# Clinical Contraception in a Rural NGO Area in Bangladesh: Findings of a Baseline Study

# Farzana Sobhan Ariful Islam



ICDDR,B: Centre for Health and Population Research GPO Box 128, Dhaka 1000, Bangladesh

ICDDR,B Working Paper No. 141

Edited by: M. Shamsul Islam Khan

Design and Desktop Publishing: Jatindra Nath Sarker

Manash Kumar Barua

ISBN: 984-551-223-2

ICDDR,B Working Paper No. 141

© 2000. ICDDR,B: Centre for Health and Population Research

Published by ICDDR,B: Centre for Health and Population Research

GPO Box 128, Dhaka 1000, Bangladesh

Telephone: (880-2) 8811751-60 (10 lines); Fax: 880-2-8811568

E-mail: msik@icddrb.org, URL: http://www.icddrb.org

Printed by: Dina Offset Printing Press, Dhaka

# Acknowledgements

The Operations Research Project (ORP) of the ICDDR,B: Centre for Health and Population Research works in collaboration with the Ministry of Health and Family Welfare, Government of the People's Republic of Bangladesh, and is supported by the United States Agency for International Development (USAID) under the Cooperative Agreement No. 388-A-00-97-00032-00 with ICDDR,B. The Centre is supported by the following countries, donor agencies, and others who share its concern for the health and population problems of developing countries:

- Aid agencies of the governments of: Australia, Bangladesh, Belgium, Canada, European Union, Japan, the Netherlands, Norway, Saudi Arabia, Sri Lanka, Sweden, Switzerland, the United Kingdom, and the United States of America;
- UN agencies: International Atomic Energy Agency, UNAIDS, UNICEF, and WHO;
- International organizations: CARE Bangladesh, International Center for Research on Women, International Development Research Centre, Swiss Red Cross, and World Bank:
- Foundations: Ford Foundation, George Mason Foundation, Novartis Foundation, Rockefeller Foundation, and Thrasher Research Foundation;
- Medical research organizations: Karolinska Institute, National Institutes of Health, New England Medical Center, National Vaccine Programme Office, Northfield Laboratories, Procter and Gamble, Rhone-Poulenc Rorer, and Walter Reed Army Institute for Research-USA;
- Universities: Johns Hopkins University, London School of Hygiene & Tropical Medicine, University of Alabama at Birmingham, University of Göteborg, University of California at Davis, University of Maryland, University of Newcastle, University of Pennsylvania, and University of Virginia;
- Others: Arab Gulf Fund, Futures Group, International oil companies (Cairn Energy Plc, Occidental, Shell, Unocal), John Snow Inc., Pathfinder, UCB Osmotics Ltd., and Wander AG.

The authors are grateful to the reviewers, Dr. Sukanta Sarker, Deputy Chief of Party, Quality Improvement Partnership, AVSC International, Dr. Anwara Begum, Manager, Clinical Products, Social Marketing Company, and Dr. Cristobal Tunon, Public Health Management Scientist, Operations Research Project, ICDDR,B for kindly reviewing this paper and giving their valuable comments. Special thanks go to Dr. M. Alauddin, Chief of Party, Rural Service Delivery Partnership, and Country Representative, Pathfinder International, Bangladesh for his kind cooperation and support in conducting the study, including finalization of the questionnaire and review of the paper.

# **Table of Contents**

Р	age
Abstract	iv
Introduction	1
Objectives	3
Methodology	3
Results	4
Profiles of sample	4
Knowledge about contraceptive methods Sources of information about contraceptives methods Misperceptions regarding disadvantages of clinical methods Misperceptions among women Misperceptions among husbands  Contraceptive use Contraceptive use reported by women and their husbands Source of contraceptives currently used Problems faced by current users Persons consulted for problems faced with clinical methods Switching of clinical methods Reasons for discontinuation of the last method used	7 9 9 10 11 11
(before the current one)	15
Promotion of clinical contraceptives  Advice to use clinical methods  Persons who advised to use clinical methods	16 16 16
Non-use of contraceptives  Reasons for non-use of modern contraceptives  Contraceptive advice to never-users of modern methods	18 18 19
Referrals	20
Discussion	21
References	24

### **Tables** Table 1. Age distribution of women ...... Table 2. Profile of women and husbands ..... Percentage of currently-married women and their husbands having Table 3. knowledge about contraceptive methods ..... Table 4. Sources of information about contraceptive methods ..... Table 5. Proportion of currently-married women and their husbands who had misperceptions regarding disadvantages of clinical methods ......... Table 6. Percentage distribution of sources of contraceptives currently Table 7. Table 8. Distribution of current users of clinical methods having methodspecific problems ..... Table 9. Distribution of persons with whom problems were discussed ...... 14 Table 10. Percentage of temporary method users, interested in spacing or Table 11. Table 12. Percentage of persons who advised temporary method users (women), interested in spacing or limiting birth, to use clinical Percentage of persons who advised temporary method users Table 13. (husbands), interested in spacing or limiting birth, to use clinical Table 14. Reasons for non-use of contraceptives among never-users of Table 15. Referral of women for use of contraceptive methods or for Table 16. Place where women were referred to for a method or for

### Abstract

In Bangladesh, during the last two decades, the contraceptive prevalence rate (CPR) has risen 6-fold and the total fertility rate (TFR) has dropped by half. The Government of Bangladesh has the objective of achieving replacement-level fertility by the year 2005. To achieve this, the CPR needs to be further increased with an increase in the relative share of clinical methods. Data for this study were collected from 1,652 currently-married women and 1,159 husbands to assess the situation of clinical contraceptives in a working area of Swanirvar, a rural service delivery partnership (RSDP) supported non-government organization (NGO), in Chagalnaiya upazila of Feni district, Bangladesh.

