Unwanted Pregnancy and Use of Withdrawal Among American Women Aged 15 – 25

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ABSTRACT

Pregnancy rates among young women in the United States are high, and a majority of these pregnancies are unwanted. According to the National Survey of Family Growth [NSFG], approximately 23% of women aged 15 – 25 choose withdrawal as a contraceptive method on at least one occasion in the recent past. Withdrawal has a high failure rate, approximately 18 – 28% in one year of use (Ranjit et. al. 2001, Kost et. al. 2008). Cox hazard model regressions on data from the NSFG indicates that those women that use withdrawal as contraception are at increased risk of unwanted pregnancy relative to women who use other contraceptive methods, with a hazard ratio of 1.66 [p = 0.001]. Women who never use contraception, however, are at an even higher risk of an unwanted pregnancy [hazard ratio = 2.76, p = 0.00], indicating that withdrawal use may prevent some unwanted pregnancies, but is not as effective as other contraceptive methods.

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INTRODUCTION

The pregnancy rate among U.S. adolescents is the highest among industrialized countries (UNICEF 2001) with 72 pregnancies per 1,000 women aged 15 to 19 per year in 2004 (Ventura et. al. 2008). Young women aged 20 to 24 also have a high rate of pregnancy: 163.7/1,000 women per year (Ventura et. al. 2008) A majority of these pregnancies among women of these age groups are unwanted (Finer and Henshaw 2006). Of these unwanted pregnancies, slightly less than half of those not miscarried are aborted (Finer and Henshaw 2006). Women that do bring unwanted pregnancies to term are more likely to engage in behaviors harmful for the fetus, including smoking, using alcohol and illicit drugs, and initiating prenatal care only in the third trimester of pregnancy (Orr et. al. 2008). In part because of this higher rate of harmful behavior, these pregnancies suffer from higher rates of adverse outcomes, including preterm birth (Orr et. al. 2000), premature rupture of membranes (Mohllajee et. al. 2007) and low birth weight (Eggleston et. al. 2001).

This high proportion of unwanted pregnancy among U.S. adolescents and young women is the result of many factors, including the prevalence of contraceptive use, the methods of contraception chosen, and user characteristics that determine how consistently and correctly these chosen methods are employed. While up to 89% of women who do not want to become pregnant employ one or more methods of contraception, over half of all unwanted pregnancies occur among those who do use some form of contraception (Finer and Henshaw 2006).

One contraceptive method young U.S. women employ is withdrawal. While recent research indicates that withdrawal use among young women has declined since the early 1990s, (Everett et. al. 2000), 10.7% of sexually active high school females reported using withdrawal at last sex in 2003 (Anderson et. al. 2006). Withdrawal as a contraceptive method is associated with a high rate of failure, on the order of 18 – 28% for each year of use (Ranjit et. al. 2001; Kost et. al. 2008). Thus, withdrawal use among young women could contribute to unwanted pregnancies within this population. Yet, Frost and Darroch (2008) recently determined that the women most likely to use withdrawal are also those who are least concerned about avoiding pregnancy, indicating

that while young women who use withdrawal might be more likely to get pregnant than those using other methods, withdrawal use might not lead to significant increased incidence of unwanted pregnancy.

In this paper, we will explore whether young women aged 15 – 25 who use withdrawal as a contraceptive method are at increased risk of an unwanted pregnancy.

METHODS

Data

The data for this paper comes from Wave 6 of the National Survey of Family Growth [NSFG], a nationally – representative survey of U.S. women aged 15 – 44, conducted in 2002-03. Complete information on survey design, implementation, coverage, refusal rates, and recoding can be found at: http://www.cdc.gov/nchs/NSFG.htm. The survey includes demographic and economic variables, as well as pregnancy histories and detailed data on contraceptive use.

Measures

Contraceptive use:

Wave 6 of the NSFG includes retrospective calendar data on contraceptive use during each month for up to 50 months prior to the survey. These calendar data were used to classify women into three groups of contraceptive use: women who report that they never use any contraception in any month, women that report that they used withdrawal as a contraceptive method in at least one month[3], and women who do use contraception, but do not report withdrawal as one of their methods in any month. While we initially had four groups, differentiating between individuals who used withdrawal as their only method of contraception and those who sometimes used withdrawal, but also used other methods, results for the two different groups did not significantly differ in magnitude, direction, or significance, so we combined these groups for simplicity.

