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**BANGLADESH FAMILY PLANNING PROGRAMME
LESSONS LEARNED AND DIRECTIONS
FOR THE FUTURE**

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Foreword

The Bangladesh National Family Planning Programme is one of the most well-documented in the world. There are strategy, planning, and research papers, as well as management and assessment reports from national and international experts. Reports are also generated by development partner teams who visit the country at regular intervals. What is unique about this document? Its purpose is to describe the programme and the "lessons learned" from it. It will profile the family planning programme, explaining its history and the lessons which can be applied to the future agenda.

What will make this a unique document is its timing and scope. This is one of the most critical times for the family planning and health programme in Bangladesh. The situation today is particularly challenging. The level of effort which has gone into the current success of the programme pales when compared to what the future will require. The Government of Bangladesh (GoB) is planning its family planning and health agenda to carry into the 21st century. Each principal development partner, e.g., World Bank, USAID, and UNFPA, is designing its next programme of assistance. The essential elements require consideration, review and thoughtful revision or readjustment as part of these processes.

This document is timed to fit into the planning framework. Its scope is intentionally broad, encompassing all programme and management sections of the national family planning programme. It is an overview of both positive and negative lessons of the past, and provides a sense of direction for the future.

This is a challenging time for the national programme. It is truly a time to build on past success with renewed vision. In order to move forward, the cross-cutting issues identified by the authors are ones we must face and solve. As we manage these together, we can advance to the next millennium confident that our programmes will serve the needs of our clients - the women of Bangladesh, their partners and their children.

I thank the ICDDR,B MCH-FP Extension Project (Rural) for taking on the formidable task of developing this monograph, and commend Professor Demissie Habte, Director, ICDDR,B, and Syed Shamim Ahsan, Division Director, Health and Population Extension Division, ICDDR,B for their leadership and guidance to the authors who prepared this monograph. My special thanks are due to Professor Barkat-e-Khuda, Dr. John Stoeckel and Ms. Nancy Piet-Pelon for the clear presentation of the complex issues the programme faces and their insights into the future.

Muhammed Ali

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Acronyms

AD/CC	Assistant Director, Clinical Contraception
AD/FP	Assistant Director, Family Planning
AD(General)	Assistant Director (General), Family Planning
AHI	Assistant Health Inspector
AIDS	Acquired Immune Deficiency Syndrome
ANC	Antinatal Care
ARI	Acute Respiratory Infection
ATFPO	Assistant Thana Family Planning Officer
AVSC	Association for Voluntary and Surgical Contraception
BAVS	Bangladesh Association for Voluntary Sterilization
BDHS	Bangladesh Demographic and Health Survey
BCS	Bangladesh Cadre Service
BRAC	Bangladesh Rural Advancement Committee
CAR	Contraceptive Acceptance Rate
CBD	Community Based Distribution
CHC	Child Health Card
CIDA	Canadian International Development Agency
CIS	Clinic Information System
COPE	Client-oriented Provider-efficient
CPI	Continuous Physical Inventory
CPR	Contraceptive Prevalence Rate
CSP	Community Service Points
CWH	Central Warehouse
CWFP	Concerned Women for Family Planning
DD	Division Director, Family Planning
DD/FP	Deputy Director, Family Planning
DDS	Drugs and Dietary Supplement
DFP	Directorate of Family Planning
DG/FP	Director General, Family Planning
DRS	District Reserve Store
EOC	Emergency Obstetric Care
EPI	Expanded Programme on Immunization
ESP	Essential Service Package
FHC	Family Health Card
FPAB	Family Planning Association of Bangladesh
FPI	Family Planning Inspector
FPCST	Family Planning Clinical Surveillance Team
FPLM	Family Planning Logistics Management
FPSTC	Family Planning Services and Training Centre
FTP	Folk Talent Programme
FWA	Family Welfare Assistant
FWC	Family Welfare Centre
FWV	Family Welfare Visitor
FWVTI	Family Welfare Visitor Training Institute
FY	Financial Year
GoB	Government of Bangladesh

Acronyms (continued)

HA	Health Assistant
HAPP-V	Fifth Health and Population Programme
HEU	Health Economics Unit
H&FWC	Health and Family Welfare Centre
HLC	High Level Committee
ICDDR,B	International Centre for Diarrhoeal Disease Research, Bangladesh
ICPD	International Conference on Population and Development
IDA	International Development Agency
IEC	Information, Education, and Communication
IEM	Information, Education and Motivation
IPAVS	International Project Association for Voluntary Sterilization
IUD	Intra Uterine Device
LGRD	Local Government, Rural Development and Cooperatives
LMIS	Logistics Management Information System
LMT	Logistics Management Training
MA	Medical Assistant
MCWC	Maternal and Child Welfare Centre
MCH-FP	Maternal and Child Health and Family Planning
MIS	Management Information System
MO/MCH	Medical Officer, Maternal Child Health
MOHFW	Ministry of Health and Family Welfare
MR	Menstrual Regulation
MSR	Medical and Surgical Requirement
NetEn	Norethendrone Enantate
NGO	Non-governmental Organization
NIPHP	National Integrated Population and Health Programme
NIPORT	National Institute of Population Research and Training
NSV	Non-scalpel Vasectomy
OR	Operations Research
ORS	Oral Rehydration Solution
PCC	Population Control Committee
PU	Planning Unit
PEP	Population Education Programme
QI	Quality Improvement
RD	Rural Dispensary
RLF	Radio Listening Forum
RTC	Regional Training Centre
RTI	Reproductive Tract Infection
RWH	Regional Warehouse
SC	Satellite Clinic
SFWV	Senior Family Welfare Visitor
SMC	Social Marketing Company
SIP	Slum Improvement Project
STD	Sexually Transmitted Disease

Acronyms (continued)

TBA	Traditional Birth Attendant
TFR	Total Fertility Rate
TFPO	Thana Family Planning Officer
THC	Thana Health Complex
THFPO	Thana Health and Family Planning Officer
TOT	Training of Trainers
TT	Tetanus Toxoid
UN	United Nations
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
UVP	Urban Volunteer Programme
VSC	Voluntary Surgical Contraception
WHC	Women's Health Card
WHO	World Health Organization

Executive Summary

The success of the Bangladesh National Family Planning Programme is reflected in an almost two-fold increase in the contraceptive prevalence rate (CPR) over the past decade, resulting in a substantial decline in fertility for the same period. Maintenance of the current prevalence and fertility levels over the next decade will require an additional 4 million users. If the national goal of replacement fertility is to be reached by 2005, the total number of contraceptive users will have to more than double to 21 million.

Meeting this formidable challenge will require fundamental changes in the operation and output of various components or subsystems of the programme. These components are: service delivery; administration; planning; training; information, education and communication (IEC); monitoring and supervision; and logistics and supplies.

This monograph is prepared in response to this challenge. The timing is critical considering all the changes required to effectively deliver the proposed Essential Services Package (ESP). The monograph presents the results of a thorough review and assessment of the components. The specific objectives of the review are to **identify the lessons learned regarding each programme component: what worked, what did not work, and why; and to provide recommendations for improvement based upon the lessons learned.** Since the urban programme presents a special challenge, the review highlights urban concerns separately.

Issues which effect the work of each programme component were identified. If the programme is to continue on a successful course, the problems presented in these cross-cutting issues will require immediate and sustained attention.

CROSS-CUTTING ISSUES

(1) **The needs and intentions of the family planning programme have changed from providing MCH and family planning to providing an Essential Service Package (ESP), which includes reproductive health.** This will pose a major challenge to the programme in terms of both the human and material resources required by the programme components for the introduction of the package.

(2) **The management of the family planning programme is oriented more toward the interests of providers than the needs of clients.** The family planning programme is still effected by a history of target-orientation. While there are no official targets in today's programme, there is still a "target mentality" which permeates the delivery of certain services, especially sterilization and IUD. Special days or camps are organised to offer these services, with an emphasis on the number of clients served rather than on ascertaining and responding to the needs of clients.

(3) **There is inadequate cooperation and coordination between the Family Planning and Health Directorates.** This is apparent in the delivery of health and family planning services at most levels. Clients receive services from different personnel at different times. However, there is marked improvement in coordination at the community level where services are now provided through combined Satellite Clinic/EPI spots.

(4) **There are internal conflicts between medical and non-medical staff within the Family Planning Directorate.** This occurs primarily between the TFPOs and MO/MCH with regard to: pay scale and status; financial drawing and disbursement authority; and career advancement opportunities.

(5) **Staff who were hired under the development budget have lower morale than staff who were hired under the revenue budget.** The discrepancies in the financial benefit package influence job performance. Family planning programme staff included in the development budget have less job security and are not eligible for retirement benefits. Staff included in the revenue budget are entitled to a provident fund, gratuity and a pension.

(6) **There is a lack of accountability in the public sector. In the family planning programme, it particularly affects staff performance, personnel management and supervision, and supplies and equipment.** There is no formal performance appraisal for staff, and no system of rewards for good performance or consequences for poor performance. A fair and operational "personnel policy" is not in place. There is a lack of clarity in job descriptions throughout and a confusion in the direct-line supervision for the personnel at the field level. Also, drugs and other medical supplies are lost in the system or missing from clinics.

(7) **There is inadequate cooperation and coordination between government and non-government organisations.** This has resulted in areas being poorly demarcated between the organisations, duplication of activities, and overlap in work between field staff. While there have been improvements, the cooperation and coordination will require continuous attention because of the large number of NGOs involved in health and family planning.

(8) **The health and family planning programme is donor dependent.** Almost 60 percent of the MCH-FP programme is funded by donor agencies. The donors will not be able to maintain this level of funding for an extended period, which has obvious implications for sustainability. In order to sustain its activities, the programme will need to work toward a balance of self-sufficiency in order to reduce its dependency.

RESOLUTION OF ISSUES

Changes will be required in the management, structure and organisation of the MOHFW and its Directorates to resolve most of the cross-cutting issues. A High Level Committee (HLC) under the leadership of the Health Minister has been established by the GoB to address these changes. The HLC has been requested to provide recommendations on management and organisational reforms, and a plan and timetable for their implementation.

Attention to these reforms by the GoB is a major step toward improving programme performance. However, it is imperative that the work of the HLC is accelerated so that the implementation of the reforms can be initiated in a timely manner. Delays will only contribute to further limiting the availability of reproductive health and family planning services through the ESP.

FAMILY PLANNING PROGRAMME COMPONENTS

For each of the programme components, lessons learned are discussed and recommendations for strengthening are suggested. The key issues are:

(1) Service delivery is the primary component of the MCH-FP programme. At the household level, the frequency, duration and quality of FWA visits with clients have contributed to an increased use of contraception. However, serious gaps still exist. Only 40 percent of eligible women in rural areas are actually visited by FWAs. Moreover, the sustainability of door-step services is being questioned. Thus, alternative service delivery models, including a promising strategy called "cluster visitation," is being tested by the ICDDR,B MCH-FP Extension Project (Rural).

At the household level, it is difficult to provide quality services, particularly medical back-up for contraceptive complications and essential dimensions of reproductive health care - pre and post-natal care. Retraining should be provided to FWAs concurrently with the strengthening of the supervisory system. This is particularly important, because retraining alone in the absence of improvement in supervision and technical support will not improve the quality of services sustainably.

Service delivery at the clinical level needs substantial improvement in the areas of quality and access. Though the national programme is a seven method programme, only three methods are consistently available - oral contraceptives, injectables, and condoms. It is not possible for the current programme to offer clinical services of consistently high quality at all service points where they should be provided, unless the quality of services, the condition of facilities, the logistic and supply system, and the training for clinical methods are further improved.

(2) Administration is negatively effected by chronic staff shortages at all levels. Positions of FWVs, Medical Officers, TFPOs, and Directors are all effected either by under-recruitment or imminent retirement. Human resource development for the entire programme needs immediate and sustained attention. Particular emphasis must be given to retraining service providers, who will be needed to implement the package of essential services.

(3) Planning is managed with insufficient staff to conduct assigned activities. This has been exacerbated by the rapid expansion of the number of NGOs (now more than 800) and development projects for which they are responsible.

A thorough review of the functions of the Planning Unit (PU) should be conducted with the objective of reducing and/or eliminating those activities not directly related to planning. The reduction of redundant/non-essential workload would allow staff to devote more time to planning activities.

(4) Training has been inadequate. The lack of capacity to train all the necessary service providers and managers is a major constraint facing the programme. The problem will become even more acute with the delivery of ESP. Both initial and refresher training courses organized by NIPORT are not timely, and lack appropriate content to meet the expanding needs of the trainees. The training target of NIPORT represents only a little over half of the estimated gross training need of the MOHFW system. Evaluation of the impact of training programmes on the performance of trainees or on service delivery have not been conducted. Training institutes and programme managers generally do not work together, resulting in a lack of follow-up, e.g., post-training activities, and differential assessment for the impact of various training approaches.

Consideration should be given to the following substantive management changes in this component: use of new approaches or training styles; development of curricula and training

plans which respond to service needs in the field; joint planning for training which is conducted by the Family Planning and Health Directorates to ensure that programme needs are met; participation in international training opportunities to broaden the staff perspective on programme issues; recruitment of highly qualified trainers for NIPORT; and exploration of the potential of using private sector organisations to augment the MOHFW training capacity. Finally, NIPORT should receive assistance to develop an evaluation plan, which would follow-up trainees in the field to assess their performance on a regular basis.

(5) Information, Education and Communication (IEC) materials have not been produced in sufficient quantities in the third and fourth five year plans to meet the needs of field workers and clients. In addition, 1) messages are inconsistent, incongruous with the beliefs and values of the potential audience, or lack emphasis on Islamic views of family planning, and 2) lack of coordination has resulted in unnecessary duplication of efforts between GoB and NGOs.

Many of these issues could be resolved with a timely implementation of the existing national MCH-FP IEC strategy for 1993-2000. The recently launched "Green Umbrella" campaign is one component of the strategy. However, much more needs to be done to address the problems of message content and audience segmentation. This would include the provision of assistance to the IEC Unit to strengthen their capacity. The existing IEC strategy will also have to incorporate additional IEC materials for a wider audience which are related to the ESP, such as family and reproductive health issues.

(6) Monitoring and supervision are closely linked. The MIS, the primary monitoring tool, collects copious amounts of information regularly from the field. FWAs and FWVs who provide the bulk of the data are particularly overloaded with recording and reporting responsibilities. Flow of information back to the field is still not adequate or timely enough to be used for local-level planning and supervision. Assistance should be provided to refine the MIS, so that only relevant data for the needs of the programme managers are collected. Also, particular attention should be given to ESP data requirements.

Supervision is inadequate at all levels. The number of visits is limited, and the quality of those visits is not uniform. Weak supervision and lack of adequate accountability should be addressed by the development and implementation of a standard plan that facilitates supportive supervision. This would include training of supervisors in supportive supervision, as well as a framework and timetable for supervisory visits.

(7) Logistics and supplies have to be maintained appropriately for the service programme to function. An effective system is in place which has changed the rate of contraceptive stock-outs from 23 percent in 1989 to under 5 percent in 1994. The decline in field-level stock-outs combined with the rise in the quantity and types of contraceptives distributed is indicative of a major improvement in contraceptive supply management.

This system will need further development, however, to accommodate the expected increased volume in contraceptives along with the additional commodities required for the ESP. Consideration should be given to a decentralized system, which would expand to include an additional storage and supply tier at the union/FWC level to cope with local demands.

URBAN MCH-FP PROGRAMME

The high urban growth rate and the presence of an extremely mobile or "floating" population will place increasing demands on a service delivery system which is even now, unable to meet current needs. Innovative approaches will have to be developed and implemented through an expanding role of non-government organisations and the private sector, particularly the Social Marketing Company (SMC), to provide the quality and level of services required.

There is a substantial gap between desirable and actual quality of many MCH-FP services. Improvement in services will require a renewed ability to identify and address problems of quality on a regular basis.

Coordination of providers and services in urban areas is essential so that services are accessible to all, but not duplicated. An intervention to institute coordination mechanisms among providers of basic MCH-FP services, and to improve capabilities in programme planning and coordination has been successful in establishing a coordination committee in various zones of the city. Further, it was learned that NGO coordination at the local level requires both local mobilisation and advocacy with parent organisations and groups which are responsible for coordinating NGO activities. Moreover, future efforts to improve coordination and services must look beyond NGOs to include the active involvement of private sector providers.

BEYOND FAMILY PLANNING - THE ESSENTIAL SERVICE PACKAGE

The national programme has decided to provide basic health services in addition to family planning. This decision will require the programme to expand its present MCH-FP services to include all the services in the Essential Service Package. The vision of the GoB is "...to be responsive to clients' - especially women's needs, to provide better quality services, to become financially sustainable, and to develop adequate delivery capacity [the] government will focus on the essential package of services. Within the essential package, the government's highest priorities will include...maternal and child health...reduction of maternal and child mortality" (Abedin, 1997).

Discussion is underway for managerial and structural reforms that will produce a "unified management structure" under which the programme components will operate. Three possible ways of implementing managerial reforms have emerged from this review. One is that the process should be initiated in a phased-in manner, both in respect to the programme components as well as the service delivery tiers. The process should begin soon among those components which could be changed immediately - logistics, MIS, training, and supervision. For example, all of the additional commodities and supplies and monitoring information required for the ESP could be placed under a unified logistics and MIS component which includes family planning and health. Similarly, the additional training and supervision required for the ESP could be included along with the family planning and health activities within each of the components. Second, instead of adopting a phased-in approach, there will be a unified merger and complete integration at all levels of service delivery and all components of the programmes. Third, the second, i.e., variant complete integration, should occur at only a selected high-performing district instead, before its introduction nationwide.

Section I: Introduction

BACKGROUND AND OBJECTIVES

By all accounts, the National Family Planning Programme has achieved substantial success over the past decade. This occurred under social, economic, and institutional conditions that would generally be viewed as unfavourable to support such changes (Cleland et al., 1994; Khuda et al., 1996; Khuda and Hossain, 1996). The challenge to the programme is to maintain and build on its successes in a sustainable manner. In order to achieve these goals, it will be necessary to further improve the operation and output of the various components or subsystems which make up the programme. In response to this need, a review and assessment of the components of the National Family Planning Programme was conducted. These components are: service delivery, administration, planning, training, IEC, monitoring and supervision, and logistics and supplies. Clinical contraception and quality of care are included in the review of service delivery. Management and personnel issues are included in the review of all components.

