

CONTRACEPTION BIOGRAPHIES: WOMEN'S CONTRACEPTIVE METHOD SWITCHING AND UNION STATUS

Extended Abstract

Introduction

Relatively few women rely on the same type of contraception throughout their reproductive life course, meaning a large proportion of women tend to practice contraceptive switching (Grady et al. 2002). The study of contraceptive method switching is relevant because it is tied to sexually transmitted infections and unintended pregnancy (Vaughan et al. 2008). Prior research has not considered the contemporary context and has been largely limited to married women (Grady et al. 1989, 2002). Much of the research on women's contraceptive behavior has focused on risk of unintended pregnancy, consistent use of contraception, method choice and satisfaction, gaps in method use, and failure rates of contraceptive methods (Frost et al. 2007 (a),(b)); Mosher and Jones 2010; Trussell 2011, Vaughan et al. 2008). While these studies expand the knowledge base of women's contraceptive behavior, fewer studies examine the switching of contraception during women's reproductive life course. This is important as maintaining consistent and effective contraceptive use over time proves very difficult (Frost 2011). Altogether, contraceptive method switching can produce both positive and negative outcomes. On one hand, it may compromise women's protection and, as such, make them more vulnerable to unintended pregnancy (Grady et al. 2002; Vaughan et al. 2008). Conversely, it may improve a woman's overall reproductive health if she switches from less to more effective contraception.

Women's contraceptive behavior allows for more in-depth analysis of their overall reproductive behavior as contraceptive use is a proximate determinant of fertility (Bongaarts 1978). Research indicates that reproductive behavior of women (e.g., patterns of conception and

childbearing) varies by union status (married versus cohabiting), (Manning 2001; Musick 2002; Raley 2001). Similarly, recent studies find variations in current contraceptive use by union status among women in the United States (Jones et al. 2012; Sweeney 2010). These findings indicate that more exploratory research is needed on other types of contraceptive behavior among women. Therefore, investigation contraceptive method switching by union status is appropriate.

Current Investigation

This paper relies on the recently collected data from the National Survey of Family Growth (NSFG). The NSFG 2006-2010 is a national area probability survey of a cross-sectional independent sample of more than 12,279 non-institutionalized women, ages 15-44 years, who are residing in households in the United States. The NSFG is an appropriate dataset for this study as it uses an event history calendar to collect month-by-month information on contraceptive use, and important life course events. For this study, 36 months of contraceptive use calendar data are used for analysis. Apart from information on contraceptive use, NSFG provides information on pregnancy, sexual activity, infertility, marital and relationship transitions, dates related to periods of sexual abstinence; and other socio-demographic correlates that may be associated with contraceptive method switching. With specific reference to union status transitions, this research uses marital and cohabitation start and end dates to provide more current and reliable estimates of women who are married, cohabiting and single. Prior research combined cohabiting and single women into one 'unmarried' category (Grady et al. 2002)

Research Goal & Hypotheses

Research Goal #1: Examining the prevalence and predictors of contraceptive method switching according to union status over a three-year period.

Hypotheses:

1. Single women will more often engage in contraceptive method switching than cohabiting or married women.
2. Cohabiting women will experience greater odds of contraceptive method switching than married women.

Dependent variable: Method switching is measured based on 1) reporting of different contraceptive methods in consecutive months and 2) the use of two methods (including nonuse) when separated only by a period of abstinence.

Independent variable: Union status (time-varying variable) is measured using retrospective dates of marital and cohabitation histories at the time of contraceptive switching. At the start of the observation period women are either in a marital or cohabiting union. If there are no marital or cohabiting dates that correspond to the commencement of the observation period, women are classified as single.

Fertility & Union History variables: The following variables are included in models for analysis: parity, fertility intentions, duration, and prior marital and cohabitation history.

Socio-demographic variables: I include respondents' age, educational level and poverty status.

Background variables: race/ethnicity, respondents' religious affiliation and mothers' educational level are included in the analysis.

Measure of time (measured in months): This variable counts the number of months from the woman's month of first contraceptive use during the observation period to the month in which a contraceptive method switch occurs provided her union status does not change and/or she does not become pregnant.

Analytic Presentation for Research Goal #1:

This paper examines patterns of contraceptive method switching and variations by union status. Descriptive analyses will show the percentage of women by union status using specific contraceptive methods who switched to a new method during the three (3) year observation period. Second, I will provide estimates of the percent distribution of women by union status by origin method and percent distribution of those who switched to specific destination methods, by origin method. The final descriptive analyses include the percentage of women who are stable non-users of contraception, stable users of contraception, and women who switch to more effective and less effective methods of contraception based on union status. In order to determine the prevalence and predictors of switching behavior I will provide weighted means, proportions and standard errors based on the analytic sample and descriptive analyses will be provided for each union status.

I estimate binary logistic regression and multinomial logistic regression analyses to estimate discrete-time event history models. This analysis is appropriate when predicting multiple event types, for example: non-use; continuous use; and switching. Event history analysis is a common technique used in prospective panel studies, where the same sample of individuals is analyzed or retrospectively in cross-sectional studies, as is the case with the NSFG. For the purposes of this study, the dataset will be restructured into person-month files. I will create a data file which contains one record for each observed month that each respondent spends using any form of contraception. If there is no record of contraceptive use for an observed month and respondents are not sexually inactive based on the period of non intercourse during that specific month that file is excluded from analysis. The exposure period ends when there is a change in union status, occurrence of pregnancy or respondents reach the age of 44 years. The

analysis essentially pools all the person-months of risk of contraceptive method switching and estimates the effect of union status on contraceptive method switching. Hazard ratios are produced which gives the risk that an event will occur given it had not previously occurred. Hazard ratios greater than 1 indicate a higher risk of an event occurring compared to the reference category while hazard ratios less than 1 indicate a lower risk of an event occurring compared to the reference category.