

Working Paper No. 160

# **Clinical Contraceptives: Situation in Rural Bangladesh**

**Farzana Sobhan  
Ariful Islam  
MA Quaiyum  
Barkat-e-Khuda  
Shameem Ahmed**

1999



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Dr. Shameem Ahmed, Health Scientist, Operations Research Project died in a tragic plane crash in Kathmandu on September 5, 1999. One of her proudest achievements was to pilot safe caesarean section at the subdistrict level. She represented the Government of Bangladesh at various international conferences. She was an Associate Professor of Paediatrics at the Bangabandhu Sheikh Mujib Medical University, Dhaka and author of a number of publications.

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## Abstract

The national family planning programme has made remarkable strides during the past two decades with the total fertility rate (TFR), dropping by half and a six-fold increase in the contraceptive prevalence rate (CPR). To achieve replacement-level fertility, the CPR needs to be further increased with an increase in the relative share of clinical methods.

To assess knowledge and practice regarding clinical contraceptives, data were collected from 9,861 currently married women during November 1998-May 1999, living in four rural thanas, Abhoynagar, Keshobpur, Mirsarai, and Satkania of Bangladesh. To estimate the discontinuation rates of pill, condom, injectables and IUD, data were taken from the surveillance system of the Operations Research Project of the ICDDR,B: Centre for Health and Population Research which collects data on a three (previously two monthly) monthly round.

Results of the study show that 90 percent of the women could name any clinical method of contraception, but knowledge regarding Norplant and male sterilization was low. More than half of the women who mentioned a clinical method had some kind of misconception about the disadvantages of the method. Misconceptions were highest for IUD (66%) and lowest for injectables (57%). Religious prohibition for using permanent methods and also fear of surgery for permanent methods and Norplant were mentioned.

The CPR was found to be 47 percent and was highest in Abhoynagar (63%) and lowest in Satkania (31%). The pill was the most widely used method, and only a few women were on Norplant. Switch to clinical methods was found to occur mainly from pills to injectables. The first-year discontinuation rate was highest (69%) for condoms and lowest (30%) for IUD. Social barriers, desire for children, breast-feeding, and health concerns were the main reasons for non-use of contraceptives. Intention to use contraceptives was positively associated with advice from the field workers, education and the number of living children.

Findings of the study suggest that there is a need to remove the barriers to clinical contraception with emphasis on removal of misconceptions prevailing in the community. There is also a need to address the high-discontinuation rates.

## Introduction

The National Family Planning Programme of Bangladesh was initiated in the early sixties, with the central aim of developing an infrastructure of personnel and facilities that could make family planning information and services readily available to the general public [1]. During the past two decades, the programme has made significant progress: the country has experienced a rapid fertility decline, with the total fertility rate (TFR) dropping by half (from 6.3 in 1975 to 3.3 in 1996-1997), and a six-fold increase (from 8% to 49%) in the contraceptive prevalence rate (CPR) [2].

A vast service-delivery and logistics system has also been developed in the country to expand the Programme's service-delivery capacity to cover married couples of reproductive age [3]. Potential clients are being offered a wider range of services together with door-step delivery of services. This has resulted in a different type of change with an increased use of short-term methods, such as pills, condoms, and injectables, and a decreased use of longer-acting ones, such as IUDs and sterilization. Barriers to contraception in both supply and demand side exist, and gender preference represents a significant barrier to fertility regulation [4]. Certain social barriers to clinical contraception exist in rural Bangladesh, and permanent methods are seen as challenging God's right over procreation [5]. Although the Bangladesh sterilization programme became increasingly popular until 1987, its popularity has gradually declined overtime [6]. The pattern of decreasing reliance on sterilization, from almost two-fifths of users a decade ago to only one-fifth in 1993-1994, may be partially due to the discontinuation of recruiter-incentives in the late 1980s, and lack of effective and explicit information, education and communication (IEC) activities on sterilization [3]. The shift in method-mix from permanent methods to modern reversible methods has important implications for the family planning programme in terms of cost, supply, logistics, and method efficacy, and is specially important given the increasing proportion of women who say they want no more children [2].

A key concern for the national family planning programme is the high discontinuation rate. Nearly half of the users discontinue within 12 months of starting use. The discontinuation rates are highest for condoms (65%), followed by injectables (51%), pills (44%) and IUDs (41%). Overall, side-effects and health reasons account for one-fifth of all reasons for discontinuation and are the most common reasons for discontinuation of IUDs, injectables, and pills. Sixteen percent of married women of reproductive age (MWRA) still have an unmet need for family planning services, while the unmet need is as high as 13 percent among women aged 30-49 years who are the potential clients for longer-acting methods [2].

The Health and Population Sector Strategy (HPSS) plans to provide a range of reproductive health services focusing on client needs, rather than demographic

targets, increase the use of available services, and make them more cost-effective and sustainable. One of the future challenges of the national population programme is to achieve replacement-level fertility by the year 2005. To attain this, the CPR must be increased to at least 70 percent. Also, the relative share of the longer-acting methods in method-mix needs to be increased.

The main objective of the fifth five-year plan is to create a greater degree of public awareness about the population problem through a social movement and nation-wide approach. The population growth rate is expected to fall from 1.8 percent in 1996 to 1.32 percent by 2005. The TFR is also expected to fall from 3.3 in 1996-1997 to 2.2 in 2005.

The current priority of the national family planning programme is to increase and sustain demand for longer-acting methods and decrease contraceptive discontinuation through improving the quality of contraceptive services.

The National Integrated Health and Population Programme (NIPHP) has adopted this concern and the Operations Research Project (ORP) of the ICDDR,B: Centre for Health and Population Research has been entrusted with the responsibility to test strategies to "Improve the Quality and Performance of Clinical Contraceptives." The intervention aims to address the three major problems identified by the NIPHP for improving the use of clinical contraceptive services in Bangladesh. These are barriers to clinical contraception, high method discontinuation, and lack of an effective system for referral and linkage for contraceptive services.

## **Objectives**

### **General objective**

The general objective of the study is to assess the situation of clinical contraceptives in rural Bangladesh.

### **Specific objectives**

The specific objectives of the study are

1. to assess the knowledge, including misconceptions, regarding clinical contraceptives among currently married women in rural areas;
2. to assess the contraceptive use, problems faced, and subsequent care-seeking behaviour in rural areas;
3. to assess the reasons for non-use of contraceptives, the switching pattern, and the discontinuation rates in rural areas.

## **Methodology**

### **Data source**

Data for this study were obtained from the baseline survey of MWRA and from the longitudinal surveillance system of the ORP.

This study presents the findings from five unions of Mirsarai thana in Chittagong district (low-performing area in terms of health and family-planning indicators) and three unions of Abhoynagar thana in Jessore district (high-performing area in terms of health and family-planning indicators) respectively. These unions are the sites for the intervention on improving the quality and performance of clinical contraceptive services which follows a quasi-experimental, non-equivalent control group design.

Findings from Satkania and Keshobpur, the comparison thanas for Mirsarai and Abhoynagar, respectively are also included.

### **Baseline survey**

The survey was conducted during November 1998-May 1999. Systematic random sampling was employed. Every 4th household in Mirsarai and Satkania and every 6th household in Abhoynagar and Keshobpur were visited. All currently married women aged 15-49 years were interviewed. The interview was terminated for women having reached menopause. In total, 9,861 women were interviewed. The interviews were conducted by trained female interviewers who were supervised by the Project's Field Research Officers.