The specific objectives of the review are to identify the lessons learned regarding each programme component, i.e., what worked, what did not work, and why; and to provide recommendations for improvement, based upon the lessons learned. The initial step to realize the first objective is to identify the activities and/or strategies (interventions) that have been used by each component to achieve its objectives. The second step is to review the evidence which assesses the effects or impacts of these interventions to determine which worked and which did not.

Two sources of data are used. The primary source is the family planning research and programme literature produced over the past decade, including the work of the ICDDR,B MCH-FP Extension Projects (Urban and Rural). The secondary source comprises interviews with persons responsible for each of the components (i.e., directors of the units of the national programme, and representatives from NGOs and donor agencies who provide assistance to the programme). The purpose of these interviews was to obtain information on any programme component activities that may be underway, but have not been documented; and to obtain information that would explain other gaps in information.

Few studies were found in either the published or unpublished literature which assessed the impacts of family planning component interventions. There were, however, a number of descriptive studies which discussed constraints under which the family planning components operate. The results of both types of studies are included in this review.

The review is divided into ten sections. The first section presents the background and objectives of the review; discusses a number of issues (and their resolution) that were found to cut across all or most of the programme components; and provides an overview of the current status of the programme. Sections II - VIII each deal with a component of the national (rural) programme, beginning with a discussion of their structure and activities, and followed by a presentation of the lessons learned about the component and recommendations for its strengthening. Section IX focusses upon the urban MCH-FP programme and discusses its structure and characteristics; and lessons learned about selected programme components, and recommendations for its strengthening. The final section summarizes the findings, and presents the conclusions of the monograph.

CROSS-CUTTING ISSUES

A number of issues which cut across almost all of the components and inhibit progress of the national programme were identified by the review. They are particularly important, because without their resolution the programme cannot achieve maximum effectiveness. These issues and recommendations for their resolution are presented in the following discussion.

The needs and intentions of the programme have changed from providing MCH and family planning to providing the ESP, which includes reproductive health. Provided at the thana level and below, the package will consist of the following: family planning; child health education and services; maternal health education (including RTI/STD and safe delivery); services to pregnant women; services to women (including management of RTI); family health education (including STD/AIDS); and family health services.

The introduction of this package has major implications for the national programme components. Additions to the existing training curriculum will be necessary; IEC approaches and message content will have to reflect the new programme emphasis; additional personnel may be required; and new drugs, supplies and equipment will have to be added to the logistics and supplies system. These changes will pose a formidable challenge to the programme, in terms of both human and material resources.

The management of the family planning programme is oriented more toward the interests of providers than the needs of clients. The family planning programme is still effected by a history of target-orientation. While there are no official targets in today's programme, there is still a "target mentality" which permeates the delivery of certain services, especially sterilization and IUD. Special days or camps are organised to offer these services, with an emphasis on the number of clients served rather than on ascertaining and responding to the needs of clients.

While quantitative objectives may need to be stated at the programme level to plan resource requirements and address epidemiological needs, they erode the quality and cost-effectiveness of service delivery when field-level work programmes and supervision are target-driven. Workers and supervisors spend too much time and effort reaching and reporting targets, and too little time in ascertaining and responding to the needs of those they are supposed to serve. For example, field workers do not segment the eligible women to provide information on methods that would be more appropriate from a reproductive health perspective. Many women who use resupply or traditional methods could be more appropriately served by the programme if they used a longer-acting method.

Field workers assume that their work is done if targeted numbers of contraceptives are delivered and reported. When and if supervisors reward or penalize workers, it is for meeting or failing to meet targets rather than providing positive and supportive feedback when client problems are encountered. Lack of adequate accountability on the part of managers can be traced to similar attitudes among subordinates. Poor treatment turns clients against the government system, and results in lower utilization of services and higher per-capita costs (World Bank, 1996).

There is inadequate cooperation and coordination between the Family Planning and Health Directorates. Due to the bifurcation of the Directorate of Family Planning and the Directorate of Health within the same ministry, collaboration on programme activities is deficient. With the exception of the joint SC/EPI intervention, at the community level, there

is little cooperation in the provision of health and family planning services. As a result, women and children normally receive health and family planning services from different personnel at separate service delivery points. This lack of cooperation and coordination contributes to other problems in the system as well. For example, both Directorates are responsible for releasing staff for training by NIPORT. Sometimes staff are not released by one Directorate for the requirements of the other. As a result, needs for trained manpower often go unmet.

There are internal conflicts between medical and non-medical staff within the Family Planning Directorate. The primary tension exists between the Thana Family Planning Officers (TFPOs) who are non-medical staff and the Medical Officers of Maternal and Child Health-Family Planning (MO/MCH). There are at least three areas of conflict between them:

- (1) The pay scale and status of the MO/MCH are higher than the TFPOs. The MO/MCH are Class I gazetted officers, while most of the TFPOs are Class II.
- (2) Financial drawing and disbursement authority was transferred from the TFPOs to the MOs/MCH for clinical expenditure. The response by TFPOs to this transfer has been generally to instruct the FWAs to continue to distribute condoms and pills but to discourage making referrals for clinical methods.
- (3) The doctors in the Family Planning Directorate are not encadred*, and therefore, their career advancement opportunities are limited to the level of Assistant Director. All encadred non-medical officers (about 50%) have the opportunity to advance to the level of Director General.

Staff who were hired under the development budget have lower morale than staff who were hired under the revenue budget. The majority of the employees in the Family Planning Programme are under the development budget. They have little job security and are not eligible for retirement benefits. Staff recruited under the revenue budget have permanent jobs, and are entitled to such benefits as provident fund, gratuity, and pension. This disparity causes considerable dissatisfaction among staff under the development budget, some of whom have been employed by the programme for decades.

There is a lack of accountability in the public sector. In the family planning programme, it particularly affects staff performance, personnel management and supervision, and supplies and equipment. There is no formal performance appraisal for staff. A system for reward and penalization does exist, but it is generally not implemented. "Disciplinary action in the form of reward and punishment focussing on field supervision is seldom initiated and followed through" (GoB, 1993). Also, there is no system of tangible rewards for good performance or consequences for poor performance (Khuda, et al., 1994b).

In general, a "lack of a fair and operational set of personnel policies" has been identified as affecting accountability within the system (Hossain, 1988). Lack of responsibility and accountability is due to lack of clarity in job descriptions, and confusion in direct line supervision throughout the field-level health and family welfare system (Ahmed et al., 1992). There are cases of Civil Surgeons, THFPOs and others being transferred and their orders

* Encadrement refers to inclusion of personnel in the BCS (FP) service where the post of Class II can be transformed to Class I. Only 3 doctors are encadred.

overturned, when they discharged inefficient or errant lower-level staff, who seem to wield a considerable degree of influence in the system (BRAC, 1991). In such cases, lack of accountability affects the morale and performance of sincere officials. This is a major reason why personnel management has not been effective. While this cannot be resolved by the MOHFW alone, the MOHFW should vigorously pursue the issue with the concerned authorities.

Supervisory guidelines are often not followed, and feedback and follow-up of supervisory action are thereby lacking. Overall, the supervision of FWAs by FPIs is unsatisfactory. The thana level officers generally do not reside at the thana headquarters, which further hampers supervision (GoB, 1991). Many MAs and FWVs do not reside at the quarters assigned to them at the FWCs. According to DG/FP circulars (dated 22.06.88 and 04.06.91), they are to be penalized. This is, however, rarely implemented.

There is a drain of valuable items like paracetamol and antibiotics from the THCs and FWCs, which can render the services dysfunctional. Also, untimely reimbursement of Tk. 100 per Satellite Clinic (SC) session has been affecting the performance of SCs. In addition, there have been reports of shortages in contraceptives, medical supplies for surgical contraception, and spare parts for autoclaves (Khuda et al., 1994b).

There is inadequate cooperation and coordination between government and non-government organisations. A major factor affecting this results from the sheer number of NGOs. There are problems in circumscribing areas to be served by the organisations which result in the duplication of their activities (UNFPA, 1990; ICDDR,B, 1990; Khuda et al., 1992a). The working areas for MCH-FP are not properly demarcated by the TFPOs, with the result that cooperative agreements frequently support NGO projects in areas where the government is also working (Ahmed et al., 1992; Islam and Rahman, 1992). Similarly, NGO activities are not coordinated at the field level in many areas, and no formal coordination mechanism exists between the government and the NGOs at the union level (GoB, 1991).

These problems are widespread (UNFPA, 1990). Field discussions reveal that about 20 percent of the NGO catchment areas also have GoB fieldworkers in place. This duplication has resulted largely from the deployment of 10,000 additional FWAs in the late 1980s.

The extensive overlap between the government and the NGO rural service delivery programme has also had a discouraging effect on government organisation workers. According to one study, there is a tendency among government organisation workers to disengage from work when other outreach workers are assigned to their area (Rahman et al., 1989).

The coordination of GoB and NGOs has been a shared concern. In this respect, the GoB has issued various circulars publicizing coordination meetings with the NGOs, and reporting their monthly progress to the TFPOs. While there are no major coordination problems at the central level, the problem is more apparent at the union level and below. For example, the NGO workers allege that when they make client referrals to the clinics, the referred clients often do not receive due attention by the clinic staff.

The health and family planning programme is donor dependent. Almost 60 percent of the MCH-FP programme is funded by donor agencies (Haider et al., 1995). The agencies providing the major portion of this support are The World Bank, USAID and the UN.

Clearly, the donors will not be able to maintain this level of funding for an extended period, which has obvious implications for the sustainability of the programme. The programme will have to achieve a balance of self-sufficiency, and thus, reduce its dependency, so that it can sustain its activities at an acceptable level.

RESOLUTION OF ISSUES

The resolution of most of the cross-cutting issues will require substantial changes in the management structure and organisation of the MOHFW and its Directorates. The GoB has established a High Level Committee (HLC), headed by the Health Minister, to address these changes. The objectives of the HLC are to provide recommendations on management and organisational reforms, and to plan a timetable for implementing these reforms during the next health and population programme (Abedin, 1997).

Management reform is expected to be characterized by the formal decentralization of authority for finances, personnel and procurement; and by a change in the "management culture" which leads to less bureaucracy and greater delegation of authority, and accountability of managers and staff (Abedin, 1997).

Organisational reform is expected to provide a one-stop infrastructure for health and family planning services. Reforms will include the following: a unified management structure (e.g., with one manager in charge for facility-based and related outreach activities at the thana level and below); a unified management structure for managing larger facilities (hospitals and possibly THCs); delegation of budget lines and personnel management positions to each managerial level; channels through which consumers can play a role in defining priorities and reviewing performance; and an allocation of functional responsibilities to field staff in line with the technical requirements of the ESP (Abedin, 1997).

The GoB should be lauded for their attention to managerial and organisational reforms. However, the critical task at hand is for the HLC to provide their recommendations for the needed reforms as soon as possible. This work should be accelerated so that the implementation of the reforms can take place under the Fifth Health and Population Programme in a timely manner. This is particularly important, since there are likely to be problems related to implementation that will require additional time for resolution. Delays will only contribute to limiting further the availability of reproductive health and family planning services through the ESP.

CURRENT PROGRAMME STATUS

What Does the Approach of the Year 2000 Mean for Bangladesh?

The year 2000 looms a mere 33 months ahead. For the past 30 years, population experts as well as other development planners have used the "YEAR 2000" as the magical end-point for a myriad of goals or potentially cataclysmic events. Countries, as well as international organisations, have linked their plans to that specific target date. "Health for all by the year 2000" is only one of the worldwide themes. Others are related directly to demographic transition. Many countries set goals to achieve replacement fertility or the two-child family to coincide with the year 2000.

As this date approaches, many countries have had to re-evaluate their goals; adjusting them to more realistically reflect the potential for achievement. In addition, there has been a change in focus during in the past decade - particularly since the last International Conference on Population and Development (ICPD 1994). Demographic targets are no longer the primary concern. Two other areas are now receiving similarly high priority. First, family planning programmes are to be expanded to meet the reproductive health needs of women and their partners. Success is to be measured in terms of women's improved health - not in demographic targets. Second, the situation for women must be enhanced to support equality and empowerment through the promotion of education, employment and legal status.

Thus, countries have to rethink their goals and plans. It is no longer sufficient to provide health or family planning services "for all" by a certain date. What is more important is to provide services which meet the clients' stated needs and to develop other sectors to support clients.

Where Does the Programme Stand?

Looking backwards, the programme can be proud of its achievements. The indicators are moving in the right directions. The total fertility rate (TFR) has gone down - from 5.8 in 1986 to 3.4 in 1993/94, while the contraceptive prevalence rate (CPR) has risen dramatically from 25.3 percent to 45 percent. By accepting a family planning method, millions of women have changed their lives. Clients have positive attitudes about future family planning as well. The mean ideal family size for currently married women is 2.5 children. Men support their wives attitudes to keep families small (BDHS 1993-94).

The clinical and community infrastructure to support the family planning programme is in place. Thousands of workers - more than half of whom are at the community level - provide information and services. The GoB programme is augmented by a plethora of community organisations. Many of these are supported by national NGOs that concentrate their development efforts in MCH and family planning. Social marketing through SMC is another source of information and specific contraceptives.

A review of past success tells only half the story, however. It is essential to look forward to the year 2000 and beyond to determine whether or not it will be possible for the family planning programme to maintain itself and achieve its ambitious future goals. Sheer numbers will be one of the greatest challenges.

The present population is 123 million. This makes Bangladesh one of the world's most densely populated countries. Given around 2 percent growth rate per annum, the population will double in 35 years to almost 250 million. Most important to the achievement of family planning goals are the following facts:

- Married women of reproductive age will increase by almost 40 percent in the next 10 years, from 22.7 million to 31.9 million.
- To maintain current prevalence and fertility levels, the family planning programme will have to serve an additional 4 million users over the next 10 years, expanding the number of users from an estimated 10.6 million in 1995 to 14.6 million in 2006.
- To reach GoB's goal of replacement fertility by 2005, the total number of contraceptive users will have to more than double to 21 million; use of long-acting

methods will have to triple; and the number of users of short-term methods will have to double.

Required family planning achievements are only a part of the total programme for the future. If Bangladesh is to significantly improve the health status of the population, it must ensure that women have access to family planning services of an acceptable quality, as well as all the other reproductive health services they require. Their children and their partners, however, also need care.

Essential Service Package

Increased or improved family planning services alone will not be sufficient to meet the health needs of the population. The GoB is thus, developing an Essential Service Package (ESP) which includes general health and family planning services for the community, along with maternal and child services, with particular emphasis on reproductive health. This is being field-tested by ICDDR,B at the request of the MOHFW and in collaboration with the Directorates of Health and Family Planning. One of the principal purposes is to make ESP available at every level of the service infrastructure, up to the district hospital. Clients should benefit from the teamwork employed by the personnel of the MOHFW in the delivery of these services.

The health statistics which drive the ESP are as compelling as those which fuel the family planning programme efforts. These numbers reflect human suffering which could be avoided or ameliorated by effective health programmes. Almost 8 percent of infants die before their first birthday. Deaths of children under five years of age still account for about half of all deaths in Bangladesh. Most are afflicted with treatable problems - ARI, malnutrition, Vitamin A deficiency, diarrhoeal disease, or measles. Others die from neonatal tetanus, which could be eliminated with appropriate immunization of mothers and improved delivery conditions. One-third of children aged 12-23 months currently remains outside the EPI coverage (Shahadat, 1996). As this age group continues to grow, the EPI services will have to expand to meet the increasing demands.

The care of women's reproductive health is a particular concern of the ESP. Md. Nurul Abedin, Additional Secretary of the MOHFW describes the current situation:

"The reproductive health of women in Bangladesh remains compromised by health risks implied in current patterns of childbearing and by inadequate access to reproductive health care....well over one-third of all recent births (between 1990-91 and 1993-94) were to women of parity four or higher and the large majority of women began child-bearing before age 20. While there is virtually universal access to family planning services, access to and/or utilization of the other three 'pillars' of safe motherhood, as defined by WHO i.e., antenatal care, clean and safe delivery, and essential obstetric care, remain wholly inadequate. The maternal mortality ratio remains at about 4.5 per thousand live births, though a most recent WHO/UNICEF estimate reports 8.5 per 1000. Evidence from community-based surveys and pilot project experience indicates high prevalence of reproductive tract infections. Prevention, control and correct case management of such conditions, however, are not yet well-established ingredients of the service package that is routinely provided at government facilities" (Abedin, 1997).

Abedin also notes that about 70 percent of women suffer from nutritional deficiencies and anemia and a full 75 percent of pregnant women receive no antenatal care. These prevailing conditions can have an adverse effect on pregnancy outcome.

Along with an expanding population, the increasing migration from rural to urban areas will change the nature of the challenge facing the programme. While the programme has proven that it can reach women in rural areas, Bangladesh will become an increasingly urban society. Unfortunately, less success has been achieved in the urban areas. Reaching the urban poor, who often live in temporary shelters and slums, is exceedingly difficult. Yet, this population will grow faster than any other, in the next decade. It is estimated that 30 percent of the total population will live in urban areas by the year 2006. The present situation is aptly described in a recent ICDDR,B publication (Thwin and Jahan, 1996):

"Bangladesh's urbanization process produced the growth of cities and municipalities at three times faster than the country as a whole, i.e., at 6 percent versus 2 percent nationally. At present, one out of four Bangladeshis lives in urban areas, in contrast to one out of twenty, thirty years ago. Within the same period, the population in the nation's capital reached 6 million from 0.5 million, resulting in the burgeoning of slum and squatter settlements. Approximately 30 percent of Dhaka City's population rise has occurred in slums and other sub-optimal living conditions, and at least half of these fall below the poverty line (Arifeen and Mookherji, 1995). With continued rapid growth of the city's population, residents in both slum and non-slum areas experience the consequences of having to depend on an infrastructure that can no longer cope with increasing needs....The slum population is often associated with lower immunization coverage rates and lower knowledge and use of contraception, compared to non-slum urban populations (Laston et al., 1993; Jamil et al., 1993). Some of the health indicators in slum areas are equivalent to those in rural areas, and in some cases - as with infant mortality - even higher."

Thus, the unmet need for family planning and other health care will only intensify as the country's urban population increases.

The Capacity to Deliver the ESP

Families need both health education and a variety of services throughout the life cycle. The need for reproductive health does not begin when a woman starts to bear children nor end when she accepts a family planning method. Thus, a family planning and reproductive health service programme which is truly client-centered will not be easy to develop, deliver or sustain.

What is the capacity of the programme and its principle development partners and donors, to manage this increasingly challenging health agenda? With the success of the family planning programme to build upon, what specific challenges will arise?

