## Will Contraceptive Use Go Up If Pakistani Couples Keep Talking?

### Significance/Background

Pakistan's latest demographic and health survey shows a slowdown in the rate of fertility decline and a stagnant contraceptive prevalence rate of around 30 percent for a decade now. While more and more women are expressing the desire to control their fertility less than a third of them are using a contraceptive method. This is reflected in the high unmet need for family planning at 25 percent and an unintended pregnancy rate of one per woman (Population Council 2004). Furthermore, different national level studies have shown that while proportion of current contraceptive users is not increasing, the proportion of ever users of contraceptive methods is accelerating (PDHS 2006-07). This is also shown by high contraceptive discontinuation rate of 45 percent at 12 months (Naz et al 2010).

Several studies attempting to determine the obstacles to uptake of contraception have found husband disapproval to play a major role (Casterline et al. 2001; Mahmood 1996). Even the two rounds of the Pakistan Demographic and Health Survey show an increasing proportion of women reporting 'husband disapproval' as the primary reason for not intending to use any form of contraception in the future. Communication between spouses is the first step in fertility decisions. An earlier analysis done by Zaidi and Mahmood (2010) showed that inter-spousal communication positively impacts the views of spouses and that it reduces the discrepancy between perceptions and reality. Such communication should therefore be one of the most important precursors for fertility change and contraceptive use. Many studies have demonstrated that low levels of communication on fertility preferences between spouses are associated with low contraceptive prevalence (Lasee and Becker 1997; Link 2011; Ogunjuyigbe et al. 2009; Tesfayi and Mishra 2007). Although partners' involvement has been found to be associated with contraceptive uptake and method choice, contraceptive discontinuation is not yet well understood (Pariani et al. 1991).

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This paper examines inter-spousal communication's influence on the uptake of contraception and on contraceptive discontinuation. Following Lasee and Becker's (1997) framework, instead of just studying the incidence of discussion on FP, woman's perception of the husband's approval is also taken in order to understand the effectiveness of this communication.

### The Pakistan Context

Pakistan is the sixth most populous country in the world with a current estimated population of 173 million (Planning Commission, 2010). In addition, it has one of the most youthful populations and highest fertility levels in the region. If the current growth rate of about two percent persists and is coupled with foreseeable population momentum, Pakistan's population is likely to double within three decades making it the third most populous country by 2050. Fertility declines are key to answering the question of how Pakistan will reach replacement fertility and consequently, population stabilization. An examination of the most recent data shows a very slow decline in the fertility rate since the beginning of this century. While the latest PDHS 2006–07 shows a very slow decline in the total fertility rate (TFR) at 4.1, the unwanted pregnancy rate is reported at 77 per 1,000 women. Moreover, unmet need increased from 33 percent in the Pakistan Reproductive Health and Family Planning Survey (PRHFPS) 2000–01 to 37 percent in the PDHS 2006–07. Consistent with these findings is the trend in unplanned childbearing (a combination of unwanted births and mistimed births) where the proportion of recent births that are unplanned rose from 21 percent in 1990–91 to 24 percent in 2006–07.

The unmet need for contraception and the proportion of unplanned births confirm that a large fraction of currently married women in Pakistan are at risk of unwanted pregnancies and potential abortions; the estimated national annual abortion rate (the number of abortions per 1,000 women aged 15–49) is 29. In fact, abortions account for termination of one in seven pregnancies (Sathar et al 2007). These figures underscore the practical importance of studying contraceptive uptake and its persistent use among couples in a country like Pakistan to achieve their reproductive intentions.

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In a patriarchal society like Pakistan, women have weak autonomy and little agency. Men play a primary role in most decisions including those related to fertility preferences and practices. Moreover, women's low mobility makes them dependent on their husbands for not just approval but also for permission and access to services. In such a setting, it becomes imperative to study the inter-spousal communication and thereby husbands' involvement in family planning decisions.

### **Data and Methods**

The data for this analysis are drawn from the baseline survey (collected in 2008-09) of a USAID funded five year project FALAH (Family Advancement for Life and Health), based on a stratified, clustered and systematic sample of urban and rural households in 29 districts<sup>1</sup> across all four provinces of Pakistan. The sample is not nationally representative but it represents all major ethnic groups of the country. The survey yielded information on 17,124 married women of reproductive age (15-49 years), which is double the sample size of the most recent Demographic and Health Survey in Pakistan.

