

## **Discontinuation and Resumption of Contraceptive Use: *Results from the 2002 National Survey of Family Growth***

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### Introduction:

In an ideal world, every woman would find a contraceptive method suited to her age, union status, and desire for future births, and would use that method until she was no longer exposed to risk of an unwanted pregnancy, or until changing life circumstances led her to choose a different method. However, in actual experience, failure to prevent pregnancy, difficulty in using methods consistently and correctly, dissatisfaction with available methods, and partner opposition to methods are among the reasons that women abandon contraceptive methods. Imperfect or incorrect use of contraception often leads to contraceptive failure and consequently an abortion or an unwanted birth. In addition, when women stop using a contraceptive method, they often do not immediately begin to use another method, leaving themselves exposed to the risk of unplanned or unwanted pregnancies during periods of nonuse.

The sixth round of the National Survey of Family Growth contains detailed information about methods of contraception used by 7,643 women 15-44 years of age from January 1999 until the time of the interview in 2002 or early 2003. In addition, the survey has a complete pregnancy history, a detailed union history, a four-year calendar of sexual activity, and a wealth of data about the woman's desires and intentions with regard to future children both for past pregnancies and at the time of the interview.

An analysis of the data from the fifth round of the NSFG in 1995 found that 44% of women discontinued using their method of contraception for a method-related reason within one year of beginning use of the method.<sup>1</sup> In the present analysis, we find that this probability has increased to 57%. We will analyze changing patterns of method use, characteristics of users, and fertility intentions in order to understand the reasons for this increase. We will present life table probabilities of contraceptive failure and of method-related discontinuation of use at various intervals from the initiation of use. For those women who discontinue using a method, we will present life table probabilities that they will resume using the same method or another method within a year. We will also present proportional hazards models of the characteristics associated with method discontinuation and resumption of use.

Finally, we will merge data on abortions from the 2001 Abortion Patient Survey with the data from the NSFG so that we can report proportions failing and discontinuing use, adjusted for underreporting of abortion, as well as the unadjusted proportions.

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<sup>1</sup> James Trussell and Barbara Vaughan. "Contraceptive Failure, Method-related Discontinuation, and Resumption of Use: Results from the 1995 National Survey of Family Growth". *Family Planning Perspectives*. 31(2): 64-72, 93, March/April 1999.

## Data:

Using the detailed method history calendar recorded in the NSFG, we construct segments of method use, beginning with the method (if any) in use on January 1, 1999, and continuing with all methods used from that time until the interview in 2002 or early 2003. We match these segments with other information in the survey to determine the circumstances that attended each change in contraceptive status. Thus, we are able to determine if the woman got pregnant while using the method, if she changed immediately to a different method, if she stopped using during a period when she wasn't exposed to the risk of pregnancy (either because she was not sexually active or because she had a sterilizing operation), or if she stopped using because she wanted to have a baby at that time. If method use was stopped during a period of sexual activity, when the woman was not sterile and not trying to get pregnant, and if the woman did not immediately begin using another method, we classify her as having stopped for other (method-related) reasons. For the purpose of our analysis, then, the method related reasons for which a woman might stop using contraceptive are: becoming pregnant while using (contraceptive failure), change to another method, and stopped for other reasons. Stopping to get pregnant or because there is no longer a risk of pregnancy are nonmethod-related reasons for discontinuation of method use.

It is known that reporting of induced abortion is incomplete in the 2002 NSFG.<sup>2</sup> It is possible that women report abortions as miscarriages in the survey, in which case the reporting of contraceptive failure and other method-related discontinuation might not be affected. However, it is also possible that women do not report at all the pregnancies that led to an induced abortion, and in this case, they may either report continuing method use throughout the pregnancy, or they may report stopping for unstated reasons. In either case, this would cause us to underestimate the probability of contraceptive failure and of all method-related discontinuations. The 2001 APS is a national survey of all abortion patients which has information on contraceptive use at the time of pregnancy. We will use these data to make an adjustment in our probabilities of failure and method-related discontinuation.

## Methodology:

We will report life table probabilities of contraceptive failure and of method-related discontinuation. We will also report life table probabilities of resumption of use of specific methods after discontinuation, as well as the resumption of use of any method. We will also estimate proportional hazards models of the characteristics that have been found to affect contraceptive failure, discontinuation, and resumption of use. These factors will include method being used, age, ethnicity, number of children already born, poverty status, and intentions for future childbearing. For resumption of use, we will add the method that was used before discontinuation.

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<sup>2</sup> Rachel Jones and Kathryn Kost, "Reporting of Induced and Spontaneous Abortion in the 2002 National Survey of Family Growth." Guttmacher Institute, unpublished document, 2006.

To adjust for the underreporting of abortions in the NSFG, we will remove from our data the contraceptive failures leading to induced abortion that were reported in the NSFG and replace them with the contraceptive failures leading to abortion that were reported in the APS, matching the respondents in both surveys by method, duration of use, and by all of the social and behavioural characteristics that we are using in the analysis.

Preliminary results:

The risk of method-related discontinuation in the first year of use has increased by 33% in the seven years between the 1995 NSFG and the 2002 NSFG. This pattern is seen in all methods other than withdrawal, whose risk of discontinuation has decreased slightly. The increase has been especially dramatic for the pill; almost half of women who begin using the pill have discontinued use within the first year. This is a 48% increase over the proportion who discontinued pill use in the first year at the time of the 1995 NSFG.

% of women who discontinue use of contraception for method-related reasons

	2002 NSFG		1995 NSFG	
	6 mo.	12 mo.	6 mo.	12.mo.
All methods	43.5	58.1	30.6	43.6
Depo-Provera	27.6	46.4	23.3	44.4
Male condom	44.2	58.6	33.9	47.3
Periodic abstinence	43.2	54.7	38.2	48.8
Pill	33.1	49.0	18.0	32.0
Withdrawal	41.6	56.8	47.4	57.1

These results imply both a high level of dissatisfaction with the choice of methods available and a high degree of risk of unplanned pregnancy when women abandon methods without beginning another method, or when they abandon highly effective methods for less effective methods.