One challenge will be the exposure of deficiencies, particularly in the quantity and quality of the current services, which will result from the adding of new elements into the programme. In terms of effective and appropriate methods, the present family planning

programme is not meeting the needs of the clients. The majority of women (six of every seven) achieve their desired family size by the age of 30. Most require contraceptive protection for an additional 15 years. Currently, the majority of these women use hormonal resupply methods - oral contraceptives or injections. The proportion of married women relying on oral contraceptives has almost doubled in the past four years, from 9 percent in 1989 to 17 percent in 1993-94. In fact, the oral contraceptive is now used by 40 percent of all current contraceptors (BDHS 1993-94). Older, high parity women use oral pills, even when other methods would be more appropriate from a health perspective. At the same time, the use of clinical methods is stagnating. Sterilization now protects only 9 percent of all eligible couples. Even in the older groups, where more sterilization would normally be expected, less than 20 percent use either male or female sterilization.

The choice of methods - as well as other elements of the programme - are often driven by administrative convenience or problems rather than by the needs of clients. Long-standing conflicts between medical and non-medical workers in the family planning programme has severely hampered the delivery of clinical methods and has compromised the quality of clinical care. Workers are not accountable to the community where they are posted and do not take the clients' needs as the primary motivation for their work.

Before the year 2000, the national programme will face a crisis in personnel. Retirement will decimate the human resources available at all levels, from directors in the central office to field workers in the community. This crisis, however, can be used as an opportunity. The need to recruit and train new staff will allow the programme to review its administrative structure and develop anew. The revised structure could both eliminate the present bottlenecks and provide the flexibility required to deliver the services in the expanded agenda.

Training is another human resource element requiring attention. Various assessments have noted the deficiencies in training of FWVs and MOs/MCH. Many are not able to perform basic functions required for family planning work (i.e., appropriate pelvic examinations or IUD insertion). This has implications both for the quality of the family planning programme and for reproductive health. Workers will need to be retrained to perform all their current job requirements in addition to the primary training for the ESP.

The personnel problems in the programme are directly effecting service delivery for family planning - and will have a debilitating effect on the proposed expansion of services. The current imbalance in family planning method mix provides one example. Dysfunctional relationships between medical and non-medical workers within the family planning programme and between family planning and health workers has severely limited the choices of methods available to clients. Instead of all seven methods being equally accessible, clients find only oral contraceptives, injections and condoms being fully accessible, while clinical methods are often difficult to obtain.

The delivery of improved reproductive health services will require a strong clinical base. This is particularly true for all EOC and RTI interventions. Accessibility of EOC services (including ante and post-natal care and safe delivery services) is severely limited. There are several new programmes which are designed to set up EOC services at either THC or

MCWC levels.* The lessons from these experimental programmes need to be incorporated into the GoB's future service plans.

RTI management (including health education for women and their partners, and appropriate drug therapy) is currently only available on a limited basis. A nationwide programme which addresses these issues will be required. This will be a formidable task, requiring trained medical personnel deployed at all levels, infrastructure redevelopment, and focussed attention on educating the community about reproductive health and available services.

And lastly, very young, newly-wed girls should be targeted. Half of the girls in Bangladesh have married and produced their first child while still teenagers. In fact, one in four girls has a second child by the age of 20. These girls will require the focussed efforts of the national programme, so that they will make appropriate contraceptive choices.

What is Sustainable?

The success in family planning has not come cheaply. During the Fourth Five Year Plan (FY 1991-FY 1995), the GoB spent \$696 million dollars on the national family planning programme from its own and donor resources. The bulk of the funding (on average about 67%) came from donor agencies - USAID, UNFPA, and the World Bank and its cofinanciers (HEU, 1995).

The programme has attracted and sustained the interest of a wide network of donors. Their support will continue. USAID, for example, has committed \$210 million dollars for 7 years (mid-1997-2004) to the National Integrated Population and Health Programme (NIPHP). The World Bank and its cofinanciers plan to commit around one billion dollars to the Fifth Health and Population Programme (HAPP-V) which begins in 1998.

The Health Economics Unit (HEU) of the MOHFW calculates that the GoB will need to spend slightly more than \$1,005 million during FY 1998-FY 2002. They predict a substantial resource gap, even after adding up all funding sources.

This presents a dilemma for the programme, since it is expected to address so many additional requirements: expand current services to meet the needs of the shifting and expanding population; improve the quality of existing services through improved training of personnel and enhanced facilities/equipment/supplies; and, develop and provide new services for the ESP. All these will cost additional money. Clients can be expected to pay some costs. Increasing poverty, however, will result in denied access to health care if costs rise too much. Donors are still giving, but less than in previous years.

Ultimately, the programme will have to outperform its past success, while using fewer resources. This may be its most formidable challenge.

* The most advanced of the EOC programs are the THC services developed by ICDDR,B MCH-FP Extension Project (Rural) in two thanas, and the programs supported at 11 MCWC by UNFPA. Each of these has successfully trained clinical staff to provide all emergency obstetrical care, including Caesarean-section, as well as the important adjunct services for safer motherhood - antenatal care with risk assessment and post-natal services. Further information about these programs is available in: ICDDR,B MCH-FP Extension Project (Rural) Documentation Note "Introduction of Comprehensive Emergency Obstetric Care at the Thana Level: Experience from Mirsarai, Chittagong", August 1996; and UNFPA report "Strengthening MCH/FP Services at MCWCs in Bangladesh: Report of the Assessment of Project BGD/91/P02", 1995.

Section II: Service Delivery

Family Planning Directorate Infrastructure

The Ministry of Health and Family Welfare (MOHFW) is responsible for formulating and executing policies, and for providing overall administrative guidance on health and family planning in the country. The Directorate of Family Planning, under the MOHFW, is headed by a Director General, and is responsible for implementing the MCH-based family planning programme, nationally. The operational units working under the Family Planning Directorate are: Administration; Information, Education and Motivation (IEM); MCH Services; Finance; Audit; Planning; Logistics and Supply; and Management Information System (MIS), each headed by a Director. Training and research is conducted by the National Institute of Population Research and Training (NIPORT), established in 1979.

Also under the Family Planning Directorate are 5 Divisional Offices, each headed by a Director; 64 District Offices, each headed by a Deputy Director; and 464 Thana Family Planning Offices. These latter offices are staffed by a Thana Family Planning Officer (TFPO), a Medical Officer (MCH-FP), an Assistant Family Planning Officer, and a Senior Family Welfare Visitor, and five other support staff. At each of these levels, there are MCH-FP Coordination Committees to supervise activities (DFP and Population Council, 1993).

The field staff of the programme includes 4,500 Family Planning Inspectors (FPIs); 5,871 Family Welfare Visitors (FWVs); 23,500 Family Welfare Assistants (FWAs); and 52,075 registered and trained Traditional Birth Attendants (TBAs). This staff is required to motivate, counsel, and refer clients, while providing both clinical and non-clinical services. These services include preventive, and curative health and contraceptive services at the thana level and below. The major contraceptive services include vasectomy, tubectomy, condoms, oral contraceptives, injectables, IUDs and Norplant (DFP and Population Council, 1993).

A wide range of service outlets have been established throughout the country to deliver services (DFP and Population Council, 1993).

(i) National Level

- Azimpur Maternity and Child Health Training Institute.
- Mohammadpur Fertility Services & Training Centre, Dhaka.
- 2 Model Clinics attached to 2 Medical College Hospitals in Dhaka.

(ii) District Level

- 6 Model Clinics attached to Medical College Hospitals in 6 districts.
- MCH-FP clinics at district hospitals.
- Mother and Child Welfare Centres (MCWC).

(iii) Thana Level

- MCH-FP Units at Thana Health Complex (THCs).

(iv) **Union Level**

- Health and Family Welfare Centres (H&FWC).
- Rural Dispensaries (RD).

(v) **Ward/Unit Level**

FWAs, through home visits, motivate mothers to use MCH-FP services, and supply non-clinical contraceptives. They also provide primary health care services.

(vi) **Satellite Clinic**

Satellite Clinics (SCs) are organized twice a week by FWVs from each Family Welfare Centre to provide MCH-FP services at a local level. SCs are held at selected homes, scattered evenly throughout the unions. Similarly, Medical Assistants (MAs) organize SCs for health education.

Lessons Learned

The review of the service delivery component is presented in two parts. The first will focus on the delivery of services at the household level, and the second will discuss service delivery at the clinic level. Service delivery is effected by the strengths and weaknesses of all of the components reviewed in the following sections.

Household Level: A substantial number of studies have been conducted on the performance of the FWAs. In these studies, performance is usually measured by the contraceptive prevalence. In general, these studies have found that a typically high performing FWA is: 1) relatively young with few children; 2) well trained and "educated"; 3) credible to and accepted by the community; 4) knowledgeable about contraindications and side-effects; 5) a good communicator; and 6) supported by family members, particularly their husbands (Simmons et al., 1990; Kabir and Uddin, 1989; Kamal et al., 1989; Neaz and Banu, 1992; Khuda et al., 1992b; Rahman, 1994).

Another group of studies investigate the relationship between the frequency, duration and quality of FWA - client contact, and the level of contraceptive prevalence or discontinuation. For example, a positive association between FWA visits and oral contraceptive use was found among national and regional samples of women (Khan and Rahman, 1996). Koenig et al. (1989) found that the frequency of contact was more associated with the prevalence of reversible family planning methods than with the prevalence of all methods; and that high quality visits are not a significant predictor of changes in prevalence unless the high quality exchanges are frequent. Another study found that household visits by FWAs have an impact on use continuity among all types of users, including adopters of long-acting methods such as IUD. Hence, "outreach not only introduces women to family planning; it also provides critically needed support for continuing contraceptive use over time" (Hossain et al., 1993). Cleland et al. (1994), in their analysis of the success of the national programme, conclude that frequent contact between outreach workers and clients increases contraceptive use; and that this relationship is strengthened when combined with approaches such as Jiggasha.* The

* Jiggasha (in Bangla, the term means to inquire) refers to an outreach scheme that forms network groups around opinion leaders. Service providers (FWAs) meet with Jiggasha to discuss family planning, promote use, and foster open discussion of family planning (Cleland et al., 1994).

latter initiative enhances the roles and status of women, and promotes the flow of information and discussion on family planning.

Several studies have investigated the factors related to household visitation by the FWAs and the types of clients who are not visited. Distance from the FWAs' residence to their clients home and size of work-area or population-worker ratio were found to be negatively associated with the frequency of visits (Phillips et al., 1986; Hossain, 1988; Simmons et al, 1990; Mabud et al., 1991; Rahman et al., 1993; Ashaduzzaman et al., 1993). Changes in the pre-planned monthly work schedules of FWAs can easily be made to improve the duration and frequency of contact with their clients (Koblinsky et al, 1989). And poor, relatively older women, lower parity mothers, non-users of contraceptives, and those who have no stated preference for family size are less likely to be visited by FWAs (Khuda et al, 1993; Nessa et al., 1991; Mitra and Associates, 1991; Rahman et al., 1993).

Surveys such as the 1993-94 Bangladesh Demographic and Health Survey have found that only about 40 percent of eligible women in rural areas are actually visited by FWAs. Because of the large workload of individual FWAs and the considerable travel time involved, the FWAs often do not have sufficient time to counsel and monitor the individual needs of their clients (ICDDR,B, 1996).

In addition to insufficient coverage of eligible women, there is an increasing concern among policymakers and programme managers about the sustainability of the existing doorstep service delivery system. Accordingly, the ICDDR,B MCH-FP Extension Project (Rural) is testing alternative service delivery strategies which are likely to be more cost-effective and also allow field workers to concentrate on motivating non-users. One such strategy is cluster visitation. Under this approach, services are provided by the FWA to a group of about 25 women at a centrally-located neighborhood house, rather than at the homes of individual clients. The cluster visitation intervention is being tested in four unions of Mirsarai and Abhoynagar Thanas. Preliminary findings indicate that there is no negative effect of clusters on the contraceptive prevalence rate. The relative share of cluster spots as a source of contraceptive supplies is increasing, while the share of supplies provided at homes is decreasing (ICDDR,B, 1996).

The earliest work on quality of care at the household level was descriptive. An observational study of FWAs found that the family planning care they provided was not comprehensive, and in some cases was inappropriate or incorrect. Education and motivation were "delivered well in many cases," but only rarely did FWAs assess the clients' understanding of the educational information provided. Screening for method suitability for new family planning clients, assessment of family planning acceptors for side effects and method satisfaction, and screening/assessment of pregnant and postnatal women were almost never done (Koblinsky et al, 1989).

Further analysis was conducted on FWA and client interactions to assess opportunities missed by the FWA for giving "quality" of care. Quality was determined by the "appropriateness and adequacy" of the content of the messages and services provided by the FWAs. The findings indicated that the FWAs would need to almost double the interaction time with their clients in order to provide the care described as a quality service for the situations observed (Koblinsky et al., 1989).

The researchers maintain that the monthly work schedule of the FWAs could be changed to increase the time spent in discussions with each woman without decreasing their frequency of contact. This would enhance the potential for FWAs to provide quality care, and ultimately to increase contraceptive prevalence. Other strategies to improve quality of care include retraining of the FWAs and their supervisors with the objective that a higher proportion of visits result in a "tangible and memorable interaction" with clients. However, the FWAs in the study had already been retrained the previous year in a special four-week course. Hence, it is concluded that, "retraining alone without concomitant improvements in the supervisory and technical support system does not appear to improve the quality of services in a sustainable fashion" (Koblinsky et al., 1989).

Another study of interactions between FWAs and their clients found that overall quality and availability of services are inadequate. This was the case in the area of medical back-up for contraceptive complications, other dimensions of reproductive health, pre-and postnatal care, and child health (Simmons et al., 1990).

Analytical studies on quality have generally provided evidence of the importance of quality of care for contraceptive behaviour. Two studies utilized an index of quality of care constructed from responses of clients to questions regarding their perception of the quality of services being provided by FWAs. These questions asked if the FWA recognized the need for privacy; responded to client questions; sympathized to problems and needs, when appropriate; helped with problems, and provided adequate information. The first study found that the probability of adopting modern contraception is two and a half times higher when the quality of care index as perceived by women is "excellent" than when the index is perceived as "poor" (Hossain et al., 1991). The second study found that quality of care was significantly related to both the probability of using a method at baseline as well as adopting a method during the subsequent observation period of 30 months. Among baseline non-users, those who perceived a high quality of care were between 2.3 and 3.2 times more likely to adopt a family planning method during the 30-month period than women who perceived that they received poor service. Further, clients who reported a high quality of care were 30 percent more likely to continue using contraception, than those who reported that they had received poor care, even after controlling for other factors (Koenig et al., 1992).

Finally in another study utilizing the same data set, the researchers maintain that women were more likely to perceive that they had received quality services in areas where interventions were increasing and supporting the provision of family planning at the doorstep, than in areas without these interventions (Whittaker et al., 1993).

Clinical Level:* In the 1960s, three clinic-based family planning methods were available - IUD, and male or female sterilization. Given those limited choices and the conservative nature of the society at that time, vasectomy was the first choice of the majority of acceptors. "The performance on vasectomy reached its peak in 1969, with 389,500 sterilizations" (Rob and Cernada, 1992).

Clinic-based programme momentum was halted because of political unrest from about 1969 through the mid-70s. When it started again in 1975, a fuller range of methods were available through the GoB programme, though sterilization continued to be most popular for women.

* Portions of this section have been published previously in Piet-Pelon, N.J., *Clinical Contraception: Revitalization and Renewal*, UNFPA, Bangladesh, 1996.

Then came the eighties. No doubt when the history of the Bangladesh programme is written, the decade of the eighties will stand out as the decade of greatest change. At the beginning, the programme ran much like that of other sub-continental countries with strong emphasis on sterilization for couples who had achieved their desired family size. By the end of the decade, permanent method acceptance was waning, while a cadre of community-based workers concentrated on disseminating temporary methods through door-step services. The new thrust gained credibility and momentum as both GoB and NGO programmes began to systematically reach women at their homes with oral contraceptives and condoms. Two new methods were then introduced, which were initially available only at clinics. Of these, the injectable gained nationwide acceptance, while Norplant was offered only on a limited basis.

Clinical methods at the beginning of the decade included only sterilization and IUD. Male and female sterilization and IUD were widely available, with incentives for providers, referrers and clients focussing the programme on those methods and driving the numbers up. In 1984, more than 500,000 sterilizations were performed. There were more tubectomies than vasectomies. That same year, IUD performance was more than 300,000. In 1985, sterilization began to decline, but IUD performance increased to more than 403,000. By 1986, however, both sterilization and IUD began a declining trend. Referral fees were withdrawn in October 1988. By 1989, only 215,000 new sterilization acceptors and 329,000 IUD acceptors came into the programme.

Three separate issues changed the programme during the 1980s:

- (1) A backlash from critics, both at home and abroad, to the aggressive sterilization programme and its potential to abuse client rights.
- (2) An awareness at the policy level that even spectacular sterilization performance could not singularly achieve the demographic goals of the country. Couples who opted for sterilization had an average of 6 children - a number far exceeding replacement fertility. In order to reach the national goals, the programme needed to provide safe and easy ways for younger couples to have small families.
- (3) An increasing confidence that the GoB and NGOs could deploy a sufficient number of community workers and volunteers to motivate couples to accept and use temporary methods effectively. Thus, the balance of the programme shifted to resupply methods.

What can be concluded regarding the historic use of clinical method service delivery which can be applied to the improvement of future programmes? There are both positive and negative aspects of service delivery to be considered for each method, particularly when information from the present decade is included.

Sterilization: For sterilization, there are negative conclusions regarding payments. The reliance on payments of all types (for providers, referrers and clients) led to accusations of abuses, and concerns that clients were making decisions they would later regret.

These accusations were not entirely accurate. However, there is little doubt that the use of payments/incentives skews the programme's approach to clients. Consequently, it is nearly impossible to parry the criticism that free and informed choice is potentially denied. At the same time, it is not possible to accurately establish whether clients consequently regret the decision to be sterilized. A summation of studies done during the peak sterilization performance period concludes:

"There is no evidence to suggest that sterilizations are performed on men and women who do not want to limit family size. The decision of an individual to be sterilized is primarily the result of a feeling that their family size is as large as they want (70 percent) or is already too large (30 percent). This finding runs counter to the statement of a few clients who have reported that they have become sterilized for 'money' only. It is, therefore, evident that the financial motive for seeking sterilization is not the dominant one; rather it is an additional spur to action and only operates when there is a desire, perhaps latent or ambivalent, to limit family size" (Huq and Ahmad, 1989).

