## Selective Home Visits for Motivation: Evidence from an Urban Intervention on Non-users of Family Planning

# Subrata Routh Shamim Ara Jahan



ICDDR,B: Centre for Health and Population Research Mohakhali, Dhaka 1212, Bangladesh

ICDDR,B Working Paper No. 136

Edited by: M. Shamsul Islam Khan

**Design and Desktop Publishing**: Jatindra Nath Sarker

Manash Kumar Barua

ISBN: 984-551-216-X

ICDDR,B Working Paper No. 136

© 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: Impression Printing House, Dhaka

#### Acknowledgements

The Operations Research Project (ORP), a project 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).

This publication was supported by the USAID under the Cooperative Agreement No. 388-A-00-97-00032-00 with the 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 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.



## **Contents**

	Page
Abstract	٧
Introduction	1
The Conventional MCH-FP Service-delivery Strategy	1
Increasing programme costs	3
Decreasing system effectiveness	4
Objectives	4
The Alternative Service-delivery Strategies	5
Description of the Selective Home-visitation Approach	7
Methodology	9
Results	10
Contraceptive acceptance rate among non-users  Time use	10 13
Compliance with the communication checklists	14
Views of the modern contraceptive new acceptors	14
Views of the remaining non-users	15
Views of the fieldworkers	15
Discussion	15
References	17
Annexure A. Fieldworker-target client communication checklists	

		Page
Tables		
Table 1.	Case mix and caseload analysis	7
Table 2.	Segmentation of non-user clients by main reason for not using modern family planning method	8
Table 3.	Before-after contraception status in the cohort of previous modern family planning method non-users in the PHCC intervention area (Hazaribag)	11
Table 4.	Before-after contraception status in the cohort of previous modern family planning method non-users in the CSP intervention area (Gandaria)	11
Table 5.	Before-after contraception status in the cohort of previous modern family planning method non-users in the Wari comparison area	12
Table 6.	Before-after contraception status in the cohort of previous modern family planning method non-users in the Siddique Bazar comparison area	12
Table 7.	Contraceptive acceptance rate among previous non-users by main reasons for non-use	13
Table 8.	Before- and after-intervention comparison of daily time use of fieldworkers	13
Figures		
Figure 1.	Before and after-intervention contraceptive prevalence rate in intervention and comparison areas	6
Figure 2.	Before and after-intervention relative share of non-permanent clinical family planning methods in intervention and comparison areas	6

#### Abstract

The paper describes the intervention component on selective home visits. The intervention was developed and field-tested within the operations research on alternative servicedelivery strategies for MCH-FP services. In partnership with the relevant government agencies and the Concerned Women for Family Development (formerly Concerned Women for Family Planning), the study was conducted in two areas of Dhaka city from 1996 to 1997. The selective home visits for motivation produced encouraging results in terms of new acceptance among the non-users of modern family-planning methods. The national health and family planning programme is currently undergoing major changes with regard to its service-delivery strategies. The changed strategies, proposed in the Health and Population Sector Programme (HPSP), emphasized the delivery of services from the fixed-site clinics where a range of essential health and family planning services are being provided by the health and family-planning workers from a single spot to maximize customers' convenience and minimize providers' costs. According to the HPSP guidelines, the fieldworkers will be required to make selective home visits only one day a week, instead of the current practice of undertaking home visits to the clients on a daily basis. Various NGO programmes are also planning of incorporating a component on selective home visits within their clinic-based service provision. Lessons learnt from the intervention component on selective home visitation are likely to provide important insights for the adaptation of an effective strategy on selective (targeted) home visitation within the government and NGO service-delivery systems.



#### Introduction

The urban component of the former MCH-FP Extension Project (subsequently merged with the Operations Research Project) of the ICDDR,B: Centre for Health and Population Research conducted an operations research in Dhaka city aiming at developing strategies alternative to the doorstep distribution of contraceptives for cost-effective delivery of maternal and child health and family planning (MCH-FP) services in the urban areas.

The intervention to develop and field-test alternative service-delivery strategies was undertaken in partnership with the concerned government agencies and a national NGO, Concerned Women for Family Development (formerly Concerned Women for Family Planning (CWFP)). The study was carried out during January 1996-May 1997. Two alternative strategies, featured along with the withdrawal of door-to-door contraceptive distribution system, were tested in two areas of Dhaka city. At Hazaribag of Ward 58, a number of MCH-FP services, including distribution of contraceptives, were delivered from the static Primary Health Care Clinic (PHCC). At Gandaria of Ward 80, a transitional arrangement was made to supply pills and condoms to a group of clients from the static sites at the locality, known as Community Service Points (CSPs). Both the strategies were complemented by selective home visits to motivate non-users to adopt modern family planning methods.

The national health and family planning programme is currently undergoing major changes with regard to its service-delivery strategies. The changed strategies, proposed in the Health and Population Sector Programme (HPSP), emphasize delivery of services from the fixed-site clinics where a range of reproductive health, child-survival and curative services (ESP--Essential Services Package) will be provided by the health and family planning providers from a single spot to maximize customers' convenience and minimize providers' costs. According to the HPSP guidelines, the fieldworkers will be required to make selective home visits one day a week, instead of the current practice of undertaking home visits to the clients on a daily basis. The paper highlights the operations research of ICDDR,B on selective home visits. Lessons learnt from the intervention are expected to provide important insights for the design and adaptation of an effective strategy on selective (targeted) home visitation within the government and NGO service-delivery systems.

