Predictors of Non-use of contraception, and reasons for non-use: Key factors affecting unintended pregnancy in the United States

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Extended Abstract

About half of all 6 million pregnancies, and over one-third of the 4 million births in the United States each year, are unintended (Finer and Henshaw, 2006; Finer and Zolna, 2011; Chandra et al, 2005, table 21), and the costs of these births are high—about \$11 billion in annual medical costs alone (Monea and Thomas, 2011; Sonfield, Kost, Gold, and Finer, 2011).

This paper examines data from two large nationally representative samples of US women on factors associated with non-use of contraception. Black women, sexually active teenagers, unmarried women, and women trying to delay births are known to have higher proportions not using a method (Mosher and Jones, 2010, eg.). But this study examines a wide variety of additional social and behavioral factors not used in previous studies, including being foreign born, language of ACASI interview, perceived fecundity impairments, alcohol and drug use, health insurance coverage, and other factors. Reasons for non-use of contraception are also studied, using these and other predictors not available before in national samples.

The results are based on the nearly 20,000 women interviewed in the 2002 and 2006-10 National Surveys of Family Growth (NSFG), and they may be useful to those delivering medical and other services to prevent unintended pregnancy in the United States. *(If this paper is accepted for PAA, it will use the full 2002 and 2006-10 surveys, which total nearly 20,000 women, but this abstract uses the 2002 and 2006-8 NSFG, which include 14,999 women. According to NCHS, the 2009-10 NSFG data will be released in October or November of 2011.)*

Predictors of Non-Use of Contraception

The population at risk of unintended pregnancy includes women who are either currently using contraception (including those who are sterile for contraceptive reasons) or are not using but are sexually active and do not want to get pregnant. **Table 1** shows that women at risk constitute 69% of all women 15-44 years of age. Those who have never had intercourse, have not had intercourse recently, are already pregnant, trying to become pregnant, or are sterile for non-contraceptive reasons are not considered "at risk of unintended pregnancy," and are excluded from the analysis. About 43 million women 15-44 were at risk of pregnancy in 2006-8. Of these, about 11 percent, or 4.5 million women, were at risk and not using a method in 2006-8. (Mosher and Jones, 2010, table 8). This paper focuses on the characteristics of these women and their reasons for not using contraception. Further understanding of this group could provide ways to reduce the unintended pregnancy rate in the US, which is among the highest in the industrialized world. (Trussell, 2008, <u>Contraception</u>).

Table 1 shows factors associated with the proportion of women at risk who are not usingcontraception, based on a national sample of more than 10,000 women at risk.

Sexually active teenagers are more likely than adults to be at risk and not using a method (18% of teens at risk were not using a method, vs. less than 10% of those 30 and older at risk). Similarly, 17% of those at risk who are never married and not cohabiting were not using contraception, compared with 7% of married women at risk. By parity, women at risk with 0 or 1 birth were twice as likely (14-15%) as those with 2 or more to be at risk and not using a method (7%).

While these differentials are well known (e.g. Mosher and Jones, 2010), others shown in table 1 are new. For example, 9% of white women and 9.8% of Asian women at risk were not using a method, compared with 15% of US-born black women and a remarkable 26% of foreign-born black women (based on 268 cases; more in the dataset for PAA). Given the large samples available for this study, this finding deserves more investigation.

Finally, table 1 also shows that among women who reported that it was difficult for them to have a baby, nearly 27% were not using a method. This is consistent with other findings (Chandra et al, 2005, table 29) that one of the leading reasons for non-use is an often-mistaken belief that she cannot get pregnant.

The NSFG self-administered questionnaire, administered by Audio Computer-Assisted Self-Interviewing or ACASI, contains a number of measures of sexual risk-taking and drug use. These were collected because they have been shown to be associated with sexual and contraceptive risk-taking, with implications for HIV, and other sexually transmitted diseases. They may also be associated with unintended pregnancy, and risks to a pregnant woman and her baby. Women who reported (to the computer) that they had "5 or more drinks within a couple of hours" daily in the last 12 months were substantially more likely than others (17% vs. 10%) to be at risk and not using a method. The same is true for women who had ever used cocaine or crack in the last 12 months. Similarly, women who had 2 or more male sexual partners in the last 12 months were significantly more likely to be at risk and not using a method than women with one partner (15-16% vs 10%).