A confounding factor is that circumstances change. The loss of a child or spouse can alter the perception of a decision which was "right" at the time it was made. Thus, 1 in 6 sterilized women interviewed in the 1993-94 BDHS regretted their decision. This is about 400,000 women nationwide (Streatfield et al., 1994).

There are two positive lessons from the early sterilization programme. The first is **accountability**, and the second is **programmatic/institutional readiness to provide the services**.

Accountability: Workers were given performance targets. If those targets were not met, there was a consequence (i.e., loss of salary). While the target aspect of the system is inappropriate for a client-centered programme, consequences for non-performance of required work is an essential lesson which the programme could re-learn. Recent research, as well as routine supervision visits highlight absenteeism, tardiness, and non-performance of duties as common by both medical and non-medical service providers. Guidelines for disciplinary action are in place, but they are not followed. Salaries continue and additional benefits, like training, are given to workers, regardless of past performance or future performance intention. In the present situation, there is no differentiation in the system's response to a worker who is idle and one who performs to maximum capacity.

Programmatic/institutional readiness to provide the services: When sterilization was the programme's main method, the system was geared to provide the service at every available service site. The providers were trained and in place, as were the logistics/supplies. The infrastructure was ready. Services were offered from both mobile and static centres. Referrers, who worked in the field, could be assured that any client they brought to the designated clinic would receive services. In other words, there was "truth in advertising".

This is not the case in the 1990s. Though there should be sterilization services available at all THCs, Model Clinics, MCWCs and district hospitals, a recent situation analysis of clinical method service delivery in selected facilities found many service sites unprepared. All 9 surveyed Model Clinics had tubectomy and eight had conventional vasectomy services. Only 2 of the 9 Model clinics, however, offered non-scalpel vasectomy (NSV). Of the 19 THCs surveyed, 17 had tubectomy and 13 had conventional vasectomy. Again, only one had NSV. Eight of the 9 MCWCs surveyed offered tubectomy services, while none offered vasectomy services (Barkat et al., 1994b). These figures indicate that it is particularly difficult for a man to find vasectomy services from either a THC or MCWC. Even the Model Clinics do not provide NSV, which is the safest method of male sterilization and should certainly be available in "model" services.

Even where sterilization services were said to be available, equipment and facility gaps identified in the situation analysis raise serious questions about quality of care. Trained providers, essential for sterilization services, are not available at all sites where the services are supposed to be offered. Only 44 percent of the providers in the Model Clinics had been trained for sterilization services and 75 percent in the THC.

The composite picture from this, and other studies, indicates that designated family planning service points and providers are unprepared to serve clients in need of sterilization. This is quite different from the past, when every effort was made to ensure that service points and providers were available to meet the programme's sterilization goals.

IUD: What is the situation with IUD services? Initially, the IUD programme was much like the early sterilization programme. The service focussed on payments and incentives, rather than client choice (the payment for clients and for service providers, though small, still remains in the programme today, but referrer payments have been withdrawn). Serving new acceptors was rewarded; however, the careful follow-up of services was not.

The current focus on reproductive health has encouraged a review of IUD services, since these relate to Reproductive Tract Infections (RTIs). Not surprisingly, this is not a new problem but one which has been pointed out by service providers for several years. In studies from the early 1980s, IUD service providers mention the symptoms of RTIs/STDs (i.e., white discharge and pelvic pain) as reasons for non-use or discontinuation of IUDs (Khan et al., 1984). Yet, no previous effort was made to revise the FWV curriculum to provide the necessary information to diagnose and treat these conditions. Nor were the FWVs systematically trained on case management for women requiring both IUD and RTI services. While it has not been proven that women stop using IUDs specifically because of RTI conditions, nearly 70 percent of acceptors who discontinue within the first year do so because of side effects or health concerns (BDHS 1993-94).

On other quality of care issues (e.g., appropriate pelvic examination and IUD insertion techniques), numerous studies and field observations over the past decade have pointed out the shortcomings of the IUD services (Kamal et al., 1990; Ahmed et al., 1992; Barkat et al., 1994; Ahlborg and Akhand, 1996; Subrata et al., 1996). Unfortunately, timely interventions have not been made to improve practical training for FWVs. Without more effective training inputs, it is difficult for FWVs to provide better services.

Injectable: This method was first introduced in the mid-seventies and was available nationwide by early eighties. The aggressive introduction of the method has had a positive influence on initial acceptance. Distributed without incentives, the injectable's wide popularity attests to the fact that women will accept a method without receiving a payment.

Easy access is probably most responsible for the significant increase in injectable acceptance. Acceptance has increased from 0.2 percent of the CPR in 1983 to 4.5 percent of the CPR in 1993-94. The future of the injectable in the programme also looks favorable. Almost one-quarter of non-users indicate that they will begin to use the injectable in the next 12 months. This is second in popularity only to the oral contraceptive (BDHS 1993-94).

However, not every aspect of the injectable programme is positive. There are both client and programme concerns.

Client perspective: Fifty-eight percent of injectable users discontinue within one year of acceptance - a rate which is only exceeded by condom discontinuation. The primary reason for discontinuation are "side effects," mentioned by 60 percent of the discontinuers (BDHS 1993-94). This points directly to quality of care concerns. Are women being sufficiently informed about side effects prior to the injectable? Are they being supported by the programme through the first weeks of injectable use? Can workers provide both the injectable service itself as well as the support/counseling required for a high-quality door-step programme? At present, it is not clear whether more women would continue injectable use through the side effects of the adjustment period if they were provided more information. However, it is clear that the workers either do not have sufficient time or information to counsel women through this period.

Programme perspectives: The inappropriate care and disposal of syringes has been pointed out in studies, assessments and field observations (Barkat et al., 1994; Mirza et al, 1996). In spite of a contemporary circular from the GoB describing the proper disposal of syringes, the problem continues at potential health risk to the population at large. Often domiciliary injectable services, the FWA carries the used syringes, ampules and cotton to her home for disposal. "No instructions or containers are given to carry the used needles and syringes. The needle coverings very often open in their bags. (FWAs are offered) no instruction on 'no touch technique' for recapping needles. Needles kept at home are accessible to family members/children" (Mirza et al., 1996).

Although there have been some improvements at the FWC and THC, conditions for syringe disposal are generally not any safer. "The used needles and syringes sent by the union and field staff are received at the Thana office by the storekeeper. They are disposed only after a 'good' number of syringes and needles have been collected in a paper carton. Disposal is done by burning in a ditch. There is no fixed timing for burning waste. It may be done every one/two/three months. FWV, *ayah*, or sweepers burn the waste in the presence or absence of Thana officials....No instructions for safe storage. Instructions to burn every month are not followed. How pits should be dug is not specified (distance from source of water, slope of land, depth of pit)" (Mirza et al., 1996).

Inappropriate disposal of contaminated wastes from the injectable programme has the potential to contribute to the spread of AIDS and/or Hepatitis B, C and D. "The existing situation ... is very hazardous. The delivery of family planning services may be responsible for the transmission of various types of infection to the service recipients, as well as to the members of the community where the services are being offered. In addition, the service providers are also exposed to serious risk of infections" (Mirza et al., 1996).*

The programme has been advised to use one brand of injectable. Based on field study, ICDDR,B and the Directorate of Family Planning experts concluded in a 1994 workshop that: **There should be only one brand of injection preferably DMPA to avoid confusion of the workers and client. This brand is also more popular with the client** (DFP and ICDDR,B, 1994). In spite of this recommendation, which was based on programme research, there are as many as three different injectable brands in the programme, which pose problems insofar as training of providers as well as logistics are concerned.

* While the inappropriate disposal of contaminated clinical waste material is a serious issue for the injectable program since these services are offered in the community, as well as at all levels of service delivery, it is also a very serious quality issue for the sterilization and IUD services. When clinical waste is not properly managed, the quality of services cannot be assured.

Weaknesses in the Clinical Family Planning Method Service Delivery

By 1990, it was clear that the downward trend which had begun in 1985 for sterilization and IUD performance was not a temporary problem but a performance pattern. The debate began (and continues unabated), on whether there is a role for the clinical methods in the present and future programme. Also, questions are raised regarding the demographic impact of the programme as well as issues related to the sustainability of the programme itself. Answering these questions requires a critical look at present realities regarding clinical contraceptives.

Performance

Performance is poor. "Voluntary sterilization and IUD performance has fallen off since the mid-1980s, and the rate of the fall-off appears to be accelerating. From an all-time high of over 550,000 in the 1983/84 fiscal year, voluntary sterilization performance plummeted to 165,000 in 1990/91, the lowest since 1978/79. IUD performance also declined after reaching high mark in 1984/85" (Ahmed et al., 1992). Since 1985, the numbers have continued to plummet. For example, vasectomy performance in most months of 1995 was less than 1,000 a month nationwide. The rate of decline for vasectomy performance is 5.9 percent per year, while for tubectomy the rate of decline is 2.6 percent (Barkat et al., 1994). From July 1995 to June 1996, total sterilization performance is less than 50,000. The GoB facilities performed 32,350 of these. Average monthly performance was 2,700 cases. NGO clinics, though few in number, provided about 34 percent of the total national performance.

Norplant, a method which has had positive results in extended field trials in Bangladesh, is not fully utilized as a programme method. Rather, Norplant is limited to 83 centres. This method has a potentially positive niche in the Bangladesh programme (Hardee et al., 1994). It is particularly appropriate for young women with children under five years of age, who need long-term pregnancy protection because they have completed their family size. A recent follow up study in an urban NGO clinic found that Norplant was more acceptable to women than injectable because it was a long-acting, worry-free method, and one which they felt they controlled (AVSC International, 1995).

Client Needs

Client needs are not met. Many women who use resupply or traditional methods could be more appropriately served by the programme if they used a longer-acting method. Older, high-parity women remain at risk of accidental pregnancy. In the present programme, a large proportion of women over 30 years of age are using resupply or traditional methods. In the 30-34 year age group, 43 percent use no contraception while an additional 33 percent use a resupply (oral contraceptive, condom) or traditional method. This means that a full 75 percent of women are either not protected or not appropriately protected by a family planning method (BDHS 1993-94). Also, high parity women are not protected as effectively as they could be. Slightly more than half of them use a contraceptive. Of those that do, only 15 percent are protected by sterilization (either male or female) or IUD. The rest depend on a resupply method for contraception.

The current programme does not sufficiently meet the needs of women with the **most effective methods** for their reproductive life. These women are at risk of **highly unwanted** pregnancies. If they have such a pregnancy, there is a strong likelihood that they will

terminate it either through MR or illegal abortion. These services pose unnecessary health risk for the women involved.

Quality of care - Medical

Forty-seven percent of women who have been sterilized state that they are having problems with their method. An additional 14.5 percent report that their husbands have problems with their vasectomy. These problems are not related to regret but health complaints (i.e., weak/tired, headache, dizziness, weight loss, etc.). This is an exceedingly high percentage for a method which is supposed to be a simple procedure to deliver and a trouble-free experience afterwards.* Problems with injectable contraceptives were expressed by nearly 48 percent of women, while problems with IUD were mentioned by 36 percent. Not surprisingly, the problems with the latter two methods clustered around bleeding issues - either excessive menstruation or amenorrhea (BDHS 1993-94).

Appropriate medical standards applied at the service sites in combination with ongoing training on clinical procedures, and regular supervision of service providers, can contribute to a higher quality of clinical services. These activities have to be governed by a set of nationally recognized standards for training and service delivery which are strictly enforced. Problems exist among each of these activities in the current programme.

(1) The standards which govern clinical training and services have recently been reviewed, revised and disseminated. Compliance to the standards, however, is not universal. Thus, the clinical programme is not operating as required to ensure safe services for clients. There are several reasons for non-compliance, but the most important is the dysfunctional relationship between medical and non-medical staff of the family planning programme. While mainly an administrative issue (which needs to be addressed through GoB service reform), the non-cooperation between the two cadres has created major problems in service delivery, particularly for clients who seek clinical services. The services often do not exist, either because a physician is at times unwilling to perform the service or unable because he has not been trained. The dysfunction between medical and non-medical staff has eroded both public confidence in clinical family planning services and the confidence of the field-level staff who should refer clients for clinical services. As more and more clients have been unable to get appropriate services, field-level staff believe their best choice is to keep women on resupply methods which are within the staffs' control.

Standards for training, particularly practical, clinic-based training, continue to be difficult to ensure. NIPORT and AVSC International jointly implement the programmes for sterilization training which include TOT, as well as comprehensive and refresher training courses for service providers. The revised curriculum is appropriate for the conditions service providers will meet in their work sites. However, training centres have insufficient case load for competence-based training. Too many of the trainees have insufficient practice at the end of the training to feel competent to perform solo procedures when they return to their assigned service site.

* The problems with sterilization expressed by women in Bangladesh is considerably higher than other countries. For example, the 1991 Indonesian DHS asked the same question with quite different results. For female sterilization, 91.8 percent experienced no problem with the method while for male sterilization, 94.4 percent experienced no problem. The high percentage of acceptors who express problems in Bangladesh calls for attention toward issues of medical quality.

Since the programme's inception in 1992, 49 and 359 participants have completed TOT and comprehensive training, respectively; and 71 have participated in refresher training (Khan et al., 1996). If each of these trainees were performing sterilization services regularly, an impact on performance would be noticed. Instead, performance has continued to decline.

With FWV training, there are similar concerns about impact on clinical service delivery. FWVs are trained on IUD service delivery, as well as other family planning methods during their basic training. However, most FWVs lack practical experience in IUD insertion, since there are not sufficient numbers of IUD cases in their practice sites. It is not unusual for an FWV to graduate with no clinical experience.

WHO recommends that 50-60 pelvic examinations and 10-15 IUD insertions be performed to achieve competency in these procedures. A recent study of FWVs found that one-third of FWV trainees had done no procedures during their basic training, while only 19 percent had done more than 21 procedures. When given refresher training, 54 percent had no clinical procedure experience and only 7 percent had performed 21 or more cases (Ashaduzzaman et al., 1995). Without the practical training, the FWV cannot be expected to provide a consistently high quality service to the client.

(2) Infection prevention standards have been re-set in Bangladesh, institutionalizing the essential decontamination procedures recently introduced worldwide. The combined effort of the Directorate of Family Planning, particularly the Clinical Services Division, with technical assistance from international technical assistance agencies (AVSC International and IPAVS) show that significant problems can be addressed when concentrated efforts are made. The final step will be to institutionalize this new standard as it is an indispensable aspect of maintaining quality services.

Also, standards for facilities and supplies/logistics must be maintained to ensure safe services. Situation analysis and other facility assessments have repeatedly pointed to gaps in these elements, including critical equipment like sterilizers (Ahmed et al., 1992; Barkat et al., 1994; Ashaduzzaman et al., 1995; Rahman et al., 1996). The most recent situation analysis of Rajshahi Division found complete IUD kits available in only 61 percent of service delivery points and sterilization kits in only 43 percent. In addition, "Drugs and Dietary Supplement (DDS) kits were found to be inadequate in almost all the service centres...Most of the centres did not receive the allotted quota of DDS kits in the preceding year" (Rahman et al., 1996). These are commonly cited problems, which have not been systematically addressed even though the identified solutions are within, rather than outside, of the control of the family planning programme. The Rajshahi situation analysis notes: "Non-availability of equipment as per set standards in most of the clinics, could be due to (1) inadequate supply from central store, (2) failure on the part of service providers in requisitioning equipment (3) insufficient knowledge of service providers about types of equipment they should have or unconcerned attitude of service provider, and (4) non-availability of equipment in central store" (Rahman et al., 1996). With sustained attention, each of these problems is solvable.

(3) Supervision of clinical services is done through Assistant Directors for Clinical Contraception (ADCC), a relatively new cadre. They are assisted by the FPCST, which is a composite of 8 teams of physician/nurse consultants assigned to work throughout the country. There are several reasons that these two supervisory systems are inadequate: 1) There are too many clinical sites for the available manpower to regularly supervise; 2) The FPCST members are experts in contraception with impressive clinical experience but the

same cannot be said for the average ADCC who is the primary supervisor. Some of the ADCCs lack the specialization to supervise clinical services. 3) The ADCCs' work is influenced by the medical/non-medical personnel conflict and can hamper their productivity.

Non-Medical Quality Issues

Access to information is the most critical aspect of non-medical quality. Do clients have access to complete information about contraceptive choices in the context of their own reproductive health and life cycle?

Unfortunately, the answer is "no" in most cases. The primary information provider is the frontline worker from the GoB or NGO programmes. This worker also is directly responsible for the delivery of two methods - oral contraceptives and condoms - and may be responsible for the delivery of injectables as well. The tendency of the worker is to provide information on the methods which she, herself, can supply. This is logical since she can provide the potential client "one stop shopping" by providing both information and service in a visit.

The frontline worker is also influenced by positive and negative aspects within the programme. 1) Medical quality issues directly effect the decisions of the frontline workers. If she believes that the quality of services available to her clients at a clinic level are poor, she will not risk her reputation by sending them to the clinic. 2) The frontline worker receives an "equal reward," whether she refers a client for sterilization or provides her with condoms or oral contraceptives. Yet, it takes her much longer to counsel a woman about the sterilization and accompany her for services. This is more time than many workers perceive that they have, so they persuade the client to use a method which can be easily discussed and immediately delivered. 3) The frontline worker is often not well-informed about clinical methods and may feel uncomfortable or unable to answer a client's questions. 4) Frontline workers have not been trained to segment clients. They do not understand the health needs of women at different stages of their reproductive life. Thus, they offer oral contraceptives to women of age 20 or those of 35. The current choice at the community level (of only oral contraceptives, injectables, and condoms), therefore, does not constitute "informed choice."

What about information at the clinic level? The recent situation analysis of clinical contraception shows a mixed, though mainly negative picture (Barkat et al., 1994). Method-specific IEC is not consistently available. Material about sterilization is available at 53 percent of THC's, but none of the Model Clinics. Similarly, information on IUD is available at 56 percent of MCWC's and none of the Model Clinics.

During the observations of client-provider information exchange, clients were asked about their reproductive intentions, their desired family size and the desired timing of their next birth. They were advised about only the methods which they preferred. The information about side effects and possibilities of switching to other methods was not routinely provided. In none of the interactions was any mention made of vasectomy, even though providers knew about the method and its effectiveness.

