



**The Transitional Islamic State of Afghanistan  
Ministry of Health**

**National Reproductive Health Survey  
2003**

**FINAL REPORT**

**June 2004**



**This Reproductive Health KAP survey was made possible through support provided by the U.S. Agency for International Development Mission to Afghanistan, under the terms of Award No. 306-A-00-04-00508-00. The opinions expressed herein are those of the author(s) and do not necessarily reflect the views of the U.S. Agency for International Development.”**

## **Acknowledgments**

This research was funded by the United States Agency for International Development (USAID) Contract No. EEE-C-00-03-00015-00 “Rural Expansion of Afghanistan’s Community-based Healthcare (REACH)” with Management Sciences for Health (MSH) under the auspices of the Ministry of Health (MOH). MOH were instrumental in authorizing fieldwork in the seven provinces this survey covered, and also facilitated data collection by providing provincial and district assistance and support. We thank the Ministry for its ongoing support for this and other activities undertaken by the social marketing program in Afghanistan. Furthermore, PSI would like to take this opportunity to thank WHO for collaborating on this survey and for offering technical assistance at various stages, and to Homaira Hanif for her work during the early stages of the project. Also we want to thank IbnSina for their collaboration in Paktya.

Data collection was contracted to the Bakhtar Development Foundation (BDF) under the coordination of PSI Research Manager Eng. Sarwar. Key personnel for the project were as follows:

Research Officer: Dr. Mirwais,

Country Manager: Eng. Farid Faeiq

Project Managers: Mr. Bayangar

Fieldwork Supervisors: Dr. Khaled, Meena, Eng. Zarafsahan, Hamesha Gul and Sher Zaman

Data collectors: Benefsha, Farid, Abdul Qahar, Wagemma, Sayed Sajad, Rahima, Abdul Aziz, Shilla, Abdul Azim, Qamar Sultan, Khaled, Samira, Shukrullah, Fazella, Mir Rafiuddin and Aiziza

Quality Control: Ahmad Sameer

Data Inputting: Mohammad Sadiq, Hameed Abdullah, Nek Mohammad, Mohammad Yaqoob, and Wahid Hedayatullah

MSH was responsible for data entry of all survey results. Both the speed and the quality of their work are greatly appreciated.

Thanks also to Kimberly Warren and Sarah Vendt for data analysis assistance and table production, to our colleagues at REACH and MSH (especially Dr. Laurence Laumonier-Ickx) and to Lorri Anne Carroza for their helpful comments on an earlier version of this report.

**Kerry Richter**  
**PSI/Washington**

**Robb Butler**  
**Euro Health Group**

**Sarwar Mohammad**  
**PSI/Afghanistan**

**Steven Chapman**  
**PSI/Washington**

## **Acronym List**

AIMS	Afghanistan Information Management System
AHDS	Afghanistan Health Development Services
BCC	Behavior Change Communications
BDF	Bakhtar Development Foundation
BS	Birth Spacing
DHS	Demographic and Health Survey
FHI	Family Health International
IC	Injectable Contraceptives
ICRH	International Committee for Reproductive Health
IUD	Intrauterine Device
KAP	Knowledge, Attitudes and Practices Survey
MOH	Ministry of Health
MSH	Management Sciences for Health
OC	Oral Contraceptives
PSI	Population Services International
PSU	Primary Sampling Unit
REACH	Rural Expansion of Afghanistan's Community-Based Healthcare
UNFPA	United Nations Population Fund
USAID	United States Agency for International Development
WHO	World Health Organization

## Table of Contents

Acknowledgments .....	i
Acronym List .....	iv
Table of Contents.....	v
Tables and Figures .....	vii
Introduction .....	1
Objectives of the Research .....	2
Previous Research on Reproductive Health in Afghanistan .....	3
The 2003 National Reproductive Health Survey: Objectives and Methods .....	6
Sampling.....	6
Sample size .....	7
Sample selection .....	8
Fieldwork strategy .....	9
Personnel .....	10
Training .....	10
Logistics & Security.....	10
Quality Control.....	11
Data Entry and Weighting .....	11
Key Findings .....	11
Sociodemographic characteristics of the sample.....	11
Current use of a modern birth spacing method .....	14
Barriers to Family Planning Use .....	16
Opportunity .....	19
Ability .....	20
Motivation .....	21
Segmentation Analysis: Factors Affecting Unmet Need .....	22
Unmet Need .....	22
Conclusions and Recommendations.....	28
References.....	29
Appendix 1: Male and Female Questionnaires .....	1
Appendix 2: List of Sampled Districts.....	31

Detailed Tables for KAP Survey Data is Available upon Request from PSI.....

## **Tables and Figures**

Figure 1: PSI's Behavior Change Framework for Family Planning .....	3
Table 1: Comparison of MICS and PSI Surveys on Knowledge and Use of Birth Spacing (in percents) .....	4
Table 2: Number of Cases by Sex, Urban Status and Province .....	9
Table 3: Sociodemographic characteristics of the sample by sex and urban status (in percents) .....	12
Table 4: Current Use of a Modern Birth Spacing Method by Sociodemographic Characteristics and Sex (in percents) .....	15
Table 5: Reproductive Behavior Change Determinants by Sex (in percents).....	16
Table 6: Reproductive Behavior Change Determinants by Urban Status (in percents)	18
Table 7: Barriers to Birth Spacing Use by Need Status .....	23
Table 8: Unmet Need by Sociodemographic Characteristics (in percents) .....	26

## **Introduction**

The Transitional Islamic State of Afghanistan is a landlocked country of approximately 28 million people. One of the most impoverished countries in the world, Afghanistan has been profoundly affected by twenty-three years of war. Water, energy, communications and transportation infrastructures have been neglected, degraded, and destroyed. Health and education infrastructures, never well developed, have also deteriorated. The life expectancy for Afghans is 46 years and over half of the population is under 15 years of age. Illiteracy is remarkably high with 54% of men and 85% of women (above 15 years of age) being unable to read. Despite current reconstruction efforts, the majority of the population continues to suffer from insufficient food, clothing, housing, and medical care, and a dearth of jobs, problems exacerbated by political uncertainties and the general level of lawlessness (Their et al., 2003).

Pregnancy, labor and delivery are major killers of Afghan women and directly contribute to one of the lowest female life expectancy rates in the world (47 years). An alarming 1 in 15 Afghan women die of maternal causes during their reproductive years. Compare this to 1:13,000 in the United States and the seriousness of the problem is underlined.

Improvement of reproductive health care is not an easy objective in Afghanistan. For any initiative in the reproductive health (RH) sector, a socially integrated and culturally well-accepted approach is essential. Under the Taliban, contraceptives were banned, and cultural and religious barriers to the use of contraceptives remain strong. Anecdotal evidence suggests that two years after the Taliban collapse, there are still vestiges of the strong opposition that existed to contraception.

In July 2002, Population Services International (PSI) launched an integrated program to promote maternal and child health, reproductive health and family welfare in Afghanistan. With funding from USAID and the William and Melinda Gates Foundation, PSI/Afghanistan social markets contraceptives (condoms, oral contraceptives and injectable contraceptives), oral rehydration therapy, insecticide-treated bed nets, and safe water systems. The reproductive health

program includes implementation of a health education and behavior change communications campaign that will promote the benefits of family planning, advertise the availability of contraceptive products, and increase the use of commercial, NGO, public sector, and social marketed contraceptives in Afghanistan.

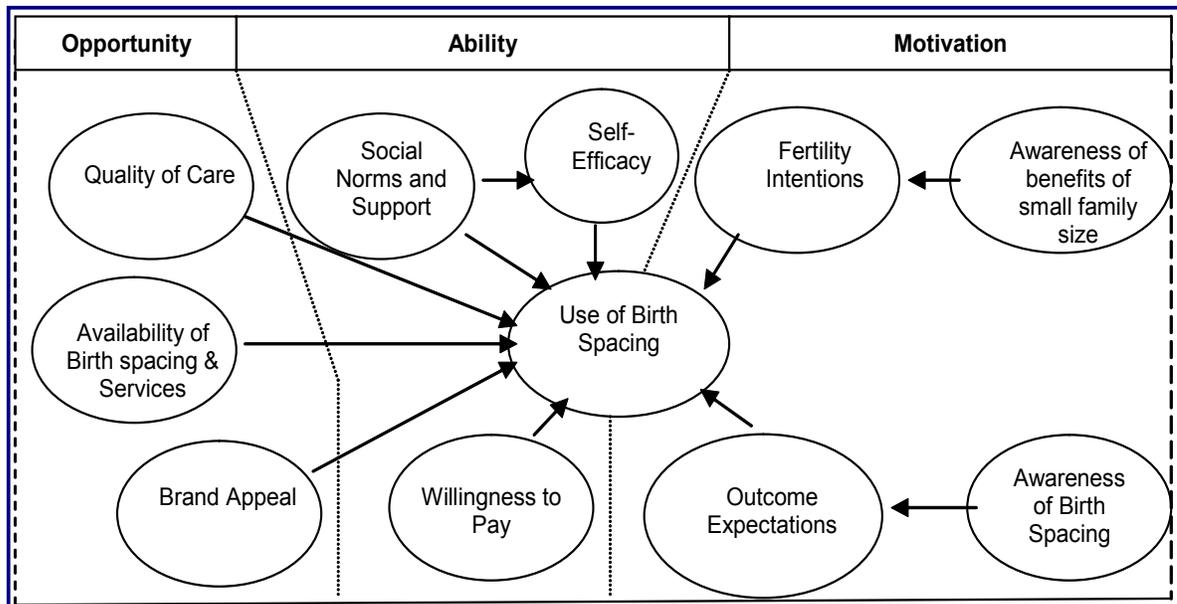
### **Objectives of the Research**

The research agenda for PSI's reproductive health project focuses primarily on the measurement of knowledge, attitudes and practices, and the extent to which these change over the project period. In general terms, PSI's research investigates the conceptual determinants of behavior change and measures the prevalence of behavioral outcomes and determinants, including exposure to social marketing campaigns.

Figure 1 shows the framework used by PSI to conceptualize behavior change for family planning. The figure shows how behavior—in this case, use of family planning—comprises a set of psychosocial and marketing determinants thought necessary to create a behavior change. It is important to note that each determinant (except for behavior) can be grouped or summarized as relating to opportunity, ability, or motivation.

When opportunity, ability and motivation to behave are present, people are 'prone to behave'. Therefore, these variables are important indicators of knowledge and attitude change (that the program will monitor), as well as independent variables influencing behavior (which will be used for evaluation) (Rothschild, 1999).

This survey will further provide baseline information for these indicators prior to the launch of the Social Marketing Program for Reproductive Health, launched by PSI in April 2004. A follow survey to measure program impact will be conducted in 2005.



**Figure 1: PSI’s Behavior Change Framework for Family Planning**

**Previous Research on Reproductive Health in Afghanistan**

Although during the communist regime there was no sanction on birth spacing (BS) methods among families in Afghanistan, the Taliban strictly outlawed the use of BS methods especially for women. People are still suffering from the legacy of this period and it remains one of the main barriers for use of BS in the rural areas. Knowledge about reproductive health is low among women in Afghanistan; even in Kabul the most basic knowledge about reproduction is lacking. A survey conducted by IbnSina/ICRH in Kabul in 2002 shows that just 16% of women knew how babies are made when they were age 15.

UNICEF conducted a national MICS (multiple indicator cluster survey) in 2003 that also provides information about knowledge and use of birth spacing. The MICS results are compared with PSI’s results in Table 1. The PSI survey shows that 78% of ever married women are currently not using a modern form of contraception while the UNICEF data indicates that 90% of women are not. The ethnic composition of both the PSI and UNICEF were quite similar (PSI’s sample included 11% Pashtun respondents and UNICEF’s included 13%); indicating that the discrepancy may result from differences in the methodology used to collect or to analyze the data. A third survey conducted by IbnSina in Kabul City in 2002,

included a 20% Pashtun sample and showed that 77% of ever married women were not currently using a modern form of Contraception.