### The Conventional MCH-FP Service-delivery Strategy

As a strategy to reduce the alarming rate of population growth, extension of family planning services to the married women of reproductive age (MWRA) on the basis of door-to-door distribution of contraceptives at the clients' homes became a national movement in Bangladesh since the mid-1970s. The sociocultural environment at that time was such that, in a relatively conservative population, most women were confined to their homes, and were unable to seek services for themselves. This led to adopt a supply-induced strategy to ensure effective motivation and easy access to family planning methods and services to fertile women.

Within the conventional community-based distribution (CBD) strategy, about 23,000 government female fieldworkers (Family Welfare Assistants) and another 12,000 NGO fieldworkers (FWs) were deployed to counsel and motivate the MWRA of the country, and provide contraceptive services to them. These FWs were required to visit once every two months all the MWRA within their specified catchment areas (on an average 700-800 MWRA per FW). During their visits to the clients' homes, the FWs were required to collect specific information on demographic characteristics, e.g. age of woman, number of living children, births and deaths, and on contraception status of the respective households. They were also responsible for providing information, motivation, commodities (pills, condoms, etc.), and counselling for family planning services and selective MCH care, such as immunization for women and children. Besides these activities, the FWs also provided information about appropriate antenatal and postnatal care, safe delivery, nutrition, and hygiene. Women seeking clinical family planning methods and MCH services were referred to the clinics. The FWs were overseen by some 4,500 male supervisors (Family Planning Inspectors) in the government programme and 1,500 (mostly females) supervisors in the NGO programmes. The usual supervisor-fieldworker ratio was 1:5.

The above community-based outreach services were complemented by about 4,000 government and 200 NGO static clinics. These clinics offered clinical and non-clinical family planning services, antenatal and postnatal care, EPI services, and sick child and sick mother treatment through paramedics and health workers. Many of these clinics were also attended by a doctor.

To enhance the accessibility of services to clients living farther away from the fixed-site (static) clinics, the satellite clinic concept was introduced in the 1980s. The Satellite Clinic or subcentre is an outreach facility, which is organized on a fixed day of a week or a month at some specific site/sites, relatively distant from the fixed-site clinic. Some 30,000 Satellite Clinics are organized every month within the government service-delivery system. NGOs also arrange Satellite Clinics. According to the existing demarcation of areas between the government and NGO programmes, the NGOs, acting as complementary and supplementary to the government programme, predominantly operate in the urban areas. In some cases, under special consideration of the government, they operate in selected rural areas where indicators of family planning performance are relatively low.

Doorstep delivery has served as the core strategy for providing MCH-FP services in the country. The role of the doorstep service-delivery strategy has widely been recognized as the key factor in attaining remarkable success by the FP programmes of Bangladesh [1,2]. This strategy helped raise the contraceptive prevalence rate (CPR) from 7 percent in the mid-seventies to its present level of 49 percent. During the same time period, the total fertility rate declined from 7 to 3.3 [3]. However, the investment in such a

large-scale national programme was considerable. With the maturity of the MCH-FP programme, priorities shifted toward further consolidation and sustainability of the programme benefits. The required direction is, therefore, to develop new service-delivery strategies that would enhance cost-effectiveness by producing maximum output with minimum cost. Over the past two decades, social outlook toward family planning has notably improved. Traditional barriers to women leaving their homes to seek health services from out-of-home sources, such as clinics, appear to be less of a problem now. Thus, the labour-intensive efforts of the doorstep distribution strategy appear to hinder the overall sustainability of the national MCH-FP programme. Two major issues involved in this regard are: (a) increasing programme costs, and (b) decreasing system effectiveness which are discussed in detail below:

#### Increasing programme costs

Health and family planning services will have to expand in the future to meet the growing demands resulting from the increased number of population. For example, to achieve the national goal of replacement-level fertility, i.e. a total fertility rate (TFR) of 2.2, family planning services, which now serve 27 million families, will need to be expanded to serve 40 million; the number of contraceptive users will need to increase from 12 million to 28 million; and the CPR must rise to 70 percent. Similarly, to attain an infant mortality rate (IMR) of 50 per 1,000 live-births by 2005, the immunization coverage has to increase from the current 4.2 million infants to approximately 6.3 million infants per year [4,5]. Under the current service-delivery strategy, the above expansions will require an incremental increase of US\$ 10 million every year in the MCH-FP programme costs of the country alone, and an amount of US\$ 220 million in 2005 from the present level of US\$ 120 million [5].

The national MCH-FP programme has been found to be heavily dependent upon donor contributions. Government of Bangladesh (GoB) contribution is only 37 percent. In all likelihood, donor support will not rise to meet the increasing funding needs. Even if the external contributions remain the same, these will not be adequate against the country's growing demands. Therefore, the need to develop cost-effective and sustainable service-delivery alternatives is crucial.

An expenditure analysis made for the Concerned Women for Family Planning programme has shown that the share of the current system's labour costs as part of the total programme costs ranges from 70 to 80 percent. Salary of the field workers involved in the doorstep-delivery system absorbs 60-65 percent of the programme cost [6]. Such break-downs are, more or less, the same for other NGOs and for the government programme.

#### **Decreasing system effectiveness**

The wide-reaching nature of the responsibilities of the FWs described above made it mandatory for the FWs to visit each and every couple routinely, even if such a visit was not needed. As a consequence, the FWs do not have sufficient scope for focused attention toward any 'special' segment of clients, such as non-users.