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[3] These two groups include 'dual users' who report more than one contraceptive method for a given month. If one of these methods mentioned was withdrawal, these users are classified as withdrawal users for that month.

Unwanted pregnancy:

For each pregnancy, women were asked a series of questions regarding whether their pregnancy was intended or unintended. Unintended pregnancies include both those pregnancies that are unwanted [the woman does not want a baby at the time of pregnancy or in the future] and those that are mistimed [the woman wants a baby in the future, but not at the time she actually got pregnant]. Pregnancies about which women indicated that they were indifferent were categorized as intended, as were pregnancies that were mistimed, but because they were 'too late' rather than too early. We use this question as our measure of unintended pregnancy, rather than the outcome of the pregnancy, due to both the fact that abortions are under – reported in the NSFG (Jones and Kost, 2007) and because many unwanted pregnancies are carried to term. We examine only the first pregnancy for each woman that occurred within the time period with calendar data on contraception [from January 1999 until the time of survey in 2002-03].

Data Analysis

We utilize a Cox proportional hazard model to estimate the risk of unwanted pregnancy associated with each of the three types of contraceptive users. We only include individuals who were aged 15 – 25, not pregnant, and sexually active in January 1999. We followed a stable cohort over time and therefore hopefully avoided introducing a secular trend into these analyses. Women are censored either at the time of their first pregnancy during January 1999 – March 2003 or at the time of survey.

In order to determine correlates of each type of contraceptive use, we use a univariate and multivariate multinomial logit models, with 'other contraception' as the baseline category. Finally, we run a logistic regression model on a subsample of all the women that use some form of contraception. In this model, we use a dichotomous variable indicating whether individuals choose withdrawal or choose other methods, conditional on choosing to use contraception at all.

We also include several control variables that might mediate the relationship between withdrawal use and unwanted pregnancy. These variables include age at time of survey, race/ethnicity [white non – Hispanic, African – American non Hispanic, Hispanic, and other], educational attainment [in years, ranging from 9 to 19],

marital/cohabitating status at time of survey, total number of live births, whether the respondent is working full time at the time of survey, age at first sex, number of lifetime sexual partners, whether the individual has ever tested positive for an STD, and whether the respondent reports wanting more children in the future. In keeping with the approach of Ranjit et. al. (2001), we measure economic status using a dichotomous variable indicating whether individuals were at or below 200% of the federal poverty line in 2001.

Regressions are weighted using the included probability sampling weights to account for survey design effects. All data analyses are carried out in STATA Release 8.0.

Sample

There are 1,661 women who were aged 15 – 25, not pregnant, and sexually active as of January 1999, of which 22 are excluded due to missing data on contraceptive information. A further 83 women are excluded due to missing data on one or more control covariates, for a final sample size of 1,556. Chi square tests indicate that individuals with missing data on control covariates do not differ in their contraceptive choices than individuals with complete data; t tests indicate that individuals with missing control data are also no more or less likely to have an unwanted pregnancy. Sample summary statistics can be found in Table 1.

