

## Weak Commitment to Modern Contraceptive Methods—A Reason for Low Prevalence in Pakistan?

The latest Pakistan Demographic and Health Survey 2006-07 indicates stagnation in contraceptive use with the contraceptive prevalence rate (CPR) falling slightly to 30 percent. The earlier rises of 2 percent per annum in CPR in the 90's appear to have slowed down to half their levels at about 1 percent a year and very recently have gone into negative. This raises the question of why current contraceptive use rates are not continuing to rise at the same levels as in the 1990s, especially since the demand for birth spacing has gone up and the number of wanted children has fallen to three children from over four earlier.

Despite no notable increase in the CPR, 'ever use' of family planning methods has increased during the past few years. Ever use of contraceptive methods steadily increased from 21 percent in 1991 to 34 percent in 2001 and finally to 49 percent in 2007, indicating a higher per annum increase since the beginning of this decade (2.5 percent per annum versus 1.3 percent per annum in the 1990's) (Table 1). This implies that almost half of currently married women have used contraceptives (modern or traditional methods) at least one time, indicating that a significant share of women have discontinued the use of family planning. In this situation it is very important to examine the reasons behind why current use remains low while the number of women trying family planning for the first time is increasing.

**Table 1: Contraceptive use among currently married women 1968-2007**

	NIS 1968-69	PFS 1975	PLFMS 1979	PCPS 1984-85	PDHS 1990-91	PCPS 1994-95	PFFPS 1996-97	PRHFPS 2001	PSWFS 2003	PDHS 2006-07
Current use of contraception	6	5	3	9	12	18	24	28	32	30
Have ever used contraception	12	11	5	12	21	28	36	40	42	49

The main objective of this paper is to examine the levels of contraceptive discontinuation in Pakistan to investigate if the low CPR is a consequence of high contraceptive discontinuation rates. This paper will also investigate what factors are associated with contraceptive discontinuation. We will also determine if the reason specific contraceptive discontinuation rates are different for different methods.

The identification of large variations in continuation between users of different methods or between users with different background characteristics may be useful for the family planning programs. We intend to present the method specific discontinuations as well as the reasons for discontinuation by the background characteristics of the women. This study of contraceptive discontinuation will not only address why CPR and ever use are moving in opposite directions, but also what are the significant implications at the policy level.

## **Data and Methods**

The data are derived from the baseline survey of a USAID funded project Family Advancement for Life and Health (FALAH). In each of the 29 focus districts from all the provinces of Pakistan, a cross-sectional household survey was conducted in 2008-09. These data are unique and important as they are the only data available in Pakistan so far to study the contraceptive discontinuation. Overall 19,038 currently married women of reproductive age were interviewed for this survey. The analysis is based on 55 month calendar data concerning women's contraceptive use and monthly reproductive behaviors that were collected from January 2004 to the month of interview on the standard Demographic and Health Surveys format. Months of starting and stopping specific methods were recorded, together with the main reason for stopping and the occurrence of pregnancies, births and terminations.