Results of the study showed that over 90 percent of the women and 70 percent of the husbands could name a clinical method, but mention of Norplant and male sterilization was low. More husbands mentioned permanent method for females than permanent method for males. A large proportion of the women and husbands who had heard of a clinical method had misperceptions regarding its disadvantages. For example, women reported upward displacement of IUD from the uterus to the chest, inability to do hard work after female sterilization, and weakness and cancer of hands, for using Norplant. Husbands reported break down of health and loss of sexual ability and desire after male sterilization. Discrepancies were observed in reporting by husbands and wives about the status of contraceptive use (wives 31.5%, husbands 52.2%). Both, however, reported pill to be the most widely used method, followed by injectables. Switching to clinical methods occurred mainly from pill to injectables. However, an almost equal number of women (n=14) had switched from injectables to temporary methods. Forty-one percent of the women were never-users of modern contraceptives. Of them, about two-fifths had husbands, living away from home, and 11 percent were pregnant. Desire for more children, social barriers, health concerns, and fear of side-effects were the main reasons for non-use of modern contraceptives, suggesting that there is a scope for the programme to raise the demand for contraceptives. Promotional activities for clinical contraceptives existed in the study area, but these were mainly for injectables. Male sterilization was rarely promoted, even to the husbands. Husbands were less involved and participated less in familyplanning activities. Although the working area of Swanirvar has been demarcated from the working area of the government, family-planning services have also been provided by the government field workers and paramedics; these include provision of contraceptives, advice regarding problems faced with contraceptives, promotion of clinical contraceptives, and also contraceptive advice to never-users of modern methods. Thus, overlapping of family-planning services exist.

Findings of the study suggest removal of barriers to clinical contraception with emphasis on the removal of prevalent misperceptions in the community. There is a scope for the programme to raise the demand for modern contraceptives among the never-users and to strengthen promotional activities for longer-acting and permanent methods. Emphasis on participation and involvement of males also needs to be stressed.

### Introduction

During the last two decades, Bangladesh has made remarkable strides in family planning with a 6-fold rise in the contraceptive prevalence rate (CPR) (7.7% in 1975; 49.2% in 1996-1997) and with the total fertility rate (TFR) declining by half (6.3 in 1975; 3.3 in 1996-1997) (1). The success in the fertility decline has been ascribed to the efforts of the family-planning programme (2). Others believe that changing social and economic structures and improved education have also played an important role (3, 4).

The national programme offers to potential clients, a wide range of contraceptive methods, such as pills, condoms, injectables, IUD, Norplant, male and female sterilization. Of these, the last five are termed as clinical contraceptive methods for which clients rely on trained hands. The clinical methods, as commonly used, are more effective than the temporary methods (5), and for these the eligible clients are not required to take daily precautions or precautions for every sexual act. In terms of specific contraceptive methods, the major change observed is the increased use of pill since the late 1980s. The pill now accounts for 42 percent of all contraceptives used as opposed to 31 percent in 1991. The use of short-term methods, such as injectables, has also increased from 0.6 percent in 1989 to 6.2 percent in 1996-1997. Use of permanent methods has stagnated for male sterilization (from 1.2% in 1991 to 1.1% in 1996-1997), and has declined for female sterilization from 9.1 percent in 1991 to 7.6 percent in 1996-1997. The use of IUD has also declined from 2.2 percent in 1993-1994 to 1.8 percent in 1996-1997. This shift, away from permanent and longer-acting methods, has important implications for the national family-planning programme in terms of cost, supply logistics, and method efficacy, and is specially important given the increasing proportion of women who want to limit children. Sixteen percent of women still have an unmet need for contraception, and this is as much as 13 percent among women aged 30-49 years who are potential clients for clinical methods (1). Barriers to contraception in both supply and demand side exist, and gender preference represents Certain social barriers to clinical a significant barrier to fertility regulation (6). contraception exist in rural Bangladesh, and permanent methods are seen as challenging God's right over procreation (7).

The high-discontinuation rate is a major concern of the national family-planning programme, nearly half of the users discontinue within 12 months of starting use. 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 (1). To achieve a higher demographic impact and sustain it, more emphasis needs to be given to increasing demand for, and availability of permanent and long-term methods maintaining the principle of the Tiahrt amendment that was enacted in the 1999 Foreign Operations Appropriations Act. In accordance with the Tiahrt amendment, for the promotion of clinical contraceptives, there should be no fixed quotas relating to acceptors of clinical methods and no incentives to individuals in exchange for becoming acceptors or to programme personnel for achieving targets or quotas. The rights or benefits would not be withheld from persons who decide not to become acceptors. Also, comprehensive information should be available to acceptors on health benefits and risks of the method chosen, including conditions that make the method chosen inadvisable and known side-effects.

The Health and Population Sector Programme (HPSP) of the Government of Bangladesh (GoB) 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. Currently, the most important objective of the government in the area of health and population, is to reduce fertility to the replacement level by 2005 along with reduction of infant mortality and morbidity, maternal mortality and morbidity, and improved nutrition.

The Operations Research Project (ORP) of ICDDR,B: Centre for Health and Population Research, the operations research partner of the National Integrated Population and Health Programme (NIPHP) has been testing strategies to improve the performance of clinical contraceptive services in the government and NGO settings. The NGO site for testing the strategy is the working area of Swanirvar in Chagolnaiva upazila in Feni district which is located in the south-east of the country. Swanirvar is an NGO, supported by the Rural Service Delivery Partnership (RSDP) of the NIPHP. The Swanirvar began to provide services under the Essential Services Package (ESP) in Chagolnaiva upazila in 1997. Before this, it had the responsibility of implementing health and family planning activities under the "Family Planning and Health Services Project" since 1988. The working area of Swanirvar has been demarcated from the working area of the government. Swanirvar operates a static clinic in Chagolnaiya upazila and also organizes 33 Satellite Clinics each month in the upazila. Pills. condoms, injectables, and IUD are provided from the clinics, while clients are referred for Norplant and sterilization to the Upazila Health Complex (UHC) or other organizations. In addition to family-planning services, various maternal and child health (MCH) services are also provided from these service outlets. The staff at Swanirvar includes 3 paramedics/family welfare visitors (FWV), 3 community mobilizers, 3 clinic aids, and 1 office assistant. Thirty-five depot-holders store pills and condoms in their homes for clients. The depot-holders also perform other functions, like provision of oral rehydration salt (ORS), referrals, health counselling and selective visitation in the community. The community mobilizer supervises the activities of the depot-holders and assists the paramedic at the Satellite Clinic; she also conducts health-education sessions in the community and in the Satellite Clinic. An upazila manager supervises the administrative activities, and a medical officer is designated for a number of upazilas to supervise the activities of the FWV/paramedic. Prices are charged for the services and commodities.

A survey was conducted in Chagolnaiya upazila to provide baseline information for assessing the situation of clinical contraceptives in the working area of Swanirvar in Chagolnaiya upazila.

# **Objectives**

This study was undertaken to assess:

- a. knowledge, including misperceptions, regarding clinical contraceptives among currently-married women and their husbands in the study area,
- b. the status of contraceptive use, problems faced, and subsequent care-seeking behaviour in the study area,
- reasons for non-use of contraceptives and the switching pattern in the study area and.
- d. the existing promotional activities for clinical contraceptives in the study area.