In the coming weeks, we intend to look at other factors that may be associated with non-use, including: language of interview, health conditions (such as Pelvic Inflammatory Disease and Endometriosis), and women's contraceptive histories (which this dataset measures in detail).

Once these factors have been examined, we will look at more detailed sub-groups by race/ethnicity, income, and education, as well as the factors examined here. This will be followed by a logistic regression analysis of factors associated with non-use, which should allow us to sort out what factors are more important among the many examined here. We also hope to suggest whether an improved measure of women "at risk and not using a method" is possible or useful with these data.

Reasons for non-use leading to an unintended pregnancy

Table 2 is shown for women who had an unintended pregnancy ending in live birth in the three years before the interview, who did not use a method before the pregnancy. These women were shown a card listing several reasons often given for non-use of contraception. They could choose more than one reason. The table shows the reasons for non-use of contraception they gave. (*This table is based on 328 cases using 2002 data; the table for PAA will use both NSFG the 2002 and 2006-10, so sample sizes will almost triple, and more detailed comparisons will be possible. We will include a variable for "cycle" to see if there are any significant trends.)*

This analysis sheds additional light on studies such as the study by Nettleman et al (2007), using PRAMS data, which has large sample sizes but contains very few predictors and a relatively limited measure of intendedness; and that by Kaye et al (2009), which was based on telephone interviews with unmarried adults 18-29. The current analysis uses larger sample sizes than those available to Chandra et al (2005, table 29).

The reasons women gave for not using a method of contraception that resulted in an unintended pregnancy were:

- About 46% said they did not think they could get pregnant,
- 31% said they "did not expect to have sex",
- 17% said they "didn't really mind if I got pregnant,"
- 5% were "worried about the side effects of birth control,"
- 6% said that their male partner didn't want to use birth control himself, and
- 8% said that their male partner didn't want her to use birth control.

Looking at variations in these reasons by characteristics of women reveals the following:

- The most common reason women gave for not using contraception was that they "did not think (they) could get pregnant". Half of Hispanic women (50%) gave this reason, along with nearly half of white women (46%) and only 35% of black women. Nettleman et al (2007) also found that "I did not think I could get pregnant" was a major reason for non-use leading to unintended pregnancies in a study of PRAMS data from 26 states in 2000-2002.
- As expected, women who were neither married nor cohabiting were much more likely to say that they "did not expect to have sex" (51%) than women who lived with a man (12% of married women and 15% of cohabiting women). This important reason was not offered to respondents in the PRAMS-based Nettleman et al (2007) study.
- Findings for those who said they "didn't really mind" getting pregnant with an unintended pregnancy helps clarify the meaning of this answer:

- Among women whose pregnancy was mistimed by less than 2 years, 33% said they "didn't really mind" getting pregnant, but
- among those who said the pregnancy was mistimed by 2 years or more, just 15% gave this reason, and
- of those who said their pregnancy was unwanted, only 8% said they "didn't really mind."
- Married women were more likely to say they "didn't really mind" getting pregnant (24%), compared with women who were cohabiting (17%) and with those who were neither married nor cohabiting (9%). Women whose current income was at the poverty level or above (21%) were more likely to say that they "didn't really mind" getting pregnant compared with women with lesser incomes (14%).
- These variations in the percentages who "didn't really mind" getting pregnant show that women who gave this response are more likely to have a partner or spouse, and more income—in short, more resources to support the baby, and were often planning only to postpone a child for another year or two. Those who did not give this reason tended to say that they did not want to have a child in the next two years—or ever.

Thus, these data have several important advantages over previous studies: a rich set of variables; very large, recent, national samples; the ability to look at high-risk groups not studied before in national samples; and new more sophisticated measures of wantedness. Combined with the multivariate analyses we have planned, we expect to increase our understanding of non-use of contraception among women at risk of unintended pregnancy in the United States. In turn, these insights should advance our understanding of fertility differentials and the challenge of preventing unintended births to women in the contemporary United States.