RESULTS

Table 2 indicates that women who use withdrawal as a contraceptive method are at higher risk of an unwanted pregnancy [hazard ratio $= 1.68$, $p = 0.001$]. Women who use withdrawal are not, however, as at high of a risk of unwanted pregnancy as women who use no contraception at all [hazard ratio $= 3.41$, $p < 0.001$]. These results hold even when controlling for other factors [Table 2 and Figure 1].
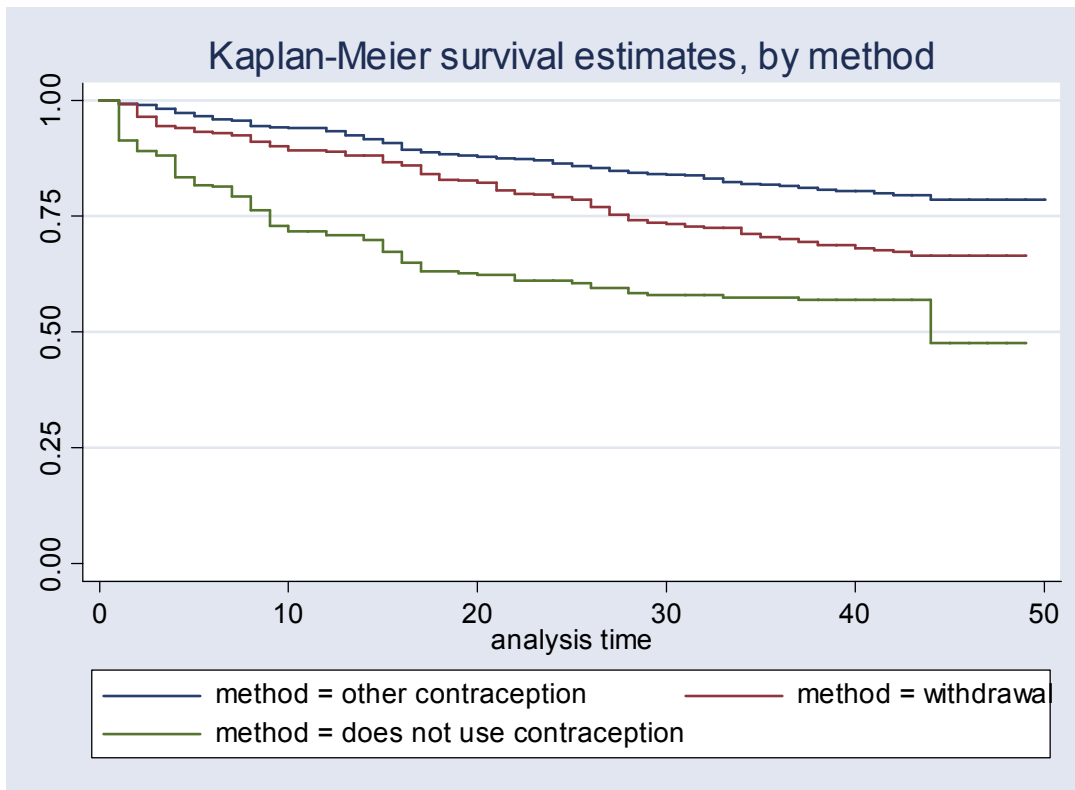
Figure 1:

Figure 1. Kaplan – Meier survival curves for a multivariate Cox proportional hazard model predicting unwanted pregnancy as a function of time, by contraceptive use method.

Table 2 also indicates other predictors of unwanted pregnancy. Some factors are significantly associated with increased risk of pregnancy in univariate models, but then are insignificant in the multivariate model, indicating that women with these characteristics likely have a higher rate of unwanted pregnancy because they choose different methods of contraception. Higher educational attainment, for instance, is protective against unwanted pregnancy in univariate models [hazard ratio = 0.82, $p < 0.001$] , but this association disappears in the multivariate model. Other individuals who are likely at higher risk of pregnancy based on differential birth control usage include Hispanics, individuals who debut sexually at younger ages, those of low socioeconomic status, and women who have been diagnosed with an STI.

Other individuals have an increased risk of unwanted pregnancy that contraceptive choice alone cannot account for [Table 2]. Women with more total children

are at higher risk of unwanted pregnancy, as are women who still want to have more children in the future. Those with a greater number of lifetime sexual partners also have a higher rate of unwanted pregnancy, as are women who are cohabitating, but who are not married, at the time of survey. Finally, African – Americans are at increased risk of unwanted pregnancy relative to white women. While some of this elevated risk operates via contraceptive choice [hazard ratio = 1.45, $p < 0.05$ for the multivariate model, vs. 2.09, $p < 0.001$ for the univariate one], a real difference remains once contraceptive method is controlled for, unlike with Hispanic women.