# Methodology

Data for this study were obtained from a baseline survey conducted during July-October 1999 in 6 unions of Chagolnaiya upazila in Feni district, located in the south-east of the country. In 1998, this upazila had a total population of 176,885 with 35,379 eligible couples. Swanirvar covers 10,113 eligible couples in the area. A total of 9,588 women, aged 15-49 years, were identified after enumeration. After preparing the sampling frame, every sixth women was interviewed to get the required sample. A total of 1,652 currently-married women, aged 15-49 years were interviewed. The sample was drawn to have a proportional age representation of the population (Table 1).

Table 1. Age distribution of women

Characteristics	Percentage of sample women (n=1,652)	Percentage of women population (n=9,588)
Women's age (in years)		
<20	3.8	3.5
20-24	22.2	21.9
25-29	20.1	20.5
30-34	17.1	17.1
35-39	16.6	16.4
40-44	11.1	11.3
45-49	9.1	9.3
Mean	31.2	31.0

Only 1,159 husbands could be interviewed. A maximum of 3 attempts were made to interview the absentees. The interviews were terminated for women who had reached menopause or were divorced. The interviews were conducted by the trained female interviewers who were supervised by the field research officers of the Project. A semi-structured questionnaire, reviewed and finalized by the RSDP and the ORP, was used after pre-testing to gather information on background, fertility, contraceptive behaviour, and socioeconomic status of the respondent.

# Results

# **Profiles of sample**

Table 1 and 2 show the profiles of the sample women and husbands. Over a fifth of the women were aged 20-24 years, and another one-fifth were aged 25-29 years, while the mean age was 31.2 years. Nearly three-fifths of the women had some schooling, and the mean year of schooling was 3.69 years. The mean age of the husbands was 41.4 years, and two-thirds of the husbands had some years of schooling. Their mean year of schooling was 5.24 years. The majority of the women (86.4%) were housewives, while nearly a third of their husbands were working abroad/living away from home. Over a fifth of the husbands were engaged in farming/dairy/poultry work and 17 percent were employed in business. Five percent of the husbands were reported to be unemployed. Fifty-five percent of the women had more than two children, and the mean number of living children was 3.03. The mean number of pregnancies of the women was 3.94, and the mean family size was 6.47. The highest monthly family expenditure was Tk.5,000 or more (39.5%), while nearly a quarter had in the range of Tk.3,000 - 3,999. Most women (98.5%) were Muslims.

**Table 2.** Profile of women (n=1,652) and husbands (n=1,159)

Characteristics	Percentage of sample
Education of women (in years)	
No education	41.6
1-5	28.5
6-9	29.0
>10	0.9
Mean	3.69
Occupation of women	
Housewife	86.4
Employed	13.6
Age of husbands (in years)	
20-24	0.9
25-29	8.5
30-34	15.9
35-39	20.0
40-44	17.3
45-49	12.9
50+	24.5
Mean	41.4
Education of husbands	
No education	32.1
1-5	22.2
6-9	34.3
>10	11.4
Mean	5.2
Occupation of husbands	
Farming/dairy/poultry	21.5
Professional/service holder	12.7
Business	16.8
Labourer	12.0
Unemployed	4.4
Works abroad/living away from home	28.9
Others	3.6

Contd....

Table 2 (contd.)

Characteristics	Percentage of sample
Number of living children	
No children	9.4
1-2	35.0
3-4	31.4
>4	24.1
mean	3.03
Total pregnancy	
Mean	3.94
Family size	
Mean	6.47
Religion	
Non-Muslim	1.4
Muslim	98.5
Monthly family expenditure (in Taka)	
<2000	4.4
2000-2999	15.2
3000-3999	24.3
4000-4999	16.6
>5000	39.5

# Knowledge

# Knowledge about contraceptive methods

Knowledge of contraceptive methods in this paper refers to the ability of the respondents to mention different types of contraceptive methods known to them. Knowledge of all the respondents, irrespective of contraceptive use, was assessed. Table 3 presents spontaneous responses only. Knowledge of women regarding any modern method was almost universal. Knowledge regarding any clinical method (injectables, IUD, Norplant, female sterilization, and male sterilization) was 92 percent. Pill and injectables were the most commonly mentioned methods (pill 91%; injectables 81%). Very few women mentioned male sterilization (3.6%) compared to female sterilization (61.7%).

Husbands mentioned pill (94.6%) and condoms (69.0%) in most cases. Norplant was least mentioned (2.7%). Female sterilization was mentioned by 41.5 percent, while male sterilization was mentioned by 13 percent of the husbands.

Mention of traditional methods was much less than modern methods (women 4%, husbands 10%). The mean number of methods known was 3.66 for women and 2.96 for their husbands.

**Table 3.** Percentage of currently-married women and their husbands having knowledge about contraceptive methods

Contraceptive method	Women (n=1652)	Husbands (n=1159)
Any modern method	99.9	97.2
Pill	91.2	94.6
Condom	47.3	69.0
Injectables	80.8	51.6
IUD	53.2	13.8
Norplant	13.8	2.7
Male sterilization	3.6	13.3
Female sterilization	61.7	41.5
Any clinical method*	91.9	70.1
Any traditional method**	3.9	9.9
Mean number of methods known	3.66	2.96

<sup>\*</sup>Clinical methods: injectables, IUD, Norplant, male and female sterilization

# Sources of information about contraceptive methods

Women were allowed to mention multiple sources of information about contraceptive methods. The first response of the women regarding the source of information about contraceptive methods has been presented in Table 4. Friends and relatives of the women were the key informers regarding contraceptive methods, followed by the depotholders/community mobilizers/NGO paramedics. The government field workers/paramedics also played a prominent role in this area. Husbands played a little role as informers of contraceptive methods, except for condom (17%). Physicians and village practitioners/influential village people also played little role in this regard. Condoms and pill were the only methods promoted by radio/TV. About 11 percent of the women had heard of male sterilization from other sources.