In this paper first we examine how contraceptive use is influenced by the communication around family planning, woman's perceptions of husband's attitudes, and the fertility preferences. The dependent variable in the analysis is the current use of modern or traditional contraception. After establishing the bivariate relationships between contraceptive use and the variables of interest we study the multivariate relations using multiple logistic regression models.

Next we study the effect of inter-spousal communication on contraceptive discontinuation. The data for this is drawn from monthly retrospective contraceptive histories. Standard Demographic and Health Surveys format was used to collect information on monthly contraceptive history of women. Analysis is based on 6,747 women that contributed at least

<sup>&</sup>lt;sup>1</sup> Names of the sample districts are: Sukkur, Dadu, Larkana, Thatta, Sanghar, Ghotki, Shikarpur, Jaccobabad, Lyari, Orangi, Gadap, Lasbela, Jafarabad, Kech, Gawadar, Khuzdar, Upper dir, Buner, Batagram, Swabi, Charsada, Mansehra, Mardan, Jhelum, Dera Ghazi Khan, Multan, Khanewal, Bahawalpur and Rajanpur.

one episode of contraceptive use in one year prior to the survey. The most recent episode of contraceptive use contributed by these women was selected for this analysis. After examining the contraceptive discontinuation rates using the life-table techniques, we examine the effect of inter-spousal communication on contraceptive discontinuation using Cox proportional hazards models.

## Findings

## Sample Characteristics

As the majority of the FALAH districts' population is rural, 74% of the women in the sample lived in rural areas. Mean age of the women was 31 years whereas majority of the women were between 25-34 years of age. Less than a third (30%) of the women were literate while only 17 percent of them had secondary or higher education (Table 1). The average family size is 3.6 children compared to 3.5 children as shown by the PDHS 2006-07.

Overall 69 percent of the women perceive their husband's approval for family planning. Whereas slightly more than two-fifths of the women reported that they had discussed family planning with their husbands at least once in one year prior to the survey.



## Figure 1: Attitudes, perceptions and fertility preferences

### Current use of contraceptives

Knowledge of at least one modern contraceptive method was universal (99%). The contraceptive prevalence rate was reported as 29 percent compared to 29.6 percent reported by the PDHS 2006-07. More than a quarter of the current users were using permanent methods (female sterilization and male sterilization: 7.7 percent). The second most common method among Pakistani couples after female sterilization was condom (6.2 percent) followed by withdrawal (5.7 percent). A higher proportion of current contraceptive users were 35 or more years of age with 5 or more living children. Similarly literate women living in urban areas and those belonging to the higher socio-economic group were more likely to be current users (Table 2).

#### Inter-spousal communication on Family Planning

A higher percentage of the women in the age group of 25-34 years and those with 3-4 living children reported discussing family planning with their husband. Literate women and those belonging to high socio economic group were more likely to have discussed this. Comparison of the fertility desire and the discussion on family planning shows that those who wanted to limit childbearing were more likely to discuss followed by those who wanted to space between births. A higher percentage of women who had discussed FP with their husbands reported that their husband approved of FP compared to those who had never discussed. Similarly a higher percentage of those non-users of contraception who had a discussion with husband reported that they would use a method in future (Table 3).

#### Contraceptive discontinuation

Contraceptive discontinuation rate at one year was 45 percent of the users. This was highest for the two hormonal methods: pill and injectables with the discontinuation rates of 57 percent and 59 percent at one year respectively. Discontinuation rates for IUD were the lowest: only 24 percent discontinued use after one year. In terms of women's background characteristics, discontinuation rates were highest for younger, rural women; those with fewer children; and those from a low socioeconomic group. There was little variation in contraceptive discontinuation based on literacy and education status. Limiters had higher continuation rates than spacers (Table 4) (Naz et al 2010).

#### Multivariate Analysis

The first multivariate regression model includes 3 variables to predict contraceptive use: discussion of family planning; woman's perception of husband's approval of FP; and fertility desire. This model controls for the residence, woman's age and parity, education attainment of both the women and their husbands and household socio-economic status. In this model we also include the Lady Health Worker in the community, in order to control for some of the variation in the availability of contraceptive services across communities. Results show that odds of contraceptive use were three times higher among the women who had discussed family planning with their husbands more than twice in past one year (OR=3.04). Women's desire to limit childbearing is the strongest predictor of contraceptive use (OR=5.98), followed by woman's perception of husband's approval (OR=4.57). All associations are significant at 99.9% confidence level.

