A Comparison of House-to-house Visit versus Fixed-site Centres for Delivery of Family-planning Services

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Abstract

Context: The family-planning program of Bangladesh is considered a model for developing countries because of its success in delivering door-to-door family-planning services by the grassroots-level family-planning workers, known as Family Welfare Assistants (FWAs). But this delivery system being expensive may not be sustainable in the future. The Government of Bangladesh has recently decided to withdraw the system and introduce a new system for deliverung services from the fixed-site centres (FSCs), called Community Clinics (CCs). To receive the services, the clients will be required to visit the CCs**.** It is, therefore, important to investigate the impact of this change in the service-delivery on the outcome of the family-planning program.

Materials and Methods: Data for this study came from Matlab MCH-FP project area of the ICDDR,B: Centre for Health and Population Research, where family-planning services have been provided through house-to-house visits since October 1977. The project area has been divided into four blocks, each with about 26,000 population. To evaluate the impact of the new service-delivery system, an experimental study was designed. Two blocks, called experimental blocks, were selected for the fixed-site delivery system, and the house-to-house delivery system was continued in the other two

blocks, called control blocks. The new service system has been implemented since March 2000. Before implementing the new service system, an opinion survey of a sample of male and female family-planning users from the experimental area was conducted. After three months of implementation of the new delivery system, a follow-up survey was conducted among the same males and females. In addition, qualitative data on attitude and perceptions of the service providers and community leaders about the new service-delivery system were obtained from the experimental area by in-depth surveys and focus-group discussions (FGDs). An exit interview was also conducted with the users who received services from the FSCs to get their opinions instantly about the new system, including the quality of services. Data on different service statistics, such as contraceptive prevalence rate (CPR), method-mix, etc., were obtained from the ongoing record-keeping system (RKS). A comparison of the CPR, method-mix, and trend of these phenomena among the users in the four blocks formed the basis of this study. CPR and method-mix from October 1977 to October 2000 are available in the RKS which may be used to evaluate the study.

Results: Most users opined that the new service-delivery system would not affect the use of family-planning methods, although they might have some difficulties for maintaining regularity of receiving service-delivery during the rainy season. If a current user was unable to come to the FSC for one reason or the other, she requested her neighbor to take the delivery of the family-planning services for her, and the CHW honored her request, particularly, if the request was for pill or condom. Both CHWs and users mentioned that the users were getting an opportunity to exchange their views about family-planning methods and to discuss other reproductive health problems with other users at the FSCs.

This meeting helped them to have a wider choice of a suitable method from the FSCs. However, the CHWs feared a decline in the use rate among newly-married women due to their shyness to visit and receive services from the FSCs. The opinions of the community leaders were quite different from those of the CHWs and users. They were unhappy with the change and thought that it would have a serious adverse effect on the CPR and the total fertility rate. The effect of the change in the family-planning delivery system on either the CPR or method-mix was not substantial. Results of the exit interview also showed that the users were quite satisfied with the new system, although they preferred for better sitting arrangements and management of side-effects at the FSCs.

Conclusion: The initial results of this study suggest that a change in the family-planning delivery system from house-to-house to the CCs will be acceptable to the users and will not make the change of CPR and method-mix different from those in the door-to-door service-delivery system.

INTRODUCTION

Over the past two decades, the Bangladesh Family-Planning Program (FPP) has been characterized largely with the door-to-door delivery of contraceptives to the married couples in their homes. About 23,500 government family-planning field workers, known as Family Welfare Assistants (FWAs) of the Government of Bangladesh (GoB). program and another 12,000 non-government (NGOs) workers were counseling, motivating, and distributing contraceptive services to these couples. These workers distribute non-clinical family-planning methods, such as pills and condoms, to their working or catchment areas (about 800 eligible couples per FWA) by routine visit (Routh *et al.*, 1997).

The use of contraceptives increased from less than 10% in the mid-1970s to the present level of 54%, and the total fertility rate (TFR) declined from 7 to 3.3 during this time (Mitra *et al.*, 2000). Doorstep distribution of family-planning services was a key factor in the successful FPP and fertility decline in Bangladesh (Cleland *et al.*, 1994; Phillips *et al.*, 1996). However, the door-to-door delivery system being expensive is unlikely to be sustainable in the future. Due to the increase in the number of couples in the reproductive age groups, family-planning services need to be expanded from the current level of 27 million to 40 million couples, and contraceptive users increased from 12 million to 28 million to achieve the replacement-level fertility by 2005. If the present delivery system continues, the above expansions will require an additional amount of US$ 10 million every year to meet the country's MCH-FP program- cost alone (Cunname, 1995). The FPP of Bangladesh is heavily dependent upon donors' contributions, which amount to

63% of the total costs (GoB, 1994). The salary of the field workers alone accounts for about 60-65% of the total cost. With the anticipated reduction in donor funding, it will become increasingly difficult to continue the doorstep services. There is, therefore, a growing concern about the sustainability and cost-effectiveness of such a labor-intensive and "spoon-fed" approach to service-delivery. Due to these factors, the policy-makers and planners need to think what alternative approaches will be cost-effective and sustainable.

The GoB and their principal donors have endorsed the Program of Action presented at the ICPD in Cairo in 1994. This plan calls for offering of family-planning services offered within a framework that supports the social and economic advancement of women, and that provide a broader range of reproductive health services. These services will require an increased emphasis on clinics. The high client-load of field workers and requirement of their home visits for doorstep distribution of contraceptives do not allow sufficient time for counseling and monitoring of individual reproductive health needs or for providing those services. The high emphasis on distribution of pills and condoms inherent within the home-based system and the weak links between the field workers and the clinics are considered to have affected the uptake of clinical services.