<sup>\*\*</sup>Traditional methods: Rhythm, withdrawal, kabiraji, herbal

 Table 4. Sources of information about contraceptive methods (first response)

Method	Husband	Friends/ relatives	NGO workers/ paramedics	GO field workers/ paramedics	Physicians	Village practitioner/ influential people	Radio/TV	Others	Total
Injectables (n=1332)	0.7	61.1	19.8	15.3	1.0	0.2	0.8	1.1	100
IUD (n=877)	0.8	61.7	17.2	15.7	1.8	0.2	0.2	2.3	100
Norplant (n=226)	0.4	67.3	12.4	12.8	1.3	0.4	-	5.4	100
Male sterilization (n=57)	1.8	57.9	17.5	8.8	3.5	-	-	10.5	100
Female sterilization (n=1018)	0.6	62.6	17.9	15.4	1.8	0.3	0.2	1.2	100
Condom (n=779)	16.8	43.5	10.8	10.7	1.3	0.1	15.3	1.5	100
Pill (n=1637)	3.3	56.3	16.9	12.2	0.7	0.2	9.6	0.8	100

# Misperceptions regarding disadvantages of clinical methods

The women and their husbands who had heard of a clinical method were asked to mention the disadvantages of its use. A response was considered to be a misperception when it was other than the disadvantages mentioned in the literature (5, 8). Side-effects of the method, if mentioned, were not considered misperceptions.

Multiple responses were recorded. Misperceptions among the women were highest for female sterilization (74.8%), followed by Norplant (57.6%) and IUD (57.1%), while these were highest for injectables (71.2%) followed by Norplant (58.3%), among their husbands (Table 5). A good proportion of the women and husbands correctly mentioned the side-effects of the methods as their disadvantages. Misperceptions prevalent among less than one percent of the sample have not been presented in this paper

**Table 5**. Proportion of currently-married women and their husbands who had misperceptions regarding disadvantages of clinical methods

Method	No. of women (n)	Percentage women	No. of husbands (n)	Percentage of husbands
Injectables	998	44.6	222	71.2
IUD	562	57.1	79	55.7
Norplant	85	57.6	12	58.3
Female sterilization	608	74.8	262	48.5
Male sterilization	57	28.1	79	46.8

### Misperceptions among women

**Injectables:** The women mentioned different injectables-associated problems, such as weakness (27%), dizziness (21.8%), vomiting (1.5%), high blood pressure (2.8%), and bodyache/aching limbs (1.5%). Some (6.5%) also mentioned infertility as a result of taking injectables. The side-effects of the injectables mentioned by the women as disadvantages were menstrual problems (39.5%) and weight gain (6%).

*IUD:* For IUD, a considerable proportion of women mentioned weakness (13.5%), dizziness (6.9%), ulcer (14.4%), and cancer in the uterus (1.8%) as health problems. Other wrong perceptions mentioned were upward displacement of IUD from the uterus (11.6%), difficulty in doing hard work (2.1%), death of women (2%), and infertility (2.5%).

Apart from the misconceptions, other disadvantages mentioned for IUD were its side-effects, such as excessive bleeding during menstruation (57.7%) and other menstrual problems (11.7%). Inconvenience in using the method (11.2%) and difficulty in intercourse (1.4%) were also mentioned.

**Norplant:** The women perceived different health problems associated with the use of Norplant, such as excessive bleeding (20.6%), weakness (17.6%), high blood pressure (1.5%), cancer of hands (4.7%), painful arms (4%), blindness (4.6%), and stomachache (2.4%). Some also mentioned that Norplant caused infertility (3%), hampered breast-feeding (2%), and religious prohibitions (6.0%).

A considerable proportion of the women mentioned fear of surgery (12%) and the side-effects of the method, such as weight gain (4.7%), weight loss (5.9%), headache (2%), nausea (2%), and amenorrhoae (22.4%).

**Female sterilization:** Regarding the disadvantages of female sterilization, unfounded beliefs, such as difficulty in carrying heavy things (25%), weakness (14.5%), dizziness (6.4%), excessive bleeding during menstruation (7.4%), weight loss (4.9%) and gain (4.3%), stomachache (2.3%), difficulty in intercourse (5.0%), blindness (4.3%), high blood pressure (6.5%), and perforation of intestines (4.8%), were noted. Some women also mentioned death of children and husbands (5.8%), death of women (5.0%), and religious prohibitions (8%).

Fear of surgery was mentioned by 9 percent of the women apart from the misperceptions.

# Misperceptions among husbands

*Injectables:* The wrong perceptions regarding injectables that were held by the husbands were: weakness (46.1%), dizziness (35.1%), high blood pressure (4.1%), and cause of infertility (2%). Among other disadvantages, side-effects (menstrual problems 23.4%; weight gain 5%) of the method were also mentioned by the husbands.

*IUD:* The incorrect perceptions regarding the disadvantages of IUD held by the husbands were: weakness (13.9%), dizziness (5.1%), cervical erosion (24.1%), cancer of the cervix (1.3%), loss of appetite (3.0%), deterioration of health (1.3%), women's body becomes hot (4.0%), and upward displacement of IUD to the chest (4.0%). Religious prohibition (1.3%) and IUD as a cause of infertility (3.0%) were also mentioned.

Among other disadvantages of IUD, a considerable proportion of the husbands mentioned inconvenience in using the method (25.3%) and its side-effects (excessive bleeding during menstruation 25.3%; other menstrual problems 10.1%).

**Female sterilization**: The wrong perceptions regarding female sterilization among the husbands were: weakness (18.4%), inability to do hard work (13.5%), dizziness (10.0%), burning sensation of the body (8.4%), death resulting from loss of weight (5.8%), weight gain (5.1%), weight loss (3.1%), excessive bleeding during menstruation (6.6%), stomach-ache (3.5%), prolapse of uterus (3%), appendicitis (4%), anaemia (5%), and religious prohibition (5%).

Nearly half of the husbands (48.1%) considered no chance of having children as a disadvantage of the method, while 5 percent also mentioned fear of surgery among the women.

**Male sterilization:** The husbands associated different health problems as a result of male sterilization, such as health breaks down/men suffer from weakness (13.9%), weight gain (1.3%), weight loss (1.3%), headaches (3.0%), loss of appetite (4.0%), and burning sensation of hands and feet (2.5%). Other misperceptions were loss of sexual ability (13.9%), sexual desire (3.8%), and sexual dissatisfaction (2.5%). Some men also reported difficulty in doing hard work (2.5%), loss of appetite (2.5%), and death of men (3.0%).

More than half of the men (51.9%) considered no chance of having any more children as a disadvantage of the method.

# Contraceptive use

# Contraceptive use reported by women and their husbands

As shown in Table 6, the CPR was 31.5 percent among the sample women, while this was 43.1 percent when excluding the 28.9 percent of women whose husbands were abroad/living away from home. Contraceptive use was only 3.1 percent among these women. The CPR as reported by the husbands was 52.2 percent. According to the women, oral pill was the most commonly used method, used by 15.1 percent of the women, followed by injectables (5.6%), and female sterilization (4.8%). The method-mix as per the husband's reporting was similar but with higher values for the specific methods. The CPR in Chittagong division is higher (37.2%), as reported in the Bangladesh Demographic Health Survey (BDHS) 1996-1997, while in Mirsarai upazila, the government site for the intervention in the nearby Chittagong district, it is 44.8 percent (9). The relative share (11.3%) of injectables in Mirsarai is much higher than in Chagolnaiya, while it is similar to that in Chittagong division. The use of IUD (2.6%) and male sterilization (0.5%) in Chittagong division is, however, higher. The use of pill (13%) in Chittagong division is less than that in the study area.