A semi-structured questionnaire was used after pre-testing. Information on the respondent's background, fertility, contraceptive behaviour, and socioeconomic status was collected.

### **Surveillance system**

Data from the surveillance system of the Project were used for calculating the first-year discontinuation rates of pills, condoms, injectables, and IUDs for the reference period, January 1997 to December 1998. The contraceptive-use status of every woman in the surveillance system was recorded at every two-month (currently 3 months) interval during the reference period. Life-table analysis was done to calculate the discontinuation rates for pills, condoms, IUDs, and injectables. The discontinuation rates were calculated for the first segment of use of a method and also for all segments of use of the same method in the reference period.

## **Operational definition**

### ***First segment***

First segment refers to the first uninterrupted duration of use of a particular contraceptive method in the reference period.

### ***All segments***

Each segment of contraceptive use by the same woman during the reference period was considered an independent event (a segment refers to the duration of use of a particular contraceptive method without any intervening period of non-use, pregnancy, or switch).

The duration of use starting before the reference period was excluded. Women who were not available for interview during a particular round, but their contraceptive use was the same during the next round, were considered as continuing the same method while if the woman was on a different method in the following round, the duration of use was considered up to the starting of the following round.

The following indicators for assessing the intervention as well as some descriptive information have been provided in this paper.

### **Indicators**

1. Proportion of MWRA with misconceptions on clinical methods
2. Proportion of MWRA not using any method due to social barriers
3. Percentage of switch of shorter-acting method users to comparatively longer-acting methods
4. First-year discontinuation rate of IUDs/injectables
5. Proportion of referred clients received services
6. Method-specific contraceptive prevalence rate (CPR)
7. Contraceptive prevalence rate (CPR)

## **Results**

### **Profiles of women**

Table 1 shows the profiles of the sample women. The mean age of the women was 30.7 years (all thanas considered together). One-fifth of the women were aged 20-24 years, and another one-fifth were aged 25-29 years. The rest were aged above or below this range. The mean year of schooling was 2.9 years and that of the husbands 4.3 years.

**Table 1.** Percentage distribution of women by different socio-demographic characteristics

Characteristics	Abhoynagar (n=1892)	Keshobpur (n=1861)	Mirsarai (n=4012)	Satkania (n=2096)	Total (n=9861)
<b>Women's age (in years)</b>					
<20	10.9	13.2	5.9	7.7	8.6
20-24	21.9	21.3	17.3	20.8	19.7
25-29	18.4	19.5	22.4	17.7	20.1
30-34	15.5	17.4	18.4	17.1	17.4
35-39	14.8	12.5	16.2	16.1	15.2
40-44	10.7	10.0	11.9	11.4	12.2
45-49	7.8	6.2	7.9	9.2	7.8
Mean	30.3	29.4	31.1	31.3	30.7
<b>Women's education (in years)</b>					
<1	45.5	58.2	50.6	57.9	57.3
1-5	32.3	26.6	24.5	23.3	26.1
6-10	21.2	14.0	23.3	23.1	21.1
>10	1.0	1.1	1.6	1.7	1.4
Mean	3.0	2.1	3.1	3.0	2.9
<b>Husband's education (years)</b>					
<1	40.5	46.9	35.1	37.9	38.9
1-5	23.9	25.1	21.8	23.8	23.2
6-10	29.9	22.3	34.5	30.1	30.3
>10	5.5	5.4	8.4	8.0	7.2
Mean	4.0	3.4	4.9	4.5	4.3
<b>Occupation</b>					
Housewife	81.1	84.2	71.3	74.0	76.2
Earns at home	14.0	11.4	27.2	23.2	20.8
Employed outside	4.9	4.4	1.5	2.8	3.0
<b>Husband's occupation</b>					
Farming/dairy/poultry	34.4	38.7	19.9	25.0	27.3
Professional/ service holder	7.7	5.9	15.6	14.4	12.0
Business	15.9	16.7	17.7	17.7	17.0
Labourer	40.3	36.2	20.7	20.7	27.4
Works abroad	0.3	0.1	17.7	15.5	10.6
Others	1.3	2.3	8.3	7.3	5.6

Table 1 (contd.)

**Table 1 (Contd.)**

Characteristics	Abhoynagar (n = 1892)	Keshobpur (n = 1861)	Mirsarai (n = 4012)	Satkania (n = 2096)	Total (n = 9861)
<b>Religion</b>					
Non-Muslim	22.8	12.3	18.4	13.2	17.0
Muslim	77.2	87.7	81.6	86.8	83.0
<b>Monthly family expenditure (Taka)</b>					
< 2000	18.8	25.0	5.3	13.7	13.4
2000-3999	53.4	49.9	46.3	53.1	49.8
> 4000	27.9	25.1	48.3	33.2	36.8
<b>Number of living children</b>					
No children	4.4	3.4	3.8	3.9	3.9
1-2	55.8	51.9	39.1	31.4	43.3
3-4	28.6	28.8	34.2	33.3	32.1
> 4	11.2	12.9	22.6	31.1	20.5
Mean	2.5	2.6	3.6	3.1	2.5

Over three-quarters of the women were housewives, while 27 percent of the husbands either were labourers or engaged in farming/dairy/poultry work. Eighteen percent and 16 percent of the husbands in Mirsarai and Satkania respectively were working abroad.

The mean number of living children was 2.5. The mean number of children was higher in the low-performing areas, Mirsarai (3.6) and Satkania (3.1) than in the high-performing areas, Abhoynagar (2.5) and Keshobpur (2.6). Four percent of the women had no living children; 43 percent had 1-2 living children and 32 percent had between 3-4 living children.

Half of the sample women reported having had a monthly family expenditure of Taka 2000-3999 and over one-third had an expenditure of more than Tk. 4000 or more. Eighty-three percent of the women in all areas belonged to Muslim families.

### **Knowledge of currently married women about contraceptive methods**

Knowledge of contraceptive methods in this paper refers to the respondent's ability to name the different types of contraceptive methods known to them.

Table 2 presents the spontaneous responses of the women. Knowledge regarding any modern method was found to be almost universal in the high-performing areas, Abhoynagar and Keshobpur, and slightly less in the low

performing areas, Mirsarai and Satkania. The knowledge regarding any clinical method (injectables, IUDs, Norplant, male sterilization, and female sterilization) was 90 percent or more in all the thanas, except Satkania where it was 81 percent. This was also found to be higher in the high-performing areas, Abhoynagar and Keshobpur, than in the low-performing areas, Mirsarai and Satkania.

**Table 2.** Percentage of currently married women having knowledge of contraceptive methods by thana

Contraceptive method	Abhoynagar (n=1892)	Keshobpur (n=1861)	Mirsarai (n=4012)	Satkania (n=2096)	Total (n=9861)
<b>Any modern method</b>	<b>99.8</b>	<b>99.5</b>	<b>98.9</b>	<b>96.5</b>	<b>98.7</b>
Pill	97.9	98.3	96.8	91.8	96.3
Condom	68.4	54.6	41.7	24.7	45.7
Injectable	89.5	83.9	76.2	61.3	77.0
IUD	71.6	64.8	55.2	51.8	59.4
Norplant	31.3	8.5	3.1	0.7	9.0
Male sterilization	31.3	14.6	2.0	1.6	9.9
Female sterilization	45.5	41.0	51.8	44.4	47.0
Vaginal method	-	-	-	-	-
<b>Any clinical method</b>	<b>97.0</b>	<b>95.3</b>	<b>89.8</b>	<b>81.3</b>	<b>90.4</b>
<b>Any traditional method</b>	<b>4.9</b>	<b>9.3</b>	<b>2.4</b>	<b>1.2</b>	<b>3.9</b>
<b>Mean number of methods known</b>	<b>4.4</b>	<b>3.7</b>	<b>3.2</b>	<b>2.7</b>	<b>3.4</b>

*Spontaneous responses only*

Between Abhoynagar and Keshobpur the difference in knowledge was more marked for condom, IUD, Norplant and male sterilization and for condom and female sterilization between Mirsarai and Satkania thanas.