Considerable attention must be given to the information which clients require, in order to make informed, sometimes difficult, decisions. The limited information currently available is insufficient for that purpose.

Recommendations for Strengthening

Household Level: Policy makers and programme managers have indicated that the existing doorstep service delivery system cannot be sustained. Hence, alternative service delivery strategies which are more cost-effective and allow field workers to focus on motivating non-users have to be tested. One promising strategy which is currently being tested by the ICDDR,B MCH-FP Extension Project (Rural) is cluster visitation. This approach provides services by FWAs to groups of about 25 women at centrally-located neighbourhood houses, rather than at the homes of individual clients. The initial results of the testing of the approach have been positive, and testing should continue. It should be noted, however, that the transition from doorstep service delivery to static centres, irrespective of the new strategies, should be conducted in phases. The phasing of the transition is necessary to ensure the minimum disruption in the services provided by the family planning programme.

The quality of services provided to clients by FWAs is inadequate, particularly in the areas of medical back-up for contraceptive complications, other dimensions of reproductive health, pre and postnatal care, and child health. Therefore, retraining should be provided to FWAs in these areas concurrently with the strengthening of the supervisory system that is discussed later, in the section on monitoring and supervision. This is particularly important because retraining, in the absence of supervision and technical support improvement will not sustainably improve the quality of services.

Clinical Level: Along with the unmet need for spacing and limiting contraceptives for women who do not use methods, there is an unmet need for appropriate contraception among those women who do. Client segmentation, using the life cycle or reproductive health need approach, can be used as the basis for approaching these women. Frontline workers should be re-trained to segment their eligible population and to provide information on methods which would be most appropriate from a reproductive health perspective.

Access to clinical contraception needs to be improved. Though the national programme is a seven method programme, only three methods are consistently available - oral contraceptives, injectables, and condoms. It is not possible for the current programme to offer sterilization and IUD services of consistently high quality in all service points, unless the quality of services, the condition of facilities, the logistic and supply system, and the training for clinical methods are further improved.

The long-term solution is a systematic refurbishing of the 700 sites and revision of training programmes which are based on competency. A plan, based on present performance and population needs, with clear achievement benchmarks, can be developed to re-establish services. The minimum goal should be to have a site in each thana where all sterilization and Norplant services are available, while IUD and injectable services should be available in all static facilities.

While all sites are being re-developed for clinical contraceptive services, **focal sites** should be used to maximum capacity. These focal sites can include GoB sites, like MCWCs, THCs and NGO sites which have been consistent performers. In the short term, referral systems, and a limited use of mobile service teams to these sites, can be established to meet immediate client need.

Payments of all types have a deleterious effect on the clinical programme. The payment system is dysfunctional, does not change the number of clients served, and can lead to a less

informed choice to clients. The information available from clients, albeit limited, indicates that they do not make decisions about accepting services based on the payment they can receive. For all these reasons, consideration should be given to a policy change which removes all payments from the system.

Having brand choice for injectables and for IUDs increases the training and logistics burden and does not enhance services. One injectable and one IUD provided through a high-quality service delivery system are sufficient to ensure client choice.

Through research and field experience, DepoProvera has emerged as the most acceptable injectable. The second injectable, NetEn, has to be provided on a different schedule with different size needles. The logistics and training for these two different injectables put an unnecessary burden on the programme at all levels. The elimination of NetEn would actually enhance service delivery for injectables. Training could be concentrated and, consequently, more effective for the paramedics involved as the primary service providers.

Two IUD choices (CuT380A and CuT200B) similarly encumber the training system. Each IUD has specific service delivery methodology which requires actual case practice to gain competence. The number of cases currently available in the training centres is insufficient to allow the primary service provider, the FWV, to gain competence for IUD services. One IUD in the programme is sufficient and should be chosen based on failure rates, long-term use capacity, and ease of insertion and removal.

Section III: Administration

Structure and Activities

The Administration Unit is responsible for personnel administration, including disciplinary issues and recruitment; common services including security (personnel); and transportation (i.e., the drivers employed by the programme). The Unit is under the leadership of a Director. A Deputy Director, Personnel reports directly to the Director, and is responsible for supervising the work of four Assistant Directors (AD): the AD Personnel-I; the AD Personnel-II (Discipline); the AD (Common Services); and the AD (Transport).

In general, there are chronic staff shortages at all levels of the programme which negatively affect administration and delivery of services. A number of specific constraints were identified with regard to the personnel component of the MCH-FP programme.

(1) An additional 2,000 FWVs are needed, but only 1,000 have been recruited. The recruitment of FWVs is particularly important because their current number is insufficient to ensure continuous service at FWCs. When the FWVs perform their duties at SCs the FWCs are left vacant and clients are unable to obtain services.

(2) Although 250 MO/MCHs have been appointed on an experimental basis, most of them do not stay at the FWC because no accommodation has been constructed. Consequently, their services are underutilized.

(3) Currently, one-third of the posts for TFPOs are vacant, and by 1998, 65 percent of the existing TFPOs will retire and will have to be replaced. In addition, retirement at the Director level will also occur in 1998, and only 2 of 14 Directors will remain. This is a major personnel constraint to the leadership of the programme, and requires immediate attention. This is particularly important because the recruitment process takes about one and a half years for TFPOs, plus the time that must be spent in training.

Recommendations for Strengthening

The recruitment process for FWVs should be accelerated through a phased approach, which takes into account the level of client demand for services at FWCs. Initially, an additional FWV should be assigned to those FWCs which are unable to meet current demand. Staffing at FWCs where the demand is currently low should take place at the end of the recruitment process.

A circular has been issued from the Family Planning Directorate which instructs the MOs(FW) to perform their duties as stipulated in their job descriptions. The circular stipulates that they must be in regular attendance at the FWCs to provide services to clients on a regular basis. However, what is imperative is that the directives in the circular are strictly adhered to. The MOs(FW), like other staff, must be held accountable for their job performance. To ensure accountability, it will be necessary to strengthen the supervisory system. This issue is discussed in Section VII on Monitoring and Supervision.

Both the current and future vacancies for TFPOs, MOs, and Directors should be addressed by the preparation and immediate implementation of a human resource development plan which will ensure the timely recruitment and replacement of these staff, especially related to the delivery of ESP.

Section IV: Planning

Structure and Activities

The structure of the Planning Unit (PU) is characterized by three levels. The Director of the PU and his support staff make up the first level. The second level, which reports to the Director, is comprised of two Assistant Chiefs and their support staff. The remaining level is made up of four Research Officers (plus support staff) who report to the Assistants Chiefs.

The PU has two primary functions. The first is to assist the Director General with the planning and monitoring of associated projects (i.e., the 19 development projects supported by donors). This assistance includes the review of the projects' finances and quality, and the monitoring of their implementation. Additional coordination is conducted between the various units of the Family Planning Directorate, that are associated with the development projects. The mechanism through which these activities are carried out is a regular monthly project review meetings held by the PU.

The second function of the PU is to coordinate all the MCH-FP activities of the NGOs. This includes the affiliation of the NGOs, monitoring of their activities, and an annual review of these activities, which is used to determine whether or not projects are being conducted "satisfactorily." If they are not satisfactory, the PU can issue a circular, warning the NGO. This can affect the annual renewal of approval for the NGOs' activities, if the reasons for the warning are not acted upon. Meetings are held every two months or as needed by the PU to carry out effective coordination of the NGOs.

There are a number of constraints under which the PU operates:

- (1) The posts for Director and his staff are under the development budget. This results in low morale and a high turnover of staff.
- (2) The number of staff in the Unit is insufficient to conduct all of the required activities. This has been exacerbated by the rapid expansion in the number of NGOs (now at more than 800) and development projects for which they are responsible. According to the Director of the PU, all projects must pass through the unit for approval before being sent to the Director General for final approval.
- (3) The staff have not received sufficient training to conduct their activities, specifically in the areas of planning, management, and supervision.
- (4) Resources are currently unavailable to conduct the type of monitoring required to assess the progress of projects in the field. A plan for monthly field visits by staff has been proposed, but has not yet been approved.

Recommendations for Strengthening

A thorough review of the functions of the PU should be conducted with the objective of reducing and/or eliminating those activities which are not directly related to planning. This would include supervision, the review of project finances and quality, monitoring and implementation, and registration of NGOs. The reduction in workload would allow staff to devote more time to planning activities. Since these latter activities have generally not been conducted, it is essential that a training programme is implemented to build the necessary planning skills among the PU staff.

Section V: Training

Structure and Activities

The National Institute of Population Research and Training (NIPORT) was established in 1979, following the merging of the Directorates of Training and Research by the MOHFW. The mandate of NIPORT is to: a) provide task-oriented maternal and child health, family planning and management training for all categories of MCH-FP personnel from administrative and technical officers at the district and thana levels to field workers at the village level; and b) conduct training-related and operations research (OR) together with population studies, and to incorporate the research findings into MCH-FP policy making and service delivery (Haider et al., 1995). More specifically, the objectives of NIPORT are to: a) impart training to programme managers of health, family planning, and multisectoral programmes from the thana level and above, as well as the senior and mid-level personnel of the NGOs; b) supervise the fieldworker and paramedic training conducted in the twenty Regional Training Centres (RTCs) and twelve Family Welfare Visitor Training Institutes (FWVTIs); c) conduct social science and population-related action research which is problem-oriented and programme focussed; and d) monitor and coordinate with other institutions/organisations involved in action-oriented research and training in population and MCH.

The activities of NIPORT are coordinated by two national-level steering committees - the Management Advisory Committee and the National Steering Committee for Population Research. NIPORT is a development of the MOHFW, and is under the leadership of a Director General (Haider et al., 1995).

NIPORT provides training directly and through the RTCs and FWVTIs. The RTCs are located at 20 thana headquarters, with the exception of one which is located in Noakhali. The FWVTIs are located at 12 greater district headquarters. The RTCs were established in 1977 to provide basic training to new FWAs; refresher training for both FWAs and HAs; team training to FPIs and AHIs; and orientation training to fieldworkers of multisectoral programmes on family planning in collaboration with the training institutes of the multisectoral programmes. The FWVTIs were created in the same year as the RTCs to provide institutionalized training and retraining to FWVs (Khuda et al., 1992b).

The major areas in which NIPORT provides training are: a) management development, supervision, monitoring, IEC, clinical contraception, and project planning for programme managers; b) supervision, monitoring and IEC through eight mobile teams for FPIs and AHIs; and c) logistics management and "designated courses" for FWVs and FWAs through the FWVTIs and RTCs, respectively (Haider et al., 1995).

Lessons Learned

Over the past decade, a considerable number of studies have found that there was a need for additional training for both government and NGO MCH-FP fieldworkers. The areas of need which have been identified include the following: population policies and programmes (Hossain, 1988); primary health care and health education (Khan et al., 1988; Mabud et al., 1988; Gupta, 1990; Rahman et al., 1991; Gupta 1991; Kabir and Uddin, 1989); client motivation and interpersonal communication skills (Mabud et al., 1986; Mabud et al., 1989; Gupta, 1991; Green, 1991; Hussain, 1991); assessment of contraindications and management of contraceptive side effects (Mabud et al., 1988; Gupta, 1990; Green, 1991; Rahman et al.,

1991); and record keeping, especially vital registration (Green, 1991; Rahman et al., 1991; Ahmed et al., 1992).

The most recent study conducted on gaps or needs in training for MCH-FP staff identified specific areas of need for each group of field personnel (Khuda et al., 1992b). These groups and their training needs are shown below:

<u>Field Personnel</u>	<u>Training Needs</u>
a) DDs, ADs, DD/FPs, ADs (General) and TFPOs	Population dynamics, FP-related management, IEC, and quality of care
b) ADCC	MCH related issues
c) SFWV	Supervision and quality of care
d) MA	General training on population dynamics and family planning
e) FWV	Interpersonal communication, supervision and quality of care
f) FPI	Supervision, record keeping and interpersonal communication
g) FWA	Interpersonal communication, general MCH record keeping and quality of care.

Additional training needs have also been identified in the area of voluntary surgical contraception (VSC). Although the BAVS, with AVSC funding, provided training to 2,800 doctors on VSC between 1970 and 1990, there was still a shortage of doctors who were trained. None of the 303 MO/MCHs recruited in 1992 have been trained adequately in sterilization. They have not been trained in vasectomy. This was a contributing factor to the decline in sterilizations. Further, by 1997 only 50 of the 180 MO/MCHs who reported for duty were trained in VSC.

While a plethora of studies have been conducted on training needs, investigations that evaluate the impact of training programmes on the performance of trainees (with one exception) have not been conducted. This problem was highlighted in a review of in-service training courses for health and family planning personnel at the upazila level and below which found that, "The training institutes and the programme managements generally work in isolation from each other, leading to little follow-up of post-training activities and performance. Information systems related to training activities and their impacts is virtually non-existent." Further, no research has been conducted "to assess differential impacts of the approaches of training" (Das and Rahman, 1991).

The only study that followed-up trainees in the field was an evaluation of the family planning logistics management training (LMT) in which the "actual performance in logistics management by the trainees" was assessed. The findings indicated that "the retention and diffusion of knowledge and skills learnt through LMT by the trainee - cadres are poor and have limited impact on overall logistics management (Huq, 1994).

Information collected from key informants indicate that there are four basic constraints affecting the operations of the training component. First, there is no information on previous training received by staff and staff are often arbitrarily assigned for training. Hence, some staff are trained repeatedly, while others are left untrained. Software has been developed to

generate the needed database to solve this problem, but there are still problems with updating the database. Second, there is a lack of coordination between the Family Planning and Health Directorates and NIPORT with regard to release of staff for training (i.e., sometimes staff are not released by one Directorate for training requirements of the other). Third, there is insufficient transportation for trainees to be taken to the field where their skills can be observed and evaluated. And, fourth there is a lack of clinics with sufficient caseload where FWVs can be trained.

The inadequate provision of, and capacity for training have also been identified as major constraints affecting the training component of the national MCH-FP programme (Hossain, 1988; Khan et al., 1988; UNFPA, 1990; Das and Rahman, 1991; Khuda et al., 1992b). For example, there are deficiencies in the provision of basic training given to MCH-FP personnel, particularly in the area of MCH services. FWVs receive 18 months of training. However, according to interviews held with key personnel and evidence from the field, the FWVs are unable to deal with maternal complications or perform clinical procedures, and most refer clients to the THC.

Refresher courses organized by NIPORT have not been timely or frequent enough to meet the needs of the expanding MCH-FP services and the needs of the trainees. Estimates from a national survey conducted in 1993 indicate that more than half of the FWAs (about 12,000) have not received any refresher training, which reflects the limited capacity of the training institutions (Khuda et al., 1993).

This constraint is further illustrated by the reduction in the target number of personnel to be trained by NIPORT under the Fourth Five Year Plan. According to NIPORT officials, the estimated gross demand for training in MCH-FP in the Government sector was 96,781 trainees (Khuda et al., 1994b). However, the initial target was set at 67,747 (NIPORT/GTZ, 1990), and then further revised to 53,616 (NIPORT, 1996). This final training target represents only a little over half of the estimated gross training need of the government system. Although NIPORT has generally achieved these training targets with the exception of GoB doctors (See Table 1), this achievement must be interpreted in relation to the overall training needs which have not been met.

In addition to the constraint of training capacity, there are also external constraints regarding practical training for clinical contraceptive methods. That is, there is no practical training for medical and nursing students on MCH-FP, including clinical methods. Also, there is no institutionalized system for in-service training for voluntary sterilization (Ahmed et al., 1992).

Table 1. NIPORT Training Targets and Achievements, 1991-1995

Sl. No.	Institution	Revised PP Target	Achievement				Total	%
			1991-92	1992-93	1993-94	July'94 to		
1.	NIPORT HQs	8579	1644	3001	1846	2133	8624	101
	LMT	6479	1644	1949	1962	1165	6720	104
	GoB Doctors	462	14	179	108	60	361	78
2.	FWVTIs	7582	1207	1030	1217	3580	7034	93
3.	RTCs	30514	7763	4496	7745	10402	30406	100
	Total =	53616	12272	10655	12878	17340	53145	99

Recommendations for Strengthening

Since the old approaches to training do not appear to be effective, serious consideration should be given to utilizing new approaches or styles to training, such as the locally-organized team training approach being used by the ICDDR,B MCH-FP Extension Project (Rural) and the concerned programme managers. The inadequate provision of training can also be addressed by utilizing data on subject areas for training. Refresher training should be developed through a curriculum and a training plan which responds to field needs. The curriculum and plan should be prepared jointly with the Family Planning and Health Directorates to ensure that the programme needs of both are being met, especially those related to the delivery of ESP.

As part of this process, the need for international training should be considered, so that family planning and health staff can broaden their perspective on programme issues. The joint process should also contribute to greater understanding and collaboration between the Directorates and NIPORT, and result in the timely selection and release of staff for training.

Training capacity would have to be improved through the recruitment of additional highly qualified trainers for NIPORT. Utilization of private sector organisations for the provision of training should also be explored to address the capacity issue.

Evaluations of the impact of training programmes on the performance of trainees should be conducted. Assistance should be provided to NIPORT on the development and implementation of an evaluation plan which would follow-up trainees in the field to assess their performance on a regular basis. It is essential that the trainees are involved in this process. The information provided in the evaluation can be utilized by them to improve their training approaches, and to identify areas of poor trainee performance which could be addressed in their training courses.

The issue of the shortage of doctors who have been trained on VSC should be addressed by providing VSC training to MO/MCHs from both the Family Planning and Health Directorates.

Section VI: Information, Education and Communication

Structure and Activities

Information, Education and Communication (IEC) activities are conducted through the Information, Education and Motivation (IEM) Unit of the Family Planning Directorate. The unit is comprised of 137 staff members under the leadership of a Director. Two Deputy Directors report to the Director. One is responsible for programming, field implementation, monitoring and feedback; and the other is responsible for media production, dissemination and documentation. The staff positions under each of the Deputy Directors are shown below:

Deputy Director

(Programming, Field Implementation, Monitoring and Feedback)

- a) Senior Programme Specialist
- b) Assistant Director, Field, Programming, Implementation
- c) Population Communication Officers
- d) Chief Pretest and Research Officer
- e) Assistant Director (Religious)

Deputy Director

(Media Production, Dissemination and Documentation)

- a) Dissemination Officer
- b) Documentation Officer
- c) Public Relations Officer
- d) Editor/Translator
- e) Media Production Manager
- f) Assistant Director, Media Production
- g) Chief Artist

Lessons Learned

An exhaustive review of the literature on exposure/access to IEC media, the impact of selected IEC interventions and barriers to communication, was conducted to aid in the development of a national MCH-FP IEC strategy (Khuda et al., 1992b). The following discussion draws heavily upon this review.