**Table 6.** Percentage distribution of contraceptive use (n=1,652)

Combra continue months of	Reported b	Reported by	
Contraceptive method	(n=1,652†)	(n=1,174‡)	husbands (%) (n=1,159)
Pill	15.1	20.4	26.1
Condom	2.4	3.3	4.4
Injectables	5.6	7.6	9.7
IUD	0.3	0.4	0.9
Norplant	0.7	1.0	0.4
Male sterilization	0.1	0.1	0
Female sterilization	4.8	6.3	6.1
Any traditional method*	2.5	4.0	4.6
Any clinical method**	11.5	15.8	17.2
Any method	31.5	43.1	52.2
No method	68.5	56.9	47.8

<sup>\*</sup> Traditional method: Rhythm, withdrawal, kabiraji, herbal

# Source of contraceptives currently used

A third of the women (35%) reported pharmacy/shop and about a fifth (19%) mentioned the Upazila Health Complex (UHC) as the sources of contraceptives being currently used (Table 7). Ten percent of the women mentioned the depot-holders and 9 percent mentioned the NGO satellite clinics as the sources of contraceptives. The government field-workers, the Family Welfare Assistants (FWA) were also mentioned as a source of contraceptives in 5 percent of cases. Further analysis showed that the Upazila Health Complex (UHC)/Maternal Child and Welfare Clinic (MCWC) was the main source for IUD, Norplant and female sterilization, whereas the NGO SCs were the main source for injectables. About 10 percent also reported obtaining Norplant from private hospitals.

# Problems faced by current users

Of the 478 current users of modern methods, 175 women (36.6%) reported facing problem(s). Table 8 presents the types of problems faced by the users of clinical methods as reported by the women only. As shown, any problem faced by the women was highest for injectables, followed by female sterilization. However, only a few women used IUD and Norplant. Common problems reported by injectable users were amenorrhoea, dizziness, and weakness. Women who had sterilization mainly reported stomachache, weakness, and dizziness. The Norplant users reported excessive bleeding during menstruation, weakness, and dizziness, while the one IUD user mentioned headache and amenorrhoea.

<sup>\*\*</sup> Clinical method: Injectables, IUD, Norplant, male and female sterilization

<sup>†</sup> Sample women

<sup>‡</sup> Women with husbands abroad/living away from home excluded from analysis

**Table 7.** Percentage distribution of source of contraceptives currently used (n=478)

Source	Percentage
Pharmacy/shop	34.7
UHC	19.0
Depot-holder	10.3
Satellite Clinic (NGO)	9.2
H&FWC	8.6
District hospital	5.9
FWA	4.6
NGO Static Clinic	3.1
Others	4.6

Table 8. Distribution of current users of clinical methods having method-specific problems

Type of problem	Injectables (n=48)	IUD (n=1)	Norplant (n=8)	Female sterilization (n=31)
Weight gain	-	-	-	1
Weight loss	1	-	-	1
Excessive bleeding	10	-	3	3
High blood pressure	1	-	-	2
Headache	4	1	-	3
Amenorrhoea	26	1	-	1
Weakness	15	-	4	8
Dizziness	17	-	3	8
Husband disapproved	-	-	-	1
Stomachache	3	-	1	12
Burning of hands and				
feet	3	-	-	-
Breathing difficulty	1	_	-	1
Others	1	-	-	6

Multiple responses were recorded Figures in the table represent actual numbers

# Persons consulted for problems faced with current clinical methods

Of those having problems with their current methods, 122 (69.7%) discussed the problem with someone. Table 9 presents the types of persons consulted for problems. Women consulted depot-holders, NGO paramedics, and government field workers (FWA) in 13 percent and 10 percent of the cases, respectively. Physicians were also consulted in almost 10 percent of the cases. Government paramedics were consulted in 9 percent of cases. Consultation with husbands was over 11 percent while that with friends/neighbours was 6.3 percent. None discussed any problems with their mothers/mothers-in-laws, and fathers/fathers-in-law. Sisters/sisters-in-laws were consulted in a small percentage of cases (2.3%). In 88 percent of the cases, the person consulted was reported to have offered some sort of advice/remedy.

Table 9. Distribution of persons with whom problems were discussed

Type of person consulted	Percentage of women (n=175)
Anybody	69.7
Did not discuss with anybody	30.3
Husband	11.4
Friend/neighbour	6.3
Sister/sister-in-law	2.3
Brother/brother-in-law	0.6
Depot-holder	13.1
FWV (NGO)	10.3
FWA	10.3
FWV/SACMO (GO)	8.6
Nurse	1.1
Physician (GO)	9.7
Physician (Private)	8.6
Pharmacist	3.4
Others	2.0

Multiple responses were recorded

# Switching of clinical methods

The last method used within one year (before the current one) by 521 women, who are current users of any contraceptives, was considered to assess the switching pattern. Of them, 190 were using clinical methods, and the rest were using other methods at the time of interview (Table 10).

Table 10. Percentage distribution of contraceptive switching

	Current method							
Previous method	Condom (n=39)	Pill (n=249)	Injec- tables (n=92)	IUD (n=5)	Nor- plant (n=12)	Female sterili- zation (n=80)	Male sterili- zation (n=1)	Tradi- tional (n=43)
Condom (n=9)	-	8	1	-	-	-	-	-
Pill (n=32)	7	7	14	-	4	-	-	-
Injectables (n=16)	3	10	1	-	-	2	-	-
IUD (n=1)	-	1	-	-	-	-	-	-
Norplant (n=1)	-	-	1	-	-	-	-	-
Withdrawal (n=1)	-	1	-	-	-	-	-	-
Did not use (n=461)	29	222	75	5	8	78	1	43

Figures in the table represent actual numbers

Findings showed that 19 couples switched from pill/condom to clinical methods. This switch was mainly from pill to injectables (n=14). Two women switched from injectables to sterilization and one from Norplant to injectables. Fourteen women had switched from clinical methods to temporary methods (pill/condom), while 167 women, not using any method previously, had adopted a clinical method, and 251 had adopted a temporary method (pill/condom).