Analysis of the performance of FWs, conducted under the needs assessment studies of the Urban Extension Project of ICDDR,B, showed that, in urban areas, most FWs were responsible for 800 MWRA or more. The mean number of visits undertaken daily by each FW was 25, and the average duration of each visit was about nine minutes. Half of the visits, however, were of five minutes' or less duration. Sixty percent of the time spent in visitation was dedicated to family planning activity, concentrating mostly on resupply of pills and condoms. The analysis showed that the FWs least frequently visited non-users, particularly couples who had never used a modern contraceptive method and women with no children [7]. The FWs, thus, became predisposed to function as the resupply agent to pill and condom users, and had less time to recruit new acceptors. Moreover, while trying to target the community as a whole, the FWs were ultimately unable to give adequate attention to those who needed the services most. It has also become evident from the findings of the Bangladesh demographic and health survey (BDHS) that the proportion of MWRA who reported to have been visited by a FW in six months prior to the survey dropped from 43 percent in 1993-1994 to 38 percent in 1996-1997.

## **Objectives**

Against the background discussed above, the objectives of the selective visitation approach were to:

- Develop a systematic approach to effectively target the non-users of modern family planning methods through 'segmentation' analysis.
- Design and test strategies based on home visits to motivate the selected 'target' subpopulations.
- Examine the effects of selective home visits on acceptance of modern family planning methods among the corresponding non-users.

The main research questions examined in the study were:

- What steps are required to implement a target-specific, home-based motivational approach for the non-users of modern family planning methods?
- How does such an approach affect the acceptance of modern family planning methods by the non-users?

## The Alternative Service-delivery Strategies<sup>1</sup>

The conventional door-to-door distribution strategy had been in place for the past two decades. Both clients and service providers are accustomed to, and comfortable with, the system. While recognizing the need of a change in the conventional service-delivery system, it has also been widely recognized that a sudden withdrawal of the door-to-door distribution strategy might negatively affect the CPR and other performance indicators. Thus, the programme managers and the decision-makers agreed to gradually implement the changes.

The explicit goal of the national health programme, in line with the recommendations of the International Conference on Population Development (ICPD), has evolved to ensure broader reproductive health services to the population. It is hoped that this goal can be achieved in a cost-effective way by offering a wide range of essential health services from the fixed-site (static) clinics. The programme also needs to reach those target groups who have high needs for the services.

One possible alternative could be to strengthen clinic services as the main hub of MCH-FP activities. This would include the delivery of a package of essential health and family planning services through a network of the static clinics used by clients who were to be informed, educated, and motivated through limited home visits to selective subpopulations as prioritized by the programmes, and performing promotional and community mobilization activities.

With the above considerations in mind, two alternative strategies were designed and tested in urban Dhaka during January 1996 - May 1997. At Hazaribag, a programme area of the CWFP in Dhaka city with a population of about 25,000, a radical shift to clinic-based service-delivery was tested. A range of MCH-FP services, such as family planning (pills, condoms, injectable contraceptives, intrauterine devices and side-effects management), antenatal and postnatal care, treatment of reproductive tract infections, and general medical care for mothers and children, was provided from the PHCC. At Gandaria, another programme area of the CWFP in Dhaka city with a population of approximately 20,000, a transitory arrangement of distributing pills and condoms from the CSPs was tested.

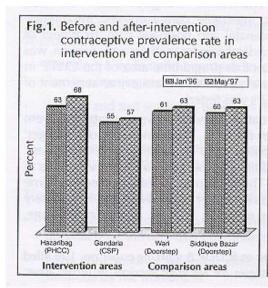
Both the above-mentioned alternative service-delivery strategies were complemented with selective home visits by the FWs. The home visits to the 'target' groups were used for delivering information and motivating potential users. Distribution of pills and condoms at the clients' homes and routine home visits to each and every MWRA were withdrawn. The basic premise of the selective home visits was founded on the concept that even under a fixed-site service-delivery strategy, some community-based focus is required, at least in the initial stage, especially for the `hard-to-motivate,' `hard-to-reach,' and `high-priority' (sub-populations in high need of corresponding services) segments. In this intervention, the focus was concentrated on family planning performance. The selective visitation approach was, therefore, designed to target non-users of modern family planning methods. This strategy was adopted to contribute to the

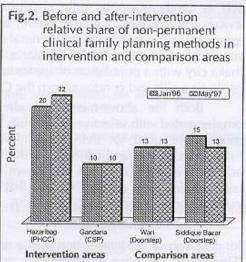
<sup>&</sup>lt;sup>1</sup>For details about this intervention, please refer to ICDDR,B working paper no. 106 titled "Developing alternative service-delivery strategies for MCH-FP services in urban areas: findings from an experiment" [8].

adoption of a client-oriented extension activity that would be effective in addressing the `unmet needs' for family planning, with lesser claims for outreach workers. Although the selective home visits of this study were designed to motivate the non-users to adopt modern methods, it could also be used (with necessary modifications) to target other population segments for other health and family planning activities. Details of the selective home visitation approach have been provided in the subsequent sections of this paper.

The key results of the intervention on alternative service-delivery strategies were as follows:

- i. Contrary to the initial fear that the shift away from the doorstep-delivery system would result in a decreased CPR, the CPR increased in both the intervention areas;
- ii. The PHCC-based strategy produced a remarkable increase in the CPR, especially with regard to the use of clinical methods (Fig. 1 and 2);
- iii. With both the alternatives, there was an increased use of commercial sources, such as pharmacies and shops, and other static sites, such as government and NGO clinics, for obtaining the family planning methods. In the PHCC-based strategy, the corresponding increase was from 42 to 50 percent, whereas in the CSP-based strategy, it was from 38 percent to 64 percent.





