



Baseline Household Survey

Ghotki District May 2010







Family Advancement for Life and Health (FALAH)

Ghotki

Baseline Household Survey
May 2010

Dr. Yasir Bin Nisar Irfan Masood



1 Population Council

The Population Council, an international, non-profit, non-governmental organization established in 1952, seeks to improve the well-being and reproductive health of current and future generations around the world and to help achieve a humane, equitable, and sustainable balance between people and resources.

The Council analyzes population issues and trends; conducts research in the reproductive sciences; develops new contraceptives; works with public and private agencies to improve the quality and outreach of family planning and reproductive health services; helps governments design and implement effective population policies; communicates the results of research in the population field to diverse audiences; and helps strengthen professional resources in developing countries through collaborative research and programs, technical exchange, awards, and fellowships.

The Population Council reserves all rights of ownership of this document. No part of this publication may be reproduced, stored or transmitted in any form by any means-electronic, photocopying, recording or otherwise-without the permission of the Population Council.

For inquiries, please contact:

Population Council # 7, Street 62, F-6/3, Islamabad, Pakistan

Tel: 92 51 8445566 Fax: 92 51 2821401

Email: pcpak@popcouncil.org

Web: http://www.popcouncil.org http://www.falah.org.pk

Layout and Design: Ali Ammad

Published: May 2010

Disclaimer

"This study/report is made possible by the generous support of the American people through the United States Agency for International Development (USAID). The contents are the responsibility of the Population Council, Islamabad and do not necessarily reflect the views of USAID or the United States Government"

.

Table of Contents

Acknowledgements	xiii
Glossary of Terms	xv
Executive Summary	xvii
Chapter 1	1
Introduction	1
Background	1
The FALAH Project	1
Ghotki District	2
The Ghotki Baseline Household Survey	3
Objectives	3
Methodology	3
Chapter 2	7
Household Characteristics	7
Geographic Distribution	7
Age-Sex Distribution	8
Marital Status	9
Household Characteristics and Wealth Indicators	10
Physical Characteristics of Households	10
Ownership of Household Assets	12
Standard of Living Index	13
Chapter 3	15
Respondent Characteristics	15
Age	15
Education and Literacy	16
Occupation and Work Status	17
Female Mobility	18
Mass Media Access and Exposure to Family Planning Messages	19
Chapter 4	21
Fertility	21
Cumulative Fertility	21

	Children Ever Born and Living	. 21
	Differentials in Children Ever Born and Surviving	. 23
	Current Fertility	. 26
	Crude Birth Rate (CBR)	. 26
	Age-specific Fertility Rates (ASFRs) and Total Fertility Rate (TFR)	. 26
	Mothers with Children Under Five Years	. 27
	Preceding Birth Interval	. 28
С	hapter 5	31
V	laternal and Neonatal Care	31
	Antenatal Care	. 31
	Tetanus Immunization	. 34
	Location and Attendance at Delivery	. 35
	Postpartum Care	. 38
	Breastfeeding	. 39
С	hapter 6	41
P	reference for Children	41
	Ideal Number of Children	. 41
	Desire for More Children	. 42
	Levels of Desire for More Children	. 42
	Socioeconomic Correlates of Desire for Children	. 44
	Son Preference	. 45
	Strength of Preference	. 45
	Attitude towards Last Pregnancy	. 47
	Wives' Perception of Husband's Fertility Preferences	. 48
С	hapter 7	49
С	ontraceptive Knowledge and Use	49
	Knowledge	. 49
	Use of Contraceptive Methods	. 50
	Levels of Ever Use and Current Use	. 50
	Current Use and Desire for Children	. 52
	Correlates of Contraceptive Use	. 53
	Source of Method	. 55

Experience with Contraceptive Methods	5
Reasons for Method Choice	
Cost, Distance and Time to Reach a Facility	
Treatment by Provider	
Information Provided	
Treatment at Facility	
Side Effects	
Chapter 9	
Reasons for Non-use	
Hindrances to Use	
Past Users	
Reasons for Discontinuing Use	
Reasons for Current Non-use	
Never Users	
Reasons for Non-use	
Attitude towards Birth Spacing and Limiting	
Knowledge of Contraceptive Users, Methods and Facilities	
Intent to Use	
Inter-spousal Communication	7
Chapter 10	7
Unmet Need	7
Levels and Correlates	7
Total Demand	7
Strength of Preference	7
Unmet Need for Spacing: Profile	8
Unmet Need for Limiting: Profile	8
Chapter 11	8
Reproductive Preferences and Behavior of Men	8
Background Characteristics	8
Contraceptive Knowledge and Use	8

	Approval of Family Planning	89
	Satisfaction Level of Current Users	89
	Inter-spousal Communication	91
	Potential Users	92
	Fertility Desire	93
	Mass Media Access and Exposure to FP Messages	94
R	eferences	.95

List of Tables

Table 1.1: Results of household and eligible women (MWRA) interviews	5
Table 2.1: Distribution of the population in sample households by residence and taluka	7
Table 2.2: Distribution of sample household population by age and sex	8
Table 2.3: Distribution of household population by marital status, sex and age	9
Table 2.4: Distribution of households with selected physical characteristics by residence	11
Table 2.5: Percentage of households owning selected items by residence	12
Table 2.6: Distribution of sample households by residence and standard of living index	13
Table 3.1: Age distribution of female respondents by residence	15
Table 3.2: Distribution of MWRA and husbands by educational achievement, literacy status, age and residence	16
Table 3.3: Distribution of occupational categories of respondents' husbands by residence	18
Table 3.4: Women's reports regarding mobility outside the home by degree of permission and destination	
Table 4.1: Distribution of MWRA by age of mother and number of children ever born (CEB	3)22
Table 4.2: Distribution of MWRA by age of mother and number of living children (LC)	22
Table4.3: Mean number of children ever born and children surviving, by sex of child and age of mother	23
Table4.4: Mean number of children ever born, living and dead by background characteristics	24
Table 4.5: Mean number of children ever born and living by age and literacy of mother	25
Table4.6: Number of women in sample households and number of births during the last three years before the survey, by age of women, and ASFRs, TFR and CBR	27
Table 4.7: Distribution of mothers by pregnancy status and number of children under 5 years	28
Table 4.8: Distribution of women with preceding birth intervals (birth to birth) by background characteristics	29
Table 5.1: Distribution of ANC check-ups during last pregnancy by residence	32
Table 5.2: Facilities/service providers mentioned for one or more antenatal visits by residence	33
Table 5.3: Tetanus immunization at last delivery	35
Table 5.4: Distribution of mothers by place of last delivery and residence	36
Table 5.5: Distribution of mothers by attendent at last delivery and residence	37
Table 5.6: Distribution of mothers by status of postnatal check-up and place of delivery	38

Table 6.1:	Distribution of MWRA with ideal number of children for their family by residence	.42
Table 6.2:	Distribution of MWRA by desire for next child and current number of living children	.43
Table 6.3:	Distribution of MWRA by reported desire for more children and background characteristics	.44
Table 6.4:	Son and daughter preferences by the respondents	.45
Table 6.5:	Distribution of MWRA who did not want more children soon, by reaction if they become pregnant in near future	.46
Table 6.6:	Distribution of MWRA who did not want more children soon, by problems faced if they become pregnant	.46
Table 6.7:	Distribution of MWRA according to perception of husband's desire for more children by woman's ideal family size	.48
Table 7.1:	Distribution of MWRA by knowledge (prompted) of contraceptive methods, by residence	.50
Table 7.2:	Percentage distribution of married women of reproductive age according to ever use of contraception and residence, by method	.51
Table 7.3:	Distribution of women by contraceptive use status and selected characteristics	.55
Table 7.4:	Distribution of ever users of specific contraceptive method by most recent source of supply	.56
Table 8.1:	Distribution of ever users of specific contraceptive methods according to reason for choosing that method	.58
Table 8.2:	Distribution of MWRA using traditional methods by reasons for not using modern contraceptive methods	.58
Table8.3:	Distribution of costs of current contraceptive method	.59
Table 8.4:	Distribution of current contraceptive users by time to reach specific contraceptive service	.60
Table 8.5:	Distribution of ever users of contraceptives by information provided at acceptance for method	.62
Table 8.6:	Percent of current users responding positively on treatment at last visit by aspect of treatment	.63
Table 9.1:	Distribution of opinions of MWRA regarding hindrances faced by couples wanting to avoid or space a birth, by family planning use status	.66
Table 9.2:	Distribution of past contraceptive users by reason for discontinuing last method	.67
Table 9.3:	Distribution of past users by reason for current non-use	.68
Table 9.4:	Distribution of never users by reason for never use	.69
Table 9.5:	Distribution of never users by attitude towards spacing and limiting birth	.69

Table 9.6: Distribution of never users by knowledge of contraceptive methods	70
Table 9.7: Knowledge of sources of contraception of never users by source of supply	71
Table 9.8: Distribution of never users by intent to use a method in future and number of living children	72
Table 10.1:Distribution of women with unmet need for spacing and limiting by background characteristics	76
Table 10.2: Distribution of non-pregnant women with unmet need for spacing and limiting, by strength of desire to avoid pregnancy	78
Table 10.3: Women with unmet need for spacing and limiting by stated reasons for non-use of contraception	79
Table 10.4: Percent distribution of MWRA in unmet need for spacing and limiting by selected characteristics	81
Table 11.1: Background characteristics of male respondents by residence	85
Table 11.2: Distribution of male respondents by contraceptive knowledge, use status and residence	86
Table 11.3: Percentage of male respondents reporting ever use or current use of a contraceptive method, by selected background characteristics	87
Table 11.4: Distribution of male ever users by the last reported source of contraceptive supply and residence	88
Table 11.5: Distribution of male respondents' attitude towards spacing and use of contraceptives for spacing, by residence	89
Table 11.6: Level of male respondents' satisfaction with their current method	90
Table 11.7: Percentage distribution of male past contraceptive users by reason for discontinuing last method	90
Table 11.8: Distribution of male never users by intent to use contraceptive methods in future	92
Table 11.9: Distribution of male never users according to reasons for not intending to use contraceptive methods in future	92
Table 11.10: Distribution of male never users who intend to use specific contraceptive methods in the future	93
Table 11.11: Distribution of male respondents by desired timing for next child and number of living children	93

List of Figures

Figure 2.1:	Distribution of population in sample households by residence and taluka	8
Figure 2.2:	Toilet facilities for Ghotki households	.10
Figure 3.1:	Literacy status of women and their husbands	.17
Figure 3.2:	Type of work of women working for pay (n=287)	.17
Figure 3.3:	Distribution of MWRA according to exposure to media and FP messages, by type of media	.19
Figure 5.1:	Distribution of MWRA by number of antenatal visits during last pregnancy	.32
Figure 5.2:	Distribution of MWRA by reason of first antenatal visit during last pregnancy	.32
Figure 5.3:	Distribution of MWRA by gestational age at first antenatal visit during last pregnancy	.33
Figure 5.4:	Location where respondents made one or more antenatal visits	.34
Figure 5.5:	Tetanus immunization at last delivery	.35
Figure 5.6:	Distribution of mothers by location of last delivery	.36
Figure 5.7:	Distribution of mothers by attendant at last delivery	.37
Figure 5.8:	Distribution of mothers by reasons for discontinuing breastfeeding (N=133)	.39
Figure 6.1:	Distribution of women by desire for more children in the future	.43
Figure 6.2:	Distribution of MWRA by attitude towards their last pregnancy	.47
Figure 7.1:	Distribution of current users by method mix	.52
Figure 7.2:	Current use and desire for children	.53
Figure 7.3:	Contraceptive prevalence by woman's age	.53
Figure 7.4:	Current contraceptive use by number of living children	.54
Figure 8.1	A: Cost in rupees of contraceptive supply for current method	.59
Figure 8.1	3: Attitude towards service charges for current method other than contraceptive	.59
Figure 8.2:	Travel time (in minutes) for contraceptive supplies	.61
Figure 8.3:	Percent ever users who experienced side effects by method used	.63
Figure 8.4:	Distribution of provider responses to past users upon consultation for side effects	.64
Figure 9.1:	Percent of never user women who knew some woman who had ever used any FP method	.70
Figure 9.2.	Mode of transportation to the pearest facility/provider	72

Figure 9.3: Time taken to go to the nearest facility/provider	72
Figure 9.4: Women's report regarding ease of approach to discuss with husband about family planning	73
Figure 10.1: Need and demand for family planning	77
Figure 11.1: Men's reports of ease of approach by their wives to discuss FP	91
Figure 11.2: Men's reports of frequency of discussion on FP with wife in last year	91
Figure 11.3: Distribution of male respondents according to exposure to media and FP messages, by type of media	94

Acknowledgements

The FALAH project is a five year project funded by USAID to improve the survival and health of women and children in Pakistan and the well-being of families, communities and the country through increased demand and utilization of births spacing and quality family planning services. Population Council is leading a consortium of national and international NGOs to support family planning activities in both the public and private sector in Pakistan. The consortium members include Greenstar Social Marketing, Health and Nutrition Development Society (HANDS), Jhpiego, Mercy Corps, Rural Support Programmes Network (RSPN) and Save the Children US. The partners bring together a blend of technical expertise combined with a rich experience of working within Pakistan and internationally.

As with any major project, it is important to have a baseline study in order to assess the progress of the project in meeting the set goals and objectives over a 5-year period. The report is a collaborative effort involving partners, Population Council staff and district officials/workers who joined their hands to make this endeavor possible.

The Population Council was primarily responsible for designing the baseline study and managing the collection of data, its analysis and for producing the reports for the project districts. We are grateful to Chief of Party of the FALAH project who strongly encouraged and facilitated the baseline survey process. Dr. Zeba Sathar, Country Director Population Council Islamabad provided invaluable input and was instrumental in the quality of the report produced.

The baseline surveys were designed and implemented under the guidance and encouragement of Dr. Arshad Mahmood, Director Monitoring and Evaluation. Several staff of the Population Council contributed substantially at various stages of producing this report and we would like to thank them individually. At the level of the training of the field staff and monitoring the quality of the data collected, we would like to particularly acknowledge the efforts of Dr. Munir Afridi, Ms. Nayyer Farooq, Ms. Ashfa Hashmi and Mr. Muhammad Ashraf. Mr. Abdul Kashif dealt with all the financial matters during the survey process and Mr. Rahim Dad Malik was responsible for making the logistical arrangements for the survey. We thank Mr. Nadeem Akhtar and Mr. Imran Rashid who were involved at various stages of the survey.

We are grateful to Mr. Peter C. Miller and Dr. Arshad Mahmood for developing the main template for the report. Dr. Yasir Bin Nisar prepared the first draft of the Ghotki report. Mr. Muhammad Jamil Arshad reviewed the report. Mr. Irfan Masood and Mr. Muhammad Ashraf tabulated the data and figures for the report. Ali Ammad developed the report layout and design. We thank these colleagues for their immense contributions.

Finally, we must acknowledge the women and men of the households in the district Ghotki for sharing their lives and their information and giving life to the survey. We hope very much that our effort will be of use to provide the necessary information to improve the quality of peoples' lives and to provide better reproductive health and family planning services.

Glossary of Terms

ANC Antenatal Care

ASFRs Age-specific Fertility Rates

BHU Basic Health Unit

CBR Crude Birth Rate

CEB Children Ever Born

CPR Contraceptive Prevalence Rate

DHQ District Headquarter

EC Emergency Contraception

ECP Emergency Contraceptive Pill

EmOC Emergency Obstetric Care

FALAH Family Advancement for Life and Health

FP Family Planning

HANDS Health and Nutrition Development Society

IUD Intra Uterine Device

LAM Lactational Amenorrhea Method

LHW Lady Health Worker

MCH Maternal and Child Health

MNH Maternal and Neonatal Health

MoH Ministry of Health

MoPW Ministry of Population Welfare

MSU Mobile Service Unit

MWRA Married Women of Reproductive Age

NGO Non Governmental Organization

NIPS National Institute of Population Studies

PAIMAN Pakistan Initiative for Mothers and Newborns

PC Population Council

PDHS Pakistan Demographic and Health Survey

PNC Postnatal Care

PSLMS Pakistan Social and Living Standard Measurement Survey

PSU Primary Sampling Unit

Pvt. Private

RH Reproductive Health

RHC Rural Health Center

RHSC(A) Reproductive Health Services Center- A

RSPN Rural Support Programmes Network

SMAM Singulate Mean Age at Marriage

TBA/Dai Traditional Birth Attendant

TFR Total Fertility Rate

THQ Tehsil Headquarter

ToR Terms of Reference

TT Tetanus Toxoid

UC Union Council

UNDP United Nations Development Program

USAID United States Agency for International Development

WHO World Health Organization

Executive Summary

The Family Advancement for Life and Health (FALAH) project conducted a baseline household survey for Ghotki, one of the 26 project districts.

The survey was conducted between March and May of 2008 in a probability sample of 520 households in 40 clusters in Ghotki. It included interviews with 673 currently married women 15-49 years ("married women of reproductive age" or MWRA), along with 198 married men, of whom 177 were married to women included in the sample. As a separate activity, a mapping study¹ was also carried out in Ghotki. The FALAH project is primarily focused on birth spacing and family planning.

Household and Respondent Characteristics

Ghotki is primarily a rural district in Pakistan; it ranked 42nd of 91 districts on the overall Human Development Index, according to the UNDP's Pakistan National Human Development Report 2003. The characteristics of our sample are generally similar to those found in other surveys; some key indicators are given below in Table A.

Table A: Selected key district characteristics from Ghotki household survey

Indicator	Value
Percentage of households in rural areas	83.7
Percentage of households with electricity	94.0
Percentage of households with indoor water supply	94.1
Percentage of households with flush toilet	61.2
Percentage of households with television	55.2
Percentage of literate female respondents	16.0
Percentage of respondents with literate husbands	61.2
Total fertility rate	4.9

Electrification was complete (94 percent of sampled households), and ownership of appliances that require electricity, such as refrigerators and washing machines, was not

¹ Mapping Survey of Health and Reproductive Health Services.

common in Ghotki. A majority of the households (94 percent) had some indoor water supply, 61 percent had a flush toilet, 5 percent had a latrine, while 34 percent had no toilet at all. On the other hand, female literacy was relatively low. Only 16 percent of the women were literate, while 61 percent of their husbands were literate. Forty-nine percent of the respondents said they watched TV, 20 percent listened to the radio, and 5 percent read newspapers or magazines. Most women who had heard of any FP message, had heard it on television.

Fertility

The crude birth rate was 31 per thousand population, and the total fertility rate was 4.9 children per woman. Fertility was higher for illiterate women and wives of illiterate men. However, there was little urban-rural difference in fertility with higher fertility in urban areas (4.5) compared to rural areas (4.3). Many births were spaced too closely for optimum health; for example, nearly 76 percent of the closed birth intervals were less than 36 months. Among those women who already had two living children less than five years of age, 22 percent were pregnant.

Maternal and Neonatal Care

The household survey obtained data on selected key indicators of maternal and neonatal health from 449 sampled women who had delivered a child during the previous four years (see Table B). Of these women, 54 percent had visited a health provider at least once for antenatal care; 27 percent had two or more tetanus toxoid immunizations; 30 percent were delivered by a skilled birth attendant; and 29 percent were delivered in a health facility, public or private. On the other hand, only 34 percent had at least one postnatal check-up, which has negative implications for family planning as well as for maternal and neonatal health. Exclusive breastfeeding was reportedly widespread: 73 percent of the mothers reported breastfeeding their last child for at least four months without supplementation.

Table B: Selected key MCH and family planning indicators from the Ghotki baseline survey

Indicator	Value
Percentage of mothers with at least one antenatal care visit	53.9
Percentage of mothers with at least two tetanus shots	27.1
Percentage of most recent deliveries conducted by a skilled birth attendant	30.1
Percentage of most recent deliveries in a facility	29.4
Percentage of MWRA not wanting more children	42.1
Percentage of MWRA wanting to delay next birth for at least two years	28.4
Percentage of MWRA knowing at least one contraceptive method	97.6
Contraceptive prevalence rate	16.5
Percentage of MWRA who are past users of contraceptives	15.8
Percentage of MWRA with unmet need for family planning	34.9
Percentage of MWRA with unmet need for spacing	16.5
Percentage of MWRA with unmet need for limiting	18.4
Total demand for family planning (CPR + unmet need)	51.4

Preference for Children

The median "ideal" number of children according to the women respondents was 5 children. Regarding desire for more children in the future, 30 percent said they wanted another child soon (within two years), 28 percent said they wanted another child, but only after two years, and 42 percent said they did not want more children. The proportion wanting more children soon decreased rapidly with the number of living children, the proportion not wanting more increased and the proportion wanting more children later was highest for women with two children. About half of women respondents (52 percent) said their husband wanted the same number of children as they did, while more than a quarter (27 percent) said their husband wanted more children than they did.