The GoB has plans to undertake several measures, including encouragement of greater effective community participation and integration of health and family-planning service-delivery through static centres, called Community Clinics (CC), at the thana level and below. The details of the CC approach have been documented elsewhere (Nabadiganta, 1999). The following services are expected to be available in a CC:

1. Antenatal, neonatal, postnatal, and delivery care.
2. Necessary healthcare services, including EPI vaccination (measles, whooping cough, tetanus, polio, etc.) to children aged less than 5 years and tetanus toxoid for all women aged 14-49 years.
3. Preventive measures against infectious diseases, such as malaria, tuberculosis, leprosy, kala-azar, and diarrhoea, and limited curative services.
4. Primary healthcare services to treat complications of eye, tooth and ear, including simple wounds, snake bites, drowning, poisoning, fever, ache, asthma, skin disorders, worms, acute respiratory infection (ARI), etc.
5. Ensuring uninterrupted supply and distribution of various materials for temporary birth control, such as pills, condoms, etc.
6. Visits by Family Welfare Visitors (FWV) working at the Union Health and Family Welfare Services Centre (UHFWC) to CCs at regular intervals for inserting IUDs and/or pushing injections among interested women.
7. Referral of complicated cases who have received healthcare and family welfare services at the CCs to the UHFWC immediately after providing primary care to them.

The CCs have largely been viewed as the vehicle to provide the Essential Service Package (ESP) for making the general and reproductive health services, including family-planning, accessible to rural population through a one-stop outlet. The establishment of CCs will be a major reform of the existing family-planning service-delivery system, and the government would have to face the challenges of successful implementation of one-

stop service outlet through the CCs without pilot-testing the probable impacts of such a change in the service-delivery system. While the concept of ESP has been greeted with enthusiasm, the possible negative impacts of reforms of the service-delivery system have also been pointed out. Some argue that, like the existing Primary Healthcare (PHC) outlets at the union and upazila levels, the proposed one-stop family-planning service-delivery system is likely to fail to prove its cost-effectiveness. However, there is a dearth of empirical evidence how the proposed change in the delivery system will affect the FPP outcomes in Bangladesh and how far it will be cost-effective.

A couple of studies carried out on the change from the existing door-to-door national family-planning delivery system to the fixed-site delivery system are either not scientifically very sound or not a true evaluation in strict sense. The primary objective of this study was, therefore, to evaluate how the proposed change in the service-delivery system from door-to-door service to the fixed-site centres (FSCs) will affect the performance of the FPP and how far this change in the delivery system will be cost-effective. The specific objectives were to assess: (a) knowledge and attitudes of the clients toward the change in the delivery system; (b) knowledge of the clients about family-planning services offered from the FSCs; and (c) changes in behavioral patterns of service use, contraceptive method-mix; contraceptive prevalence rate (CPR), and fertility. and (d) constraints in using the FSCs.

Materials and Methods

Matlab, the well-known research station of ICDDR,B: Centre for Health and Population Research, was selected for the study. Since 1978, the ICDDR,B has been maintaining an innovative experimental maternal and child health and family-planning (MCH-FP) program there. The program is characterized by a rigorous experimental design and careful collection of various issues relating to family planning, health, fertility, and mortality. It is specified in the design that 70 of 149 villages of the study area would receive intensive MCH-FP services from the ICDDR,B. The part with this MCH-FP services is known as "Treatment area." The remaining 79 villages (called comparison area) would continue to receive the regular services offered by the government program. The project has made an important contribution to the success of the country's FPP through operations research and technical assistance in the areas of management improvement and quality of care. The Matlab MCH-FP area is characterized by (a) intensive services currently delivered by 60 female community health workers (CHWs); (b) a system of extensive back-up by female paramedical and medical staff; (c) a well-defined system of management and supervision; and (d) an emphasis on the provision of a wide range of contraceptive methods for individual women in the most accessible and convenient manner possible (Koenig *et al.*, 1987). Each CHW covers, on an average, 2,000 population. The project has a well-established health and demographic surveillance system (HDSS) and a record-keeping system (RKS) for collecting data on health and family planning.

The Matlab MCH-FP area is divided into four blocks, namely A, B, C, and D. Each block, with about 26,000 population, has a subcentre clinic, where the CHWs assemble fortnightly to discuss problems with their supervisors and to submit updated reports of progress of their work. At the beginning of the MCH-FP project at Matlab, both health and family-planning services were given through door-to-door delivery. But the health services (EPI vaccine, vitamin A, management of ARI, and treatment of minor ailments) started to be given in all blocks from the fixed-site centres (residences of CHWs) since January 1999. The delivery of family-planning services continued through door-to-door with until the present study begun in March 2000. To evaluate the impact of FSCs, door-to-door delivery of family-planning services was withdrawn, and the couples were asked to come to the FSCs of block B and D. Door-to-door delivery of family- planning services, however, continued in block A and C. Thirty CHWs were providing family-planning services from the FSCs, while the remaining 30 CHWs continued to deliver family-planning services through door-to-door visits. It should be mentioned here that an FSC was somewhat different from a CC. A comparison of the services to be offered by a CC and a FSC is given below:

Government-proposed CC	**Matlab FSC**
Separate building	Residence of CHW(a separate room in her house)
Separate toilets for males and females	Toilet facilities for service recipient only
Waiting room	No separate waiting room
Facility for IUD insertion	Referred to subcentre for IUD insertion
Population 6,000	Population 2,000
Staff: 1 FWA and 1 HA	1 CHW
Injectable by FWV during routine visit	CHW push injectables
IUD by FWV during routine visit	Referred to subcentre
Permanent method at UHC	Permanent method at UHC

The above comparison shows that a Matlab FSC is ifferent from a government CC. Our study did not make a thorough evaluation of the CC model. It will, however, be possible to know the direction of the change in family-planning and demographic indicators due to the change in the delivery system. It will be also possible to know whether only one female worker will be able to run an FSC, and whether Bangladesh will be able to reach or maintain a CPR level as high as 70% which is prevalent in the Matlab MCH-FP area through CC approach.

