



# Birth Spacing and Family Planning Uptake in Pakistan: Evidence from FALAH

## THE UPTAKE OF BIRTH SPACING AND FAMILY PLANNING 2008-2012



Arshad Mahmood, Ph.D.







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Population Council

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Baseline and end line household surveys were carried out to assess the impact of FALAH interventions on key outcomes. The baseline survey was conducted in 2008–09 in 20 FALAH districts to collect data on key project indicators to be compared with the end line survey (2011–12). The end line survey assessed change in the outcomes which were set as project goals and objectives.

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Arshad Mahmood, PhD Director, M&E and Research Population Council, Islamabad

## **Acronyms and abbreviations**

BCC Behavior Change Communication

BHU Basic Health Unit

BS Birth Spacing

CAM Communication, Advocacy, and Mobilization

CBR Crude Birth Rate

CBV Community Based Volunteer

CCA Client-Centered Approach

**CCFPS** Client-Centered Family Planning Services

CPR Contraceptive Prevalence Rate

CWH Central Warehouse

DFPAP Diversification of Family Planning Activities in Pakistan

DHQ District Headquarters Hospital

DOH-2 Department of Health-Form 2

ECP Emergency Contraceptive Pill

FALAH Family Advancement for Life and Health

FGD Focus Group Discussion

FP Family Planning

GIS Geographic Information Systems

GSM Greenstar Social Marketing

HANDS Health and Nutrition Development Society

HCP Healthcare Provider

HTSP Healthy Timing and Spacing of Pregnancy

IEC Information, Education, and Communication

IPC Interpersonal Communication

IUD Intrauterine Device

KP Khyber Pakhtunkhwa

LAM Lactational Amenorrhea

LHS Lady Health Supervisor

LHW Lady Health Worker

MGM Men's Group Meeting

MMR Maternal Mortality Ratio

MSU Mobile Service Unit

MWRA Married Women of Reproductive Age

NIPS National Institute of Population Studies

PDHS Pakistan Demographic and Health Survey

PMP Performance Monitoring Plan

PPHI People's Primary Healthcare Initiative

PSU Primary Sampling Unit

RH Reproductive Health

RHC Rural Health Center

RSPN Rural Support Programmes Network

SAHR Salutation, Assessment, Help, and Reassurance

SDM Standard Days Method

SLI Standard of Living Index

THQ Tehsil Headquarters Hospital

USAID United States Agency for International Development

WGM Women's Group Meeting

WHO World Health Organization

### **Chapter 1: Introduction**

#### 1.1 Background: FALAH project

The Diversification of Family Planning Activities in Pakistan (DFPAP)—later named the Family Advancement for Life and Health (FALAH) project was funded by the United States Agency for International Development (USAID) to improve the wellbeing of families through increased demand and utilization of births spacing and quality family planning services. The Population Council competed for the project and was the lead implementing agency in partnership with Greenstar Social Marketing (GSM), Health and Nutrition Development Society (HANDS), Jhpiego, Mercy Corps, Rural Support Programmes Network (RSPN), and Save the Children. The original time period for the project was from June 1, 2007 to May 31, 2012. However, USAID reduced project funding and revised the end date to December 31, 2011, due to changes in policy. A nocost extension was then given through March 31, 2012.

The FALAH project's main objectives were:

- A ten percent increase in the use of modern contraceptive methods in project districts by year five;
- Equipping 80 percent of public service-delivery points to provide appropriate family planning services by year five;
- Ensuring an understanding of birth spacing and ways of achieving it by at least three-fourths of the target populations.

The FALAH project was conceived against a backdrop of empirical research all over developing countries, highlighting a strong association between birth spacing and maternal and child health outcomes. Demographic and health surveys and other data sources, have established that short birth-to-pregnancy intervals are associated with significant increases in early childhood mortality, low birth weight/premature births, malnutrition among young children, stillbirths, miscarriages, and maternal morbidity/mortality. When the FALAH project was launched in June 2007, the Pakistan Demographic and Health Survey (PDHS) 2006–07 had just reported that nearly half (49 percent) of currently married women of reproductive age (MWRA) had ever used a contraceptive method, while 30 percent were using a method at the time of survey. Contraceptive use was higher in urban areas (41 percent) than in rural areas (24 percent) where two-thirds of the total population lives. Nearly half of the women who were not using contraceptives expressed intentions of doing so in future, though fear of side effects was a major deterrent. The total fertility rate was estimated at 4.1 children at the national level, of

which the number of unwanted children was one. More than half (54 percent) of currently married, non-pregnant women had no desire for additional children, but not all of them were using contraception (National Institute of Population Studies (NIPS) and Macro International Inc. 2008).

Within this context, FALAH worked on improving access to services in the public and private sectors adopting a multipronged implementation strategy that included the following components.

#### 1.1.1 Communications and Mobilization

FALAH designed a well thought out Communication, Advocacy, and Mobilization (CAM) strategy to enhance the social acceptability of the birth spacing concept by reaching out to a wide audience. A paradigm of 'birth spacing saves lives' was introduced in place of the 'small family' norm that had been advocated for many decades. All three mediums including mass media, community media and interpersonal communication were employed to communicate information on the societal and individual level benefits of birth spacing, and the common myths and misconceptions associated with contraceptive use. The mass media campaign ranged from television commercials to radio spots and documentaries, whereas the Interpersonal communication and community mobilization activities entailed household visits and group meetings with married women and their husbands, conducted by Lady Health Workers (LHWs) and outreach workers, to popularize the concept of birth spacing. In the non-LHW areas in the province of Sindh, couples were reached through an "info-entertainment" approach employing the use of interactive theatre. FALAH's advocacy efforts through high level meetings, seminars, and conferences led to wider acceptance of 'birth spacing as a health intervention that saves lives'. FALAH also obtained a consensus from the Ulema of all major schools of thought regarding the permissibility of birth spacing in Islam.

# 1.1.2 Improving Capacity of the Public Health System to offer high quality services

To improve access to services and reduce unmet need, FALAH employed a strategy to bring on board the health department to deliver high quality family planning services. FALAH achieved this by facilitating the availability of contraceptives at the facility level and by training providers of the health system (public and private) to become more client-centered and responsive to clients' reproductive health needs and to proactively offer high quality services. Training was imparted on the "Salutation, Assessment, Help, and Reassurance" (SAHR) framework developed by the Population Council for interacting with clients, family planning technology, Islam and family wellbeing. In addition, skills development trainings on intrauterine device (IUD)

counseling, its use and removal as well as on mini-laparotomy and vasectomy surgeries were provided to district surgeons and women medical officers. Health managers were trained in contraceptive logistics management to remove bottlenecks and ensure contraceptive availability at the facility level. FALAH also strengthened Regional Training Institutes (RTIs), Reproductive Health Service (RHS) 'A' centers, medical colleges, midwifery and nursing schools, and District Health Development Centers (DHDCs) by providing equipment, supplies, and developing master trainers. The district Health and Population Welfare Managers were trained in leadership skills to transform them into effective "leaders" capable of acting as agents of change.

#### 1.1.3 Helping the Private Sector expand its outreach

FALAH consortium partner Greenstar Social Marketing (GSM) made inroads into the rural communities to expand the private sector's role in family planning service provision. New providers, mainly in the rural areas were trained and franchised by GSM and existing providers were provided refresher trainings. GSM also mobilized communities and linked them to services through their Clinic Sahoolat program. In many rural communities where there were no grassroots workers such as Lady Health Workers (LHWs), a special strategy was developed by FALAH to introduce the community-based Health Worker model. This model helped mobilize communities and link them to services.

Through the use of geographic information systems (GIS) mapping methodology, FALAH was able to provide digitized maps in its project districts that gave the exact location of all public and private sector health facilities, by types of services and range of providers available. The district managers were trained on the Software developed by the Council that uses GIS mapping information and can help in district level planning monitoring and evaluation.

#### 1.1.4 Enhanced social marketing of family planning commodities

FALAH also strengthened the marketing capacity of the commercial sector to support contraceptive security and sustainability in order to manufacture and procure quality contraceptives for national consumption. FALAH helped develop the sales teams for importers/distributors, UDL, and launch a condom brand (Happy Life Collection) for the Pakistani market. As a result the market share of locally produced contraceptives by ZAFA pharmaceuticals' increased considerably.

The FALAH project originally focused on 20 districts. A phase of expansion in 2009 increased coverage to 26 districts. However, work in some districts had to be curtailed due to security concerns. Below is a list of the districts where FALAH worked. The 15 districts marked in bold are where the entire range of FALAH interventions was completed:

Baluchistan: Gwadar, Jaffarabad, Kech, Khuzdar, Lasbela, Quetta, and Zhob.

Khyber Pakhtunkhwa: Buner, Charsadda, Mansehra, Mardan, Swabi, and Upper Dir.

<u>Punjab</u>: **Bahawalpur**, **Dera Ghazi Khan**, **Jhelum**, Khanewal, Multan, and **Rajanpur**.

<u>Sindh</u>: **Dadu, Ghotki,** Jacobabad, Karachi (towns of Godap, Liyari, and Orangi), **Larkana, Sanghar**, Shikarpur, **Sukkur**, and **Thatta**.

This report focuses on the evaluation of project activities and their impact on the following 14 districts for which both baseline (2008-9) and end line (2011-12) surveys were conducted:

<u>Khyber Pakhtunkhwa</u>: Charsadda, Mansehra, Mardan, and Swabi <u>Punjab</u>: Bahawalpur, Dera Ghazi Khan, Jhelum, and Rajanpur <u>Sindh</u>: Dadu, Ghotki, Larkana, Sanghar, Sukkur, and Thatta

#### 1.2 Objectives of the end line survey

The end line survey was conducted to determine the following:

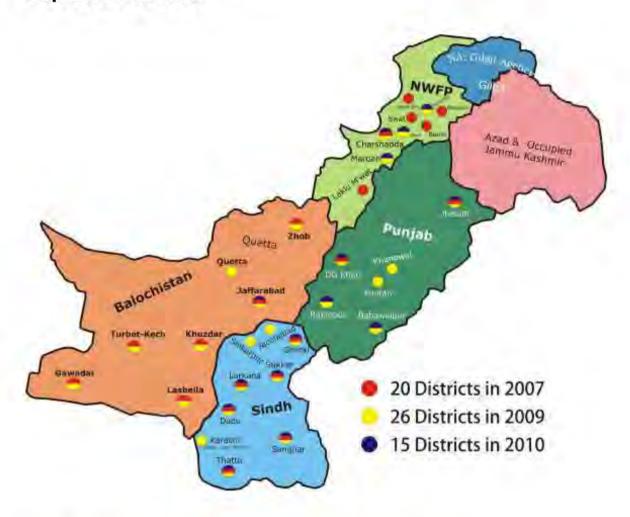
Awareness levels of birth spacing and its impact on maternal and child health; Trends in contraceptive prevalence rate (CPR) and the unmet need for contraception;

Dropouts from contraceptive use and reasons for their discontinuation;

Access to family planning methods;

Utilization of public and private sector family planning service outlets; Impact of specific interventions by the FALAH project.

#### Map of FALAH districts



#### 1.3 Methodology: sample design and size

The baseline and end line surveys covered currently MWRA (15–49 years), together with a maximum of five husbands per primary sampling unit (PSU). A systematic stratified random sampling technique was used for the baseline survey to select a representative sample. The survey was representative and designed to provide estimates of all indicators of interest at the district level. The universe consisted of all urban and rural households in each district. A total of 40 blocks/villages were selected from each district with 15 households selected per block/village.

In the end line survey, households sampled in the baseline survey were revisited and women who were still of reproductive age were interviewed. If the former household had shifted to some other place, the current occupants of those premises were interviewed. In addition, if the selected household was locked or the women temporarily absent, it was replaced by a new one.

The sample was designed such that changes in the perceptions, attitudes, and practices of the same panel of women interviewed in the baseline survey could be assessed over a period of time.

The distribution of households visited, MWRA, and the number of married men interviewed in the baseline and end line survey is given by rural-urban breakup in Table 1.1. Of 12,402 women interviewed in the end line survey, 6,806 (55 percent) were from the panel sample, whereas the remaining 5,596 were from the cross-sectional sample.

Table 1.1: Number of households visited, number of MWRA, and number of married men interviewed, by rural-urban residence: FALAH baseline survey (2008–09) and end line survey (2011–12)

		Baseline		End line			
Type of interview	Rural	Urban	Total	Rural	Urban	Total	
Households	6,635	1,824	8,459	6,580	1,910	8,490	
MWRA	8,422	2,182	10,604	9,737	2,665	12,402	
Married men	2,183	601	2,784	2,076	573	2,649	

#### 1.4 Household characteristics

#### 1.4.1 Main sources of drinking water

Both surveys found that six of every ten households (60 percent) had access to motorized or hand-pumped drinking water, within the premises. The second major source was tap water supplied by the government (baseline, 15 percent; end line, 12 percent). There were rural-urban variations in both access to motorized/hand-pumped water sources and government supply within the premises; urban households were better off in both surveys. A very small percentage of households (two percent in the baseline survey, three percent in the end line survey) were using river/canal/stream/pond water, and were thus exposed to waterborne diseases (Table 1.2).

#### 1.4.2 Type of toilet facility

The largest share of households (more than 40 percent) in both surveys had toilet facilities connected either to septic tanks or to a sewerage system. Nearly four out of ten urban households (41 percent in the baseline survey, 37 percent in the end line survey) were flushing excreta into open drains. About one-fourth (24 percent) of households in the baseline survey and one-fifth (19 percent) in the end line survey still had no toilet facilities at all. Again, there was rural-urban variation where rural households were worse off; one-third of the rural households in the baseline survey and about one-fourth in the end line possessed no toilet facilities.

#### 1.4.3 Type of fuel used for cooking

Just over two-thirds of households in both surveys were using firewood for cooking purposes. This was more common in rural areas (81 percent in both surveys) than urban areas (21 percent in the baseline survey, 18 percent in the end line survey). Natural gas was far more commonly used in urban areas (66 percent in the baseline survey, 71 percent in the end line survey) than in rural areas (five percent in the baseline survey, nine percent in the end line survey). The use of natural gas for cooking had increased marginally in both rural and urban areas in the last 3–4 years.

#### 1.4.4 Electricity availability

Electricity was available in almost all households in urban areas (99 percent in both surveys). Availability in rural areas increased from 87 percent in the baseline survey to 90 percent in the end line survey. Overall, the availability of electricity increased from 90 percent to 92 percent in the sampled households during 2008–2011.

Table 1.2: Percentage distribution of households with selected physical characteristics: FALAH baseline survey (2008–09) and end line survey (2011–12)

		Baseline survey (%)			End line survey (%)		
Household characteristics		Rural	Urban	All areas	Rural	Urban	All areas
	Govt. supply (tap water inside)	13.4	19.6	14.8	10.4	17.2	12.0
	Govt. supply (communal)	2.7	1.5	2.5	3.3	2.4	3.1
	Motorized/hand pumped (inside)	58.6	65.7	60.2	58.6	63.5	59.7
Main source of drinking	Motorized/hand pumped (outside)	12.6	5.6	11.0	12.8	6.7	11.4
water	Well (inside)	5.6	2.6	4.9	5.1	3.0	4.6
	Well (outside)	3.4	0.8	2.8	3.0	0.7	2.5
	River/canal/stream/spring	2.4	0.2	1.9	3.5	0.1	2.7
	Others	1.2	4.0	1.8	3.2	6.4	3.9
	Flush connected to sewerage system	1.4	11.4	3.7	3.0	14.5	5.6
	Flush connected to septic tank	34.4	42.8	36.3	33.0	43.0	35.2
Type of toilet	Flush connected to open drain	12.1	41.3	18.7	18.3	37.4	22.6
facility	Raised latrine	17.0	3.1	13.9	11.1	1.7	9.0
	Pit latrine	4.0	0.3	3.2	8.4	1.9	7.0
	In fields	30.5	0.9	23.8	24.3	1.0	19.0
	Others	0.6	0.2	0.5	2.0	0.6	1.7
	Firewood	81.4	21.3	67.9	80.5	17.8	66.4
Main type of	Gas cylinder	2.9	7.8	4.0	2.5	8.1	3.8
fuel used for	Natural gas (Sui gas)	4.5	66.0	18.2	8.7	71.1	22.8
cooking	Dry dung	10.5	3.7	9.0	6.1	2.2	5.2
	Others	0.7	1.3	0.8	2.2	0.8	1.9
Electrical	Yes	87.2	99.3	89.9	89.9	98.6	91.8
connection	No	12.8	0.7	10.1	10.1	1.4	8.2
Total		100.0	100.0	100.0	100.0	100.0	100.0
Number of hou	useholds	6,635	1,824	8,459	6,579	1,910	8,490

#### 1.4.5 Household assets

The possession of valuable household items was used as a proxy indicator for assessing socio-economic status. The availability of these items at the household level was used to build a socio-economic status index. Table 1.3 shows the distribution of households owning selected items in both surveys. The list comprises 18 elements ranging from items worth a few hundred rupees to far more expensive ones like cars. The table shows that in the baseline survey the majority of households had wall clocks (74 percent), followed by mobile phones (65 percent), televisions (55 percent), and sewing machines (53 percent). These proportions had changed somewhat by the time the end line survey was conducted. The majority of households in the end line survey had at least one mobile phone (82 percent) revealing a rapid increase in the acquisition of mobile technology, followed by wall clocks (67 percent), and televisions (52 percent). The survey showed that one in every four households had a motor cycle, one in 20 households had a car, and one in 13 households had a computer.