Interpersonal communication with family planning fieldworkers has been the major source of family planning information for clients. The importance of this type of communication is further illustrated by the finding that contraceptive use is directly related to fieldworker home visitation (Mitra et al., 1990), and that women who live in a village which has a resident female family planning fieldworker are more likely to use modern contraception than other women. There is, however, considerable room for improvement in communication, because the frequency of home visitation, although increasing, is still below desired levels (Mitra et al. 1992), and the family planning fieldworkers often lack adequate knowledge about the contraindications and side-effects of family planning methods. Worse still, those with adequate knowledge are reluctant to it with potential clients because of fear of non-acceptance. Despite these shortcomings, the fieldworkers are still the main motivators among couples accepting family planning methods, particularly clinical ones (Gupta, 1990; Huq and Ahmad, 1989).

Access to other media such as newspapers, radio, television, audio-visual vans, IEM print materials, film/slide shows, folk songs etc., were limited, when compared to interpersonal communication between family planning workers and their target population. This was particularly apparent in rural areas, among females and the illiterate segment of the population. Hence, it was concluded that interpersonal communication should continue to be the first line of communication, followed by radio, television and other media as the second line of communication; and that both lines of communication need further improvement to increase their effectiveness (Khuda et al., 1992b). The universal awareness about family planning and the growing realization about the need to further contain the rate of population growth among most people as well as the increasing role of the media over the past few years suggest that the media should disseminate more messages about family planning and reproductive health. At the same time, providers should increasingly assume a secondary role as the programme moves away from the doorstep to fixed sites.

Three MCH-FP IEC interventions were reviewed to assess their effects on family planning knowledge and behaviour - the folk talent programme (FTP), the radio listening forum (RLF), and the population education programme (PEP). The FTP, initiated in 1976, gave local folk singers responsibility for composing folk songs on family planning. The specific objectives of the FTP were to: (a) create social awareness by disseminating population information in rural areas; (b) motivate and educate rural couples to adopt family planning; and (c) contribute toward the goal of achieving the two-child family norm.

The RLF was formed by the IEM Unit in 1988 with assistance from UNFPA. A 20-member RLF was formed in selected rural areas to meet at least twice a week. Members of the forum involved eligible couples, local leaders, and service providers. The IEM distributed 4,500 radio sets for the farmers through the FPAB, District FP Welfare Centres, Social Welfare Department, Mothers Clubs, Radio Bangladesh and selected NGOs.

The PEP was initiated in 1976 by the Ministry of Education in Class 5-12 as part of multisectoral activities in population. Five major areas were covered: general population information; population growth and human development; problems of urbanization; environmental issues; and population planning (Islam, 1982). By 1985, population education was gradually integrated into selected subjects, such as Bangla, Social Studies, Home Economics, Economics, Geography and Biology. Funding stopped in 1985, but was resumed in 1992 by UNFPA.

The FTP and RLF interventions had limited effects on raising knowledge about family planning and even less impact on family planning behaviour (Khuda, 1992b). Both of the interventions have been discontinued. The FTP was characterized by inefficiency in programme organisation due to a lack of suitable location and absence of adequate publicity; inadequacies in programme coverage and frequency, and provision of microphones; and a lack of adequate training for the folk singers. The RLF was unable to solve problems of resupply of dry cells for the radios, and the provision of funds for maintenance and repair costs.

Studies conducted on the PEP suggest that there was some increase in knowledge of, and favorable attitudes about, family planning among students (Islam, 1982; Cruz and Khatun, 1985, Dhaka University, 1976); and improvements in knowledge levels and attitudes toward family planning among teachers (GoB, 1991; Islam, 1982; Cruz and Khatun, 1985). However, the evidence also suggests that the following areas require attention to improve the quality and contents of the PEP: planning and improvement of the curriculum; training of

the teachers; revision of materials; and the establishment of a linkage with the national education goals.

Several lessons have also been learned about the IEC activities and interventions conducted by family planning NGOs - AVSC, FPAB, FPSTC and Pathfinder International. These include the importance of systematic planning; the adaptation of IEC to local cultural and religious beliefs and needs among different segments of the target population; and adequate resources for personnel and logistics (Khuda, 1992b).

The IEC activities conducted by the Social Marketing Company (SMC) were also reviewed. The objectives of these activities are to inform and educate the general population about the need for family planning; educate and motivate people about the advantages of a small family; and inform people about the sources of family planning supplies and methods of their choice. The SMC relies mainly on communication channels used by the commercial marketing sector - radio, TV, newspapers, cinema halls, and indigenous media such as folk theater programmes in rural areas.

Findings from evaluations conducted on SMC's media campaigns indicate that radio is the most frequently used media, followed by TV, outdoor media (billboards, signs, wall paintings), newspapers and magazines; exposure to cinema is nominal compared to other news media; outdoor media are most effective in boat-sail areas (rural/remote areas); and publicity on family planning was highest through radio, followed by television and boat-sails. These activities have played a significant role in promoting the concept of family planning nationwide, and in desensitizing issues related to family planning in general and those related to family planning methods and products in particular (Khuda et al., 1992b).

During the Third and Fourth Five Year plans, IEC materials were not produced in sufficient quantities to meet the needs of fieldworkers and clients (Khuda et al., 1992b). However, even with sufficient quantities of materials, there are still a number of problems with the messages they convey. These are inappropriate focus (e.g., inattention to reasons for non-use of family planning); inconsistencies and contradictions in themes; incongruity with beliefs and values of the target audience; and a lack of emphasis on Islamic views of family planning. There are also constraints related to the lack of audience segmentation and targetting of messages, and with low comprehension and wrong perceptions of messages by the target audience (Khuda et al., 1992b); and with a lack of sufficient numbers of communication staff and fieldworkers who are trained in interpersonal communication skills (Barua et al., 1992; Khuda et al., 1992b).

Probably one of the most important constraints to effective IEC activities is the lack of coordination and collaboration between government and non-government organisations engaged in MCH-FP IEC activities (POPTTECH, 1995; GoB, 1993; Barua et al., 1992; Khuda et al., 1992b). This results in duplication of efforts, overlap and waste of resources, and dissemination of inconsistent and contradictory messages which reduce the effectiveness of all organisations (GoB, 1993).

Problems of coordination within the government have also affected the development of a national MCH-FP IEC strategy (1993-2000). Due to the lack of inclusion of the Health Directorate of the MOHFW in the strategy development, efforts at coordination were not successful in developing a comprehensive IEC strategy which analyzes and addresses needs in primary health care as well as family planning and MCH.

Recommendations for Strengthening

Many of these IEC component issues could be resolved with the speedy implementation of the existing National MCH-FP IEC strategy for 1993-2000. One part of the strategy, the "**Green Umbrella**" campaign which was launched successfully in mid-1996. However, much more needs to be done to address the problems of message content and audience segmentation. This would include the provision of assistance to the IEM Unit that would strengthen their capacity to: (a) segment the target populations according to their characteristics, and elasticity of demand for family planning methods; (b) develop messages tailored to the needs of the specific groups; (c) identify IEC strategies appropriate to the specific needs of different segments of the target population; and (d) determine which medium or combination of media would be appropriate to disseminate the messages among the different segments of the target population.

The existing IEC strategy will also have to incorporate the additional IEC needs which are related to the ESP. This will require a broadening of the target population, and the message content of IEC approaches and materials to include family and reproductive health issues.

Finally, the IEC strategy will have to address the issue of the lack of coordination and collaboration between government and non-government organisations engaged in IEC activities for the ESP. Assistance could be provided to the IEM Unit to develop a coordination mechanism with other government organisations and NGOs. This could include a workshop that would bring together the representatives of all organisations involved with IEC to identify areas of duplication and overlap, and to address the issues of targets and message content. The workshop could be followed by the establishment of a schedule for regular coordination meetings on IEC for these organisations.

Section VII: Monitoring and Supervision

Management Information System (MIS)

Structure and Activities: The national-level MCH-FP MIS Unit operates under the leadership of a Director with two Deputy directors, one Senior System Analyst, and a host of professionals: evaluation officer, logistics and monitoring officer, documentation officer, computer supervisor and programmer. In addition, 18 Assistant Statisticians conduct routine field supervision and surveillance. At the district level, Statistical Assistants have been trained to operate computer programmes for data entry and consolidation. Beyond the district level, the system operates using services of the regular staff and personnel (field workers) of the Family Planning Directorate (Haider et al., 1995).

The current MIS was designed and developed in 1989 to retrieve and record information on field performance, such as family planning contraceptive/method acceptance and use status; MCH service delivery; and ORS and immunization performance with background demographic characteristics of the eligible couples. Vital statistics (births and deaths) are also recorded. Five different forms were designed and implemented to report information in the FWA Register from field workers through thana and districts to the national level. The system was made complete by instituting a dissemination process through monthly performance reports (Haider et al., 1995).

The major activities of the MIS Unit include: (a) publication of regular reports (monthly, half-yearly, and periodic) on contraceptive service statistics and other MCH-FP indicators; (b) development of contraceptive targets (method mix) nationally, and their distribution to sub-national and unit levels; (c) training of field workers and concerned programme personnel on the MIS; (d) revision and improvement of the registers, forms and recording and reporting system, in collaboration with the Extension Project; (e) printing and distributing forms and registers to the field; (f) conducting field surveillance and supervision to monitor and update recording and reporting programmes; (g) maintaining and updating the central MCH-FP data bank to meet the programme demands for programme statistics; (h) collecting, compiling and reporting performance information of the GoB (including multi-sectoral programmes), NGOs, and the private sector (SMC); (i) monitoring and coordinating activities of the LMIS; and (j) performing the role of primary source for data retrieval and use of service statistics, including contraceptive performance, logistics and MCH (Haider et al., 1995).

Lessons Learned. Several current constraints to the effective operation and application of the MIS Unit were identified. First, the flow of information back to the field is still not adequate or timely enough to be used for local level planning and supervision (i.e., at the thana level). Second, the training programme for FWAs on the use of the third generation FWA register has not been conducted because of limited resources and "bureaucratic reasons." And third, the manual for the new FWA Register (third generation) has not been printed, again because of lack of resources and bureaucratic reasons.

There are also constraints related to the workload of the FWAs and FWVs. These workers are overloaded with recording and reporting duties, because there are too many forms and registers. As many as 43 different forms were being used to collect information on family planning service statistics, MCH and logistics. These three systems of information collection function separately with little coordination, and result in the duplication of efforts in recording and reporting (Haider et al., 1995).

Earlier studies similarly identified problems of information flow and staff training. The MIS system is supposed to provide programme managers with data which can be utilized to diagnose field problems and evaluate the performance of individual workers and areas. However, the submission of reports and returns was found to be irregular and improper, and the quality of the data was poor (GoB, 1993). Further, the training of the FWA on how to fill out the basic form for the reporting system was inadequate.

Problems related to target setting and data feedback and utilization for planning and decision making have also been identified as constraints for the MIS. The overall national targets, by method mix, are determined in the Five Year Plans developed by the Planning Commission in consultation with the MOHFW. The MIS Unit of the Directorate of Family Planning assumes the responsibility of apportioning the overall target set by the Planning Commission to the districts. The districts, then, apportion targets among the thanas; and, in turn, the thanas apportion the target among the unions, based on the eligible population and past experience. Field-level discussions indicate that the process is top-down, with the implication by some, that targets are set without adequate consideration given to local conditions in which the fieldworkers operate (Khuda et al, 1994b)..

The feedback of data provided by the MIS Unit to the district managers only allows a comparison of their own contraceptive acceptance rate (CAR) with the rest of the country. There is no further analysis of thana-level data. Furthermore, no information on areas which are in need of further investigation or supervision is provided to the district or thana managers (Ashraf et al., 1991). The information provided by the MIS and LMIS is not systematically analyzed on a regular basis. Because of a lack of monitoring, the available information is seldom used, and the MIS and LMIS become merely suppliers and compilers of information for various reports (Huq and Huq, 1990).

Recommendations for Strengthening

The MIS Unit should receive assistance in refining the MIS, so that only data relevant to the needs of programme managers are collected. This could include a workshop for programme managers in which: (1) the specific data required for their needs, including those for the ESP, are identified; and (2) the MIS instruments are revised accordingly. The elimination of irrelevant data could also contribute to more rapid feedback, since the volume of information would be reduced.

This activity should be conducted for information collection on family planning, MCH, logistics, and all components of the ESP. A review of the data requirements and duplication between the current information systems would provide the basis for the design of a single integrated system which eliminates duplication and improves coordination of data collection.

Supervision

Structure and Activities: Supervision is a critical and integral part of the management process. It includes planning, directing, organizing, and regulating the work activities of others. It is not only close supervision but also support during supervision that are the pre-requisites for the success of a family planning programme (Koblinsky et al., 1984). Clear lines of authority delegated to supervisors, decentralized personnel decision-making, systems for management control, and salaries commensurate with work tasks all contribute to effective programme implementation (Cleland et al., 1994).

The organisational structure of the national MCH-FP programme and the lines of supervision between the various cadres of staff reflect confusion of supervision. There are no single clear lines of authority for each worker. It is not uncommon for a worker to receive supervision from two different individuals - or to receive managerial/administrative supervision from one individual but technical guidance to carry out their work functions from another. Often the two supervisors are not formally linked. One example is the Family Welfare Assistant (FWA), who is the lowest cadre of staff in the family planning programme. The FWA is administratively supervised by the Family Planning Inspectors (FPI) at the union level. For technical assistance, the FWAs maintain a working relationship with the Family Welfare Visitors (FWV). However, the structure of the programme does not specify any formal relationship between the FWV and the FPI. The result is often a confusing one for the FWA, since her work is directed by two different individuals who have no official link with each other.

This confusion of lines of supervision is also operative for the FPI. The FPI should be supervised by the Assistant Thana Family Planning Officer (ATFPO). However, the post of ATFPO is relatively new and the actual supervision of the FPI is still done by the Thana Family Planning Officer (TFPO), who is ultimately responsible for the performance of the FPI (Ashraf et al., 1996).

The FWV is supervised by the Senior Family Welfare Visitor (SFWV) who, in turn, is supervised by the Medical Officer/MCH (MO/MCH). Yet, both the FWV and the SFWV are to report to the MO/MCH on technical matters. It is not expected that the FWV will first report to the SFWV when she has a technical issue to discuss. Thus, the FWV's immediate supervisor, the SFWV, may hear about her problem via her own supervisor, the MO/MCH.

In addition to the convoluted supervision structure, there is also a mismatch of skills between some of the workers and their supervisors. This mismatch occurs for two reasons: 1) gender issues in the delivery of family planning services which influence training and service provision; and, 2) multiple locations for work.

(1) Gender: All the FWV and SFWV are women. The majority of their technical supervisors are men (MO/MCH), and all of their administrative supervisors are men (TFPO). The FWV and SFWV are the principle providers of all family planning methods, except sterilization. They are also trained in ante- and post-natal care and delivery. Most MO/MCHs are not trained to provide the clinical services which they supervise. Women clients are uncomfortable with male providers for personal health services which may require pelvic examination. Consequently, the MO/MCH is often unable to offer appropriate technical assistance, particularly in-service training or hands-on help in difficult situations. This severely limits their ability to be credible supervisors.

This problem will increase in subsequent years, since the GoB implements the reproductive health agenda with emphasis on essential obstetric care and RTI/STD management. Already in the MCWCs where MO(Clinic) have been trained to provide all emergency obstetric care, including Caesarean-section, there is a problem. The MO/Clinic is supervised by the Assistant Director, Clinical Contraception (ADCC). The ADCC (all men) often are unable

to perform the EOC functions because they have not been trained (UNFPA, 1996).*

(2) **Location:** Workers can be posted at different locations than their supervisors, making the practical work of daily or routine supervision more difficult. For example, an FWV may be posted at an FWC, THC or MCWC. In addition, she conducts eight Satellite Clinics a month if she is posted at either an FWC or THC. Her clinical supervisor is always posted at the THC. To supervise the FWV at the Satellite Clinic, FWC or THC, requires the MO/MCH to leave his own clients without care. At the same time, if the FWV has an emergency situation, her supervisor may be unable to reach her with technical assistance. TFPOs could be used as mobile supervisors for the FWV, but they do not have the technical skills to supervise their clinical work.

These dysfunctions are repeated throughout the system where a lower-tier worker may have more than one supervisor; supervisors are not trained in the skills they are to supervise; and supervisors are not co-located with those they supervise and have their own duties to perform, limiting their supervision time. Consequently, the supervised are not assisted by the supervision function. Rather, they can be confused by conflicting advice or even completely ignored.

Lessons Learned: Supervision at all levels is a major weak link in the family planning programme (Khuda et al., 1992b). According to Cleland et al. (1994), weak supervision of government efforts explains the relative ineffectiveness of different approaches utilized by the programme. Supervision of the union level and domiciliary workers is quite limited, and there is no accountability of functionaries at the thana level and below (Khan et al., 1988; Gupta, 1990; Mabud et al., 1990; Rahman et al., 1991; Neaz and Banu, 1992). According to the Director of the Administration Unit, the major problems with supervision occur at the thana level. Each TFPO, ATFPO, MO/MCH and SFWV are supposed to spend 14 days on supervisory visits. However, this is not done regularly, and when visits are made they are not conducted "properly." Although a monitoring checklist exists, it is not used. Also, problems identified during supervision are not systematically reported up the chain.

An earlier study found that three-quarters of the FWAs reported that they had not received any supervisory visits from their TFPO in the two months preceding the study interview; and about one-third reported that they had never been visited by a TFPO (Rahman et al., 1991). Another study found that only workers located in close proximity to the THC managed to see the TFPO occasionally, while those at the more distant unions did not see the TFPO for long periods of time, if ever (Koblinsky et al., 1984; Hasan and Koblinsky, 1991).

As discussed above, the FPI is the primary or immediate supervisor of the FWA. Ineffective supervision at this level is the direct cause of insufficient client contact between FWAs and clients, and results in weak interaction when contact does take place (Mitra et al., 1993; Whittaker et al., 1993; Koblinsky et al., 1989). Several studies have found that increased client contact with FWAs and the quality of the contact can contribute to enhanced programme performance (Phillips et al., 1988; Kamal et al., 1989). Hence, the importance of the FPI supervisory role for programme success can not be overemphasized.