**Table 1: Comparison of MICS and PSI Surveys on Knowledge and Use of Birth Spacing (in percents)**

	MICS			PSI		
	Total	Urban	Rural	Total	Urban	Rural
Ever married women (<49 years) never heard of a method to delay pregnancy	72	55	78	32	23	36
Ever married women (<49 years) not currently using a method to delay pregnancy	90	79	94	78	66	84

PSI conducted formative research in the form of focus group discussions (FGDs) to identify needs and preferences for birth spacing products. Eight men’s and eight women’s groups were held in Kabul City and Logar Province in mid-2003. All of the groups were able to name benefits of birth spacing (Carrozza 2003a, 2003b). The prevailing attitude in the women’s groups was that women who space their births have a happier, healthier, and/or more financially secure family life. The men’s groups also cited improved health of both mother and children and improved family economy.

However, the studies found that knowledge of birth spacing was generally low. Some male participants had never heard of birth spacing or seen any methods; others had heard of BS methods but never seen any personally. Because the women’s FGDs were conducted within health facilities, the female participants tended to be more knowledgeable about birth spacing. However, not all participants could name a modern method; women often stated that “being careful” (interpreted as meaning the rhythm method) was one of the best methods of birth spacing.

Both the men’s and the women’s groups cited barriers to the use of birth spacing. Both groups tended to mention harmful side effects for injectables and oral contraceptives as a primary barrier. They also mentioned religious sanctions against birth spacing and cultural props for large families, and particularly sons. Women also mentioned their husband’s or other relatives’ disapproval of BS use,

as well as the continued incentives to having many children. These include the need for sons, the fact that children provide for parents, and the fear that some children will not survive.

PSI also conducted a market assessment study in the cities of Kabul and Herat to gauge the availability of modern contraceptive products in retail and wholesale outlets (Butler, 2003). It found that condoms are significantly more available in convenience stores and street vendors than in pharmacies, and more available in urban and rural Kabul than in Herat. Retail sales of condoms were found to be reasonably high: 42% of condom sellers reported selling more than 35 condoms a week. In contrast, oral contraception (OCs) and injectable (ICs) products are sold only through pharmaceutical wholesaler and retailer outlets. Availability and sales volumes of OCs and injectables are significantly greater in Herat than they are in Kabul. Sales of OCs are also greater in Herat, where wholesalers reported selling 120-550 cycles per week compared to 30-300 cycles per week by Kabul wholesalers. For ICs, Herat City pharmacists reported selling 2 vials per week, with sales volumes lower in rural areas; wholesalers said they sold from 50-200 vials per week.

The market assessment study also found that unmet demand is high among customers in Kabul City and Herat City. Fully 80% of outlets in Kabul City who did not currently sell contraceptive products reported that customers ask them for contraception; the figure in Herat City was 93%. The vast majority of non-sellers in both cities said that they would like to do so. Furthermore, none of the outlets that were currently selling OCs and/or ICs had any educational or informational materials of any kind. None of the pharmacists had attended training by companies or organizations distributing the brand they sell, nor had any of them received a visit from a salesperson to promote a product or inform them of its uses.

To sum up, PSI's research has shown that there is an unmet demand for birth spacing advice and counseling in Afghanistan. Our research has also shown that there exists a substantial gap between the level of supply of product and advice, and a considerable latent demand for such products and help among the general population.

## **The 2003 National Reproductive Health Survey: Objectives and Methods**

In the fourth quarter of 2003, PSI/Afghanistan MSH conducted a baseline household survey of currently married men and women of reproductive age. The study had the following objectives:

- To measure baseline levels of knowledge, attitudes and behaviors regarding demand for family planning.
- To investigate the key barriers to contraceptive use to be addressed by upcoming behavior change campaigns.
- To identify key target groups for the program by segmenting the population according to need and to opportunity, ability, and motivational barriers to behavior change.

The male and female questionnaires for the survey are shown in Appendix 1.

### **Sampling**

The sampling strategy was drawn from recommendations given by the World Health Organization (WHO), Family Health International (FHI), the Demographic and Health Surveys, and PSI's own sampling tool kit (DHS, 1996; FHI, 2001; Krotki, 1998; WHO, 1996). The objective of the sampling strategy was to obtain a representative sample of the rural and urban population age 15-49 by gender. The sample was designed to be representative of the general population of men and women of reproductive age (15-49) in urban and rural districts of seven provinces: Kabul, Herat, Balkh, Ghazni, Jawzjan, Saripol and Paktya. At the planning phase Kandahar province was included, but due to security problems Paktya was selected in its place.

## **Sample size**

The first step in developing the sampling strategy was to determine the minimum sample size to show change over time in key indicators with statistical significance in the subgroups of interest. The calculation of minimum sample size uses a baseline estimate for one key indicator and the target level for this indicator at follow-up.

For the Afghanistan Reproductive Health survey, the subgroups of interest were urban men, urban women, rural men and rural women. Key indicators for the program measure increase in knowledge of contraceptive methods, their benefits, and their sources of availability. However, the availability of baseline measures of these indicators was limited. One cross-sectional study conducted at clinics in Kabul found that 59.2% of ever-married women knew of any method to delay or prevent a pregnancy. This was considered likely to be a high estimate even for women in Kabul, since the survey was conducted at MCH clinics in urban areas. The general population of women, and especially those outside of Kabul, were considered likely to have a much lower level of knowledge; it is not known whether Afghan men have greater or lesser knowledge of family planning than women. Based on this limited knowledge, a baseline *estimate* was set with contraceptive knowledge at 30%. The target level for the program was set at 40%; this is the goal level of knowledge after PSI's communications campaign is implemented.

Therefore, the minimum sample size was calculated to detect an increase from 30% to 40% in the percentage knowing a family planning method with 80 percent power at a 95 percent level of significance. Using the formula for determining minimum sample size at these levels resulted in a minimum sample size of N=463 for each subgroup (urban men, urban women, rural men, rural women).<sup>1</sup>

---

<sup>1</sup> The formula for minimum sample size is:

$$n = \frac{D [Z_{1-\alpha} \sqrt{2P(1-P)} + Z_{1-\beta} \sqrt{P_1(1-P_1) + P_2(1-P_2)}]^2}{(P_2 - P_1)^2}$$

where:

D = design effect (set at 2);

P1 = the estimated proportion at the time of the first survey (.59 rural, .77 urban);

P2 = the proportion at some future date such that the quantity (P2-P1) is the size of the magnitude of change that one wishes to be able to reliably detect; (.68 rural, .89 urban)

Allowing for 5% refusals increased this to N=486; for simplicity, the sample size for each subgroup was set at 500. The sample size was then expanded to allow for separate analysis by province, for a total sample of N=7000.

### ***Sample selection***

The primary sampling units (PSUs) were villages in rural areas and “blocks” or the equivalent in urban areas, from the seven selected provinces. The list of selected districts is shown in Appendix 2. “Urban” districts were defined as the capital district in the province. Individuals were selected for the survey in the following four-stage design, illustrated below:

In order to cluster the sampling units for ease of fieldwork, three rural districts and the urban central district were selected from each selected province. The rural districts were selected with probability proportional to size (PPS) using population data from the polio unit at WHO.

From the 3 selected rural districts per province, a total of 5 villages were selected randomly; 2 villages were selected from each of the 2 larger districts and 1 village from the smallest district. In the urban districts the number of blocks was determined by the relative population size of the urban areas: in each urban center three areas (Nahia) were selected randomly, apart from in the Northern provinces, where there exist fewer Nahia, in these provinces villages were selected inside the urban area.

From each selected PSU 50 households were selected. Households were selected by determining the sampling interval (N) by dividing the number of the households in the PSU by 50, choosing a random starting point, and selecting every N<sup>th</sup> household thereafter.

---

$$P = (P1+P2) / 2;$$

Z1-a = the z-score corresponding to the probability with which one can be certain that an observed change of size (P2-P1) did not occur by chance (that is, the level of significance); (set at 1.645 for 95% level)

Z1- b = the z-score corresponding to the probability with which one wishes to be certain that a change of size (P2-P1) will be detected (that is, the power of the survey) (set at 0.84 for 80% power)

(Taken from FHI. 2001.)

Individuals were chosen from within the selected household using a Kish grid. Two individual were chosen at random from each household, one male and one female. Due to transportation problems only one call-back was made if the selected individual was not home. If the selected individual was not located in two visits to the household, he or she was not replaced.

The resulting number of cases in the completed sample is shown in Table 2. An approximately equal number of cases (N=500) was achieved within each sex category and urban status by province.

**Table 2: Number of Cases by Sex, Urban Status and Province**

	<b>Male</b>	<b>Female</b>	<b>Urban</b>	<b>Rural</b>	<b>Total</b>
<b>TOTAL</b>	<b>3500</b>	<b>3500</b>	<b>3500</b>	<b>3500</b>	<b>7000</b>
<b>Province</b>					
Kabul	498	501	499	500	999
Ghazni	502	502	498	506	1004
Herat	501	499	499	501	1000
Sari Pul	500	500	500	500	1000
Paktya	500	499	504	495	999
Jawzjan	500	499	499	500	999
Balkh	499	500	502	497	999

### **Fieldwork strategy**

The Ministry of Health (MOH), UNFPA and the Bakhtar Development Foundation (BDF) expressed support for this survey. Survey steps were outlined to each of these partners and MOH wrote a letter of approval used to access communities. This letter of approval was addressed to Provincial Health Departments who were requested by MOH to assist data collectors. In addition, members of MOH were incorporated in the survey team.

Fieldwork was conducted from October to December 2003. BDF coordinated fieldwork and data collection, and recruited interviewers. PSI conducted training for the interviewers and supervisors, and alongside MSH conducted monitoring of

the fieldwork and data entry. PSI was responsible for data analysis, results of which are presented by way of this survey report.

### ***Personnel***

A team of 16 interviewers with 4 supervisors conducted the survey in Kabul, Balkh, Ghazni, Jawzjan, Saripol and Herat. As Kandahar was omitted from the survey and Paktya province was selected as alternative province, BDF conducted the survey in that province using 14 interviewers and 2 supervisors.

### ***Training***

Due to the sensitivity of the topics covered by the questionnaire, it was essential that a thorough training program was developed. Training was conducted in Kabul for four days, including a day of practical fieldwork. A further day was spent training supervisors. Separate refresher training was conducted by BDF for Paktya data collectors. Due to language problems in Paktya, Pashtu speaking data collectors were selected to conduct the survey. Male and female interviewers were trained together on methodology, sampling and interview techniques. Fieldworkers worked individually in the field – that is to say that household interviews were conducted by individual fieldworkers.

### ***Logistics & Security***

All travel arrangements were arranged for the team of interviewers by BDF. PSI arranged the car for supervisors. Due to time constraints, air travel was preferred between provinces but due to limited budget BDF was unable to arrange it for the teams.

Security remains a primary concern when conducting work outside the city limits of Kabul. The logistics and fieldwork strategy took this situation into account. Teams were organized into teams of 4 interviewers and one supervisor. Arrangements were established for storage of questionnaires and scheduling of call-backs. A person from each community assisted the fieldworkers in the villages. Supervisors checked all questionnaires at the end of each working day. A messenger was recruited for transporting the questionnaires from the provinces to Kabul. After checking questionnaires at the PSI office the questionnaires were sent to the MSH office for data entry.

### **Quality Control**

The survey was monitored in the field by the supervisors utilizing a series of checklists and cluster control forms to ensure sample completeness and checks on questionnaires. All questionnaires were checked by supervisors for completeness and correct coding. The PSI Country representative (CR), Deputy CR and Research Manager each undertook monitoring visits to the field during data collection.

### **Data Entry and Weighting**

Data entry of the questionnaires was performed by staff recruited by MSH under the management of a supervisor. Data entry was performed with validation to ensure no errors from the outset. Data cleaning was done every week to avoid errors in data entry. Data was inputted in *Access* and converted to *SPSS* and recoded by PSI/Research using *StatTransfer*.