The pill and injectable were the two most commonly known methods in all areas considered together (pill 96%; injectable 77%). Norplant and male sterilization were the two methods least known to the sample women; knowledge about these two methods was highest in Abhoynagar (31%) and almost negligible in Mirsarai and Satkania. Vaginal methods were not mentioned in any area. Very few mentioned the traditional methods (withdrawal and periodic abstinence, while mention of homeopathic and *kabiraji* methods was negligible). The mean number of methods known in Abhoynagar, Keshobpur, Mirsarai, and Satkania was 4.4, 3.7, 3.2 and 2.7 respectively.

When both prompted and unprompted responses were considered together, the knowledge for all types of methods was found to be higher, particularly for condom (88.2%), injectable (98.8%), IUD (94.1%), Norplant (30.8%), male sterilization (62.9%), female sterilization (98.4%), and any traditional method (55.7%).

### Misconceptions regarding disadvantages of clinical methods

The women who had heard about a clinical method were asked to mention its disadvantages. A response was considered to be a misconception when it was other than the disadvantages mentioned in the literature [7,8]. Actual side-effects/complications of the method and religious prohibition about the method, if mentioned, were not included in the misconceptions.

As seen in Table 3, in Abhoynagar, the misconceptions were highest for IUD (81%) and lowest for Norplant (57%). In Keshobpur, the misconceptions were highest for IUD (66%) and lowest for injectables (56%). In Mirsarai, the misconceptions were highest for female sterilization (82%) and lowest for injectables (51%), while in Satkania, these were highest for Norplant (68%) and lowest for female sterilization (52%). Table 4-8 show the responses considered as the misconceptions.

**Table 3.** Proportion of currently married women having misconceptions regarding disadvantages of clinical methods by area

Method	Abhoynagar	Keshobpur	Mirsarai	Satkania	Total
Injectables (n = 8790)	71.7	56.4	51.4	55.2	57.3
IUD (n = 7225)	80.9	65.8	60.7	61.3	65.7
Norplant (n = 805)	53.9	62.3	72.8	67.7	61.9
Female sterilization (n = 7268)	58.6	53.1	82.2	52.6	65.4
Male sterilization (n = 3547)	56.5	46.4	74.4	56.7	58.5

*n = Heard about the method in all thanas (both prompted and unprompted responses)*

## Types of misconceptions regarding disadvantages of clinical methods

It was observed that among the misconceptions, health problems were more frequently cited for all the clinical methods.

### *Injectables*

It was found that health problems were the most common misconceptions cited (Table 4). Any health problem as a misconception was mentioned by 52 percent of the women. The main health problems reported were dizziness (36%) and weakness (32%). Other health problems mentioned were weight loss, high blood pressure, diminished eye sight, tingling and burning of extremities. Other misconceptions regarding injectables were accumulation of water, blood, or stone in the stomach (1%) and infertility (2%). It may be mentioned that side-effects of the method (amenorrhoea (61%), excessive bleeding (46%), and weight gain (8%)) were the other disadvantages mentioned for injectables.

**Table 4.** Types of misconceptions regarding disadvantages of injectables by area

Misconceptions regarding disadvantages	Abhoynagar (n=1800)	Keshobpur (n=1671)	Mirsarai (n=3533)	Satkania (n=1783)	Total (n=8789)
<b>Any health problem</b>	66.9	51.3	47.2	46.8	51.9
Dizziness	54.6	36.0	29.3	32.0	36.3
Weakness	38.0	30.6	30.3	29.8	31.8
Weight loss	9.8	10.3	6.1	10.8	8.6
High blood pressure	1.3	1.1	1.4	5.5	2.2
<b>Accumulation of blood/stone/water in the stomach</b>	0.8	0.5	1.0	0.1	1.0
<b>Causes infertility</b>	0.4	1.4	1.6	2.6	1.5

*Figures in the table represent the percentage of women*

### **IUD**

As shown in Table 5, the most common misconceptions of IUDs were related to health problems (35%). Weakness (20%), ulcer in the cervix (18%), and dizziness (16%) were the commonly mentioned health problems. Other misconceptions regarding IUDs were upward displacement of IUDs (10%) and infertility (4%).

**Table 5.** Types of misconceptions regarding disadvantages of IUD by area

Misconceptions regarding disadvantages	Abhoynagar (n=1426)	Keshobpur (n=1163)	Mirsarai (n=2988)	Satkania (n=1649)	Total (n=7226)
<b>Any health problem</b>	28.4	31.0	33.4	45.8	34.9
Weakness	15.4	18.7	19.6	27.2	20.4
Dizziness	10.3	8.9	13.2	30.7	15.9
Stomach/backache	4.4	5.3	2.6	4.7	3.9
Ulcer in the cervix	47.0	15.3	11.7	6.9	18.2
Cancer in uterus	1.6	2.2	2.1	1.2	1.8
<b>IUD displaced upwards</b>	16.9	12.3	10.1	3.9	10.4
<b>Causes infertility</b>	1.9	8.1	3.0	6.2	4.3

*Figures in the table represent the percentage of women*

The other common disadvantages mentioned for IUDs were side-effects of the method (excessive bleeding during menstruation, 49% and other menstrual problems, 26%). Inconvenience in using the method (16%) and religious prohibition (2%) were also cited.

### **Male sterilization**

Table 6 shows that for male sterilization also, health problems were the most frequently cited misconceptions. Health breakdown (35%), weakness (10%), and dizziness (2%) were among the common health problems mentioned.

**Table 6.** Types of misconceptions regarding disadvantages of male sterilization by area

Misconceptions regarding disadvantages	Abhoynagar (n=1117)	Keshobpur (n=1003)	Mirsarai (n=978)	Satkania (n=450)	Total (n=3548)
<b>Any health problem</b>	44.4	35.0	59.2	42.2	45.5
Dizziness	2.1	1.7	2.9	2.4	2.3
Health deteriorates	34.4	25.2	45.4	34.2	34.8
Weakness	9.0	9.8	15.0	5.1	10.4
<b>Loss of sexual desire</b>	5.4	9.7	6.2	12.9	7.8
<b>Loss of sexual ability</b>	8.2	5.6	12.6	12.9	9.3
<b>Difficulty in doing hard work</b>	10.7	4.8	5.9	6.2	7.1
<b>Men die</b>	1.1	0.7	9.1	4.2	3.6

*Figures in the table represent the percentage of women*

Other misconceptions for male sterilization were loss of sexual ability (9%), loss of sexual desire (8%), difficulty in doing hard work (7%), and death of men (4%). Almost a quarter of the women (24%) mentioned religious prohibition as a disadvantage for male sterilization.

