 4.4)	**1.9***	(1.1, 3.4)	**2.4***	(1.2, 4.7)
Relationship status						
Not married or cohabiting	--		--		--	
Married	**3.7*****	(1.8, 7.4)	1.6	(0.8, 3.4)	**7.0*****	(3.3, 15.1)
Cohabiting	1.9	(0.8, 4.7)	1.8	(0.7, 4.4)	**5.4****	(1.9, 15.0)
Education						
Not high school graduate	--		--		--	
High school graduate or GED	1.7	(0.7, 4.3)	2.1	(0.8, 5.4)	2.5	(0.9, 7.0)
Some college	1.9	(0.9, 4.1)	**2.3***	(1.1, 5.0)	**3.5****	(1.6, 7.8)
College graduate	1.8	(0.6, 5.3)	2.3	(0.8, 6.7)	**4.8****	(1.5, 15.3)
Employment						
Not working full-time	--		--		--	
Working full-time	0.6	(0.4, 1.0)	0.7	(0.4, 1.1)	1.0	(0.6, 1.6)
SEXUAL AND REPRODUCTIVE HEALTH						
Age at first intercourse†						

<15–17	**3.1****	(1.6, 6.1)	**3.1****	(1.6, 6.0)	**2.1***	(1.0, 4.1)
18–44	--		--		--	
Number of male sexual partners in last year						
<2	--		--		--	
≥2	1.7	(0.7, 3.8)	0.5	(0.2, 1.1)	0.8	(0.3, 1.9)
Ever experienced unwanted pregnancy						
No	--		--		--	
Yes	**2.4****	(1.3, 4.6)	1.2	(0.6, 2.3)	**2.2***	(1.1, 4.4)
Intentions for additional births††						
Does not intend to have (more) children	--		--		--	
Intends to have (more) children	1.3	(0.8, 2.2)	**1.9****	(1.2, 3.0)	1.3	(0.7, 2.4)
Visited clinic in past 12 months for family planning services?						
No	--		--		--	
Yes	1.0	(0.6, 1.7)	**10.1*****	(6.3, 16.4)	**11.9*****	(6.8, 20.9)
Ever stopped using non-long-acting hormonal method due to dissatisfication?						
No	--		--		--	
Yes	**3.5*****	(2.1, 5.7)	1.4	(0.9, 2.3)	**1.9***	(1.1, 3.1)

Notes: Population includes all female respondents who reported current long-acting reversible contraceptive method use, current non-long-acting hormonal contraceptive method use, current barrier or traditional method use and nonuse of contraception while at risk of unintended pregnancy, weighted to reflect the female civilian population of the United States. Adjusted odds ratios were calculated using multinomial logistic regression. Women at risk of unintended pregnancy are those who have reported being sexually active in the three months prior to interview but have not been seeking pregnancy, are not postpartum and have not undergone surgical sterilization.

†Age at first sex is limited to respondents age 20 and older.

††Women reporting "don't know" in response to pregnancy intentions were omitted due to limited reliability of analyses based on the small numbers in this category. Asterisks indicate significant differences at *p<0.05, **p<0.01, ***p<0.001. "--" denotes the reference category.