The data was weighted to reflect the true urban distribution in the country in three categories: Kabul City, other urban and rural. It was also weighted to reflect the relative size of the provinces selected for the study. Population figures from AIMS (Afghanistan Information Management Service) were used to construct the weights. The findings presented here show weighted percentages and unweighted (true) Ns.

### **Key Findings**

The main body of the report discusses key findings; a full set of tables may be made available upon request by PSI.

### **Sociodemographic characteristics of the sample**

Table 3 shows sociodemographic characteristics of the sample. Approximately two-thirds of the population of Afghanistan is rural; when weighted, the sample reflects this. There is no reliable data on the relative proportion of Afghanistan's ethnic groups, and the survey sampling strategy did not attempt to achieve a nationally representative ethnic mix (Their et al., 2003). Nevertheless, it appears

that the sample contains a relatively smaller proportion of Pashtuns and a larger proportion of Tajiks than is found in the general population. The sample also contains significant differences in the distribution of ethnic groups by urban status; Pashtun are more prominent in rural areas while other ethnic groups are more likely to be found in urban areas. As mentioned above, these ethnic differences are largely due to the provinces selected for the study.

**Table 3: Sociodemographic characteristics of the sample by sex and urban status (in percents)**

	<b>Males (N= 3500)</b>	<b>Females (N= 3500 )</b>	<b>Urban (N=3501)</b>	<b>Rural (N=3499)</b>	<b>Total (N= 7000 )</b>
<b>Urban Status</b>					
Urban	31.1	31.3	-	-	31.2
Rural	68.9	68.7	-	-	68.8
<b>Ethnic Group</b>					
Pashtun	26.2	24.4	12.8*	31.0*	25.3
Tajik	44.8	45.8	49.0*	43.7*	45.3
Hazara	11.8	12.8	21.9*	7.9*	12.3
Uzbek	11.3	10.9	14.9*	9.4*	11.1
Other	5.9	6.1	1.4*	8.0*	6.0
<b>Current Age</b>					
<20	1.1*	7.3*	3.1*	4.8*	4.3
20-24	8.9*	20.3*	14.2*	15.0*	14.7
25-29	14.7*	22.0*	20.2*	17.5*	18.4
30-34	16.6*	20.7*	18.3*	18.9*	18.7
35-39	14.6*	17.6*	15.3*	16.5*	16.0
40-44	13.2*	9.6*	13.0*	10.7*	11.4
45+	30.8*	2.4*	15.9*	16.7*	16.4
<b>Median age</b>	37	30	33	32	32
<b>Age at Marriage</b>					
<20	21.2*	77.8*	46.6*	50.8*	49.4
20-24	40.5*	18.7*	31.2*	28.8*	29.6
25-29	23.9*	3.0*	14.6*	12.9*	13.4
30-34	9.8*	0.4*	5.4*	5.0*	5.1
35-39	3.1*	0.1*	1.6*	1.6*	1.6
40-44	1.1*	0.0*	.3*	.7*	0.6
45+	0.3*	0.0*	.2*	.2*	0.2
<b>Median age at marriage</b>	23	16	20	19	20

	<b>Males (N= 3500)</b>	<b>Females (N= 3500 )</b>	<b>Urban (N=3501)</b>	<b>Rural (N=3499)</b>	<b>Total (N= 7000 )</b>
<b>Number of Living Children</b>					
0	9.5	8.8	8.4*	9.5*	9.1
1	12.7	12.1	12.2*	12.4*	12.4
2	12.7	13.4	13.5*	12.8*	13.0
3	12.0	13.0	12.9*	12.3*	12.5
4	12.2	12.5	13.8*	11.7*	12.4
5	12.1	11.9	13.2*	11.5*	12.0
6	10.0	10.3	9.1*	10.7*	10.2
7	7.8	7.4	5.8*	8.4*	7.6
8	5.8	6.1	6.0*	5.9*	5.9
9+	5.2	4.6	5.2*	4.9*	5.0
<b>Median number of living children</b>					
	4	4	4	4	4
<b>Educational Attainment</b>					
None	49.6*	81.7*	51.1*	72.2*	65.6
Informal	7.2*	2.9*	4.0*	5.5*	5.0
1-5 years	11.5*	4.9*	9.4*	7.7*	8.2
6-8 years	11.2*	3.9*	10.0*	6.4*	7.5
9-10 years	4.5*	1.8*	4.6*	2.5*	3.2
11-12 years	11.2*	3.4*	13.1*	4.7*	7.3
Higher	4.8*	1.5*	7.8*	1.0*	3.1
<b>Socioeconomic index</b>					
Lowest	20.2*	20.7*	5.8*	27.2*	20.5
Low	23.2*	20.9*	6.0*	29.3*	22.0
Medium	21.9*	18.6*	15.5*	22.5*	20.3
High	18.2*	20.0*	26.7*	15.6*	19.1
Highest	16.5*	19.7*	46.0*	5.5*	18.1
<b>Access to Media</b>					
Listen to Radio at least once a month	67.2*	40.4*	61.7*	50.3*	53.8
Read Newspaper at least once a month	21.2*	6.9*	25.5*	8.9*	14.2
Watch TV	25.4*	28.0*	57.8*	12.6*	26.7
*Indicates significant difference at P<.05.					

Women aged 15-49 and men married to women of that age group were sampled. Because women marry on average seven years younger than men do, the age

distribution of women in the sample is proportionately younger than that of the men. Urban residents tend to have an older age distribution than rural residents. The median number of living children in the sample is 4; it should be remembered that this does not reflect average completed family size, as some respondents are in the early years of childbearing. Urban residents are found to have slightly smaller family size than their rural counterparts.

Educational attainment in the sample is generally low; half the men and over 80% of the women reported having no education. Urban residents have higher educational status on average than rural residents. Socioeconomic status is measured by conducting a principal components analysis of household possessions and amenities. The sample was then divided into quintiles and their status ranked from lowest to highest. The weighted proportions are slightly less evenly distributed than that created by the original analysis using unweighted data. Also, urban residents are more likely to be in the higher socioeconomic categories.

While fully two-thirds of the men said that they listened to the radio at least once a month, only 40% of the women did so. Reflecting the educational status described above, only 21% of men and 7% of women said they read a newspaper at least once a month. Interestingly, a slightly higher proportion of women said that they watched television than men (28% vs. 25%); no frequency information was obtained for television exposure. Urban residents have considerably higher media exposure than rural residents.

### **Current use of a modern birth spacing method**

Respondents were asked whether they were currently doing anything to avoid or delay getting pregnant, and if so what method they were using. Table 4 shows the percentage responding "yes" to this question and subsequently responding that they were using a modern method (condoms, OCs, ICs, an IUD or sterilization). Overall 19% of the sample reported currently using a modern method. As is common in countries where men are sanctioned to be the chief decision-maker in the household, current use was reported by a higher percentage of women than of men. This likely indicates that some women hide their contraceptive use from their husbands. Urban residents had a considerably higher proportion currently

using BS than rural residents (31% vs. 13%). Hazara and Tajiks reported higher use than other ethnic groups. The age pattern of birth spacing use, as found in most surveys, shows the highest degree of use among those in the middle reproductive age groups, when fecundity is still high and desired family size has been reached. As expected, those of higher educational attainment and socioeconomic status were more likely to use birth spacing.

**Table 4: Current Use of a Modern Birth Spacing Method by Sociodemographic Characteristics and Sex (in percents)**

	<b>Males (N=3472)</b>	<b>Females (N= 3443)</b>	<b>Urban (N=3501)</b>	<b>Rural (N=3499)</b>	<b>Total (N= 6915)</b>
<b>Total</b>	15.3*	21.9*	30.5*	13.4*	18.6
<b>Urban Status</b>					
Urban	26.7*	33.9*	-	-	30.3
Rural	10.2*	16.2*	-	-	13.2
<b>Ethnic Group</b>					
Pashtun	11.2*	14.9*	24.4*	11.0*	13.0
Tajik	19.0*	27.3*	37.4*	16.3*	23.2
Hazara	22.1*	27.2*	30.8*	17.4*	24.8
Uzbek	6.3*	10.5*	13.7*	5.0*	8.4
Other	9.0*	15.8*	14.3*	12.1*	12.3
<b>Age</b>					
<20	.*	5.9*	12.1*	3.1*	5.1
20-24	7.2*	14.4*	20.1*	9.0*	12.2
25-29	13.6*	21.8*	27.3*	14.2*	18.6
30-34	15.4*	22.2*	32.4*	13.8*	19.2
35-39	17.7*	29.7*	40.1*	17.9*	24.3
40-44	21.6*	35.8*	42.1*	20.0*	27.7
45+	15.5*	16.5*	28.2*	10.4*	15.5
<b>Educational Attainment</b>					
None	9.5*	17.7*	25.0*	11.5*	14.6
Informal	15.6*	15.7*	20.0*	14.3*	15.9
1-5 years	13.4*	36.7*	25.7*	17.6*	20.3
6-8 years	16.1*	43.7*	35.5*	14.8*	23.1
9-10 years	18.4*	44.4*	34.7*	19.0*	25.9
11-12 years	28.5*	44.5*	39.8*	23.0*	32.0
Higher	44.0*	67.3*	53.0*	38.3*	49.1

	<b>Males (N=3472)</b>	<b>Females (N= 3443)</b>	<b>Urban (N=3501)</b>	<b>Rural (N=3499)</b>	<b>Total (N= 6915)</b>
<b>Socioeconomic index</b>					
Lowest	7.6*	13.4*	12.2*	10.5*	10.5
Low	10.9*	14.6*	10.9*	13.0*	12.7
Medium	12.1*	17.3*	23.7*	11.6*	14.4
High	19.7*	25.5*	29.8*	17.6*	22.7
Highest	31.3*	38.2*	38.1*	24.9*	35.0
*Indicates significant at P<.05					

### Barriers to Family Planning Use

Tables 5 & 6 show findings on variables measuring the behavior change determinants described above. All of the measures classify respondents into one of two categories: either they are positive (meaning that the determinant is not a barrier to birth spacing use) or negative (meaning that the determinant is a barrier to use). Only the percentage of those who are positive on the measure is displayed in the table. For example, the percentage who do know a place to obtain a BS method and who do not mention availability as a barrier to using BS is presented. In all cases then, the objective of the program is for the percentage level to go up.