About two months before the actual change in family-planning delivery system, i.e. from door-to-door to FSC, all couples of reproductive age of block B and D were informed of the change, so that they were mentally prepared to receive services from the FSCs. After informing the people about this change in the delivery system, an opinion survey of a systematic sample of 600 couples (300 males and 300 females) who were using family-planning methods was conducted in the area. Another opinion survey (follow-up survey) of the same population was conducted after three months of the change in the delivery system to assess the knowledge, attitudes, behavior, and problems relating to services offered by the FSCs. Opinions of the community leaders and family-planning service providers about the change were also obtained through an in-depth survey and focus group discussions (FGDs). An exit interview of 70 women who received services from FSCs (the interview was conducted immediately after receiving the services) was conducted to know the quality of services and the level of their satisfaction. Data on the CPR and method-mix for each block for each month were obtained from the RKS. A structured questionnaire was administered for collecting the data.

RESUTLS

Findings of the Quantitative Survey

As mentioned before, the main purpose of the opinion survey was to know the reaction of the current users, providers, and community leaders about the change; and a follow-up survey after three months was made to know the use behavior, problems, and level of satisfaction due to the change in the delivery system and also to know the constraints to receive the services from an FSC compared to the door-to-door delivery system.

Results of opinion survey showed that more than 60% of both male and of female users expressed that the FSC system would not create any problem to receive the needed family-planning services. The remaining respondents expected some problems (Table 1).

Table 1 Percentage distribution of users by expressed opinion about FSCs according to sex of users

Whether FSC will be a problem	**Opinion survey**	
	Male (n=291)	Female (n=269)
Yes	38.5	32.3
No	61.2	66.2
Cann't say at this stage	0.3	1.5

Results of the opinion survey also showed that 37.5% of the male and 43.1% of the female users thought that they would go to the FSCs for receiving services at their own interest. About 21% of the male and 15% of the female users mentioned that transportation would be a problem to obtain services from the FSCs (Table 2).

Table 2 Percent distribution of users stated problems and attitude toward new delivery systems (FSC)

Comments	**Opinion survey**	
	Male (n=291)	Female (n=269)
Problems		
Communication/transportation problem	20.6	15.2
Will not get proper services/treatment	2.4	2.2
Husband/mother-in-law will not allow to go	-	0.4
It is difficult to leave household work	17.5	12.6
May forgot the due dates of injections	0.3	0.7
Attitudes		
Interest will decline to accept family planning	1.0	1.9
Clients will go to CHW's house for his own interest	37.5	43.1
The previous system was better than the present system as it was easy to get services from home	18.2	21.6
Others	2.4	2.2

The opinions of the community leaders obtained through FGDs were strongly against the change from the door-to-door service-delivery system to the FSCs. They thought that this change would be a setback to the family-planning services in the country. The family-planning service providers expressed their opinion that the change might have a negative impact on the newly-married women in obtaining contraceptives, but the others would not be affected.

Of the 300 male and 300 female users who were selected in the opinion survey, 35 males and 33 females discontinued the use of family-planning at the time of follow-up survey conducted after three months. About 50% of the males and 75% of the females who discontinued did it due to side-effects or because of the desire for children (Table 3). No

males, but 6% females, who discontinued using family-planning methods mentioned that it was not possible on their part to receive services from the FSCs due to various reasons. However, the rate of discontinuation was less than 1% (0.12x0.06x100).

Table 3 Percent distribution of stated reasons for discontinuation during follow-up survey

Reasons for not using methods currently	**Follow up survey**	
	Male (n=35)	Female (n=33)
Not possible to receive services from FSC (due to social barriers)	-	6.1
For side-effects	28.6	54.5
Desired child	22.9	21.2
Other reasons	48.5	18.2

Not applicable cases excluded

Over 95% of the male and female users obtained family-planning supplies from the CHWs at the time of door-to-door delivery system. Almost the same percentage of the male and female users received family-planning services from the FSCs in the experimental blocks (Table 4). This indicates that the change in delivery system did not have any effect.

Table 4 Percent distribution of stated sources of supply of family-planning methods

Sources of supply of methods	**Opinion survey**		**Follow-up survey**	
	Male (n=233)	Female (n=218)	Male (n=243)	Female (n=201)
CHW supplies at home	95.7	96.4	1.6	0.5
Buy from pharmacy	1.3	1.4	1.6	3.0
Husband knows/other family members help	-	0.5	-	0.5
FWA supplies at home	0.9	0.5	0.8	1.0
ICDDR,B subcentre	2.1	1.4	1.2	1.0
Receive supply from FSCs	-	-	93.4	93.5
Others	-	-	1.2	0.5

It is also important from both service and program points of view that the services of providers were either acceptable to the service recipients or the service recipients were satisfied with the services of providers. Findings of both opinion and follow-up surveys showed that most women were satisfied with the provider's service-delivery (Table 5).

Table 5 Percentage of service recipient satisfied with the CHWs services

Satisfied	**Opinion survey**		**Follow-up survey**	
	Male (n=291)	Female (n=269)	Male (n=290)	Female (n=259)
Yes	97.9	96.3	96.2	96.1
No	2.1	3.7	3.8	3.9

An user was used to visit the house of a CHW sometime before the change in the delivery system for various reasons, such as management of side-effects, for getting supply of family-planning methods, or for healthcare services. Table 6 shows that before the change in the service-delivery system, more than four-fifths of the men or women visite CHW's residence while more than 90% of the men or women visited the FSCs after the change in the service-delivery system.