The next models show the hazard ratios for contraceptive discontinuation (Table 6). The second model shows that contraceptive discontinuation was significantly higher among those women who did not have a discussion on family planning with their husband compared to those who had done so more often (HR=1.27). Contraceptive discontinuation was 8 percent higher among those women who only had this discussion once or twice as compared to those who had a repeated discussion, this difference was not significant. This model also shows that contraceptive discontinuation was significantly higher among injectables, pill, withdrawal and condom users, in that order, as compared to the IUD users. This model also shows that odds of contraceptive discontinuation were almost three times higher among the women whose intent to use contraception was to space between births (HR=2.93). Therefore, we construct the third and fourth model separately for spacers and limiters, to independently see the impact of spousal communication on these distinct groups of women.

The third model is only based on those women who were using contraceptives to space between births. It shows that contraceptive discontinuation is significantly higher by 27 percent among those who had not discussed family planning with their husband after controlling for woman's age, parity, education level, wealth status and the method discontinued.

The fourth model is based on only those women who used contraceptives to limit childbearing. This model showed that contraceptive discontinuation was significantly higher among those who either had never discussed family planning with their husbands or only discussed it once or twice (HR=1.27 and HR=1.26 respectively; significant at the 99 percent level). In this model, only the residence and the age of the woman were significant out of all the background characteristics included in this model.

#### Discussion

The analysis demonstrates that while couple's fertility desires play a significant role in the uptake of contraception, women's perceptions of their husband's approval is the strongest predictor of current use of contraception. Hence the accuracy of these perceptions is of critical importance. Previous research has shown that discussion on family planning issues positively impacts accuracy about views of spouses (Zaidi & Mahmood 2010). The current findings reconfirm that the inter-spousal communication increases the odds of contraceptive use.

The next question in this regard is whether inter-spousal communication affects the persistent contraceptive use i.e. to investigate if any relationship exists between the inter-spousal communication and the contraceptive discontinuations.

The results show a high level of contraceptive discontinuation among Pakistani women. The high discontinuation rates for pills and injectables reflect serious dissatisfaction with these methods. On the other hand, discontinuation rates were much lower for IUDs, however according to the PDHS 2006–07, only 8 percent of current users use IUDs. The high level of use and continuation rates of the withdrawal method and condoms suggests important advantages of these methods and the positive involvement of husbands. Low discontinuation rates among limiters as compared to spacers show the stronger commitment to use contraceptives among limiters than spacers.

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The findings show that inter-spousal communication does in fact affect the persistent contraceptive use. The women who reported the repeated discussion on family planning with their husbands had 27 percent less chances of discontinuing their contraceptive use as compared to those who did not discuss. Separate analysis of the spacers and limiters show that among spacers the odds of contraceptive discontinuation reduce even if the couple discusses the topic once or twice. While on the other hand among the limiters the odds of discontinuation would only be reduced if the couple discuss it more often, as the hazard rate was almost similar among those who had either never discussed it or did so only once or twice.

Overall, the analyses of this study indicate a positive impact of inter-spousal communication on family planning. Findings reflect that the contraceptive continuation rates could be improved by encouraging the couples for communication on family planning. Therefore, the FP programs need to proactively encourage inter-spousal communication and husbands' involvement in family planning decisions to attain better results on the CPR.

To achieve greater husband involvement in family planning, FALAH project implemented various community mobilization activities in the target districts. These activities include husband group meetings which were separately conducted by the Village Health Committees and the male community mobilization officers. Ulema and religious leaders were also trained and mobilized to indirectly influence the male involvement around family planning issues. In addition, the husbands were communicated family planning messages through interactive theaters in the target communities.

## References

Mahmood, N. (1996). Factors Affecting Contraceptive Use in Pakistan. Pakistan Development Review, 37(1).

Casterline, J.B, Z. Sathar and M. ul Haque. (2001). Obstacles to Contraceptive Use in Pakistan: A Study in Punjab. Studies in Family Planning, 32(2): 95-110.