**Table 5: Reproductive Behavior Change Determinants by Sex (in percents)**

	<b>Males (N= 3500)</b>	<b>Females (N= 3500)</b>	<b>Total (N= 7000)</b>
<b>OPPORTUNITY</b>			
<b>Quality of Care</b>			
Would get BS information from a health professional	89.5*	78.4*	84.0
Has had contact with health professional in the last month	40.1*	37.3*	38.7
<b>Availability</b>			
Knows place to obtain modern BS method	43.7*	62.6*	53.2
‘Availability’ is not a barrier to use	99.3	99.2	99.3
Can name at least one method of modern BS that is widely available	33.5*	40.0*	36.8
<b>Brand Appeal</b>			
Can name a condom brand	8.5*	1.9*	5.2
Has heard of <i>Sathi</i> condom brand	7.5*	1.4*	4.4

	<b>Males</b> (N= 3500)	<b>Females</b> (N= 3500)	<b>Total</b> (N= 7000)
<b>ABILITY</b>			
<b>Willingness to Pay</b>			
‘Cost’ not a reason for not using BS	99.8	99.8	99.8
Can name at least one modern BS method that is inexpensive	30.8*	42.0*	36.4
<b>Social Norms and Support</b>			
Own, husband’s or mother-in-law’s disapproval is not a reason for not using BS	93.5*	81.0*	87.3
Husband wants same number or fewer children	76.3*	66.7*	71.5
Both partners approve of BS use	49.8*	61.4*	55.6
Friends/neighbors approve of BS	13.1*	29.6*	21.3
<b>Self Efficacy</b>			
Not stopped from using BS due to husband or mother-in-law refusal	100.0*	99.8*	99.9
Not waiting for husband’s approval to use BS	100.0*	99.9*	99.9
Has discussed BS with spouse	35.4*	53.4*	44.4
Decision to use BS is joint or wife’s	55.1*	78.2*	66.9
Wife could influence husband to use BS	100.0*	62.5*	81.3
<b>MOTIVATION</b>			
<b>Awareness of BS</b>			
Has heard of a BS method (spontaneous)	43.1*	62.9*	53.0
Has heard of a BS method (probed)	46.0*	66.8*	56.4
‘Lack of knowledge’ not a barrier to use	88.8*	94.3*	91.6
<b>Outcome Expectations</b>			
“Fear of side effects” or “previous bad experience” not a barrier to use	95.9*	93.2*	94.6
Can name at least one modern BS method that is effective	27.1*	34.1*	30.6
<b>Fertility Intentions</b>			
Desired waiting time to next child is at least 2 years from the birth of the last child	13.1*	28.3*	20.7
Last child was wanted at that time	76.6*	64.3*	70.5
Intends to use BS in the future	53.4*	64.5*	59.0
<b>Awareness of Benefits of Small Family Size</b>			
Ideal number of children should be 4 or less	28.6	29.8	29.2
Thinks women should wait at least two years between births	83.7*	92.5*	88.1
Can name at least one benefit of spacing births	81.5*	88.3*	84.9
*Indicates significant at P<.05			

**Table 6: Reproductive Behavior Change Determinants by Urban Status (in percents)**

	<b>Urban (N=3501)</b>	<b>Rural (N=3499)</b>	<b>Total (N= 7000)</b>
<b>OPPORTUNITY</b>			
<b>Quality of Care</b>			
Would get BS information from a health professional	88.1*	82.1*	84.0
Has had contact with health professional in the last month	39.6	38.3	38.7
<b>Availability</b>			
Knows place to obtain modern BS method	63.4*	48.5*	53.2
'Availability' is not a barrier to use	99.7*	99.0*	99.3
Can name at least one method of modern BS that is widely available	45.6*	32.8*	36.8
<b>Brand Appeal</b>			
Can name a condom brand	8.1*	3.9*	5.2
Has heard of <i>Sathi</i> condom brand	6.4*	3.5*	4.4
<b>ABILITY</b>			
<b>Willingness to Pay</b>			
'Cost' not a reason for not using BS	99.9	99.8	99.8
Can name at least one modern BS method that is inexpensive	45.2*	32.4*	36.4
<b>Social Norms and Support</b>			
Own, husband's or mother-in-law's disapproval is not a reason for not using BS	91.4*	85.4*	87.3
Husband wants same number or fewer children	78.0*	68.5*	71.5
Both partners approve of BS use	70.0*	49.0*	55.6
Friends/neighbors approve of BS	28.3*	18.2*	21.3
<b>Self Efficacy</b>			
Not stopped from using BS due to husband or mother-in-law refusal	99.9	99.9	99.9
Not waiting for husband's approval to use BS	100.0	99.9	99.9
Has discussed BS with spouse	56.8*	38.8*	44.4
Decision to use BS is joint or wife's	80.0*	60.8*	66.9
Wife could influence husband to use BS	88.1*	78.2*	81.3
<b>MOTIVATION</b>			
<b>Awareness of BS</b>			
Has heard of a BS method (spontaneous)	65.0*	47.6*	53.0
Has heard of a BS method (probed)	67.6*	51.3*	56.4
'Lack of knowledge' not a barrier to use	93.8*	90.5*	91.6

	<b>Urban (N=3501)</b>	<b>Rural (N=3499)</b>	<b>Total (N= 7000)</b>
<b>Outcome Expectations</b>			
“Fear of side effects” or “previous bad experience” not a barrier to use	94.5	94.6	94.6
Can name at least one modern BS method that is effective	37.8*	27.4*	30.6
<b>Fertility Intentions</b>			
Desired waiting time to next child is at least 2 years from the birth of the last child	21.0*	20.5*	20.7
Last child was wanted at that time	69.7*	70.9*	70.5
Intends to use BS in the future	68.0*	54.9*	59.0
<b>Aware of Benefits of Small Family Size</b>			
Ideal number of children should be 4 or less	44.3*	22.4*	29.2
Thinks women should wait at least two years between births	91.8*	86.4*	88.1
Can name at least one benefit of spacing births	88.1*	83.4*	84.9
*Indicates significant at P<.05			

The table reveals that some potential barriers to birth spacing use do not appear salient for the sampled population. For example, few list availability or cost as a reason for not using birth spacing. Other barriers appear to be extremely important in the Afghan context. These are discussed briefly below.

### ***Opportunity***

Reported health seeking behavior and ***quality of care*** questions resulted in the survey finding that 90% of men and 78% of women would get BS information from a health professional. A large percentage (39%) of respondents also reported that they had contact with a health professional in the last month<sup>2</sup>.

The findings on ***availability*** present a somewhat mixed picture. While 99% of respondents did not report availability as a reason for non-use, further questioning revealed that only 53% knew a place to obtain BS, and only 37% could name a BS method that is widely available. Since the availability of BS products at the retail level is in fact quite low at this time (Butler, 2003), it is likely that other factors—such as motivation to reduce fertility—are more salient

---

<sup>2</sup> ‘Health professional’ included: doctors, basic health center staff, community health workers, MCH clinic staff and midwives.

reasons for not using family planning. In other words, those who want to use birth spacing are able to obtain it at clinics and public sector outlets.

The survey was conducted before PSI's *Number One* brand condom was launched, and hence **brand appeal** is measured only through knowledge of a condom brand. Subsequent surveys will measure perceptions of the social marketed brand as well as of commercial brands. Brand recognition was unsurprisingly low in a country with a nascent condom market; only 5% of respondents knew a brand of condom. The highest awareness by brand was for the Pakistani social marketed Sathi brand of condoms (4%).

### **Ability**

As with availability, a lack of knowledge of the costs of contraceptives affects whether respondents perceive that cost is a barrier to use. Actual **willingness to pay** may therefore in reality be more of a barrier than these findings suggest; nearly all respondents did not list cost as a reason for non-use. Again, this is also because other barriers are more salient. However, as only one-third (36%) of respondents are unable to name at least one modern BS method that is inexpensive, lack of knowledge is also a factor.

**Social norms and social support** are likely to be barriers to BS use in the Afghan context, particularly for women. While 81% of women report that their own, their husband's or mother-in-law's disapproval is not a reason for not using BS, there is a considerable gender gap in these reports with a much higher percentage of men saying so (94%). This "perceived" social support is unexpected, and indicates that mothers-in-law could be effective social influencers for birth spacing.

Women are also less likely to say their husband wants the same number or fewer children than they do. At the same time, more women than men say that both spouses approve of BS, and that friends and neighbors approve of BS. These somewhat contradictory results reflect the complexity of social norms that may be understood but unspoken.

This complexity is also found in the statements on **self-efficacy** which show that nearly all women say they are not prevented from using BS by their husband or

mother-in-law's refusal and are not waiting for their husband's approval to use BS. Yet only 53% reported that they had discussed BS with their spouse, and only 63% believed that they could influence their husband to use BS. At the same time only about half of men said they believe that using BS is a joint decision or their wife's alone, yet 100% of men said their wife could influence their husband to use BS. These contradictory findings may be due to the phrasing of the questions and/or to differential interpretations of their meaning. Women may be unlikely to admit to an interviewer that their husbands or mother-in-law are a factor in stopping them from using BS, yet this factor was raised in many of the men's and women's FGDs conducted by PSI. Often, such family pressure is unspoken but still felt.

### ***Motivation***

Women are considerably more likely to be ***aware of BS methods*** than men are – with 62% of women and 43% of men being able to name a method spontaneously, and 66% of women and 46% of men reporting the same after being prompted by the interviewer. Considering that only half of respondents (53%) have heard of a BS method it is surprising that only 9% of all respondents report 'lack of knowledge' as a reason for not using BS. Again, this could be because other barriers, such as motivation to reduce fertility, are more prominent; lack of knowledge only becomes a factor when one is motivated to reduce fertility and searching for a way to do so.

Few reported fear of side effects or previous bad experiences with BS as a reason for non-use. However despite positive ***outcome expectations***, less than one-third could name a modern BS method that is effective. These findings again reflect a lack of specific knowledge about BS methods, and that few have themselves experienced or heard about side effects.

In terms of ***fertility intentions*** a large proportion felt that women should wait at least two years between births, with women showing a slightly higher percentage than men. Motivation to reduce family size remains low, with less than 30% wanting four children or less.

## **Segmentation Analysis: Factors Affecting Unmet Need**

In order to effectively target behavior change programs, we must first gain an understanding of which subgroups of the population are most in need. In the case of family planning, we define this in terms of unmet need for birth spacing. Secondly, it is important to examine the barriers to behavior change that are most prominent for those with unmet need for birth spacing. Such understanding leads to effective behavior change communication (BCC) campaign design. Finally, for efficient targeting, it is important to investigate the sociodemographic and geographical profile of those most at risk. In market research, this process is called segmentation.

In the previous sections we examined characteristics of those currently using birth spacing and the barriers to use, according to the behavior change framework, among the total population. This section further differentiates the sample by examining key barriers affecting those in need.

### **Unmet Need**

Table 7 divides the population into four categories based on their need for birth spacing. “Unmet need” refers to those who say they want to space their next birth (unmet need for spacing) or limit their family size (unmet need for limiting), yet are not currently using contraception. Those who are either currently using birth spacing, or want another child within the next two years, do not have unmet need. About one-fifth of the sample currently uses BS; another two-fifths are not using BS but say they want another child within two years. The remaining two-fifths want to delay their next birth or stop having children, but are not currently using BS. This group is about equally divided between those with unmet need for spacing and those with unmet need for limiting.

When examining key barriers to BS use, it is clear that the causal order of some factors is ambiguous. For example, those using BS have the highest percentage that have recently seen a health professional—but this could as much have been to obtain contraceptives as because contact with health professionals provides greater opportunity to obtain BS. Similarly, those currently using BS have greater

knowledge of where to obtain contraceptives. Nevertheless, the analysis provides some insight into how the behavior change determinants may affect use. These include:

- Those who say they want to have a child soon are generally less knowledgeable about BS than those who say they want to delay or limit but aren't currently using.
- Those who want a child soon report greater perceived disapproval of BS by both spouse and those in the community.
- With regard to self-efficacy, those with unmet need are more likely to have discussed BS and to say that BS decisions should be made jointly or by the wife.
- Those expressing a desire to space or limit are more likely to be able to name a BS method than those who do not. At the same time, those with unmet need for limiting are most likely to express "lack of knowledge" and "fear of side effects" as reasons for not using BS.