Table 1.3: Comparison of household assets: FALAH baseline survey (2008–09) and end line survey (2011–12)

Household assets	Baseline survey (%)	End line survey (%)
Wall clock	73.9	66.6
Chairs	40.2	35.0
Bed	45.3	42.8
Sofa	24.1	25.2
Sewing machine	53.3	47.2
Camera	9.1	4.9
Radio/tape recorder	40.0	15.5
Television	54.5	52.1
Refrigerator	35.2	36.7
Landline telephone	10.1	5.4
Mobile telephone	64.6	82.1
Room cooler/air conditioner	14.6	13.0
Washing machine	40.3	43.5
Cycle	30.8	18.6
Motor cycle	19.6	26.9
Jeep/car	4.0	4.5
Tractor	4.1	2.8
Personal computer	6.0	7.5
Number of households	8,459	8,490

#### 1.5 Characteristics of married women of reproductive age

#### 1.5.1 Age distribution of respondents

Table 1.4 shows the distribution of female respondents by age and residence. The proportion of currently married female respondents in the 15–24 years age group within the panel decreased from 27 percent in the baseline survey to 24 percent in the end line survey. This implies that the proportion of younger women (aged 15–24) was higher in the baseline survey, and due to ageing of the panel women there were more currently married women above 25 years of age in the end line survey. However the rural-urban distribution of women was almost the same in both surveys (Table 1.4). Table 1.5 shows the characteristics of panel women interviewed in the baseline and end line surveys.

Table 1.4: Age distribution by literacy, education level, and residence of married women of reproductive age: FALAH baseline survey (2008–09) and end line survey (2011–12) – All MWRA (cross-sectional)

Characteristics of respondents and		Ag	e of responder	Residence			
their husbands		15–24	25–34	35–49	Rural	Urban	All areas
		Bas	eline survey				
Canala libanas	Literate	32.3	31.4	18.6	21.9	47.4	27.2
Female literacy Illiterate		67.7	68.6	81.4	78.1	52.6	72.8
	No education	64.7	66.3	80	75.9	50.5	70.7
Education level	Up to primary	17.4	14.4	10.9	13	17.7	14
Education level	Up to secondary	13.7	12.9	6.6	8.4	20.5	10.9
	Above secondary	4.2	6.4	2.4	2.7	11.3	4.4
Percentage		26.6	38.5	34.9	79.4	20.6	100.0
Mean number of o	hildren ever born	1.40	3.04	6.60	4.20	4.14	4.19
Mean number of l	iving children	1.27	3.47	5.63	3.63	3.67	3.64
Number of wome	1	2,821	4,081	3,703	8,422	2,182	10,604
		End	line survey	•			•
E	Literate	36.1	37.2	22.9	25.8	53.2	31.7
Female literacy	Illiterate	63.9	62.8	77.1	74.2	46.8	68.3
	No education	62.1	61.6	76.1	72.8	46.0	67.1
	Up to primary	16.9	15.6	11.8	13.8	17.2	14.5
Education level	Up to secondary	15.8	14.7	8.2	9.9	21.1	12.6
Above secondary		5.2	8.1	3.9	3.4	14.7	5.8
Percentage		24.3	39.1	36.6	78.5	21.5	100.0
Mean number of o	children ever born	1.52	3.84	6.33	4.26	3.93	4.19
Mean number of l	iving children	1.37	3.42	5.41	3.69	3.50	3.65
Number of wome	ו	3011	4847	4545	9738	2665	12402

#### 1.5.2 Literacy and education level of respondents

Among the panel women in the baseline survey, more than three-fourths (78 percent) of MWRA in rural areas, and over half (51 percent) in urban areas, were illiterate. The end line survey showed marginal improvement in literacy and education levels; the overall literacy rate is 27 percent. Both surveys found that higher proportions of younger women were literate and possessed some level of education. This was found to be true in both rural and urban areas.

Table 1.5: Age distribution, by literacy, education level, and residence of married women of reproductive age: FALAH baseline survey (2008–09) and end line survey (2011–12) – Panel MWRA

Characteristics of respondents and		Ag	e of responder	Residence			
their husbands		15–24	25–34	35–49	Rural	Urban	All areas
		Base	eline survey				
	Literate	31.5	30.5	19.3	22.2	48.9	27.3
Female literacy	Illiterate	68.5	69.5	80.7	77.8	51.1	72.7
	No education	65.7	67.1	78.8	75.3	49.2	70.3
E-1	Up to primary	17.8	14.7	11.3	13.7	18.2	14.5
Education level	Up to secondary	13.1	12.1	7.4	8.4	21.7	10.9
	Above secondary	3.5	6.1	2.5	2.7	10.9	4.2
Percentage		28.0	41.0	31.0	81.0	19.0	100.0
Mean number of o	hildren ever born	1.45	4.04	6.40	4.08	3.92	4.05
Mean number of li	ving children	1.31	3.56	5.49	3.53	3.51	3.53
Number of womer	1	1,907	2,788	2,111	5,510	1,296	6,806
		End	line survey			•	•
Famala likanan	Literate	27.0	32.8	22.0	22.5	48.0	27.4
Female literacy	Illiterate	73.0	67.2	78.0	77.5	52.0	72.6
	No education	70.8	65.8	76.7	76.0	50.5	71.1
Education level	Up to primary	14.9	15.5	11.5	13.0	17.2	13.8
Education level	Up to secondary	11.7	12.9	8.3	8.5	20.6	10.8
Above secondary		2.5	5.8	3.4	2.5	11.7	4.3
Percentage	Percentage		42.2	41.9	81.0	19.0	100.0
Mean number of o	hildren ever born	2.36	4.12	6.37	4.82	4.61	4.78
Mean number of li	ving children	2.08	3.67	5.46	4.19	4.07	4.17
Number of womer	1	1,084	2,870	2,852	5,510	1,296	6,806

#### 1.6 Characteristics of men

Table 1.6 shows the characteristics of all men interviewed in the baseline and end line surveys. The literacy level is almost the same in both surveys. As in the case of women, the proportion of husbands' married to the 15–24 year age group of women within the panel decreased from 23 percent in the baseline survey to 13 percent in the end line survey. Table 1.7 provides the characteristics of panel men interviewed in baseline and in the end line.

Table 1.6: Age distribution, by literacy, education level, and residence of men respondents: FALAH baseline survey (2008–09) and end line survey (2011–12) – All men (cross-sectional)

			Age	of wife		Resid	dence		
Characteristics		15 - 24	25 - 34	35 - 49	Don't know	Rural	Urban	Total	
			Base	line					
Husband literacy	Literate	69.3	64.8	58.0	36.4	59.4	73.6	62.6	
	Illiterate	30.7	35.2	42.0	63.6	40.6	26.4	37.4	
	No education	25.2	29.8	38.3	51.1	35.3	22.5	32.5	
	Up to primary	23.6	21.5	22.5	27.3	23.9	17.8	22.5	
Education level	Up to Secondary	36.7	30.9	24.6	14.2	28.1	34.2	29.5	
ievei	Above secondary	14.6	17.8	14.5	7.5	12.7	25.5	15.6	
	Percentage	22.8	38.2	36.0	3.0	77.7	22.3	100.0	
	Number of men	634	1,064	1,003	83	2,164	620	2,784	
			End	line					
Husband	Literate	68.1	65.9	55.4	34.7	58.3	72.6	61.6	
literacy	Illiterate	31.9	34.1	44.6	65.3	41.7	27.4	38.4	
	No education	28.2	30.9	41.5	56.7	37.8	26.0	35.1	
	Up to primary	22.5	19.9	24.6	28.4	23.6	18.0	22.4	
Education level	Up to Secondary	34.7	31.0	18.2	12.2	25.2	29.4	26.1	
	Above secondary	14.6	18.2	15.7	2.7	13.4	26.7	16.4	
	Percentage	16.8	40.8	41.2	1.2	77.3	22.7	100.0	
	Number of men	445	1,081	1,092	32	2,048	601	2,649	

Table 1.7: Age distribution, by literacy, education level, and residence of men respondents: FALAH baseline survey (2008–09) and end line survey (2011–12) – Panel men

		Age of wife			Residence				
Characteristics		15 - 24	25 - 34	35 - 49	Don't know	Rural	Urban	Total	
Baseline									
Husband literacy	Literate	68.9	61.2	55.7	39.4	58.1	69.5	60.3	
	Illiterate	31.1	38.8	44.3	60.6	41.9	30.5	39.7	
Education level	No education	24.9	31.6	39.3	43.7	34.9	25.4	33.0	
	Up to primary	25.8	25.2	27.4	33.4	27.2	23.0	26.4	
	Up to Secondary	35.1	24.0	21.0	17.3	24.2	29.8	25.3	
	Above secondary	14.2	19.3	12.2	5.6	13.8	21.8	15.3	
	Percentage	22.6	41.7	31.3	4.3	80.9	19.1	100.0	
	Number of men	215	396	298	41	768	182	950	
			End li	ne					
Husband literacy	Literate	67.9	62.9	54.6	41.5	57.3	68.5	59.5	
	Illiterate	32.1	37.1	45.4	58.5	42.7	31.5	40.5	
Education level	No education	31.1	33.3	41.1	40.8	38.5	28.6	36.6	
	Up to primary	22.8	20.7	26.1	52.7	24.3	22.1	23.9	
	Up to secondary	33.0	29.5	16.9	0.0	22.8	28.1	23.8	
	Above secondary	13.2	16.4	15.9	6.6	14.3	21.2	15.6	
	Percentage	12.8	40.3	45.5	1.4	80.9	19.1	100.0	
	Number of men	121	383	432	13	768	182	950	

# Chapter 2: Measuring Changes in the Knowledge, Intentions and the Use of Birth Spacing and Family Planning

Pakistan's fertility transition has been slow. Except a surge of change recorded in the 1990s, there has been little evidence in the recent past of any significant increase in the uptake of birth spacing or family planning. The PDHS results discussed earlier confirmed the lack of change in contraceptive prevalence in 2007. Thus, the results presented in this chapter can be seen both as evidence of the impact of FALAH interventions in project districts, and as a demonstration of the fact that there is nothing intrinsically holding back the uptake of family planning in these primarily rural districts of Pakistan.

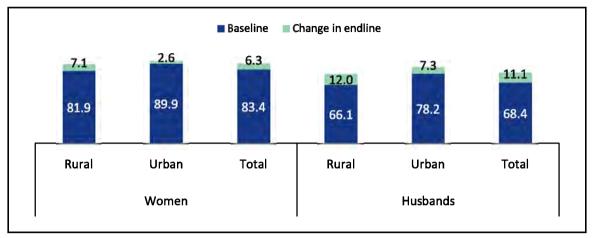
This chapter describes respondents' knowledge of various contraceptive methods and discusses both past and current contraceptive use. The findings presented (unless indicated as 'cross sectional') are based on a panel of women interviewed for the baseline survey, and again for the end line survey.

Findings from husbands interviewed are also presented separately to demonstrate the impact of interventions aimed at them.

#### 2.1 Approval of family planning

Respondents were asked in both surveys about their own approval of and perceptions about their husbands' approval of family planning. Overall, 90 percent women in the end line survey approved of family planning while 80 percent reported their husbands' approval. A similar pattern of husband and wife approval was observed in Bangladesh (Islam, el.al. 2006). Findings from the baseline survey showed that about 82 percent of rural and 90 percent of urban women approved of family planning. The end line survey showed that women's approval had increased by more than seven percentage points for rural women, and almost three percentage points for urban women. The increase in husbands' approval in rural areas was twelve percentage points and seven percentage points for urban husbands (Figure 2.1). Increase in approval can be attributed to FALAH's efforts to reach out to men and women to remove misgivings associated with family planning in the past.

Figure 2.1: Percentage of MWRA, by approval of family planning (FP) and perceptions about their husbands' approval of FP: FALAH baseline survey (2008–09) and end line survey (2011–12) (N=6,806)



# 2.2 Knowledge of modern and traditional contraceptive methods

The knowledge of at least one method of modern contraception has been almost universal for a long time in Pakistan. Table 2.1 confirms this finding and shows that virtually all women knew of at least one contraceptive method. While overall, there has been little change in this figure, a comparison of the baseline and end line surveys shows that knowledge of specific contraceptive methods such as intrauterine devices (IUDs), Norplant, condoms, the rhythm method, the withdrawal method, and male sterilization, has increased substantially.

Modern methods are more widely known than traditional ones; almost all married women knew of a modern method. Injectables and pills were almost universally known, while knowledge of IUDs rose from 90 to 93 percent, and male sterilization from 36 to 46 percent. The awareness of Norplant (an implant) rose from 33 to 48 percent. Awareness of emergency contraceptive pills (ECPs), which is a relatively new method in the private sector and even newer to the public sector, had increased by nine percent in rural areas, and by 13 percent in urban areas. Interestingly, the results show that the knowledge of at least one traditional method has increased by seventeen percentage points (almost 67 % in baseline and 84% in end line survey). Married women reported 71 percent knowledge of the withdrawal method and 43 percent knowledge of the rhythm method. FALAH used the medium of interpersonal communications through home visits and group meetings via Lady Health Workers and community based workers to inform men and women about the various contraceptive options and from where these could be obtained.

Table 2.1: Knowledge of contraceptive methods, by method and residence: FALAH baseline survey (2008–09) and end line survey (2011–12)

	В	aseline surv	≘y	End line survey			
Method	Rural	Urban	Total	Rural	Urban	Total	
Pills	97.1	98.0	97.3	96.8	97.4	96.9	
IUDs	89.0	92.5	89.7	92.0	95.7	92.7	
Injectables	96.8	96.5	96.8	97.3	98.3	97.4	
Norplant	31.5	41.4	33.4	46.2	57.0	48.2	
Condoms	72.5	84.1	74.7	81.2	91.2	83.1	
Rhythm method	24.7	33.2	26.3	42.4	44.2	42.7	
Withdrawal method	57.8	65.1	59.2	69.8	77.8	71.3	
Female sterilization	96.1	97.4	96.4	91.4	93.5	91.8	
Male sterilization	34.2	44.9	36.3	44.5	52.4	46.0	
Lactational amenorrhea (LAM)*				34.4	41.6	35.7	
Standard days method (SDM)*				4.6	4.2	4.6	
Other contraceptive methods	6.7	6.9	6.7	5.0	5.3	5.0	
ECPs	10.1	17.7	11.5	18.9	30.7	21.1	
At least one FP method	99.4	99.4	99.4	99.8	100	99.8	
					100		
At least one modern FP method	99.4	99.4	99.4	99.7	100	99.8	
At least one traditional FP method	65.1	73.7	66.7	83.1	86.5	83.7	
N	5,510	1,296	6,806	5,510	1,296	6,806	

<sup>\*</sup> FP methods LAM and SDM was included in the FALAH interventions, questions on knowledge were not included in the baseline survey

#### 2.3 Current and ever use of contraception

One of the main indicators for assessing the impact of the FALAH project was a rise in the current adoption of contraceptive use. The CPR refers to the proportion of MWRA (aged 15–49) currently using—or whose husbands were using a contraceptive method at the time of survey. The project was designed mainly to increase contraceptive use and reduce unmet need for family planning services (presented in the next chapter). For this reason, a very important finding was the rise in current use of contraceptives from 29.4 percent in the baseline survey to 37.9 percent in the end line survey - an increase of 8.5 percentage points during the project period that can be attributed to the positive impact of the combined FALAH interventions. Compared to 18 percent in the base line, 22 percent of women interviewed in the end line survey reported having ever used a method in the past (Figure 2.2). The proportion of couples in the project districts who had never used any contraception, declined from 52 percent to 40 percent.

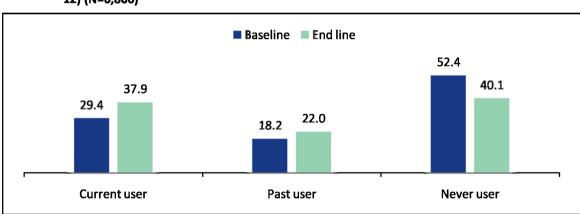


Figure 2.2: Current use of contraception: FALAH baseline survey (2008–09) and end line survey (2011–12) (N=6,806)

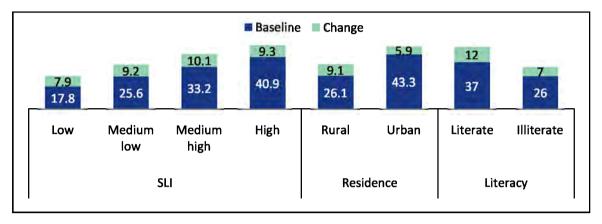
Analyzing current use of contraception by background characteristics is important because it helps identify subgroups of the population to target offering family planning services in the future.