Table 3 indicates characteristics of women choosing not to use contraception, or choosing withdrawal, as compared to women using other contraceptive methods besides withdrawal. African – American women are consistently less likely to use withdrawal as a contraceptive method compared to white women, even when accounting for other factors [multinomial logit coefficient = -0.49, $p < 0.05$]. Women who have a higher number of lifetime partners, a risky sexual behavior, also are more likely to use withdrawal rather than a more reliable method of contraception [multinomial logit coefficient = 0.04, $p < 0.001$]. While many groups, including older women, Hispanics, African – Americans, less educated women, those who do not work full time, and those below 200% of the poverty line, are all less likely to use any form of contraceptive in univariate models, these differences disappear when other factors are controlled for, apart from an inverse correlation between education and any contraceptive use [multinomial logit coefficient = -0.22, $p < 0.001$] and, not surprisingly, a positive correlation between total number of children and lack of birth control [multinomial logit coefficient = 0.26, $p < 0.01$].

Finally, Table 4 indicates characteristics of women who choose withdrawal as a contraceptive method relative to other methods, conditional on their choosing to use birth control at all. Again, African – Americans are less likely to choose withdrawal [OR = 0.60, $p < 0.05$]. Women who exhibit other characteristics of risky sexual behavior, including a greater number of partners and past STI diagnoses, are also more likely to engage in withdrawal [OR = 1.04, $p < 0.01$ for number of partners; OR = 1.67, $p < 0.05$ for STIs].

DISCUSSION

This study builds upon prior research on correlates of unintended pregnancy by demonstrating the role of withdrawal as a contraceptive method in contributing to risk of unintended pregnancy among a national sample of young women aged 15 – 25. The study also fills an important gap in the literature by elucidating characteristics of young women who use withdrawal. Understanding withdrawal use and its relationship with unintended pregnancy in this population is particularly compelling since youth and young adults between 15 and 25 years are at increased risk of unwanted pregnancy compared to women in older age groups, and nearly 11% of youth have reported using withdrawal at their last sexual intercourse. (Anderson et al. 2006)

Our findings demonstrate that, while withdrawal is associated with an increased risk of unintended pregnancy compared to other methods, using withdrawal as a contraceptive method leads to a lower risk of unintended pregnancy than using no method at all, findings consistent with those of Ranjit et. al. (2001), who examined women from a wider age range [15 – 44]. While very little research has been done on whether and how practitioners discuss withdrawal as a contraceptive method with their patients, women who use withdrawal represent a population of women interested in preventing pregnancy, who practitioners could perhaps persuade to use more effective methods of contraception.

Similar to other studies (Finer and Henshaw 2006), our results from the univariate analyses confirmed a relationship between unintended pregnancy and low socioeconomic status, being Hispanic and earlier age of sexual debut found in other studies (Henshaw 1998; Finer and Henshaw 2006). These findings are also consistent with literature that show that poor women and Hispanic women are more likely to have unprotected sexual intercourse and experience higher rates of method failure, both of which lead to unintended pregnancy (Frost and Darroch 2008; Singh et. al. 2001). However, the results from our multivariable model indicate that these findings do not persist once we control for contraceptive method, suggesting that it might be differential contraceptive use that accounts for the bulk of increased risk of unwanted pregnancy seen among Hispanic women and those from disadvantaged economic backgrounds.

Our study did, however, show a relationship between being African – American and risk of unintended pregnancy, a finding also demonstrated in other studies (Finer and Henshaw 2006; Beck et. al. 2002). Thus, better contraceptive use alone might be insufficient to prevent unwanted pregnancies and associated poor birth outcomes among young African – American women. More research could explore pregnancy planning behaviors and reasons behind unwanted childbearing among young African – American women in particular.

We also identified other factors that are significant predictors of unintended pregnancy, even after controlling for contraceptive use. Our finding of a higher risk of unintended pregnancy among unmarried, cohabitating women than married women mirrors the findings of Finer and Henshaw (2006). Our study also confirmed that younger age makes youth particularly vulnerable to unintended pregnancy (Kissin et. al. 2008). While this finding could be because young women are less experienced with contraception, it could also be due to the fact that younger women are more likely to lable a pregnancy 'unwanted'.