**Table 7: Barriers to Birth Spacing Use by Need Status**

	No unmet need		Unmet need	
	Current birth spacing users (N=1299)	Want another child within 2 years (N=2693)	Unmet need for birth spacing (N=1320)	Unmet need for limiting (N=1560)
<b>TOTAL</b>	18.8	39.6	18.7	22.8
<b>OPPORTUNITY</b>				
<b>Quality of Care</b>				
Would get BS information from a health professional	95.8	81.5	83.6	80.0
Has had contact with health professional in the last month	43.1	40.0	32.4	38.0
<b>Availability</b>				
Knows place to obtain modern BS method	92.8	37.4	53.0	49.9
'Availability' is not a reason for non-use of BS	100.0	99.6	99.1	98.2

	No unmet need		Unmet need	
	Current birth spacing users (N=1299)	Want another child within 2 years (N=2693)	Unmet need for birth spacing (N=1320)	Unmet need for limiting (N=1560)
Can name at least one method of modern BS that is widely available	72.7	23.2	28.5	37.8
<b>Brand Appeal</b>				
Can name a condom brand	11.7	4.0	2.7	4.0
Has heard of <i>Sathi</i> condom brand	9.8	3.5	1.8	3.9
<b>ABILITY</b>				
<b>Willingness to Pay</b>				
'Cost' not a reason for not using BS	99.9	99.9	100.0	99.4
Can name at least one modern BS method that is inexpensive	99.9	99.9	100.0	99.4
<b>Social Norms and Support</b>				
Own, husband's or mother-in-law's disapproval is not a reason for not using BS <sup>3</sup>	99.8	99.9	99.9	99.9
Husband wants same number or fewer children	80.5	69.2	69.0	70.3
Both partners approve of BS use	92.7	39.4	57.1	52.1
Friends/neighbors approve of BS	38.7	13.5	22.8	19.0
<b>Self Efficacy</b>				
Not waiting for husband's approval to use BS <sup>4</sup>	99.9	100.0	99.9	99.9
Has discussed BS with spouse	94.7	23.6	39.8	42.9
Decision to use BS is joint or wife's	90.0	55.0	71.1	63.9
Wife could influence husband to use BS	97.5	79.1	69.8	81.1
<b>MOTIVATION</b>				
<b>Awareness of BS</b>				
Has heard of a BS method (spontaneous)	94.8	37.2	50.5	49.7
Has heard of a BS method (probed)	96.9	40.2	55.3	53.8
'Lack of knowledge' not given as reason for not using BS	99.8	91.4	91.7	84.7
<b>Outcome Expectations</b>				

<sup>3</sup> Not significant at .05 level.

<sup>4</sup> Not significant at .05 level.

	No unmet need		Unmet need	
	Current birth spacing users (N=1299)	Want another child within 2 years (N=2693)	Unmet need for birth spacing (N=1320)	Unmet need for limiting (N=1560)
“Fear of side effects” or “previous bad experience” not given as reason for not using BS	99.3	96.5	94.8	87.6
Can name at least one modern BS method that is effective	70.4	17.6	20.1	29.2
<b>Fertility Intentions</b>				
Last child was wanted at that time	62.3	84.4	81.1	45.5
Intends to use BS in the future	96.3	43.5	65.4	50.4
<b>Aware of Benefits of Small Family Size</b>				
Ideal number of children should be 4 or less	44.5	24.5	29.9	24.5
Thinks women should wait at least two years between births	96.8	80.7	95.3	88.0
Can name at least one benefit of spacing births	92.1	80.6	88.4	83.9

Less than half of those who want to stop childbearing said that their last child was wanted. Interestingly, those currently using BS also have a low percentage reporting they wanted their last child (62%). This implies that many would like to begin using birth spacing earlier than they are. At the same time, only half of those wanting to limit their family size say that they intend to use BS in the future.

These findings imply that there is latent demand for BS, with such factors as lack of knowledge being key barriers to use. These results are encouraging as effective behavior communications campaigns and increased access should prove extremely effective at reaching those who already are motivated to limit their family size or space births. They also confirm the findings of the qualitative studies discussed earlier (Carrozza 2003a, 2003b).

Finally Table 8 differentiates those with unmet need by sociodemographic characteristics. Of note is the fact that while men and women are equally likely to state that they want to stop childbearing, women are fully twice as likely as men to say that they want to delay their next birth. This implies that campaigns to promote the benefits of spacing births should be targeted to men as well as women.

**Table 8: Unmet Need by Sociodemographic Characteristics (in percents)**

	Males (N=3450)		Females (N= 3422)		Total (N= 6872)	
	Spacing	Limiting	Spacing	Limiting	Spacing	Limiting
<b>Total</b>	12.6*	23.0*	24.9*	22.6*	18.7*	22.8*
<b>Urban Status</b>						
Urban	12.4	22.5	22.1*	20.6*	17.3*	21.5*
Rural	12.7	23.3	26.1*	23.6*	19.3*	23.4*
<b>Ethnic Group</b>						
Pashtun	13.0*	22.8*	24.3	23.3	18.4*	23.1*
Tajik	12.0*	23.4*	25.8	22.1	19.0*	22.7*
Hazara	11.4*	30.0*	23.6	24.5	17.8*	27.1*
Uzbek	14.1*	18.8*	24.3	23.7	19.0*	21.2*
Other	13.3*	15.8*	23.9	18.5	18.8*	17.1*
<b>Age</b>						
<20	20.5*	0.0*	36.7*	3.2*	34.5*	2.8*
20-24	21.6*	4.9*	34.1*	8.9*	30.3*	7.7*
25-29	15.1*	6.9*	30.6*	13.8*	24.5*	11.1*
30-34	14.9*	9.2*	25.9*	26.1*	21.0*	18.6*
35-39	11.9*	14.1*	13.9*	35.4*	13.0*	25.9*
40-44	11.7*	28.4*	6.0*	46.2*	9.2*	36.0*
45+	8.4*	46.2*	2.6*	65.4*	7.9*	47.5*

	<b>Males</b>		<b>Females</b>		<b>Total</b>	
	<b>(N=3450)</b>		<b>(N= 3422)</b>		<b>(N= 6872)</b>	
	<b>Spacing</b>	<b>Limiting</b>	<b>Spacing</b>	<b>Limiting</b>	<b>Spacing</b>	<b>Limiting</b>
<b>Number of Living Children</b>						
0	7.4*	1.9*	17.7*	1.0*	12.5*	1.4*
1	18.2*	4.1*	40.7*	4.1*	29.1*	4.1*
2	18.1*	8.8*	34.6*	8.8*	26.5*	8.8*
3	13.9*	17.5*	31.0*	16.5*	22.6*	17.0*
4	13.3*	19.0*	27.0*	19.2*	20.3*	19.1*
5	11.8*	31.9*	23.9*	28.1*	17.7*	30.0*
6	9.7*	39.9*	16.9*	36.4*	13.4*	38.0*
7	8.9*	46.3*	15.3*	51.0*	11.9*	48.6*
8	10.4*	48.3*	9.0*	46.2*	9.7*	47.1*
9+	4.9*	48.9*	3.1*	57.9*	4.1*	53.1*
<b>Educational Attainment</b>						
None	12.4*	24.1*	26.6*	22.4*	21.2*	23.0*
Informal	7.3*	27.0*	19.0*	39.0*	10.9*	30.1*
1-5	17.8*	17.1*	17.3*	22.0*	17.7*	18.4*
6-8	15.0*	21.2*	17.4*	21.2*	15.6*	21.4*
9-10	10.3*	21.2*	17.5*	27.0*	12.3*	22.8*
11-12	9.7*	24.7*	16.9*	18.6*	11.4*	23.2*
Higher	10.4*	23.3*	11.8*	15.7*	10.7*	21.4*
<b>Socioeconomic index</b>						
Lowest	12.8*	17.2*	23.7*	21.9*	18.3*	19.6*
Low	12.4*	27.1*	30.2*	21.9*	20.9*	24.7*
Medium	12.1*	22.1*	26.8*	22.8*	18.8*	22.3*
High	11.6*	26.3*	23.2*	26.9*	17.8*	26.6*
Highest	13.4*	23.0*	20.4*	20.1*	17.3*	21.4*

\*Indicates significant at P<.05.

Of note also is the virtual lack of differentiation in unmet need by most of the other factors examined. No rural/urban differences are found; Hazara are most likely to say they want to stop childbearing, with the other ethnic groups fairly similar. The normal patterns are observed by age, with younger respondents most interested in spacing and older in limiting. A parallel pattern is seen by number

of children. Finally, and contrary to expectations, unmet need is apparently not strongly associated with socioeconomic status or education.

## **Conclusions and Recommendations**

The PSI National Reproductive Health Survey showed much higher levels of birth spacing use than the MICS survey conducted by UNICEF in a similar time period. While several factors could account for these differences, it is likely that they are largely attributable differences in either data collection or data analysis.

The survey found a high level of latent demand for birth spacing products in Afghanistan. About one-fifth of the sample currently use BS products, and another two-fifths are not using BS products and say they would like another child within two years. The remaining 2/5 are not using BS products and have stated that they would like to either space their births or limit their family size. This group has an unmet need for BS products.

Those with unmet need are less knowledgeable about BS and less likely to have had contact with a health professional. Only half know where to obtain a modern method.

Still, a substantial percentage (40%) of those with unmet need have discussed BS with a spouse, and the majority say the wife could influence her spouse to use BS. Significantly, women are twice as likely as men to say they'd like to space the next birth (25% vs. 13%). Furthermore, social support for use (support of husbands and mothers-in-law) may be higher than previously thought.

These findings point to clear opportunities for meeting the latent demand for modern birth spacing products. Communication campaigns providing information on BS could be extremely effective to those already motivated to limit or space, since many cited a lack of knowledge as a reason for not using. While the vast majority of respondents stated that they would seek BS information from medical personnel, most said that their source of knowledge on BS methods was friends and relatives. This indicates that CHWs, working at the village level could be extremely effective channels for communication in rural areas. Pharmacists and clinic based workers would also be important sources of information. Since radio listenership was found to be particularly high among both men and women (67% and 40%), radio is a potential new channel for BCC campaigns.

Secondly, it is important to recognize gender differences in the barriers to using birth spacing. Women were more likely to report birth spacing than men, indicating both that there is some covert use among women and that men may be less inclined to admit BS use. This corresponds to the qualitative finding that men were somewhat more likely to cite cultural props to large family size and barriers to BS use. Also, those who reported that they had discussed BS with a spouse and to think that BS decisions should be made jointly were much less likely to have unmet need. At the same time, few perceived that husbands' or mothers'-in-law disapproval as a barrier to BS use. Clearly, campaigns to promote BS benefits should target men as well as women, and messages that encourage discussion between spouses could greatly reduce unmet need. Messages could also be expanded to include mothers-in-law and other key social influencers in the family. While the results of the survey made clear that decisions about birth spacing are seen as a private family matter, role models, for example community leaders, could serve as spokespersons for the benefits of small family size.

In conclusion, the 2003 Reproductive Health Survey illustrated key opportunities for PSI's social marketing program. Clearly the expansion of birth spacing to the retail sector will serve the existing latent demand for these products. The findings also point to areas where behavior change communication campaigns can facilitate the use of birth spacing by increasing communication between spouses and other family members, and reinforcing the benefits of small family size that are already apparent to most Afghans.

## References

- Butler, Robb. 2003. Market Assessment: Kabul and Herat. PSI/Afghanistan.
- Carrozza, Lorri-Anne. 2003a. Birth Spacing Attitudes and Experience and Contraceptive Branding among Afghan Women. PSI/Afghanistan.
- 2003b. Negative testing of 3 *Number One* Packages; Exploring Birth Spacing Attitudes and Experiences with Afghan Men. PSI/Afghanistan.
- Demographic and Health Surveys (DHS). 1996. *Sampling Manual*. DHS—III Basic Documentation—6.

- Family Health International (FHI). 2001. *Evaluating Programs for HIV/AIDS Prevention and Care in Developing Countries: A Handbook for Program Managers and Decision Makers.*
- Ibn Sina Public Health Program; International Center for Reproductive Health, University of Ghent, 2002. *KAP Survey Regarding Reproductive Health.*
- Krotki, K.P. 1998. *Monitoring Tools for Social Marketing Projects: Guidelines for Survey Sampling.* PSI Research Division.
- Rothschild, M. 1999. Carrots, sticks, and promises: a conceptual framework for the management of public health and social issue behaviors. *Journal of Marketing* 63, 24–37.
- Their, A., Wardak, A., Johnson, C., and Maley, W. 2003. *Afghanistan's Political and Constitutional Development.* Department for International Development: London
- WHO/GPA/TCO/SEF/94.1. 1994. *Evaluation of a National AIDS Program: A Methods Package.* Geneva: World Health Organization.