### **Description of the Selective Home-visitation Approach**

The systematic approach for selective home visitation to non-users of modern family planning methods comprised the following four basic steps:

i. Case mix/caseload analysis of the fieldworkers. The main purpose of this exercise was to assess the user to non-user ratio and caseload of the fieldworkers in terms of door-to-door distribution of pills and condoms. Information recorded in the couple registration books of the fieldworkers served as the basis of the exercise. At the end of this step, it helped to ascertain the proportions of MWRA dependent upon home supply of pills and condoms, and the various sub-groups of non-users of the modern family planning methods. Findings of the case mix/caseload analysis are shown in Table 1. It was found that about three-fifths of the MWRA of the intervention and comparison areas were users of modern family planning methods.

Table 1. Case mix and caseload analysis

				(In percent)	_
	Total no.	Users dependent	Non-users		
Total MWRA	or ramily		Newly- wed*	Young couple**	Others
Hazaribag	63	16	1	20	16
(n=4,236)					
Gandaria	55	18	1	23	21
(n=3,708)	2.4	0.0			4.0
Wari	61	20	1	22	16
(n=4,262)		40			4.0
Siddique Bazar (n=6,027)	60	19	1	20	19

<sup>\*</sup> Newly-wed: Women in first year of marriage

In the conventional strategy, the major function of the FWs was to distribute pills and condoms to contraceptors. The caseload analysis revealed, however, that the women the FWs predominantly served, i.e. pill and condom users who depended on the FWs for their home supplies, accounted for only 16-20 percent of all MWRA. Two of every five MWRA in the research areas were non-users of modern family planning methods. The proportions of the newly-wed and the young couple not using modern methods were one and 20 percent of the MWRA respectively.

<sup>\*\*</sup> Young couple: Married women of age ≤30 years

Segmentation analysis to identify the 'target' clients. The next step was to examine the reasons reported by the current non-users for not using any modern family planning method. During the routine home visits prior to the intervention, the non-users of modern family planning methods, identified during the previous step. were interviewed by the FWs to ascertain the single most important reason for not using a modern family planning method.

Results of these interviews were then analyzed in participatory workshops with the FWs, and the 'target' groups, to whom selective home visits will be undertaken, were agreed upon. The selection was made based on the following three key considerations: (a) number of cases in each group (size), (b) potential of the respective cases to adopt modern family planning methods (prospect), and (c) positioning of outreach activities for non-users with greater need for modern family planning methods (need).

Findings of the segmentation analysis are presented in Table 2. The segmentation analysis revealed that 80-90 percent of the non-users did not use a modern method for one of the following six reasons: wanting a child, misconception about infertility (unsubstantiated belief that they would not conceive further), experiencing postpartum amenorrhoea, experiencing pregnancy, using traditional methods, and husband staying abroad. Accordingly, the selective home visitation approach targeted these six groups for home-based motivation.

**Table 2.** Segmentation of non-user clients by main reason for not using modern family planning method

Main reason	Hazaribag (n=1,563) %	Gandaria (n=1,683) %	Overall (n=3,246) %
Wants a child	21	19	20
Unsubstantiated infertility	17	20	18
Postpartum amenorrhoea (PPA)	20	15	17
Pregnancy	10	11	11
Using a traditional method	10	8	9
Husband abroad	9	7	8
Physical illness	4	6	5
Others <sup>2</sup>	9	14	12

<sup>&</sup>lt;sup>2</sup>Others included various reasons, such as no relation with husband, religious conservatism, superstition, personal disliking, etc.

- iii. **Development of communication checklist**. Based on the discussions about contraceptive prospect and need, standard communication checklists were developed for each of these six groups. The checklists, developed at the workshops with the FWs, included two types of information: questions on which to gather information from the clients, and corresponding information, education and motivation messages to be delivered to the clients. The communication checklists were developed to make the motivation activities client and case-specific. The standard checklists were also designed to help the FWs focus on the issues they needed to discuss with the clients during the motivational home visits. Thus, the fieldworker-target client encounters were directed on two-way communication between the clients and the providers. The communication checklists have been included in Annexure A.
- Implementation of the selective home-visitation approach. The selective homevisitation approach, developed on the basis of the above steps, was field-tested for one year from April 1996 to March 1997. The study comprised 2,800 target clients-about 1.400 cases in each of the two intervention areas. These figures represented 33 percent and 38 percent of all the MWRA in Hazaribag and Gandaria respectively. In view of the decreased number of clients to be visited at homes, a reduction in the number of fieldworkers to undertake home visits to the selected clients became possible. However, a proportionate reduction was not suggested considering the following two reasons: (a) it was presumed that the targeted non-users were the 'hard core' ones who needed intensive motivation, i.e. more time from the FWs; and (b) although the number of home visits to be undertaken by a FW was reduced, more travel time was thought to be needed due to the probable dispersion of the households to visit (geographic expansion of the catchment area). Considering these factors, it was agreed upon to reduce the number of FWs from five to three. An assessment of the effects of the selective visitation approach was made during the evaluation of the intervention conducted in April-May 1997.

## Methodology

The analysis followed a quasi-experimental non-equivalent control group design with before- and after-intervention analysis of the cohort of non-users of modern family planning methods. Two programme areas of the CWFP in Dhaka city, one each at Wari and Siddique Bazar, served as the comparison areas. The acceptance rate of modern contraceptive methods among the target non-users served as the key indicator. Both quantitative and qualitative methods were used for analyzing the effects of the selective visitation approach. The service records of the fieldworkers and community-based surveys were the sources of data for analyses.