Our study also demonstrated that youth with a high number of previous children are at increased risk of experiencing an unintended pregnancy. Despite having prior interactions with the health care system, their risk of unintended pregnancy remains high. While having more children may suggest a history of unprotected sex or lack of consistent and effective use of reversible contraception, research is needed to explore why young women with multiple children continue to be at increased risk of unwanted pregnancies to appropriately tailor clinical and community-based interventions to this particular at risk population. Similarly, women in our study who indicated a future intention for childbearing were more likely to have an unintended pregnancy. Young women who desire future children *but* do not want their current pregnancy could benefit from more counseling and interventions to help them understand the role of effective contraceptive methods in postponing pregnancies to a time in their lives that best meets their child-bearing goals and lifestyle.

Our study also identified characteristics of adolescents and young adults who choose withdrawal as a contraceptive method. Consistent with other studies (Frost and Darroch 2008) withdrawal appears to be more of a high risk behavior closely linked not

only with unintended pregnancy but a previous diagnosis of sexually transmitted infections (STI) and a history of multiple sexual partners among youth and young adults (Woods et. al. 2007). Young women who engage in sex with multiple casual partners may have difficulty communicating with their casual partners about contraception, often fail to discuss STIs with these partners, and thus might choose withdrawal as a contraceptive method due to poor advance planning (Camelo and Landry 1994).

DATA LIMITATIONS

There are several drawbacks to using NSFG data to explore unintended pregnancies which limit the usefulness of this study, not least of which is the definition of 'unintended pregnancy'. In the NSFG, for the most part women are asked about their pregnancies after they've already either had an abortion [spontaneous or induced] or they've given birth, and changes in their attitude [for better or for worse] towards their pregnancy by the time of survey might indicate how they view their pregnancy in retrospect, rather than at the time it occurred. Furthermore, the NSFG forces women to decide whether pregnancies are wanted, unwanted, or whether they are indifferent, whereas a woman's actual feelings might be somewhere on a continuum between these three possibilities and thus hard to measure in quantitative surveys. Ambivalence or unwantedness of a pregnancy might also be influenced by cultural or religious beliefs, and thus it is hard to know whether characteristics that we've identified as predictive of an unwanted pregnancy are truly correlated with a higher likelihood of pregnancy, or rather a higher likelihood that a woman will rate her pregnancy as unwanted. Despite these limitations, previous authors (Campbell and Mosher 2000) have indicated that the NSFG is still a reasonable tool with which to study unintended pregnancies. We also tried to be as conservative as possible in defining a pregnancy as unwanted, by classifying pregnancies about which a woman was indifferent as 'wanted'.

Another flaw of these data is the imprecision with which we can categorize women into groups based on contraceptive use. Women are asked to list all methods of contraception that they utilize within a given month, but we are unable to measure how consistently they use each method within that month. Furthermore, our categorization of women in the 'withdrawal' group also includes women who also use other contracpetive

methods in addition to withdrawal. Thus, women who only use withdrawal might be at even higher risk of unintended pregnancy than these results indicate. We did try breaking the 'withdrawal' groups into two: women who occasionally use withdrawal and those who only use withdrawal. As might be expected, the women who only use withdrawal had a higher risk of unintended pregnancy than women who occasionally used withdrawal, but the number of women in this group was quite small, too small for the estimated hazard ratios to be significant [data not shown].

Finally, while the calendar structure of the data allow us to know that contraceptive use preceded pregnancy, other covariates, including relationship status, educational attainment, whether an individual is below the poverty level, and number of lifetime sex partners are measured at the time of survey, and may not reflect conditions at the time of pregnancy or contraceptive choice. While some of these factors likely remain stable over time, such as relative educational attainment or poverty level status, these factors might also be affected by an unintended pregnancy, and thus must be interpreted as correlational only, not causal.

CONCLUSION

In this study, we find that withdrawal as a contraceptive method is more effective than no method at all in terms of preventing unwanted pregnancy, but not as effective as modern methods of birth control. Users of withdrawal are more likely to engage in higher rates of sexual risk behavior as well, or come from groups who have a higher risk of unintended pregnancy. Women who use withdrawal often do so in conjunction with other contraceptive methods, and represent a population that practitioners could target for promotion of the use of more consistent, reliable forms of birth control. Doing so might help prevent unwanted pregnancies and their attendant poorer birth outcomes, as well as reduce the rate of induced abortions.