# 2.3.1 Contraceptive use by place of residence, standards of living index (SLI) and literacy

As expected, contraceptive use was the lowest among poor-income women (18 percent in the baseline survey and 26 percent in the end line survey) and the highest among women from higher-income groups (41 percent in the baseline survey and 50 percent in the end line survey). An unexpected result was the increase in use among the group with the lowest standard of living

index (SLI); this went up by eight percentage points representing a 44 percent increase compared to a 23 percent rise in the highest SLI group.

Figure 2.3: Current use of contraceptive methods across standard of living index (SLI), residence, and literacy: FALAH baseline survey (2008–09) and end line survey (2011–12) (N=6,806)



Women living in rural areas invariably have limited access to information and contraceptive methods, resulting in lower contraceptive prevalence. The difference in contraceptive use between rural and urban areas was more than seventeen percentage points (43.3 percent in urban areas and 26.1 percent in rural areas). For this reason, efforts were made in FALAH districts to focus especially on women and families living in rural areas. As a result, a substantial increase in the acceptance of contraception was recorded in rural communities, (rising from 26 percent in the baseline survey to 35 percent in the end line survey) — in a period of just over three years. An increase was also seen in urban areas, though slightly less than in rural areas (Figure 2.3), bringing the original rural-urban differential in contraceptive prevalence down from 17.2 percent to 14 percent. This endorses the view that contraceptive uptake can occur in rural areas as long as focused efforts are made to mobilize and provide such services to rural women.

Similarly, as expected, a higher proportion of literate women were using contraceptives in the baseline (37 percent) and end line (49 percent) surveys as compared to illiterate women (26 percent in the baseline survey, and 33 percent in the end line survey). Not surprisingly, the increase in contraceptive use among literate women was greater than the rise among illiterate women (12 percent vs. 7 percent).

#### 2.3.2 The uptake of contraception by age and parity

In the past, fertility surveys have confirmed the positive association between age and parity and contraceptive use - a parallel finding is that family planning is mostly adopted late in the process of childbearing, and few younger couples plan their families. However, our findings showed an increase in contraceptive uptake across all age groups, with a more pronounced rise in the youngest age group (15–24 years) (Figure 2.4). Similarly, a substantial increase in contraceptive use by women at lower parities was noted: an increase of seven percentage points (from 12 percent in the baseline survey to 19 percent in the end line survey) among women with 0–2 living children, and of five percentage points among women with five or more living children. This sort of change among younger women and those at lower parities is difficult to achieve, and can be attributed to FALAH interventions geared towards encouraging birth spacing rather than limitation; birth spacing is a more appealing concept than planning children earlier on in the reproductive process.

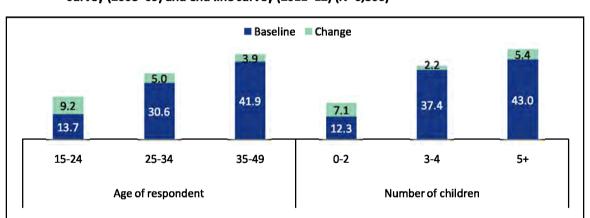


Figure 2.4: Current use of contraceptive methods, by age and number of living children: FALAH baseline survey (2008–09) and end line survey (2011–12) (N=6,806)

Women using contraception at the time of the surveys were disaggregated by their reasons for using contraception. If women reported that they were sterilized or that they did not wish to have any more children, they were classified as 'using to limit' (to avoid the next pregnancy). If they said they wanted a/another child — whenever this was: soon, later or if they were undecided about the time — or if they were undecided about having a child, they were classified as 'using to space' (to delay the next pregnancy).

Figure 2.5 shows that the motivation to space was the main driving force behind contraceptive change in the 15–24 years age group (this increased from 10.3 percent in the baseline survey to 16.6 percent in the end line survey). By contrast, limitation was the motivation for the higher increase of five percent in contraceptive use in older women aged 25–34 years who had perhaps by then reached their desired family size.

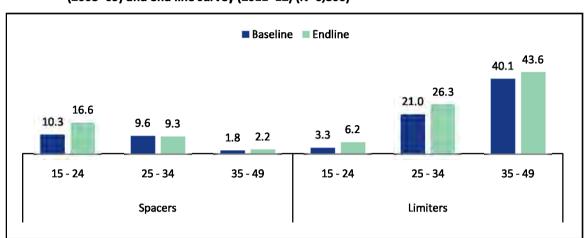


Figure 2.5: Current use of contraception for spacing and limiting births: FALAH baseline survey (2008–09) and end line survey (2011–12) (N=6,806)

#### 2.3.3 Changes in district and province-wise contraceptive use rates

FALAH used a district-level approach to increase demand and motivation for the adoption of family planning and birth spacing. Community mobilization efforts and the training of service providers helped in improving acceptance and access to services that translated into an increase in contraceptive use. While similar programmatic approaches were followed in all districts, the level of effort and responses may have varied.

The largest average change in contraceptive use rate was observed in Khyber Pakhtunkhwa (KP) (11 percent), followed by Punjab (8.2 percent), and Sindh (7.5 points) (Figure 2.6). These averages indicate a strong response to FALAH interventions overall, especially in KP as compared to Punjab. However, several other factors must be considered. Most importantly, all populations in the provinces did not react uniformly. In fact, the greatest diversity was seen in Sindh and Punjab. In addition, the project districts in Sindh suffered from floods in 2010 and 2011, which might have caused some inroads to be negatively affected. Given the high level of displacement due to floods and migration, examining the results of the panel of women is a more precise measure of impact. Figure 2.7 presents district-wise CPR based on the panel of women interviewed in both surveys. An increased CPR has been noted in all districts. The largest change was observed in Mansehra and Charsadda (both approximately 13 percent), followed by Rajanpur and Sanghar (both approximately 12 percent), and the least change was in Larkana (2 percent).

Figure 2.6: Contraceptive prevalence rate (CPR), by region: FALAH baseline survey (2008–09) and end line survey (2011–12) (N=6,806)

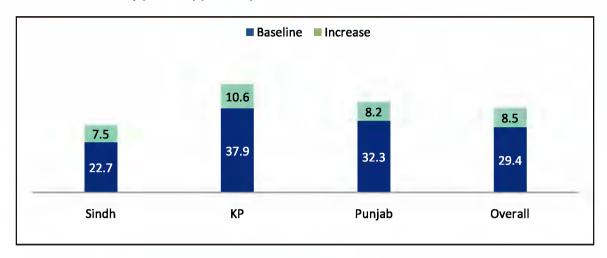
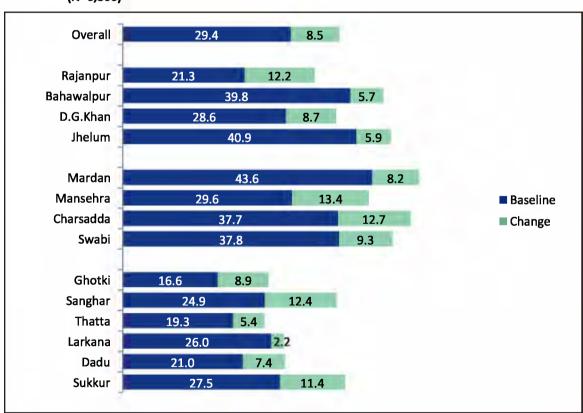


Figure 2.7: CPR among panel sample: FALAH baseline survey (2008–09) and end line survey (2011–12) (N=6,806)



#### 2.3.4 Method Use

A wide range of contraceptive methods were available to women and men in the FALAH districts. A notable change marked by an increase in the use of all contraceptive methods (with the exception of oral pills) was recorded in the end line survey. The rise in contraceptive use was distributed across all commonly used methods: female sterilization (increased from 7 percent to 10 percent), withdrawal (increased from 6 percent to 9 percent), and injectables (increased from 3.9 percent to 5 percent).

The increase in the withdrawal method can be attributed to the increase in knowledge of the benefits of birth spacing. Another reason could be the erratic availability of contraceptives at public-sector service delivery outlets during the initial project years. In some of the FALAH districts the Health department outlets were outsourced to the People's Primary Healthcare Initiative (PPHI), but there were no clear guidelines available to PPHI personnel for obtaining contraceptives from the central warehouse (CWH) located in Karachi. The CWH was being managed by the Ministry of Population Welfare, however after the 18<sup>th</sup> Constitutional Amendment and devolution of functions to the provinces, responsibility for warehousing and distribution was transferred (on July 1, 2011) to the Federal Planning and Development Division. An independent analysis confirmed a serious shortage of contraceptives at the CWH during the project period, and supply was rationed for Population Welfare outlets (Mahmood, et.al. 2012). The shortage at the CWH had therefore a direct impact on supply replenishment at the facility level.

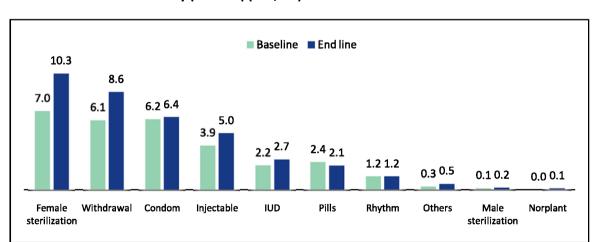


Figure 2.8: Change in current use of specific contraceptive methods: FALAH baseline survey (2008–09) and end line survey (2011–12) (N=6,806)

Overall, the increase in use of modern methods of contraception (5.5 percent) and of temporary methods (5.1 percent) was higher in comparison to the increase in use of traditional (3.5 percent) and permanent methods (3.4 percent). Modern and temporary methods also accounted for a larger share of change in contraceptive use than traditional and permanent ones.

■ Baseline ■ End line 37.9 29.4 27.4 27.3 22.3 21.8 11.1 10.5 7.6 7.1 Any FP method Any modern method Any traditional Temporary methods Permanent methods method

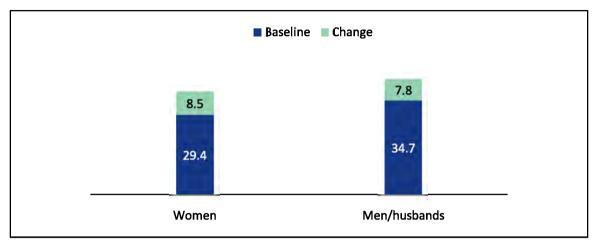
Figure 2.9: Change in contraceptive use, by method: FALAH baseline survey (2008–09) and end line survey (2011–12) (N=6,806)

# 2.4 Contraceptive use among husbands

About one-third sample of husbands was also included in both the baseline and end line surveys to assess the impact of FALAH interventions on men. Approximately 43 percent of the men reported using contraceptives at the time of the end line survey. This was an increase from 35 percent in the baseline survey, in line with a similar increase of 8.

5 percentage points seen in women. Male respondents reported a higher use of contraceptives in both surveys as compared to women (Figure 2.10). However, this does not reflect differences between husbands and wives, rather between men (select sample) and women within the FALAH districts.

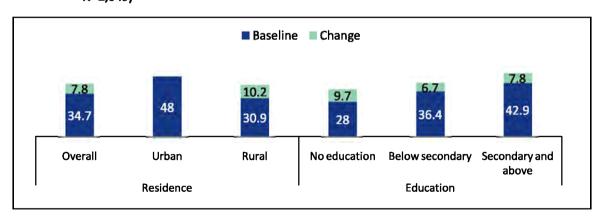
Figure 2.10: Current use of contraceptives reported, by women (N=6,806 baseline and end line) and men (baseline: N=2,784; end line: N=2,649): FALAH baseline survey (2008–09) and end line survey (2011–12)



## 2.4.1 Contraceptive prevalence rate among rural and uneducated men

Overall, the change in contraceptive uptake is seen to be across all educational categories (Figure 2.11). However as intended, the FALAH interventions appear to have had a greater impact on men living in rural areas as compared to those in urban areas. Furthermore, unlike the case of women, change was higher among uneducated husbands than those with secondary and higher education. This is likely to be due to a higher concentration of uneducated men in rural areas.

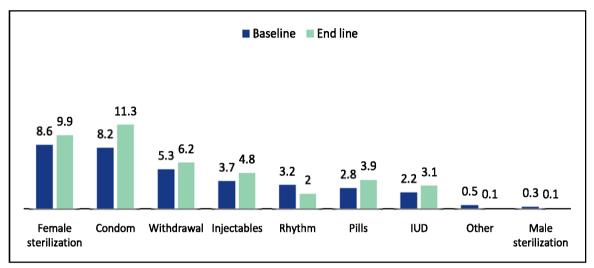
Figure 2.11: Change in contraceptive use among men (husbands,) by residence and education: FALAH baseline survey (2008–09) and end line survey (2011–12) (baseline: N=2,784; end line: N=2,649)



## 2.4.2 Method-specific use reported by men

As in the case of women, the method mix did not change among men across the project period (Figure 2.12). There was an increase in the use of all contraceptive methods except for the rhythm method. The end line survey showed that the methods most commonly used were condoms (11.3 percent), sterilization (9.9 percent), withdrawal (6.2 percent), and injectables (4.8 percent).

Figure 2.12: Change in contraceptive use, by method as reported by men: FALAH baseline survey (2008–09) and end line survey (2011–12) (baseline: N=2,784; end line: N=2,649)



# 2.5 Ever use of contraceptives

## 2.5.1 Ever use of injectables and withdrawal rises

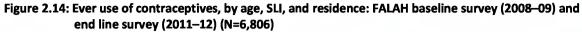
Women who had heard of any contraceptive method were asked if they had ever used them. As shown in Figure 2.14, ever use of any method increased by twelve percentage points during the project period (from 48 percent in the baseline survey to 60 percent in the end line survey). The largest increases were seen in the use of injectables and the withdrawal method, while use of female sterilization increased by 4 percent (Figure 2.13).

■ Baseline ■ End line 23 20 17 18 18 <sub>15</sub> 16 15 11 10 و 2 2 0.2 0.4 Sterilization Pills **IUDs** LAM/SDM Other FP Injectables Withdrawal Condoms Rhythm Norplant method method methods

Figure 2.13: Percentage of currently married women aged 15–49 years, by ever use of contraceptive method: FALAH baseline survey (2008–09) and end line survey (2011–12) (N=6,806)

# 2.5.2 Ever use by age, residence, and SLI

It is interesting to closely examine the groups where ever use of contraceptives has increased because it is close to the levels of adoption during the project period. Figure 2.14 shows the findings for ever use of contraceptives by age, SLI, and residence. The largest increases were seen in the 15–24 years age group (up by nineteen percentage points), in the medium high income group (up by fifteen percentage points), and among rural women (up by thirteen percentage points) in the end line survey. Table 2.2 presents data on ever use of contraceptives by district.



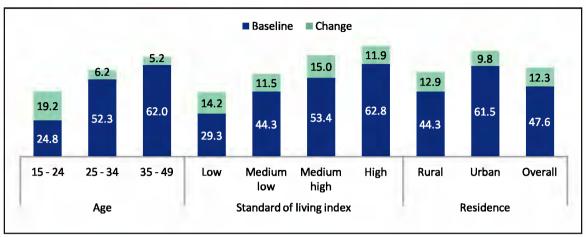


Table 2.2: Percentage change in ever use of contraception across districts: FALAH baseline survey (2008–09) and end line survey (2011–12) (N=6,806)

District	Baseline (%)	Change (%)		
Sukkur	43.5	13.8		
Dadu	39.9	9.4		
Larkana	40.3	6.1		
Thatta	28.9	13.0		
Sanghar	38.7	18.3		
Ghotki	32.4	16.2		
Swabi	58.0	11.9		
Charsadda	65.4	11.7		
Mansehra	52.4	16.3		
Mardan	71.3	12.3		
Jhelum	62.1	12.2		
D. G. Khan	45.5	13.3		
Bahawalpur	57.3	9.3		
Rajanpur	37.3	13.4		

# 2.6 Intention to use contraception in the future

Intention to use contraception in the future provides a forecast of potential demand for family planning services and represents a summary indicator of attitudes toward contraception among current non-users. In FALAH districts where the CPR was not especially high, non-users were specifically targeted by providing family planning information and services.

Respondents not using any contraceptive method at the time of the interview were asked if they intended to use a method at any time in the future. Figure 2.15 shows the percentage of married women who were not using a contraceptive method at the time but intended to do so in the future. According to the baseline survey, 41 percent of non-users intended to use family planning sometime in the future. This proportion fell to 31 percent in the end line survey.

This 10 percent decrease was seen among the panel women as they had aged by four years during the time between the two surveys, and in this time had either already become current users or had started considering themselves to be at a lower risk of getting pregnant. Similar patterns were seen in Bangladesh and Morocco, which also indicate reasons such as lower exposure to pregnancy (Curtis and Westoff, 1996), and the fact that older women may consider themselves sub-fecund or sterile (Bhatia, 1982), thereby diminishing their need for contraception.