**Appendix 1: Female Questionnaire**  
**BIRTH SPACING KAP QUESTIONNAIRE**

**Married Women of Reproductive Age (15-49 years)**

**INFORMED CONSENT**

Hello. My name is \_\_\_\_\_, and I am working with \_\_\_\_\_. We are conducting a survey and would appreciate your participation. I would like to ask you some questions about \_\_\_\_\_. This information will help us to plan health services. The survey usually takes \_\_\_\_\_ minutes to complete. Participation in this survey is voluntary and you can choose not to answer any individual question or all of the questions. However, we hope that you will participate in this survey since your views are important.

At this time, do you want to ask me anything about the survey?

Signature of interviewer: \_\_\_\_\_

Date: \_\_\_\_\_

RESPONDENT AGREES TO BE INTERVIEWED ..... 1

RESPONDENT DOES NOT AGREE TO BE INTERVIEWED ..... 2 | END

## IDENTIFICATION

CLUSTER NUMBER .....	.....
HOUSEHOLD NUMBER .....	.....
RECORD NUMBER .....	.....

INTERVIEW DATE \_\_\_\_/\_\_\_\_/\_\_\_\_  
(dd/mm/yy)

RESCHEDULE INTERVIEW \_\_\_\_/\_\_\_\_/\_\_\_\_  
(dd/mm/yy)

NAME OF RESPONDENT \_\_\_\_\_

INTERVIEWER'S NAME \_\_\_\_\_

SUPERVISOR'S NAME \_\_\_\_\_

COMMUNITY \_\_\_\_\_

## BACKGROUND

NO.

QUESTIONS AND FILTERS

CODING CATEGORIES

SKIP

1.	What ethnic group do you belong to?	<input type="checkbox"/> [ 1 ] Pashtun <input type="checkbox"/> [ 2 ] Tajik <input type="checkbox"/> [ 3 ] Hazara <input type="checkbox"/> [ 4 ] Uzbek <input type="checkbox"/> [ 5 ] OTHER _____ (SPECIFY)	
2.	What language(s) is spoken in your home?  Record all answers.	<input type="checkbox"/> [ ] Dari <input type="checkbox"/> [ ] Pashtu <input type="checkbox"/> [ ] Hazaragi <input type="checkbox"/> [ ] Uzbeki <input type="checkbox"/> [ ] OTHER _____ (SPECIFY)	
3.	How old are you?	_____years	
4.	What is the highest level of education that you attained?	<input type="checkbox"/> [ 1 ] No schooling/ Illiterate <input type="checkbox"/> [ 2 ] Masjid <input type="checkbox"/> [ 3 ] Non Formal Education Class <input type="checkbox"/> [ 4 ] Home <input type="checkbox"/> [ 5 ] 1-5 class <input type="checkbox"/> [ 6 ] 6-8 class <input type="checkbox"/> [ 7 ] 9-10 class <input type="checkbox"/> [ 8 ] 11-12 class <input type="checkbox"/> [ 9 ] University Graduate <input type="checkbox"/> [10] Post Graduate <input type="checkbox"/> [11] OTHER _____ (SPECIFY)	

5.	Can you read and understand a newspaper or any other print easily, with some difficulty or can't understand at all?	<input type="checkbox"/> [ 1 ] Easily <input type="checkbox"/> [ 2 ] Some difficulty <input type="checkbox"/> [ 3 ] Can't understand at all  <input type="checkbox"/> [ 4 ] OTHER _____ (SPECIFY)	
6.	What is the highest level of education that your husband attained?	<input type="checkbox"/> [ 1 ] No schooling/ Illiterate <input type="checkbox"/> [ 2 ] Masjid <input type="checkbox"/> [ 3 ] Non Formal Education Class <input type="checkbox"/> [ 4 ] Home <input type="checkbox"/> [ 5 ] 1-5 class <input type="checkbox"/> [ 6 ] 6-8 class <input type="checkbox"/> [ 7 ] 9-10 class <input type="checkbox"/> [ 8 ] 11-12 class <input type="checkbox"/> [ 9 ] University Graduate <input type="checkbox"/> [10] Post Graduate <input type="checkbox"/> [11] OTHER _____ (SPECIFY)	
7.	How do you earn money?  Record all answers.	<input type="checkbox"/> [ ] Does not earn money <input type="checkbox"/> [ ] Sewing <input type="checkbox"/> [ ] Shop Keeper <input type="checkbox"/> [ ] Live Stock <input type="checkbox"/> [ ] Selling Dairy products <input type="checkbox"/> [ ] Farming <input type="checkbox"/> [ ] Carpet weaving/ Gilam <input type="checkbox"/> [ ] Salaried Worker <input type="checkbox"/> [ ] OTHER _____ (SPECIFY)	

8.	<p>How does your husband earn money?</p> <p>Record all answers.</p>	<p>[ ] Does not earn money          [ ] Daily Wage          [ ] Sewing          [ ] Shop Keeper          [ ] Street Vendor          [ ] Live Stock          [ ] Selling Dairy products          [ ] Farming          [ ] Carpet weaving/ Gilam          [ ] Salaried Worker          [ ] OTHER _____          (SPECIFY)</p>	
9.	<p>Where do you obtain the water that you use at home?</p>	<p>[ 1 ] Tap          [ 2 ] Hand Pump          [ 3 ] Closed Well          [ 4 ] Open Well          [ 5 ] River          [ 6 ] Spring/ Karez          [ 7 ] OTHER _____          (SPECIFY)</p>	
10.	<p>Does your house have electricity?</p>	<p>[ 1 ] Yes          [ 2 ] No</p>	
11.	<p>Do you own a functioning radio?</p>	<p>[ 1 ] Yes          [ 2 ] No</p>	

12.	Observe main type of construction of home (wall and roof)	<input type="checkbox"/> [ 1 ] Pucca (concrete wall with concrete or steel roof) <input type="checkbox"/> [ 2 ] Semi Pucca (concrete wall with wood roof) <input type="checkbox"/> [ 3 ] Katcha (Mud/thatch roof and wall) <input type="checkbox"/> [ 4 ] Tent <input type="checkbox"/> [ 5 ] Wooden structure (made of only wood and reeds) <input type="checkbox"/> [ 6 ] OTHER _____ (SPECIFY)
13.	Presence of others in room?  Check all that apply.	<input type="checkbox"/> [ ] Children Under 10 <input type="checkbox"/> [ ] Husband <input type="checkbox"/> [ ] Mother-in-law <input type="checkbox"/> [ ] Other Males <input type="checkbox"/> [ ] Other Females <input type="checkbox"/> [ ] OTHER _____ (SPECIFY)

**SEXUAL HISTORY**

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
14.	How old were you when you first married?	_____ years	
15.	Are you currently married?	<input type="checkbox"/> [ 1 ] Yes <input type="checkbox"/> [ 2 ] No →	END

16.	Does your husband live with you?	[ 1 ] Yes → [ 2 ] No	18
17.	(If No) Where does your husband live?	[ ] Other City [ ] Other Province [ ] Other Country [ ] OTHER _____ (SPECIFY)	
18.	Does your husband have other wives he lives with?	[ 1 ] Yes [ 2 ] No	
19.	Including yourself, how many wives live with your husband?	_____ (number)	
20.	How old is your spouse?	_____ years	

**PREGNANCY**

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
21.	How many times have you been pregnant (including present pregnancy, miscarriages, and still births)?	_____ (number)	

22.	What are the total number of live births that you gave? Please include all births even if some only lived for a short while.	_____ (number)																																	
23.	What are the total number of live children that you have now?	_____ (number)																																	
24.	Can you tell me their gender and ages?	<table border="0"> <thead> <tr> <th>Boys</th> <th>Ages:</th> <th>Girls:</th> <th>Ages:</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>____years</td> <td>1.</td> <td>____years</td> </tr> <tr> <td>2.</td> <td>____</td> <td>2.</td> <td>____</td> </tr> <tr> <td>3.</td> <td>____</td> <td>3.</td> <td>____</td> </tr> <tr> <td>4.</td> <td>____</td> <td>4.</td> <td>____</td> </tr> <tr> <td>5.</td> <td>____</td> <td>5.</td> <td>____</td> </tr> <tr> <td>6.</td> <td>____</td> <td>6.</td> <td>____</td> </tr> <tr> <td>7.</td> <td>____</td> <td>7.</td> <td>____</td> </tr> </tbody> </table>	Boys	Ages:	Girls:	Ages:	1.	____years	1.	____years	2.	____	2.	____	3.	____	3.	____	4.	____	4.	____	5.	____	5.	____	6.	____	6.	____	7.	____	7.	____	
Boys	Ages:	Girls:	Ages:																																
1.	____years	1.	____years																																
2.	____	2.	____																																
3.	____	3.	____																																
4.	____	4.	____																																
5.	____	5.	____																																
6.	____	6.	____																																
7.	____	7.	____																																
25.	Have you ever had an induced abortion?	[ 1 ] Yes [ 2 ] No																																	
26.	Are you pregnant now?	[ 1 ] Yes → [ 2 ] No	28																																
27.	<b>(Not presently expecting)</b> Do you want to have another child?	[ 1 ] Yes [ 2 ] No →	29																																

28.	How long would you like to wait from now before the birth of (another) child?	[ 1 ] As soon as possible [ 2 ] Few months [ 3 ] 1-2 years [ 4 ] More than 2 years [ 5 ] Uncertain/Not decided	
29.	The last time you became pregnant, did you want to become pregnant then, did you want to wait until later, or did you not want to become pregnant at all?	[ 1 ] Wanted the pregnancy [ 2 ] Wanted to wait [ 3 ] Did not want at all [ 4 ] Never had a pregnancy	

**CONTRACEPTIVE USE AND AWARENESS**

**Now I would like to ask you some questions about birth spacing. By birth spacing, I mean the different ways and methods couples use to avoid or delay pregnancy.**

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
30.	Have you ever heard of birth spacing?	[ 1 ] Yes [ 2 ] No →	36

31.	From where did you learn about birth spacing?	<input type="checkbox"/> [ 1 ] Hospital <input type="checkbox"/> [ 2 ] MCH clinic <input type="checkbox"/> [ 3 ] Community Worker <input type="checkbox"/> [ 4 ] Pharmacy <input type="checkbox"/> [ 5 ] Mother <input type="checkbox"/> [ 6 ] Mother-in-law <input type="checkbox"/> [ 7 ] Husband <input type="checkbox"/> [ 8 ] Friends/Relatives <input type="checkbox"/> [ 9 ] Radio <input type="checkbox"/> [10] Other	
-----	---	--	--

<p>32. Which ways or methods of birth spacing have you heard about?</p> <p>CIRCLE CODE 1 FOR EACH METHOD MENTIONED SPONTANEOUSLY. THEN PROCEED DOWN THE COLUMN, READING THE NAME AND DESCRIPTION, FOR EACH METHOD NOT MENTIONED. CIRCLE CODE 2 IF RECOGNIZED AND CODE 3 IF NOT RECOGNIZED. FOR EACH METHOD WITH CODE 1 OR 2 CIRCLED FOR 33, ASK QUESTION 34 AND 35 BEFORE PROCEEDING TO THE NEXT METHOD.</p>	<p><b>Codes for 35:</b></p> <input type="checkbox"/> [ 11 ] Hospital <input type="checkbox"/> [ 12 ] MCH clinic <input type="checkbox"/> [ 13 ] Community Health Worker <input type="checkbox"/> [ 14 ] Pharmacy <input type="checkbox"/> [ 15 ] Convenient Store <input type="checkbox"/> [ 16 ] Doctor <input type="checkbox"/> [ 17 ] Midwife <input type="checkbox"/> [ 18 ] Friends/Relatives <input type="checkbox"/> [ 19 ] Traditional Healer <input type="checkbox"/> [ 98 ] Other (Specify) <input type="checkbox"/> [ 99 ] Don't Know
--	--

	33. Have you ever heard of <b>(method)</b> ?	34. Have you ever used <b>(method)</b> ?	35. Where would you go if you wanted to use <b>(method)</b> ?
--	--	--	---