REFERENCES

Anderson J, Santelli J, and Morrow B (2006). Trends in adolescent contraceptive use, unprotected and poorly protected sex, 1991 – 2003. *Journal of Adolescent Health* 38: 734 – 739.

Beck L, Morrow B, Lipscomb L, Johnson c, Gaffield M, Rogers M, and Gilbert B (2002). Prevelance of selected maternal behaviors and experiences, Pregnancy Risk Assessment Monitoring System (PRAMS), 1999. *Morbidity and Mortality Weekly Report Surveillance Summary* 51(2): 1 – 27.

Camelo T and Landry D (1994). Young unmarried men and women discuss men's role in contraceptive practice. *Family Planning Perspectives* 26(5): 222 – 227.

Campbell A and Mosher W (2000). A history of the measurement of unintended pregnancies and births. *Maternal and Child Health Journal* 4(3): 163 – 169.

Eggleston E, Tsui A, and Kotelchuck M (2001). Unintended pregnancy and low birthweight in Ecuador. *American Journal of Public Health* 91(5): 808-810.

Everett S, Warren C, Santelli J, L K, Collins J, Kolbe L (2000) Use of birth control pills, condoms, and withdrawal among U.S. high school students. *Journal of Adolescent Health* 27(2):112-118.

Finer L and Henshaw S (2006). Disparities in rates of unintended pregnancy in the United States, 1994 and 2001. *Perspectives on Sexual and Reproductive Health* 38(2): 90 – 96.

Frost J and Darroch J (2008). Factors associated with contraceptive choice and inconsistent method use, United States, 2004. *Perspectives on Sexual and Reproductive Health* 40(2): 94 – 104.

Henshaw S (1998). Unintended pregnancy in the United States. *Family Planning Perspectives* 30(1): 24 – 29 & 46.

Jones R and Kost K (2007). Underreporting of induced and spontaneous abortion in the United States: An analysis of the 2002 National Survey of Family Growth. *Studies in Family Planning* 38(3): 187 – 197.

Kissin D, Anderson J, Kraft J, Warner L, and Jamieson D (2008). Is there a trend of increased unwanted childbearing among young women in the United States? *Journal of Adolescent Health* 43(4): 364 – 371.

Kost K, Singh S, Vaughan B, Trussell J, and Bankole A (2008). Estimates of contraceptive failure from the 2002 National Survey of Family Growth. *Contraception* 77(1): 10-21.

Orr S, Miller C, James S, and Babones S (2000). Unintended pregnany and preterm birth. *Paediatric and Perinatal Epidemiology* 14(4): 309-313.

Orr S, James S, and Reiter J (2008). Unintended pregnancy and prenatal behaviors among urban, black women in Baltimore, Maryland: The Baltimore preterm birth study. *Annals of Epidemiology* 18(7): 545 – 551.

Mohllajee A, Curtis K, Morrow B, and Marchbanks P (2007). Pregnancy intention and its relationship to birth and maternal outcomes. *Obstetrics and Gynecology* 109(3): 678 – 686.

Ranjit N, Bankole A, Darroch J, and Singh S (2001). "Contraceptive failure in the first two years of use: Differences across socioeconomic subgroups." *Family Planning Perspectives* 33(1): 19-27.

Singh S, Darroch J, and Frost J (2001). Socioeconomic disadvantage and adolescent women's sexual and reproductive behavior: The case of five developed countries. *Family Planning Perspectives* 33(6): 251 – 258, 289.

UNICEF (2001). A league table of teenage births in rich nations. *Innocenti Report Card No. 3*. UNICEF Innocenti Research Center, Florence.

Ventura S, Abma J, Mosher W, and Henshaw S (2008). Estimated pregnancy rates by outcome for the United States, 1990 – 2004. *National Vital Statistics Reports* 56(15): 1 – 26.

Woods J, Hensel D, and Fortenberry J (2007). Influences on contraceptive withdrawal in adolescent women. *Journal of Pediatric and Adolescent Gynecology* 20(2): S134 – S135.