To assess appropriateness of the selective visitation strategy and perceptions of the target clients and the FWs regarding the new approach, 40 random observations of the encounters between the FWs and the target clients, 48 indepth interviews of the target clients, and indepth interviews with all six FWs of the two intervention sites were conducted.

Female field researchers observed the encounters between the FWs and the non-user target clients. Each FW was observed for two days. The field researchers accompanied each FW for two entire days of her home visits and randomly chose 40 encounters for detailed observation. A structured checklist was used for recording the observations.

For the indepth interviews of the clients, the target categories, proved to be most promising in terms of contraceptive acceptance during the intervention, were selected. Accordingly, the following four non-user categories were chosen for the indepth interviews:

- Unsubstantiated infertility
- b. Experiencing postpartum amenorrhoea
- c. Pregnant
- d. Using a traditional method

Forty-eight clients comprised the sample for the indepth interviews. In the sample, both types of target clients (those who became acceptors of modern methods during the intervention and those who remained non-users) were included. This was done to capture the perspectives of both the scenarios. The sample composition for the indepth interviews with the clients was as follows:

Non upor groups	Non-users		New acceptors		- Total
Non-user groups	Hazaribag	Gandaria	Hazaribag	Gandaria	- Total
Unsubstantiated					
infertility	3	3	3	3	12
Experiencing PPA	3	3	3	3	12
Using a traditional					
method	3	3	3	3	12
Pregnant	3	3	3	3	12
Total	12	12	12	12	48

#### Results

The results specific to the selective home-visitation approach are described below:

#### Contraceptive acceptance rate among non-users

The cohort of the non-users identified at the outset of the intervention and addressed through the selective visitation approach was followed throughout the intervention period to assess the effects of the intervention on new acceptance of modern family planning methods. Two potential effects could result from the intervention: the non-user couples would either adopt modern contraceptive methods because of the special focus of the intervention on them or they would still remain as non-users despite the intervention efforts. A third option could also take place—a section of these non-users could migrate out of the area during the intervention period, and, as a result, they could not be followed up.

The results of the analyses of contraception status of the cohort of modern family planning non-users, by slum and non-slum couples, in the PHCC (Hazaribag) and CSP (Gandaria) intervention areas have been provided in Table 3 and 4. The results from the comparison areas are provided in Table 5 and 6.

**Table 3.** Before-after contraception status in the cohort of previous modern family planning method non-users in the PHCC intervention area (Hazaribag)

Residence	Total no.	After-intervention contraception status of previous modern family planning method non-users			
Residence	users	Still non-user (%)	New acceptor (%)	Out-migration (%)	
Non-slum	1,169	49	34	17	
Slum	394	47	25	28	
Total	1,563	49	31	20	

**Table 4.** Before-after contraception status in the cohort of previous modern family planning method non-users in the CSP intervention area (Gandaria)

Residence	Total no.	After-intervention contraception status of previous modern family planning method non-users						
Residence	users	Still non-user (%)	New acceptor (%)	Out-migration (%)				
Non-slum	1,167	57	27	16				
Slum	516	50	28	22				
Total	1,683	55	27	18				

**Table 5.** Before-after contraception status in the cohort of previous modern family planning method non-users in the Wari comparison area

Residence	Total no.	After-intervention contraception status of previous modern family planning method non-users			
Residence	users	Still non-user (%)	New acceptor (%)	Out-migration (%)	
Non-slum	1,343	79	9	12	
Slum	319	81	5	14	
Total	1,662	79	8	13	

**Table 6.** Before-after contraception status in the cohort of previous modern family planning method non-users in the Siddique Bazar comparison area

Docidonos	Total no.		ion contraception sta mily planning metho	on status of previous nethod non-users	
Residence	users	Still non-user (%)	New acceptor (%)	Out-migration (%)	
Non-slum	1,833	80	10	10	
Slum	578	79	6	15	
Total	2,411	80	9	11	

Table 3-6 show that 31 percent of the modern contraceptive non-users at Hazaribag and 27 percent at Gandaria became new acceptors of modern family planning methods during the intervention on selective home visitation. The corresponding rates for the comparison areas were eight percent for Wari and nine percent for Siddique Bazar. The acceptance rate of modern contraceptive methods under the new approach was significantly higher than that of the conventional doorstep strategy for both Hazaribag and Gandaria (p<0.05).

One-third of the non-slum and one-fourth of the slum non-users of Hazaribag and little more than one-fourth of both slum and non-slum non-users of Gandaria accepted modern family planning methods during the intervention period. The new acceptance rate by the slum and non-slum clients was considerably higher in the intervention sites than in the comparison ones.

It was also found that the acceptance rate of modern contraceptives was higher at the PHCC area (Hazaribag), both in relative (by four percentage points) and absolute terms (485 at Hazaribag versus 454 at Gandaria), compared to that in the CSP intervention site at Gandaria. The rate of new acceptance was, however, a little higher for the non-slum segment in the PHCC intervention site, and the other way around for the slum segment in the CSP intervention area.

About 70 percent of modern contraceptive acceptance occurred among those non-contraceptors who had not been using a modern method due to postpartum amenorrhoea or pregnancy (Table 7). Another 25 percent who newly accepted methods were those who had not used a method due to the unsubstantiated belief that they would not conceive or because they were using a traditional method. The misconceptions regarding unsubstantiated belief that they would not conceive further were found to persist mainly because of irregular menstruation among these women. Non-users who wanted a child and those whose husbands stayed abroad proved less prospective in terms of accepting a modern family planning method.