* The fact the ADCCs are all men may hamper their opportunity or desire for training, although it does appear that gender is less important in "life saving" situations than in routine care. Thus, using male medical officers in EOC programs is not impossible because of gender.

A recent study was conducted to assess the effectiveness of the FPIs, and to identify constraints to the performance of their supervisory activities. The constraints to performance included poor job motivation, as well as little investment of the national MCH-FP Programme in the systematic professional development of the FPI cadre. Several specific problems were identified, which exemplify the complex and entrenched difficulties of this cadre. The problems include: an ambiguous job description, absence of a job manual, inadequate training, no tools to measure supervisory functions or progress, inadequate supervisory support and guidance from the FPI supervisors, difficulties with logistical, administrative and official matters, and lack of control over performance targets. The areas in which performance were most negatively affected were job knowledge, quantity and quality of work, and use of time (Ashraf et al., 1996). In short, all aspects of the job and its supervision are inadequate for the tasks to be performed. The researchers maintain that to improve the performance of the FPI, "...systematic professional development techniques" should be utilized. These include the provision of monitoring tools to FPIs, development of their problem-solving capabilities and performance review skills, institutionalization of useful and timely feedback of reports, and incentives and awards for good performance (Ashraf et al., 1996).

The study found that the FPI played a crucial role in performance improvement for the programme. The unions which exhibited the greatest improvement in performance were the ones with better skilled and motivated FPIs, while the unions with the least or no improvement had very poorly motivated and low-skilled FPIs. The study also pointed out that the skills and knowledge of the FPI could be improved with training, but improving motivation proved to be more difficult. This motivation was achieved partly through the empowerment of the supervisors who trained the FPIs to develop and present their own performance reviews (Hasan and Maru, 1993).

The intervention faced constraints in implementation which resulted from a complex organisational structure and the existence of irregularities in the system. The conflict between the Directorates of Health and Family Planning contributes to a lack of collaboration between health and family planning staff. In addition, workers considered the irregularities within the system to be a major factor producing a lack of motivation. The performance review and planning process cannot deal with these systemic problems, but the study demonstrated that the intervention could improve programme performance even within the constraints of the existing system (Hasan and Maru, 1993).

Recommendations for Strengthening

The problem of weak supervision is often highlighted in policy documents. Systematic action to alter this weakness, however, has not been taken. At all levels, this key problem must be addressed by the development and implementation of a standard plan which facilitates supportive supervision. This would include additional training for staff in facilitative supervision at all supervisory levels. It should also include a review of the technical skills required for each level of supervision. A systematic approach to filling the technical skill gaps of each clinical supervisor has to be taken.

Further, each level requires a checklist of supervisory activities: a fixed number of supervisory visits during a specific time period; and a diary in which the visits and the results are recorded, as well as the results of follow-up visits for verification by the immediate supervisor.

Meetings on supervision should be held monthly at the thana and district levels. These meetings would provide a forum in which the supervisors could discuss problems they have encountered and arrive at mutually acceptable solutions to the problems. Subsequent meetings should follow-up on the solutions decided at previous meetings.

Attention should be given to the resources necessary to ensure that supervision can occur. Supervisors require time to travel to sites to monitor the work of others. Particularly in the case of clinical supervisors, provisions need to be made to manage their client load while they are supervising others. In addition to time, funds for supervisory travel should be earmarked and used for that purpose only.

The supervisory system should be "two-way." Those supervised should have a mechanism for calling their supervisor when they require assistance in the field. This should include clinical help from MO/MCH during the introduction of new services in the reproductive health agenda. Supervisors should also be available to newly-trained or refreshed workers to assist them with their initial service provision to ensure its correct delivery to the clients.

Finally, the supervision framework should be revised so that each worker has one primary supervisor. In cases where a worker needs both programme and clinical direction, the coordination of the work should be done at the supervisory level but informed to the worker through one channel. This would avoid confusion of directions for the worker.

Section VIII: Logistics and Supplies

Structure and Activities

The Director of the Logistics Unit is aided by two Deputy Directors, one for local procurement and the other for offshore procurement. Each section head, a Deputy Director, is, in turn, assisted by a number of Assistant Directors and Procurement Officers. Recently, a section called International Procurement has been set up. In addition, the Central Warehouse (CWH) management is headed by an Additional Director, who is assisted by an Assistant Director and a number of technical and supervisory personnel. Each Regional Warehouse is headed by a Supply Officer. The Directorate of Family Planning (DFP) maintains one central warehouse (CWH), three regional warehouses (RWH), 18 district reserve stores (DRS), and 467 thana stores throughout the country. Geographic locations of these warehouses and stores roughly follow the administrative units of the country: district, thana, union. For storage and distribution, no distinction is made between family planning and MCH commodities.

The Directorate of Logistics is responsible for procurement and delivery of most drugs, kits, medical and surgical requisites, and other supplies for the family planning programme. Distribution is done through the central warehouse in Dhaka, and various regional warehouses. Logistics management is ensured through participation of teams of monitoring officers, supported by a Logistics Management Information System (LMIS), and technically assisted by UNFPA, UNICEF, WHO, USAID, CIDA and IDA. About 5,000 static distribution points serve the country. Some commodities such as donated contraceptives and specialized drugs are procured by donors and distributed to intermediary institutions (Haider et al., 1995).

The Directorate of Family Planning storage and distribution system carries more than a thousand contraceptive, medical, and surgical items. Medical and surgical requisites include commodities required for family planning and MCH programmes (e.g., for sterilization, IUD insertion, follow-up medication, and MCH and clinical support services). Various forms, registers, manuals and programme-related information, education and motivation materials are also stored in warehouses or thana stores (Haider et al., 1995).

Since 1985, logistics management has been a major activity and a critical area for the national family planning programme. Logistics reporting consists of commodity reports on: contraceptives, MSR, and MCH supplies. The main thrust of the logistics and management programme is to develop: i) a need-based, demand-oriented logistics supply and storage system; and ii) a task-oriented, trained logistics manpower at various levels of storage and distribution points. The objectives of the logistics management system are to achieve correct quantities of supplies at service delivery points on time.

The logistics distribution/supply system operates on two methods: i) push (allocation) and; ii) pull (indent). Push method is operated from the higher tier, where the commodities are sent directly to a lower tier on the basis of performance. The pull method is operated from lower tiers, where requirement indent is sent to higher tiers for supplies as per programme demand and needs (Haider et al., 1995).

Lessons Learned

Maintaining an appropriate stock level of contraceptives at various tiers is crucial to an effective family planning logistics distribution/supply system (Huq, 1994). Rates of contraceptive stock-outs at the thana level have declined markedly from 23 percent in 1989 to under 5 percent by 1994 (FPLM, 1994). The decline in field-level stock-outs combined with the rise in the quantity and types of contraceptives distributed is indicative of a major improvement in contraceptive supply management (POPTECH, 1995).

A training intervention aimed at improving the implementation of the push system at the field level also resulted in an increase in stock levels. A comparison of logistics data 12 months prior to the intervention with data 6 months after the intervention indicated there was continuous improvement of stock status at the FWV and FWA levels. On the basis of these results, the Family Planning Directorate instituted a national policy to use push at the field level in the distribution network. Preliminary data from the Logistics Management Information System (LMIS) and the Continuous Physical Inventory (CPI) indicate an improvement in stock levels (FPLM, 1996).

Although the logistics system has been effective in reducing stock-outs, it will have to become more efficient if it is to handle the anticipated increased volume of contraceptives in future years (POPTECH, 1995). The UNFPA estimates that there will be a three-fold increase in the number of modern contraceptive users, from 6.4 million in 1991 to over 20 million in 2006 (UNFPA, 1994). Given the popularity of supply-based methods, the growth in demand for contraceptives poses a major challenge for the storage and distribution components of the logistics system, based on discussions of a meeting with FPLM in 1996.

Several constraints to the effective operation of the logistics system were identified by the Director of the Logistics Unit, for example: (1) there are gaps of time in procurement of supplies, because donors have their own schedules for delivery; and (2) there is high staff turnover and vacancies at both the thana and central levels.

Additional constraints to the operation of the logistics system were identified in an evaluation of the logistics management training. It was concluded that, "... a sense of dissatisfaction between store cadres (supply officers and store-keepers) and programme cadres (DDs, ADs, TFPOs, MO/MCHs, SFWVs and ATFPOs) is fast growing. This is a highly dangerous trend which might slowly damage the entire system. There is also duality of commands at various storage and distribution points" (Huq, 1994).

Recommendations for Strengthening

"Since the demand for family planning services is ever-increasing, it is becoming difficult to handle the supply, storage and distribution of family planning commodities through the existing 5-tier infrastructure. Therefore, steps should be taken to decentralize the system by adding a storage and supply tier at the union/FWC level to cope with local demands. This additional tier will also help to avoid stock-out situations in the field and to prevent commodities from becoming unusable" (Huq, 1994).

It will also be necessary to adopt the decentralized system to handle the additional commodities included in the ESP. This would include the formulation of procedures for determining the level of their demand, and the amount of supplies required to meet this demand.

Section IX: Urban MCH-FP Programme

Introduction

The proportion of Bangladeshis living in urban areas rose from slightly more than 5 percent in 1961 to 23 percent in 1995. The urban population is currently growing at a rate of 5 percent per year. Projections indicate that the urban population will reach 55 million by the year 2010, and account for a third of the country's total population. A major consequence of this growth will be an increase in the numbers of the population living in slum and squatter settlements. For example, about 30 percent of the estimated 8 million people in Dhaka City live in slums and 50 percent live below the poverty line. If these proportions are maintained for the total urban population of the country in the year 2010, there will be more than 16 million people living in slums and another 27 million living below the poverty line (Baqui, 1997). These figures illustrate the potential magnitude of the problem that will face the service delivery system if a dramatic reduction in urban growth is not achieved.

Structure and Characteristics

Although the government has a structured health and family planning service delivery system for its rural population, it does not have a comparable infrastructure for its urban population. The NGOs and the private sector are the primary service providers for the urban population; and their coverage of the urban area is not complete. The government approach to the urban health and family planning programme emphasizes the active involvement of the NGOs in the process of service delivery, IEC, and training. According to the GoB policy, the primary responsibility of urban health and MCH-FP lies with the Ministry of Local Government, Rural Development, and Cooperatives (LGRD).

The urban health and family planning programme is vested with each of the 88 municipalities under the general direction of the Ministry of LGRD. Each municipality is required to plan and implement its own health services (Cambridge Consulting Corporation, 1991). For example, in Dhaka, the Deputy Commissioner's Office has a section on local government, with an Assistant Director in charge. With the help of the DG/FP personnel, the Deputy Commissioner's Office offers training programmes on MCH-FP for union council chairmen and their members (Khuda et al., 1994b).

The remaining discussion on structure and characteristics will focus on Dhaka as an illustrative example of the urban family planning programme. Dhaka City is divided into two zones, Tejgaon and Mirpur; and each is headed by a TFPO. Sixty-nine of the 75 wards of the Dhaka urban area have been demarcated among NGOs. FWAs also work in the wards but there is apparently little overlap, since both the NGO workers and FWAs have been assigned specific areas of operation (Khuda et al., 1994b).

There are four main providers of contraceptive supplies and services in Dhaka City: the MOHFW, the Dhaka City Corporation, the SMC, and the NGOs. Most of the NGOs operate community-based services.

Government outdoor dispensaries, Mother and Child Welfare Centre Clinics at the City Corporation Ward Commissioners' Offices, are all under the jurisdiction of the Dhaka District Family Planning Office, while the Azimpur Maternity Centre and the Mohammadpur Fertility Services & Training Centre operate directly under the DFP. Some

of the CBD NGOs provide IUD services. In addition, there are 40-50 NGOs which provide clinical services plus contraceptive distribution but no outside motivational activity.

The Deputy Director holds monthly coordination meetings with the NGOs. Also, the Deputy Directors, TFPOs, and representatives of NGOs attend the district Family Planning Committee meetings, chaired by the Deputy Commissioner, Dhaka. The TFPOs can also call meetings, if and when required. The national NGOs deal directly with the DFP.

The FWAs and the NGO workers make their reports to the FPI, each of whom are in charge of three city wards. The FPIs, in turn, report to the TFPOs who, then, report to the Deputy Directors. The consolidated figures are, then, sent to the MIS Unit of the Directorate (Khuda et al., 1994b).

Slum areas of Dhaka City are considered part of the wards where they are located. They are covered by the usual CBD programmes as well as by the SC. Also, the Dhaka District Family Planning Office provides assistance to the LGEB/UNICEF/Slum Improvement Project (SIP), if and when such assistance is sought. Furthermore, the MCH-FP Extension Project (Urban) - previously the Urban Volunteer Programme (UVP) of the ICDDR,B - has been working in the slums of Dhaka City since the early 1980s. The Project operates through volunteers (slum mothers who are involved in health and MCH-FP education), and provides basic service provision to their local communities (Khuda et al., 1994b). But, in its present form, the Urban Extension Project conducts OR in collaboration with an NGO, Concerned Women for Family Planning (CWFP).

Lessons Learned from Selected Components

According to the GoB policy, major family planning related activities in the municipalities should be implemented through the formation of "population control committees" (PCC). However, an assessment conducted at selected municipalities found that in many instances the PCCs had not been formed, and in those cases when PCCs were formed, no meetings had been held during the previous year. Further, most of the chairmen of the PCCs did not know the Deputy Director of Family Planning, and there were no staff in the municipality (under the Health and Family Planning Division) who were exclusively responsible for family planning activities. Hence, the role of the municipality in overseeing the municipal MCH-FP programme was either non-existent or at best, limited (Khuda et al., 1994b).

During the last half of 1994, the first comprehensive assessment of the health and family planning needs and available services was carried out in an urban area (Arifeen and Mookherji, 1995). The assessment, which was conducted in zone 3 of Dhaka City, focussed upon planning and coordination of services; management information systems at the community and clinic levels; service delivery; and service quality. The following discussion presents the constraints identified in each of these areas by the assessment, and some of the preliminary lessons learned by interventions that were implemented by the ICDDR,B MCH-FP Extension Project (Urban) to address these constraints.

Service Delivery: Three problem areas for the delivery of services were identified by the needs assessment. These problems and the interventions developed to respond to them are discussed below:

The doorstep distribution system is costly and hard to maintain under funding constraints. The current reporting and monitoring requirements of the programme to visit each and every

eligible woman once every two months constitute a heavy responsibility for the field workers. The needs assessment found that the high client load and the routine tasks in making home visits to every eligible woman (even if such a visit was not required from the programme's point of view) severely constrained the capacity of the field-workers to provide sufficient counselling to the clients, and monitor their individual needs, especially non-users (ICDDR,B, 1996).

In response to these constraints, an intervention was developed to test the feasibility of withdrawing the existing doorstep distribution and to introduce a cost-effective, static-centre-based service delivery system. The intervention has been implemented in three phases.

In Phase 1 (for 8 months starting from January 1996), to test the feasibility of the change, two different approaches are being tested in two CWFPP areas in Dhaka: one with a direct shift from doorstep distribution to a static-clinic-based system; and the other involving an intermediary and transitional arrangement of Community Service Points (CSP) to resupply a cluster of clients at a common site near their residence. Both the approaches are supplemented with targeted home visits (but no supply at homes) with a special focus on non-users, and a modified reporting and monitoring system. In Phase 2, starting from September 1996, a static, clinic-based system that involves delivery of basic MCH-FP services from the clinics, and community mobilisation and IEC activities by a reduced system of field staff is being tested. Some field workers will be retrained as community extension workers to conduct mobilisation and targeted IEC, while others will be retrained as health workers to assist the paramedics in the clinics. Phase 3 will deal with scaling-up the intervention (ICDDR,B, 1996).

Although it is too early to assess the lessons learned, most of the initial findings have been positive. Most importantly, the shift in service delivery did not appear to negatively affect the CPR. Instead, the CPR increased slightly, due to an enhanced focus on non-users that resulted in higher acceptance (ICDDR,B, 1996).

The needs assessment found that the quality of MCH-FP services available at urban facilities is poor, and results in services of low effectiveness which are also poorly utilized. Problems in service quality include incomplete screening and counselling of contraceptive acceptors, resulting in a higher incidence of side-effects and drop-out. Poor management of reported side-effects leaves many clients dissatisfied. Children with diarrhoea or ARI are not assessed according to standard guidelines, and consequently, are not managed appropriately. Furthermore, antenatal care for pregnant women often lacks key elements.

The reason for these problems is that national-level guidelines are limited, and where they do exist (e.g., management of diarrhea and ARI), they have not been adapted into service delivery protocols that are appropriate for the type of clinics and providers available at the urban primary care level. For services like antenatal care, management of RTI, etc., nationally recommended service delivery protocols are non-existent, resulting in non-uniform service standards. As the existing clinics expand their range of services, some facilities may only choose to provide specific components of a service (e.g., just family planning education, rather than the full range of family planning services). However, there is a lack of protocol that can be used by the provider to deliver these service components properly (ICDDR,B, 1996).

On the basis of these findings, an intervention was designed to expand the range and to strengthen the quality of services delivered from urban primary care clinics. Under the

intervention, agreement will be reached on the services to be provided from specific clinics. Practical service delivery protocols for key MCH-FP services will be developed and tested. The protocols are based on existing standard guidelines and will be adapted to the urban primary care setting. Appropriate support systems will be defined and implemented in the areas of supervision, record keeping, reporting, and logistics. Based on the standardized protocols, training curricula for staff will be developed. The targeted staff include physicians, paramedics and clinic health workers.

The intervention will be tested in two CFWP clinics, two dispensaries of the Directorate of Health, and a children's hospital of the Dhaka City Corporation. Staff training and support systems were implemented in incremental phases during 1996, on the basis of policy decisions on specific services to be incorporated in the intervention. Lessons learned must await the completion of the evaluation of the intervention's impact (ICDDR,B, 1996).

The needs assessment and a Health Facility Inventory conducted in 1995 found an abundance of facilities which provide essential services. However, individual facilities usually have a limited range of services, and many are single-purpose clinics. The consequent fragmentation of services not only increases the cost of providing these services, but also limits access to them as the opportunity costs for the clients go up.

The overall availability of essential services at the zonal (city administrative unit) level is high. However, due to inadequate planning and coordination, the location of these facilities often does not match the needs the area it serves. In some areas many facilities provide similar services and are clustered together, while under-served areas exist elsewhere. This results in inefficient use of resources and underutilisation, as well as geographic differences in availability and access to essential services.