Contraceptive Knowledge and Use

Nearly all currently married women (98 percent) knew of at least one contraceptive method. The contraceptive prevalence rate (the percentage of MWRA currently using some method of contraception) was 16 percent, which was considerably lower than the average for Sindh or for Pakistan. The most commonly used methods used were female sterilization (5.8 percent), injectables (3.3 percent) and withdrawal (2.7 percent). Past users comprised 15.8 percent of MWRA; injectables, pills, IUD, and withdrawal were all common past methods. Seventy-three percent of the current users did not want more children, while 27

percent wanted more, but at a later time. Most users reported obtaining their supplies and services from health department/private sources, or their husband obtained the supplies, particularly in the case of condoms and pills.

Experience with Contraceptive Methods

Stated reasons for a respondent's choice of her current or past method varied by method, but commonly cited reasons included convenience of use, easy availability, low cost, ability to use for a long period and provider's advice. Costs were generally low (only 24 percent paid more than Rs.50 the last time they obtained their method) and did not appear to be a major obstacle to contraceptive use. Forty-eight percent reported requiring more than 30 minutes to reach their service. Information provided at the time of acceptance of a FP method often did not include information on possibility of switching method, other FP methods, contraindications, advantages and side effects. Clients generally reported being reasonably treated by providers and were often examined properly, but some respondents did not feel that providers were capable of dealing with side effects. A variety of side effects were reported by users and past users.

Reasons for Non-use

Asked hypothetically about hindrances a couple might face if they wanted to avoid or delay pregnancy, women typically mentioned husband's disapproval, religion, and side effects; less frequently mentioned were distance/cost or that people might find out about their contraceptive use. Past users were most likely to discontinue use because they wanted more children, or because of side effects; their reason for current non-use was most often fear of side effects. Other reasons were currently pregnant, breastfeeding and desire for more children. Never users were most likely to say they were not using contraceptives for reasons relating to childbearing, but husband's opposition and fear of side effects were also common reasons. Knowledge of contraceptive sources was noticeably lower among never users. A majority of female current and past users said they could discuss family planning easily with their husbands, but only 58 percent of the never users said they could do so. Thirty-nine percent of the never using women expressed their intent to use contraceptives in the future. The information obtained in this study indicates that substantial number of women in Ghotki were willing to adopt birth spacing and family planning.

Unmet Need for Family Planning

A woman is said to be in "unmet need" for family planning if she says she does not want more children, or wants them later, and is at risk of conceiving, but not using any method of contraception. By this definition, 34.9 percent of the women in this sample were in unmet need: 16.5 percent for spacing and 18.4 percent for limiting. Unmet need for limiting was higher in rural areas, among illiterate women, and among women with lower standards of living. However, unmet need for spacing was higher among literate women.

Reproductive Preferences and Behavior of Men

The findings reveal that almost all men (96 percent) knew at least one modern contraceptive method. Male sterilization was one of the least known contraceptive methods among men in Ghotki. More than 66 percent of the men did not want more children in the future or wanted to delay the next pregnancy. Sixteen percent of the male respondents reported that they or their wives were currently using a family planning method, and 14 percent were using modern contraceptive methods. Among the current users, 96 percent were very satisfied with their current contraceptive method.

Of those who were not using a contraceptive method, 30 percent reported that they were not intending to use any FP method in future. The fear of side effects was one of the main reasons for not using contraception. Of those who did intend to use contraceptives in the future, injectables and female sterilization were their preferred methods. Very few men were willing to use condoms in future. It would be important to include specific interventions aimed at influencing men's attitude toward their role and responsibility in the overall health of the family and in birth-spacing and limiting needs.

Conclusion

Ghotki was characterized by a relatively less-developed infrastructure, a fairly low standard of living. In Ghotki, knowledge and approval of family planning was high, but contraceptive prevalence, at 16.5 percent, was lower than usual for a rural district in Pakistan. Nevertheless, there is much need for improvement; unmet need for family planning remains high at 35 percent. Among the important reasons that should be addressed in an improved program are the attitudes of husbands, inter-spousal communication, fear of side effects, and knowledge of contraceptives. Also, the concept of birth spacing needs to be stressed to lengthen birth intervals, which are often too short.

Chapter 1

Introduction

Background

The FALAH Project

The Family Advancement for Life and Health (FALAH) project is a 5-year project funded by the United States Agency for International Development (USAID) to support birth spacing and family planning in Pakistan. The FALAH Project works with the Government of Pakistan (particularly the Ministry of Population Welfare and the Ministry of Health) at Federal, Provincial, and District levels as well as the private sector, to improve birth spacing information and services.

The FALAH project will specifically focus on 26 districts. These are:

- Balochistan: Gwadar, Jaffarabad, Khuzdar, Lasbella, Quetta, Kech/Turbat and Zhob;
- Khyber Pakhtunkhwa: Charsadda, Mansehra, Mardan, Swabi;
- **Punjab**: Bahawalpur, Dera Ghazi Khan, Jhelum, Khanewal, Multan and Rajanpur;
- **Sindh**: Dadu, Ghotki, Jacobabad, Karachi (townships of Orangi, Liyari and Godap), Larkana, Sanghar, Shikarpur, Sukkur, and Thatta.

The aims of the FALAH project are:

- a) To increase demand for and practice of birth spacing;
- b) To increase access to and quality of family planning services in the public sector;
- c) To increase the coverage and quality of family planning services in the private sector;



d) To increase the coverage of social marketing of contraceptives, and provide support to the commercial sector for marketing contraceptives to strengthen contraceptive security.

At the district level, FALAH works to integrate communication and services through a "whole district" approach involving all available resources in the public and private sectors. FALAH is being implemented by a team of seven partner organizations: Population Council (as the lead agency), Jhpiego, Greenstar Social Marketing, Save the Children (US), Mercy Corps, Health and Nutrition Development Society (HANDS), and the Rural Support Program Network (RSPN). FALAH is also coordinating its activities with the PAIMAN maternal and neonatal health project, especially in the PAIMAN districts, and with other projects as appropriate. In Ghotki, district-level activities are being coordinated by Mercy Corps, with Greenstar providing information and services through social marketing and other partners supporting specific activities as needed.

Ghotki District

Ghotki is primarily a rural district in Sindh. The population of the district was estimated to be 1,194,800 in 2008, with a population density of 196 persons per square kilometer. Ghotki is bounded on the north by Rahim Yar Khan and Jacobabad districts, on the south by Sukkur district and on the west again by Jacobabad district. Ghotki is located at the border of Sindh and Punjab provinces and is inhabited by a variety of races and tribes. Sindhi, Balochi, Saraiki, Punjabi and Urdu languages are spoken.

According to 1998 census data, 1.3 percent of the district population consisted of lifetime inmigrants. Of these, 25.1 percent were from within the province (Sindh), while 49.4 percent were from Punjab, 1.1 percent from NWFP, and 2.5 from Balochistan; another 17.7 percent were repatriated from other countries.

According to the Pakistan National Human Development Report 2003², Ghotki stood 42nd among 91 districts in Pakistan, and within Sindh it stood 6th of 16 districts (UNDP, 2003). In the UNDP Millennium Development Goals report (United Nations, 2006), district-level data (based on the Pakistan Social and Living Standards Measurement Survey 2004-05) were shown for various measures of education, gender equity, infant mortality, and

² The districts of Pakistan were ranked according to a Human Development Index in 2003. Districts were ranked based on literacy rates, enrolment ratios, immunization ratios, infant survival ratios, real GDP per capita, educational attainment index, health index, and income index.

environmental sustainability. In these comparisons, Ghotki ranked below average on immunization, above average on most measures of education, literacy and water supply, and 21st nationally out of 98 districts on sanitation (Planning Commission of Pakistan, 2006; Government of Pakistan, 2006).

The Ghotki Baseline Household Survey

In Ghotki (as in other FALAH project districts) Population Council conducted a baseline sample household survey to learn about knowledge, attitude, and practices regarding fertility, reproductive health, and child spacing/family planning. This represents one of two major studies to establish baseline indicators for the FALAH project. The other is a mapping exercise to compile complete, digitized maps of all facilities providing reproductive health services, including maternal health, neonatal and child health, and birth spacing/family planning. To assess progress, these baseline survey results will be compared with an endline survey toward the end of the project.

Objectives

The objectives of the Ghotki Baseline Household Survey are:

- To obtain baseline measurements for those FALAH indicators that can best be measured through such surveys;
- To obtain detailed information on the knowledge, attitudes and practices of married couples of Ghotki district regarding reproductive health, so as to meet their needs more effectively;
- More specifically, to obtain information needed to improve reproductive health services and to design appropriate social mobilization activities.

Methodology

Study Population

FALAH is primarily a district-level project that intends to improve the health of women and children of the district over a five-year period. The baseline household survey covers married women of reproductive age (15-49 years old) and their husbands living in the community. The objective is to understand and measure general knowledge, attitudes and practices of these married couples regarding family planning.



Sample Design and Size

The systematic stratified sample technique was used to select a representative sample of the district. The universe consisted of all urban and rural households of the district. A total of 40 blocks/villages were selected, with 13 households selected per block/village. The selection procedure is described below.

Urban Sample

The required number of enumeration blocks was selected with probability proportional to size (number of circles) by adopting a multistage stratified sampling design. The "enumeration circles," i.e., the smallest units available in the 1998 Population District Census Reports, as demarcated by the Population Census Organization, were then selected. The maps of these circles, obtained from the Population Census Organization, were already divided into blocks of approximately 250-300 households depending upon the number of households in each circle. One block was then randomly selected from each circle. The household listing of each randomly chosen block was carried out by the enumeration teams before selecting the sampled households. A fixed number of 13 households was drawn from each sample enumeration block by using systematic random sampling.

Rural Sample

The 1998 Population Census list of villages was used as the sampling frame for the selection of the rural sample. Villages in rural areas have been treated as primary sampling units (PSU). Sample PSUs were selected with probability proportional to size (number of households). Households within the sample PSUs were considered secondary sampling units. The household listing of each village was then prepared by the enumeration teams before selecting the sampled households. A fixed number of 13 households were selected from each sample enumeration village by the systematic random technique. Table 1.1 presents the planned and enumerated number of households and eligible women of reproductive age in Ghotki.

Selection of Respondents

Within each household, all married women of reproductive age (MWRA) 15-49 were interviewed. In addition, husbands of MWRA who were present were also interviewed to a maximum of 5 per block; if fewer than 5 husbands could be interviewed from the 13 sampled households, additional interviews were sought from neighboring households.

Table 1.1: Results of household and eligible women (MWRA) interviews

Result	Rural	Urban	Total
Number of blocks/villages	33	7	40
Planned households	429	91	520
Households contacted	493	101	594
Households replaced	64	10	74
(Households refused)	0	8	8
(Households locked)	64	2	66
Eligible women identified	563	113	676
(Eligible women refused)	3	0	3
Total women's interviews	560	113	673

Questionnaire Design

Two questionnaires, one for women and the other for men, were developed for this survey. The questionnaires contained sufficient information to make estimates of all FALAH indicators that the household survey aimed to collect as well as additional information of interest to the project.

The questionnaires were pre-tested in both urban and rural areas of Islamabad. The main objective of the pre-testing was to examine the suitability and effectiveness of questions in eliciting adequate responses, to check if the interviewers or respondents would face any language problems, and to determine the approximate time required to complete one questionnaire.

In the pre-test, interviewers were advised to note down their experiences with regard to each question. After making all of the revisions on the basis of the pre-test, the questionnaires were finalized and translated into Urdu.

Hiring of Interviewers and Supervisors

Since the respondents in the baseline survey were currently married women and their husbands, female interviewers were hired to interview female respondents and male interviewers were used for male respondents. The required number of interviewers was hired locally by advertising through local newspapers. A logistics supervisor and a data quality supervisor were also hired for each team.



Training of Interviewers and Supervisors

In order to ensure that the training provided for interviewers was of high quality, and that interviewers understood the definitions and concepts underlying the language of the questions, a two-weeks training of the Ghotki team was conducted by the Population Council in Quetta. During the training, interviewers conducted 2-3 field interviews in order to prepare for the actual interview process.

Training regarding the importance of the criteria for the selection of primary sampling units, mapping and listing procedures, sample selection, field operation procedures, and selection of particular households and respondents was also provided by specialists.

Quality Assurance

To ensure the quality of the data, Population Council staff monitored the fieldwork by accompanying the field teams. While supervising the fieldwork, Population Council supervisory staff members were also available to provide on-the-spot guidance to interviewers in the event that any part of the questionnaire was unclear to them. This ensured the completeness and accuracy of each questionnaire.

Data Entry and Edit Procedures

Data processing was initiated in the field with the checking of the questionnaires. Each team leader completed on-the-spot checks and preliminary editing of questionnaires during the enumeration period. Team supervisors were provided with editing instructions which emphasized the importance of completing each questionnaire, correctly identifying each eligible respondent, and the completeness of household composition. Each team leader engaged in preliminary editing of completed questionnaires during the enumeration period. On receipt of the questionnaires at the Islamabad office, a special team of experienced staff edited the completed questionnaires. After the completion of the editing and coding process, the questionnaires were dispatched to a data entry center. The data were then analyzed using SPSS for Windows.

Fieldwork

Fieldwork for Ghotki district was carried out between March 15 and May 6, 2008.

Chapter 2

Household Characteristics

Geographic Distribution

Ghotki district is comprised of Daharki, Ghotki, Khangarh, Mirpur Mathelo and Ubauro talukas. Table 2.1 and Figure 2.1 show the distribution of the population of sample households according to residence (urban and rural) and by taluka, with comparisons to the distribution of the 1998 National Population and Housing Census.

Table 2.1: Distribution of the population in sample households by residence and taluka

		Rural Urban			Urban Total		tal	
Taluka	N	%	1998 Census %	N	%	1998 Census %	N	%
Daharki	806	78.2	82.8	225	21.8	17.2	1031	100.0
Ghotki	1365	86.1	79.9	220	13.9	20.1	1585	100.0
Khangarh	458	100.0	100.0	0 0	0.0	0.0	458	100.0
Mirpur Mathelo	622	72.3	75.8	238	27.7	24.2	860	100.0
Ubauro	763	88.6	88.6	98	11.4	11.4	861	100.0
Total	4014	83.7	83.7	781	16.3	16.3	4795	100.0

As Table 2.1 shows, the distribution of the population of the 520 households in the sample by urban-rural residence and talukas closely follows the distribution recorded for the district in the 1998 Census (Population Census Organization, 2000). Ghotki is almost 84 percent rural and 16 percent urban district. About 33 percent of the sampled population resided in Ghotki taluka, 21 percent in Daharki taluka, 18 percent in Ubauro, 18 percent in Mirpur Mathelo and 10 percent in Khangarh taluka. The sample population of Khangarh taluka had no urban population.



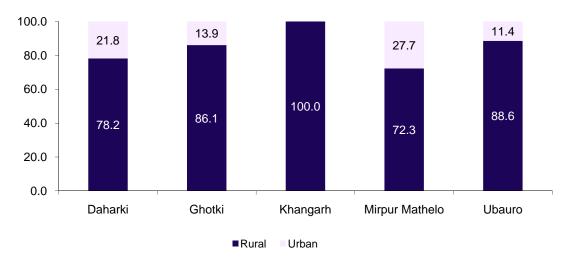


Figure 2.1: Distribution of population in sample households by residence and taluka

Age-Sex Distribution

Table 2.2 shows the population of the sampled households by age and sex. The population is typical of a society with high fertility, with 46 percent of the population under 15 years of age. The median age was 16 years old in Ghotki.

Table 2.2: Distribution of sample household population by age and sex

_	Sex of household member					
_		Male	Female			Total
Age group	N	%	N	%	N	%
00 - 04	392	16.0	373	15.9	765	16.0
05 - 09	377	15.4	398	17.0	775	16.2
10 - 14	335	13.7	300	12.8	635	13.3
15 - 19	286	11.7	240	10.2	526	11.0
20 - 24	234	9.6	259	11.0	493	10.3
25 - 29	198	8.1	192	8.2	390	8.1
30 - 34	137	5.6	116	4.9	253	5.3
35 - 39	92	3.8	85	3.6	177	3.7
40 - 44	81	3.3	86	3.7	167	3.5
45 - 49	71	2.9	96	4.1	167	3.5
50 - 54	75	3.1	64	2.7	139	2.9
55 - 59	71	2.9	75	3.2	146	3.0
60 - 64	53	2.2	38	1.6	91	1.9
65+	41	1.6	26	1.1	67	1.4
Total	2443	100.0	2348	100.0	4791	100.0

Of the total population of the sampled households, 22.4 percent consisted of females 15-49 years of age, and 16.0 percent consisted of children under 5 years old. These women and children, and their husbands/fathers, comprise the population of primary interest to the FALAH project, and most of the analysis in this report will focus on them.

Marital Status

In Ghotki (as in Pakistan generally) two trends can be identified: first, that women generally get married at an early age; and, second, that women marry men who are older than themselves. The singulate mean age at marriage (SMAM) for men was 24 years and for women it was recorded as 21 years. As Table 2.3 shows, a higher proportion of younger women were married than men. There were more widows than the widowers; this might be due to older husbands who reach their life expectancy prior to their wives.

Table 2.3: Distribution of household population by marital status, sex and age

	Marrie	Married Widow/divorced/separated		Widow/divorced/separated		rried
Age group	Female	Male	Female	Male	Female	Male
15 - 19	25.8	4.2	0.0	0.0	74.2	95.8
20 - 24	70.9	48.7	0.8	0.9	28.3	50.4
25 - 29	86.5	78.7	1.6	1.0	12.0	20.3
30 - 34	92.2	87.5	5.2	3.7	2.6	8.8
35 - 39	95.3	94.6	3.5	3.3	1.2	2.2
40 - 44	90.7	96.3	7.0	2.5	2.3	1.2
45 - 49	90.6	98.6	9.4	1.4	0.0	0.0
50 - 54	78.1	98.7	20.3	1.3	1.6	0.0
55 - 59	78.7	90.1	21.3	8.5	0.0	1.4
60 - 64	57.9	86.8	42.1	11.3	0.0	1.9
65 - 69	35.3	72.0	52.9	28.0	11.8	0.0
70 - 74	33.3	80.0	50.0	20.0	16.7	0.0
75+	0.0	83.3	100.0	0.0	0.0	16.7
All ages 15+	70.8	63.6	7.0	2.8	22.3	33.7
N	903	850	89	37	284	450



Household Characteristics and Wealth Indicators

Several household characteristics that reflect the wealth and well-being of its inhabitants were assessed. Some of these may have a direct bearing on health; for example, a clean indoor water supply and flush toilets are important for hygiene, and access to radio and television can help in learning about good health practices and health services. Others, that relate more to the general well-being of the household, may correlate with good health – for example, by indicating ability to buy sufficient food for good nutrition or pay for quality health care.

Physical Characteristics of Households

Table 2.4 shows selected physical characteristics of the sample households. A substantial proportion of households (93 percent) had an indoor motorized pump. It is important to note that all households in urban areas had indoor water facilities, while 93 percent of the households in rural area had the same. A majority (61 percent) had some type of flush toilet and huge differentials were observed between rural (53 percent) and urban (99 percent) availability of flush toilets. About 5 percent of the households had a raised or pit latrine; while 34 percent of the households had no toilet at all. While most households used firewood (83 percent) for cooking, particularly in rural areas, only 16 percent of the sampled households used gas, usually Sui gas, particularly in urban areas. All households had electricity in urban areas, and 93 percent of the sampled households in rural areas had electric connections. Slightly more than one-third of the houses were roofed with wood/bamboo and mud, while 57 percent of the houses had earth/sand /mud floors. Similarly, 74 percent of the walls of houses were made of burnt brick or cement blocks, while 22 percent were of mud or mud brick.

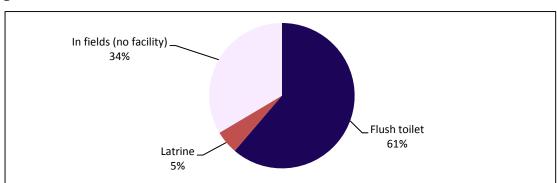


Figure 2.2: Toilet facilities for Ghotki households

Table 2.4: Distribution of households with selected physical characteristics by residence

Characteristic	Rural	Urban	Total
Source of drinking water			
Govt. supply (tap water inside)	0.9	0.0	0.8
Motorized/hand pump (inside)	91.8	98.9	93.1
Motorized/hand pump (outside)	7.2	0.0	6.0
Well (inside)	0.0	1.1	0.2
Sanitation facility			
Flush to sewerage	1.2	42.9	8.5
Flush connected to septic tank	25.4	18.7	24.2
Flush connected to open drain	26.6	37.4	28.5
Raised latrine	5.4	1.1	4.6
Pit latrine	0.7	0.0	0.6
In fields (no facility)	40.8	0.0	33.7
Type of fuel used for cooking			
Fire wood	95.8	22.0	82.9
Gas cylinder	1.4	0.0	1.2
Natural gas (sui gas)	2.1	76.9	15.2
Others	0.7	1.1	0.8
Electrical connection	92.8	100.0	94.0
Material of roof			
Concrete	0.7	3.3	1.2
Iron sheet	4.2	1.1	3.7
Guarder and T-iron	57.8	79.1	61.5
Wood/bamboo and mud	37.3	16.5	33.7
Material of floor			
Earth/sand/mud	65.5	17.6	57.1
Chips	0.9	2.2	1.2
Ceramic tiles	0.2	1.1	0.4
Marble	1.2	2.2	1.3
Cement	26.8	72.5	34.8
Bricks	5.4	4.4	5.2
Material of walls			
Burnt bricks/blocks	69.9	93.4	74.0
Mud bricks/mud	25.4	4.4	21.7
Wood/bamboo	4.6	2.2	4.2
Total	429	91	520



Ownership of Household Assets

Another indicator of household wealth can be the ownership of durable consumer goods, as shown in Table 2.5. These 18 items are suggestive of wealth in a variety of ways. They represent different types of need – e.g., transport, communications, comfort – along with different tastes and levels of expenditure. Some have specific relevance to the FALAH objectives; for example, electronic media can be used to access health messages, to reach health facilities, and telephones to summon help when needed. Others are suggestive of more general well-being.