**Table 7.** Contraception acceptance rate among previous non-users by main reasons for non-use

Main reason	Hazaribag (n=485) %	Gandaria (n=454) %
Experiencing postpartum amenorrhea	46	40
Currently pregnant	25	31
Unsubstantiated infertility	14	17
Using a traditional method	9	9
Wants a child	3	2
Husband abroad	3	1

#### Time use

Findings from the observations of fieldworkers' time use in the Hazaribag and Gandaria intervention areas--before and after the selective home-visitation approach-- are presented in Table 8.

Table 8. Before- and after-intervention comparison of daily time use of fieldworkers

	Travel time (minutes)	Encounter time (minutes)	Total time for home visits (minutes)	No. of clients visited per day
Before intervention	48	176	224	22
After intervention	56	180	236	10

A fieldworker spent about four hours in the community to visit homes (Table 8). Prior to the intervention, an FW visited, on an average 22 clients every working day. The mean duration of a home visit was estimated at 10 minutes, of which two minutes were spent for traveling to the client and eight minutes spent in interacting with the client. It was

also noted, during the observations, that the mean duration of a home visit (travel and encounter time combined) to a non-user client was a little less than five minutes. However, with the introduction of the selective home-visitation approach, an FW, on an average, visited 10 clients each working day. The mean duration of each visit significantly increased from 10 to 24 minutes.

The mean time of actual interaction with the clients more than doubled from 8 minutes to 18 minutes. However, the mean travel time also increased significantly, i.e. from two minutes to six minutes, with the introduction of the new approach. As it was presumed earlier, although the FWs under the selective visitation strategy were responsible for a smaller number of clients, as a result of higher dispersion in the residences of the assigned clients to visit, the actual catchment areas, in fact, got widened. Therefore, more travel time was needed to reach and locate these clients.

#### Compliance with communication checklists

In 34 of the 40 encounters observed, the FWs properly followed all of the items mentioned in the communication checklists. In 26 of such encounters, the clients actively participated in the discussions, making the communication process between the FWs and the clients interactive in the true sense. In three of the cases, the clients expressed preoccupation with household activities and opted to cut the encounters short.

#### Views of the modern contraceptive new acceptors

During the indepth interviews, 24 new acceptors expressed their satisfaction with regard to the intervention approach. According to them, selective visitation is effective because of the longer encounters which naturally resulted in better explanations and higher levels of motivation provided by the FWs. Nine interviewees stated that, as per their suggestions, the FWs contacted their husbands and other family members to secure approval for adopting a modern method. This, according to them, was the deciding factor in their acceptance of a modern family planning method during the intervention. Of the 24 acceptors, 11 adopted pill, another 11 condom, one IUD, and one female sterilization. Within the selective home-visitation approach, no services, other than information and motivation, were provided at the homes. Six of the clients, who adopted methods, obtained their contraceptive supplies from a pharmacy/shop, and the remaining 18 from an NGO or a government clinic. Clients, who received their supplies from clinics, reported that visits to the clinics for contraceptives allowed them to receive other health services for themselves, for their children, and for other family members.

#### Views of the remaining non-users

During the indepth interviews, 24 women who, despite the new approach, remained nonusers reported that they had noticed changes in the FW's motivation strategy. Unlike the previous visits, they reported that the FWs gave them more time and tried to understand their problems. These women mentioned that they personally approved of modern family planning. Four of them suggested to give them more time and attention to motivate them adequately. Seventeen women hoped to use modern family planning methods in the future. Fairly consistently however, the women identified the importance of discussing these issues with their husbands and in-laws. Moreover, effective management of sideeffects was identified as a critical factor in their future intention to adopt a modern family planning method.

#### Views of the fieldworkers

The FWs opined that selective visitation was effective. It was more demanding in terms of travel and encounter times, and was feasible to visit 10-12 clients each day. While highly rating the role of the communication checklists in their activities, they pointed out that the communication checklists were remarkably helpful in addressing the non-users in a systematic way, with appropriate consideration of all related issues. The FWs termed the remaining non-users as the 'hard-to-motivate' ones. They suggested that those target clients who would remain non-users even after 3-4 intensive motivational visits under the new approach should be treated as 'hard core' non-users and be dropped from the home visitation schedule. Non-users of modern family planning methods due to postpartum amenorrhoea and pregnancy were the two groups which the FWs considered prospective and easier to convert. They also expressed that, although longer encounters were critical to persuade the 'hard-to-motivate' cases, the slum women, by and large, were not in favour of long interactions, probably because of their high preoccupation with household and other necessary domestic activities.

#### **Discussion**

The selective home-visitation approach for motivating the non-users of modern family planning methods produced encouraging results. The new acceptance rate of modern family planning methods was three to four times higher in the intervention areas than it was with the conventional strategy. Ultimately, the wider focus of the conventional CBD, encompassing the entire community, has eventually appeared to result in inadequate attention to those who need services and motivation the most. Moreover, with the maturity of the CBD programme and growing demands for services, the requirements of resource necessary to run the programme increase considerably. In view of this, the government and NGO programmes have currently opted to shift toward clinic-based service-delivery strategies. The intervention findings suggest to undertake community-based promotional

and motivational activities targeted toward selective sub-populations to make the clinic-based service-delivery strategies effective. By making necessary modification in the approach used in this study, similar promotional activities could be carried out at the community level to address other special sub-populations, such as households with children aged less than two years, to encourage these target groups to seek the required services from a nearby static clinic.

This study has shown that it is possible to segment a population and focus on the resulting target population. Moreover, it has shown moreover that the information necessary to do such an analysis is available with the FWs in their couple registers. Thus, a clinic-based service-delivery strategy, complemented by selective community-based activities performed by a reduced number of fieldworkers, proved to be an effective approach.