Figure 2.15: Percentage of currently married women aged 15–49 years, by intention to use contraception: FALAH baseline survey (2008–09) and end line survey (2011–12)

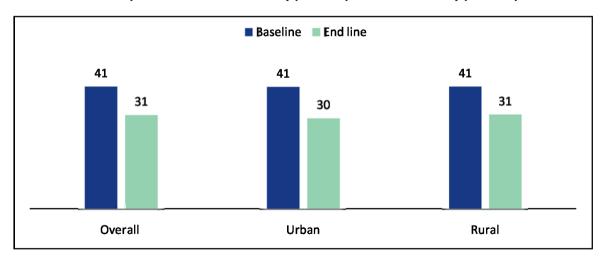
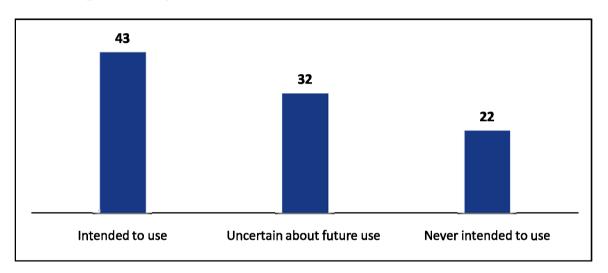


Figure 2.16 shows the status of contraceptive use for those women who reported having never used any contraceptive method in the end line survey, but intended to do so in the future. It shows that 43 percent of those never users who intended to use contraception in the baseline survey actually started using it, compared to 22 percent of never users who were not intending to use contraception in the baseline survey. Among those who were uncertain about use of contraception in the future (at the time of the baseline survey), almost one-third started using any form of contraception and reported this in the end line survey.

Figure 2.16: Contraceptive use in the end line survey as reported by women who never used any contraceptive method but reported an intention to use in future in the baseline survey (panel women)



# Chapter 3: Increasing Overall Demand and Reducing Unmet Need for Family Planning

Unmet need is a valuable indicator for measuring the impact of national family planning programs because it shows how well the program is achieving a key mission i.e. meeting the population's felt need for family planning. Data on unmet need can help family planning programs target activities by identifying women who are at the greatest risk of unintended pregnancy and more likely to adopt a method, than other non-users. Levels of unmet need rise and fall in response to two factors: demand for family planning, and contraceptive use. It is important to note that low levels of unmet need may reflect the fact that women want large families, and not that contraception is widely available or used. For example, if contraceptive use increases and desired family size remains unchanged, unmet need will generally decrease. But if contraceptive use increases at the same time that desired family size decreases, the level of unmet need may go up, making it difficult to assess the progress of family planning programs. The major components of unmet need in Pakistan are access to services, quality of services, discontinuation due to side effects/lack of counseling/interrupted access, and obstacles in method adoption such as husbands'/family's disapproval (Casterline et.al., 2001). It was some of these factors that the FALAH project attempted to address.

# 3.1 Total demand for family planning increased

Demand for family planning refers to women or couples' desire to plan their future fertility preferences. Family planning demand is generally present in fecund couples if they do not want more children or want to space their next pregnancy for two or more years. Theoretically, both these groups of women should be using some form of contraception to avoid unintended pregnancies. Family planning programs need to meet the total demand of contraceptives for these couples. It is therefore crucial to identify both the level of demand for family planning, and the proportion of demand being met.

In FALAH, efforts were made at the community level (through community mobilization and lady health worker [LHW] training) and at the health facility level (through training of health personnel and the availability of contraceptives), to increase the demand for contraception and fulfill that demand effectively. The 'proportion-met demand' of contraceptives was calculated for both surveys and compared to see how effectively the programs were meeting desired demand.

#### 3.1.1 Unmet need, met need, and total demand

Unmet need decreased by two percentage points from 35 percent in the baseline survey to 33 percent in the end line survey. Met need for family planning increased from 29 percent in the baseline survey to 38 percent in the end line survey.

Figure 3.1 shows the total demand for family planning and the met need, as well as the proportion of demand met in both surveys. The total demand for family planning increased from 64 percent in the baseline survey to 71 percent in the end line survey; a 7 percentage point increase. The end line survey findings showed that overall, 54 percent of family planning demand was being met. The corresponding figure for the baseline survey was 46 percent - an 8 percentage point increase in met demand.

The percentage of women with unmet need plus the percentage of women currently using contraception (representing 'met need') is referred to as 'demand for family planning.' The percentage of women using contraception divided by the percentage of women with 'demand for family planning' is 'proportion of demand met.' The indicator proportion of demand met is useful for assessing overall levels of coverage for family planning programs. As levels of contraceptive use increase, the proportion of demand met increases. By contrast, levels of unmet need can either rise or fall with changes in contraceptive use and desired family size and spacing.

Baseline Endline

71

64

46

54

46

Total demand

Proportion met

Met need

Figure 3.1: Comparison of unmet need, met need, and proportion met between baseline survey (2008–09) and end line survey (2011–12) (N=6,806)

Unmet need

#### 3.1.2 Unmet need for family planning increased among younger women

The unmet need for family planning declined among all segments of the population, except for younger women, between the baseline and end line surveys. It was observed that the unmet need had increased by four percentage points among younger women aged 15–24 years, maybe due to an increase in the knowledge regarding benefits of birth spacing for young mothers and their children. The maximum decrease in the unmet need was among women aged 35–49 years (six percentage points). The unmet need for family planning had declined by two percentage points in rural areas and three percentage points in urban areas (Figure 3.2). Unmet need was the lowest among the wealthiest segment of women in both surveys. The highest decline was also observed among the wealthiest.

A district-wise analysis shows that the unmet need for family planning had decreased in all of the districts of Punjab, and in all of the districts of KP, except Swabi. In Sindh, however, the unmet need had decreased in Sanghar only. The largest decline in unmet need was observed in district Mansehra, followed by D. G. Khan and Mardan (Figure 3.3).

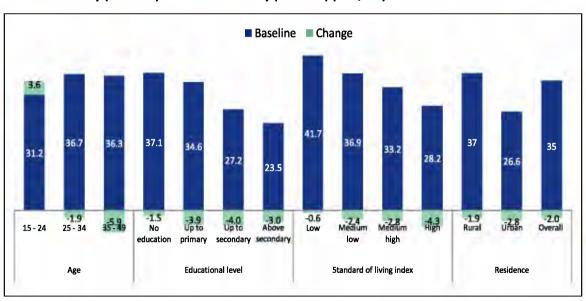


Figure 3.2: Percentage of MWRA with unmet need, by background characteristics: FALAH baseline survey (2008–09) and end line survey (2011–12) (N=6,806)

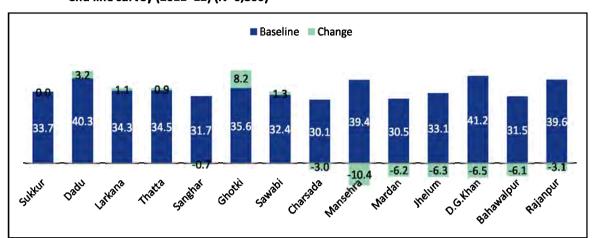


Figure 3.3: Percentage of MWRA with unmet need, by district: FALAH baseline survey (2008–09) and end line survey (2011–12) (N=6,806)

## 3.1.3 Proportion met demand among younger and rural women

Table 3.1 shows that the demand for family planning varied by age, education levels, SLI, and residence. The highest total demand was observed among women who were older, higher-educated, more prosperous and living in urban areas.

Overall, the proportion met demand for family planning had increased by eight percentage points in the end line survey. It had increased by 7 percent among uneducated women compared with 10 percent among educated ones. The proportion met demand for family planning had increased by six percentage points (from 54 percent to 60 percent) among women aged 35–49 years, and by five percentage points (from 46 percent to 51 percent) in women aged 25–34 years. However, it had risen by nine percentage points (from 31 percent to 40 percent) among younger women aged 15–24 years.

Similarly, improvements were seen in differences across education levels and SLI. The increase in the proportion met demand was higher (nine percentage points) in rural areas compared to that in urban areas (six percentage points).

# 3.1.4 Proportion met demand by district

In the baseline survey, total demand for family planning varied from 52 percent in Ghotki to over 74 percent in Mardan, while in the end line survey, it varied from 60 percent in Thatta to 81 percent in Swabi. According to the end line survey, the proportion met demand was the highest in Mardan (68 percent) and the lowest in Ghotki (37 percent). The baseline survey showed that 32 percent was the lowest proportion met demand (Ghotki), while the highest of 59 percent was observed in Mardan. Overall, the proportion met demand in all districts had improved, but disproportionately. The maximum improvement of seventeen percentage points in the

proportion met demand was observed in Mansehra. The minimum improvement of 1.2 percentage points was observed in Larkana.

Table 3.1: Percentage of currently married women aged 15–49 years: total demand for contraceptives, met demand for contraceptives, and proportion met: FALAH baseline survey (2008–09) and end line survey (2011–12) (N=6,806)

	Total demand (%)		Met demand (%)		Proportion met (%)		
Districts/	Baseline	End line	Baseline	End	Baseline	End	Increase
Background statistics				line		line	
District							
Sukkur	61.2	72.5	27.5	38.8	45.0	53.5	8.5
Dadu	61.3	71.7	20.9	28.4	34.1	39.6	5.5
Larkana	60.5	63.8	26.4	28.6	43.6	44.8	1.2
Thatta	54.0	60.2	19.7	24.8	36.4	41.2	4.8
Sanghar	56.2	68.5	24.7	37.5	44.0	54.8	10.8
Ghotki	52.2	69.3	16.6	25.5	31.8	36.8	5.0
Swabi	70.2	80.8	37.8	47.1	53.9	58.3	4.4
Charsadda	67.7	76.8	37.6	49.9	55.5	65.0	9.5
Mansehra	68.9	72.1	29.4	43.0	42.7	59.6	16.9
Mardan	74.2	76.2	43.5	51.9	58.6	68.1	9.5
Jhelum	73.9	73.6	41.2	47.1	55.7	64.0	8.3
D. G. Khan	69.7	71.7	28.5	37.4	40.9	52.2	11.3
Bahawalpur	71.3	71.0	39.8	45.5	55.8	64.1	8.3
Rajanpur	61.1	69.9	21.1	33.6	34.5	48.1	13.6
Age of respondent							
15 – 24	44.9	57.5	13.7	22.8	30.5	39.6	9.0
25 – 34	67.4	70.6	30.7	35.8	45.5	50.7	5.2
35 – 49	78.0	76.3	41.8	45.9	53.5	60.1	6.6
Education level	•						
No education	63.5	69.4	26.4	33.8	41.5	48.7	7.2
Up to primary	65.9	70.5	31.3	39.9	47.5	56.5	9.0
Up to secondary	67.9	76.9	40.7	53.7	59.9	69.8	9.9
Above secondary	66.3	81.1	42.8	60.6	64.5	74.7	10.2
SLI	•						
Low	59.6	66.9	17.8	25.8	29.9	38.6	8.7
Medium low	62.7	69.5	25.7	35.0	41.0	50.3	9.3
Medium high	66.3	73.7	33.1	43.2	49.9	58.7	8.8
High	69.0	74.2	40.8	50.2	59.1	67.7	8.6
Residence							
Rural	63.2	70.4	26.1	35.3	41.4	50.1	8.7
Urban	69.7	73.0	43.2	49.2	61.9	67.4	5.5
Overall	64.4	70.9	29.4	37.9	45.6	53.5	7.9

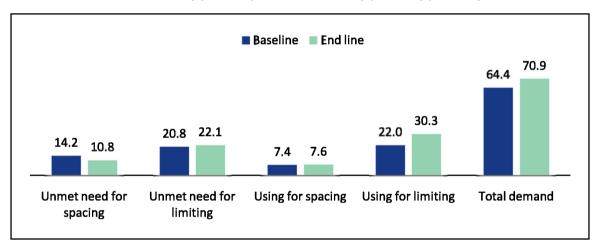
## 3.1.5 Unmet need for spacing and for limiting

Figure 3.4 shows that unmet need for spacing had fallen from 14 percent in the baseline survey to 11 percent in the end line survey. For limiting, however, unmet need had increased from 21 percent to 22 percent. Overall, there had been a reduction of two percentage points in unmet need (for both spacing and limiting) (Figure 3.2).

Similarly, the increase in those using contraceptives for spacing between the two surveys had been negligible (0.2 percent). However, for limiting, there had been a significant increase in met need from the baseline survey (22 percent) to the end line survey (30 percent).

Hence, there is clear evidence of both an increase in overall demand and of satisfied demand (met need) for family planning services, and it appears that the FALAH project was able to reach out to the most vulnerable segments of women.

Figure 3.4: Unmet need and met need for spacing and limiting, and total demand for contraception: FALAH baseline survey (2008–09) and end line survey (2011–12) (N=6,806)



## 3.2 Reasons for non-use

Various factors compel certain couples to use fertility regulation methods. However, there are others who have never used family planning methods due to certain impediments (ignorance, non-availability, non-affordability), past experience, a desire for more children, or physical, medical, or social problems. The subsections below examine the reasons for having never used a FP method, reasons for using traditional methods instead of modern ones, and the reasons for not currently using a method.

## 3.2.1 Reasons for never using a contraceptive method

Women who had never used a contraceptive method were asked about their reasons. Seven out of ten women in the baseline survey and almost half (49 percent) in the end line survey reported that they wanted children and had therefore never used a contraceptive method (Figure 3.5) There has been a significant decline (21 percent) in this perception between the baseline and end line surveys. It is important to note that prior to the FALAH project, spacing was erroneously not considered a focus of family planning. The end line results show a decline in almost all reasons for not adopting family planning. This may be attributed to the repositioning of family planning through the promotion of birth spacing, which as a concept has wider appeal and religious endorsement, and due to the effective counseling approach adopted by FALAH trained service providers. Husbands' opposition still appeared as a strong deterrent to adopting family planning methods among women who have never used a contraceptive method (30 percent in the baseline survey and 26 percent in the end line survey). This demands more effective measures for involving men, especially uneducated men in urban slums and rural localities.

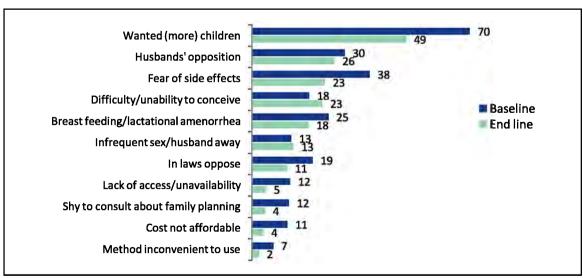
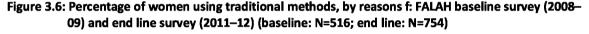
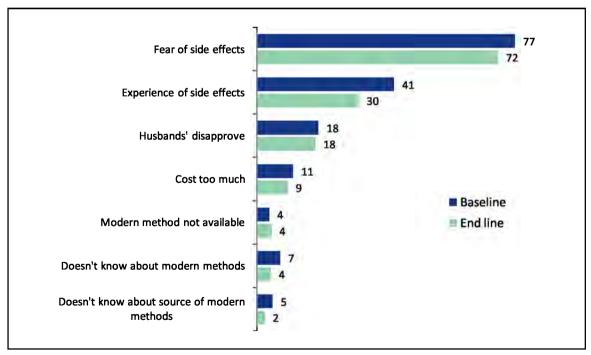


Figure 3.5: Percentage of never users, by reasons for never using any method: FALAH baseline survey (2008–09) and end line survey (2011–12) (baseline: N=3,238; end line: N=4,074)

## 3.2.2 Reasons for using traditional methods

As mentioned in chapter two, among the panel of women who were interviewed in both surveys, nearly 8 percent were using a traditional method in the baseline survey and 11 percent in the end line survey. Women were asked why they chose a traditional method when modern and more effective methods were available. Figure 3.6 shows that a sizeable majority (77 percent in the baseline survey) reported fear of side effects as a reason for non use. However this figure declined in the end line survey with 72 percent reporting fear of side effects of modern methods. The women could give more than one reason, and almost one-third said they had actually experienced side effects (41 percent in the baseline survey and 30 percent in the end line survey). It is important to note that the FALAH project had focused on the proper counseling of clients, especially at the facility level, informing them of possible side effects and what to do under various circumstances. The reduction in the fear of side effects and switching to other acceptable options in case of side effects can be attributed to the project's interventions. The other reasons included a sizeable proportion of husbands (18 percent in both surveys) disapproving use of modern methods. Around one in ten women reported using traditional methods because modern methods cost too much. Four percent reported that modern contraceptive methods were not available.