Table 2.5: Percentage of households owning selected items by residence

Item	Rural	Urban	Total
Wall clock	49.2	90.1	56.3
Chairs	24.9	44.0	28.3
Bed	28.9	57.1	33.8
Sofa	9.8	38.5	14.8
Sewing machine	39.6	72.5	45.4
Camera	6.8	13.2	7.9
Radio/Tape recorder	41.0	34.1	39.8
Television	48.7	85.7	55.2
Refrigerator	27.3	52.7	31.7
Land line telephone	4.4	16.5	6.5
Mobile phone	61.5	81.3	65.0
Room cooler/ Air conditioner	13.1	36.3	17.1
Washing machine	34.0	79.1	41.9
Bicycle	30.1	19.8	28.3
Motorcycle	26.1	26.4	26.2
Jeep/Car	3.7	6.6	4.2
Tractor	9.8	3.3	8.7
Computer	4.4	7.7	5.0
No. of observations	429	91	520

The distribution of these items appears to show the expansion in consumer purchasing power that has characterized Pakistan in recent years, although comparable past data for Ghotki was not available to us. Several items requiring electricity are available in households, some in substantial numbers: television was available to 55 percent of the households, and almost half of the rural households were also accessible for communication messages. This could be of particular interest to communication specialists. The recent expansion in information technology in Pakistan is reflected by the ownership of mobile telephones by 65 percent of all households (61 percent in rural and 81 percent in urban

areas), and ownership of a computer by about 8 percent of urban households. Motorized transport, however, remained fairly uncommon, suggesting difficulties in arranging for transport in health emergencies, although 26 percent of the households had motorcycles.

Standard of Living Index

It is useful to use the above data to get an overall index of the economic well-being of a household, both for a general estimate of economic development for an area, and for use in investigating the relationship between household wealth and reproductive health behavior. One such index is the Standard of Living Index (SLI), developed for international comparisons with data from the Demographic and Health Surveys (Rutstein and Johnson, 2004). This index gives each household a score of 0-1 or 0-2 on each of the following: source of drinking water; toilet facilities; material of floor; availability of electricity; ownership of a radio; ownership of a TV; ownership of a refrigerator; and means of transportation. For the whole household, the value of the index can range from 0 to 12. Table 2.6 gives the distribution of the SLI for the sample households according to urban and rural residence. The median index for all households was 5, it was also 5 for rural households and 7 for urban households. About 78 percent of all households fell in the range from 3 to 8. This index will be used later in this report to examine differences in reproductive health knowledge and behavior.

Table 2.6: Distribution of sample households by residence and standard of living index

Standard of living		Rural	Urbai	n	To	Total		
index	N	%	N	%	N	%		
1	15	3.5	0	0.0	15	2.9		
2	56	13.1	0	0.0	56	10.8		
3	55	12.8	0	0.0	55	10.6		
4	70	16.3	3	3.3	73	14.0		
5	66	15.4	14	15.4	80	15.4		
6	49	11.4	17	18.7	66	12.7		
7	46	10.7	25	27.5	71	13.7		
8	39	9.1	21	23.1	60	11.5		
9	26	6.1	7	7.7	33	6.3		
10	6	1.4	4	4.4	10	1.9		
11	1	0.2	0	0.0	1	0.2		
Total	429	100.0	91	100.0	520	100.0		
Median	na	5	na	7	na	5		

Chapter 3

Respondent Characteristics

The primary sources of data from the Household Survey are the interviews conducted with 673 currently married women of reproductive age. The background characteristics of these respondents are described in this chapter.

Age

Table 3.1 shows the age distribution of the female respondents for rural and urban areas. Since many younger women were not married yet, the numbers at age 15-19 were relatively small; at older ages, the numbers declined. More than half of the sample respondents were under age 30; urban areas had 45 percent of women under the age of 30, and rural areas had 53 percent of women under the age of 30.

Table 3.1: Age distribution of female respondents by residence

Ago group]	Rural	I	Urban		Total	
Age group	N	%	N	%	N	%	
15 - 19	45	8.0	7	6.2	52	7.7	
20 – 24	137	24.5	18	15.9	155	23.0	
25 – 29	116	20.7	26	23.0	142	21.1	
30 - 34	74	13.2	23	20.4	97	14.4	
35 – 39	61	10.9	17	15.0	78	11.6	
40 – 44	64	11.4	9	8.0	73	10.8	
45 – 49	63	11.3	13	11.5	76	11.3	
Total	560	100.0	113	100.0	673	100.0	



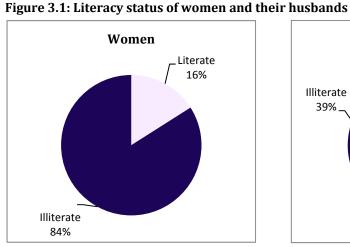
Education and Literacy

Levels of schooling completed and literacy rates for the respondents and their husbands are given in Table 3.2. Literacy rates are also shown in Figure 3.1. Literacy rates for females were very low (16 percent) compared to their husband's literacy level which was 61 percent. Literacy of female respondents was substantially less than reported in PSLMS 2004-05, where 38 percent of the women in the province of Sindh as a whole, and 36 percent (at that time) for Pakistan as a whole, were literate(Government of Pakistan, 2005; Government of Pakistan, 2006). Similarly, only about 17 percent of the female respondents reported having ever attended school. For men as well, literacy (at 61 percent) was lower than the PSLMS found for Sindh in 2004-05 (68 percent), as well as the national average (63 percent) (Government of Pakistan, 2005).

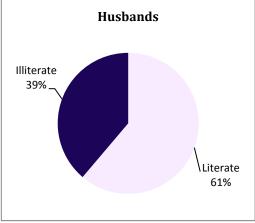
Table 3.2: Distribution of MWRA and husbands by educational achievement, literacy status, age and residence

_		Ago group		Dooid	Residence		
		Age group		Resid	ence		
Variable	15 - 24	25 - 34	35 - 49	Rural	Urban	Total	
Respondent (women)							
Proportion literate	20.8	19.1	8.4	12.7	32.4	16.0	
Education level							
No education	77.8	79.1	90.7	86.2	64.9	82.6	
Up to primary	13.5	10.2	7.1	9.0	16.2	10.2	
Up to secondary	5.8	8.5	1.8	3.4	15.3	5.4	
Above secondary	2.9	2.1	0.4	1.4	3.6	1.8	
N	207	235	226	557	111	668	
Respondent's husband							
Proportion literate	62.9	60.2	60.6	58.7	73.7	61.2	
Education level (husbands)							
No education	35.9	39.0	38.9	40.3	26.0	38.0	
Up to primary	22.6	18.3	29.8	24.1	20.0	23.4	
Up to secondary	24.6	23.5	17.7	19.6	34.0	21.9	
Above secondary	16.9	19.2	13.6	16.0	20.0	16.7	
N	195	213	198	506	100	606	

For both men and women respondents, literacy and education levels were higher in urban areas, although more rural men had primary education.







Occupation and Work Status

For men, occupation is both an economic and social classification; some occupations usually indicate higher income levels than others, while at the same time may represent social status and lifestyle. Women's work, whether for necessary income or for career fulfillment, is likely to compete, at least to some degree, with time spent on household management and child care. Therefore, it is worthwhile to examine men and women's work separately. Only 287 of 673 female respondents reported working for cash; their occupations are shown in Figure 3.2.

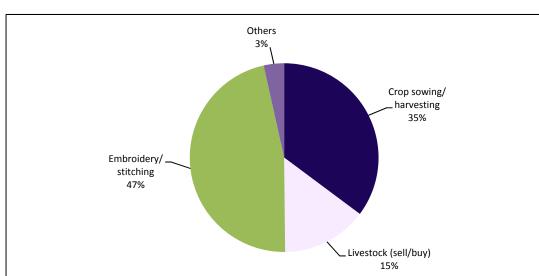


Figure 3.2: Type of work of women working for pay (n=287)



Table 3.3: Distribution of occupational categories of respondents' husbands by residence

Occupation/ economic activity	Rural	Urban	Total
Agriculture/livestock/poultry	37.1	3.5	31.5
Petty trading	8.6	21.2	10.7
Labor (daily wages)	20.4	12.4	19.0
Government service	14.8	24.8	16.5
Private service	7.3	9.7	7.7
Own business	4.6	22.1	7.6
Unemployed	5.9	5.3	5.8
Other	1.3	0.9	1.2
N	560	113	673

Thirty-two 32 percent of the women's husbands were working in agriculture/livestock or poultry. Only 16 percent of these men were in government service, while a large proportion was working as daily wages laborers. This was the most uncertain category of earnings. Overall, 58 percent of the husbands in rural areas were working in agriculture or as daily labor, which was also mostly agricultural labor. Trading was more common in the towns, employing one in five urban men. About 8 percent of the husbands of respondents were working in the private sector, while 6 percent were unemployed.

Female Mobility

Women respondents were asked about their ability to go to places outside their homes and what degree of permission was required. Only a few women reported being able to go to any of the places named without permission; on the other hand, a few women reported not being able to go at all to any of the places; the market was the only place where nearly one-quarter of the women (24 percent) said they did not go or could not go at all. For each of the named destinations, a majority said they could go with someone.

Table 3.4: Women's reports regarding mobility outside the home by degree of permission and destination

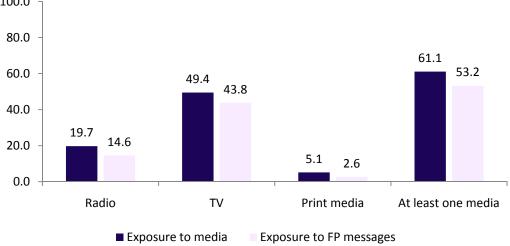
		Degree of permission						
Destination	Without permission	With permission	With someone	Can't go / doesn't go	%	N		
Market	1.8	7.7	66.7	23.8	100.0	673		
Health center	1.0	7.9	88.1	3.0	100.0	673		
Relatives /friends	8.8	24.2	64.5	2.5	100.0	673		
Out of village/town	0.1	3.7	89.5	6.7	100.0	673		

Mass Media Access and Exposure to Family Planning Messages

For the development of communication activities, it is important to know which forms of mass media are available and to what extent they are used by various segments of the population. Table 2.5 shows that 55.2 percent of households owned a television, while 39.9 percent owned a radio. Figure 3.4 shows the proportion of women who reported that they watch TV, listen to the radio, or read newspapers or magazines. Television was the most commonly used medium (49 percent), while radio and print media were less common (20 percent and 5 percent respectively).

100.0 0.08 61.1

Figure 3.3: Distribution of MWRA according to exposure to media and FP messages, by type of



Furthermore, women who reported access to any sort of media were asked if they had ever seen, heard or read any message about methods of family planning through these mediums. Most women said that they had heard about family planning messages on the television (44 percent), radio (15 percent); only 3 percent of the women reported reading messages from print materials.

Chapter 4

Fertility

The main objective of this baseline survey was to seek information on the level of knowledge and acceptance of birth spacing methods to improve maternal and child health. Some information on fertility, such as the number of children ever born and living children, was collected from the currently married women interviewed. This information has been used to obtain the level of cumulative fertility.

Other information collected in this baseline survey included the date of birth for all live births and whether those children were still alive at the time of the survey. If a mother was unable to remember the date of birth, she was asked how long ago her live birth was. From these responses, births that occurred during the last three years were ascertained. The number of births obtained through this procedure was then used to analyze current fertility. For a family planning program, it is essential to be informed about fertility levels to understand couples' responses to family planning.

Cumulative Fertility

Children Ever Born and Living

The number of children a woman has ever borne reflects fertility in the past; it therefore provides a somewhat different picture of fertility levels, trends and differentials than do period measures of fertility such as the CBR and the TFR. Table 4.1 shows the percentage distribution of all currently married women by the number of children ever born (CEB). The table shows this distribution by the age of the woman at the time of the survey.



Table 4.1: Distribution of MWRA by age of mother and number of children ever born (CEB)

	Children ever born						
Age group	0	1-2	3-4	5+	%	Mean CEB	N
15-19	65.4	32.7	1.9	0.0	100.0	0.5	52
20-24	16.8	61.3	18.7	3.2	100.0	1.7	155
25-29	9.2	27.5	38.0	25.4	100.0	3.3	142
30-34	5.2	7.2	20.6	67.0	100.0	5.4	97
35-39	5.1	5.1	16.7	73.1	100.0	6.3	78
40-44	4.1	1.4	15.1	79.5	100.0	7.6	73
45-49	2.6	2.6	6.6	88.2	100.0	8.1	76
Total	12.9	24.5	19.8	42.8	100.0	4.4	673

Table 4.2: Distribution of MWRA by age of mother and number of living children (LC)

		Number of living children					
Age group	0	1-2	3-4	5 +	%	Mean LC	N
15-19	67.3	32.7	0.0	0.0	100.0	0.5	52
20-24	21.3	64.5	12.9	1.3	100.0	1.4	155
25-29	10.6	33.1	40.1	16.2	100.0	2.8	142
30-34	5.2	11.3	36.1	47.4	100.0	4.4	97
35-39	5.1	6.4	24.4	64.1	100.0	5.4	78
40-44	4.1	1.4	20.5	74.0	100.0	6.2	73
45-49	3.9	3.9	13.2	78.9	100.0	6.6	76
Total	14.6	27.3	23.2	34.9	100.0	3.6	673

Early childbearing was common in Ghotki. The table, as expected, shows that the mean number of children ever born (Table 4.1) and living children (Table 4.2) increased with the age of the mother, as would be expected in data of good quality. Table 4.3 shows the mean number of sons and daughters. The mean number of children ever born increased steadily from 0.5 in the age group 15-19 years to 8.1 in the age group 45-49. Among women aged 15-49 in Ghotki, the mean number of children ever born was 4.4 for currently married women. On average, the women aged 45-49 also had 6.6 living children; they had lost 1.5 children in their reproductive lives.

Table4.3: Mean number of children ever born and children surviving, by sex of child and age of mother

	Mean number of children						
	Ever born			9	Surviving		
Age group	Boys	Girls	Total	Boys	Girls	Total	N
15-19	0.3	0.2	0.5	0.2	0.2	0.5	52
20-24	0.8	0.9	1.7	0.7	0.7	1.4	155
25-29	1.6	1.7	3.3	1.3	1.5	2.8	142
30-34	2.8	2.6	5.4	2.3	2.1	4.4	97
35-39	3.3	3.1	6.3	2.8	2.6	5.4	78
40-44	4.0	3.5	7.6	3.3	2.9	6.2	73
45-49	4.2	4.0	8.1	3.4	3.2	6.6	76
Total	2.2	2.1	4.4	1.8	1.8	3.6	673

Table 4.1 also shows that 35 percent of the married women who were 15-19 years of age had already had a child. Women aged 45-49 had virtually completed childbearing. Among the currently married women in this age group, 9 percent had reached the end of childbearing with fewer than five children ever born and 88 percent had five or more children ever born. Data show that 97 percent of the women aged 45-49 had at least one live birth in their reproductive period, suggesting that primary infertility was about 3 percent (i.e., the proportion of couples who are unable to have any children) in this sample in Ghotki. The sex ratio at birth was 105 males per 100 females, which is consistent with international norms. The sex ratio of living children was 100.

Differentials in Children Ever Born and Surviving

Table 4.4 and Table 4.5 show that differences in the mean number of children by literacy, and educational level of currently married women were pronounced. On average, literate women produced 2.2 fewer children than illiterate women. Also, fertility declined with the level of education. Those who had "up to primary" education had 2.9 children ever born on average as compared to 4.7 produced by those who had no schooling. Those who had "up to secondary" education had 2.3 children ever born.



Table 4.4: Mean number of children ever born, living and dead by background characteristics

Characteristics	Mean number	Mean	Proportion	B.Y
Characteristics Literacy of mother	of CEB	number of LC	dead	N
<u> </u>	2.5	2.2	0.10	107
Literate	2.5	2.3	0.10	107
Illiterate	4.7	3.9	0.18	561
Schooling of mother				
No education	4.7	3.9	0.18	552
Up to primary	2.9	2.6	0.10	68
Up to Secondary	2.3	2.0	0.12	36
Above secondary	1.8	1.6	0.10	12
Residence				
Rural	4.3	3.6	0.17	560
Urban	4.5	3.9	0.15	113
Literacy of husband				
Literate	4.1	3.4	0.16	369
Illiterate	4.7	3.9	0.18	234
Schooling of husband				
No education	4.8	3.9	0.18	230
Up to primary	4.6	3.7	0.20	142
Up to Secondary	3.7	3.2	0.15	133
Above secondary	3.7	3.2	0.11	101
Standard of living index				
Low	4.3	3.5	0.19	137
Medium low	4.4	3.6	0.19	195
Medium high	4.6	3.8	0.17	187
High	4.1	3.6	0.12	154
Husband's occupation				
Agriculture/Livestock/ Poultry	4.6	3.7	0.20	212
Petty trader	3.9	3.3	0.14	72
Labor (Daily wages)	4.0	3.3	0.18	128
Government service	4.8	4.1	0.14	111
Private service	3.5	3.1	0.11	52
Own business	4.7	3.9	0.17	51
Unemployed	4.7	4.0	0.14	39
Others	3.9	3.1	0.19	8
Total	4.4	3.6	0.17	673

Differentials were also observed on the basis of literacy and economic activity of husbands. Those who had literate husbands had 4.1 children compared to 4.7 children ever born to those who had illiterate husbands. The differentials relating to the background characteristics of husbands were somewhat smaller than those relating to the background characteristics of the currently married women themselves. Women with illiterate husbands had the same number of children ever born as women who were illiterate themselves (4.7 children). Women with husbands in government service had the highest number of children ever born (4.8 children), while women whose husbands were working in the private service had the lowest number of children ever born (3.5 children).

A comparison of mean numbers of children ever born and surviving children shows that survival of children increased with the literacy of mothers. The survival of children was also better if the husband was literate.

Table 4.5: Mean number of children ever born and living by age and literacy of mother

		Literate			Illiterate				
Age group	Mean number of CEB	Mean number of LC	N	%	Mean number of CEB	Mean numbe r of LC	N	%	
15 - 19	0.3	0.3	12	11.2	0.6	0.5	40	7.1	
20 - 24	1.3	1.2	31	29.0	1.8	1.5	124	22.1	
25 – 29	2.3	1.9	31	29.0	3.5	3.0	110	19.6	
30 - 34	4.1	3.8	14	13.1	5.6	4.5	80	14.3	
35 – 39	5.1	4.9	8	7.5	6.5	5.5	69	12.3	
40 – 44	4.9	4.3	8	7.5	7.9	6.4	65	11.6	
45 – 49	6.7	6.3	3	2.8	8.2	6.6	73	13.0	
Total	2.5	2.3	107	100.0	4.7	3.9	561	100.0	

Table 4.5 further explains the relationship of age of mothers and literacy with mean number of children ever born and their survival. It is evident that the mean number of children ever born to literate mothers was lower (2.5 children) compared to those mothers who were illiterate (4.7 children). Similarly, the survival of children of literate mothers was far better than those born to illiterate mothers. The mean number of children ever-born to younger literate mothers was lower and their survival was better than children born to mothers in older age groups. Literate mothers were younger than illiterate mothers. In the below 30 age group, 69 percent of the mothers were literate, as compared to 49 percent who were



illiterate. It is not only that literate women had fewer children overall, but younger literate women also had fewer children ever born compared to illiterate women.

Current Fertility

Crude Birth Rate (CBR)

The Crude Birth Rate, though a crude measure of fertility, is the most commonly understood and used fertility measure. In this survey, it is calculated from the number of births that occurred during the last three years before the survey and the mid-period total population in the sample households. The baseline survey provides an estimate of 31 births per thousand population.

Age-specific Fertility Rates (ASFRs) and Total Fertility Rate (TFR)

The TFR is a more refined fertility measure than CBR. ASFRs and the TFR are based on births to currently married women and the number of women living in the sample households. One of the limitations of measuring ASFRs is the low number of births in the sample during the last three years. The findings show a pattern of ASFRs common in international data; rates rose rapidly until age 25-29, then declined with increasing age. A TFR of 4.9 for the period of 2004-2007 was obtained from the set of ASFRs calculated from the data presented in Table 4.6, compared with 4.3 for Sindh and 4.1 for Pakistan as a whole found in the PDHS (NIPS/PDHS, 2008).