### Reasons for discontinuation of the last method used (before the current one)

Women (n=60) were asked about reasons for discontinuation of the method last used (within one year before the current one). Side-effects (n=21) and health concerns (n=11) were mentioned by most pill users as the reason for discontinuation, while others reported method failure (n=1), desire for pregnancy (n=1), husband's disapproval (n=1), and husband staying abroad (n=3). Women whose husbands were using condom mentioned disapproval of their husbands, need for a more effective method, and health concerns. Most injectable users also reported side-effects (n=11), and health concerns (n=6). Difficulty in using the method was also mentioned (n=1). One Norplant user switching to injectables mentioned side-effects as the reason for discontinuation.

# Promotion of clinical contraceptives

### Advice to use clinical methods

Of the 255 users of temporary methods (pill/condom) wanting spacing/limiting, 233 women (91.3%) were advised to use a clinical method. As seen in Table 11, 43.5 percent was advised to use injectables, 25.9 percent IUD, and 17.6 percent female sterilization. Advice for Norplant was the least (4.3%), while none were advised for their husbands' sterilization. Of the 315 husbands using temporary methods and wanting spacing/limiting, 136 (43.2%) were advised to use clinical methods. Like the women, advice to use injectables by their wives (22.5%) was most frequently given, followed by female sterilization (10.5%), and IUD (6.7%). Advice to husbands for their own sterilization (1.9%) and use of Norplant by their wives (1.6%) was the least.

**Table 11.** Percentage of temporary method users, interested in spacing or limiting birth, advised to use a clinical method

Method	Percentage of women (n=255)	Percentage of husbands (n=315)
Injectables	43.5	22.5
IUD	25.9	6.7
Norplant	4.3	1.6
Female sterilization	17.6	10.5
Male sterilization	-	1.9

### Persons who advised to use clinical methods

Table 12 shows that advice to women for injectables was given mostly by the depotholders and FWAs, while advice for IUD and female sterilization was given by the FWAs, followed by the depotholders. Advice to use Norplant was given in the majority of cases by friends/neighbours (36.4%), followed by the depotholders. The FWV/SACMO also promoted clinical methods. Physicians played little role in promoting clinical contraceptives, except Norplant.

**Table 12.** Percentage of persons who advised temporary method users (women), interested in spacing or limiting birth, to use clinical methods

Person	Injectables (n=111)	IUD (n=66)	Norplant (n=11)	Female sterilization (n=45)
Husband	4.5	4.5	9.1	8.6
Friend/neighbour	8.1	6.0	36.4	4.4
Relative	18.0	16.6	-	22.2
Community mobilizer	1.8	1.5	-	2.2
Depot-holder	36.0	25.7	18.2	26.6
FWV (NGO)	6.3	4.5	-	2.2
FWA	24.3	31.8	9.1	35.5
FWV/SACMO	12.6	13.6	9.1	6.6
Private MBBS doctor	0.9	3.0	-	2.2
GoB MBBS doctor	1.8	4.5	9.1	4.4
NGO MBBS doctor	-	1.5	9.1	-
Nurse	2.7	3.0	-	4.4

Multiple responses were allowed

Table 13 shows the percentage of persons who advised husbands to use clinical methods. Advice for all types of clinical methods was given mostly by friends/neighbours. The depot-holders, FWAs, and FWVs (NGO) suggested injectables and male and female sterilization. Physicians promoted mostly IUD and female sterilization. Nurses also gave advice to use IUD and Norplant.

**Table 13.** Percentage of persons who advised temporary method users (husbands), interested in spacing or limiting birth, to use clinical methods

Person	Injectables (n=71)	IUD (n=21)	Norplant (n=5)	Female sterilization (n=33)	Male sterilization (n=6)
Wife	9.6	4.8	_	6.0	-
Friend/neighbour	28.1	14.3	20.0	30.2	33.3
Relative	9.9	-	_	6.0	-
Community mobilizer	5.6	-	_	6.0	-
Depot-holder	26.7	-	-	21.2	16.7
FWV (NGO)	8.4	-	-	9.1	16.7
FWA	15.5	4.8	-	24.2	16.7
FWV/SACMO	2.8	4.8	-	-	-
Private MBBS doctor	1.4	28.6	20.0	3.0	-
GoB MBBS doctor	1.4	9.5	-	9.1	16.7
NGO MBBS doctor	-	4.8	-	-	-
Pharmacy/shop	1.4	-	20.0	_	-
TBA/DAI	-	-	_	3.0	-
Nurse	-	23.8	20.0	-	-
Sister/sister-in-law	1.4	-	_	_	-
FPI	-	-	20.0	-	-

Multiple responses were allowed

# Non-use of contraceptives

### Reasons for non-use of modern contraceptives

In this study, 676 women (41%) were never-users of any modern contraceptive method. The women were asked about the reasons for non-use of modern contraceptives. The responses were categorised as: social barriers (husband's opposition, opposition from others in the family, religious prohibition), programmatic barriers (lack of access/distance, knows no method, knows no source), need not felt (husband away from home, irregular stay with husband, hysterectomy, infertile, wants children, currently pregnant), postpartum/breast-feeding, health concerns, fear of side-effects, and others (Table 14). For the majority of the women who were never-users of any modern method, 'need not felt' was the reason for non-use of a modern method, and 'husband living away from home' had the major share in this category (41.7%), followed by 'desire for children' and 'currently pregnant'. A good proportion of women also mentioned social barriers (11.4%), postpartum/breast-feeding (10.9%), health concerns (7.2%), and fear of side-effects (3.7%). Another 7 percent had never used a modern method in their life for other reasons. Twenty percent of those who wanted children had 2 or more children.

**Table 14.** Reasons for non-use of contraceptives among never-users of any modern contraceptive method

Reasons	Percentage of women (n=676)
Social barriers	11.4
Husband opposed	5.6
Others opposed	0.9
Religious prohibition	5.6
Programmatic barriers	3.0
Lack of access/distance	0.4
Knows no method	2.1
Knows no source	1.5
Need not felt	73.8
Husband living away from home	41.7
Irregular stay with husband	9.5
Hysterectomy	3.8
Infertile	2.1
Wants children	21.4
Currently pregnant	10.9
Postpartum/breast-feeding	10.9
Health concerns	7.2
Fear of side-effects 3.7	
Others	7.4

Multiple responses were allowed

# Contraceptive advice to never-users of modern methods

Of the never-users, 124 (18.3%) were advised to use modern methods. This advice was given mostly by the depot-holders (31.5%), FWAs (25.8%) and relatives (23.4%). Friends/neighbours provided advice in 13 percent of the cases, while husbands advised in only 5 percent of cases. Pills (76.6%) and injectables (33.1%) were the two most frequently-suggested methods, while male sterilization (1.6%) and Norplant (1.6%) were the least-suggested methods. Female sterilization and IUD were respectively, suggested in 9.7 and 7.3 percent of the cases. About 57 percent of the women who were advised mentioned that they intended to use contraceptives recommended to them.