Table 6 Percfentage of respondents visited CHW's residence/FSCs for family-planning or other health services

Visited CHW residence	**Opinion survey**		**Follow-up survey**	
	Male (n=291)	Female (n=269)	Male (n=290)	Female (n=259)
Yes	79.0	93.7	96.2	92.3
No	21.0	6.3	3.8	7.7

Most users were aware of which services were available at the FSCs (Table 7).

Table 7 Percentage of respondents about awareness of types of services offered from FSCs

Knowledge about type of services available	**Follow-up survey**	
	Male (n=290)	Female (n=259)
Correctly know	96.9	98.8
Don't know correctly	3.1	1.2

We also collected information on whether the interviewees received health and family-planning services from any other sources besides FSCs or other sources besides CHWs. Over 90% either visited or received services from other sources (Table 8). However, this proportion came down to little over 80% for the females after the launching of FSCs.

Table 8 Percentage of respondents who visited elsewhere for health and family-planning services (services not rendered by the CHWs/ICDDR,B)

Visited elsewhere	**Opinion survey**		**Follow-up survey**	
	Male (n=291)	Female (n=269)	Male (n=290)	Female (n=259)
Yes	93.5	94.8	93.8	82.6
No	6.5	5.2	6.2	17.4

It is important to know whether the service recipients are satisfied with the services provided through house-to-house delivery or from the FSCs, because they will not obtain services if they are not satisfied. We collected information about the attitudes of service providers and the quality of services rendered by them. The attitudes of service recipients and their views about the quality of services, and the reasons for satisfaction are given in Table 9-10. Most males and females were satisfied with the services provided by the CHWs and the quality of services offered at the FSCs.

Table 9 Percentage of satisfaction of service recipients when services are given by CHWs at FSCs.

Satisfied with services	**Follow-up survey**	
	Male (n=278)	Female (n=249)
Yes	96.4	97.1
No	3.6	2.9

Table 10 Percentage of stated reasons of satisfaction with CHWs services by service recipients.

Reasons for satisfaction	**Follow-up survey**	
	Male (n=278)	Female (n=249)
She provided quality services[1]	88.8	90.4
She took proper care[2]	80.6	78.3
Regular follow-up	3.2	17.3

Multi-response: [1] = first reason; [2] = second reason

The new service-delivery systems might have some advantages and disadvantages from the perspectives of service recipients. This finding would help the program managers ensure the quality of services and to improve the new system if there is any shortfall or drawback in service-delivery for the service recipients. About two-fifths of the male respondents reported that the new system had no advantage and their house was very

close to CHW's house, while almost half the women reported that there was no advantages of the new system and about one-fifth of the female respondents reported that their house was very close to CHW's house (Table 11). About one-fifth of the males and more than one-fifth of the females reported that the CHWs would be available all the time, and it would not be a problem for them to get services from the FSCs.

Table 11 Percentage of respondent reported about advantages of FSCs.

Advantages of FSCs	**Follow-up survey**	
	Male (n=290)	Female (n=259)
No advantage	38.6	45.2
Advantages		
CHWs is available, and they get treatment properly	17.2	26.3
CHW's house is nearer to my house	41.4	20.5
No need of the new system	0.3	7.3
Others	2.4	0.8

Table 12 highlights the disadvantages of the FSCs as reported by the service recipients. One-third of the male and one-quarter of the female respondents reported that communication would be a problem to visit the FSCs. A small proportion of the male and female respondents reported that visits to the FSC by abandoning their household work would be a problem.

Table 12 Percentage of respondent reported about disadvantages of FSCs.

Disadvantages of the new systems	**Follow-up survey**	
	Male (n=290)	Female (n=259)
No disadvantage	49.7	52.9
Disadvantages		
Difficult to go by leaving household work	13.8	18.5
Communication problem	30.0	25.5
Forget to go on time	0.7	0.8
To go to FSC timely	0.3	0.4
Shyness of others to go to get services	2.8	1.2
Others	2.8	0.8

To improve the new delivery system, suggestions from the males and females were also sought. About 13% of the males and 30% of the females reported that they had neither any suggestions nor they can say anything at this stage. Almost half the males and one-third of the females suggested that the service providers should provide medicines to the service recipients. About one-third of the males and females suggested that drinking water should be made available for children when they visit the FSCs (Table 13).

Table 13 Percentage of service recipient suggested regarding improvement the new system

Suggestions	**Follow-up survey**	
	Male (n=290)	Female (n=259)
No suggestion	13.1	29.7
Suggestions		
The new system will be more effective if drinking water for children is made available at FSCs	27.6	29.7
Need to provide medicines for all sickness	49.7	30.9
CHWs should give more time for listening to their problems	3.4	7.7
Need to provide side-effect management	17.6	5.0
It is better to set up FSC in the village of clients	1.7	-
Others	3.4	2.3

Exit interview

Results of the exit interview are presented in Table 14

Table 14 Percentage of women who visited FSCs for different services

FSC related variables	Distribution	Contd..	Distribution
Purpose of visit		**Comments about FSC**	
To get supply of family-planning methods	78.6	Took proper care	98.6
To seek advice about health problems	2.9	Behave properly	97.1
Antenatal/postnatal care	2.9	Listen problems with attention	98.6
Treatment of diarrhoeal/dysentery	2.9	Give enough time	92.9
Acute respiratory infections	2.9	Can talk freely	97.1
Fever	8.6	Able to diagnose problems	88.6
Other purposes	24.3	If unable to diagnose, referred	97.1
		Remains indifference	94.3
Services available at FSC			
Family-planning methods	100.0	**Problems at FSC**	
Advice on merits/demerits and side-effect management of family planning	64.3	To wait for long time	1.4
Counseling	60.0	FSC is too far	17.1
Antenatal/postnatal care	38.6	Has communication problem	15.7
Expanded Program on Immunization/tetanus toxoid	95.7	Misconducted/misbehaved	2.9
Health education	65.7	Unable to diagnose problem	1.4
Treatment of diarrhoeal diseases	75.7	**Level of satisfaction**	
Acute respiratory infection	92.9	Highly satisfied	10.0
Fever	100.0	Satisfied	87.1
Child nutrition education	45.7	No comment	2.9
Growth monitoring	14.3		
Vitamin A	84.3	**Time to get services**	
Referral	100.0	<10 minutes	61.6
Iron tablet	77.1	10-20 minutes	38.4
Others	1.4		
		Distance to FSC	
Types of family-planning method users		<1 km	78.6
Pill	14.3	1+ km	21.4
Condom	2.9		
Injectables	70.0	**Mode of transport**	
IUD	2.9	Rickshaw/van	2.9
Tubectomy	1.4	Country boat	12.9
		On foot	82.9
		Others	1.4