Table4.6: Number of women in sample households and number of births during the last three years before the survey, by age of women, and ASFRs, TFR and CBR

	147	D'al.	Age-specific fertility
Age group	Women	Births	rates (ASFRs)
15 - 19	240	21	29.2
20 – 24	259	142	182.8
25 – 29	192	127	220.5
30 - 34	116	71	204.0
35 – 39	85	50	196.1
40 – 44	86	30	116.3
45 – 49	96	9	31.3
Total	1074	450	na
TFR: 4.9			
CBR: 31.3			

na=not applicable

Mothers with Children Under Five Years

If mothers have a child while breastfeeding an older child, they are often less able to produce breast milk for the older child (Adair et al., 1994). When children are weaned too soon, their growth suffers; they are more likely to suffer from diarrheal diseases (Bohiler et al., 1995). Milk diminution is more likely to occur as women have more children and are undernourished (Garner et al., 1994). In addition, when children are close in age, they compete for resources as well as for maternal care. The mother may also not be able to breastfeed the newborn properly, placing the newborn at higher risk for nutritional deficiency and infectious diseases contracted from older siblings.

Table 4.7 shows a significant number of women with the burden of caring for several young children. Among those who already had two living children less than five years of age, 22 percent were pregnant. For such mothers, it is particularly important for their health and that of their children to ensure that birth spacing is a part of their married life at that point.



Table 4.7: Distribution of mothers by pregnancy status and number of children under 5 years

	Currently pregnant		Currently not p	Total		
Children < 5 years	N	%	N	%	%	N
0	36	15.9	190	84.1	100.0	226
1	56	27.6	147	72.4	100.0	203
2	40	21.9	143	78.1	100.0	183
3	11	18.6	48	81.4	100.0	59
4	0	0.0	2	100.0	100.0	2
N	143	21.2	530	78.8	100.0	673

Preceding Birth Interval

Women with short birth intervals are at higher risk for delivering premature, low-birth-weight or small-for-gestational-age infants (Fuentes-Affelick and Hessol, 2000; Miller et al., 1995; Zhu et al., 1999). The length of the preceding birth interval is very important for the health of mothers and their babies. Table 4.8 shows the length of the last closed birth interval for women with two or more births by background characteristics of mothers at the time of the survey.

Table 4.8: Distribution of women with preceding birth intervals (birth to birth) by background characteristics

Characteristic	Up to 17 months	18 - 23 months	24 - 35 months	36 - 47 months	48 and above	Total	N
Age group							
15 – 19	14.3	28.6	57.1	0.0	0.0	100.0	7
20 – 24	19.3	24.1	42.2	7.2	7.2	100.0	83
25 – 29	16.0	25.7	42.4	11.8	4.2	100.0	144
30 - 34	9.6	23.4	35.1	20.2	11.7	100.0	94
35 – 39	10.1	17.4	36.2	18.8	17.4	100.0	69
40 – 44	14.6	9.8	46.3	17.1	12.2	100.0	41
45 – 49	0.0	0.0	46.7	26.7	26.7	100.0	15
Number of live birt	hs						
2	15.2	24.2	42.4	9.1	9.1	100.0	66
3	21.0	22.2	39.5	6.2	11.1	100.0	81
4	14.9	22.4	41.8	10.4	10.4	100.0	67
5	11.7	23.3	35.0	25.0	5.0	100.0	60
6+	10.1	19.0	41.9	18.4	10.6	100.0	179
Education level							
No education	13.5	19.8	41.4	15.1	10.2	100.0	384
Up to primary	15.4	23.1	48.7	5.1	7.7	100.0	39
Up to secondary	15.8	47.4	10.5	15.8	10.5	100.0	19
Above secondary	16.7	33.3	50.0	0.0	0.0	100.0	6
Standard of living in	ndex						
Low	8.6	18.3	38.7	18.3	16.1	100.0	93
Medium low	11.0	22.8	44.9	14.0	7.4	100.0	136
Medium high	15.3	22.0	43.2	13.6	5.9	100.0	118
High	19.8	21.7	34.0	13.2	11.3	100.0	106
Total	13.7	21.4	40.6	14.6	9.7	100.0	453

A short interval has traditionally been viewed as a risk factor for poor pregnancy outcomes, particularly affecting neonatal mortality in developing countries (Cleland and Sathar, 1984). It has been observed in several studies that the risk of death for an index child whose birth closes a short birth interval is higher than those experienced by an index child whose birth closes a longer birth interval (Mahmood, 2002). It has also been found that children born within the preceding interval of 18 months experienced higher mortality risks during infancy than those born in an interval of two to three years (Cleland and Sathar, 1984).



Table 4.8 shows that almost 14 percent of the children were born up to 17 months birth interval. Almost 76 percent were born with a birth interval of less than 36 months, while 24 percent were born after three years or more. The differentials by mother's age, educational level and standard of living index are also shown. Younger and lower-parity women – particularly women aged 15-19 years and of parity 3 – were more likely to have short birth intervals.

Chapter 5

Maternal and Neonatal Care

Birth spacing is an integral part of maternal and neonatal care. Adequate spacing of births improves the health of mothers and babies; at the same time, the survival of mothers and babies allows for longer birth intervals. In this survey, a small battery of questions was asked regarding the most recent child born during the past four years, reflecting some of the essential indicators of maternal and neonatal care. A total of 449 women out of the 673 women interviewed had borne a child during the past four years, and these women were asked additional questions about maternal and neonatal care.

Antenatal Care

Antenatal check-ups allow for skilled health personnel to advise expecting mothers as to how to best take care of themselves and their unborn baby during pregnancy, to prepare them for childbirth and care of the newborn, and to identify possible problems during pregnancy and delivery. The Ministry of Health recommends at least three antenatal visits during pregnancy, preferably four. Traditionally, many women, understanding childbirth as a natural experience and perhaps not finding health providers nearby, have not gone to skilled providers for antenatal care, but in recent years these proportions have been increasing in Pakistan (Government of Pakistan, 2006; NIPS/PDHS, 2008). Table 5.1 and Figure 5.1 show the number of ANC visits for the last birth of women who had delivered during the previous four years. About 54 percent of the sample respondents had at least one antenatal care visit during the last pregnancy. This was significantly higher than the level obtained for Ghotki in the 2004-05 PSLM Survey (36 percent), lower than the level for Sindh in the PDHS (70 percent) or the level obtained nationally in the PDHS (61 percent) (Government of Pakistan, 2006; NIPS/PDHS, 2008). More urban women received ANC visits during their last pregnancy than rural women. Of the total women, 33 percent had at least three such visits and 20 percent had four or more visits.



Table 5.1: Distribution of ANC check-ups during last pregnancy by residence

	Rui	Rural Urban Tota			tal	
Number of ANC visits	N	%	N	%	N	%
No visit	185	48.6	22	32.4	207	46.1
1-2 visits	77	20.2	18	26.5	95	21.2
3 visits	46	12.1	12	17.6	58	12.9
4+ visits	73	19.2	16	23.5	89	19.8
Total	381	100.0	68	100.0	449	100.0

Figure 5.1: Distribution of MWRA by number of antenatal visits during last pregnancy

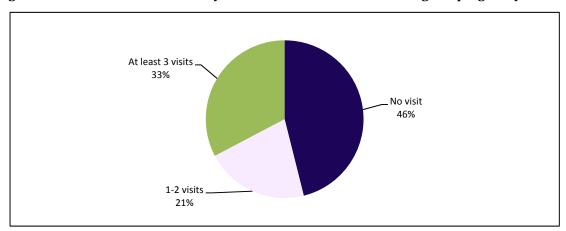
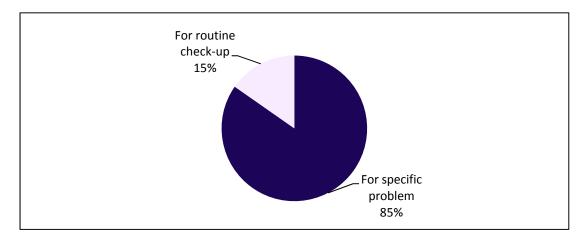


Figure 5.2 shows that many of these visits were in response to some problem rather than for a routine check-up. Eighty-five percent of the first antenatal visits were for a curative purpose.

Figure 5.2: Distribution of MWRA by reason of first antenatal visit during last pregnancy



Data also show that 30 percent of the first visits took place within the first three months of gestation, and 34 percent of the first visits occurred during the third trimester (Figure 5.3).

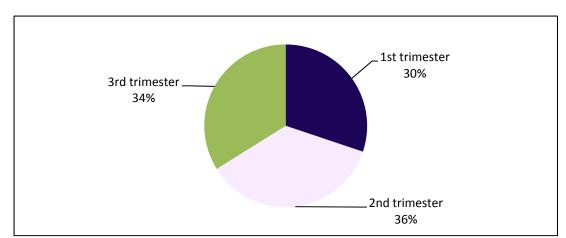


Figure 5.3: Distribution of MWRA by gestational age at first antenatal visit during last pregnancy

Table 5.2 shows the locations where respondents made one or more antenatal visits. Most antenatal visits took place in privat-sector facilities. The most common providers of antenatal care were private hospitals, clinics and private doctors. Ten percent of the antenatal check-ups were carried out at DHQ/THQ hospitals, followed by BHUs and RHCs; other providers were less common.

Table 5.2: Facilities/service providers mentioned for one or more antenatal visits by residence

	Rural		Urban		Total	
Facility/service provider	N	%	N	%	N	%
Dispensary/MCH center	2	1.0	1	2.2	3	1.2
BHU/RHC	10	5.1	0	0.0	12	4.9
DHQ/THQ hospital	20	10.1	6	13.1	24	9.9
Pvt. hospital/clinic/doctor	157	79.7	42	91.3	199	81.9
TBA/dai/ LHW	17	8.6	0	0.0	17	7.0
Nurse/LHV/Midwife	10	5.1	1	2.2	11	4.5
N	197	na	46	na	243	na

na=not applicable; respondents could name more than one facility/service provider



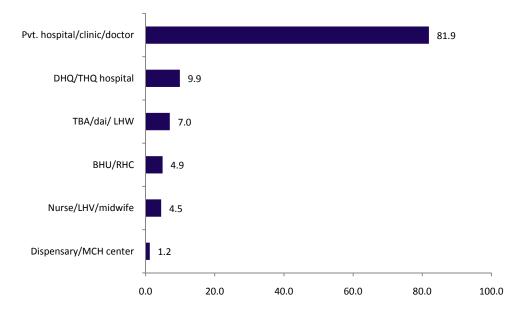


Figure 5.4: Location where respondents made one or more antenatal visits

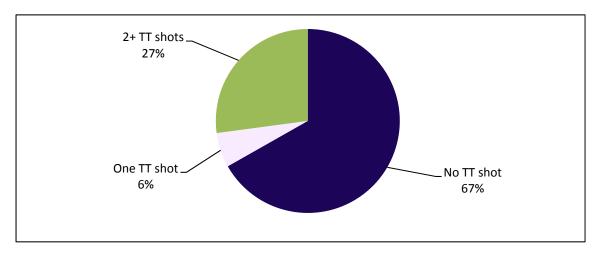
Tetanus Immunization

Tetanus toxoid immunization is important to avoid tetanus in the newborn or mother. Two doses in a pregnancy are sufficient to prevent tetanus; however, if the woman was immunized during her previous pregnancy only one dose may be needed. Five doses are sufficient for lifetime protection. In PSLMS 2004-05, 37 percent of the mothers in Ghotki had received at least one shot. According to the PDHS 2006-07, 58 percent of the mothers in Sindh and 60 percent nationally were appropriately protected from tetanus (Government of Pakistan, 2006; NIPS/PDHS, 2008). Table 5.3 shows that 33 percent of mothers had received at least one shot during their last pregnancy, and 27 percent had received 2 or more shots. The immunization rate was higher in urban areas. While tetanus immunization appeared to be increasing in Ghotki, a substantial proportion of mothers (67 percent) remained unprotected. The immunization rate for 2+ shots was higher in urban areas than in rural areas.

Table 5.3: Tetanus immunization at last deliver	Table 5.3:	Tetanus	immunization	at last	delivery
---	-------------------	----------------	--------------	---------	----------

	Rural		Urba	ın	Total	
Number of injections	N	%	N	%	N	%
No TT injections	258	68.1	40	59.7	298	66.8
One TT injection	26	6.9	1	1.5	27	6.1
2+ TT injections	95	25.1	26	38.8	121	27.1
Total	379	100.0	67	100.0	446	100.0

Figure 5.5: Tetanus immunization at last delivery



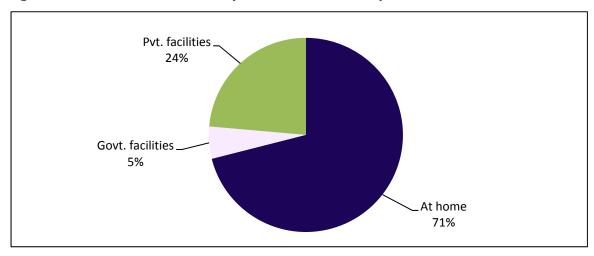
Location and Attendance at Delivery

One of the most important ways to reduce maternal mortality is to increase the proportion of mothers delivering in a health facility with the support of a trained birth attendant. Although these proportions have been rising in recent years, they have been historically low in Pakistan, contributing substantially to high maternal mortality. According to the 2004-05 PSLMS, 19 percent of the deliveries in Ghotki took place in institutions, compared with PDHS 2006-07 figures of 42 percent for Sindh and 34 percent nationally (NIPS/PDHS, 2008). In the present survey, 29 percent of the most recent deliveries were in some health facility (Table 5.4 and Figure 5.6). The percentage of women delivering in facilities was higher in urban areas compared to women delivering in rural areas (41 percent urban; 27 percent rural). A large number of deliveries took place at home, and only a quarter of the deliveries occurred in private hospitals/clinics.



		Rural	Ī	Urban	•	Total		
Place of last delivery	N	N %		N %		%		
At home	277	72.7	40	58.8	317	70.6		
Dispensary/MCH center	3	0.8	2	2.9	5	1.1		
BHU/RHC	7	1.8	0	0.0	7	1.6		
DHQ/THQ hospital	11	2.9	1	1.5	12	2.7		
Pvt. hospital/clinic	81	21.3	25	36.8	106	23.6		
Others	2	0.5	0	0.0	2	0.4		
Total	381	100.0	68	100.0	449	100.0		

Figure 5.6: Distribution of mothers by location of last delivery



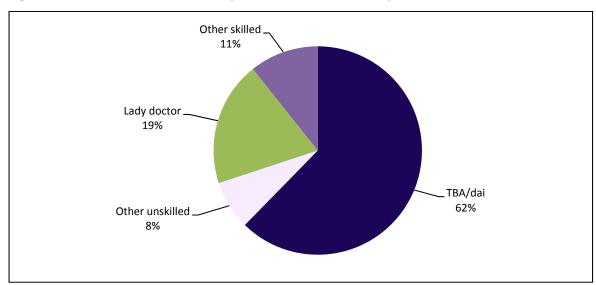
The proportion of births delivered by skilled attendants was higher than expected from previous data. In this survey, 30 percent of the reported deliveries in the previous 4 years were delivered by a skilled birth attendant. This was higher in urban areas (Table 5.4 and Figure 5.7). In the PSLMS 2004-05, only 20 percent of the births in Ghotki were delivered by a skilled attendant. In the PDHS 2006-07, the corresponding figures were 44 percent for Sindh and 39 percent for Pakistan as a whole (NIPS/PDHS, 2008). Most of the births attended by a skilled attendant in this household survey were reportedly attended by a lady doctor. (The term "doctor," however, may in such interviews mean a paramedic, such as a Lady Health Visitor.) About 62 percent of births were delivered by *dais* (traditional birth

attendants), while another 7 percent, mostly in rural areas, were delivered by a relative or neighbor who was not a dai.

Table 5.5: Distribution of mothers by attendent at last delivery and residence

_	Rural			Urban		Total	
Birth attendant and skill level	N	%	N	%	N	%	
TBA/dai	245	64.3	35	51.5	280	62.4	
Midwife	4	1.0	0	0.0	4	0.9	
Nurse/LHV	39	10.2	5	7.4	44	9.8	
Lady doctor	64	16.8	23	33.8	87	19.4	
Female relative/friend/ neighbor (not dai)	29	7.6	2	2.9	31	6.9	
Others	0	0.0	3	4.4	3	0.7	
Total	381	100.0	68	100.0	449	100.0	
Skilled birth attendant	107	28.1	28	41.2	135	30.1	
Unskilled birth attendant	274	71.9	40	58.8	314	69.9	

Figure 5.7: Distribution of mothers by attendant at last delivery





Postpartum Care

For the health of mothers and newborns, a newly delivered mother and baby should be followed up for at least about 6 weeks after delivery. MoH guidelines recommend at least one postpartum visit after discharge during the first 42 days after delivery. This is, however, a major weakness of maternal and newborn health care in Pakistan. Women who deliver at home rarely go for any postnatal check-up, and women who deliver in facilities are usually seen while they are in the facility but not after. Ghotki is no exception. As Table 5.6 shows, almost 34 percent of the respondents reported receiving postnatal care within 40 days after delivery, compared to 43 percent nationally and 60 percent in Sindh (NIPS/PDHS, 2008). However, 33 percent received postpartum care within 24 hours. As expected, only 7 percent of the women who delivered at home reported to have had a postnatal check-up within or after 24 hours.

The absence of postpartum visits represents a missed opportunity to talk to the mother about birth spacing. Much international evidence supports the value of the postpartum period as a critical time for the mother to focus on family planning and its role in the next birth interval, or on how and when to take steps to end childbearing (WHO, 2006).

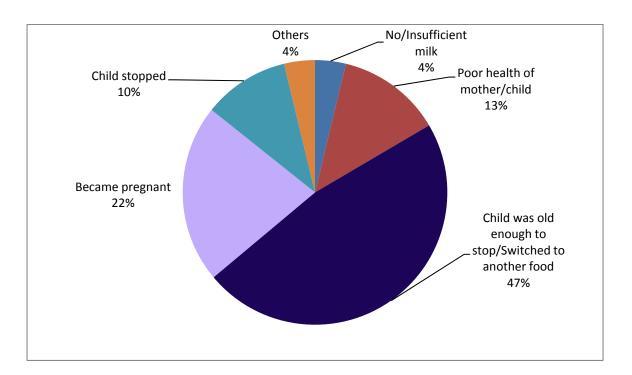
Table 5.6: Distribution of mothers by status of postnatal check-up and place of delivery

	up wi	al check-Postnatal vithin check-up after nours 24 hours		Did no postnata uj	l check-	Total		
Place of delivery	N	%	N	%	N	%	N	%
Institutional	130	100.0	0	0.0	0	0.0	130	100.0
Non-institution	16	5.0	7	2.2	295	92.8	318	100.0
Total	146	32.6	7	1.6	295	65.8	448	100.0

Breastfeeding

Breastfeeding is a critical component of newborn and infant health. In addition, it is a primary determinant of the length of postpartum amenorrhea. In this aspect, breastfeeding can be deliberately used to delay pregnancy, either through a formal procedure such as "Lactational Amenorrhea Method" (LAM), or more informally through the assumption that breastfeeding protects against pregnancy. Virtually all Pakistani women breastfeed their children to some extent. In our sample, only 4 of the 408 respondents reported not having breastfeed their last child at all. Breastfeeding is normally carried out for a substantial time. In fact, the median length of breastfeeding for the last baby (not currently being breastfed) was 24 months. Five main reasons were given for discontinuing breastfeeding: child was old enough to stop (47 percent); became pregnant (22 percent); poor health of mother/child (13 percent); child stopped (10 percent) and no or insufficient milk (4 percent).





Chapter 6

Preference for Children

In order to meet the family planning needs of couples, it is essential to understand how they feel about the number and timing of children they want. Couples' views on this typically evolve over the course of their reproductive years; in the beginning, they want their first children quickly, while toward the end of their reproductive lives, they are quite sure they want to stop. At some point in the middle, they may go through a period of ambivalence where their views are uncertain and conflicted. Husbands and wives may or may not agree on these matters, and may or may not communicate well. Often it is difficult to learn what couples truly feel about these issues because they themselves may not be certain. We can, however, ask questions, record responses and investigate in as much depth as possible.

Ideal Number of Children

One way of investigating fertility preference is to ask respondents, regardless of current fertility status, how many children they would ideally want. The exact wording, asked of female respondents was (English translation): "If you could choose exactly the number of children to have in your whole life, how many would that be?" Table 6.1 shows the responses.

The median "ideal" number, in the sense indicated above, was 5 children; 4 for urban and 5 for rural women. Forty-three percent of the respondents wanted 4 or fewer, however, a large number cited 5 (18 percent) or 6 (22 percent) or even 7 or more (17 percent) as the ideal number of children they would want to have. Urban-rural differentials were also observed.