Lasee, A. and S. Becker. (1999). Husband-Wife Communication about Family Planning and Contraceptive Use in Kenya. International Family Planning Perspectives, 23(1): 15-23.

National Institute of Population Studies (NIPS) [Pakistan], and Macro International Inc. (2008). Pakistan Demographic and Health Survey 2006-07. Islamabad, Pakistan: National Institute of Population Studies and Macro International Inc.

Zaidi, B. and A. Mahmood. (2010). Attitudes, Perceptions and Behavior Regarding Contraceptive Use amongst Pakistani Couples. Tenth Annual Population Research Conference March 9-11, 2010, Islamabad, Pakistan.

Link CF. (2011). Spousal Communication and Contraceptive Use in Rural Nepal: An event history analysis. Studies in Family Planning, 42(2):83-02.

Ogunjuyigbe PO, Ojofeitimi EO, Liasu. (2009). A Spousal communication, changes in partner attitude, and contraceptive use among the Yorubas of Southwest Nigeria. Indian Journal of Community Medicine; 34(2):112-116.

Tesfayi G, Mishra V. (2007). Spousal Agreement on Family Planning in Sub-Saharan Africa. DHS Analytical Studies No. 11. Calverton, Maryland: Macro International.

Pariani, Siti, David M. Heer, and Maurice D. Van Arsdol Jr. (1991). "Does choice make a difference to contraceptive use? Evidence from East Java." Studies in Family Planning 22(6): 384–390.

Population Council. (2004). Unwanted pregnancy and post abortion complications in Pakistan: findings from a national study. Islamabad: Population Council.

Naz, S. S and A. Mahmood. (2010). "Contraceptive Discontinuation in Pakistan: Analysis of Calendar Data." Presented at the Eleventh Annual Population Research Conference. PAP, Multan.

Sathar, Z. A., Singh, S., and Fikree, F. F. (2007). Estimating the incidence of abortion in Pakistan. Studies in Family Planning, 38(1): 11–22.

National Institute of Population Studies. (2001). The Pakistan reproductive health and family planning survey 2000–2001. Islamabad.

Planning Commission. (2010). Population Projections of Pakistan 2010–2030, Government of Pakistan, Islamabad.

	All wor	men
Background characteristics	Ν	%
Age of the woman		
15 - 24	4466	26.1
25 - 34	6753	39.4
35 - 49	5905	34.5
Residence		
Rural	12749	74.4
Urban	4375	25.6
Number of living children		
0-2	6,763	39.5
3-4	4551	26.6
5 or more	5810	33.9
Literacy		
Literate	5048	29.6
Illiterate	11987	70.4
Education of the woman		
None	11820	69.2
Primary	2354	13.8
Secondary	2079	12.2
College	832	4.9
Standard of living index		
Poorest	4219	24.6
Second	4054	23.7
Third	4318	25.2
Richest	4533	26.5
Province		
Balochistan	1009	5.9
КРК	3163	18.5
Punjab	5785	33.8
Sindh	7167	41.9
Total	17,124	100.0

# Table 1: Background characteristics of women, FALAH baseline survey, 2008-09

Background characteristics	Current users
Age of the woman	
15 - 24	13.9
25 - 34	30.0
35 - 49	39.2
Residence	
Rural	24.2
Urban	43.0
Number of living children	
0-2	13.6
3-4	37.2
5 or more	40.4
Literacy	
Literate	38.6
Illiterate	24.9
Standard of living index	
Poorest	16.9
Second	23.5
Third	32.7
Richest	41.6
Province	
Balochistan	17.5
КРК	30.5
Punjab	35.3
Sindh	24.8
Total	29.0

Table 2: Background characteristics of current users of contraceptives, FALAH baseline survey, 2008-09