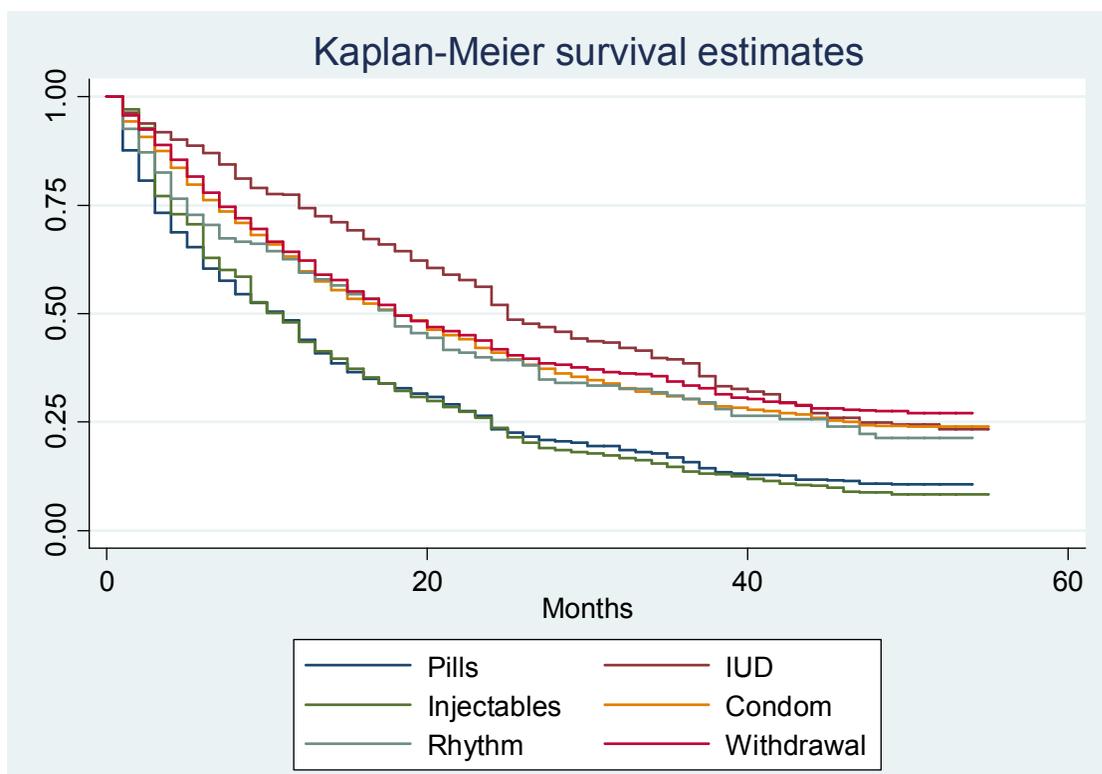
Since the outcome of interest is contraceptive discontinuation, the analysis is based on 8,932 episodes contributed by the use of reversible contraceptive methods. The episodes that were contributed by non-reversible methods were excluded from the analysis because they were not at the risk of discontinuation. The dependent variable for the analysis is time to contraceptive discontinuation. To investigate why some women are more likely than others to discontinue while in need, experience failure or switch methods, we will apply the multilevel, multinomial discrete-time hazard regression models. The period of observation used for survival analysis is the time in months from the woman's contraceptive usage with the outcome (or failure) variable being discontinuation of contraceptive use. Women who had been using any family planning method at the end of the calendar are considered right-censored.

## Findings

### *Discontinuation rates*

Figure 1 shows the discontinuation rates for different contraceptive methods. This shows that the discontinuation is highest among the pill and injectable users. Half of the pill users discontinued use within 11 months, with two-fifths of the women abandoning pill use within 6 months. Also more than half of the injectable users discontinued use within the first year. The continuation rates were highest among IUD users, with only a quarter of the users discontinuing within first year of use and around half discontinuing within two years of use. Since the number of Norplant users is very low, separate analysis was not performed for them. Among condom and withdrawal users the discontinuation was high during the first year of use but the discontinuation rates went down after the first year.

**Figure1: Contraceptive discontinuation rates of reversible methods**



\*Excluding Norplant due to small numbers

### *Reasons of discontinuation*

We divided the reasons of contraceptive discontinuation into four broad categories: abandoning use while not in need (Infrequent sex/husband away and wanted to become

pregnant etc.), abandoning use while in need (Side effects/complications and husband didn't like method etc.), method failure and method switching. Based on these categories, separate discrete-time hazard models will be applied to examine if reason-specific continuation rates differ significantly by methods and back ground characteristics of the women. Preliminary results show that almost two-thirds of the episodes were discontinued due to the reasons that can be avoided to increase the contraceptive use. It also shows that lack of access and cost which are commonly perceived as the main reason for low contraceptive use in Pakistan are not the obstacles for the contraceptive continuation. On the other hand the reasons like the experience of side effects/complications and method failure are the main reasons for low contraceptive continuation rate. These are the problems that can be addressed through improved quality of care.

The results of this study will help to reinforce the major but much neglected problems of discontinuation and inadequate switching to alternative methods in the family planning program of Pakistan.