1.	<b>Pill.</b> Women can take a pill every day	Yes/spont -- 1 Yes/probed -- 2 No ----- 3	Yes ----- 1 No ----- 2	____CODE  ____OTHER
2.	<b>Injection.</b> Women can have an injection by a doctor or a nurse that stops them from becoming pregnant for several months.	Yes/spont -- 1 Yes/probed -- 2 No ----- 3	Yes ----- 1 No ----- 2	____CODE  ____OTHER
3.	<b>Condom.</b> Men can use a rubber sheath during sexual intercourse.	Yes/spont -- 1 Yes/probed -- 2 No ----- 3	Yes ----- 1 No ----- 2	____CODE  ____OTHER
4.	<b>IUD.</b> Women can have a loop or coil placed inside them by a doctor or a nurse.	Yes/spont -- 1 Yes/probed -- 2 No ----- 3	Yes ----- 1 No ----- 2	____CODE  ____OTHER
5.	<b>Female sterilization.</b> Women can have an operation to avoid having more children.	Yes/spont -- 1 Yes/probed -- 2 No ----- 3	Have you ever had an operation to avoid having any more children? Yes ----- 1 No ----- 2	____CODE  ____OTHER
6.	<b>Male sterilization.</b> Men can have an operation to avoid having more children.	Yes/spont -- 1 Yes/probed -- 2 No ----- 3	Has your husband ever had an operation to avoid having any more children?  Yes ----- 1 No ----- 2	____CODE  ____OTHER

7.	<p><b>Periodic abstinence.</b> Couples can avoid having sexual intercourse on certain days of the month when the woman is more likely to become pregnant.</p>	<p>Yes/spont -- 1          Yes/probed -- 2          No ----- 3</p>	<p>Yes ----- 1          No ----- 2</p>	<p>Do you know where a person can obtain advice on how to use periodic abstinence?</p> <p>_____ CODE          _____ OTHER</p>
8.	<p><b>Withdrawal.</b> Men can be careful and pull out before climax.</p>	<p>Yes/spont -- 1          Yes/probed -- 2          No ----- 3</p>	<p>Yes ----- 1          No ----- 2</p>	
9.	<p><b>Have you heard of any other methods that a man or woman can use to avoid pregnancy?</b> (specify)</p> <p>1. _____</p> <p>2. _____</p> <p>3. _____</p>	<p>Yes/spont -- 1          No ----- 3</p>	<p>Yes ----- 1          No ----- 2</p> <p>Yes ----- 1          No ----- 2</p> <p>Yes ----- 1          No ----- 2</p>	<p>_____ CODE          _____ OTHER</p> <p>_____ CODE          _____ OTHER</p> <p>_____ CODE          _____ OTHER</p>
36.	<p>Have you ever used any modern birth spacing method?          (Don't ask if already mentioned)</p>	<p>[ 1 ] Yes          [ 2 ] No</p>		
37.	<p>Are you currently using something or using any method to delay or avoid getting pregnant?</p>	<p>[ 1 ] Yes          [ 2 ] No →</p>	40	

38.	Which method are you using?	<input type="checkbox"/> [ 1 ] Pills <input type="checkbox"/> [ 2 ] Injectables <input type="checkbox"/> [ 3 ] Condoms <input type="checkbox"/> [ 4 ] IUD <input type="checkbox"/> [ 5 ] Female Sterilization <input type="checkbox"/> [ 6 ] Male Sterilization <input type="checkbox"/> [ 7 ] Emergency Contraception <input type="checkbox"/> [ 8 ] Withdrawal <input type="checkbox"/> [ 9 ] Periodic Abstinence <input type="checkbox"/> [10] Breastfeeding <input type="checkbox"/> [11] Herbal (Greek) Medicine <input type="checkbox"/> [12] OTHER _____ (SPECIFY)	
39.	Why are you using this method of birth spacing?	<input type="checkbox"/> [ 1 ] It is effective <input type="checkbox"/> [ 2 ] It is inexpensive <input type="checkbox"/> [ 3 ] It is easily available <input type="checkbox"/> [ 4 ] Doctor/medical personnel recommended it <input type="checkbox"/> [ 5 ] Husband's preference <input type="checkbox"/> [ 6 ] It is natural <input type="checkbox"/> [ 7 ] Less side effects <input type="checkbox"/> [ 8 ] OTHER _____ (SPECIFY)	
40.	Do you intend to use a birth spacing method in the future?	<input type="checkbox"/> [ 1 ] Yes → <input type="checkbox"/> [ 2 ] No <input type="checkbox"/> [ 3 ] Undecided/ Don't Know	42

<p>41.</p>	<p><b>If said no and no to 27:</b></p> <p>You have said that you do not want (a/another) child, but you are not using any method to avoid pregnancy.</p> <p>Can you tell me the main reason why?</p>	<p>[ 1 ] Husband disapproves</p> <p>[ 2 ] Respondent disapproves</p> <p>[ 3 ] Mullah disapproves</p> <p>[ 4 ] Fear of infertility</p> <p>[ 5 ] Fear of side effects</p> <p>[ 6 ] Cost</p> <p>[ 7 ] Not easily available</p> <p>[ 8 ] Previous bad experience with method</p> <p>[ 9 ] Difficulties using products</p> <p>[10] Having children depends on fate</p> <p>[11] Husband away</p> <p>[12] Less frequent sex</p> <p>[13] Breastfeeding</p> <p>[14] OTHER _____</p> <p>(SPECIFY)</p>	
<p>42.</p>	<p>Which method of birth spacing do you intend to use in the future?</p>	<p>[ 1 ] Pills</p> <p>[ 2 ] Injectables</p> <p>[ 3 ] Condoms</p> <p>[ 4 ] IUD</p> <p>[ 5 ] Female Sterilization</p> <p>[ 6 ] Male Sterilization</p> <p>[ 7 ] Emergency Contraception</p> <p>[ 8 ] Withdrawal</p> <p>[ 9 ] Periodic Abstinence</p> <p>[10] Breastfeeding</p> <p>[11] Herbal (Greek) Medicine</p> <p>[12] OTHER _____</p> <p>(SPECIFY)</p>	

43.	Do you think that breastfeeding can affect a woman's chance of becoming pregnant?	[ 1 ] Yes [ 2 ] No → [ 3 ] Don't Know →	45 45
44.	Do you think a woman's chance of becoming pregnant while breastfeeding is increased, decreased, or not affected?	[ 1 ] Increased [ 2 ] Decreased [ 3 ] Not affected [ 4 ] Depends [ 5 ] Don't know	

**ATTITUDES TOWARDS BIRTH SPACING**

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
45.	If you decide to use any birth spacing method, whose decision would it be?	[ 1 ] Mine [ 2 ] Husband [ 3 ] Both-Husband and Wife [ 4 ] Mother-in-law [ 5 ] Friends/Relatives [ 6 ] Doctor [ 7 ] OTHER _____ (SPECIFY)	
46.	Could you influence your husband by your decision to use any birth spacing method?	[ 1 ] Yes [ 2 ] No	

47.	Have you ever talked with your husband regarding the usage of any contraceptive method to delay or avoid pregnancy?	[ 1 ] Yes [ 2 ] No	
48.	Do you think that your husband wants the same number of children that you want or does he want more or fewer than you want?	[ 1 ] Same [ 2 ] More [ 3 ] Fewer [ 4 ] Don't Know	
49.	<p><b>(Has living children)</b> If you could go back to the time you did not have any children and you could choose exactly the number of children to have in your whole life, how many would that be?</p> <p><b>(Has no living children)</b> If you could choose exactly the number of children to have in your whole life, how many would that be?</p>	_____ (number)	
50.	Would you say that you approve or disapprove of couples using a birth spacing method to avoid or delay pregnancy?	[ 1 ] Approve [ 2 ] Disapprove [ 3 ] No Opinion [ 4 ] Don't Know	
51.	Do you think that your husband approves or disapproves of couples using a birth spacing method to avoid or delay pregnancy?	[ 1 ] Approve [ 2 ] Disapprove [ 3 ] No Opinion [ 4 ] Don't Know	

52.	Do most of your friends/neighbors approve or disapprove of couples using a birth spacing method to avoid or delay pregnancy?	<input type="checkbox"/> [ 1 ] Approve <input type="checkbox"/> [ 2 ] Disapprove <input type="checkbox"/> [ 3 ] No Opinion <input type="checkbox"/> [ 4 ] Don't Know	
53.	In your opinion, how long should a mother wait after having a child before having another?	<input type="checkbox"/> [ 1 ] Immediately after she recovers <input type="checkbox"/> [ 2 ] One year <input type="checkbox"/> [ 3 ] One and a half years after <input type="checkbox"/> [ 4 ] Two years after <input type="checkbox"/> [ 5 ] More than two years after <input type="checkbox"/> [ 6 ] OTHER _____ (SPECIFY)	
54.	What would you say are the benefits of delaying or spacing your children?	<input type="checkbox"/> [ 1 ] It protects the health of mothers <input type="checkbox"/> [ 2 ] Avoid unplanned pregnancy <input type="checkbox"/> [ 3 ] Helps health of children <input type="checkbox"/> [ 4 ] Allows couples to prepare for children <input type="checkbox"/> [ 5 ] Don't Know <input type="checkbox"/> [ 6 ] OTHER _____ (SPECIFY)	

55.	In your opinion, what are effective birth spacing methods?	<input type="checkbox"/> [ 1 ] Pills <input type="checkbox"/> [ 2 ] Injectables <input type="checkbox"/> [ 3 ] Condoms <input type="checkbox"/> [ 4 ] IUD <input type="checkbox"/> [ 5 ] Female Sterilization <input type="checkbox"/> [ 6 ] Male Sterilization <input type="checkbox"/> [ 7 ] Emergency Contraception <input type="checkbox"/> [ 8 ] Withdrawal <input type="checkbox"/> [ 9 ] Periodic Abstinence <input type="checkbox"/> [10] Breastfeeding <input type="checkbox"/> [11] Herbal (Greek) Medicine <input type="checkbox"/> [12] OTHER _____ (SPECIFY)	
56.	In your opinion, which birth spacing methods are widely available?	<input type="checkbox"/> [ 1 ] Pills <input type="checkbox"/> [ 2 ] Injectables <input type="checkbox"/> [ 3 ] Condoms <input type="checkbox"/> [ 4 ] IUD <input type="checkbox"/> [ 5 ] Female Sterilization <input type="checkbox"/> [ 6 ] Male Sterilization <input type="checkbox"/> [ 7 ] Emergency Contraception <input type="checkbox"/> [ 8 ] Withdrawal <input type="checkbox"/> [ 9 ] Periodic Abstinence <input type="checkbox"/> [10] Breastfeeding <input type="checkbox"/> [11] Herbal (Greek) Medicine <input type="checkbox"/> [12] OTHER _____ (SPECIFY)	

57.	In your opinion, which birth spacing methods are inexpensive?	[ 1 ] Pills [ 2 ] Injectables [ 3 ] Condoms [ 4 ] IUD [ 5 ] Female Sterilization [ 6 ] Male Sterilization [ 7 ] Emergency Contraception [ 8 ] Withdrawal [ 9 ] Periodic Abstinence [10] Breastfeeding [11] Herbal (Greek) Medicine [12] OTHER _____ (SPECIFY)	
58.	Do you agree or disagree with this statement: A woman can use birth spacing without her partner's knowledge.	[ 1 ] Agree [ 2 ] Disagree [ 3 ] No Opinion [ 4 ] Don't Know	

**NON-USERS**

**(ASK ONLY OF THOSE WHO HAVE NEVER AND ARE NOT CURRENTLY USING ANY METHOD)**

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
-----	-----------------------	-------------------	------