## 3.2.3 Reasons for not currently using contraceptives

Women who had used contraceptive methods in the past, but were not currently using any, were asked for their reasons. Figure 3.7 shows that about one-fifth (19 percent in the baseline survey and 18 percent in the end line survey) had stopped using any method as they wanted to become pregnant, while a higher proportion (28 percent in the baseline survey and 21 percent in the end line survey) were already pregnant, and therefore not using any method. The fear of side effects, however, remains a deterrent with 24 percent of women in the baseline survey and 21 percent in the end line survey, citing this as a reason for not currently using a fertility regulation method. A sizeable proportion of past users (23 percent in the baseline survey and 18 percent in the end line survey) were not using any method, as they were breast feeding and considered it to be sufficient protection from getting pregnant.

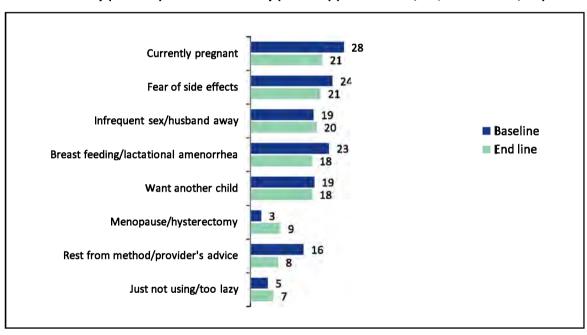


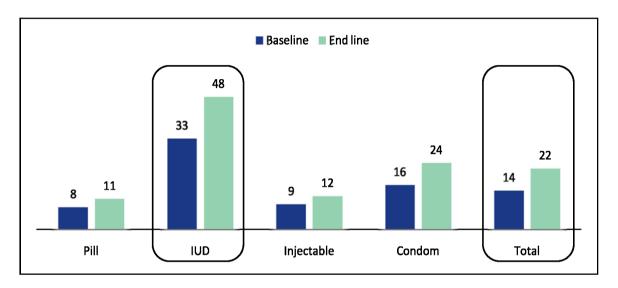
Figure 3.7: Percentage of past users, by reasons for not currently using any method: FALAH baseline survey (2008–09) and end line survey (2011–12) (baseline: N=1,238; end line: N=1,497)

# 3.3 Median duration of contraceptive use

The FALAH baseline survey included a contraceptive calendar to collect the contraceptive history of the sampled women for the four years prior to the survey. A contraceptive events-based dataset was created from this calendar where each episode of contraceptive use counted as one observation. All episodes of contraceptive use that occurred during the four-year period of observation were used to calculate discontinuation rates.

Figure 3.8 compares the median duration of contraceptive use in the two surveys. The life table median is defined as the duration by which half the users have discontinued use. As seen, the median duration of use of all modern methods increased in the end line survey. Overall, the median duration of use increased by 8 months, with a 15 month increase for IUDs and an 8 month increase for condoms.

Figure 3.8: Median duration (months) of contraceptive use, by method: FALAH baseline survey (2008–09) and end line survey (2011–12) (baseline: N=10,604; end line: N=12,402)



# Chapter 4: The Impact of Communication Interventions through the Mass Media and Interpersonal Communication

A Communications Program is central to the improvement of family planning knowledge and use. It is well established that behavior change communication (BCC) programs carried out through either the mass media, community-level events, or interpersonal communication/ counseling, are essential for changing intentions, and raising approval as well as actual use of family planning methods (Bongaarts et al 2012). There is evidence from several studies in developing countries that an individual's exposure to mass media messages promoting family planning influences their contraceptive behavior (Westoff et al, 1997; Kincaid and Lawrence, 2000; Piotrow et al, 1997). The FALAH behavior change communication (BCC) campaigns based on the CAM strategy (described in the Introduction) included a combination of television advertisements and radio spots, community activities—interactive theater, women and men's group meetings, and Friday sermons—and interpersonal interactions along with the utilization of IEC materials (leaflets, posters and clinic-based counseling materials). The use of multiple media sources was expected to reach a larger audience and to reinforce the messages being spread. Effects of exposure to maternal health messages in the mass media and through interpersonal communications have an incremental effect on improvement in maternal health indicators (Mahmood, 2010; Bessinger et al, 2003). This holds true for an increase in the use of family planning methods as well (Jato et al, 1999; Kane et al, 1998).

# 4.1 Removal of obstacles by communicating messages about birth spacing

The FALAH Communications Advocacy and Mobilization (CAM) strategy adopted 'out of the box' approaches to reach out to communities to increase demand and acceptability of family planning. The strategy shifted the focus from advocating the adoption of the long term use of the small family norm such as 'bachhay do hee achhay' (two children are good), to the value and need of birth spacing to improve maternal and child health and family wellbeing. This was based on the evidence that family planning was perceived largely as a means of family size limitation, and was the root of much of the opposition to family planning programs in the last few decades (Casterline et al, 2001; Bongaarts and Bruce, 1995; Mahmood and Ringheim, 1996). The FALAH CAM strategy provided a strongly needed break from this concept.

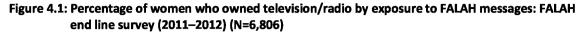
The repositioning of family planning by communicating the concept of birth spacing was used both in the mass media campaigns and the information, education, and communication (IEC) materials utilized in group meetings, as well as materials developed for provider-client interactions. Newly developed messages addressed misgivings associated with family planning for the first time and provided holistic information on contraceptive choices, details of where services could be obtained, contraceptive side effects, the Islamic viewpoint on family planning and the direct impact of birth spacing on maternal, child and family health outcomes. The main target groups were married couples, but we also focused on men, recognizing them as major decision makers.

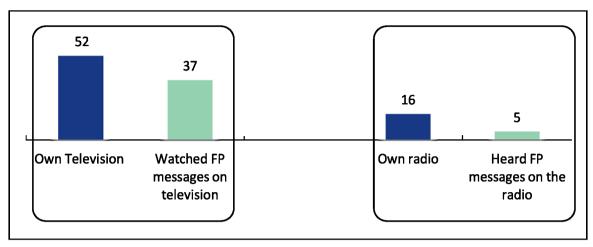
The communication strategy used three mediums for reaching out to communities: interpersonal communication (IPC), community media, and the mass media. IPC refers to discussions between individuals, e.g. when health workers counsel women or husbands. Community media refers to group activities such as women and men's group meetings or interactive theater. Mass media includes radio and television. Although activities differed by medium and each district had some variations in approach, the messages remained the same and focused on the World Health Organization (WHO)-recommended healthy timing and spacing of pregnancies (HTSP).

The steps to behavior change are based on an adaptation of the diffusion of innovations theory and the input/output persuasion model. The different stages of change identified in the literature are knowledge, approval, intention, practice, and advocacy (Piotrow et al, 1997). This chapter assesses the impact of BCC interventions on women and men's attitudinal change toward family planning, their future fertility intentions and use of family planning methods.

# 4.1.1 Mass media birth spacing/family planning messages

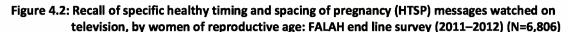
We begin by assessing the impact of the mass media and overall reach of the messages conveyed. This measure was one of the key outcomes expected of the FALAH project in the performance monitoring plan (PMP) indicators. Outreach and coverage were assessed for FALAH districts through the end line survey. As seen in figure 4.1, 52 percent of households owned a TV set, and 37 percent of women (71 percent of those who owned televisions) saw the family planning messages on television; whereas, 16 percent households possessed a radio and 5 percent women (31 percent of those who owned radios) heard family planning messages on the radio. Clearly, those households that owned TVs were more likely to use them, whereas radios were less likely to be utilized.

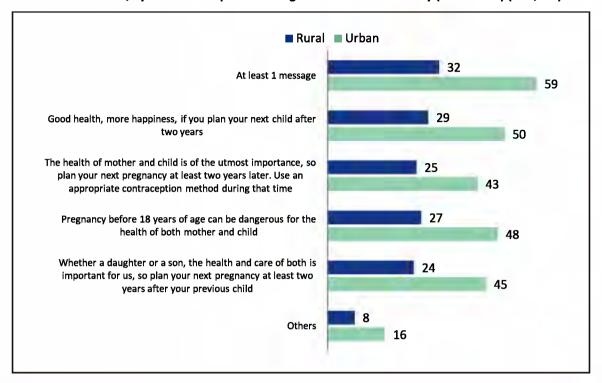




Recall of FALAH related broadcasts and their messages on mass media were much higher in urban areas. Almost 60 percent of MWRA in urban areas and 32 percent of MWRA in rural areas of FALAH districts recalled at least one FALAH message in the end line survey (Figure 4.2). The best recalled message (by 50 percent of women in urban areas and 29 percent in rural areas) was 'sehat achi, khoshian ziada, 2 sal baad agley bachey ka irada' (good health, more happiness, if you plan your next child after two years). Another message: '18 sal se kam umar main hamla hona maan aur bache donon ki sehat ke liye khatarnak ho sakta hai' (pregnancy before 18 years of age can be dangerous for the health of both mother and child) was recalled by 48 percent of MWRA in urban areas and 27 percent in rural areas. Two other messages, 'beti ho ya beta, donon ki sehat aur parvarish ham sab ke liye ahm hai, is leye agley bachey ka irada kam az kam 2 sal baad karain' (whether a daughter or a son, the health and care of both is important to us, so plan your next pregnancy at least two years after your previous child) and 'yaad rukhain maa buchey ki sehat hi sub se burh ke hai, is leye ugley humal ka irada paidaish key kam az kam 2 sal baad karain, aur is dauraan vuqfay ka koi munaasib tarieeka istamaal karain' (the health of mother and child is of the utmost importance, so plan your next pregnancy at least two years later. Use an appropriate contraceptive method during that time), were recalled by 25 percent in rural areas and more than 43 percent in urban areas.

The national coverage of the media campaign as measured by a third-party evaluation conducted by Gallup, Pakistan is presented in Box 4.1. Gallup reported that 50 million people most of them rural and poor had seen or heard FALAH messages on television.





# Box 4.1: Viewership of FALAH's Media Campaign - Results of the Third Party Evaluation

Gallup Pakistan's audience measurement exercise was based on sample data from over 5,000 statistically selected television viewers from the rural and urban areas of all four provinces. The findings are:

The FALAH media campaign reached an estimated 50 million adult men and women (age group 18+). These constituted 66 percent of the total television viewers in that age group. Furthermore, on the average, each recipient was exposed to the advertising messages 48 times during the campaign period.

The targeted population comprised a broad profile, largely corresponding with the national profile of the country. Thus, the message reached 25 million males and females, each. It reached 34 million rural residents and 14 million urban residents. It was disseminated to a variety of socioeconomic groups and estimated to have been watched by 32 million people in low-income groups, 18 million in middle-income groups and 0.3 million in high-income groups.

As for the impact of the advertising campaign on awareness, attitudes, and behavioral change, a qualitative study was carried out by Gallup, Pakistan, through focus group discussions (FGDs). The analysis of these discussions revealed that the campaign had raised awareness visibly, and promoted the attitudinal and behavioral changes intended. The qualitative study also indicated certain areas where these attitudinal and behavioral changes could be further enhanced. Taking all factors into account, the study findings were that the FALAH advertising campaign aired through six television channels reached a large audience of 50 million men and women aged over 18. The campaign cut across gender, rural-urban, and socioeconomic divides.

Source: Gallup, Pakistan. 2011. Viewership of FALAH media campaign, estimated size and profile of viewers: a third-party evaluation. Islamabad. Pakistan: Gallup Pakistan.

#### 4.1.2 Community media

FALAH used three types of community media in disseminating birth spacing/family planning messages among women and men in project districts. The following were the community mediums used:

- 1. Women Group Meetings (WGMs): LHWs conduct group meetings in communities on a regular basis and make household visits to discuss reproductive health (RH) needs with individual women. One of the main interventions was to train them to reinforce the messages in both the WGMs and the house-to-house visits, and remove any religious obstacles, social disapproval, and misconceptions about modern contraception.
- 2. Men Group Meetings (MGMs): Male FALAH community mobilization officers, social mobilizers of population welfare programs, and volunteers—identified with the help of village health committees—were trained to conduct MGMs to discuss social disapproval and misconceptions about modern contraception, RH needs, and the benefits of birth spacing. They also referred men to nearby public and private health facilities for contraceptive supplies.
- 3. Ulemas' Friday sermons: More than 1,500 ulema (on average 100 per district) were given an in-depth orientation on the benefits of birth spacing, family planning, and Islamic injunctions on family wellbeing. This intervention was aimed towards transforming religious leaders into active proponents of birth spacing as an important health intervention for improving the health of mother and child, leading to overall family wellbeing. This intervention was perceived to be critical in the set of 'opinion shaping' interventions as it addressed the issue of perceived religious opposition to family planning.
- 4. Interactive theater: Interactive theater was an 'entertain-educate' approach that provided a platform for two-way communication. It consisted of a theatrical performance on social issues performed by local artists. This activity was conducted in selected rural areas of FALAH's Sindh districts. Selected underserved areas of the FALAH districts in Sindh used this approach.

The audience often included families who were encouraged to participate in the performance by identifying indigenous solutions to community problems highlighted during the performance. FALAH used this innovative approach of entertainment-education communication in remote areas to enhance acceptability and generate demand for birth spacing methods in Sindh. It was used to desensitize communities to the phrase 'family planning' and introduce 'birth spacing' as a health and social issue that needed to be discussed at the family level, and collectively at the community level where such phrases and related issues were unacceptable topics for open discussion. The performance scripts were based on a story describing the advantages of HTSP.

Overall coverage of community media interventions obtained from the end line survey in FALAH districts is shown in Figure 4.3. It shows that more than ten percent of the women attended WGMs and more than five percent of the women reported that their husbands attended MGMs.

Overall more than three percent MWRA reported that their husbands attended Friday sermons. Moreover, slightly more than two percent of the women also reported that they attended interactive theater performances in FALAH's Sindh districts (data not shown).

10.6

5.4

Attended WGMs in LHW areas Husbands Attended MGMs

Figure 4.3: Percentage of women exposed to women group meetings and whose husbands attended men group meetings: FALAH end line survey (2011–2012) (Panel women, N=4,365)

#### 4.1.3 Interpersonal communication

Interpersonal activities were carried out by LHWs in areas where they worked. In areas where there were no LHWs, reliance for IPC activities was on GSM outreach workers, who were mainly available in urban areas of FALAH districts. LHWs were especially given client centered (SAHR) training with its strong emphasis on behavior change and communications, and knowledge of messages on Healthy Timing and Spacing of Pregnancies and Islam and Family Planning to their community clientele. LHWs were encouraged both to make household visits to discuss RH needs with individual women and offer contraceptives to those who were identified as having an unmet need for family planning. They were also asked to conduct Women Group meetings. The majority (86 percent) of respondents living in areas with LHWs present reported being visited by LHWs in the last three months. Overall coverage of IPC activities in FALAH districts is presented in Figure 4.4.

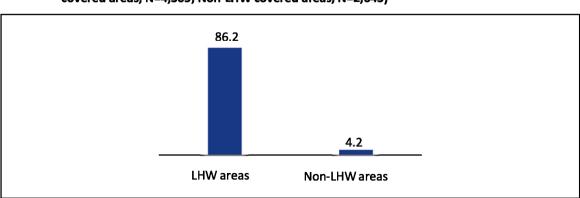


Figure 4.4: MWRA who reported being visited by a health worker by areas: FALAH end line survey (LHW covered areas, N=4,365; Non-LHW covered areas, N=2,643)

In addition to Greenstar outreach workers, we also tested an approach of Community Based Volunteers in rural areas not covered by LHWs. This approach was tested in only 6 districts and Non-LHW areas of 53 UCs met with considerable success. Implemented with Partner RSPN and linking mobilization with services from the population welfare departments and GSM clinics found that the knowledge of contraception, of HTSP and above all use of contraceptives spiked up as a result of this intervention in non-LHW rural areas. (Details are given in Box 5.1).

# 4.2 Impact of FALAH interventions on fertility intentions and behavior of women

The aim of this analysis is to examine whether differences were observed in women's fertility intentions and their behavior prior to and after experiencing an intervention of the BCC campaign. Mass media/BCC exposure was measured on responses to the following questions:

- i) Having seen a FP message on television within the last year;
- ii) Having heard a FP message on the radio within the last year;
- iii) Having attended a women's group meeting (WGM) within the last year;
- iv) Having attended a men's group meeting (MGM) within the last year;
- v) (Husbands) having attended a Friday sermon within the last year;
- vi) Having attended an interactive theater performance within the last year;
- vii) Having been visited by an LHW during the last three months.

Impact is measured as change in the following outcomes:

- i) Desire for more children or for spacing children
- ii) Women's approval of family planning;
- iii) Husbands' approval of family planning;
- iv) Future intentions to use Family planning;
- v) Current Contraceptive use.

The analysis makes use of the data from the panel of women interviewed both in the baseline and end line to assess actual change in their reproductive behaviors, before and after the influence of an intervention. This was considered a stronger indicator of assessment of impact of interventions as we looked at the changes in the same set of women. Whereas, comparisons between the cross-sections of women would have required demographic and socio economic controls and there would have been a possibility that women from other areas could enter the end line survey.