Table 3: Inter-spousal communication on family planning by background characteristics, FALAH

baseline survey 2009-10

	Disc	ussed family planning	
Variables	Never	Once or twice	Repeatedly
Age of the woman			
15 - 24	60.1	23.4	16.5
25 - 34	48.8	24.0	27.1
35 - 49	62.0	18.1	19.9
Residence			
Rural	57.4	22.4	20.2
Urban	53.1	20.0	26.8
Number of living children			
0-2	65.4	19.6	15.0
3-4	48.3	23.5	28.2
5 or more	51.9	23.2	24.9
Literacy			
Literate	47.7	22.7	29.6
Illiterate	59.9	21.4	18.7
Education level			
None	59.8	21.4	18.8
Primary	52.7	22.5	24.7
Secondary	45.9	22.8	31.3
College	42.7	23.8	33.5
Standard of living index of household			
Poorest	61.7	22.2	16.1
Second	58.1	22.5	19.5
Third	54.9	22.1	23.0
Richest	51.0	20.7	28.3
Future desire for having children			
Soon	75.6	15.4	8.9
Later (want spacing)	51.0	27.1	21.9
Never (want limiting)	48.9	22.4	28.7
Woman's perception of husband approval			
Approve	46.2	24.7	29.2
Disapprove	74.5	18.5	7.1
Future intent to use contraceptives (current non-use		I	
Yes	45.0	29.2	25.8
No	85.6	10.9	3.6
Total	56.2	21.8	21.8

Background characteristics	Contraceptive discontinuation rate at 12-months
Age at discontinuation	
15 – 24	66
25 – 34	47
35 – 49	29
Residence	
Rural	49
Urban	37
Parity at discontinuation	
0 – 2	55
3 – 4	42
5 or more	38
Literacy	
Literate	43
Illiterate	46
Woman's schooling	
None	45
Primary	48
Secondary	43
College	40
Standard of living index	
Poorest	50
Second	51
Third	44
Richest	40
Contraceptive intent	
Spacer	56
Limiter	34
Method discontinued	
Pills	57
Injectables	59
IUD	24
Condom	41
Withdrawal	38
Total	45

Table 4: Contraceptive discontinuation rate by selected socio-demographic characteristics at 12-<br/>months of use, FALAH baseline survey 2009-10

Table 5: Multivariate logistic regression model for current use of contraception
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Variable	Odds Ratios
Discussed family planning	
Never	1
Once or twice	1.82***
Repeatedly	3.04***
Woman's perception of husband approval	4.57***
Future desire for children	
Soon	1
Later (want spacing)	3.67***
Never (want limiting)	5.98***
Presence of LHW in community	1.13**
Residence	
Rural	1
Urban	1.65***
Woman's age	
15-24	1
25-34	1.26**
35-49	1.67***
Number of living children	
0-2	1
3-4	1.89***
5 or more	1.85***
Woman's education	
None	1
Primary	1.31***
Secondary	1.80***
College	1.83***
Husband's education	
None	1
Primary	1.06
Secondary	1.13*
College	1.15*
Household wealth status	
Poorest	1
Second	1.28***
Third	1.58***
Richest	1.86***

\*\*\*p<0.001;\*\*p<0.01\*p<0.05

	Hazard Ratios			
Variable	Overall	Model-2 Overall (Controlled)	Model-3	Model-4
	(Uncontrolled)		Only spacers	Only limiters (Controlled)
			(Controlled)	
Discussed family planning				
Repeatedly	1.00	1.00	1.00	1.00
Once or twice	1.35***	1.08	1.02	1.26**
Never	1.28***	1.27***	1.27***	1.27**
Age at discontinuation	0.92***	0.94***	0.96***	0.93***
Residence				
Rural	1.90***	1.52***	1.68***	1.43***
Urban	1.00	1.00	1.00	1.00
Parity at discontinuation				
<2	1.00	1.00	1.00	1.00
3-4	0.53***	0.98	0.85*	1.04
5 or more	0.45***	1.33***	1.23*	1.33
Literacy				
Illiterate	1.00	1.00	1.00	1.00
Literate	0.77***	0.93	0.90	0.90
Household wealth status				
Poorest	1.73***	1.14	1.07	1.21
Second	1.70***	1.17*	1.21*	1.14
Third	1.20***	1.05	1.03	1.06
Richest	1.00	1.00	1.00	1.00
Method discontinued				
IUD	1.00	1.00	1.00	1.00
Pills	2.53***	2.77***	3.37***	2.57***
Injectables	3.05***	2.8***	3.10***	3.06***
Condom	1.22*	1.43***	1.94***	1.04
Withdrawal	1.17	1.44***	1.93***	1.17
Intent				
Using for limiting	1.00	1.00	na	na
Using for spacing	3.58***	2.93***	na	na

\*\*\*p<0.001;\*\*p<0.01;\*p<0.05