### **Female sterilization**

For female sterilization, health problems were the most frequently cited misconceptions (Table 7). Weakness (20%), weight loss (12%), weight gain (12%), and dizziness (10%) were the common health problems mentioned.

**Table 7.** Types of misconceptions regarding disadvantages of female sterilization by area

Misconceptions regarding disadvantages	Abhoynagar (n = 1445)	Keshobpur (n = 1349)	Mirsarai (n = 2827)	Satkania (n = 1647)	Total (n = 7268)
<b>Any health problem</b>	41.8	36.6	43.7	35.1	40.1
Weight gain	9.1	4.2	15.6	14.1	11.9
Weight loss	20.1	10.7	11.1	9.5	12.4
Weakness	22.4	21.0	23.7	12.9	20.3
Dizziness	8.9	9.1	11.3	7.8	9.6
Excessive bleeding	1.0	2.2	10.0	3.3	5.3
<b>Difficulty in carrying heavy things</b>	17.6	8.2	25.6	7.7	16.7
<b>Cannot do hard work</b>	2.1	1.5	10.5	4.9	5.9
<b>Women die</b>	5.0	7.9	5.5	4.0	5.5
<b>Brings bad luck to property/children</b>	0.1	0.6	2.6	1.3	1.4

*Figures in the table represent the percentage of women*

Other misconceptions for female sterilization were difficulty in carrying heavy things (17%), difficulty in doing hard work (6%), and death of the women/children (6%).

Other disadvantages mentioned for female sterilization were inability to have children (35%), religious prohibition (15%), and brings bad luck to property/children (2%).

### **Norplant**

Table 8 shows that, for Norplant, health problems were the most frequently cited. Commonly mentioned health problems were weight loss (11%), weakness (16%), and high blood pressure (1%).

**Table 8.** Types of misconceptions regarding disadvantages of Norplant by area

Misconceptions regarding disadvantages	Abhoynagar (n=356)	Keshobpur (n=183)	Mirsarai (n=235)	Satkania (n=31)	Total (n=805)
<b>Any health problem</b>	36.0	39.3	41.7	35.5	38.4
Weight loss	11.0	14.8	7.7	12.9	10.9
High BP	0.6	0.5	3.0	-	1.2
Weakness	13.2	14.1	21.3	16.1	15.9
<b>Painful arms</b>	9.5	2.2	4.3	3.2	6.1
<b>Difficulty in doing hard work</b>	1.1	0.5	1.3	-	1.0
<b>Paralysis/cancer of upper limb</b>	4.2	-	0.9	3.2	2.2
<b>Causes infertility</b>	3.7	20.2	18.3	29.0	12.7

*Figures in the table represent the percentage of women*

Other misconceptions cited for Norplant were causes infertility (13%), painful arms (6%), difficulty in doing hard work (1%), and paralysis/cancer of upper limb.

Among the other disadvantages, a high proportion mentioned fear of surgery (29%) and side-effects of the method (25%).

#### **Contraceptive use among currently married women**

The CPR was 47.3 percent in all areas considered together (Table 9). It was higher in Abhoynagar and Keshobpur than in Mirsarai and Satkania. It was 63.2 percent in Abhoynagar, 55 percent in Keshobpur, 44.8 percent in Mirsarai, and 31 percent in Satkania.

Of the sample women, 7.3 percent were pregnant at the time of the interview.

Among all methods, the oral pill was the most commonly used method. This method was used by nearly a fifth of women in Keshobpur and Abhoynagar and by less than a fifth in Mirsarai and Satkania (Table 9).

**Table 9.** Percentage distribution of contraceptive use among currently married women by thana

Contraceptive method	Abhoynagar (n=1892)	Keshobpur (n=1861)	Mirsarai (n=4012)	Satkania (n=2096)	Total (n=9861)
Pill	20.9	23.6	16.5	14.3	18.2
Condom	2.4	2.1	2.6	2.1	2.4
Injectable	24.5	9.9	11.3	4.6	12.1
IUD	2.4	1.2	2.8	2.2	2.3
Norplant	0.3	0.6	0.4	0	0.3
Male sterilization	0.9	1.7	0.1	0.1	0.5
Female sterilization	5.2	6.3	6.1	5.0	5.7
Any traditional method*	6.7	9.6	5.0	2.6	5.7
Any clinical method	33.2	19.6	20.6	11.9	21.0
Any method	63.2	55.0	44.8	31.0	47.3
No method	36.8	45.0	51.2	69	52.7

\*Traditional method: Rhythm, withdrawal, *kabiraji*, herbal

The use of clinical contraceptives was found to be highest in Abhoynagar (33.2%) and lowest in Satkania (12%), while in Keshobpur and Mirsarai over a fifth were using the clinical methods. Among the clinical methods, injectables were the most common method used, followed by female sterilization. It is notable that the relative share of clinical contraceptives in the CPR was found to be over 50 percent in Abhoynagar, but lesser in other thanas.

The use of traditional methods was found to be much lower than the modern methods. It was higher in Abhoynagar (7%) and Keshobpur (10%) than in Mirsarai (6%) and Satkania (6%).

### Persons who advised to use clinical method

As seen in Table.10, clinical methods were recommended in nearly two-thirds of cases by the government field workers in all areas, except Satkania, where this was 55 percent. A difference of almost 12 percent was observed between Mirsarai (67%) and Satkania (55%). This was followed by advise from relatives which was found to be higher in Abhoynagar, at 32 percent and lowest in Satkania, at 14 percent. Husbands advised their wives to use clinical methods in almost a quarter of the cases (24.2%) when all areas were considered together; however, this was found to be much lower in Abhoynagar (13%) than in its

comparison area, Keshobpur (30%). Advice by friends was also found to be higher in Keshobpur (28%), but it was much lower in other thanas. It was observed that advice to use clinical methods was reported to be negligible by the village practitioners, NGO field workers, community leaders or group leaders which has been categorized as others.

**Table 10.** Types of persons who advised women to use any clinical method by area

Type of person	Abhoynagar (n=628)	Keshobpur (n=365)	Mirsarai (n=826)	Satkania (n=250)	Total (n=2069)
Husbands	13.2	30.4	29.2	26.0	24.2
Friend/neighbours	13.2	28.2	8.0	8.0	13.1
Relatives	31.8	26.6	29.1	14.4	27.7
Government field workers	64.0	62.5	67.3	55.2	64.0
Paramedics (FWV/SACMO/Nurse)	2.7	1.9	4.7	11.2	4.4
Doctors	1.3	1.1	4.5	2.8	2.7
Self	14.3	3.8	9.8	10.8	10.2
A user of the method	1.6	3.0	0.2	0.4	1.2
Others	3.5	4.7	1.8	7.6	3.5

*Figures in the table represent the percentage of types of persons*

### **Problems faced by current users of contraceptive methods**

Of the 4,102 current users of modern methods, 1,537 women (37.4%) faced problems. Table 11a and 11b show the problems faced by the users of clinical methods only. Any problem faced by the women was highest for Norplant in Abhoynagar (80%) and Mirsarai (75%). However, the number of Norplant users is very low. Apart from this, problems faced by the injectable users were highest in all the areas. This was found to be nearly 20 percentage points higher in Keshobpur (71%) than in Abhoynagar (52%) and 17 percentage points higher in Mirsarai (66%) than in Satkania (49%). Common problems reported by the injectable users were amenorrhoea, followed by dizziness and weakness in all the thanas.