It is important to note when discussing coverage and impact of interventions that the survey does not allow for controlling or measuring some aspects of the interventions. For example, in the following discussion, when talking about the importance of women's participation in women's group meetings formed by LHWs, there is no way of knowing or accounting for factors that made certain woman chooses to participate. The factors that make some people choose to participate might make them more likely to benefit from participation; therefore, when assumptions are put forward about the benefits such an intervention might have if only more women were given an opportunity to participate, we cannot, in fact, say with certainty that the same percentage of women in a larger context would benefit because of the self-selection factor that we have not measured.

#### 4.2.1 Impact of communications interventions on desire for children

The underlying rationale promoting family planning programs (as in the case of FALAH) is to give couples the freedom and ability to bear the number of children they want and to achieve the spacing of births they prefer. Communications interventions are especially designed to remove obstacles that act as deterrents to contraceptive use and act as a barrier to the approval of family planning methods. They are also designed to reduce discrepancies between husbands' and wives' intentions, and increase approval of family planning methods in order to boost their use. Women's desires to curtail fertility rose from 49 to 61 percent over the four years of the project (figure 4.5). To a large extent this change may reflect the 'aging' of the panel and likelihood of completing family size. The rest of the change would be caused by various interventions that were directed towards greater knowledge of HTSP, of contraceptive methods and removal of major misconceptions regarding contraception.

Among the major sets of mass media and interpersonal interventions it appears that 13.3 percent more women who reported having heard FP messages on radio, 12.6 percent more of the panel who watched messages on TV and 13.6 percent more of those who were visited by an LHW in the last 3 months wanted to cease childbearing. In comparison, though few in numbers because of the limited extent of the interventions, 15.6 percent of women whose husband attended a Male group meeting said they wanted no more children. The attendance of husbands in a Friday sermon also leads to a 12.5 percent increase in women wanting no more children.

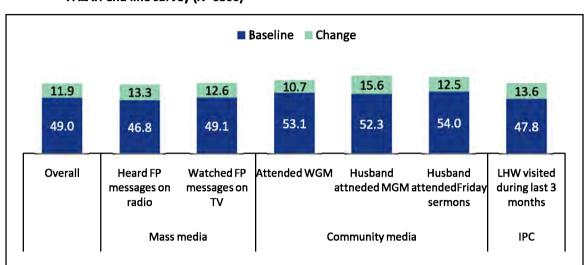
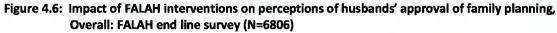


Figure 4.5: Impact of individual FALAH interventions on women wanting no more children, overall: FALAH end line survey (N=6806)

# 4.2.2 Impact of FALAH interventions on Women's approval and perceived approval of husbands for family planning

The next step towards using a contraceptive method is whether the couple approves using family planning to avoid unwanted pregnancies. In this process, spousal approval on family planning is critical: if a husband does not approve of family planning it is difficult for a woman to use contraceptive methods even if she approves of them. Many studies suggest that in addition to inter-spousal discussion, a husband's approval of family planning is an important predictor of family planning (Bongaarts and Bruce, 1995; Kamal, 2000; Islam et al, 2006). Women who do not know whether their husbands approve of family planning or who believe that their husbands do not approve of family planning are less likely to use a contraceptive method than those who believe that their husbands will not disapprove (Kamal, 2000).



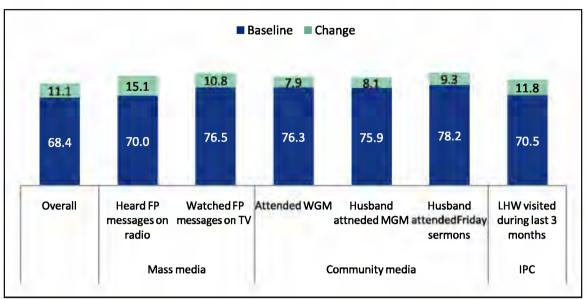
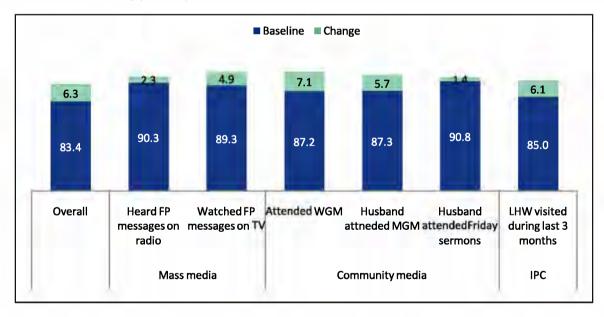


Figure 4.7: Impact of FALAH interventions on women's approval of family planning Overall: FALAH end line survey (N=6806)



While approval of family planning among women is now reaching universality, women still deal with the concern that their husbands disapprove of FP; at times this is founded in reality, but at other times can be wrongly construed (Zaidi and Mahmood, 2009). This may be explained by the lack of communication between husbands and wives. The expectation is that sound communications interventions especially those directed at men could change this indicator in particular. Furthermore, once exposed to family planning interventions, a woman may be in a

better position to hold discussions with her husband and assess his views on family planning more accurately.

Overall, the majority (more than 68 percent of women) interviewed in the baseline survey perceived that their husbands' approved of family planning and in the end line survey an additional 11 percent women reported the same (Figure 4.6). However, it is still important to remember that men lag behind by a considerable margin in their approval of family planning (Figure 4.7). More communications interventions are still needed to bring about universal approval of family planning among men.

Women, who had heard FP messages on the radio, reported a 15 percent rise in their husbands' approval of family planning. This could be because messages being conveyed via radio were specifically encouraging inter-spousal communication. An additional 12 percent of those who were visited by the LHWs during the three months before the survey reported that their husbands now approved of family planning. Interventions directed at men had less impact on husband's perceived approval.

# 4.2.3 Impact of FALAH interventions on women's intentions to use family planning methods

The progress from approval of family planning to an intention to use it is a major step towards successful use of contraception. While the majority of women approved of family planning there were a large proportion of women in the baseline who said they had never used and did not intend to use it in the future; this presumably reflected obstacles that they faced: to make a decision, find, and then pay for services. A high proportion of these women (43.3 percent) changed their intention to use contraception by the end of the project. The most successful interventions in terms of getting this group to change their intentions were those targeting men. Interpersonal communication with men such as men group meetings and Friday sermons were effective means of getting women to change their intentions to use contraception (Figure 4.8). It is likely that interventions targeting men helped husbands and wives to communicate better or broke the ice regarding family planning between couples, along with providing more information on the topic.

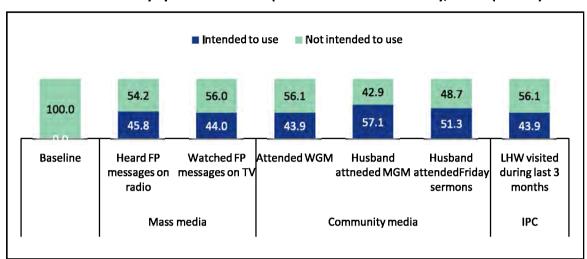


Figure 4.8: Impact of FALAH interventions on never users who did not intend to use contraception in the baseline survey by status of contraceptive use in the end line survey, overall (N=1988)

#### 4.2.4 Impact of FALAH Interventions on Contraceptive use

The final step of contraceptive adoption is likely to be most influenced by interventions that provide more accurate and better information regarding use, a reassurance that contraceptive methods are safe, and knowledge about availability etc. Women with unmet need can be identified through one-on-one discussions through IPC when they are visited by LHWs during their home visits or by the service providers during women's visits to the facility. During such interactions, the providers can also offer information on how to use methods, what to do if they experience side effects with the used method and how to choose an alternative method if they experience side effects, all of which would encourage more effective use among women who have strong motivation to avoid their next pregnancy. The large proportion of women who had not intended on using family planning earlier, but had changed their intentions by the end line survey, are ready for the use of services (Figure 4.8).

FALAH interventions to improve service delivery came into play in response to the above situation. The contraceptive prevalence of married women in the panel increased by 8.5 percent in the project districts. An increase of 9.7 percent is recorded among women who reported LHW visits to their homes during the last three months before the survey, followed by an 8.7 percent increase among women who watched FP messages on television and those who reported that their husbands' attended men group meetings. However, the largest increase of 10.3 percentage points is recorded for women who attended women's group meetings.

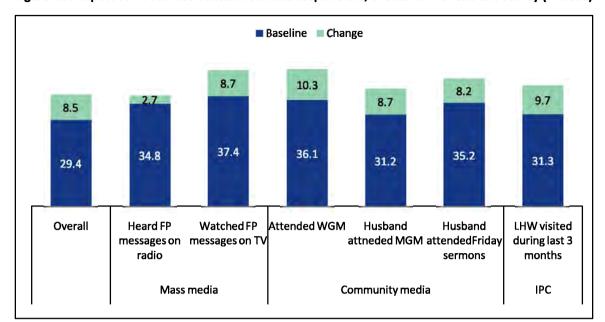


Figure 4.9: Impact of FALAH interventions on contraceptive use, overall: FALAH end line survey (N=6806)

# 4.3 Impact of Communications Interventions as Reported by men

While the above discussion was based on the responses of women regarding interventions directed at them and regarding their husbands participation in these interventions and their approval of family planning, we now turn to responses directly sought from men. The media messages had an element of male responsibility in them and the more direct communications on family planning were conveyed through male group meetings, religious sermons, community mobilizers and CBVs in group meetings, and interactive theater performances in Sindh.

As mentioned earlier, the Gallup evaluation found that 50 million people nationally were exposed to FALAH messages - at least half were men. The qualitative findings of the Gallup evaluation also showed that watching family planning/birth spacing advertisements on television had a definite impact on men's perceptions about birth spacing (Box 4.1).

The findings presented here are based on the panel of men that were interviewed in both the baseline and end line surveys. Their characteristics are presented in the Introduction chapter. Mass media exposure among the panel of men in the FALAH districts was also quite extensive with 30.7 percent having watched FALAH messages on television and 7.5 percent hearing them on radio (data not shown).

# 4.4 Impact of FALAH interventions on men's reproductive intentions and behavior

The interventions directed at men proved to be an important strategy decision in changing women's intentions and behaviors even though only 4 percent of men attended MGMs and more than 5 percent attended Friday sermons. The targeted interventions where men were directly approached and allowed to participate were much more likely to have improved couples' (as seen earlier) and men's own reported reproductive intentions and behavior. We analyzed responses from men in the panel who were interviewed in the baseline and end line to assess impact. As shown in Figures 4.10 through 4.13, a higher proportion of men exposed to FALAH interventions wanted no more children, approved of family planning, intended to use contraception in future, and/or were currently using contraception. Through MGMs and religious sermons, it appears that men do require information about birth spacing and its benefits, and it does help shape their reproductive intentions and behavior.

The greater impacts noted were the following: Men who had attended Friday sermons showed 27 percentage point increase in expressing that they want no more children and (Figure 4.10) 16 percentage points increase in the approval of family planning compared to the baseline (Figure 4.11).

Almost half of the group of men who had never used contraception and did not intend to use contraception in future in the baseline changed their future intentions by the end line. The greatest impact on this group was of TV viewership. And finally, attending male group meetings had the strongest impact on adoption of contraceptive use presumably reflecting the presence and influence of LHWs in those settings.

Figure 4.10: Impact of individual FALAH interventions on proportion of men who want no more children: Panel men (N=950)

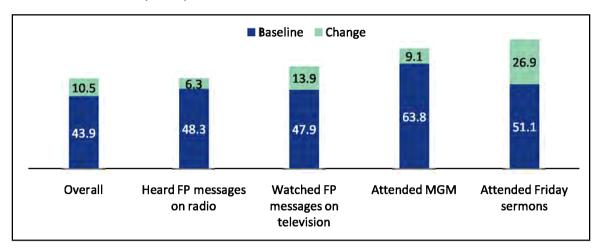


Figure 4.11: Impact of FALAH interventions on men's approval of family planning: Panel men (N=950)

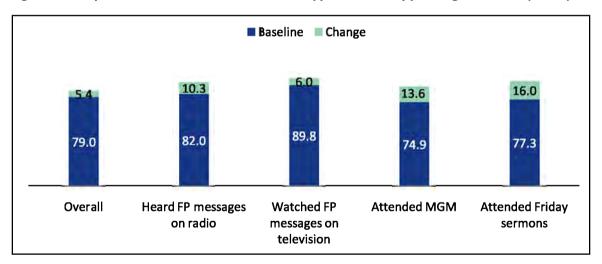


Figure 4.12: Impact of FALAH interventions on men's future intention to use contraception: Panel men (N=359)

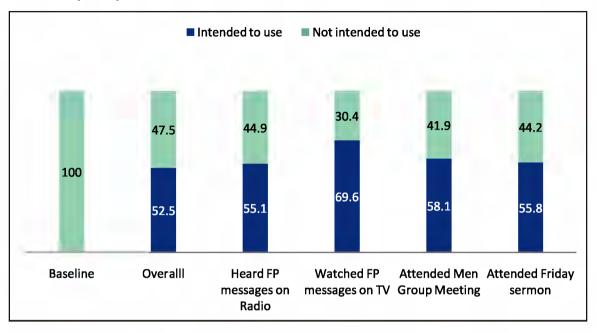
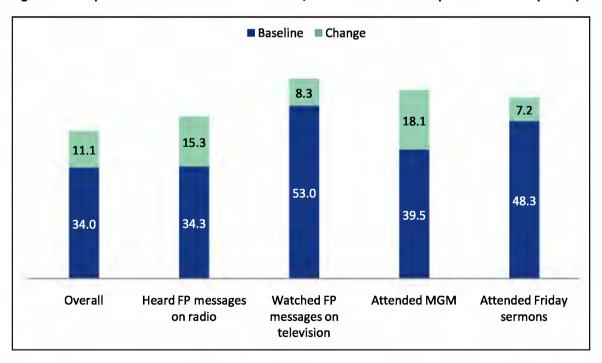


Figure 4.13: Impact of FALAH interventions on men's, current use of contraception: Panel men (N=950)



# Chapter 5: The Impact of Strengthening the Health System in Delivering Family Planning Services

The full package of FALAH BCC interventions along with the health system strengthening interventions were implemented in the project districts. In the health system interventions, the major strategies were to promote improved delivery of family planning through the public health sector by investing in the capacity building of managers and providers. This was brought about by training health providers in contraceptive technology, Client Centered Approach, Islam and family wellbeing; and the training of district managers in leadership skills and contraceptive logistic management as well as through supportive supervision. While it is almost impossible to measure the precise impact of these capacity-building interventions on actual contraceptive use from survey findings, the training of this large cadre of HCPs (comprising staff of static clinics like basic health units [BHUs], rural health centers [RHCs), tehsil headquarter [THQ] hospitals and district headquarter [DHQ] hospitals and the large numbers of LHWs) certainly had an impact in project areas, and contributed to the changes between the baseline and end line results.

During mobilization the women and men were referred to nearby health facilities for obtaining family planning services. In urban areas the RHS-A centers of the Population Welfare Program, which provide family planning services, are situated in the premises of the district and tehsil headquarter hospitals. However, in rural areas, the health department's facilities such as BHUs and RHCs only started providing family planning services after the FALAH interventions. As 80 percent of the population resides in rural areas it is important to focus on them to observe the impact of these interventions.

# 5.1 Static clinics in the public system

In addition to assessing the impact of FALAH interventions at the community level, the end line evaluations also assessed the readiness of public health facilities for offering family planning and birth spacing services. The situation analysis (Miller et al, 1998) technique was employed to assess the readiness of health facilities and the quality of their family planning services. The facilities' quality of care was assessed by observing client and provider interactions, and client satisfaction was assessed using exit interviews. The multi-item measure (Fapohunda, 2012) was

utilized for accurately assessing functioning facilities. A complete assessment of the situation analysis of public health facilities is presented in a separate report (Mahmood et al, 2012).

This chapter presents relevant findings of the analysis and the impact of the client-centered family planning services (CCFPS) trainings on the quality of family planning services and on the overall impact of FALAH interventions on the increase in contraceptive uptake (the difference between end line and baseline surveys) at the district level.

Health providers at public health facilities such as DHQs, THQs, RHCs, and BHUs were trained in each FALAH district to deliver quality birth spacing/family planning services with confidence. An evaluation of the impact of these training courses was carried out using the situation analysis methodology developed by the Population Council. This included undertaking health facility assessments comprising a sample of 141 facilities across 14 FALAH districts. Interviews were conducted with providers, and provider-client interactions were observed. Data were gathered on a sample of facilities for the following attributes:

- i) The physical capacity of health centers;
- ii) The capacity and training of providers to render birth spacing services;
- iii) The situation regarding the availability of contraceptives;
- iv) The quality of interaction with particular reference to providers' counseling skills.
- i) Physical capacity of health centers: The condition of infrastructure to provide family planning services was reasonable, with full electrification. However, only 39 percent of facilities had alternative power supply arrangements to deal with frequent electrical load shedding. Seventy percent of facilities had separate rooms for examination and 62 percent had IUD kits readily available. Most impressive was the fact that overall, 84 percent of staff at the facilities visited (without prior information) were available on the day of the visit. This factor is considered most essential for clients' utilization of services. Seventy-eight percent of facilities displayed IEC material. However, the difference between FALAH-trained and untrained staff was dramatic; 90 percent of the former displayed the materials compared to just 57 percent of the latter.