Reasons for visiting the FSCs and the type and quality of services that are being provided from the FSCs are also important factors for comparing the two delivery systems. An exit interview was conducted with the service recipients immediately after receiving services from the FSCs.

Family-planning services are being provided from the FSCs, and the service recipients generally visit the FSCs for receiving their family-planning services. Table 14 showed that almost four-fifths of the service recipients visited the FSCs for family-planning services as was expected. It is also important to know from the service recipients about types of services that are being delivered from the FSCs. The results showed that all service recipients were very much aware of different types of services.

Among the service recipients, the number of injectable users was the highest followed by the pill users. A small proportion of service recipients stated that the FSCs were too far and communication was a problem. Most service recipients were highly satisfied with the quality of services provided at the FSCs. Almost two-thirds of the service recipients reported that the services were provided within 10 minutes. Four-fifths of the service recipients stated that distance to the FSCs was <1 km, and almost four-fifths visited them on foot (Table 14).

Findings of the Qualitative Surveys: FGD/In-depth Interview

Community Health Workers

In the opinion survey, CHWs stated that most of their service recipients were willing to take services from the FSCs when they were informed of the incoming change in the delivery system, i.e. from house-to-house to FSCs. Among the service recipients, some were newly-married, and some were very conservative. The CHWs opined that these two groups might be reluctant to receive services from the FSCs-- the first group due to shyness, and the other group due to conservatism to go out of their houses. They further opined that that these groups would also eventually go to the FSCs for services. The CHWs stated further opined that they would be able to counsel, motivate, and educate many women at a time or in a group in the new system, and would be able to save time to serve more women. In their opinion, the rural women generally have very little scope to come out of their homes, but the new system will facilitate them to come out of their homes for services from the FSC's, and they will have a wider choice for a contraceptive method through discussion with others. According to them, one of the disadvantages of the FSCs might be that the husbands or guardians of some women might not like their visit to the FSCs for family-planning services. This might increase the discontinuation rate.

In the follow-up survey, the CHWs mentioned that the users, by and large, were responsive to the FSCs satisfactorily, although a small segment of the service recipients in their respective areas were facing some difficulties to get transportation for visiting the FSCs for services. However, this group also somehow managed to come to the FSCs.

As the CHWs mentioned before launching the FSCs, one of the advantages for them-they could provide service from their homes which would be helpful for the clients as well. After implementation of the FSCs, the CHWs also expressed the similar views. Since the service providers were mostly served in a group at the FSCs, the recipients had some choices to shift to a suitable method by consulting and/or discussing with other women. The CHWs could easily counsel and/or educate them about a particular method (merits and demerits of any method) in a group. This would pave the opportunity for the service recipients to be familiar with and sharing experiences about using different family-planning methods.

Community leaders

In the opinion survey, the community leaders stated that the door-to-door delivery system was better, and service-delivery from a fixed-site centre was not at all acceptable to them. They further stated that the FSCs would be good for the CHWs, because they would not have to visit house-to-house to serve women. But it would have an adverse effect on the program, and the CPR would go down. They opined that if the women would have to receive services from the FSCs, the use rate must fall, and many would discontinue to use methods. They said that all women, irrespective of age, particularly newly-married and mothers-in-law, would feel shy to get exposed to receive family-planning services from the FSCs. In their opinion, women from the respectable family or members from the rich family would not visit the FSCs for family-planning services, and many mothers-in-law would not allow their daughters-in-law to go outside their homes for services. The community leaders also opined that it would not be always possible for the rural women

to visit the FSCs leaving their children at home, and they would have some problems or difficulties to maintain their household work if they are needed to go to the FSCs. All these may create societal problems.

In the follow-up survey, opinions of the community leaders about the FSCs were quite different from those in the opinion survey. Most community leaders expressed their views and realized some advantages of the FSCs: the CHWs could serve many persons from one spot and could save some of their time to give services to more users with quality and other health services. However, some of them felt that the CHWs did not need to go house-to-house in the FSC system to give services to the people, and they (CHWs) would spend the time saved for their personal household activities. They also thought that women would face tremendous problems in going to FSCs during the rainy season. The newly- married women would not be willing to go to the FSCs for services, and the program should take these points to account.

Effects of the Change on Contraceptive Prevalence Rate and Method-mix

Whatever is the knowledge, opinions, and attitudes of the couples, community leaders, and service providers about the change in the delivery system, main interest of the program managers and policy-makers would be to observe the effects of the new delivery system on the CPR, method-mix, and fertility. In this section, we have examined the effects of the new delivery system on the CPR and method-mix. The effects on fertility are too early to make any comments. As mentioned before, family-planning services were

being given from the FSCs in block B and D, and through house-to-house delivery in block A and C.