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Table 1. Number of women 15-44 years of age at risk of unintended pregnancy¹, and percent currently using a method of contraception, by selected characteristics: United States, 2002 and 2006-08 (combined)

	All women		All women at risk			
Characteristic	Number in thousands	Percent at risk	Number in thousands	Percent using a method	Percent not using a method	
Total 2/ Sample n	61,713 14,999	69.2	42,720 10,178	89.3	10.7	
Interview Year						
2002	30,780	69.3	21,342	89.3	10.7	
2006-2008	30,932	69.1	21,378	89.4	10.6	
Age						
15-19 years	10,132	36.5	3,697	81.7	18.4	
20-24 years	9,990	66.4	6,637	86.8	13.2	
25-29 years	9,750	74.3	7,248	88.8	11.2	
30-34 years	9,930	75.9	7,537	91.8	8.2	
35-39 years	10,664	80.8	8,612	90.3	9.7	
40-44 years	11,247	79.9	8,989	91.8	8.2	
Marital or cohabiting status						
Currently married	27,666	81.6	22,578	92.8	7.2	
Currently cohabiting	1,686	68.9	1,161	86.7	13.3	
Formerly married, not cohabiting	10,153	77.1	7,831	89.1	11.0	
Never married, not cohabiting	22,208	50.2	11,149	82.8	17.2	
Parity						
0 births	26,252	52.6	13,809	85.8	14.2	
1 birth	10,772	70.3	7,572	85.0	15.1	
2 births	13,123	85.7	11,246	93.0	7.1	
3 or more births	11,566	87.3	10,092	93.4	6.6	
Education 2/						
No high school diploma or GED	13,657	50.8	6,936	85.5	14.5	
High school diploma or GED	16,053	75.9	12,187	88.8	11.2	
Some college, no bachelor's degree	17,424	73.4	12,782	90.3	9.8	
Bachelor's degree	7,898	74.7	7,898	92.3	7.7	
Master's degree or higher	2,917	73.0	2,917	88.5	11.5	
Poverty level income 3/						
0-149 percent	19,398	63.9	12,389	87.0	13.0	
0-99 percent	12,665	62.7	7,942	86.4	13.6	
150-299 percent	18,073	70.2	12,693	89.6	10.5	
300 percent or more	24,241	72.8	17,638	90.8	9.2	

Table 1 (cont) . Number of women 15-44 years of age at risk of unintended pregnancy¹, and percent currently using a method of contraception, by selected characteristics: United States, 2002 and 2006-08 (combined)

08 (combined)						
	All wo	men	All women at risk			
				Percent	Percent	
	Number in	Percent	Number in	using a	not using	
Characteristic	thousands	at risk	thousands	method	a method	
Future childbearing intentions						
Intends more	29,189	57.0	16,646	85.5	14.5	
Intends no more	31,628	80.5	25,473	91.8	8.3	
Does not know intent	895	67.2	602	92.1	7.9	
Fecundity status						
Surgically sterile (contraceptive)	13,449	100.0	13,444	100.0	0.0	
Subfecund	5,272	67.1	3,536	73.2	26.8	
Fecund	40,501	61.9	25,060	86.2	13.8	
Race and Hispanic origin and Foreign- born status						
Hispanic	9,742	65.4	6,372	89.8	10.2	
Foreign-born	4,804	67.7	3,252	90.0	10.0	
Born in the U.S.	4,924	63.1	3,107	89.6	10.4	
Non-Hispanic	, -		-, -			
White, single race	38,571	71.2	27,479	90.7	9.3	
Black, single race	8,351	66.6	5,558	84.2	15.8	
Foreign-born	792	56.4	447	74.2	25.8	
Born in the U.S.	7,548	67.7	5,108	85.1	14.9	
All other single race and multiple						
race	5,048	65.6	3,311	85.6	14.5	
Asian, single race	2,308	64.3	1,483	90.3	9.8	
Binge drinking in past year (5+ drinks "within a couple of hours")						
Never	38,145	65.5	24,998	89.9	10.1	
Once a month or less	19,912	74.6	14,861	88.9	11.1	
Once a week	3,036	80.6	2,446	86.4	13.6	
Daily	341	81.7	279	83.1	16.9	
Marijuana use in past year						
Never	51,704	68.3	35,300	89.8	10.2	
Once a month or less	7,488	74.5	5,582	86.1	13.9	
Once a week	917	72.7	667	92.3	7.7	
Daily	932	76.7	932	86.0	14.0	