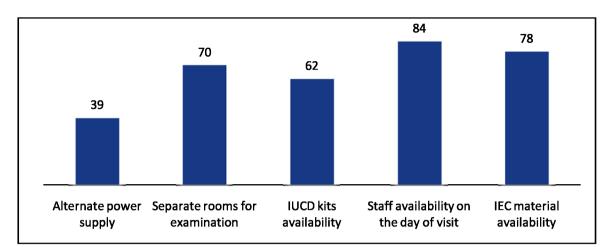


Figure 5.1: Percentage of health facilities with basic infrastructure and availability of services (N=141)

ii) The capacity and training of providers to render birth spacing/family planning services: 69 percent of facilities had staff trained by FALAH in offering Client Centered Family Planning Services -Basic (for male staff), 70 percent of facilities had staff trained in CCFPS-Advanced (for female staff), and 51 percent of facilities had at least one staff member trained in IUD insertion skills. In terms of all providers at these facilities, 87 percent of total providers in FALAH districts had attended the CCFPS-Advance training, followed by 66 percent who attended IUD insertion skills training.

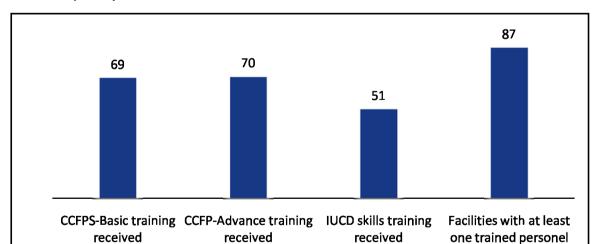


Figure 5.2: Percentage of health facilities, by type of training received by doctors and paramedics (N=141)

iii) The situation regarding availability of contraceptives: There were constraints with contraceptive supplies in health facilities, even though 71 percent of providers reported availability at the time of the visit. Fifty-one percent of facilities had experienced a stock-out in the last three months. A large majority of providers (82 percent) had started sending

demands (using the Department of Health-Form 2 [DOH-2]) to procure additional contraceptives. Providers trained by FALAH were more likely than untrained providers to have sent their DOH-2s during the last month (31 percent vs. 17 percent). An even higher proportion said they sent their reports within the last two months. However, providers were not receiving supplies as per demand.

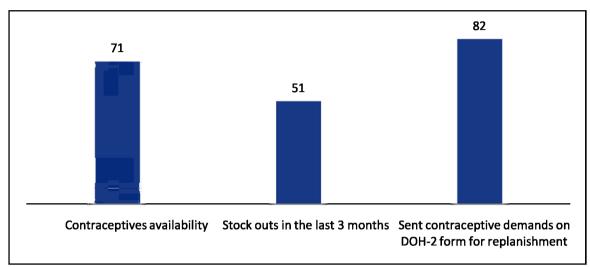


Figure 5.3: Percentage of facilities, by contraceptive availability, stock outs, and sending contraceptive demands for replenishment (N=141)

iv) The quality of interaction with particular reference to providers' counseling skills: More than half of the providers (53 percent) interviewed had received FALAH training. This lead to overall improvements in knowledge of FP methods - an accurate understanding of the birth spacing concept (as per the WHO-recommended definition of HTSP) was found to be more widespread among trained providers (61 percent) than untrained providers (27 percent). However, 8 percent of trained providers still regarded family planning as the limiting of children, with 3 percent taking it to mean limiting children to two. This shows the tenacious hold of old concepts of family planning among providers.

Observations of provider-client interactions showed real differences between FALAH trained and untrained providers. As measured through observations of patient/client interaction and exit interviews, the largest share of clients preferred going to BHUs for their health needs (44 percent), followed by RHCs (34 percent). Fifty-four percent of clients reached these facilities on foot. The use of cars and taxis was very low (3 percent); essentially these were only used for patients/clients needing emergency attention. It is clear that these facilities are catering to a poor and rural clientele, and may serve as a direct explanation for these groups' larger rise in the adoption of family planning methods.

The results of provider-client interactions are presented in Figures 5.4a through 5.4d, which show significantly improved indicators for Salutation, Assessment, Help, and Reassurance

(SAHR). 'Salutation' refers to how a client is welcomed, shown respect, and facilitated with confidence, allowing for free and open discussions of their problems. The aim in 'Assessment' is to maintain the client/patient's confidence while openly discussing the problem, thereby assisting the provider in making an accurate assessment of the problem. Client/patient satisfaction with this assessment is a prerequisite for compliance with the prescribed treatment. In the 'Help' phase, the provider has to help the client/patient with discussions of different treatment options/methods. Finally, providers are expected to 'Reassure' clients about the treatment suggested by repeating instructions and advice; they must ensure that clients/patients have understood their options. The health facility assessment findings showed that trained providers had notably higher standards of behavior with clients/patients in all four components of the SAHR approach. The impact of the SAHR training components on providers' behavior and interaction with clients in static clinics is presented in Figures 5.4a through 5.4d.

Figure 5.4a: Salutation (%)

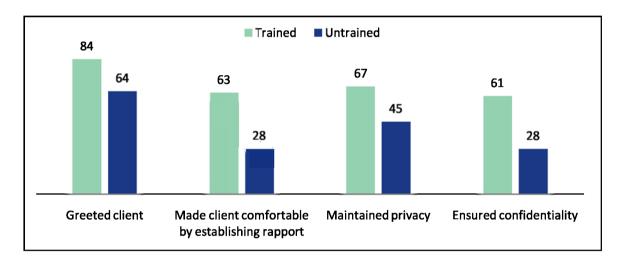


Figure 5.4b: Assessment (%)

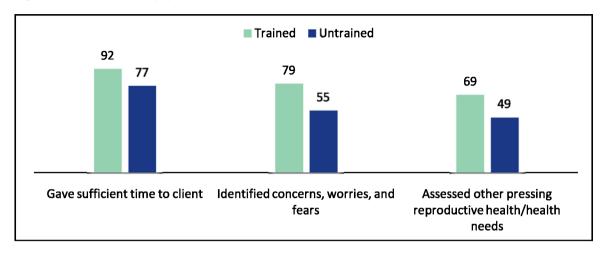


Figure 5.4c: Help (%)

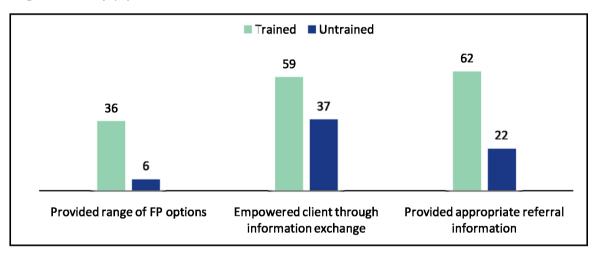


Figure 5.4d: Reassurance (%)

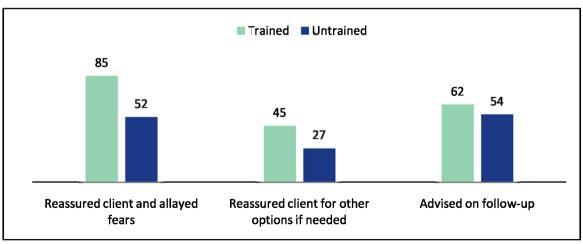


Figure 5.5 shows the average attendance of family planning clients at facilities where trained and untrained providers were providing services, over a six-month period. Facilities with trained providers were attracting almost 50 percent more clients than those with untrained providers during November 2011. Similarly, areas with trained LHWs were more likely to have IPC and direct services available. We now need to assess the combined impact of each of these major public sector interventions, particularly as we look towards scaling up such interventions.

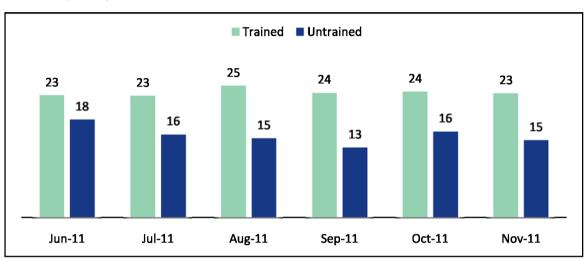


Figure 5.5: Average number of FP clients attended, by facilities with trained and untrained providers (N=141)

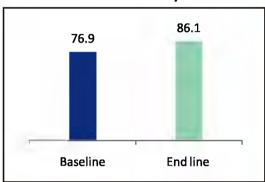
## 5.2 Community worker (lady health worker) performance

The bulk of health service delivery improvement was through the training of 14,000 LHWs in CCA, contraceptive technology, and in conducting WGMs. LHWs provide family planning advice and services through monthly home visits and static health houses established near their residences. They are supported by health committees and women's groups; these are voluntary boards, formulated by LHWs as required, for assistance in providing health services. Lady health supervisors (LHSs) are also a part of the program; their job is to provide monitoring and supervisory support to the LHWs.

The impact of FALAH interventions on LHWs has also been assessed through two additional sources of data: a third-party evaluation (Shafaat et al, 2011) and the household-based end line survey to evaluate LHW performance. The third-party evaluation used a case control design study and found the CCFPS training useful and effective in improving the LHWs' knowledge of family planning. On average, the LHW household visitation frequency was higher in intervention districts as compared to control districts. The evidence showed that CCA (SAHR) training improved LHW behavior and interaction with clients during household visits.

The findings of the end line survey (using a before-after intervention design) showed a significant improvement (9 percent) in LHW household visitation during the previous three months, as compared to the baseline survey (Figure 5.6). The increase in household visitation indicates more frequent interactions between LHWs and women in the community.

Figure 5.6: Percentage of women reporting an LHW visit to their households during the last three months before the survey



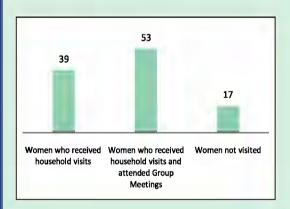
As mentioned previously, the logistic regression analysis showed an association between LHW household visits and women's fertility intentions and behavior. The analysis showed that if women were visited by LHWs during the last three months they had a significantly greater likelihood of intention to use contraception and to currently be using contraception, as compared with the women who were not visited by LHWs (other factors remaining constant).

# Box 5.1: Impact of the CBV model Third Party Evaluation

The FALAH project applied the CBV model to develop community mobilization and facilitation, particularly for married couples in non-LHW-covered areas, for birth spacing knowledge and services. This model was implemented in six districts comprising Dadu, Thatta, Sukkur, and Sanghar, in Sindh, Mansehra in KP, and D. G. Khan in Punjab. The impact evaluation study was conducted by Contech International in five of the six CBV intervention districts (excluding Sanghar owing to floods). They conducted structured interviews with 1,990 MWRA, 269 CBVs, and 30 in-depth HCP interviews and managers. To evaluate the impact of CBVs, MWRA were assessed for family preferences, reproductive intentions, awareness of FP and birth spacing methods, misconceptions, and their attitudes and practices regarding FP.

The study findings showed that the CPR improved significantly among women who participated in the CBV activities. It was demonstrated that 53 percent of the women who participated in the group meetings and received household visits were using contraceptives, compared to 39 percent of women who were merely visited. The CPR was only 17 percent among women who had not received household visits.

#### **CPR by CBV activities**



Source: Source: Impact Evaluation Community Based Volunteers,

A Third Party Evaluation Study, Contech International,
Lahore, 2012

## 5.3 Mobilization and provision of FP services in non-LHW areas

The FALAH project used community mobilization activities to promote HTSP and increase the use of contraceptives by addressing personal and social barriers to contraceptive use (side effects, fear of side effects, religious disapproval, and husbands' disapproval). Female outreach staff conducted household visits for face-to-face IPC with married women identified as having unmet need for family planning. Under the private sector component of FALAH, the major objective of the mobilization activities was to motivate women to seek birth spacing services from nearby GSM providers, especially during *Sahoolat* Clinic days where, during the project, services were offered either free of cost or at highly subsidized prices.

According to the end line survey findings, only 0.6 percent of MWRA reported that they visited the *Sahoolat* Clinic in the FALAH districts. However, ever use among women who visited the *Sahoolat* Clinic (observed in the baseline) was 71 percent. It increased by ten percentage points to 81 percent in the end line survey. It was found that 53 percent of the women who attended the *Sahoolat* Clinic organized by GSM were using contraception (data not shown).

### Box 5.2: Impact of FALAH interventions on maternal health indicators

Contraceptive use reduces maternal mortality in several ways. First, it reduces the incidence of pregnancies and thus exposure to any risk of life-threatening pregnancy complications. Second, it reduces the risk of abortion due to the reduction in the number of unwanted/unplanned pregnancies. Contraceptive use also lowers the risk-per-birth, measured as the maternal mortality ratio (MMR), by reducing the excessive hazards associated with pregnancies that are "too early, too late, too many, too close." The PDHS (2006–07) shows that maternal mortality risk is higher at young ages (below 18) when pelvic development may not yet be complete. In addition, women with high parity experience elevated risk.

Indicator	Numbers
Unintended pregnancies	416,459
Unintended births	273,385
Maternal deaths	711
Abortions	68,514
Unsafe abortions	45,676

The FALAH end line survey findings showed that the proportionate increase in CPR was greatest among the rural, poor, and youngest women. FALAH targeted these high-risk women for FP counseling and services, leading to an increase in contraception, thereby reducing the number of pregnancies and the risk of maternal and neonatal deaths.

A recent study examined the effect of FP on reducing maternal mortality and suggested that FP potentially reduced about 44 percent of maternal deaths, globally. In Pakistan, it suggested that the aversion of 42 percent of maternal deaths was contributed by the CPR of 29 percent. Given the 8.5 percentage point increase in CPR in FALAH districts, applying the same methodology, an additional six percent of maternal deaths have ostensibly been averted. Moreover, the demographic impact of 1.9 million CYPs produced in project districts through FALAH interventions has also saved 711 maternal deaths and the elimination of more than 0.4 million unintended pregnancies during the project period.

The mobilization of MWRA and their husbands in non-LHW areas during the project period on HTSP components was conducted by the CBVs and through interactive theater performances. After the mobilization, MSUs camps were organized to counsel women and provide them with family planning services. Survey findings showed that 58 percent of the women who attended such MSU camps were using contraceptives (data not shown).

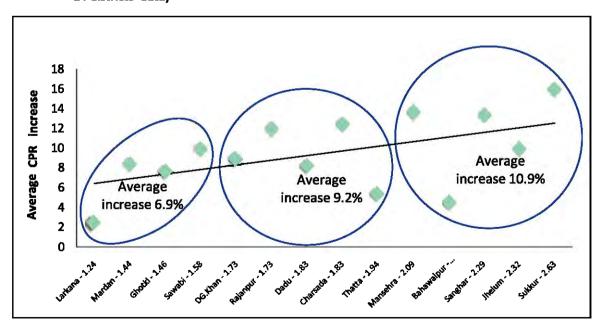
# 5.4 Combined impact of health facilities and lady health workers on the district-level uptake of contraceptive use

An index was developed to observe the impact of service provider training, trained LHW coverage, and contraceptives stock availability on the district-level increase in contraceptive uptake. The index was based on the following components (see Annexure 1 for details):

- i) Proportion of FALAH-trained providers;
- ii) Proportion of FALAH-trained LHW coverage;
- iii) Proportion of RHCs and BHUs with contraceptive stocks available.

As shown in Figure 5.7, there is a clear positive correlation between the index (based on improvement in public sector service delivery) and increases in CPR in rural areas. In districts where interventions were thinly spread, an average increase in CPR of 6.9 percentage points was noted, while in districts where interventions were more extensive, there was an average 11 percent increase.

Figure 5.7: Impact of improvement in the public health system on the delivery of FP services (based on 14 districts' data)



In figure 5.7, the two extreme districts observed in the case of CPR increases were both in Sindh. These were Sukkur (the best performer) and Larkana (the least performer).

The differences between the two districts are outlined below:

- 1. The estimated population of Larkana is almost twice that of Sukkur;
- 2. LHW coverage was 80 percent in Sukkur, but just 50 percent in Larkana;
- 3. The proportion of FALAH-trained LHWs was 87 percent in both districts (1,005 of 1,160 LHWs trained in Sukkur, and 788 of 1,058 LHWs trained in Larkana);
- 4. All facilities in Sukkur possessed contraceptive commodities on the day of visit whereas only 44 percent of facilities in Larkana had contraceptives on the day of visit;
- 5. In Sukkur, 83 percent of rural facilities had at least one CCFPS-trained provider available. The corresponding figure for Larkana was 30 percent;
- 6. Hence, the estimated index score was 2.63 for Sukkur and 1.24 for Larkana (out of three);
- 7. The increase in the CPR noted in rural areas (end line compared to baseline) was 16 percent for Sukkur and 2.5 percent for Larkana.