The FSCs were started in March 2000. Fig. 1 shows the monthwise CPR in each block from January 1998 to October 2000. There was a variation in the level of and trend in the CPR between the blocks. In January 1998, the CPR was lower at around 67% in block A and B, and was higher at around 70% in block C and D. The trend of CPR was increasing constantly in block C throughout the time. The upward trend continued up to April 1999 in other blocks. The CPR was declining in block B since then, but remaining stable in block A and D up to April 2000. Since then, it was also declining in block A and D. Block A was in the control area, and block D was in the experimental area. The total decline from July to October in the CPR in these two blocks was as high as 3%. There was no important seasonal pattern in the area. The decline in the CPR in block B and D might give us an impression that it was due to the change in the delivery system from house-to-house to FSCs. But this was not case. The decline in the CPR occurred also in block A, and the decline started in block B since August 1999, well before the change in the delivery system. So, these preliminary results did not give us any clear picture whether this change in the CPR was related to the change in the delivery system.

One hypotheses of this study was that there would be a change in method-mix due to the shift in the delivery system from house-to-house to FSCs. Because, for example, if a woman is required to visit the FSC for an injectable, but she could get the pill from the FSC through her neighbor who would visit the FSC for services, this may cause a decline

in the use of injectables, but there will be an increase in the use of pills. The monthwise contraceptive method-mix in different blocks from January 1998 to October 2000 is shown in Fig. 2a and Fig. 2b. The highest use was for injectables, followed by pill. However, the difference in dependence on injectables and pills among the blocks was not the same. About 45% of the users used injectables, and 30% used pills in block A. These figures were about 50% and less than 30% respectively in the other three blocks. More than 10% of the users used permanent methods in block C and D. These figures were each less than 10% in block A and B. There was a minor upward trend in pill use and downward trend in injectable use in the experimental block B and D. There was no change in the other method-mix in any blocks.

Results of the exit interview also suggest that most users (95%) were satisfied with the services of the FSCs, although they liked to have better sitting arrangements and side-effect management there. Currently, they are required to visit subcentre to have services for management of side-effects.

DISCUSSION AND CONCLUSION

The main objective of this study was to compare the relative effectiveness of FSCs compared to that of the door-to-door delivery system. The policy-makers have already decided to move to the fixed-site centre (CC approach), and there is no possibility to return to the house-to-house delivery system. A question may arise that if there is no possibility of a change in the delivery system from the fixed-site centre to house-to-house delivery, what is the use of this study or this comparison. This comparison is necessary to identify the adverse effects, if any, caused due to the change in the delivery system, so that the policy-makers can make required modifications in the new system, if not completely turning back to the original system. One of the objectives of this study was to investigate the problems and drawbacks and to identify the means and ways how to solve those shortcomings and make the FSC approach effective.

Two other limitations of our study should be underscored. As mentioned in the Materials and Methods section, an FSC of this study and a CC of the government are not exactly the same. So, a true comparison of the CC has not been possible in this study. However, the study sufficiently investigated the direction of the effect, i.e. whether the effect was positive, negative, or no change on different outcomes of a family-planning program due to the change in the delivery system from house-to-house to CC approach. Moreover, the government may subsequently feel the necessity of establishing some FSCs in some areas or as a supplement to CCs. The establishment and running cost of a FSC will be much less than those of a CC. The second limitation is that the Matlab MCH-FP area is quite

different demographically from average Bangladesh. The current CPR in the country is about 54%, but in the study area it is about 70%. The pill is the main method used in the country, but injectable is the main method used in the study area. So, the results of this study are likely to be different from those in the national level. However, there is no reason that the relative role (not the magnitude) of FSCs compared to the house-to-house delivery system will be different at different levels of CPR. If FSCs are proved to be better in the Matlab MCH-FP area, this should be better at the national level, and if these are ineffective in the MCH-FP area, this should also be ineffective at the national level.

The community in general and its leaders in particular may not initially feel comfortable for the change in the delivery system from house-to-house to fixed-site centres. The results of this study suggest that their attitude will be changed, if the quality of services at the FSCs is good, and the activities at FSCs are being added from time to time, according to the need of the community. For example, the arrangement for giving pills through her neighbor to a pill user on her request who could not visit to the FSC for one reason or other seemed to be very effective in this study.

The actual users generally will accept the change without much hesitation. However, the CHWs and the community leaders expressed some concerns about the use of family-planning methods to be obtained from the FSCs by the newly-married women and the women of conservative households. We do not have sufficient data to know the effects of the change on these groups. However, the findings of our study indicate that the users of FSCs got opportunities to exchange their views about family-planning methods and

other reproductive health issues with each other. This meeting helped them to have a wider choice of a suitable method from the FSCs.

There was no definite indication of the decline in the CPR. The drop-out did not have any substantial increase, and the method-mix did not have any shift toward traditional methods of family planning due to the change in the delivery system. However, the results are very preliminary, and it is too early to evaluate the FSCs, or make a comparison of house-to-house delivery with the FSCs. The effects on some of the important indicators, such as effect on the use pattern of newly-married couples, use of permanent methods, etc., are yet to be explored. In spite of these limitations, the results of our study suggest that:

1. the success of the FSCs approach depends on the quality of services provided at the FSCs;
2. the users (male and female) are ready to receive services from the FSCs instead of house-to-house delivery; and
3. necessary facilities for management of side-effects should be available at the FSCs, and there should be provision to add facilities to the FSCs, from time to time, according to the need of users.