**Table 11a.** Percentage of current users having method-specific problems by area (Abhoynagar and Keshobpur)

Type of problem	Abhoynagar						Keshobpur					
	Inj. (n=463)	IUD (n=45)	Norplant (n=5)	Female sterili- zation (n=98)	Male sterili- zation (n=17)	Total (n=1069)	Inj. (n=184)	IUD (n=22)	Norplant (n=11)	Female sterili- zation (n=118)	Male sterili- zation (n=31)	Total (n=846)
Any problem	52.0	44.4	80.0	25.0	25.0	36.3	71.0	40.9	36.4	40.7	25.8	36.6
Weight gain	1.3	-	-	-	-	0.7	-	-	-	-	-	-
Weight loss	2.4	4.4	-	6.1	-	1.9	2.2	4.5	-	5.1	6.5	1.9
Excessive bleeding	6.0	6.7	-	-	-	3.2	4.9	9.1	-	4.2	-	1.9
Amenorrhea	28.5	4.4	20.0	1.0	-	13.1	59.2	-	27.3	2.5	-	14.3
Irregular menstruation	4.3	4.4	20.0	3.1	-	2.8	1.1	-	0.8	-	-	0.4
Weakness	14.0	17.8	20.0	12.2	11.8	12.0	12.0	9.1	-	17.8	6.5	10.4
Stomachache	3.9	13.3	-	8.2	5.9	3.6	2.2	18.2	-	8.5	6.5	2.7
Headache/nausea	2.6	2.2	-	1.0	-	3.2	8.2	4.5	-	5.1	3.2	5.9
Dizziness	18.6	8.9	40.0	11.2	-	16.5	14.7	-	9.1	11.9	3.2	15.8
Burning extremities	4.8	-	-	-	-	2.5	5.4	-	9.1	2.5	-	2.6
Others	2.4	24.4	-	11.2	5.9	3.8	2.2	13.6	-	13.6	16.1	4.0

*Multiple responses were allowed*

**Table 11b.** Percentage of current users having method-specific problems by area (Mirsarai and Satkania)

Type of problem	Mirsarai						Satkania					
	Inj. (n=453)	IUD (n=111)	Norplant (n=16)	Female sterili- zation (n=243)	Male sterili- zation (n=3)	Total (n=1594)	Inj. (n=96)	IUD (n=47)	Norplant (n=1)	Femle sterili- zation (n=104)	Male sterili- zation (n=2)	Total (n=593)
Any problem	66.4	41.4	75.0	36.2	-	43.0	49.0	19.6	-	29.0	-	27.7
Weight gain	0.7	-	-	0.4	-	0.5	1.0	-	-	-	-	0.5
Weight loss	2.2	-	-	2.9	-	1.6	2.1	-	-	4.8	-	1.3
Excessive bleeding	9.9	21.6	25.0	4.5	-	5.9	8.3	4.3	-	3.8	-	3.0
Amenhorrea	41.1	6.3	25.1	2.1	-	13.4	29.2	-	-	-	-	5.1
Irregular menstruation	7.9	0.9	6.3	1.2	-	3.0	2.1	-	-	-	-	0.7
Weakness	23.0	20.7	20.6	31.3	-	18.8	19.8	4.3	-	14.4	-	12.5
Stomachache	5.7	8.1	-	9.9	-	4.1	2.1	4.3	-	15.4	-	3.4
Headache/Nausea	4.6	1.8	6.3	3.3	-	4.9	4.2	4.3	-	2.9	-	3.7
Dizziness	26.3	14.4	62.5	21.0	-	24.0	35.4	12.8	-	10.6	-	18.0
Burning extremities	2.4	1.8	-	1.2	-	2.0	4.2	-	-	1.0	-	1.7
Others	2.0	5.4	25.0	7.0	-	3.1	4.2	4.3	-	9.6	-	4.7

*Multiple responses were allowed*

## ***IUD***

Any problem faced by the IUD users was found to be higher in Abhoynagar (44%) than in Keshobpur (41%). This higher rate was also reported in Mirsarai (42%) and in Satkania (20%). The IUD users mainly reported weakness (18%) and stomachache (13%) in Abhoynagar; stomachache (18%), weakness (9%), and excessive bleeding (9%) in Keshobpur; excessive bleeding (22%), weakness (21%), and dizziness (14%) in Mirsarai whereas in Satkania, dizziness (15%) was the main complaint.

## ***Norplant***

The Norplant users mainly reported dizziness, amenhorrea, and weakness in Abhoynagar and Keshobpur. Excessive bleeding was reported in Mirsarai, in addition to the above.

## ***Female sterilization clients***

Any problem faced by the women having had sterilization was found to be higher in Keshobpur (41%), than its intervention thana Abhoynagar where this was 25 percent; while this was higher in Mirsarai (36%) compared to its comparison thana Satkania (29%). The tubectomy clients mainly reported weakness and stomachache in all thanas.

## ***Male sterilization***

The male sterilization clients were few and were reported to suffer from weakness, stomachache, and weight loss.

## **Person consulted for problems faced with the current method**

Among those having problems with the current method, 78 percent (all the areas considered together) discussed the problem with someone. This was found to be highest (82%) in Abhoynagar and lowest (64%) in Satkania (Table 12).

In all the areas, the Family Welfare Assistants (FWA) were consulted by the majority of women (78.4%). This was much higher in the intervention areas (86% in Abhoynagar and 71% in Mirsarai) than in the respective comparison thanas (49% in Keshobpur and 38% in Satkania).

Consultation with the Family Welfare Visitors/Sub-Assistant Community Medical Officer (FWV/SACMO), however, was higher in both the comparison areas (Abhoynagar 12% and Keshobpur 20%; Mirsarai 19% and Satkania 40%).

It was also found that the women discussed these problems more with the relatives/friends than with their husbands. It was also noted that the village practitioners were seldom consulted for problems faced with the use of modern contraceptives.

**Table 12.** Types of persons consulted for problems by area

Type of person consulted	Abhoynagar (n=319)	Keshobpur (n=241)	Mirsarai (n=542)	Satkania (n=104)	Total (n=1206)
Anybody	82.4	77.7	80.0	64.1	78.4
FWA	86.2	49.0	71.4	37.5	67.9
FWV/SACMO	11.6	19.5	19.0	40.4	19.0
Doctor	3.8	10.0	10.0	16.3	8.9
Husband	4.7	7.9	5.2	7.7	5.8
Relative/friend	9.1	29.0	12.0	12.5	14.7
Others	0.6	1.6	0.6	0.6	0.1

*Multiple response recorded*

*Figures in the table represent the percentages of women*

### **Type of measure taken by persons consulted for problems**

Of the persons who were consulted by the women facing problems, 93 percent (all the areas considered together) gave some sort of advice or remedy (Table 13). This was found to be higher in both the comparison areas than the respective intervention areas (Abhoynagar 93%; Keshobpur 88%; Mirsarai 96%; Satkania 86%). Results show that assurance/advice, followed by prescription of medicine, was the most common measure given by any person consulted for the problems in all the areas. Assurance/advice was found to be higher in Keshobpur (71%) and Mirsarai (77%) than in Abhoynagar (64%) and Satkania (59%).