Table 1: Sample Summary Statistics

variable	% of sample or mean value
current age	23.9
race:	
white, non - Hispanic	58.8
African - American, non - Hispanic	21.7
Hispanic	15.5
other race	4.1
marital status:	
single	50.3
cohabiting	18.5
married	31.2
others:	
education - years	13.0
number of children	0.9
wants more children	76.5
age at first sex	16.1
number of lifetime sex partners	6.3
has ever had an STI	12.7
works full time	69.2
at or below 200% of the FPL, 2001	53.4
N:	1556

Table 2: Predictors of Unwanted Pregnancy [hazard ratio]

variable	univariate hazard ratio	p - value	multivariate hazard ratio	p - value
contraceptive use:				
withdrawal	1.68	0.001	1.66	0.001
no contraception	3.41	< 0.001	2.76	< 0.001
[ref = other contraception]				
race:				
African - American, non - Hispanic	2.09	< 0.001	1.45	< 0.05
Hispanic	1.55	0.01	0.97	
other race	0.93		1.00	
[ref = white, non - Hispanic]				
marital status:				
cohabiting	1.36	< 0.05	1.39	< 0.05
married	0.88		0.91	
[ref = single, not cohabitating]				
others:				
current age	0.92	0.001	0.83	< 0.001
education - years	0.82	< 0.001	0.99	
number of children	1.73	< 0.001	1.74	< 0.001
wants more children	0.40	< 0.001	0.66	< 0.01
age at first sex	0.87	< 0.001	1.01	
number of lifetime sex partners	1.03	< 0.001	1.03	< 0.001
has ever had an STI	1.52	< 0.05	1.01	
works full time	0.58	< 0.001	0.98	
at or below 200% of FPL in 2001	1.96	< 0.001	1.15	
N:	1556		1556	

Table 3: Correlates of Contraceptive Choice [multinomial logit coefficients]

variable	univariate does not use contraception	p - value	uses withdrawal	p - value	multivariate does not use contraception	p - value	uses withdrawal	p - value
current age	0.08	< 0.05	-0.02		0.07	< 0.10	-0.04	< 0.01
race:								
African - American, non - Hispanic	0.53	< 0.01	-0.53	< 0.01	0.31		-0.49	
Hispanic	0.69	0.00	-0.27		0.14		-0.17	
other race	0.54		-0.18		0.75	< 0.10	-0.19	
[ref = white, non - Hispanic]								
marital status:								
cohabiting	0.12		0.25		-0.02		0.24	
married	0.40	< 0.05	-0.09		0.25		-0.02	
[ref = single, not cohabitating]								
others:								
education - years	-0.28	< 0.001	0.03		-0.22	< 0.001	0.02	
number of children	0.50	< 0.001	-0.12	< 0.10	0.26	< 0.01	0.03	
wants more children	-0.57	0.00	0.16		0.002		0.04	
age at first sex	-0.09	< 0.05	-0.01		-0.04		0.03	
number of lifetime sex partners	-0.01		0.04	< 0.001	-0.01		0.04	< 0.001
has ever had an STI	-0.004		0.52	< 0.01	-0.03		0.35	< 0.10
works full time	-0.48	< 0.01	0.12		-0.13		0.07	
at or below 200% of FPL in 2001	0.64	< 0.001	-0.22	< 0.10	-0.03		-0.19	
N:	1556				1556		1556	

Table 4: Correlates of Withdrawal, Conditional on Using Contraception [odds ratios]

variable	univariate odds ratio	p - value	multivariate odds ratio	p - value
current age	1.00		0.98	
race:				
African - American, non - Hispanic	0.59	< 0.05	0.60	< 0.05
Hispanic	0.76		0.83	
other race	0.89		0.95	
[ref = white, non - Hispanic]				
marital status:				
cohabiting	1.14		1.13	
married	0.99		0.99	
[ref = single, not cohabitating]				
others:				
education - years	1.00		1.01	
number of children	1.003		1.07	
wants more children	1.06		1.00	
age at first sex	0.96		1.01	
number of lifetime sex partners	1.04	< 0.001	1.04	< 0.01
has ever had an STI	2.03	< 0.01	1.67	< 0.05
works full time	1.01		0.94	
at or below 200% FPL	0.85		0.79	
N:	1378		1378	