N	Rura	ıl	Urb	an	Tot	al
Number of children	N	%	N	%	N	%
1	1	0.2	1	0.9	2	0.3
2	22	3.9	13	11.5	35	5.2
3	34	6.1	12	10.6	46	6.8
4	166	29.6	40	35.4	206	30.6
5	105	18.8	15	13.3	120	17.8
6	129	23.0	21	18.6	150	22.3
7+	102	18.2	11	9.7	113	16.8
Up to God	1	0.2	0	0.0	1	0.1
Total	560	100.0	113	100.0	673	100.0

Desire for More Children

Levels of Desire for More Children

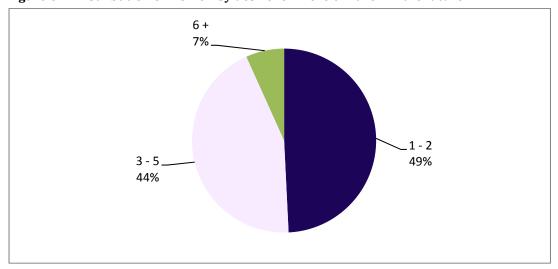
A more immediate measure of fertility preference is whether a couple wants more children; if so, do they want the next one now or later, and how many more do they want. The desire for future children is closely linked with the number of children a couple already has. Table 6.2 shows that whether respondents wanted more children soon, later (after 2 years or more) or not at all was based on the number of living children they already had. Forty-two percent of the respondents did not want more children. About a quarter (28 percent) wanted to delay their next child. The proportion wanting more children sooner rather than later declined sharply after the first birth. Even most mothers with a single living child would like to wait before having a second. Of the women who had 4 children, about 55 percent did not want more children. For all those with 2 and 3 living children, about 59 percent and 41 percent, respectively, of those who wanted an additional child wanted to have one later rather than right away. On the other hand, most women with 4 or more living children did not want to have more children. For those with 6 or more, the proportion wanting to stop was 87 percent. This table clearly indicates the high level of interest in both spacing and limiting births.

Table 6.2: Distribution of MWRA by desire for next child and current number of living children

Number of living children	Soon	Later	Never	Total	N
0	72.4	26.5	1.0	100.0	98
1	48.3	48.3	3.4	100.0	89
2	25.3	58.9	15.8	100.0	95
3	23.5	40.7	35.8	100.0	81
4	24.0	21.3	54.7	100.0	75
5	15.9	14.3	69.8	100.0	63
6+	8.1	4.7	87.2	100.0	172
Total	29.6	28.4	42.1	100.0	673
N	199	191	283	na	673

For those women who wanted more children, we also asked how many more. Figure 6.1 indicates that about half of the women who wanted more children, and who had an opinion, wanted 1 or 2 more children.

Figure 6.1: Distribution of women by desire for more children in the future





Socioeconomic Correlates of Desire for Children

A woman's stated desire was analyzed in relation to four possible socioeconomic determinants: standard of living index (SLI), and respondent's age, literacy and residence (Table 6.3). The relationship between SLI and desire for more children was weak and inconsistent. Younger women (aged 25 or less years) were more willing to opt for spacing (54 percent) compared to the older women (aged 25 or more years) who wanted to limit their children (58 percent). Literate women were more likely to want the next child at a later time (39 percent) compared to illiterate women (26 percent). On the other hand, illiterate women were more likely to not have more children (45 percent) compared to literate women (27 percent).

Table 6.3: Distribution of MWRA by reported desire for more children and background characteristics

	Desire for more children			Total		
Characteristic	Soon	Later	Never	%	N	
Standard of living index						
Low	32.8	29.9	37.2	100.0	137	
Medium low	32.3	30.8	36.9	100.0	195	
Medium high	26.2	25.7	48.1	100.0	187	
High	27.3	27.3	45.5	100.0	154	
Age of woman						
< 25	40.1	54.1	5.8	100.0	207	
25 or more	24.9	17.0	58.2	100.0	466	
Literacy of respondent						
Literate	33.6	39.3	27.1	100.0	107	
Illiterate	28.9	26.4	44.7	100.0	561	
Residence						
Rural	30.7	29.8	39.5	100.0	560	
Urban	23.9	21.2	54.9	100.0	113	
Total	29.6	28.4	42.1	100.0	673	

Son Preference

In Pakistan, there is known to be substantial preference for sons over daughters; in particular, the belief that a family is incomplete without sons is stronger than the corresponding belief for daughters. In this questionnaire, respondents were asked how many daughters they would have before stopping if they did not have a son, and correspondingly for sons if they did not have a daughter. For women, son preference came out most strongly: 78 percent of women said there would be no limit to the number of daughters before having a son. Likewise, 53 percent of women said there would be no limit to the number of sons before having a daughter.

Table 6.4: Son and daughter preferences by the respondents

	Number of daughters for the desire of a son		Number of sons for the desire of a daughter		
Preference	N	%	N	%	
No limit	528	78.5	354	52.6	
Numeric responses	145	21.5	319	47.4	
Total	673	100.0	673	100.0	
Median	na	4	na	4	

na=not applicable

Strength of Preference

The strength of preferences asked in such surveys can be questioned. The need for birth spacing can be presumed to be greater if a couple is strongly motivated not to have more children, or to delay the next pregnancy, than if this does not matter much to them. We asked respondents if they became pregnant soon would they be pleased, worried, accept it or it did not matter. Results are shown in Tables 6.5 and 6.6. (This question excludes those 388 of the total 673 women who wanted a next child soon, were currently pregnant, had been sterilized, had gone through menopause or had a hysterectomy).



Table 6.5: Distribution of MWRA who did not want more children soon, by reaction if they become pregnant in near future

Reaction if pregnant	Later	Never	Total	N
Pleased	5.1	1.2	2.8	8
Worried	44.4	70.2	59.6	170
Accept it	49.6	26.8	36.1	103
Doesn't matter/others	0.9	1.8	1.4	4
Total	100.0	100.0	100.0	285
N	117	168	na	285

Table 6.6: Distribution of MWRA who did not want more children soon, by problems faced if they become pregnant

Problems faced if they become	Future desire for	Total		
pregnant	Later	Never	%	N
Own health	84.6	96.4	91.5	260
Health of youngest child	94.9	75.4	83.5	237
Caring of children	82.9	83.1	83.0	235
Schooling of children	55.6	78.4	69.0	196
Family economic situation	62.4	81.4	73.6	209
Others	0.0	0.6	0.4	1
N	117	167	284	284

Respondents could give more than one response.

Table 6.5 shows that among those who did not want more children at all, 70 percent said that they would be worried if they became pregnant. More than one quarter (27 percent) reported that they would accept the new pregnancy, while only 1 percent, among those who did not want more children, said they would be pleased. Among those women who wanted to delay their next pregnancy for more than 2 years, 44 percent would be worried while 5 percent would be pleased and 50 percent would accept the pregnancy. This shows weak motivation for spacing. However, the high proportion of women who said they would be worried if they became pregnant supports their earlier statement that they wanted to delay or stop childbearing.

Further, women who expressed a desire not to have more children or to delay the next child were asked what problems they would face if they became pregnant soon. Table 6.6 shows their responses. If we observe the situation overall the problem most commonly faced was own health followed by health of youngest child, caring of children, family economic situation and schooling of children. It is important to note that health has been emerging as a priority in planning family size.

Attitude towards Last Pregnancy

Another important dimension of fertility preference relates to whether the last pregnancy was wanted at the time, was mistimed (i.e., wanted later) or was not wanted at all. Pregnancies that are unwanted cause hardship in many ways and represent a failure to realize a couple's right to have the number of children they want, at the time they want them. This can be somewhat difficult to determine precisely in surveys. Sometimes parents report that an unwanted pregnancy was actually wanted, but it is less common to report that a child was wanted when in fact it was not. In this survey, as shown in Figure 6.2, many women reported that their last pregnancy was unwanted (16 percent) or mistimed (9 percent).

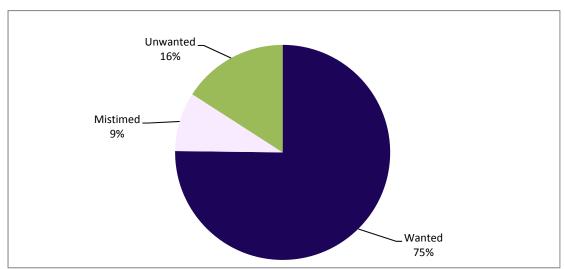


Figure 6.2: Distribution of MWRA by attitude towards their last pregnancy



Wives' Perception of Husband's Fertility Preferences

Women were asked whether they thought their husbands wanted the same number of children as they did, more, or fewer. In Table 6.7, their responses are tabulated according to the woman's ideal family size. Sixteen percent of the women did not know their husband's preference; another 52 percent thought their husbands wanted the same number of children as they did. However, 27 percent thought their husbands wanted more than they did, while only about 6 percent thought their husbands wanted fewer children. These proportions did not vary systematically according to women's ideal family size.

Table 6.7: Distribution of MWRA according to perception of husband's desire for more children by woman's ideal family size

	Perception	Tot	Total			
Ideal family size of women	Same number	More children	Fewer children	Don't know	%	N
1 - 2 children	45.9	48.6	0.0	5.4	100.0	37
3 - 4 children	55.2	25.4	6.3	13.1	100.0	252
5 or more children	49.9	25.6	5.5	19.1	100.0	383
Up to God	0.0	100.0	0.0	0.0	100.0	1
Total	51.6	26.9	5.5	16.0	100.0	673
N	347	181	37	108	673	673

Chapter 7

Contraceptive Knowledge and Use

The FALAH baseline household survey obtained data on contraceptive knowledge and use by first asking what methods respondents knew, if any (spontaneous knowledge). Then, for each method not mentioned, that method was named by the interviewer and described, and the respondent was asked if she knew that method, if she had ever used it, and if she was using it currently. This approach is standard in such surveys in Pakistan and elsewhere. In addition, respondents were asked to report their most recent source of contraceptive methods.

Knowledge

For many years, at least 95 percent of married women of reproductive age in Pakistan have known of at least one method of contraception. Table 7.1 shows that this holds true for Ghotki as well; 98 percent of all women knew of at least one method. A majority of the female respondents knew of the most commonly used program methods – injectables, pills, female sterilization and IUDs. Knowledge of women about permanent methods, traditional methods and emergency pills was lower than the PDHS findings (NIPS/PDHS, 2008) have shown. Urban-rural differentials can also be seen in Table 7.1, which indicates variation in knowledge across the different methods.



Table 7.1: Distribution of MWRA by knowledge (prompted) of contraceptive methods, by residence

Method	Rural	Urban	Total
Female sterilization	93.6	98.2	94.4
Male sterilization	25.5	55.8	30.6
Pill	95.7	99.1	96.3
IUD	84.3	94.7	86.1
Injectables	96.6	98.2	96.9
Norplant	52.2	72.6	55.7
Condom	45.2	80.5	51.1
Rhythm	7.2	12.4	8.0
Withdrawal	22.6	45.1	26.4
Emergency pills	5.5	7.1	5.8
At least one method	97.3	99.1	97.6
At least one modern method	97.3	99.1	97.6
At least one traditional method	27.5	52.2	31.6
N	560	113	673

Use of Contraceptive Methods

Levels of Ever Use and Current Use

For the purpose of analyzing contraceptive use in a population, currently married women of reproductive age (typically taken to be 15-49 years) are generally divided into "ever users," i.e., women who have used some form of contraception at some point, and "never users," who have not. Ever users are further divided into current users and past users. These categories are in standard use in Pakistan and internationally.

Of all the married women interviewed in our sample, about 32 percent reported having used some method of contraception during their married lives (Table 7.2). This percentage was higher for urban women (59 percent) compared to their rural counterparts (27 percent). It was substantially lower than the proportion obtained in the PDHS 2006-07 for Pakistan as a whole (48.7 percent) (NIPS/PDHS, 2008).

Table 7.2: Percentage distribution of married women of reproductive age according to ever use of contraception and residence, by method

		Ever u	sers			Current	users			Past users			
FP method	Rural	Urban	Total	N	Rural	Urban	Total	N	Rural	Urban	Total	N	
Pill	8.6	28.3	11.9	80	0.5	6.2	1.5	10	8.0	22.1	10.4	70	
IUD	4.5	18.6	6.8	46	0.7	3.5	1.2	8	3.6	15.0	5.5	37	
Injectable	13.9	25.7	15.9	107	3.0	4.4	3.3	22	10.9	21.2	12.6	85	
Nor plant	0.4	0.0	0.3	2	0.0	0.0	0.0	0	0.4	0.0	0.3	2	
Condom	2.3	17.7	4.9	33	0.7	4.4	1.3	9	1.6	13.3	3.6	24	
Rhythm method	0.4	2.7	0.7	5	0.0	0.9	0.1	1	0.4	1.8	0.6	4	
Withdrawal	4.8	16.8	6.8	46	2.0	6.2	2.7	18	2.9	10.6	4.2	28	
Female sterilization	5.7	6.2	5.8	39	5.7	6.2	5.8	39	0.0	0.0	0.0	0	
Male sterilization	0.2	0.0	0.1	1	0.2	0.0	0.1	1	0.0	0.0	0.0	0	
Other FP method	1.3	1.8	1.3	9	0.4	0.9	0.4	3	0.9	0.9	0.9	6	
Any FP method	26.8	59.3	32.2	217	13.2	32.7	16.5	111	13.6	26.5	15.8	106	
Any modern FP method	26.1	54.9	30.9	208	10.9	24.8	13.2	89	15.2	30.1	17.7	119	
Any traditional FP method	5.7	21.2	8.3	56	2.3	8.0	3.3	22	3.4	13.3	5.1	34	
N	560	113	673	673	560	113	673	673	560	113	673	673	
Emergency pills	0.2	2.7	0.6	4	na	na	na	na	na	na	na	na	

na=not applicable

The proportion of currently married women of reproductive age who are currently using some form of contraception, commonly known as the "contraceptive prevalence rate" (CPR), is one of the central indicators of the status of family planning programs. It shows the degree to which couples are actively involved in spacing or limiting births, and the proportions by method (the "method mix") indicate the means couples are using to do this. Historically, the family planning Program in Pakistan has been characterized by the availability and use of a wide variety of methods, but at relatively low levels. For the last several years, the national CPR seems to have remained at the level of about 30 percent (NIPS, 2001; NIPS, 2007; Population Council 2006; NIPS/PDHS, 2008).

As shown in Table 7.2, current use of family planning in Ghotki, compared with Pakistan in general, was low. A total of 16 percent of all married women in the sample were currently using some method of contraception (the "contraceptive prevalence rate" or CPR), compared with 29.6 percent for Pakistan in the 2006-07 PDHS and 26.7 percent for Sindh as a whole (NIPS/PDHS, 2008). In urban areas, the CPR was 33 percent, compared to 13 percent in rural areas.



The methods most commonly being used were female sterilization, injectables and withdrawal. (See Figure 7.1 showing the proportion of current users by method mix.) Table 7.2 shows that the use of injectables – 3.3 percent – is slightly high by national standards (2.3 percent). Conversely, the use of female sterilization, at 5.8 percent, is lower than shown in national data (8.2 percent). Overall, 13 percent of married women were using modern methods and 3.3 percent were using traditional methods (withdrawal and rhythm).

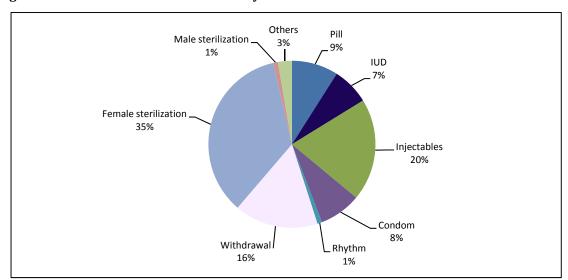


Figure 7.1: Distribution of current users by method mix

Current Use and Desire for Children

For current users of contraception, it is important to determine how many are using for spacing purpose, and how many want to stop having children altogether. Figure 7.2 shows that, 73 percent of current use was for the purpose of limiting, compared to 27 percent for spacing births.

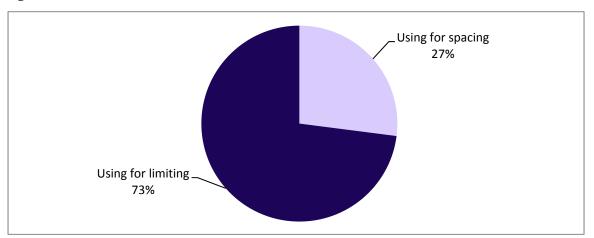


Figure 7.2: Current use and desire for children

Correlates of Contraceptive Use

Figures 7.3 and 7.4 show the relationship between contraceptive prevalence and a woman's age. The shape of the graph for age is similar to that seen in other Pakistani and international studies, with low prevalence among both younger and older women, and higher prevalence in between. Prevalence was highest among women aged 40-44.

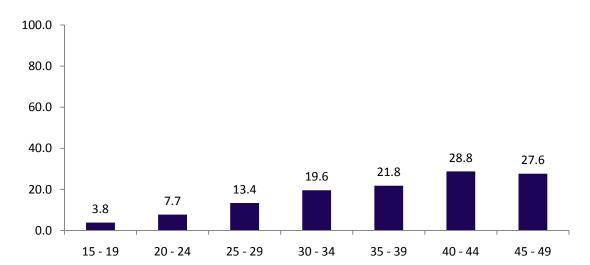
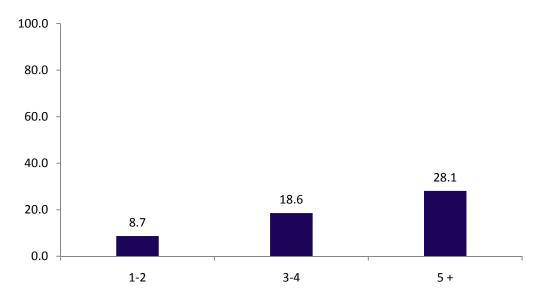


Figure 7.3: Contraceptive prevalence by woman's age



Figure 7.4 indicates the contraceptive prevalence by number of living children: those who had higher number of children had a higher contraceptive prevalence rate. A maximum CPR of 28.1 percent was recorded for women having 5 or more children.

Figure 7.4: Current contraceptive use by number of living children



In Pakistan as well as internationally, contraceptive use is associated with higher socioeconomic status and urban residence. This is also true in Ghotki, as shown in Table 7.3. Respondents in households with the highest SLI had a higher contraceptive prevalence (27 percent) than those with the lowest SLI (8 percent). Women from households with low SLI (80 percent) were more likely to be never users. Similarly, respondents' literacy was associated with higher current use and lower never use. A slight association of CPR to SLI was observed among past users. Ownership of a television was positively associated with both current and past use. Likewise, current and past users were much more likely to live in urban areas.

Table 7.3: Distribution of women by contraceptive use status and selected characteristics

		•			
	Contra	ceptive use sta	tus	Total	
Characteristic	Current user	Past user	Never user	%	N
Standard of living inde	x				
Low	8.0	12.4	79.6	100.0	137
Medium low	11.3	12.8	75.9	100.0	195
Medium high	19.3	19.3	61.5	100.0	187
High	27.3	18.2	54.5	100.0	154
Ownership of TV					
Yes	20.5	19.0	60.5	100.0	400
No	10.6	11.0	78.4	100.0	273
Literacy of respondent					
Yes	29.0	10.3	60.7	100.0	107
No	14.3	16.6	69.2	100.0	561
Residence					
Rural	13.2	13.6	73.2	100.0	560
Urban	32.7	26.5	40.7	100.0	113
Total	16.5	15.8	67.8	100.0	673

Source of Method

With many types of outlets available to obtain various contraceptive methods, it is important to know which ones are being used, and for which methods. Table 7.4 shows the place at which current and past users combined (i.e., ever users) obtained their contraceptive method last time.

From this table, it is clear that the source depended on the method. Pills and condoms were mostly obtained by the husband while IUDs and injectables were mostly inserted in private facilities. In most cases, female sterilization was carried out in DHQ/THQ hospitals and to a lesser extent in private hospitals. These statements hold true for both current and past users.



 $\begin{tabular}{ll} \textbf{Table 7.4: Distribution of ever users of specific contraceptive method by most recent source of supply} \\ \end{tabular}$

			I	Family planr	ing method	l		
Source	Pill	IUD	Injectables	Norplant	Condom	Female sterilization	Male sterilization	N
Govt. hospital (DHQ/THQ)	9.5	25.0	18.1	0.0	0.0	64.1	100.0	47
BHU/RHC/MCH center	2.4	0.0	0.0	0.0	0.0	2.6	0.0	2
LHW	23.8	0.0	9.7	0.0	0.0	0.0	0.0	17
Pvt. doctor	9.5	25.0	22.2	0.0	0.0	5.1	0.0	26
Pvt. hospital/clinic	14.3	43.8	22.2	100.0	0.0	28.2	0.0	41
Pharmacy, chemists	7.1	0.0	5.6	0.0	10.5	0.0	0.0	9
TBA/dai/referral	0.0	6.3	2.8	0.0	0.0	0.0	0.0	3
Grocery shop/general store	4.8	0.0	4.2	0.0	15.8	0.0	0.0	8
Husband brings method	26.2	0.0	12.5	0.0	73.7	0.0	0.0	34
Others	2.4	0.0	2.8	0.0	0.0	0.0	0.0	3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	190
N	42	16	72	1	19	39	1	190

Chapter 8

Experience with Contraceptive Methods

An important part of the success of a birth spacing program is to ensure that users are able to choose the method that is more appropriate for them, and to provide sufficient information and support for that method. All methods have their strengths and weaknesses, and no method is deemed to be appropriate for everyone. In looking carefully at the experience of those who have used contraceptive methods, both currently and in the past, we can gain insights into the problems users face and how to solve them. We asked a series of questions regarding the experience of current and past users; for past users who had used more than one method, we asked about their most recent method.