	All women		All women at risk			
				Percent	Percent	
	Number in	Percent	Number in	using a	not using	
Characteristic	thousands	at risk	thousands	method	a method	
Alcohol use in past year						
Never	15,601	55.2	8,615	89.1	11.0	
Once a month or less	32,146	71.2	22,885	89.2	10.8	
Once a week	11,232	80.7	9,062	89.2	10.8	
Daily	2,380	82.1	1,954	91.6	8.4	
Cocaine or crack use in past year						
Never used	59,712	69.0	41,223	89.5	10.5	
Ever used	1,682	78.1	1,313	83.7	16.3	
Number of male sexual partners in past year 4/						
1 partner	42,551	81.2	34,556	89.7	10.3	
2 partners	3,865	85.5	3,304	84.9	15.1	
3 or more partners	2,440	88.1	2,149	83.8	16.2	
Current health insurance status						
Private insurance	40,360	71.0	28,649	90.7	9.3	
Other insurance	6,216	61.8	6,216	86.4	13.6	
Not insured	7,784	70.6	7,784	86.7	13.3	

Table 1 (cont). Number of women 15-44 years of age at risk of unintended pregnancy¹, and percent currently using a method of contraception, by selected characteristics: United States, 2002 and 2006-08 (combined)

1/ "At risk of unintended pregnancy" includes all current contraceptors plus women who have had sex in the last 3 months but are not current contraceptors. Not included (not at risk) are those who are currently pregnant, trying to get pregnant, sterile for health reasons, never had intercourse, and had no intercourse in the past 3 months.

2/Limited to women 22-44 years of age

3/Limited to women 20-44 years of age

4/Limited to women who have had sex in the past year

contracoption, by concerce a marat			, 2002			
				Worried	Male partner	Male
		Did not	Didn't	about	didn't	partner
	Did not	think you	really	side	want <u>you</u>	didn't
	expect to have	could get	mind if you got	effects of birth	to use birth	want to use birth
	Sex	pregnant	pregnant	control	control	control
			Perc			
Total 1/	30.9	45.6	17.3	5.4	5.6	7.7
Unintended status						
Unwanted	42.7	38.6	8.3	8.5	6.2	9.9
Mistimed < 2 years	24.4	45.2	33.1	2.4	3.4	3.0
Mistimed 2 or more years	22.5	53.7	14.8	4.6	6.7	9.2
Age at birth						
Under 25	32.9	49.1	15.6	3.6	7.6	6.3
25-44	28.2	41.0	19.6	7.8	3.0	9.5
Marital and cohabiting status at time of birth						
Married	22.0	48.2	23.9	4.1	4.7	7.6
Cohabiting	15.1	57.4	16.5	10.2	9.2	11.4
Neither married nor cohabiting	51.2	35.8	8.8	4.7	4.7	5.9
Public assistance receipt in 2001						
Yes	35.7	44.4	12.7	6.0	7.2	7.4
No	22.2	47.9	25.6	4.5	*	8.3
Education 2/						
High school diploma or GED or						
less	32.4	42.3	17.7	5.2	5.3	9.8
Some college or higher	23.7	49.5	23.3	5.7	*	4.1
Percent of poverty level 3/						
0-99 percent	36.6	41.8	13.8	8.0	*	6.2
100 percent or higher	27.8	46.5	20.6	4.4	4.7	8.7
Hispanic origin and race						
Hispanic or Latina	26.8	50.0	13.2	6.1	6.8	8.8
Not Hispanic or Latina:						
White, single race	28.2	45.6	23.3	5.1	*	7.5
Black or African American, single race	45.6	34.6	10.8	6.5	*	7.4
	1010	0.110	1010	0.0		

Table 2. Number of women 15-44 years of age who had an unintended pregnancy leading to a live birth in January 1999 or later and who were not using a method of contraception at the time of the pregnancy, and percent reporting specified reasons for not using a method of contraception, by selected characteristics: United States, 2002

1/ Includes women of other or multiple race and origin groups, and women with missing information on contraception used in each month, and reasons for not using contraception, not

shown separately.

2/ Limited to women 22-44 years of age at time of interview. GED is General Educational Development diploma.

3/ Limited to women 20-44 years of age at time of interview.

Note: If more than one unintended pregnancy leading to a birth occurred during the time frame, the most recent pregnancy is represented in this table.

* Figure does not meet standard of reliability or precision.