59.	What is the main reason why you or your partner is not using any contraceptive or birth spacing method?	[ 1 ] Desire to have children [ 2 ] Currently pregnant [ 3 ] Just delivered/ Breastfeeding [ 4 ] Lack knowledge about birth spacing [ 5 ] Too expensive [ 6 ] Afraid of side effects/ Health reasons [ 7 ] Fear of infertility [ 8 ] Not easily available [ 9 ] Not sexually active /infrequent sex [10] Infertile [11] Religion [12] Husband disapproves [13] Respondent disapproves [14] Having children depends on fate [15] Husband away [16] OTHER _____ (SPECIFY)	
60.	Do you intend to use any contraceptive or birth spacing method to avoid unplanned pregnancy at any time in the future?	[ 1 ] Yes → [ 2 ] No [ 3 ] Don't Know →	62  62

61.	If not, what is the main reason you do not intend to use any contraceptive or birth spacing method in the future?	[ 1 ] Want children [ 2 ] Lack knowledge [ 3 ] Causes infertility [ 4 ] Costs too much [ 5 ] Side effects [ 6 ] Hard to get method [ 7 ] Religion [ 8 ] Husband disapproves [ 9 ] Respondent disapproves [10] Infrequent sex [11] Menopausal / hysterectomy [12] Having children depends on fate [13] OTHER _____ (SPECIFY)	
62.	Have you ever wanted to use a contraceptive or birth spacing method?	[ 1 ] Yes [ 2 ] No →	69
63.	The last time you wanted to use a contraceptive or birth spacing method, why did you want to use it?	[ 1 ] Just to try / experiment [ 2 ] My husband wanted me to use it [ 3 ] To prevent unplanned pregnancy [ 4 ] OTHER _____ (SPECIFY)	

64.	The last time you wanted to use the contraceptive, why did you not eventually use it?	[ 1 ] Afraid of side effect [ 2 ] My husband refused [ 3 ] Not available [ 4 ] Didn't know how to use it [ 5 ] Religion [ 6 ] OTHER _____ (SPECIFY)	
65.	What is the main reason why you intend to use a birth spacing method in the future?	[ 1 ] To space children [ 2 ] To prevent unplanned pregnancy [ 3 ] To prevent disease [ 4 ] OTHER _____ (SPECIFY)	
66.	When do you intend to start using any contraceptive or birth spacing method?	[ 1 ] When I want to space children [ 2 ] When my husband wants me to [ 3 ] When my husband allows me [ 4 ] Don't Know [ 5 ] OTHER _____ (SPECIFY)	

67.	When you use any contraceptive or birth spacing method in the future, which method would you prefer to use?	[ 1 ] Pills [ 2 ] Injectables [ 3 ] Condoms [ 4 ] IUD [ 5 ] Female Sterilization [ 6 ] Male Sterilization [ 7 ] Emergency Contraception [ 8 ] Withdrawal [ 9 ] Periodic Abstinence [10] Breastfeeding [11] Herbal (Greek) Medicine [12] OTHER _____ (SPECIFY)	
68.	What is the main reason why you would prefer this contraceptive or birth spacing method?	[ 1 ] It is effective [ 2 ] It is inexpensive [ 3 ] It is easily available [ 4 ] Doctor/medical personnel recommended it [ 5 ] Husband's preference [ 6 ] It is natural [ 7 ] It protects against disease [ 8 ] OTHER _____ (SPECIFY)	

**STIs**

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
-----	-----------------------	-------------------	------

69.	Have you ever heard about infections that can be transmitted through sexual contact?	<input type="checkbox"/> [ 1 ] Yes <input type="checkbox"/> [ 2 ] No →	73
70.	In a man, what signs and symptoms would lead you to think that he has such an infection?	<input type="checkbox"/> [ 1 ] Abdominal Pain <input type="checkbox"/> [ 2 ] Discharge from penis <input type="checkbox"/> [ 3 ] Itching in genital area <input type="checkbox"/> [ 4 ] Burning pain on urination <input type="checkbox"/> [ 5 ] Ulcer / open sores in genital area <input type="checkbox"/> [ 6 ] Blood in Urine <input type="checkbox"/> [ 7 ] Loss of weight <input type="checkbox"/> [ 8 ] Don't know <input type="checkbox"/> [ 9 ] OTHER _____ (SPECIFY)	
71.	In a woman, what signs and symptoms would lead you to think that she has such an infection?	<input type="checkbox"/> [ 1 ] Abdominal Pain <input type="checkbox"/> [ 2 ] Discharge from vagina <input type="checkbox"/> [ 3 ] Itching in genital area <input type="checkbox"/> [ 4 ] Burning pain on urination <input type="checkbox"/> [ 5 ] Ulcer / open sores in genital area <input type="checkbox"/> [ 6 ] Blood in Urine <input type="checkbox"/> [ 7 ] Loss of weight <input type="checkbox"/> [ 8 ] Inability to conceive <input type="checkbox"/> [ 9 ] Don't know <input type="checkbox"/> [10] OTHER _____ (SPECIFY)	

72.	<p>Is there anything a person can do to avoid getting these infections (STIs)?</p> <p>What can a person do?</p> <p>Record all answers.</p>	<p>[ ] No</p> <p>[ ] Abstain from sex</p> <p>[ ] Use Condoms</p> <p>[ ] Avoid Blood Transfusions</p> <p>[ ] Avoid Injections</p> <p>[ ] Don't Know</p> <p>[ _____ ]</p> <p>OTHER _____</p> <p>(SPECIFY)</p>	
-----	--	---	--

**MEDIA & COMMUNICATION**

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP						
73.	<p>Who would you talk to if you wanted to get factual information about using a contraceptive or birth spacing method?</p>	<p>[ 1 ] Community Health Worker</p> <p>[ 2 ] Basic Health Unit / MCH clinic</p> <p>[ 3 ] Hospital</p> <p>[ 4 ] Doctor</p> <p>[ 5 ] Pharmacist</p> <p>[ 6 ] Husband</p> <p>[ 7 ] Mother-in-law</p> <p>[ 8 ] Mother</p> <p>[ 9 ] Mullah</p> <p>[10] Don't want information</p> <p>[11] OTHER _____</p> <p>(SPECIFY)</p>							
74.	<p>Of the sources I'm going to say, which do you think are</p>	<table border="1"> <tr> <td></td> <td align="center">YES</td> <td align="center">NO</td> </tr> <tr> <td>Radio</td> <td align="center">1</td> <td align="center">2</td> </tr> </table>		YES	NO	Radio	1	2	
	YES	NO							
Radio	1	2							

appropriate sources for information about contraception or birth spacing?

Read each one and record the answer.

Television	1	2
Newspaper/Magazine	1	2
Poster	1	2
Pamphlet	1	2
Community Leader	1	2
Religious Leader	1	2
Doctor	1	2
Midwife	1	2
Pharmacist	1	2
Community Health Worker	1	2

75.

During the last month, how often have you come in contact with each of the following:

Doctor  
Nurse / Midwife  
Community Health Worker / Health Educator  
Traditional Birth Attendant  
Traditional healer

Frequently (4+)	Sometimes (1-3)	Never

76.

Do you watch TV?

[ 1 ] Yes  
[ 2 ] No →

78

77.	<p>During a typical day, when do you watch TV?</p> <p>Record all answers.</p>	<p><input type="checkbox"/> Morning</p> <p><input type="checkbox"/> Afternoon</p> <p><input type="checkbox"/> Evening</p> <p><input type="checkbox"/> When there is programming</p> <p><input type="checkbox"/> OTHER _____ (SPECIFY)</p>	
78.	<p>How often do you read a newspaper?</p>	<p><input type="checkbox"/> 1 Daily</p> <p><input type="checkbox"/> 2 Once a week</p> <p><input type="checkbox"/> 3 More than once a week</p> <p><input type="checkbox"/> 4 Every two weeks</p> <p><input type="checkbox"/> 5 Once a month</p> <p><input type="checkbox"/> 6 Never</p>	
79.	<p>Do you listen to the radio?</p>	<p><input type="checkbox"/> 1 Yes</p> <p><input type="checkbox"/> 2 No →</p>	86
80.	<p>How often do you listen to the radio?</p>	<p><input type="checkbox"/> 1 Daily</p> <p><input type="checkbox"/> 2 Once a week</p> <p><input type="checkbox"/> 3 More than once a week</p> <p><input type="checkbox"/> 4 Every two weeks</p> <p><input type="checkbox"/> 5 Once a month</p>	

<p>81.</p> <p>Normally, which channels do you listen to?</p> <p>Probe and record all answers.</p>		<p><input type="checkbox"/> BBC</p> <p><input type="checkbox"/> Voice of America</p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/> OTHER _____</p> <p>(SPECIFY)</p>	
<p>82.</p> <p>During a typical day, when do you listen to the radio?</p> <p>Record all answers.</p>		<p><input type="checkbox"/> 7-9 a.m.</p> <p><input type="checkbox"/> 9-12 a.m.</p> <p><input type="checkbox"/> 12-5 p.m.</p> <p><input type="checkbox"/> 5-7 p.m.</p> <p><input type="checkbox"/> 7-9 p.m.</p> <p><input type="checkbox"/> 9-10 p.m.</p> <p><input type="checkbox"/> 10-midnight</p> <p><input type="checkbox"/> Midnight till morning</p>	
<p>83.</p> <p>What type of programs do you listen to on the radio?</p> <p>Record all answers.</p>		<p><input type="checkbox"/> News</p> <p><input type="checkbox"/> Drama</p> <p><input type="checkbox"/> Music</p> <p><input type="checkbox"/> Panel Discussions / Talk shows</p> <p><input type="checkbox"/> OTHER _____</p> <p>(SPECIFY)</p>	

84.	<p>With whom do you listen to the radio?</p> <p>Record all answers.</p>	<p><input type="checkbox"/> Husband</p> <p><input type="checkbox"/> Other women / neighbors</p> <p><input type="checkbox"/> Family / Relatives</p> <p><input type="checkbox"/> Alone</p> <p><input type="checkbox"/> OTHER _____</p> <p>(SPECIFY)</p>	
85.	<p>Who determines the listening channel?</p>	<p><input type="checkbox"/> 1 Elder</p> <p><input type="checkbox"/> 2 Husband</p> <p><input type="checkbox"/> 3 Respondent</p> <p><input type="checkbox"/> 4 Mother-in-law</p> <p><input type="checkbox"/> 5 Anyone</p> <p><input type="checkbox"/> 6 OTHER _____</p> <p>(SPECIFY)</p>	
86.	<p>How often do you go to a store?</p>	<p><input type="checkbox"/> 1 Daily</p> <p><input type="checkbox"/> 2 Once a week</p> <p><input type="checkbox"/> 3 More than once a week</p> <p><input type="checkbox"/> 4 Every two weeks</p> <p><input type="checkbox"/> 5 Once a month</p> <p><input type="checkbox"/> 6 Never</p>	
87.	<p>How do you pay for your purchases?</p> <p>Record all answers.</p>	<p><input type="checkbox"/> Cash</p> <p><input type="checkbox"/> Barter</p> <p><input type="checkbox"/> OTHER _____</p> <p>(SPECIFY)</p>	



**Appendix 2: List of Sampled Districts**

<b>No.</b>	<b>Province</b>	<b>District Name</b>	<b>Urban and Rural Status (U or R)</b>
1	Kabul	Kabul	U
2		Qara Bagh	R
3		Bagrami	R
4		Chahar Asyab	R
5	Ghazni	Ghazni	U
6		Andar	R
7		Jaghathu	R
8		Muqur	R
9	Herat	Enjil	U
10		Adraskan	R
11		Ghoryan	R
12		Karukh	R
13	Sari Pul	Sari Pul	U
14		Sayed Abad	R
15		Sangcharak	R
16		Sayyad	R
17	Paktya	Gardez	U
18		Said Karam	R
19		Zurmat	R
20		Road Ahmad Zai	R
21	Jawzjan	Shibirghan	U
22		Faiz Abad	R
23		Khwaja Do Koh	R
24		Mingajik	R
25	Balkh	Mazare Sharif	U
26		Balkh	R
27		Khulm	R
28		Dehdadi	R