In summary, the main difference in the two extreme districts was the availability of CCFPS-trained providers and contraceptive commodities in the facilities during this period. The BHUs in both districts were run by PPHI. The availability of trained health providers in Larkana (30 percent) was significantly less than that in Sukkur (83 percent). It was observed that if providers were trained in providing family planning services, they would automatically consider contraceptive availability important. During field visits by project staff, it was observed that the Sukkur PPHI team was very responsive in requisitioning contraceptive commodities from the CWH and distributing them to health facilities. The same cannot be said of Larkana. In fact, the PPHI in Larkana had an outstanding issue of supplies from the CWH. Their supplies remained unavailable to them due to improper documentation.

## **Chapter 6: Conclusions**

The main conclusion of this research is that a sharp uptake of family planning is possible in a relatively short time, given certain investments are made to ensure better communication and greater access to better quality family planning services particularly in the public sector. Pakistan experienced rapid demographic change in the 1990s and a two-percent-a-year contraceptive uptake between 1991 and 1998. However, these gains stalled at the time of the PDHS 2006–7. Contraceptive use changed very little after 1998, and stood at just 29.6 percent in 2006-7. The discussion of stagnation in contraceptive prevalence and high maternal mortality rates was rampant when the FALAH project was launched in 2007. Many of the research findings regarding unmet need for family planning and barriers to contraception were applied to its design.

Contraceptive prevalence has risen by 8.5 percent in FALAH districts among a panel of women interviewed in the baseline in 2007-8 and then in 2011. This increase was uneven, varying from two percent to 13 percent over a period of barely four years between the baseline and end line surveys. The increases were most dramatic in KP, followed by Punjab, and Sindh. In absolute terms, the unmet need for family planning declined by two percent and overall demand for contraception increased by seven percent.

The results of the impact of the FALAH project's focused interventions are most strongly evident among rural and poor women. This reflects the choice of districts which were largely rural, as well as the focus on replacing traditional communication modes and messages, and directly addressing social barriers against the uptake of family planning. While the project succeeded in raising prevalence in both urban and rural areas, its significant achievement is that it was able to address the needs of 'hard-to-reach' groups - those identified by the PDHS 2006–7 as ones with higher unmet need and lower prevalence - the rural, poor, uneducated, and young. The fact that younger women's unmet need can be addressed effectively and that their contraceptive prevalence spiked, is perhaps the most encouraging news about the messaging and communication breakthroughs of the project.

## 6.1 Family Planning Communications

To begin with, communication issues were tackled directly and differently from previous programs. The main communications strategies included addressing husbands through direct communication about family planning, repositioning family planning as birth spacing, and using

communication strategies to include religious leaders. Each of these has proven to be an important strategy decision.

- a) The repositioning of family planning meant changing its past understanding as a phrase to stop childbearing to one that implied birth spacing. The birth spacing terminology also chimes with religious values, and is a communication breakthrough that altered a message which had been in use for the last 40 years. It immediately conferred acceptability as was seen in Gallup's third-party evaluation. Gallup corroborated the positive effect of watching FALAH television messages on contraceptive use of men and women in FALAH districts.
- b) Earlier research underscored that husbands' approval and attitudes towards family planning were based on lack of communication and were a major reason for unmet need among women who themselves were convinced they wanted no more children, or who wished to space their next child. But very few interventions have targeted husbands directly in Pakistan. FALAH interventions directed towards better communication with men about family planning reinforce the fact that men do appreciate and require information on birth spacing and its benefits. These messages, when conveyed in a compelling and persuasive manner through group meetings, religious sermons, or television can affect men and also change responses of wives regarding future fertility desires and intentions to use contraception in the future.
- c) Sensitization to birth spacing messages among community leaders, religious leaders, and ulema was an extremely effective means of removing social and religious obstacles to family planning which depict it as unnatural or conflicting with Islam. It had a considerable impact on men who attended Friday sermons given by Imam Masjids sensitized by FALAH training. Attendance at the sermons showed an impact on desire for wanting no more children in the future and changing intentions to use birth spacing methods, for women whose husbands attended Friday sermons.
- d) Since our focus was women themselves and increasing their knowledge and approval and strengthening their intentions to adopt contraception, it is important to establish that they were also strongly influenced by effective IPC and media messages. The exposure to mass media messages and community media—delivering messages about why family planning makes good sense, how to go about it, and what to expect—both made a difference. Although it is difficult to disaggregate each of these interventions at this stage, it appears that communication with men did have a strong influence on women's future intentions to use, and on their perceptions regarding their husbands' approval.

Interventions involving face-to-face interaction had a stronger influence on actually adopting the use of family planning. In particular, LHW household visits are the most important factor in changing fertility desire, husbands' approval of family planning, intention to use family planning

in future, and current use of family planning. The end line survey findings showed that the actual LHW visits representing face-to-face interaction with women of reproductive age are key to changing fertility intentions and behaviors of married women.

## 6.2 Family Planning Services

FALAH's communication and mobilization strategy was clearly seen to increase overall demand of contraception from 64 percent to 71 percent among the panel of women, reflecting that the overall market share for contraception had increased. But the need to translate this into actual contraception uptake had two challenges - access to quality of services, and acceptability of contraception. For this purpose, the bulk of FALAH's interventions involved improvements in family planning service delivery in the public health system. The focus was on improving the quality of services through better and more informative interactions between providers and clients. Emphasis was paid on interventions which focused on increasing contraception acceptability by clarifying values of contraception in Islam, and allaying fears of side effects.

In the urban areas the focus of service provision was through our partner Greenstar Social Marketing. They provided services through the GSM network clinics, conducting home visits and carrying out Clinic Sahoolats. In rural areas, the highest priority was ensuring family planning services are provided by the public health system, which for all practical purposes, provided no family planning services at all. The foremost reason for this deficiency was the lack of recognition that family planning is very much a part of the health sector's responsibilities. Leadership trainings and policy work with the Federal Ministry, departments of health, the National Program for FP and PHC, *did* make a difference in the inclusion of public health services. The 14,000 LHWs in the FALAH districts re-learned how to talk about and deliver family planning services in a client centered setting. They learnt how to speak with clients, received updates on contraceptive technology, and learnt the values of Islam-endorsed birth spacing. The results show effectiveness of the approach – TNS Aftab's third-party evaluation of the training showed that client-centered training *does* influence the quality of services provided and its outcomes. In particular, the SAHR elements proved effective in increasing contraceptive acceptability by LHWs.

The FALAH project tested a CBV model to address the unmet RH needs of married couples residing in areas where there were no LHWs. The volunteers were trained in CCFPS to serve in these areas, and to provide birth spacing knowledge and services. This intervention was a pilot aimed at confirming the fact that those living in non-LHW-covered areas were not likely to have any source of information, services, or points of referral in hard-to-reach areas. Contech

International's third-party evaluation found a resounding response to the introduction of CBVs in these areas: women who participated in CBV activities experienced a dramatic uptake in contraceptive practice. Of particular importance was the finding that contraceptive prevalence among women who participated in the CBV-led group meetings and received household visits was 53 percent as compared to 39 percent among those who only received household visits and 27 percent among those who neither received household visits, nor attended group meetings.

The role of static clinics in providing family planning services was strengthened through training and better provision of contraceptive supplies. The situation analysis of facilities showed a definite difference in family planning and other RH services provision when there was at least one FALAH-trained provider present and when contraceptive availability was ensured. The training of 6,000 providers in CCFPS brought improvements in public health services, which in turn had a huge impact on family planning uptake. Sixty percent of DHQs, 75 percent of THQs, 83 percent of RHCs, and 63 percent of BHUs in FALAH districts now have a fully-trained female provider for family planning services at their premises. Findings also showed that public health facilities with trained providers were attracting almost 50 percent more clients than untrained providers' facilities, during November 2011. The evidence is definitive that there is a strong positive correlation between the rise in contraceptive prevalence across FALAH districts and coverage of LHWs that have received training and availability of trained staff in static clinics.

An essential part of ensuring that women continue using a method that they have adopted is by addressing clients' issues, especially about side effects. Improving providers' communication skills to address side effects, what to expect and how to take care of it, was a very worthwhile strategy. Continuation rates for all methods among women in the panel improved significantly, especially the median duration for IUDs, which increased by 15 months. In the past, the fear and experience of side effects had been a major reason for discontinuation and also a major cause for women resorting to induced abortions.

#### 6.3 Lessons learnt

Finally, the evidence presented here demonstrates that "real" unmet need for family planning services in Pakistan exists and is palpable and relatively easy to address through well-designed and focused interventions. While the FALAH approach may seem multipronged and complex, it was in fact very simply based on addressing communication challenges that have prevented rapid contraception uptake, and the improvement of services to ensure that once couples have addressed communication obstacles, the services they require are available within reasonable distances and at affordable costs.

These two principles have been proven successful, and the results have ramifications for fertility decline in Pakistan. First, there is now no reason to doubt that Pakistan can speed up its fertility decline in a relatively short period of time. Second, the findings presented here provide clear evidence of the reasons behind the faltering in fertility decline, particularly in CPR. Third, the task is not insurmountable and by utilizing this evidence and the interventions that underlie the change which was brought about by the FALAH project, Pakistan can rapidly raise its contraceptive prevalence to 50 percent in a period of just 10–15 years. This can bring the fertility rate down by 2 children in the same time-frame. Such a decline in fertility will have a positive impact on all of the country's development indicators.

## References

Bessinger R., Kbatende C., and Gupta N., 2003, Multi-media campaign exposure effects on knowledge and use of condoms for STI and HIV/AIDS prevention in Uganda. Chapel Hill, NC, USA: MEASURE Evaluation, Carolina Population Center, University of North Carolina at Chapel Hill.

Bhatia, S. 1982. "Contraceptive intentions and subsequent behavior in rural Bangladesh." *Studies in Family Planning*. 13(1): 24–31.

Bongaarts et al, 2012. "Family Planning Programs for the 21st Century: Rationale and Design", Population Council.

Bongaarts, J., Bruce J., 1995. "The causes of unmet need for contraception and the social content of services." *Studies in Family Planning*. 27(3): 173–191.

Casterline, J.B, Sathar, Z., and Haque, M., 2001. "Obstacles to contraceptive use in Pakistan: a study in Punjab" *Studies in Family Planning*. 32(2): 95–110.

Curtis, S.L., and Westoff, C.F, 1996. "Intention to use contraceptives and subsequent behavior in Morocco." *Studies in Family Planning*. 27(5): 239–250.

Fapohunda B. 2012. "Using health facility assessment data to address programmatic questions: illustrative examples for program managers". Measure Evaluation and USAID.

Islam, M.A. et al. 2006. "Men's approval of family planning in Bangladesh", *Journal of Biosocial Science* 38(2): 247-259.

Jato, Miriam N., et al, 1999, "The impact of multimedia family planning promotion on the contraceptive behavior of women in Tanzania." *International Family Planning Perspectives* 25(2):60-67.

Kamal, N. 2000. "The influence of husbands on contraceptive use by Bangladeshi women". *Health Policy and Planning* 15(1):43-51

Kane, T. et al, 1998, "The impact of a family planning multimedia campaign in Bamako, Mali" *Studies in Family Planning* 29(3):309-23

Kincaid, D. Lawrence. 2000. "Social networks, ideation, and contraceptive behavior in Bangladesh: Alongitudinal analysis" *Social Science and Medicine* 50(2): 215:231.

Mahmood, A., Muhammad, J.A, and Maqsood S., 2012. "Situation analysis of health facilities with special reference to family planning services in Pakistan" Islamabad, Pakistan: Population Council.

Mahmood, A. 2010. "Improving maternal and neonatal health: measuring the impact of the PAIMAN project in ten districts in Pakistan, comparing baseline and end line household survey findings (2005–2010)". Islamabad, Pakistan: Population Council.

Mahmood, N. and K. Ringheim. 1996. "Factors affecting contraceptive use in Pakistan." *Pakistan Development Review*. 35(1): 1–22.

Miller K, Miller, R., Askew, I., Horn, M.C., and Ndhlovu, L., 1998, "Clinic-based family planning and reproductive health services in Africa: findings from situation analysis studies" New York City, NY, USA: Population Council.

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.

Piotrow, P., Kincaid, D.L, Rimon, J.G and Rinehart, W., 1997, "Health communication: lessons learned from family planning and reproductive health". Westport, CT, USA: Praeger.

Population Council, 2004, *Unwanted pregnancy and post-abortion complications in Pakistan: findings from a national study.* Islamabad, Pakistan: Population Council.

Shafaat, M., Sarah, A., and Khadija Q., 2011, Impact of lady health workers' client-centered family planning services training: a third party evaluation study. Lahore, Pakistan: TNS Aftab.

Westoff, C.F. and Bankole, A., 1997, "Mass media and reproductive behavior in Africa", DHS Analytic Reports No. 2. Calverton, MD: Macro International Inc.

Zaidi, B. and Mahmood A., 2009, Attitudes, Perceptions and Behavior Regarding Contraceptive Use amongst Pakistanis, A Paper presented in the 10th Conference, Population Association of Pakistan

# Annexure 1: Combined Impact of Health Facilities and Lady Health Workers on the District-Level Uptake of Contraceptive Use

An index was developed to assess the impact of service provider training, trained LHW coverage, and contraceptive stock availability, on CPR. It was based on the following components:

- i) Proportion of FALAH-trained providers;
- ii) Proportion of FALAH-trained LHW coverage;
- iii) Proportion of facilities with contraceptive stocks available.

The index was created by scoring individual districts as follows:

- Rural health facilities (BHUs and RHCs): The proportion of health providers trained in client-centered FP services (1, 0): the score was **one** if all the providers were trained, and **zero** if none were trained.
- **LHW density**: The proportion of CCA-trained LHW coverage (1, 0): the score was **one** if the district had 100 percent trained-LHW coverage. It was **zero** if the coverage was zero.
- Availability of contraceptives: the proportion of facilities with contraceptive stocks available (1, 0): the score was **one** if all the rural facilities possessed contraceptive stocks on the day of visit. The score was **zero** if no facility had contraceptives.

A district's maximum score would be **three** if all three variables were 100 percent. The score would be **zero** if nothing had been achieved.

Index values for districts were observed ranging from 1.24 to 2.63. The districts were clustered into the following groups using the 'rank cases' command in IBM SPSS®:

Group 1: four districts (score 1.2-1.6)

Group 2: five districts (score 1.7–2.0)

Group 3: five districts (score 2.1–2.6)

The average increase in CPR in rural areas for Group 1 was 6.9 percentage points. The average increase for the districts in Group 2 was 9.2 percentage points, and the average increase for the districts in Group 3 was 10.9 percentage points.

Table 1: District-wise scores attained from the FALAH inputs

District	Proportion of LHW trained	Proportion of CCA-trained LHW coverage	Proportion possessing contraceptives on day of visit	Proportion of CCA-trained rural facility providers	Total score
Larkana	87	0.50	0.44	0.30	1.24
Mardan	97	0.33	0.50	0.61	1.44
Ghotki	93	0.25	0.70	0.51	1.46
Swabi	99	0.44	0.56	0.58	1.58
Rajanpur	100	0.33	1.00	0.40	1.73
D. G. Khan	92	0.75	0.50	0.48	1.73
Charsadda	85	0.89	0.30	0.64	1.83
Dadu	93	0.60	0.56	0.67	1.83
Thatta	88	0.64	0.90	0.40	1.94
Bahawalpur	73	0.78	0.85	0.46	2.09
Mansehra	98	0.78	0.71	0.61	2.10
Sanghar	98	1.00	0.69	0.60	2.29
Jhelum	100	0.44	1.00	0.88	2.32
Sukkur	87	0.80	1.00	0.83	2.63
Overall	90	0.60	0.70	0.60	1.90

Table 2: Index scores by group, FALAH baseline and end line CPR, and increase in CPR, rural areas

District	Index score	CPR			
		Baseline	End line	Increase	
Larkana	1.24	22.7	25.2	2.5	
Mardan	1.44	40.0	48.4	8.4	
Ghotki	1.46	13.5	21.1	7.6	
Sawabi	1.58	37.1	47.1	9.9	
Group 1		28.8	35.7	6.9	
D. G. Khan	1.73	27.4	36.4	9.0	
Rajanpur	1.73	19.0	31.0	11.9	
Dadu	1.83	16.5	24.8	8.3	
Charsadda	1.83	36.0	48.4	12.4	
Thatta	1.94	18.6	24.0	5.4	
Group 2		22.7	31.9	9.2	
Bahawalpur	2.09	28.7	42.3	13.7	
Mansehra	2.10	35.9	40.5	4.5	
Sanghar	2.29	20.9	34.3	13.4	
Jhelum	2.32	37.8	47.8	10.0	
Sukkur	2.63	14.3	30.3	16.0	
Group 3		28.0	38.9	10.9	
Overall rural		26.1	35.2	9.1	