Various cost analysis studies suggest that costs associated with motivating first-time acceptors are high, especially with regard to field services. Labour costs constitute around 80 percent of the corresponding unit cost [6]. It is, thus, obvious that employment of fewer FWs would contribute to the reduced acceptance costs. The selective home-visitation approach made it possible to reduce the number of FWs by 40 percent. The decrease in the requirement of FWs should, however, depend on their redefined roles, the number of 'target' clients to be visited, and the possible changes in their travel time.

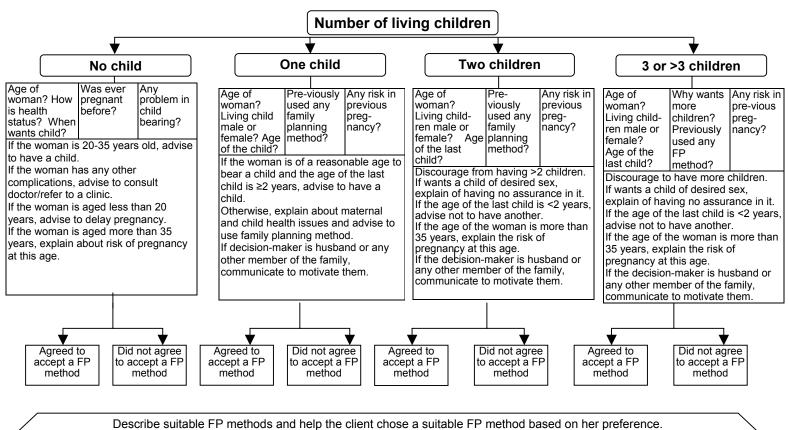
Withdrawal of doorstep services will also mean the elimination of door-to-door client enumeration. This requires that the selective home-visitation approach develops an easy, practical and cost-effective mechanism to identify target clients. Targets are subject to change with time and the changing focus of programmes. Thus, information on all households of the programme area should be renewed at a reasonable interval, perhaps once in a year. Cost-effective ways of doing this, in the absence of the regular routine visits to all homes, is a high-priority concern. In the future, involvement of nominally-paid community volunteers (depot-holders) could be explored to perform this activity. A manual on the selective visitation approach and communication checklists for motivation of the target sub-populations could help make this an effective alternative. strategy to deliver services from the fixed clinics, appropriate provision for limited home visits to target sub-populations for informing and motivating these clients to use the services provided at the clinics is of paramount importance. The key issue in this regard, however, is to ensure that a cost-effective mechanism is in place to link clinic-based service-delivery with the community. The experiences gained from this intervention could be used for charting out such a strategy. However, more operations research needs to be conducted in issues relating to the selective home visits.

#### References

- 1. Cleland J, Phillips JF, Amin S, Kamal GM. The determinants of reproductive health change in Bangladesh: success in a challenging environment. Washington, D.C: World Bank, 1994.
- 2. Phillips JF, Hossain MB, Arend S-Kuenning M. The long-term demographic role of community-based family planning in Bangladesh. *Stud Fam Plann*1996;27: 204-19.
- 3. National Institute of Population Research and Training. Bangladesh demographic and health survey 1996-1997. Dhaka: National Institute of Population Research and Training, 1997.
- 4. Ministry of Health and Family Welfare. Country report of Bangladesh at ICPD/Cairo. Dhaka: Ministry of Health and Family Welfare, Government of Bangladesh, 1994.
- 5. Cunnane RF. Bangladesh family planning and MCH programme-vision for NGO sustainability. Dhaka: USAID, 1995.
- 6. Barb N, Thwin AA, Routh S, Levin A, Mookherji S, Yousuf A, Begum A. Practical experiences from developing cost management skill of CWFP programme managers. Dhaka: MCH-FP Extension Project (Urban), International Centre for Diarrhoeal Disease Research, Bangladesh, 1997. (ICDDR,B working paper, 90; MCH-FP Extension Project (Urban) working paper, 29).
- 7. Arifeen SE, Mookherji S, editors. The urban MCH-FP initiative--an assessment of programme needs in Zone 3 of Dhaka city. Dhaka: MCH-FP Extension Project (Urban), International Centre for Diarrhoeal Disease Research, Bangladesh, 1995.
- 8. Routh S, Arifeen SE, Jahan SA, Begum A, Thwin AA, Baqui AH. Developing alternative service delivery strategies for MCH-FP services in urban areas: findings from an experiment. Dhaka: MCH-FP Extension Project (Urban), International Centre for Diarrhoeal Disease Research, Bangladesh, 1997. (ICDDR,B working paper, 106; MCH-FP Extension Project (Urban) working paper, 41).

## Annexure A. Fieldworker-target client communication checklists

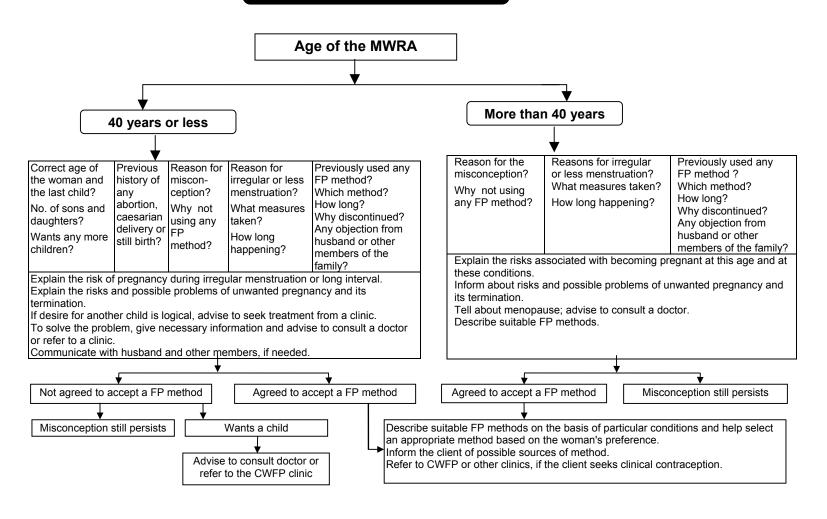
## Wants Child



Describe suitable FP methods and help the client chose a suitable FP method based on her preference Inform the client of possible sources of method.