# Referrals

Of the 1,652 women aged 15-49 years, 272 (16.5%) were referred by someone either for adoption of a method or for management of side-effects. Of them, 48 percent were referred by the FWAs, and about 35 percent were referred by the depot-holders (Table 15). Women were mostly referred to the UHC (53.3%) (Table 16). About 17 percent of the women were referred to the Health and Family Welfare Centre, 13 percent to a Satellite Clinic, 7 percent to the District Hospital, and about 10 percent to the NGO clinic. Compliance with referral was highest for the NGO clinic (76.1%) and lowest for the UHC (63%).

**Table 15.** Referral of women for use of contraceptive methods or for management of side-effects

Referred by	Percentage of women (n=272)
FWA	47.8
FWV/MA/SACMO	8.5
Depot-holder	34.9
Community mobilizer	0.7
Physician	5.1
Nurse	2.2
User of method	1.8
Relative/friend	0.4
TTBA	0.7
Others	3.3

**Table 16.** Place where women were referred to for a method or for management of side-effects

Referred to	Percentage of women referred (n=272)	Compliance with referral (%)
Satellite clinics	12.5 (n=34)	67.6
H&FWC	16.9 (n=46)	66.9
NGO clinic	9.9 (n=27)	76.1
UHC	53.3 (n=145)	63.0
District hospital	6.6 (n=18)	72.2
Others	0.7 (n=2)	75.0

### Discussion

This study assessed the status of clinical contraceptives in a working area of Swanirvar, a RSDP-supported NGO, in the Chagalnaiya upazila of Feni district. Knowledge and practices regarding clinical contraceptives of currently-married women and their husbands were assessed. The need for involvement of males in family-planning programmes has been stressed in various recent studies. Both 1994 International Conference on Population and Development in Cairo and 1995 Fourth World Conference on Women in Beijing endorsed the incorporation of reproductive health services that include men. Men who are educated about reproductive health are more likely to support their partners while making decisions on contraceptive use and family planning (10). Results of studies in China, Taiwan, and Nigeria have also shown that successful family planning is enhanced with the involvement of husbands (11). Similar findings have also been reported from Bangladesh (12). In this study, knowledge, regarding not merely the ability to mention the names of contraceptives, but also the perceptions of the women and their husbands regarding the disadvantages of clinical methods was assessed. Ability to mention the name of a contraceptive at this stage of the family-planning programme has little effect on the acceptance or rejection of a method. However, knowledge about a specific contraceptive method is a precondition for its use.

This study reveals that knowledge about at least one modern method is almost universal, although it was higher in women compared to their husbands. Both women and their husbands were least aware of Norplant and male sterilization. Knowledge about all types of clinical methods other than male sterilization was higher among the women. However, the mention of female sterilization by husbands was over 3 times more than male permanent methods. Also, knowledge of at least one clinical method was lower (70%) among husbands compared to their wives (90%). On the average, women could mention more methods of contraceptives than their husbands.

The contraceptive use reported by the women is well below the national figure of 49.2 percent, because husbands of a large proportion of the women (28.9%) have been living abroad/staying away from home and the contraceptive use among them was only 3.1 percent. Discrepancy was observed in husbands and wives report of contraceptive use. A difference of about 20 percentage points was noted (wives reporting 31.5%, husbands reporting 52%). The national figures represented in the BDHS 1996-1997 also show similar inconsistencies where the reporting by husbands exceeded by 10 percentage points. Such a large discrepancy may be due to overreporting by men either to appease the interviewer or because they are unwilling to admit that they are non-users. Results of study in rural India suggest that such inconsistencies are primarily the result of under-reporting of actual contraceptive use by the wives as a result of shyness or social stigma. The results from these studies raise the possibility that single sex analysis of contraceptive behaviour may overlook a source of bias capable of substantially altering many central results and conclusions (13).

It was found, in the study, that women first heard of contraceptive methods mainly from their friends or relatives. This study also reveals the non-significant role of husbands as the source of their wives hearing about a method. One of the reasons for this could be that many of these women have had heard of the method before their marriage which is supported by the findings of a study conducted by Nahar Q *et al.*, 1999 where 67 percent of the rural adolescent girls were aware of contraceptive methods, and the majority (83%) were unmarried (14). Poor communication between husband and wife regarding family planning could be another reason. The BDHS 1996-1997 reported that almost half of the women had not communicated with their husbands regarding family planning in the three months prior to the survey.

Views of clients regarding contraceptive methods are likely to affect contraceptive uptake and discontinuation. Findings of this study reveal that misperceptions regarding the disadvantages of clinical methods, particularly male sterilization, IUD, and injectables, were high among the women and their husbands. Unfounded beliefs about the adverse effects of contraceptives and fear of surgical procedures associated with sterilization and Norplant have also been reported in studies conducted in other countries (15, 16). Study findings suggest that there is a need to address misperceptions prevalent in the community.

Weakness, dizziness, and menstrual problems were mainly reported to be health problems associated with all types of clinical methods. Similar findings were also reported in the study conducted by BIRPERHT, 1991 and BDHS 1996-1997 (17, 1). Over a third of the current users of modern methods reported facing health problems. 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 contraceptive method (18). The women reported having discussed the problem mostly with the depot-holders and NGO paramedics. However, an almost equal proportion also consulted the government field workers and paramedics. Communication with husbands regarding problems associated with contraceptives was low (11%). This suggests that contraceptives-associated problems is a subject not readily discussed with husbands.

Of the never-users of modern contraceptives, over a fifth desired more children, and about 20 percent among them had 2 or more children. This indicates that the two-child norm needs more advocacy. Social barriers, particularly husbands' disapproval were also reported to be a major reason for the non-acceptance of modern contraceptives among never-users. Thus, there is a need to address social barriers prevailing among never-users in the community. Health concerns and fear of side-effects were also found to be inhibiting factors for the adoption of modern contraception. There is a scope for the programme to disseminate correct information to potential clients enabling them to weigh the benefits of contraception against the actual side-effects which may occur.