Reasons for Method Choice

In the survey, current and past users were asked the reasons they chose a particular method. A list of possible reasons was read out to them, and the results are shown in Table 8.1. Overall, the reasons for current and past users were similar, so the data are combined. Among the most common reasons for choosing a method were convenience of use, easily available, low cost, can be used for a long period of time and provider's advice. For female sterilization and norplant, suitability of use for a long period was cited by all. Cited less frequently were no or fewer side effects, provider advice, method always available and no other method available. Clients usually tend to make decisions according to the known attributes of the various methods, but not always. For example, about 10 percent of pill users cited lack of side effects as a reason for choosing the pill, even though it is in fact associated with a number of common side effects.



Table 8.1: Distribution of ever users of specific contraceptive methods according to reason for choosing that method

	Pill IUD Injectables Norplant Condo		Condom	Female	Male	Total			
Reason	FIII	101	injectables	Noi piant	Condon	sterilization	sterilization	%	N
Easily available	95.2	81.3	97.2	100.0	94.7	53.8	100.0	86.3	164
Low cost	85.7	50.0	79.2	100.0	94.7	74.4	100.0	78.9	150
Convenient to use	83.3	93.8	95.8	100.0	94.7	66.7	0.0	86.3	164
Suitable for Respondent/ husband	54.8	43.8	51.4	100.0	89.5	59.0	100.0	57.4	109
No/fewer side effects	52.4	62.5	45.8	100.0	73.7	61.5	100.0	55.3	105
Can be used for long period	40.5	100.0	55.6	100.0	36.8	100.0	100.0	63.7	121
No other method available	9.5	25.0	15.3	0.0	0.0	2.6	0.0	10.5	20
Method always available	64.3	56.3	51.4	0.0	73.7	35.9	100.0	53.7	102
Provider advised	54.8	75.0	54.2	100.0	47.4	82.1	100.0	61.6	117
Others	0.0	0.0	5.6	0.0	5.3	0.0	0.0	2.6	5
N	42	16	72	1	19	39	1	na	190

Respondents could give more than one reason.

To look more specifically at why some users preferred traditional methods to modern ones, 20 current traditional method users were asked why they were not using modern methods. Side effects were by far the main issue: 90 percent cited fear of side effects and 50 percent reported their own experience of side effects. Husband's disapproval (of modern methods) was cited by 35 percent of the users.

Table 8.2: Distribution of MWRA using traditional methods by reasons for not using modern contraceptive methods

Reason	Percentage
Fear of side effects	90.0
Husband's disapprove	35.0
Experienced side effects	50.0
Doesn't know about modern methods	10.0
N	20

Respondents could give more than one reason.

Cost, Distance and Time to Reach a Facility

Costs to users of contraceptive methods vary widely in Pakistan according to method, availability of method in the public or private sector, and other factors. Table 8.3 and Figure 8.1 show women's reported costs the last time the method was obtained. Nearly half of the clients were not charged for their contraceptives, including a majority of female sterilization users (who were, in fact, typically reimbursed for expenses involved). Almost one-fifth of the women, notably condom users, the husband obtained the method, so wives did not know the cost. Another 10 percent of respondents paid not more than 50 rupees. IUD and injectable users paid more than 50 rupees for their method; but for the IUD, this entailed a one-time cost, so the monthly cost may be quite low.

Table8.3: Distribution of costs of current contraceptive method

FP method	Nil	1-20	21-50	51+	Don't know	Total	N
Pill	10.0	20.0	10.0	0.0	60.0	100.0	10
IUD	0.0	0.0	0.0	100.0	0.0	100.0	8
Injectables	4.5	9.1	18.2	59.1	9.1	100.0	22
Condom	0.0	0.0	0.0	0.0	100.0	100.0	9
Female sterilization	100.0	0.0	0.0	0.0	0.0	100.0	39
Male sterilization	100.0	0.0	0.0	0.0	0.0	100.0	1
Total	47.2	4.5	5.6	23.6	19.1	100.0	89

Figure 8.1A: Cost in rupees of contraceptive supply for current method

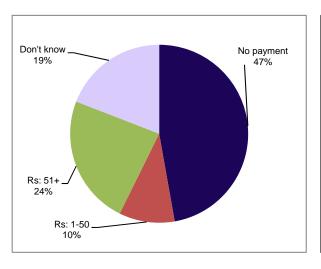
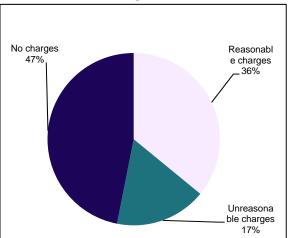


Figure 8.1B: Attitude towards service charges for current method other than contraceptive





Current users were also asked whether their facility charged them for services other than for the method itself. Of the 64 users who were asked this question, 47 percent said they were not charged, 36 percent were charged a reasonable amount, and 17 percent were charged an unreasonable amount.

The time usually needed for current users to obtain their method is shown in Table 8.4 and Figure 8.2 shows the overall travel time in minutes to reach the service outlet. Less than one-fifth of the users needed no more than 15 minutes to obtain their method; this included methods obtained from LHWs, who often bring injectables, pills and condoms to the doorstep. Twenty-eight percent needed 31-60 minutes to obtain their method. For another one-fifth of users, particularly female sterilization users, it took more than an hour to reach the service delivery point; in these cases, there was usually no need to visit the facility frequently. Nearly 23 percent of the users did not know how long it took as their husbands brought the contraceptive (mostly condoms and pills).

Table 8.4: Distribution of current contraceptive users by time to reach specific contraceptive service

			Time (in n	ninutes)		Tota	al
Family planning method	1-15	16-30	31-60	61+	Don't know/husband brought method	%	N
Pill	20.0	0.0	0.0	20.0	60.0	100.0	10
IUD	25.0	25.0	37.5	0.0	12.5	100.0	8
Injectables	27.3	18.2	27.3	9.1	18.2	100.0	22
Condom	11.1	11.1	0.0	0.0	77.8	100.0	9
Female sterilization	10.3	10.3	41.0	35.9	2.6	100.0	39
Male sterilization	0.0	0.0	100.0	0.0	0.0	100.0	1
Others	33.3	0.0	0.0	0.0	66.7	100.0	3
Total	17.4	12.0	28.3	19.6	22.8	100.0	92

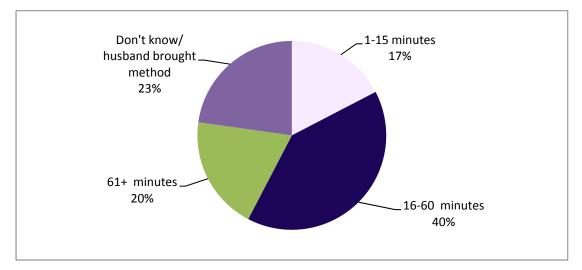


Figure 8.2: Travel time (in minutes) for contraceptive supplies

Treatment by Provider

Information Provided

Current and past users were asked what information the service provider might have given them (Table 8.5) (from a list of important topics that were read out to them). The accuracy of client responses may be questioned due to problems of recall or understanding. It appears that information provided is seriously inadequate. The most common topics respondents said they were told about were effectiveness/duration, how to use a method and how the method works. Some were told about side effects, what to do if experienced side effects or about the advantages of a method. A few were told about contraindications, about other methods of FP they could use or about the possibility of switching a method. Condom users were given less information in general than users of clinical methods perhaps because these were often obtained by husbands. There is a need to emphasize to providers that they give comprehensive information on the method selected by clients, especially hormonal contraceptives.



Table 8.5: Distribution of ever users of contraceptives by information provided at acceptance for method

		Family planning method						
Information provided at acceptance	Pill	IUD	Injectables	Condom	Female sterilization	N		
How the method works	28.6	50.0	19.4	5.3	48.7	55		
How to use the method	61.9	68.8	37.5	10.5	38.5	82		
Contraindications	14.3	12.5	9.7	5.3	12.8	22		
Effectiveness	61.9	75.0	61.1	26.3	79.5	120		
Advantages	9.5	50.0	13.9	5.3	25.6	35		
Possible side effects	21.4	56.3	19.4	0.0	30.8	45		
What to do if experienced side effects	16.7	68.8	19.4	0.0	30.8	44		
Possibility of switching	7.1	18.8	6.9	0.0	0.0	11		
About other methods of FP you could use	4.8	37.5	9.7	5.3	7.7	19		
N	42	16	72	19	39	188		

Respondents could give more than one response.

Treatment at Facility

Current users were asked about various aspects of their treatment when they last visited a provider for family planning. As Table 8.6 shows, responses were mainly positive with some exceptions. Nearly one-third of respondents said that the provider could not deal with the side effects, 47 percent said that the provider did not charge for services, and 13 percent of the respondents said that the attitude of service providers was uncooperative. However, almost all the respondents (97 percent) said the provider was available when they visited, but 18 percent said that the provider did not examine them properly when they visited.

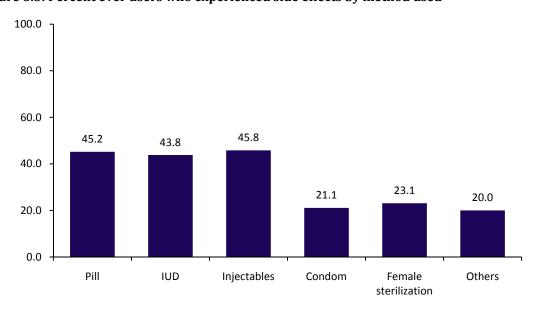
Table 8.6: Percent of current users responding positively on treatment at last visit by aspect of treatment

Aspect of treatment	Percentage
Staff attitude cooperative	86.8
Provider available	97.1
Attend/examine properly	82.1
Doesn't demand charges for services	46.9
Can deal with side effects	69.0

Side Effects

Current users were asked if they had experienced or were experiencing any side effects from their current method; past users were asked if side effects were among the reasons for their discontinuation of a method. If so, a list of possible side effects was read out to them, and they were asked if they had experienced them (multiple responses were allowed). As shown in Figure 8.3, side effects were most commonly reported by injectable, pill and IUD users (46 percent, 45 percent and 44 percent, respectively) and least commonly reported by condom users (21 percent).

Figure 8.3: Percent ever users who experienced side effects by method used





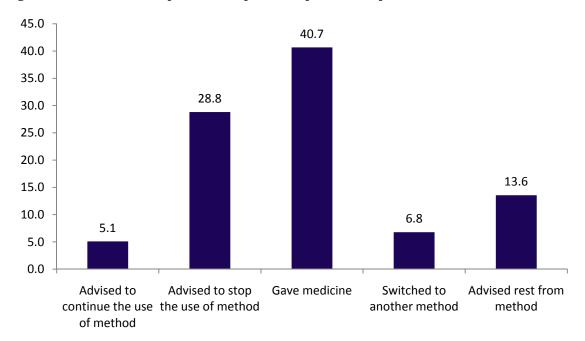


Figure 8.4: Distribution of provider responses to past users upon consultation for side effects

These respondents were asked if the provider responded in a manner included in a list read out to them (Figure 8.4). Only 5 percent were advised to continue the use of the chosen method, 28 percent were advised to stop, and 14 percent were advised for rest from the method.

Chapter 9

Reasons for Non-use

There are many reasons why a couple may not be practicing birth spacing at any given time. The woman may already be pregnant, the couple may want another child soon, the woman may already have passed menopause or she may believe herself to be sterile. Other reasons may prevent couples from using contraceptives even if they want to avoid having more children. Reasons may include: lack of knowledge of methods or inability to obtain them; fear of side effects; opposition of husband or family; and concern that birth spacing may be against Islam or somehow wrong and so on. To understand how best to meet the needs of such people, it is important to understand the reasons why couples are not practicing birth spacing in relation to the situation they are currently in.

Hindrances to Use

One way to understand common hindrances to contraceptive use is to ask respondents about their understanding of the concerns of people in general, with the view that people may feel less need to conceal their real concerns than when they are discussing their own situation. All respondents were asked: "If a couple wants to avoid or space a birth, which of the following hindrances might they face?" Each item on a list was read out to the respondent.

Table 10.1 shows the responses of the female respondents according to whether they were current users, past users or never users.



Table 9.1: Distribution of opinions of MWRA regarding hindrances faced by couples wanting to avoid or space a birth, by family planning use status

	Contraceptive use status					
	Current	user	Past	Past user		er
Hindrance	N	%	N	%	N	%
Husband's disapproval	107	96.4	97	91.5	433	95.0
Other people may find out about contraceptive use	91	82.0	93	87.7	406	89.0
Distance and travel costs to FP outlet	86	77.5	89	84.0	341	74.8
Probability of getting pregnant while using contraceptives	97	87.4	95	89.6	399	87.5
Fear of side effects	106	95.5	103	97.2	425	93.2
Problem of managing side effects	100	90.1	96	90.6	418	91.7
FP is against religion	104	93.7	102	96.2	441	96.7
N	111	na	106	na	456	na

na=not applicable; respondents could give more than one response.

Some obstacles that couples might faced were almost universally acknowledged. Among current users, the same percent mentioned husband's disapproval and fear of side effects (96 percent each), while about 94 percent acknowledged religious concerns. Ninety percent mentioned the problem of managing side effects, and 87 percent were concerned about the possibility of getting pregnant while using contraceptives. Eighty-two percent of the current users mentioned that other people might find out about their use; for 77 percent the distance and costs of going to a FP outlet was a concern.

Past Users

Reasons for Discontinuing Use

Table 9.2 shows past users by reason for discontinuing their last method. (More than one reason was permitted.) The most commonly given reasons were: side effects experienced, desire for another child, fear of side effects, provider's advice, husband's advice, rest from the method, infrequent sex and method failure.

These reasons were appropriate in most cases, but not always. Method failure results from using methods that have high failure rates. Clinical methods do have associated side effects;

but as we have seen, providers rarely try to counsel users through the temporary experience of common or non-dangerous side effects.

Table 9.2: Distribution of past contraceptive users by reason for discontinuing last method

Reason	Percentage
Wanted another child	36.8
Fear of side effects	24.5
Side effects experienced	55.7
Method failure	12.3
Lack of access/unavailability	1.0
Cost not affordable	1.0
Method inconvenient to use	2.8
Rest from method	14.2
Missed the dose	2.8
Provider's advice	18.9
Infrequent sex/husband away	13.2
Husband's advice	17.0
In-laws oppose	1.9
Menopause	2.8
N	106

Respondents could give more than one reason.

Reasons for Current Non-use

It is important to know the reasons for non-use of those couples who have used contraceptive methods in the past but are not currently using them. A list of possible reasons was read out to past users for not currently using contraceptives, with more than one reason possible (Table 9.3). The most common reason was the fear of side effects. Other reasons were related to childbearing (e.g., currently pregnant, breastfeeding/ amenorrheic, wanting another child). However, significant percentages cited just not using/too lazy, provider's advice and infrequent sex as reasons for non-use.



Table 9.3: Distribution of past users by reason for current non-use

Reason	Percentage
Fear of side effects	35.8
Want another child	19.8
Currently pregnant	27.4
Rest from method	6.6
Provider's advice	10.4
Infrequent sex/husband away	10.4
Breastfeeding/lactation amenorrhea	20.8
Menopause	5.7
Just not using/too lazy	11.3
Others	9.1
N	99

Respondents could give more than one reason.

Never Users

Reasons for Non-use

The 456 women in the sample who reported never use were asked about possible reasons for not using contraceptives (each reason was read out separately from a list). As shown in Table 9.4, the most important reason was the desire for more children, with a concern about their ability to conceive sometimes being an additional factor. Women were more likely to cite fear of side effects, opposition of husband and opposition of in-laws as significant reasons for not using contraceptives. Another important reason cited was breastfeeding. Very few reported unavailability/lack of supply, shy to consult about FP, method inconvenient or religious objections; each of these are often cited in other literature as a barrier to family planning use (Table 9.4).

Table 9.4: Distribution of never users by reason for never use

Reason	Percentage
Husband opposes	32.9
In-laws oppose	19.7
Fear of side effects	37.9
Lack of access/unavailability	10.1
Cost not affordable	6.1
Shy to consult about family planning	5.3
Method inconvenient to use	2.4
Infrequent sex/husband away	9.4
Difficult/unable to conceive	19.3
Breastfeeding/lactational amenorrhea	11.2
Wanted (more) children	71.9
Against religion	3.5
Natural spacing	9.9
Others	4.8
N	456

Respondents could give more than one reason.

Attitude towards Birth Spacing and Limiting

It is important to see the extent to which never users disapproved of family planning in principle, as opposed to accepting it in principle but not using contraceptives for some other reason. This is shown in Table 9.5 for never using respondents. About 31 percent of the women disapproved of spacing and 20 percent of limiting births.

Table 9.5: Distribution of never users by attitude towards spacing and limiting birth

	Attitude towards	spacing	Attitude towards	limiting
Attitude	N	%	N	%
Approve	313	68.6	366	80.3
Disapprove	143	31.4	90	19.7
Total	456	100.0	456	100.0

Knowledge of Contraceptive Users, Methods and Facilities

Figure 9.1 shows that of the 456 female never users in the sample, 75 percent reported knowing some woman who had ever used a method to delay or avoid pregnancy. Of the respondents who knew someone who had used some method, 67 percent were relatives,



while 22 percent were friends or neighbors. Nearly a quarter of never users did not know anyone who had ever used a FP method to delay or avoid pregnancy

Figure 9.1: Percent of never user women who knew some woman who had ever used any FP method

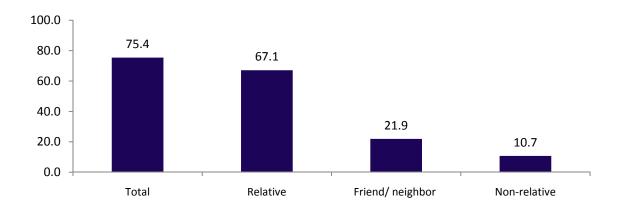


Table 9.6: Distribution of never users by knowledge of contraceptive methods

Method	Percentage
Female sterilization	92.3
Male sterilization	22.8
Pill	94.7
IUD	79.8
Injectables	95.6
Norplant	45.1
Condom	39.7
Rhythm	4.8
Withdrawal	17.0
Emergency pills	4.6
Others	3.5
Know at least one FP method	96.5
N	456

Respondents could give more than one response.

As might be expected, never users have somewhat lower levels of knowledge of contraceptive methods than ever users. Of all the never user women, 97 percent knew of at least one method compared to all ever users. For each method, a somewhat smaller percent

of never users knew that method than the overall knowledge of women as shown in Table 71. Most never users knew a variety of methods. However, their knowledge of where to get services and supplies was less satisfactory.

Of the 456 never users, 42 percent did not know of a place to obtain a method. For those who did know, the places they were aware of are shown in Table 9.7. The sources best known were Department of Health outlets – the district/tehsil Headquarters hospitals, BHUs/RHCs/MCH centers, and Lady Health Workers. A substantial number knew of private facilities, including pharmacies/chemists and grocery shops. Very few were aware of other sources, including TBA/dai, Greenstar clinics, Family Welfare Centers of the Ministry of Population Welfare, and mobile service unit camps.

Table 9.7: Knowledge of sources of contraception of never users by source of supply

Facilities/service providers	Percentage
Knowledge of at least one service provider	58.3
DHQ/THQ hospitals	45.0
BHU/RHC/MCH center	7.5
Family welfare center	2.0
Mobile service unit camp	1.1
Lady health worker	17.1
Green star clinic	5.0
Private hospital/clinic/doctor	37.1
Dispenser/compounder	2.0
Pharmacy/chemists	27.2
Homeopathic/hakim	0.9
TBA/dai	5.9
Grocery shop (not pharmacy/chemist)	16.0
N	456

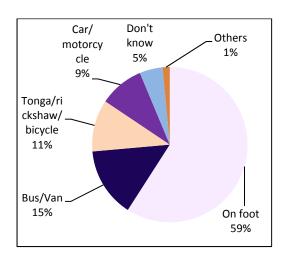
Respondents could name more than one facility/service provider.

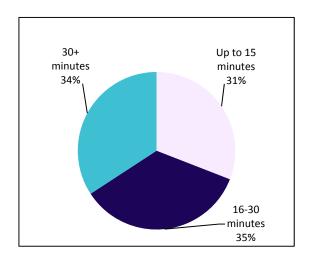
When asked which of the facilities named was nearest, the respondents were again most likely to name DHQ/THQ hospitals, private hospitals/clinics and pharmacy/chemists in that order. Mostly they went on foot, sometimes by bus/van and *tonga* (Figure 9.2). Of the 268 respondents who indicated the time needed to go to the nearest facility, 31 percent reported 15 minutes or less, 35 percent reported 16 to 30 minutes and 34 percent reported more than 30 minutes; the maximum time was one hour (Figure 9.3).