Refer to the CWFP or other clinics, if the client seeks clinical contraception.

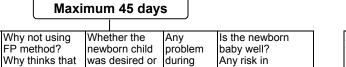
## Unsubstantiated Infertility (Misconception: Thinks Infertile)







Age of living



woman? No. FP method? Why thinks that of livina sons/ will not become not? post previous delivery? daughters? pregnant at this Previously partum Knows about child Age of living stage? Breastused any FP period? immunization? children? feeding type? method?

Inform that there is still a chance to become pregnant at this stage and also explain about risks in such a pregnancy.

Inform that this is the appropriate time to use a FP method and also inform about a suitable method.

Inform the woman of the value of exclusive breast-feeding and of sources of child healthcare.

Inform the woman about benefits of postnatal care and sites where she can get postnatal care (Refer if needed).

Inform the women about child immunization and places where she can get (Refer if needed).

If husband or any other member of the family is the decision-maker. communicate and motivate them on FP, PNC and child immunization.

Explain the benefits of maintaining a 2/3-year gap between pregnancies.

Age of the

Age of the Whether Is the baby Why not using Any risk in woman? No. breastfeeds the well? FP method? previous of living baby? Has child Why thinks that delivery? Breast-feeding will not become sons/ immunitype? What pregnant at this daughters? zation

More than 45 days

children? the baby? Inform that there is still a chance to become pregnant at this stage and also explain the risks associated with such a pregnancy.

Explain the correct procedure of exclusive breast-feeding if the child is aged ≤5 months.

started?

stage?

Educate on weaning if the child is aged >5 months.

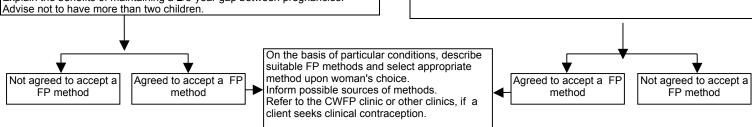
else gives to

If immunization not started yet and not properly given, inform what to do and where to go to get immunization.

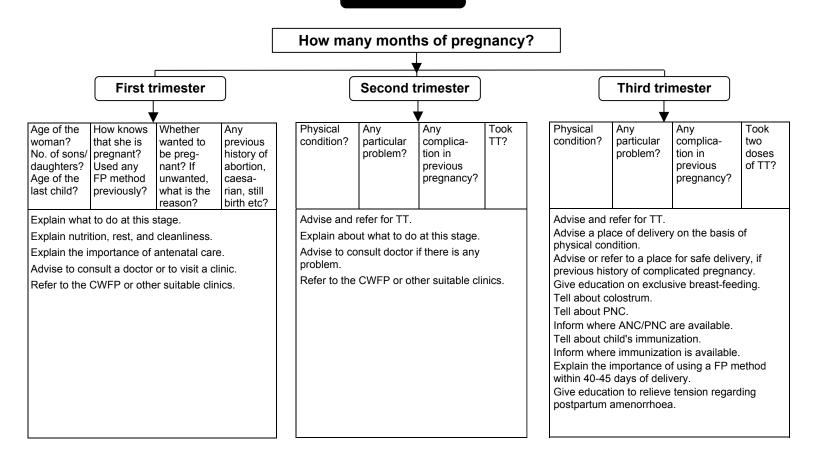
Describe FP methods that can be used during this time.

Explain the benefits of maintaining a 2/3-year gap between pregnancies. Advise not to have more than two children and the necessity of FP.

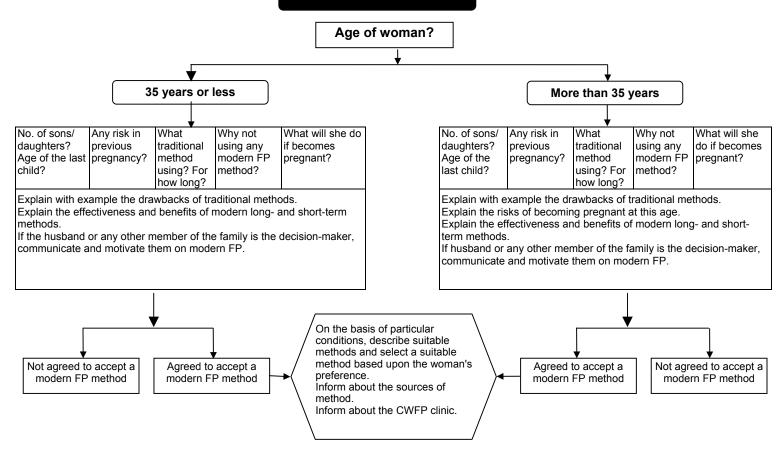
If the husband or any other member of the family is the decision-maker, communicate and motivate them on FP and child immunization.



## Pregnant



## Traditional Method User



#### **Husband Abroad**