Switch to clinical methods was found to occur mainly from pill to injectables, while an equal proportion of women were also found to have switched from clinical to temporary methods. This could be due to the side-effects experienced. Haque I *et al.*, 1997 showed that side-effects are the main reason for switching of all modern methods other than condom (18). Promotion of clinical methods to couples who are temporary method users, but want to limit or space childbearing, was found to exist in the study area. However, this promotional activity was found to be mainly toward injectables and directed toward women. Male sterilization was rarely promoted, even to husbands. This

reflects the fact that the national family-planning programme is primarily a female-focused programme. These promotional activities were mostly reported being done by depot-holders, FWAs and FWVs/SACMOs. Doctors were found to have a small role. Again, this could be due to the fact that women did not have any interaction with a physician. Contraceptive advice to never-users of modern methods was reported to be given mainly for pill and injectables. Again this advice was reported to be given by both NGO workers and government field workers. Mass media (radio/TV) disseminate information only about temporary methods, the pill, and condom. With the thrust now toward the promotion of clinical contraceptives, mass media could also play a major role in this regard.

Findings of the study suggest that, although the working area of Swanirvar has been demarcated from the working area of the government, overlapping of family-planning services exists across this demarcation. A plausible explanation for this could be that women residing closer to the government facilities are still availing of the services from there.

In conclusion, it may be said that there is a need to remove barriers to clinical contraception with emphasis on the removal of misperceptions prevailing in the study area. There is a scope for the programme to raise the demand for modern contraceptives among the never-users and to strengthen promotional activities for longer-acting and permanent methods. Emphasis on participation and involvement of males also needs to be stressed.

The Operations Research Project of ICDDR,B has undertaken an intervention to improve the performance of clinical contraception in the study area. As an intervention strategy, existing behaviour change communication (BCC) messages and materials have been reviewed, modified and adapted, while some have also been developed by the Project to address misperceptions and reduce social barriers to clinical contraception. Intervention activities also include promotion of clinical contraceptives by involving not only women but also men. These include formal and informal opinion leaders in the community. Village practitioners have also been involved in the promotion of clinical contraceptives and on referral of clients with side-effects and complications. Other intervention activities include refresher training of providers on screening, counselling, management of side-effects and complications as well as development of job-aids for them.

### References

- 1. Mitra SN, Al-Sabir A, Anne RC, Jamil K. Bangladesh demographic and health survey 1996-1997. Dhaka: National Institute of Population Research and Training, 1997;50-56: 91-98.
- 2. Cleland J, Phillips J, Amin S, Kamal GM. The determinants of reproductive change in Bangladesh: success in a challenging environment. Washington DC: World Bank, 1994.
- 3. Pritchett, LH. Desired fertility and the impact of population policies. *Pop Dev Rev* 1994;20:1-55.
- 4. Caldwell, JC, Barkat-e-Khuda, Caldwell B, Pieris I, Caldwell P. The Bangladesh fertility decline: an interpretation. *Pop Dev Rev* 1999;25: 67-84.
- Hatcher RA, Rinehart W, Blackburn R, Geller JS, editors. The essentials of contraceptive technology. Maryland: Population Information Program, Center for Communication Programs, The John Hopkins School of Public Health, 1997:78-148.
- 6. Rahman M, Akbar J, Phillips JF, Becker S. Contraceptive use in Matlab, Bangladesh: the role of gender preference. *Stud Fam Plann* 1992;23:229-42.
- 7. Caldwell B, Barkat-e-Khuda. The first generation to control family size: understanding Bangladesh's fertility decline from the perspective of the participants. *In*: Kane TT, Barkat-e-Khuda, Phillips J, editors. Reproductive health in rural Bangladesh, policy and programmatic implications, Volume 1. Dhaka: MCH-FP Extension Project (Rural), International Centre for Diarrhoeal Disease Research, Bangladesh, 1997:409-26. (ICDDR,B monograph, 7).
- 8. Huezo CM, Carignan CS, editors. Medical and service delivery guidelines for family planning. London: International Planned Parenthood Federation, 1997:6-12.
- 9. Sobhan F, Islam A, Quaiyum MA, Barkat-e-Khuda, Ahmed S. 1999. Clinical contraceptives: situation in rural Bangladesh. Dhaka: ICDDR,B: Centre for Health and Population Research 1999. (ICDDR,B working paper, 128, pp. 12-13).
- 10. Ezeh A, Seroussi M, Raggers H. Men's fertility, contraceptive use, and reproductive preferences. Demographic and health surveys comparative studies. Calverton, MD: Macro International, 1996, No.18.
- 11. Becker S. Couples and reproductive health: a review of couple studies. *Stud Fam Plann* 1996;27:291-306.
- 12. Amatya R, Akhter H, McMahan J, Williamson N, Gates D, Ahmed Y. The effect of husband counseling on Norplant contraceptive acceptability in Bangladesh. Contraception 1994;50:263-73.
- 13. Koenig MA, Simmons GB, Misra BD. Husband-wife inconsistencies in contraceptive use responses. *Pop Stud* 1984;38:281-98.

- Nahar Q, Tunon C, Houvras I, Gazi R, Reza M, Huq NL. Reproductive health needs of adolescents in rural Bangladesh: a study report. Dhaka: ICDDR,B: Centre for Health and Population Research, 1999. (ICDDR,B working paper, 130, pp. 25-26).
- 15. Nag M. Some cultural factors affecting costs of fertility regulation. *Pop Bull* 1984;(17):17.
- 16. Bongaarts J, Bruce J. The causes of unmet need for contraception and the social content of services. *Stud Fam Plann* 1995;26:57-76.
- Akhter HH, Ahmed S. Determinants of contraceptive use dynamics in rural Bangladesh. Dhaka: Bangladesh Institute of Research for Promotion of Essential & Reproductive Health and Technologies 1991:48-93. (BIRPERHT publication no.93).
- 18. Rahman M, Khan MMA. Factors associated with reported side-effects of oral pills and injectables in rural Bangladesh. *In*: Kane TT, Barkat-e-Khuda, Phillips J, editors. Reproductive health in rural Bangladesh, policy and programmatic implications, Volume 1. Dhaka: MCH-FP Extension Project (Rural), International Centre for Diarrhoeal Disease Research, Bangladesh, 1997;191-216. (ICDDR,B monograph, 7).
- 19. Haque I, Kane TT, Roy NC, Mozumder KA, Barkat-e-Khuda. Contraceptive switching pattern in rural Bangladesh. Dhaka: International Centre for Diarrhoeal Disease Research, Bangladesh, 1997. (ICDDR,B working paper, 85, pp.17-9).