**Table 13.** Types of measures taken by persons consulted

Type of measure	Abhoynagar (n=296)	Keshobpur (n=213)	Mirsarai (n=523)	Satkania (n=92)	Total (n=1124)
Prescription of medicines	27.4	19.7	34.8	47.8	31.0
Prescription of vitamins	-	-	1.0	-	0.4
Assurance/Advice	64.2	71.4	76.5	58.7	70.8
Advised to switch method	1.3	26.7	1.3	3.3	5.2
Referred	19.3	18.3	4.4	9.8	11.4
Did nothing	1.3	1.8	1.0	1.0	1.0
Others (advised nutritious food)	0.3	-	0.4	-	0.3

*Multiple responses recorded*

*Figures in the table represent the percentages of women*

Prescription of medicine was higher in the low-performing areas (Satkania 48%, Mirsarai 35%) than in the higher-performing areas (Abhoynagar 27%, Keshobpur 20%). Switch to a different method was advised to over a quarter (27%) of the women in Keshobpur. This advice was, however, much less in other areas. Prescription of vitamins was negligible. These were prescribed only in 1 percent of cases in Mirsarai. Referral was higher in Abhoynagar (19%) and Keshobpur (18 %) than in Mirsarai (4%) and Satkania (10%).

### Referral for side-effects/complications

Of the women who were having problems with the current method, 127 were referred to a higher facility or more trained person (Table 14). Referral was much higher in the high-performing areas, Abhoynagar (19%) and Keshobpur (18%) than in the low-performing areas, Mirsarai (4%) or Satkania (10%). Compliance with referral was also higher in Abhoynagar (72%) and Keshobpur (87%) than in Mirsarai (87%) and Satkania (55%). All the women who complied with referral, were reported to have received services, except in Abhoynagar where this was 93 percent. Information was available for 119 women on the type of facility referred to. Of them, 67 were referred to a Health and Family Welfare Centre (H&FWC), 15 to Satellite and EPI Centres (SC and EPI), 32 to Thana Health Complex (THC), and 8 to a Satellite Clinic (SC).

**Table 14.** Proportion of MWRA referred and received services for side-effects/ complications of clinical methods

Variable	Abhoynagar (n = 296)	Keshobpur (n = 213)	Mirsarai (523)	Satkania (n = 92)	Total (n = 1124)
Referred for side-effects/ complications of clinical methods	19.3 (57)	18.3 (39)	4.4 (22)	9.8 (9)	11.4 (128)
Complied with referral	71.9 (41)	87.2 (34)	68.2 (15)	55.6 (5)	74.8 (95)
Received services	92.7 (38)	100.0 (34)	100.0 (15)	100.0 (5)	96.8 (92)

*Figures in parentheses indicate numbers of MWRA*

### Non-use of contraceptives

Of the 9,861 currently married women, 29 percent were never-users of contraceptive methods. Information on reasons for non-use of contraceptives was available for 2,814 women. The responses have been categorized as follows: social barriers (husband's opposition, self opposition, opposition from others, and

religious prohibition), programmatic barriers (lack of access/distance, cost, knows no source, knows no method) need not felt (husband living abroad, hysterectomy, desire for children, currently pregnant) health concerns and fear of side-effects, postpartum/breast-feeding and others (Table 15).

In all the thanas, need not felt was the most common reason cited (66%) for non-use of contraceptives, followed by social barriers (19%), concern for health (7%), and fear of side-effects (6%).

**Table 15.** Reasons for non-use of contraceptives by thana

Reasons	Abhoynagar (n=273)	Keshobpur (n=435)	Mirsarai (n=1158)	Satkania (n=948)	Total (n=2814)
<b>Social barriers</b>	<b>23.4</b>	<b>13.8</b>	<b>17.0</b>	<b>23.6</b>	<b>19.4</b>
Husband opposed	13.5	6.4	12.2	15.5	12.6
Respondent opposed	7.7	5.3	7.0	12.0	8.4
Others opposed	1.0	1.0	0.3	0.1	1.0
Religious	1.2	4.6	3.4	3.0	3.3
<b>Programmatic barriers</b>	<b>1.8</b>	<b>1.6</b>	<b>1.0</b>	<b>3.1</b>	<b>1.9</b>
Lack of access/ distance	0.4	0.5	-	0.2	0.2
Cost	-	-	0.1	-	0.0
Knows no method	1.1	0.5	0.4	2.0	1.2
Knows no source	0.5	0.7	0.3	0.5	0.9
<b>Need not felt</b>	<b>58.2</b>	<b>58.4</b>	<b>65.7</b>	<b>70.5</b>	<b>65.5</b>
Husband abroad	3.7	2.1	31.2	23.7	21.5
Hysterectomy	4.0	3.0	6.8	3.9	5.0
Wants children	48.7	53.6	25.6	48.0	39.7
Currently pregnant	4.8	1.4	9.1	8.1	7.1
<b>Health concerns</b>	<b>14.7</b>	<b>14.4</b>	<b>4.7</b>	<b>3.1</b>	<b>6.6</b>
<b>Fear of side-effects</b>	<b>6.4</b>	<b>3.0</b>	<b>2.2</b>	<b>10.7</b>	<b>5.6</b>
<b>Postpartum/breast- feeding</b>	<b>11.5</b>	<b>19.7</b>	<b>15.2</b>	<b>7.5</b>	<b>13.3</b>
<b>Others</b>	<b>22.7</b>	<b>12.0</b>	<b>8.4</b>	<b>5.9</b>	<b>9.5</b>

*Multiple responses recorded*

*Figures in the table represent the percentages of women*

**Contraceptive need not felt:** Over half of the respondents in the high-performing and over two-thirds in the low-performing areas fell under this category. In Mirsarai and Satkania, this was mainly because husbands were staying abroad and also due to desire for children. In Abhoynagar, this was mainly due to desire for children. Of those who desired children, about 27 percent already had 2 or more children.

It is interesting to note that in both the comparison thanas, desire for children was much higher, 53 percent in Keshobpur compared to 5 percent in Abhoynagar and 48 percent in Satkania compared to 26 percent in Mirsarai.

**Social barriers:** Over one-fifth (23%) in Abhoynagar and nearly one-fifth (17%) in Mirsarai were not using contraceptives due to social barriers. However, this was found to be 9 percentage points less in Keshobpur (comparison area) than in Abhoynagar and 7 percentage points greater in Satkania (comparison area) than in Mirsarai.

Husband's opposition was the most frequent social barrier, being 13 percent in Abhoynagar and 12 percent in Mirsarai. It was lower in Keshobpur and higher in Satkania compared to the respective intervention thanas. Religious barriers were found to be negligible, the highest being 5 percent in Keshobpur.

**Programmatic barriers:** Lack of access/distance, cost, lack of knowledge of source or method were negligible (2%).

**Postpartum/breast-feeding:** Quite a number of women, particularly in Keshobpur, reported breast-feeding as the reason for non-use of contraceptives.

**Health concerns and fear of side-effects:** This was mentioned as a reason for non-use of contraceptives, particularly in Abhoynagar and Keshobpur (15%).

### **Contraceptive advice to never-users**

Sixty-two percent of the never-users in Abhoynagar, 42 percent in Keshobpur, 32 percent in Mirsarai, and 45 percent in Satkania were advised to use a contraceptive method. This advice was given mostly by the field workers. Advice to use contraceptives was higher in the high-performing areas than in the low-performing areas.