Figure 9.2: Mode of transportation to the nearest facility/provider

Figure 9.3: Time taken to go to the nearest facility/provider





Intent to Use

Never users were asked about their intentions regarding contraceptive use in the future. Table 9.8 shows that 39 percent of the female respondents (430 out of 456 who believed they could get pregnant) intended to use some method. More women with 1-2 living children expressed their intent to use contraceptives in the future compared to the women with 5 or more children. Forty-five percent of the women refused to use contraceptives in the future; this is a matter of concern and needs some effective information, education and communication (IEC) strategy.

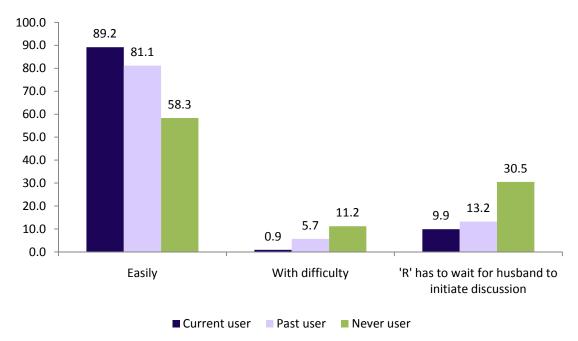
Table 9.8: Distribution of never users by intent to use a method in future and number of living children

	Intention to use FP method in future				Total		
Number of living children	Yes	No	Unsure/ ncertain	Can't get pregnant	%	N	
0	35.7	40.8	18.4	5.1	100.0	98	
1-2	43.2	48.0	8.1	0.7	100.0	148	
3-4	33.0	48.0	14.0	5.0	100.0	100	
5 or more	40.9	41.8	3.6	13.6	100.0	110	
Total	38.8	45.0	10.5	5.7	100.0	456	

Inter-spousal Communication

One of the determinants of contraceptive use is inter-spousal discussion on fertility intentions and family planning. Women were asked whether they could approach their husbands to discuss family planning easily, with difficulty, or if they had to wait for their husbands to initiate the discussion. Most women said they could do so easily (Figure 9.4). However, this varied by use status. Eighty-nine percent of the current users and 81 percent of the past users said they could approach their husbands easily; very few said they had to wait for their husband to initiate the discussion. However, for never users, only 58 percent reported being able to approach their husbands easily, and 11 percent reported that they could only do so with difficulty; another 30 percent said they had to wait for him to initiate the conversation.

Figure 9.4: Women's report regarding ease of approach to discuss with husband about family planning



Chapter 10

Unmet Need

"Unmet need" for family planning is a term long used to help focus attention in a family planning program on those who need it. Conceptually, unmet need refers to women who say they do not want more children, or want them later, and are at the risk of conceiving, but are not currently using contraceptives. Women currently pregnant or who are experiencing postpartum amenorrhea are said (in this formulation) to be in unmet need if their current (if pregnant) or last (if amenorrheic) pregnancy was said to be unwanted or mistimed. Women who want to delay their next pregnancy are said to be in unmet need of spacing; those who do not want more children at all are said to be in unmet need of limiting. Women in unmet need in this sense are those for whom there is an inconsistency between what they say they want and what they are doing; these women would appear to be in need of some support to avoid unwanted pregnancies.

Levels and Correlates

Table 10.1 shows the levels of unmet need for spacing and limiting among married women of reproductive age in Ghotki. Of the 673 MWRA, 35 percent were judged to be in unmet need. This proportion is slightly lower than is typically found using the same definition for Pakistan as a whole (NIPS/PDHS, 2008). The lower proportion may be a reflection of the relatively high contraceptive prevalence; higher levels of use may mean that more of the total demand for family planning is being met. This is supported by the relatively low levels of unmet need for women with 5 or more children, for whom contraceptive prevalence was particularly high.



 $\begin{tabular}{ll} \textbf{Table 10.1: Distribution of women with unmet need for spacing and limiting by background characteristics} \end{tabular}$

	τ	Jnmet need		I	Met need					
Background characteristic	For spacing	For limiting	Total	For spacing	For limiting	Total	Total demand	Not in Need	Total	N
Age of respondent										
15 - 24	30.4	2.4	32.8	5.8	1.0	6.8	39.6	60.4	100.0	207
25 - 34	16.7	13.0	29.7	5.9	10.0	15.9	45.6	54.4	100.0	239
35 – 49	3.5	38.8	42.3	1.8	24.2	26.0	68.3	31.7	100.0	227
Residence										
Rural	17.5	19.3	36.8	4.1	9.1	13.2	50.0	50.0	100.0	560
Urban	11.5	14.2	25.7	6.2	26.5	32.7	58.4	41.6	100.0	113
Literacy of respond	ent									
Literate	19.6	3.7	23.3	11.2	17.8	29.0	52.3	47.7	100.0	107
Illiterate	15.9	20.9	36.8	3.2	11.1	14.3	51.0	49.0	100.0	561
Education of respon	ident									
No education	15.6	21.2	36.8	3.3	11.2	14.5	51.3	48.7	100.0	552
Up to primary	20.6	4.4	25.0	8.8	14.7	23.5	48.5	51.5	100.0	68
Up to secondary	22.2	0.0	22.2	8.3	22.2	30.5	52.8	47.2	100.0	36
Above secondary	16.7	8.3	25.0	25.0	8.3	33.3	58.3	41.7	100.0	12
Number of Children	l									
0	3.4	0.0	3.4	0.0	0.0	0.0	3.4	96.6	100.0	87
1-2	30.3	3.6	33.9	6.7	1.2	7.9	41.8	58.2	100.0	165
3-4	29.3	13.5	42.8	9.0	10.5	19.5	62.4	37.6	100.0	133
5+	6.6	34.7	41.3	2.4	22.6	25.0	66.3	33.7	100.0	288
Ownership of TV										
Yes	14.0	17.0	31.0	5.0	15.5	20.5	51.5	48.5	100.0	400
No	20.1	20.5	40.6	3.7	7.0	10.7	51.3	48.7	100.0	273
Standard of living in	ndex									
Low	16.1	24.1	40.2	4.4	3.6	8.0	48.2	51.8	100.0	137
Medium low	18.5	19.0	37.5	3.1	8.2	11.3	48.7	51.3	100.0	195
Medium high	15.0	17.1	32.1	3.7	15.5	19.2	51.3	48.7	100.0	187
High	16.2	14.3	30.5	7.1	20.1	27.2	57.8	42.2	100.0	154
Total	16.5	18.4	34.9	4.5	12.0	16.5	51.4	48.6	100.0	673

Of the 35 percent of the women who had unmet need, 17 percent were for spacing and 18 percent for limiting. Unmet need for spacing was concentrated among younger women and women with one or two children. Unmet need for limiting, unsurprisingly, was highest among women with five or more children.

The correlations between unmet need and various socioeconomic indicators varied by whether the unmet need was for spacing or for limiting. Unmet need for limiting was strongly associated with SLI, literacy and residence of the women. Unmet need for spacing, on the other hand, also had a relationship with literacy and residence. Figure 10.1 shows the need and demand for family planning of the sampled women.

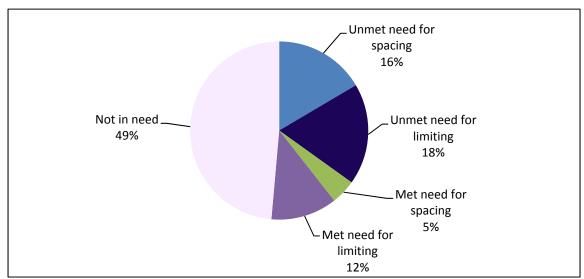


Figure 10.1: Need and demand for family planning

Total Demand

The sum of current use ("met need") and unmet need is often called "total demand" for family planning. Total demand would normally be expected to rise with the number of living children a couple has. Table 10.1 shows total demand by the background characteristics of the women. Overall, total demand was 51.4 percent of all married women of reproductive age. As the table shows, total demand did rise rapidly, and fairly consistently, by number of children.



Strength of Preference

It is of interest to look at the responses of women in unmet need (those not currently pregnant) according to their reaction if they became pregnant in the near future (Table 10.2). Forty-four percent of the women with unmet need for spacing said they would be worried if they became pregnant again; and 5 percent said they would be pleased. Of those with unmet need for limiting, 68 percent said they would be worried if they became pregnant; 28 percent would accept it and very few would be pleased if the pregnancy occurred (2 percent).

Table 10.2: Distribution of non-pregnant women with unmet need for spacing and limiting, by strength of desire to avoid pregnancy

	Unmet need	for spacing	Unmet need	Unmet need for limiting		
Reaction if become pregnant in near future	N	%	N	%		
Pleased	5	5.2	2	1.8		
Worried	42	43.8	78	68.4		
Accept it	48	50.0	32	28.1		
Doesn't matter	1	1.0	2	0.9		
Others	0	0.0	1	0.9		
Total	96	100.0	114	100.0		

Reasons for Non-use

Past and never users were asked why they were not using some method of contraception; the results are shown in Table 10.3. The most important reasons for non-use by past and never users were fear of side effects, opposition by husband and opposition by in-laws. On the other hand, many women with defined unmet need stated reasons that did not reflect perceived need, at least at present. Such reasons included: wanted more children, infrequent sex/husband away and natural spacing. Some of these women may have had more need than they realized; for example, women using "natural spacing" or breastfeeding may in fact be at substantial risk of pregnancy. Women currently pregnant or amenorrheic may be in need of contraception in the near future.

 $\begin{tabular}{ll} \textbf{Table 10.3: Women with unmet need for spacing and limiting by stated reasons for non-use of contraception} \end{tabular}$

Reason	Unmet need for spacing	Unmet need for limiting	Total unmet need
Fear of side effects	43.2	58.9	51.5
Husband opposes	21.6	30.6	26.4
In-laws oppose	13.5	14.5	14.0
Rest from method	1.8	1.6	1.7
Shy to consult about FP	6.3	5.6	6.0
Provider's advice	2.7	5.6	4.3
Against religion	3.6	4.8	4.3
Lack of access/unavailability	5.4	14.5	10.2
Cost not affordable	2.7	10.5	6.8
Just not using/too lazy	1.8	5.6	3.8
Method inconvenient to use	3.6	3.2	3.4
Infrequent sex/husband away	4.5	17.7	11.5
Natural spacing	5.4	16.1	11.1
Difficult/unable to conceive	6.3	4.8	5.5
Want (more) children	73.9	18.5	44.7
Currently pregnant	4.5	1.6	3.0
Breastfeeding/lactational amenorrhea	3.6	8.9	6.4
Others	4.5	11.3	8.1
N	111	124	235

Respondents could give more than one reason.



Unmet Need for Spacing: Profile

Women with unmet need for spacing comprised 111 (16.5 percent) of MWRA. As shown in Table 10.4, they were characterized by:

- **Living Children:** Most (55 percent) had 1 or 2 living children.
- **Family Planning Use:** More never users (80 percent) than past users (20 percent).
- **Strength of Preference:** Moderate (only 44 percent "worried" if they became pregnant earlier than they wanted compared to those who would be pleased (5 percent) or accepting (50 percent) of an unwanted pregnancy).
- **Intent to Use FP in Future:** Moderate (about 58 percent intended to use a FP method in future).
- **Approval of FP:** High (74 percent approved of using a FP method for spacing purpose).
- **FP Communication with Husband:** Limited (only 35 percent had communicated with husbands on FP in the past one year; 59 percent said approaching the husband was easy.
- **Obstacles to FP Use:** Fear of side effects (43 percent); opposition by husband or laws (22 percent and 14 percent respectively) (Table10.3).

Table 10.4: Percent distribution of MWRA in unmet need for spacing and limiting by selected characteristics

	Unmet need for spacing		Unmet for i	need limiting
Characteristics	N	%	N	%
Number of living children				
0	3	2.7	0	0.0
1-2	61	55.0	7	5.6
3-4	34	30.6	24	19.4
5 or more	13	11.7	93	75.0
Contraceptive use status				
Current user	0	0.0	0	0.0
Past user	22	19.8	35	28.2
Never user	89	80.2	89	71.8
Reactin if become pregnant in near future	9			
Pleased	5	5.2	2	1.8
Worried	42	43.8	78	68.4
Accept it	48	50.0	32	28.1
Doesn't matter	1	1.0	1	0.9
Others	0	0.0	1	0.9
Intention to use a method in future				
Yes	64	57.7	49	39.5
No	33	29.7	65	52.4
Unsure/Uncertain	14	12.6	5	4.0
Can't get pregnant	0	0.0	5	4.0
Approval of FP				
Approve	82	73.9	93	75.0
Disapprove	29	26.1	31	25.0
FP communication with husband in past of	one year			
Never	72	64.9	84	67.7
Once or twice	30	27.0	35	28.2
More often	9	8.1	5	4.0
Approach the topic of FP with husband				
Easily	65	58.6	84	67.7
With difficulty	10	9.0	13	10.5
Respondent has to wait for husband to initiate discussion	36	32.4	27	21.8
Total	111	100.0	124	100.0



Unmet Need for Limiting: Profile

Women with unmet need for limiting comprise 124 (18.4 percent) of MWRA. As shown in Table 10.4, they were characterized by:

- **Living Children:** A strongly positive association with number of living children; 75 percent had 5+ living children.
- **Family Planning Use:** More never users (72 percent) than past users (28 percent).
- **Strength of Preference:** High (68 percent would be "worried" if they became pregnant compared to those who would be pleased (2 percent) or accepting (28 percent) of an unwanted pregnancy).
- **Intent to Use FP in Future:** Moderate (about 40 percent intended to use a FP method in future).
- **Approval of FP:** High (75 percent approved of FP for limiting purpose).
- **FP Communication with Husband:** Limited (only 32 percent had communication with husband on FP in the past year; 68 percent said approaching the husband was easy).
- **Obstacles to FP Use:** Fear of side effects (59 percent); opposition of husbands and in-laws (31 percent and 15 percent respectively); and lack of access/unavailability of FP contraceptives (15 percent) (Table 10.3).

Chapter 11

Reproductive Preferences and Behavior of Men

It is often the case that in matters relating to family planning the focus has too often been more on women, despite the fact that husbands are equal partners in the reproductive process and often have greater responsibility for decision-making in the family. In addition, women often mention their husbands as a constraint to the use of contraception (NIPS/PDHS, 2008; Population Council, 1995). The objectives of interviewing husbands/men in the FALAH baseline survey were to explore their perspectives on birth spacing/family planning and to use the information obtained to design the communication strategy for the FALAH project. Overall, the planned sample size was 200 husbands in each district The intention was to interview as many husbands as possible who were available when the household interviews were undertaken. Knowing that some number of husbands might be at their places of work during the timing of the interviews, the plan was to then make up for any of the husbands who were unavailable, by interviewing other married men available in the selected communities in order to come as close as possible to meeting the objective of interviewing 200 husbands/men in each FALAH district. In Ghotki, the field team was able to interview 177 men who were husbands of the married women of reproductive age who had been interviewed for the survey plus 21 married men living in selected areas who were not husbands of the female respondents. In this chapter, the results for the respondents' husbands and the other married men who were interviewed (N = 198) are always grouped together, whether the reference is to "men," "male respondents," "married men," or "husbands."

A husband's approval of family planning is a powerful factor in explaining contraceptive use (Tawiah, 1997). In families, fertility decisions occur within specific social contexts and according to prevailing social norms that restrict individual decisions on fertility and behaviors related to spacing of births, stopping childbearing and using contraception.



Earlier studies suggest that the husband's approval of and discussion about family planning are important predictors of a woman's contraceptive use and fertility desire (Bongaarts and Bruce, 1995; Mahmood and Ringheim, 1997).

This baseline survey investigates social and demographic differentials, and knowledge, ever use and current use of family planning methods. It also explores how approval and discussion of birth spacing/family planning influence the use of contraceptive methods. Traditionally, the measurement of contraceptive use has been based on women's self-reports of current use. The rationale for interviewing men was to investigate their perspective on issues of fertility and family planning.

Background Characteristics

Table 11.1 shows the background characteristics of the men interviewed in the survey. It shows that more than 18 percent of the men were under 25 years of age and 10 percent were 50 years of age and above.

Men were substantially better educated than the sampled currently married women of reproductive age. Thirty-five percent of the men had not been to school compared to 83 percent of the currently married women (Table 3.2). It also shows that 41 percent of the men had more than primary education, whereas 7 percent of the currently married women had attained that level of education (Table 3.2). Eighty-three percent of the urban men had received some schooling compared to 61 percent of the rural men.

The occupations of men are also presented in Table 11.1. The highest proportion (38 percent) of men were working in agriculture-related activities; 24 percent were working as daily laborers; 8 percent were running their own business.

Table 11.1: Background characteristics of male respondents by residence

Characteristics	Rural	Urban	Total
Age			
15-19	4.3	0.0	3.5
20-24	16.0	8.6	14.6
25-29	17.8	17.1	17.7
30-34	11.7	25.7	14.1
35-39	14.7	20.0	15.7
40-44	13.5	17.1	14.1
45-49	12.9	0.0	10.6
50-54	6.1	8.6	6.6
55+	3.1	2.9	3.0
Education			
Proportion literate	56.4	80.0	60.6
No education	38.7	17.1	34.8
Up to primary	24.5	22.9	24.2
Up to Secondary	20.9	37.1	23.7
Above secondary	16.0	22.9	17.2
Occupation			
Agriculture/Livestock/Poultry	45.4	5.7	38.4
Labor	21.5	34.3	23.7
Govt. service	12.3	25.7	14.6
Pvt. service	8.0	11.4	8.6
Own business	4.9	22.9	8.1
Unemployed	6.1	0.0	5.1
Others	1.8	0.0	1.5
N	163	35	198

Contraceptive Knowledge and Use

More than 96 percent of the interviewed men in Ghotki knew of at least one modern method of contraception. As presented in Table 11.2, knowledge of modern methods was highest for injectables and the pill (88 percent for both) followed by female sterilization (87 percent). The least known methods were male sterilization (28 percent), Norplant (29 percent) and IUD (49 percent). Knowledge of at least one traditional method was prevalent among 57 percent of the men. Nearly 98 percent of the currently married women of



reproductive age interviewed in Ghotki also knew at least one contraceptive method (Table 7.1).

The pattern of ever use and current use of contraception reported by husbands is also shown in Table 11.2. Thirty-two percent of the MWRA reported having used some method of contraception during their married lives (Table 7.2); of the male respondents, 35 percent reported ever using some method of contraception in their married lives. For modern methods, the men reported that the pill was the most popular ever used (14 percent), followed by injectables (12 percent) and condom (10 percent). Although 7 percent of men living in rural areas reported ever use of condoms, surprisingly, none of them reported current use of this method.