Figure 1

Contraceptive Prevalence Rate (CPR) in the MCH-FP area
Period: January'98 - October'00

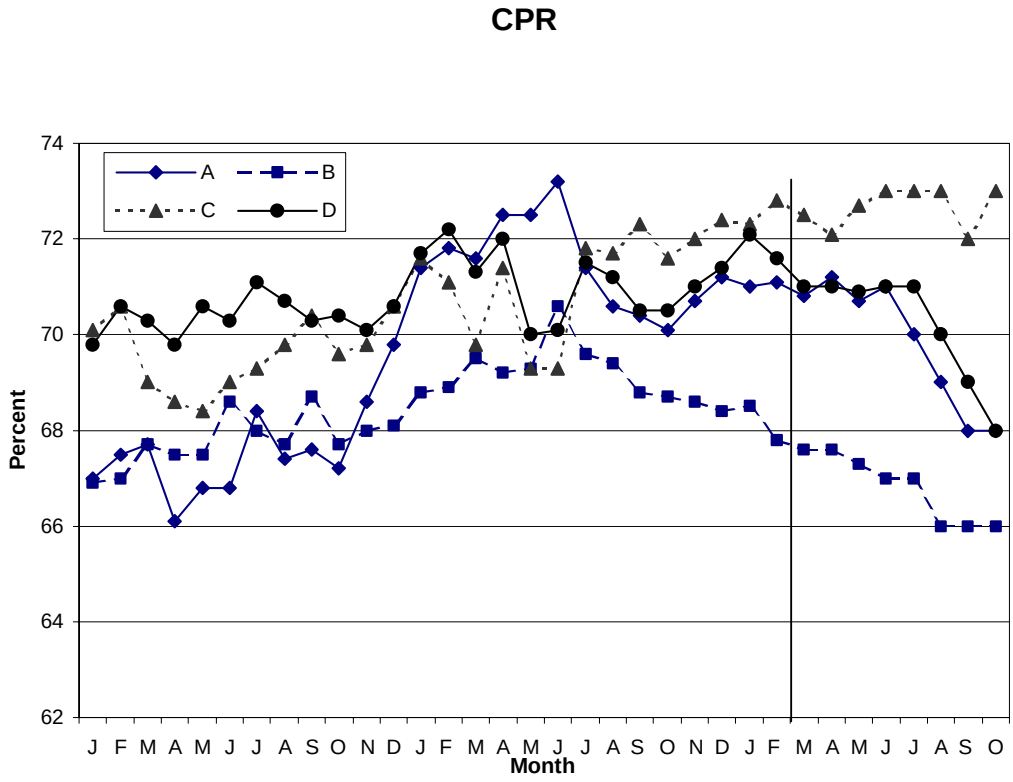


Figure 2a

Method-mix in control area during Jan'98 - Oct'00

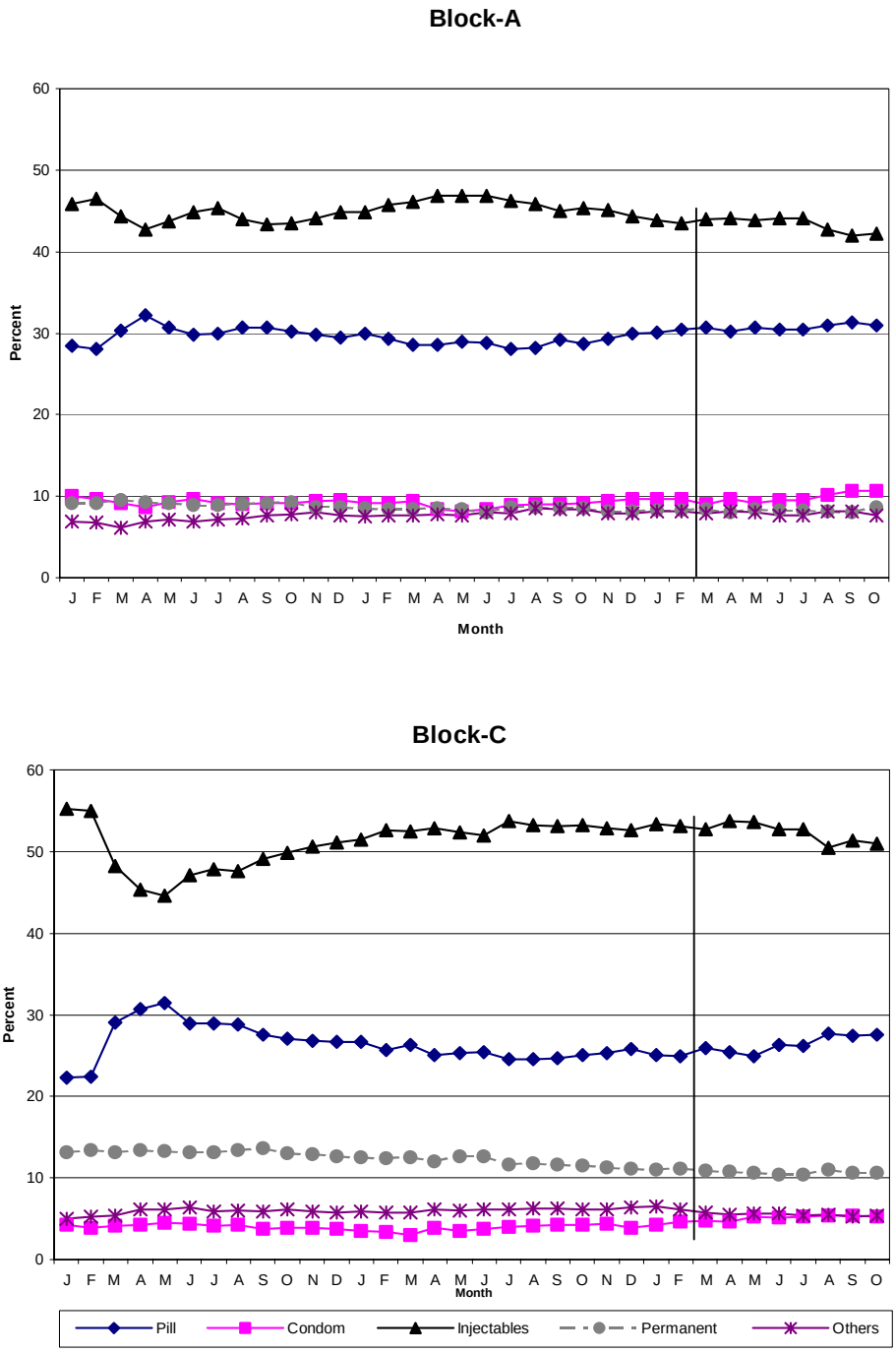
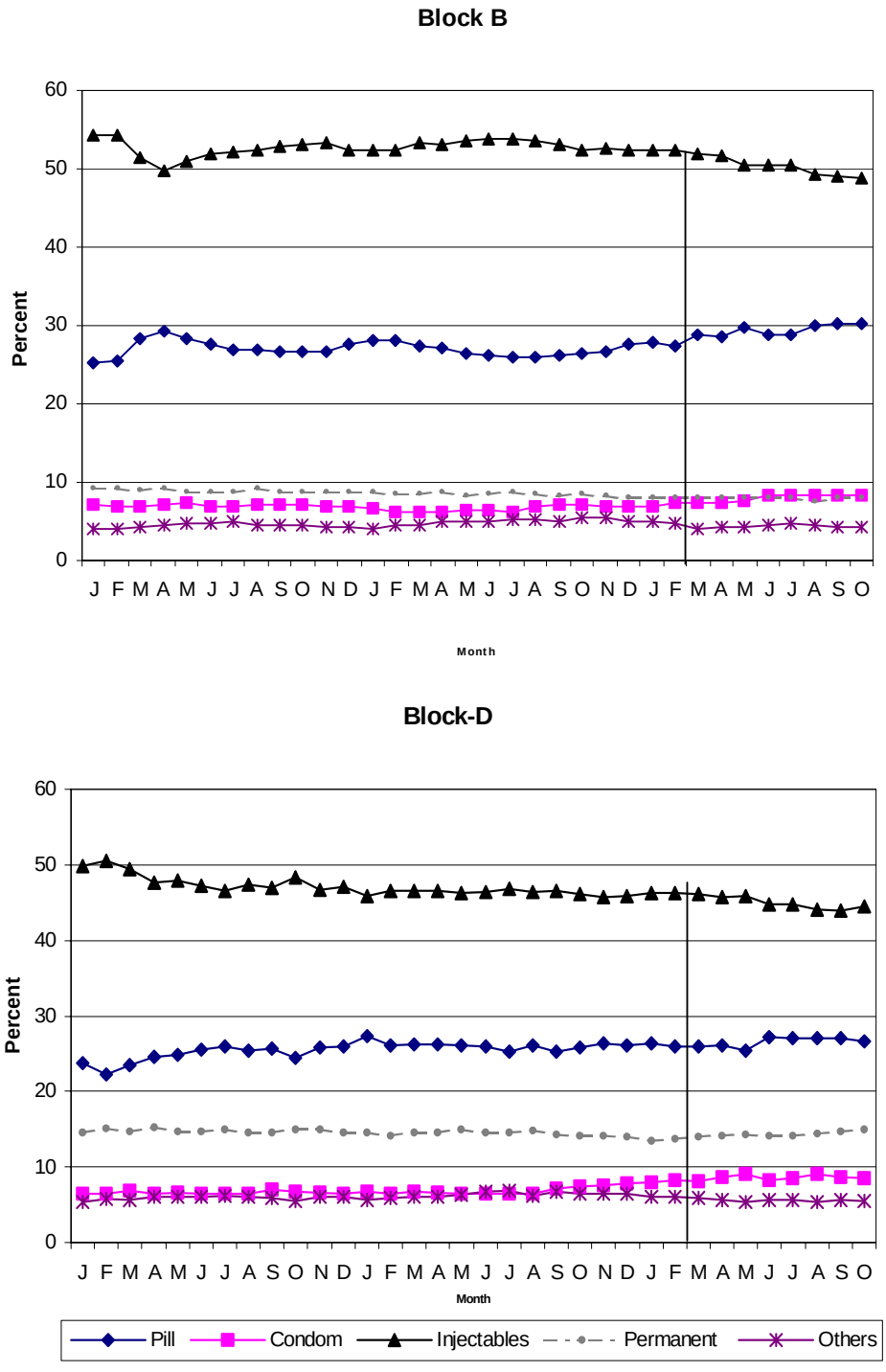


Figure 2b

Method-mix in the experimental area during Jan'98 to Oct'00



References:

Cleland, J., Phillips, J.F., Amin, S., and Kamal, G.M. 1994

The Determinants of Reproductive Health Change in Bangladesh: Success in a Challenging Environment, World Bank, Washington, DC.

Cunname, R.F., 1995

Bangladesh Family Planning and MCH programme - vision for NGO sustainability. Paper presented at the NGO seminar on sustainability, July 1995, Bangladesh.

Government of Bangladesh 1994

Country report of Bangladesh at the ICPD/Cairo. September 1994, Bangladesh.

Koenig, M.A., J.F. Phillips, Ruth S. Simmons and M.A. Khan 1987

Trends in Family Size Preferences and Contraceptive Use in Matlab, Bangladesh, Studies in Family Planning, Vol.18, No.3, pp 117-127

Mitra, S.N., Al-Sabir, A., Cross, A.R., and Jamil, K. 2000

Bangladesh Demogaphic and Health Survey 1999-2000 (Preliminary Report). National Institute of Population Research and Training (NIPORT) and Mitra Associates: Dhaka, Bangladesh; and Measure/DHS+, ORC-Macro International: Calverton, MD, USA

Phillips, J.F., Hossain, M.B., and Arend S-Kuenning, M. 1996

The long-term demographic role of community-based family planning in Bangladesh: Studies in Family Planning, 27(4), 204-219.

Routh, S., Shams-El, A., Jahan, S.A., Begum, A., Thwin, A.A. and Baqui, A.H. 1997

Developing Alternative Strategies for MCH-FP Services in Urban Areas: Findings from an Experiment. ICDDR,B Working Paper No. 106, Dhaka, Bangladesh.