Intention to use contraceptives was found to be significantly higher ( $p < 0.001$ ) among those who were advised to use methods than among those who were not advised to do so. This was also found to be higher with increase in the education of the women ( $p < 0.001$ ) and the numbers of living children ( $p < 0.001$ ).

### **Switch to clinical methods**

The last-method use (before the current one) of the 1,471 women who are current users of modern contraceptives for one year was taken to assess the switching patterns. Of them, 584 (180 in Abhoynagar, 95 in Keshobpur, 230 in Mirsarai, and 89 in Satkania) were using clinical methods, and the rest were using other methods. Forty-two percent of these women were not using any method previously (Table 16).

**Table 16.** Percentage distribution of switching to clinical contraceptives by thana

Method switched from	Switch to injectable/IUD/Norplant/sterilization			
	Abhoynagar (n=180)	Keshobpur (n=95)	Mirsarai (n=230)	Satkania (n=89)
Pill/condom	47.2	55.8	40.4	44.9
Injectables	14.4	9.5	9.2	4.5
IUD	0.7	3.2	5.4	9.0
Traditional	2.7	2.0	2.0	
Did not use method previously	35.0	29.5	43.0	1.6

Responses were categorized as switch from non-clinical (pill/condom) and traditional method to clinical methods, and also from shorter-acting clinical methods (injectables) to comparatively longer-acting ones.

Findings show that switch from pill/condom to clinical methods was highest (47%) in Keshobpur (56%), the comparison area for Abhoynagar. This was also found to be higher in Satkania (45%) than in Mirsarai (41%). Further analysis showed that this switching was mainly from pill to injectables. This type of switching was found to be highest in Keshobpur compared to other thanas.

Switch from injectables to other clinical methods was, however, higher in both the intervention areas than in the respective comparison areas. This was highest in Abhoynagar (14 %) and lowest in Satkania (5%).

Switch from IUD to other clinical methods was higher in Mirsarai (5%) than in Abhoynagar (0.7%). It was also found that this was higher in both the comparison areas than their respective intervention areas ( Keshobpur 3%; Satkania (9%).

Switch from traditional methods was low, the highest being 3 percent in Abhoynagar.

### Discontinuation rates

The rates presented in Table 17 are cumulative, first-year discontinuation rates and represent the proportion of users who discontinued use by 12 months after they started using it. The discontinuation rates for Norplant were not available as this method has been introduced recently in the Bangladesh programme. It was observed that the first-year discontinuation rate of condoms was highest in all the areas and that of the IUD was lowest. Contraceptive discontinuation was higher in Mirsarai than Abhoynagar for all methods other than condoms. About 47 percent

of the injectable users in Mirsarai and 44 percent in Abhoynagar discontinued first pill use in the reference period within one year of starting use. It was 63 percent in Satkania and 51 percent in Keshobpur. For IUD, discontinuation was lowest in Abhoynagar (17%) compared in Mirsarai (31%). Forty-seven percent of the acceptors in Satkania and 31 percent in Keshobpur discontinued IUD use within one year of acceptance.

Table 17 also shows the first-year discontinuation rate of all segments of the use of pills, condoms, injectables, and IUDs. It was observed that the results are similar to the first segment of use in the reference period. Here too, one-year discontinuation rate of condom was highest in all the areas and that of IUD was lowest. Contraceptive discontinuation was higher in Mirsarai than Abhoynagar for all methods other than condom. About 49 percent of the injectable users in Mirsarai and 46 percent in Abhoynagar discontinued first pill use in the reference period within one year of starting use. In Satkania and Keshobpur, this was found to be 61 percent and 50 percent respectively. For IUD, discontinuation was lowest in Abhoynagar (24%) compared to Mirsarai (29%). Forty-nine percent of the acceptors in Satkania and 24 percent in Keshobpur discontinued IUD use within one year of acceptance. Both for injectable and IUD, the first-year discontinuation was higher in Satkania than in all other thanas.

**Table 17.** First-year discontinuation rates of pills, condoms, injectables and IUDs in the reference period (January 1997-December 1998)

Method	Thana				Total
	Mirsarai	Satkania	Abhoynagar	Keshobpur	
	<u>First segment of use</u>				
Pill	63.5	60.2	56.4	48.1	56.9
Condom	68.7	64.5	71.4	69.6	69.2
Injectable	46.7	62.5	43.6	50.6	46.9
IUD	30.7	47.0	16.5	30.5	31.2
	<u>All segments of use</u>				
Pill	62.7	61.7	55.8	49.6	57.2
Condom	70.2	66.4	72.6	65.7	69.9
Injectable	48.7	60.5	46.2	49.5	48.6
IUD	28.6	49.3	23.8	26.7	31.9

## Discussion

This study provides some useful insights to understand the knowledge of women concerning clinical contraceptives. Knowledge regarding not merely the ability to mention the names of contraceptives, but also the perceptions of women regarding the methods. Ability to mention the name of a contraceptive at this stage of the family planning programme has limited impact on accepting or rejecting a method. However, knowledge of a specific method is a precondition for its use. The findings of the study reveal that when unprompted responses only were considered, mention of any modern method both in intervention and comparison thanas was found to be slightly less than the national figures represented in the BDHS 1996-1997, where this was found to be 100 percent. This was also found to be slightly higher in the high-performing thanas than in the low-performing thanas. Mention of clinical methods, however, was much less than the modern methods in all the areas, particularly in Satkania. The mean number of methods known was also found to be higher in both the intervention thanas. The presence of other interventions in these thanas may be a plausible explanation for it. Knowledge regarding both male and female sterilization was considerably less, particularly in the low-performing thanas. Knowledge regarding Norplant as a contraceptive method is understandably low as this has been introduced recently. Knowledge was comparable with the BDHS 1996-1997 for most methods when both prompted and unprompted responses were considered. The levels for both permanent methods, however, were still lower than the national rates. It is likely that there may have been over-reporting of prompted responses while spontaneous responses may have been under-reported.

Clients' views regarding contraceptive methods are likely to affect contraceptive uptake and discontinuation. The findings of the study reveal that misconceptions regarding disadvantages of the clinical methods, particularly IUDs and female sterilization, were high. Health problems were the most common misconceptions cited. Such misconceptions as dizziness and weakness have also been reported as perceived negative aspects of contraceptives in another study in Bangladesh [9]. Our study also revealed other misconceptions prevailing in the community, such as upward displacement of IUD, loss of sexual desire, sexual ability, and difficulty in doing hard work for male sterilization; difficulty in carrying heavy things and in doing hard work, and death of the client for female sterilization. Apart from the misconceptions mentioned above, social barriers, such as religious prohibition, were found to be high for both the permanent methods. Fear of surgery regarding Norplant and permanent methods was also mentioned. Unfounded beliefs about adverse effects of contraceptives and fear of surgical procedures associated with sterilization and Norplant have been reported in studies conducted in other countries [10,11]. Our findings suggest that there is a need to address these misconceptions prevalent in the community. As an

intervention strategy, existing behaviour change communication (BCC) messages and materials have been reviewed, modified, and adapted, while some have also been developed to address the misconceptions and reduce the social barriers to clinical contraception. These BCC materials are now being field-tested in the intervention sites.

Weakness, dizziness, and menstrual problems among the current users were mainly reported for all types of clinical methods. Reported side-effects have been found to be more in less-educated women, poor women, and women whose husbands have not been involved in choosing the method [12]. Problems faced with clinical contraceptive methods were discussed mostly with field workers in the intervention unions and with the paramedics in the non-intervention unions. This may be, as other interventions involving the field workers are operating in the intervention unions, and, as such the field workers contact with the community is more in these unions.