Table 11.2: Distribution of male respondents by contraceptive knowledge, use status and residence

Rural	Huban				Ever use			Current use		
	Urban	Total	Rural	Urban	Total	Rural	Urban	Total		
84.0	100.0	86.9	4.9	8.6	5.6	4.9	8.6	5.6		
24.5	42.9	27.8	0.0	0.0	0.0	0.0	0.0	0.0		
85.9	100.0	88.4	12.3	22.9	14.1	2.5	5.7	3.0		
44.4	71.4	49.2	2.5	11.4	4.0	0.6	5.7	1.5		
87.7	91.4	88.4	9.8	22.9	12.1	2.5	5.7	3.0		
24.5	48.6	28.8	0.0	0.0	0.0	0.0	0.0	0.0		
80.4	97.1	83.3	6.7	22.9	9.6	0.0	5.7	1.0		
28.8	40.0	30.8	9.2	11.4	9.6	1.2	5.7	2.0		
43.6	76.5	49.2	3.1	5.7	3.5	0.0	0.0	0.0		
95.7	100.0	96.5	28.2	65.7	34.8	11.7	37.1	16.2		
95.7	100.0	96.5	25.2	60.0	31.3	10.4	31.4	14.1		
51.5	80.0	56.6	9.8	17.1	11.1	1.2	5.7	2.0		
10.4	20.0	12.1	1.2	0.0	1.0	na	na	na		
163	35	198	163	35	198	163	35	198		
	84.0 24.5 85.9 44.4 87.7 24.5 80.4 28.8 43.6 95.7 95.7 51.5 10.4	84.0 100.0 24.5 42.9 85.9 100.0 44.4 71.4 87.7 91.4 24.5 48.6 80.4 97.1 28.8 40.0 43.6 76.5 95.7 100.0 95.7 100.0 51.5 80.0 10.4 20.0	84.0 100.0 86.9 24.5 42.9 27.8 85.9 100.0 88.4 44.4 71.4 49.2 87.7 91.4 88.4 24.5 48.6 28.8 80.4 97.1 83.3 28.8 40.0 30.8 43.6 76.5 49.2 95.7 100.0 96.5 95.7 100.0 96.5 51.5 80.0 56.6 10.4 20.0 12.1	84.0 100.0 86.9 4.9 24.5 42.9 27.8 0.0 85.9 100.0 88.4 12.3 44.4 71.4 49.2 2.5 87.7 91.4 88.4 9.8 24.5 48.6 28.8 0.0 80.4 97.1 83.3 6.7 28.8 40.0 30.8 9.2 43.6 76.5 49.2 3.1 95.7 100.0 96.5 28.2 95.7 100.0 96.5 25.2 51.5 80.0 56.6 9.8 10.4 20.0 12.1 1.2	84.0 100.0 86.9 4.9 8.6 24.5 42.9 27.8 0.0 0.0 85.9 100.0 88.4 12.3 22.9 44.4 71.4 49.2 2.5 11.4 87.7 91.4 88.4 9.8 22.9 24.5 48.6 28.8 0.0 0.0 80.4 97.1 83.3 6.7 22.9 28.8 40.0 30.8 9.2 11.4 43.6 76.5 49.2 3.1 5.7 95.7 100.0 96.5 28.2 65.7 95.7 100.0 96.5 25.2 60.0 51.5 80.0 56.6 9.8 17.1 10.4 20.0 12.1 1.2 0.0	84.0 100.0 86.9 4.9 8.6 5.6 24.5 42.9 27.8 0.0 0.0 0.0 85.9 100.0 88.4 12.3 22.9 14.1 44.4 71.4 49.2 2.5 11.4 4.0 87.7 91.4 88.4 9.8 22.9 12.1 24.5 48.6 28.8 0.0 0.0 0.0 80.4 97.1 83.3 6.7 22.9 9.6 28.8 40.0 30.8 9.2 11.4 9.6 43.6 76.5 49.2 3.1 5.7 3.5 95.7 100.0 96.5 28.2 65.7 34.8 95.7 100.0 96.5 25.2 60.0 31.3 51.5 80.0 56.6 9.8 17.1 11.1 10.4 20.0 12.1 1.2 0.0 1.0	84.0 100.0 86.9 4.9 8.6 5.6 4.9 24.5 42.9 27.8 0.0 0.0 0.0 0.0 85.9 100.0 88.4 12.3 22.9 14.1 2.5 44.4 71.4 49.2 2.5 11.4 4.0 0.6 87.7 91.4 88.4 9.8 22.9 12.1 2.5 24.5 48.6 28.8 0.0 0.0 0.0 0.0 80.4 97.1 83.3 6.7 22.9 9.6 0.0 28.8 40.0 30.8 9.2 11.4 9.6 1.2 43.6 76.5 49.2 3.1 5.7 3.5 0.0 95.7 100.0 96.5 28.2 65.7 34.8 11.7 95.7 100.0 96.5 25.2 60.0 31.3 10.4 51.5 80.0 56.6 9.8 17.1 11.1 1.2 10.4 20.0 12.1 1.2 0.0 1.0 na <td>84.0 100.0 86.9 4.9 8.6 5.6 4.9 8.6 24.5 42.9 27.8 0.0 0.0 0.0 0.0 0.0 85.9 100.0 88.4 12.3 22.9 14.1 2.5 5.7 44.4 71.4 49.2 2.5 11.4 4.0 0.6 5.7 87.7 91.4 88.4 9.8 22.9 12.1 2.5 5.7 24.5 48.6 28.8 0.0 0.0 0.0 0.0 0.0 80.4 97.1 83.3 6.7 22.9 9.6 0.0 5.7 28.8 40.0 30.8 9.2 11.4 9.6 1.2 5.7 43.6 76.5 49.2 3.1 5.7 3.5 0.0 0.0 95.7 100.0 96.5 28.2 65.7 34.8 11.7 37.1 95.7 100.0 96.5 25.2 60.0 31.3 10.4 31.4 51.5 80.0 56.6 9.8</td>	84.0 100.0 86.9 4.9 8.6 5.6 4.9 8.6 24.5 42.9 27.8 0.0 0.0 0.0 0.0 0.0 85.9 100.0 88.4 12.3 22.9 14.1 2.5 5.7 44.4 71.4 49.2 2.5 11.4 4.0 0.6 5.7 87.7 91.4 88.4 9.8 22.9 12.1 2.5 5.7 24.5 48.6 28.8 0.0 0.0 0.0 0.0 0.0 80.4 97.1 83.3 6.7 22.9 9.6 0.0 5.7 28.8 40.0 30.8 9.2 11.4 9.6 1.2 5.7 43.6 76.5 49.2 3.1 5.7 3.5 0.0 0.0 95.7 100.0 96.5 28.2 65.7 34.8 11.7 37.1 95.7 100.0 96.5 25.2 60.0 31.3 10.4 31.4 51.5 80.0 56.6 9.8		

na=not applicable

As mentioned in Chapter 7, a total of 16 percent of all MWRA in the sample were currently using some method of contraception; interestingly, for the male respondents this figure is also 16 percent. The most common current modern method reported by male respondents was female sterilization (5.6 percent), followed by pill and injectables (3 percent each). The use of traditional methods was reported by only 2 percent of the current users. Since

traditional methods are far less reliable than modern methods, an important goal of the FALAH project may be to shift users of traditional methods to more effective modern methods. Although more than 12 percent of the respondents knew about the emergency contraceptive pill, only 1 percent of the men reported ever using it.

Table 11.3 shows ever use and current use of modern contraception among respondents by background characteristics. A higher proportion of urban men were currently using a family planning method compared to rural men. More than 47 percent of the respondents who had secondary and above education reported ever use of any contraceptive method, compared to 16 percent with no education. The current use of family planning also showed the same pattern by education of men.

Table 11.3: Percentage of male respondents reporting ever use or current use of a contraceptive method, by selected background characteristics

	Ever used at least one FP	Currently using any	
Characteristic	method	FP method	N
Residence			
Rural	28.2	11.7	163
Urban	65.7	37.1	35
Education level			
No education	15.9	5.8	69
Below secondary	42.2	20.3	64
Secondary and above	47.7	23.1	65
Number of living children			
None	0.0	0.0	18
1-2	26.7	6.7	60
3-4	31.7	14.6	41
5+	50.6	27.8	79
Future desire for children			
Soon	6.2	0.0	65
Later	30.3	9.1	33
Never	56.1	29.6	98
Don't know/unsure	0.0	0.0	2
Total	34.8	16.2	198

Table 11.3 also shows a positive relationship between the number of living children and ever use as well as current use. Of those who had more than 4 children, 51 percent reported ever use of family planning methods compared to 32 percent who had 3-4 children and 27



percent who had 1-2 children. The same relationship was observed between number of living children and current use of contraceptive methods.

Table 11.3 also shows contraceptive ever use and current use by future desire for children. Highest ever use was found among the male respondents who said they did not want any more children: 56 percent of those respondents who wanted no more children had ever used any contraceptive method, and 30 percent were currently using a form of contraception. Among those men who wanted to delay their next child for at least two years, only 9 percent reported current use of any contraceptive method.

Source of Contraceptive Methods

As shown in Table 11.4, among those who reported the last source for obtaining contraceptive methods, 39 percent obtained it from a private hospital/clinic and 18 percent reported getting it from a "pharmacy/ chemist." Government hospitals were reported by 7 percent of the ever users. More than 10 percent of the male respondents said that LHWs were the source of contraceptives for them.

Table 11.4: Distribution of male ever users by the last reported source of contraceptive supply and residence

Source	Rural	Urban	Total
Govt. hospital (DHQ/THQ)	11.1	0.0	7.1
BHU/RHC/MCH center	5.6	0.0	3.6
FWC	2.8	0.0	1.8
LHW	13.9	5.0	10.7
Pvt. doctor	16.7	10.0	14.3
Pvt. hospital/clinic	30.6	55.0	39.3
Dispenser/compounder	2.8	0.0	1.8
Pharmacy, chemist	13.9	25.0	17.9
TBA/dai	2.8	0.0	1.8
Grocery shop/general store	0.0	5.0	1.8
Total	100.0	100.0	100.0
N	36	20	56

Approval of Family Planning

Respondents were asked about their approval of birth spacing and use of any form of contraception for spacing purpose. A husband's opposition may prevent his wife from using contraception, even when she wants to delay or stop childbearing (Casterline et al., 1997). In Ghotki, 90 percent of the men approved of spacing between children and 89 percent also approved of the use of any form of contraception for this purpose (Table 11.5). Eleven percent of the men disapproved of using any form of contraception to space between children.

Table 11.5: Distribution of male respondents' attitude towards spacing and use of contraceptives for spacing, by residence

Variable	Rural	Urban	Total
Spacing between children			
Approve	90.2	88.6	89.9
Disapprove	9.8	11.4	10.1
Total	100.0	100.0	100.0
N	163	35	198
Using family planning methods for spacing			
Approve	89.0	88.6	88.9
Disapprove	10.4	11.4	10.6
Others	0.6	0.0	0.5
Total	100.0	100.0	100.0
N	163	35	198

Satisfaction Level of Current Users

Satisfaction of the user with his/her contraceptive method is an important factor in whether or not they continue with the method. Male contraceptive users were asked to report how satisfied they were with their present contraceptive method. Table 11.6 shows that 96 percent of current users were very satisfied with their current method; just 4 percent of current users reported being somewhat satisfied with their current method. These users would seem to be in need of more information on their current method as well as on other available methods so that they continue using a family planning method.



Table 11.6: Level of male respondents' satisfaction with their current method

Satisfaction	Percent
Very satisfied	96.4
Somewhat satisfied	3.6
Total	100.0
N	28

The reasons why male respondents stopped using their last contraceptive method are presented in Table 11.7. The table shows that wanting another child was the main reason for stopping the use of a family planning method. However, 16 percent of male past users discontinued use because of side effects the couple experienced with their method. More than 10 percent of the past users stopped using a contraceptive due to method failure. This contraceptive failure may have occurred among those who were relying on natural methods. There were also some cases where the wife opposed the use of a contraceptive method (11 percent)

Table 11.7: Percentage distribution of male past contraceptive users by reason for discontinuing last method

Reason	Percent
Lack of access/unavailability	10.8
Cost not affordable	8.1
Experienced side effects	16.2
Fear of side effects	13.5
Want another child	64.9
Method failure	10.8
Method inconvenient to use	16.2
Rest from method	37.8
Health concern	10.8
Service provider's advice	2.7
Infrequent sex/respondent away	2.7
Wife opposes	10.8
In-laws/parents oppose	2.7
N	37

Respondents could give more than one reason.

Inter-spousal Communication

One of the determinants of contraceptive use is inter-spousal discussion on fertility intentions and family planning. Husbands were asked if during the last year their wives could approach them to discuss family planning easily, with difficulty, or if they had to wait for them to initiate the discussion; the responses are shown in Figure 11.1. Eighty-six percent of the men reported that their wives could talk to them about family planning and fertility-related issues easily. However, 59 percent of the men reported that their wives had never approached them during the last year on this issue. Nineteen percent of the men reported that their wives had talked often about this subject during the last year, while 22 percent reported they had talked once or twice.

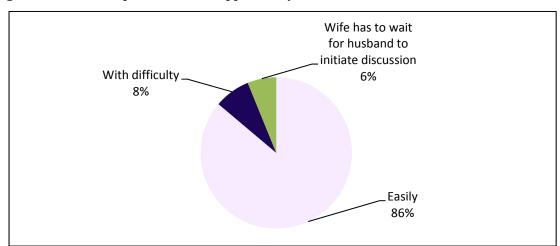
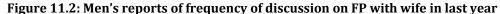
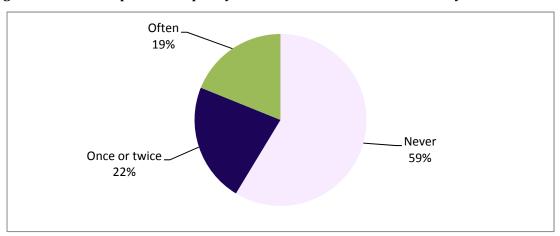


Figure 11.1: Men's reports of ease of approach by their wives to discuss FP







Potential Users

Men who were non-users of contraception were asked about their intended future use of contraception and their method preferences. Table 11.7 shows that 40 percent intended to use contraception in the future, while 30 percent did not intend to do so. The other 30 percent of the respondents were uncertain about their future use of a contraceptive method.

Table 11.8: Distribution of male never users by intent to use contraceptive methods in future

Intent	Percent
Will use	40.3
Will not use	30.2
Unsure/uncertain	29.5
Total	100.0
N	129

As shown in Table 11.9, the main reason husbands said they did not intend to use contraception was that their wives were unable to conceive (26 percent). The desire for more children was cited by 59 percent of the husbands; for 15 percent, fear of side effects was the reason for not using a contraceptive method. It is pertinent to mention that 31 percent of the respondents reported that their wife opposed to the use of contraception.

Table 11.9: Distribution of male never users according to reasons for not intending to use contraceptive methods in future

Reason	Percent
Wife opposes	30.8
In-laws/parents oppose	15.4
Fear of side effects	15.4
Lack of access/unavailability	17.9
Cost too much	23.1
Shy to go to FP clinic	15.4
Inconvenient to use	2.6
Infrequent sex/respondent away	0.0
Difficult/unable to conceive	25.6
Breast feeding/ lactational amenorrhea	12.8
Respondent/wife infertile	5.1
Want more children	59.0
N	39
N	39

Respondents could give more than one reason.

Table 11.10 shows the distribution of the male respondents who intended to use a specific contraceptive method in the future. Injectables were the most preferred method for future use followed by female sterilization; condoms were the least preferred method.

Table 11.10: Distribution of male never users who intend to use specific contraceptive methods in the future

Method	Percent
Female sterilization	30.8
Pills	15.4
IUD	5.8
Injectable	40.4
Condom	1.9
Rhythm	1.9
Others	3.8
Total	100.0
N	52

Fertility Desire

Men were asked about the number of their living children and their desire for more children. Table 11.11 shows that more than 32 percent of the respondents wanted another child soon (within two years). Another 17 percent wanted to delay their next child for more than two years. The largest proportion of respondents (50 percent) did not want any more children at all.

Table 11.11: Distribution of male respondents by desired timing for next child and number of living children

Number of	Desire for next child			child Total		al
living children	Soon	Later	Never	Don't know/ unsure	%	N
0	77.8	16.7	0.0	5.6	100.0	18
1	55.6	33.3	11.1	0.0	100.0	27
2	39.4	36.4	21.2	3.0	100.0	33
3	37.5	16.7	45.8	0.0	100.0	24
4	23.5	5.9	70.6	0.0	100.0	17
5+	12.6	5.1	82.3	0.0	100.0	79
Total	32.8	16.7	49.5	1.0	100.0	198



The desire to stop having children was positively associated with the number of living children. Twenty-one percent of the respondents who had 2 children did not want more children, whereas more than 82 percent who had 5 or more children did not want more children.

Mass Media Access and Exposure to FP Messages

For the development of communication activities, it is important to know which forms of mass media are available and to what extent they are used by various segments of the population. Figure 11.3 shows the proportion of men who reported that they watched TV, listened to the radio, or read newspapers or magazines. TV and print media were the most commonly accessed mediums: 67 percent of the male respondents in Ghotki watched TV and 53 percent of them reported access to print media.

Furthermore, respondents who reported access to any sort of media were asked if they had ever seen, heard or read any message pertaining to methods of family planning through these mediums. Forty-eight percent of the men had seen FP messages on television. Overall, 57 percent of the male respondents and 53 percent of the MWRA had seen or heard a family planning message on at least one medium. Twelve percent of the men reported that they had ever listened to a family planning message on the radio.

100.0 89.4 80.0 66.7 56.6 53.0 60.0 47.5 36.9 40.0 15.2 12.1 20.0 0.0 TV Radio Print media At least one media

Exposure to FP messages

Figure 11.3: Distribution of male respondents according to exposure to media and FP messages, by type of media

■ Expoure to media

References

- Adair, L., B. Popkin and D. Guilkey. 1994. *The duration of breastfeeding: How is it affected by biological, socioeconomic, health sector, and food industry factors?* Demography 30(1): 63.
- Bohiler, E. and S. Bergstrom. 1995. *Subsequent pregnancy affects morbidity of previous child.* Journal of Biosocial Science 27(4): 431-442. Oct. 1995.
- Bongaarts, J. and J. Bruce. 1995. *The Causes of Unmet Need for Contraception and the Social Content of Services.* Studies in Family Planning 26(2): 57-75.
- Caldwell, J.C. 1976. *Toward a Restatement of Demographic Transition Theory*. Population and Development Review 2(3-4): 321-366.
- Casterline, J.B., A.E. Perez and A.E. Biddlecom. 1997. *Factors Underlying Unmet Need in the Philippines*. Studies in Family Planning 28(3): 173-191.
- Casterline, J.B., Z. Sathar and M. ul Haque. 2001. *Obstacles to Contraceptive Use in Pakistan: A Study in Punjab*. Studies in Family Planning 32(2): 95-110.
- Cleland, J. and Z. Sathar. 1984. *The Effect of Birth Spacing on Childhood Mortality in Pakistan*. Population Studies, Vol. 38, No. 3 (Nov., 1984), pp. 401-418.
- Fuentes-Affelick, E. and N.A. Hessol. 2000. *Interpregnancy interval and the risk of premature infants*. Obstetrics and Gynecology 95(3): 383-390. Mar. 2000.
- Garner, P., T. Smith, M. Baea, D. Lai and P. Heywood. 1994. *Maternal nutritional depletion in a rural area of Papua New Guinea*. Tropical and Geographical Medicine 46(3): 169-171. 1994.
- Government of Pakistan. 2005. *Pakistan Social and Living Standards Measurement Survey 2004-05: National/Provincial.* Islamabad: Federal Bureau of Statistics.
- Government of Pakistan. 2006. *Pakistan Social and Living Standards Measurement Survey* 2004-05: Provincial/District. Islamabad: Federal Bureau of Statistics.
- Mahmood, Arshad. 2002. *Determinants of Neonatal and Post-Neonatal Mortality in Pakistan*. The Pakistan Development Review, Vol. 41, No. 4, Part (Winter 2002), pp.723-744.



- Mahmood, N. and K. Ringheim. 1997. *Knowledge, Approval and Communication about Family Planning as Correlates of Desired Fertility among Spouses in Pakistan*. International Family Planning Perspectives 23(3): 122-129, 145.
- Miller, J.E. 1994. *Birth Order, Interpregnancy Interval and Birth Outcomes among Filipino Infants.* Journal of Biosocial Science 26(2): 243-259. Apr. 1994.
- NIPS (National Institute of Population Studies). 2001. *Pakistan Reproductive Health and Family Planning Survey 2000-01.* Islamabad.
- NIPS (National Institute of Population Studies). 2007. Status of Women, Reproductive Health and Family Planning Survey: Main Report. Islamabad.
- NIPS/DHS (National Institute of Population Studies and MEASURE DHS, Macro International). 2007. *Pakistan Demographic and Health Survey 2006-07: Preliminary Report.* Calverton, Maryland: Macro International Inc.
- Planning Commission of Pakistan. 2006. *Pakistan Millennium Development Goals Report* 2006. Islamabad: Center for Research on Poverty and Income Distribution.
- Population Census Organization. 2000. *District Census Report of Ghotki.* Islamabad: Statistics Division Government of Pakistan.
- Population Council. 1997. *The Gap between Reproductive Intentions and Behavior: A Study of Punjab Men and Women.* Islamabad: Population Council.
- Population Council. 2006. Women's Health in Pakistan 2005. Islamabad: Population Council. Unpublished.
- Population Council. 2007. *Diversification of Family Planning Activities in Pakistan (DFPAP):*Performance Monitoring Plan. Islamabad: Population Council. Unpublished.
- Population Council. 2008. *Communication, Advocacy and Mobilization (CAM) Strategy for the FALAH Project: A Draft Strategy.* Islamabad: Population Council. Unpublished.
- Rutstein, S.O. and K. Johnson. 2004. *The DHS Wealth Index*. DHS Comparative Report No. 6. Calverton, Maryland, USA: ORC Macro.
- Tawiah, E.O. 1997. *Factors Affecting Contraceptive Use in Ghana*. Journal of Biosocial Science 29(2): 141-149.
- UNDP (United Nations Development Program). 2003. *Pakistan National Human Development Report 2003.* Karachi.

- UNFPA/PC (United Nations Population Fund and Population Council). 2007. *Report of the Seminar on Unpacking Unmet Need for Family Planning in Pakistan.* Islamabad: The Population Council.
- United Nations. 2006. *Millennium Development Goals Report 2006*. New York: United Nations Department of Economic and Social Affairs.
- Westoff C. F. and A. Bankole A. 1999. *Mass Media and Reproductive Behavior in Pakistan, India, and Bangladesh.* Demographic and Health Surveys Analytic Reports No.10. Calverton, Maryland: Macro International Inc.
- WHO (World Health Organization). 2006. *Policy Brief on Birth Spacing Report from a World Health Organization Technical Consultation*. WHO Department of Reproductive Health and Research and Department of Making Pregnancy Safe.
- Zhu, B.P., R.T. Rolfs, B.E. Nangle and J.M. Horan. 1999. *Effect of the Interval between Pregnancies on Perinatal Outcomes*. New England Journal of Medicine 340(8): 589-594. Feb 25, 1999.