Desire for children, a major reason for the non-use of contraceptives even among a high proportion of the women with 2 or more children, indicates that the 2-child norm needs more advocacy. Social barriers, particularly husband's disapproval, were also reported to be a major reason for non-acceptance of contraception among the never users. Thus, there is a need to address the social barriers prevalent among the never-users of contraceptives with emphasis on involvement of males. Fear of side-effects and health concerns were also found to be inhibiting factors for adoption of contraception. This has also been reported in other studies [13]. There is a scope for the programme to provide correct information to potential clients enabling them to weigh the benefits of contraception against the actual side-effects which may occur. Advice to use contraceptives by the field workers has a positive effect on the intention to use contraceptives among the never-users.

The CPR was found to be 47.3 percent when all the thanas were considered together. This was higher in Abhoynagar (63.2%) and in Keshobpur (55%), and lower in Mirsarai (44.8%) and Satkania (31%) than the national figure of 49.2 percent. Compared to the CPR recorded for these thanas by the surveillance system of the Project during January-February round 1997, the present CPR for Mirsarai and Satkania was found to be increasing (Mirsarai, 39.5; Satkania, 28.7). The CPR was also found to be increasing in Abhoynagar (57.6%) and in Keshobpur (47.8%). The relative share of clinical methods in Abhoynagar and Keshobpur is mainly due to injectables.

The discontinuation rates for the methods derived for both first segment of use and all segment of use are very high. The two methods of estimating the discontinuation rates provided similar results. Results obtained by the two methods differed most for IUD in Abhoynagar. This could be due to smaller number of users (54) in case of first segment of use compared to all segment of use

(200). IUD, which is given for 5 years, was discontinued by about one-third of the users by 12 months of starting its use. Although the BDHS 1996-1997 did not report the discontinuation rates for rural areas and not for different divisions of the country, the discontinuation rates of condom and injectables are comparable with the results of the BDHS 1996-1997. As part of the intervention activities, the service providers have been given training on compliance with standard protocols for contraceptives. The discontinuation rates for IUD, although lower than that reported in the BDHS 1996-1997, needs further reduction as this is a long-term method. As reported in several studies, side-effects are the main reason for discontinuation [2,9,14]. To achieve a higher continuation rate, improved counselling, more consistent and careful follow-up, and prompt management of side-effects should be institutionalized.

Several studies have underscored the importance of investigating contraceptive method-switching patterns in evaluating the family planning programmes in different parts of the world [9,15,16]. The programmatic implications of method switching are still largely unknown [17]. On one hand, a high rate of method switching may indicate a successful family planning programme [18], where women are exposed to an array of contraceptive methods and have the opportunity to change their methods as their need changes. On the other, switching may imply a poorly managed programme with problems, such as contraceptive supply shortage, inadequate screening of contraindications, weak counselling services, and poor management of contraceptive side-effects.

In this study, women, who were using any clinical method (injectables, IUD, Norplant, and sterilization) for the last one year, were questioned about the last contraceptive method used to know their switching pattern. It was observed that a negligible proportion of the users switched from the traditional methods. About half of the users also switched from pills/condoms and this could be due to side-effects experienced. Haque, 1997 [19] showed that side-effects are the main reason for switching of all modern methods other than condom.

In relation to the national Health and Population Sector Programme (HPSP), the Bangladesh family planning programme must be strengthened further with emphasis on the performance of clinical contraceptives. The findings suggest that there is a need to remove the barriers to clinical contraception with emphasis on removal of misconceptions prevailing in the community. There is also a need to address the high-discontinuation rates.

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## MCH-FP Extension Work at the Centre

An important lesson learned from the Matlab MCH-FP project is that a high CPR is attainable in a poor socioeconomic setting. In 1982, the MCH-FP Extension Project (Rural) with funding from USAID began to examine in rural areas how elements of the Matlab programme could be transferred to Bangladesh's national family planning programme. In its first year, the Extension Project set out to replicate workplans, and record-keeping and supervision systems, within the resource constraints of the government programme.

During 1986-89, the Centre helped the national programme to plan and implement recruitment and training, and ensure the integrity of the hiring process for an effective expansion of the work force of governmental Family Welfare Assistants. Other successful programme strategies scaled up or in the process of being scaled up to the national programme include doorstep delivery of injectable contraceptives, management action to improve quality of care, management information systems, and strategies to deal with problems encountered in collaborative work with local area family planning officials. In 1994, this project started family planning initiatives in Chittagong, the lowest performing division in the country.

The Centre and USAID, in consultation with the government through the Project's National Steering Committees, concluded an agreement for new rural and urban Extension Projects for the period 1993-97. Salient features include: improving management, quality of care and sustainability of the MCH-FP programmes, and providing technical assistance to GoB and NGO partners. In 1994, the Centre began an MCH-FP Extension Project (Urban) in Dhaka (based on its decade long experience in urban health) to provide a coordinated, cost-effective and replicable system of delivering MCH-FP services for Dhaka urban population. This important event marked an expansion of the Centre's capacity to test interventions in both urban and rural settings. The urban and rural extension projects have both generated a wealth of research data and published papers in international scientific journals.

In August 1997 the Centre established the Operations Research Project (ORP) by merging the two former MCH-FP Extension Projects. The ORP research agenda is focussed on increasing the availability and use of the high impact services included in the national Essential Services Package (ESP). In this context, ORP has begun to work with partners in government and NGOs on interventions seeking to increase coverage in low performing areas and among underserved groups, improve quality, strengthen support systems, enhance financial sustainability and involve the commercial sector.

ORP has also established appropriate linkages with service delivery partners to ensure that research findings are promptly used to assist policy formulation and improve programme performance.

## The Division

The Health and Population Extension Division (HPED) has the primary mandate to conduct operations research, to disseminate research findings to programme managers and policy makers and to provide technical assistance to GoB and NGOs in the process of scaling-up research findings to strengthen the national health and family planning programmes.

The Division has a long history of solid accomplishments in applied research which focuses on the application of simple, effective, appropriate and accessible health and family planning technologies to improve the health and well-being of underserved and population-in-need. There are various projects in the Division which specialize in operations research in health, family planning, environmental health and epidemic control measures. These cut across several Divisions and disciplines in the Centre. The Operation Research Project (ORP) is the result of merging the former MCH-FP Extension Project (Rural) and MCH-FP Extension Project (Urban). These projects built up a considerable body of research and constituted the established operations research element for child and reproductive health in the Centre. Together with the Environmental Health and Epidemic Control Programmes, the ORP provides the Division with a strong group of diverse expertise and disciplines to significantly consolidate and expand its operations research activities. There are several distinctive characteristics of these endeavors in relation to health services and policy research. For one, the public health research activities of these Projects are focused on improving programme performance which has policy implications at the national level and lessons for the international audience also. Secondly, these Projects incorporate the full cycle of conducting applied programmatic and policy relevant research in actual GoB and NGO service delivery infrastructure, dissemination of research findings to the highest levels of policy makers as well as recipients of the services at the community level; application of research findings to improve programme performance through systematic provision of technical assistance; and scaling-up of applicable findings from pilot phase to the national programme at Thana, Ward, District and Zonal levels both in the urban and rural settings.

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