There is also a lack of local-level coordination and effective cross-referral mechanisms among neighbouring facilities which provide complementary services. The needs of the client could be met by neighbouring facilities are not assessed during the course of a client's visit and therefore, (s)he is not referred to a supporting facility. Also, in facilities which provide more than one type of service, client needs are often not assessed, resulting in "missed opportunities" to offer appropriate services (ICDDR,B, 1996).

In response to these needs, an intervention was designed to reorganize the clinic network at the zonal level and establish functional linkages between different facilities through a participatory process involving senior and field-level programme managers. The aim is to have a primary care clinic or a functionally combined set of complementary clinics to provide a basic package of services of acceptable quality to a defined catchment population. Changes will be brought about in the network of facilities already in place to optimize the use of existing resources and provide essential services in a manner that is appropriate and convenient for the community, especially the poor. The mechanisms for achieving this include: staff training on a broader range of tasks; staff reassignments within or between organisations; coordination and referral between complementary facilities in close proximity; relocation of complementary service outlets to a common site and functional combination; and relocation of service outlets to under-served areas (ICDDR,B, 1996).

On the basis of a detailed assessment of the health facilities in Zone 3 of Dhaka City and discussions with the senior managers of the relevant organisations, specific proposals for reorganisation were formulated in 1996. The proposals incorporate one or more of the mechanisms mentioned above. A participatory workshop was organised in 1996, involving

senior/mid-level and field managers and especially individuals in decision-making positions. The workshop resulted in specific decisions on modifications of the system, along with a time frame and responsibilities for implementation. Project staff will facilitate and monitor the implementation of the workshop decisions (ICDDR,B, 1996).

As with the studies discussed above, it is still too early to evaluate the intervention. Hence, the lessons learned will be assessed upon completion of the evaluation.

Service Quality: The needs assessment revealed a substantial gap between the desirable and actual quality of many MCH-FP services. Family planning client screening, counselling and side effect management, assessment and treatment of children with diarrhoea and cough, and antenatal care were identified as areas particularly in need of strengthening (ICDDR,B, 1996; Perry et al., 1996).

Interventions implemented by the ICDDR,B MCH-FP Extension Project (Urban) either directly or indirectly address some of these problems. Although the interventions are necessary, they are not sufficient to produce continuing improvements in overall service quality (ICDDR,B, 1996). The primary need is to be able to identify and address problems of quality on a regular basis for continuing improvements in service.

A Quality Improvement Intervention was designed specifically to address this need through a quality improvement (QI) approach defined as the "ongoing identification and solution of problems affecting the quality of services." The QI approach uses the Client-Oriented Provider-Efficient (COPE) methodology developed by AVSC International. The intervention will be implemented in Zone 3 of Dhaka City, at two CWFP units, and in two government clinics; and the feasibility and effectiveness of the QI approach will be assessed (ICDDR,B, 1996).

Planning and Coordination of Services: As in all urban areas, Zone 3 of Dhaka City was characterized by a multitude of health and family planning service providers. Service delivery points were managed by two directorates within one GoB ministry; the Dhaka City Corporation under the direction of another GoB ministry; three NGOs; and more than 300 private practitioners. In addition, there were both NGO and GoB field workers working in Zone 3.

Although there were a large number of service delivery points (36 GoB and NGO facilities), most of these facilities provide only a few types of services (i.e. family planning, EPI or curative health care). Among these facilities, there is limited coordination, communication and referral, which result in differential quality of care and inefficient management of resources in the form of duplications and gaps in service delivery. Although the Dhaka City Corporation has the responsibility of coordinating and monitoring these services, the Corporation has inadequate staff resources and expertise to fully manage this role (Arifeen and Mookherji, 1995).

In response to these constraints, an intervention was implemented in all ten zones under the Dhaka City Corporation with the objectives to: (a) institute coordination mechanisms among providers of basic MCH-FP services; (b) improve capabilities in planning and coordinating the implementation of the MCH-FP programme; and (c) identify and minimize gaps and duplication of services (ICDDR,B, 1996).

The intervention was successful in establishing a coordination committee in all ten zones under Dhaka City Corporation. These zonal committees, chaired by zonal executives, meet once every two months and appear to be an effective mechanism to coordinate special health promotion campaigns and to provide a forum for the discussion and resolution of local problems.

The work of the zonal committees has stimulated the formation of ward level committees in various zones of the city. This experience prompted the Ministry of Local Government, Rural Development and Cooperatives (LGRD) to issue a circular to all municipal authorities instructing them to establish similar Health and Family Planning Coordination Committees in their areas.

Additional lessons learned are: (1) more resources are needed to ensure that the activities of the committees are properly supported and monitored; (2) the involvement of NGOs at the local level requires local mobilisation, plus advocacy at higher levels with parent organisations and groups coordinating NGO activities; and (3) future efforts to improve coordination must include active involvement of private sector providers.

Management Information System: The current record keeping system for urban field workers was modeled after the system utilized in rural areas. The needs assessment found, however, that conditions in urban areas require a modified health information system, because: (a) urban groups, especially those living in slums are more mobile; (b) unlike the rural situation, urban field workers are responsible for both MCH-FP and health services; and urban service providers are putting an increasing emphasis on clinic-based services rather than the domiciliary delivery of contraceptives (ICDDR,B, 1996).

These findings resulted in the development of a study to design a health information system which promotes more comprehensive maternal and child survival services; facilitates identification of high-risk families; and encourages innovative work planning by field workers in urban areas. A modified urban fieldworker information system was designed in collaboration with CWFP and the government field workers. This system supports the urban field workers in delivering a basic package of maternal and child health services. The system includes a Family Record Card, birth and death forms, reporting forms, referral slips, and monitoring and supervision procedures.

Supervisors and managers report that the new system gives a better indication of the range of services provided by fieldworkers than the previous system. Further, the training provided in the use of this information will contribute to improving the quality of services and programme performance. The system also serves as a checklist which reinforces the delivery of counselling activities that are related to the package of services which is being delivered for maternal and child survival (ICDDR,B, 1996).

The assessment of the MIS at the clinic level found that record-keeping in most clinics providing MCH-FP services is based on registers. Client information is recorded in a separate register for each service, leading to unconnected multiple registers. This system may ensure a good record of clinic outputs, but has a more limited utility for ensuring continuity of care, assisting the monitoring of quality in delivering basic health services, and reducing missed opportunities (ICDDR,B, 1996).

These constraints were addressed by testing the feasibility and effectiveness of a card-based Clinic Information System (CIS) at two CFWP clinics in Dhaka City. The card-based system includes:

(a) A Family Health Card (FHC), retained by the client, which records the family planning status of, and family planning services received by women; TT and ANC visit information; EPI information for up to 3 children; and a record of clinic services received by the holder and/or her family.

(b) Three cards that are retained at the clinic are: a Woman's Health Card (WHC), which records some reproductive health services used by the client, with a built-in checklist of family planning screening procedures for new users of oral contraceptives, injectable and IUDs; an Antenatal/Postnatal Care Card, which also contains a checklist of standard questions and examinations for pregnancy-related check-ups, and for the identification of risk factors and any danger signs during pregnancy; and a Child Health Card (CHC) for recording a child's immunization status and general illness information. This card has a checklist to improve assessment of children with diarrhoea or with cough and cold.

(c) Finally, the cards are kept in Family Folders, and thus, the entire history of clinic utilization by the client or her children is readily available to the service providers. The folders are filed, according to a registration number.

Findings from a preliminary evaluation indicate that the average time to register new clients decreased over time, and that the time required to register clients during their re-visits also declined. Of particular importance is the very high proportion of clients (98%) who retained their FHC and presented it during their revisits to the clinics.

The FHC includes the record of EPI/TT immunizations provided at the two intervention clinics; however, not all clients return to the same clinic for all doses. Hence, other service providers should be informed/motivated to honor the FHC. The meetings of the Zonal Planning and Coordination Committees can be a valuable mechanism to orient other organisations to the FHC and encourage its acceptance.

Recommendations for Strengthening

The high urban growth rate and the presence of a highly mobile or floating population (estimated at 10-12% of the total urban population) will place increasing demands on a service delivery system that is unable to meet current needs. Innovative approaches will have to be developed and implemented through an expanding role of government and non-government organisations and the private sector, particularly the SMC, to provide the quality and level of services required.

A test of the feasibility of withdrawing the existing door-step distribution of contraceptives services and to introduce cost-effective, static-centre-based delivery systems in Dhaka City, found that the shift in services produced a slight increase in the CPR. Further testing of the approach should be conducted and expanded to other urban areas.

There is a substantial gap between the desirable and actual quality of many MCH-FP services. A major programme need is to be able to identify and address problems of quality on a regular basis. The testing of quality improvement (QI) approaches such as COPE should continue, and studies which aim to develop standard quality indicators for the family planning

programme should be initiated. At present, there is little consensus on quantifiable indicators that could be utilized by the programme to evaluate quality.

An intervention to institute coordination mechanisms among providers of basic MCH-FP services and to improve capabilities in programme planning and coordination was successful in establishing a coordination committee in all ten zones under Dhaka City Corporation, and ward level committees in various zones of the city. Further, it was learned that the involvement of NGOs at the local level requires local mobilisation plus advocacy at higher levels with parent organisations and groups coordinating NGO activities. Also, future efforts to improve coordination must include the active involvement of private sector providers.

The intervention should be expanded to other areas and its success in improving coordination through the inclusion of private sector providers evaluated. As mentioned above, the role of the private sector will have to be expanded if the programme is to achieve success in the urban area.

An urban fieldworker information system was implemented to support the urban field workers in delivering a basic package of maternal and child health services. This system provides a better indication of the range of services provided by field workers than the previous system; and training given on the use of this information contributes to improving the quality of services and programme performance. This system should continue and be expanded to other urban areas. The Card-Based Clinic Information System (CIS), using an FHC should also be expanded to other clinics, particularly in light of the success of the FHC.

Section X: Summary and Conclusions

The success of the Bangladesh National Family Planning Programme is reflected in a doubling of the contraceptive prevalence rate over the past decade, resulting in a substantial decline in fertility for the same period. The maintenance of current prevalence and fertility levels over the next decade will require an additional 4 million users. If the national goal of replacement fertility is to be reached by 2005, the total number of contraceptive users will have to more than double to 21 million.

Meeting this formidable challenge will require considerable improvements in the operation and output of the various components or subsystems of the national family planning programme.

This monograph was prepared in response to this need, and presents the results of a review and assessment of the programme components. The specific objectives of the review are to identify the lessons learned regarding each programme component (i.e., what worked, what did not work, and why); and to provide specific recommendations for their improvement, based upon the lessons learned.

CROSS-CUTTING ISSUES

The review identified issues that cut across all or most of the components of the national programme. These have been identified as follows:

(a) **The needs and intentions of the family planning programme have changed from providing family planning and MCH to providing the ESP, which includes reproductive health.** This will pose a major challenge to the programme, in terms of both the human and material resources, that will be required by the programme components for the introduction of the package.

(b) **The management of the family planning programme is oriented more toward the interests of providers than the needs of clients.** The family planning programme is still effected by a history of target-orientation. While there are no official target in today's programme, there is still a "target mentality" which permeates the delivery of certain services, especially sterilization and IUD. Special days or camps are organised to offer these services, with an emphasis on the number of clients served rather than on ascertaining and responding to the needs of clients.

(c) **There is inadequate cooperation and coordination between the Family Planning and Health Directorates.** This is apparent in the delivery of health and family planning services at most levels. Women normally receive each of these services from different personnel at different locations. However, there is marked improvement in coordination at the community level where services are now provided through combined satellite clinics/EPI spots.

(d) **There are internal conflicts between medical and non-medical staff within the Family Planning Directorate.** This occurs primarily between the TFPOs and MO/MCHs with regard to: their pay scale and status; financial drawing and disbursement authority; and career advancement opportunities.

(e) **Staff who were hired under the development budget have lower morale than staff who were hired under the revenue budget.** The discrepancies in the financial benefit

package influences job performance. Family planning programme staff under the development budget have little job security and are not eligible for pensions when they retire. Staff under the revenue budget are entitled to the provident fund, gratuities and a pension.

(f) There is a lack of accountability in the public sector. In the family planning programme, it particularly affects staff performance, personnel management and supervision, and supplies and equipment. There is no formal performance appraisal for staff, and no system of rewards for good performance or consequences for bad performance. A fair and operational "personnel policy" is not in place; there is a lack of clarity in job descriptions; and there is confusion in direct-line supervision throughout the field level. Also, there is some degree of leakage in drugs and other medical supplies.

(g) There is inadequate cooperation and coordination between government and non-government organisations. This has resulted in areas being poorly demarcated between the organisations, with a duplication of activities in some areas, and non-coverage in others.

(h) The health and family planning programme is donor dependent. Almost 60 percent of the MCH-FP programme is funded by donor agencies. Clearly, the donors will not be able to maintain this level of funding for an extended period, which has obvious implications for the sustainability of the programme.

Resolution of Issues

The resolution of most of the cross-cutting issues will require substantial changes in the management structure and organisation of the MOHFW and its Directorates. Headed by the Health Minister, the GoB's High Level Committee (HLC) is to address these changes. It will be the objective of the HLC are to provide recommendations on management and organisational reforms, along with a plan and timetable for implementing these reforms in the next health and population programme (Abedin, 1997).

The GoB should be lauded for their attention to managerial and organisational reforms. However, the critical task at hand is for the HLC to provide their recommendations for the needed reforms as soon as possible. Therefore, the work of the HLC should be accelerated so that the implementation of the reforms can take place under the fifth health and population programme. This is particularly important, because there are likely to be problems related to implementation which will require additional time for resolution.

FAMILY PLANNING PROGRAMME COMPONENTS

In the following section, the lessons learned, with regard to each of the programme components are discussed. Recommendations for their strengthening, based upon these lessons, are also presented.

Service Delivery

Household Level: The review found that the frequency, duration and quality of FWA visits with clients has contributed to an increase in the use of contraception, and that only about 40 percent of eligible women in rural areas are actually visited by FWAs. Moreover, family planning policy makers and programme managers have indicated that the existing doorstep

service delivery system cannot be sustained. Hence, alternative service delivery strategies that are more cost-effective and allow field workers to focus on motivating non-users have to be tested. Cluster visitation, a strategy which is currently being tested by the ICDDR,B MCH-FP Extension Project (Rural) provides services by FWAs to groups of about 25 women at centrally-located neighborhood houses, rather than at the homes of individual clients. The initial results of the cluster visitation have been positive. Several NGOs have already replicated it. Also, the government has accepted cluster visitation and is considering introducing it in the next health and population project. In the meantime, however, testing should continue, and the transition from doorstep service delivery to static centres - irrespective of the new strategies - should be conducted in phases. The phasing of the transition is necessary to ensure the minimum disruption in the services provided by the family planning programme.

The quality of services provided to clients by FWAs is inadequate, particularly in the areas of medical back-up for contraceptive complications, other dimensions of reproductive health, pre and postnatal care, and child health. Retraining should be provided to FWAs in these areas concurrently with the strengthening of the supervisory system. This is particularly important because retraining, in the absence of improved supervision and technical support will not sustainably improve the quality of services.

Clinical Level: There are two types of unmet need: 1) spacing and limiting contraceptives for women who use no methods; and 2) contraceptive methods for women who use a method that may be inappropriate. This includes women who use resupply or traditional methods but fit one of the following categories: a) women of high parity (more than 3 children); b) women who are 30+; c) women who have stated they have completed their family size, regardless of age or parity; d) women who have terminated an unwanted pregnancy; and e) women who have used a hormonal method for 5 years or more.

Client segmentation, using the life cycle or reproductive health need approach, can be used as the basis for approaching these women. Frontline workers should be re-trained to segment their eligible population and to provide information on methods which would be more appropriate from a reproductive health perspective.

Access to clinical contraception needs to be improved. Though the national programme is a seven method programme, only three methods are consistently available - oral contraceptives, injectables, and condoms. The quality of services, the condition of facilities, the logistic and supply system, and the training for clinical methods have all deteriorated. Thus, it is not possible for the current programme to offer sterilization and IUD services of consistently high quality at all service points where these should be provided.

The long-term solution is a systematic refurbishing of the 700 sites and revision of training programmes, to make them competency-based. A plan based on current performance and population needs, with clear achievement benchmarks, can be developed to re-establish services. The minimum goal should be to have a site at each Thana where all sterilization and Norplant services are available, while IUD and injectable services should be available at all static facilities.

While sites are being re-developed for clinical contraceptive services, **focal sites** should be used to maximum capacity. These focal sites can include GoB sites, like MCWCs, THCs and NGO sites which have been consistent performers. Referral systems, and mobile service teams, can be established to meet client needs at these sites.

Consideration should be given to a policy change which removes all payments from the system. Payments of all types have a deleterious effect on the clinical programme, and the payment system itself, is dysfunctional. The information available from clients indicates that they do not make decisions about accepting services based on the payment they can receive.

Having brand choice for injectables and IUDs increases the training and logistics burden and does not enhance services. One injectable and one IUD provided through a high-quality service delivery system are sufficient to ensure client choice.

The logistics and training necessary for the provision of two different injectables puts an unnecessary burden on the programme at all levels. Through research and field experience, DepoProvera has emerged as the most acceptable injectable. Thus, the elimination of any additional brands would actually enhance service delivery for injectables. Training could be concentrated and, consequently, more effective for the paramedics involved as the primary service providers.

Similarly, one IUD in the programme is sufficient and should be chosen based on failure rates, long-term use capacity, and ease of insertion and removal.

Administration

There are chronic staff shortages at all levels of the programme, that negatively affect administration and delivery of services. Specifically, an additional 2000 FWVs are needed but only 1000 have been recruited. Although 250 MOs(FW) have been appointed on an experimental basis for the FWC, most of them do not stay at the FWC and services are underutilized. One-third of the posts for TFPOs are now vacant and 65 percent of the existing TFPOs will retire by 1998. Finally, retirement at the Director level will also occur in 1998. Only 2 of the 14 staff members will remain.

The recruitment process for FWVs should be accelerated through a phased approach which takes into account the level of client demand for services at FWCs. Initially an FWVs should be assigned to those FWCs which are unable to meet demand. Staffing at FWCs where the demand is currently low should take place at the end of the recruitment process. Both current and future TFPO, MO, and Director vacancies should be addressed by the preparation and immediate implementation of a human resource development plan which will ensure the timely recruitment and replacement of these staff.

The circular issued from the Directorate of Family Planning which instructs the MO(FW) to perform their duties as stipulated in their job descriptions, should be adhered to. The MOs(FW) must be in regular attendance at the FWCs to provide services to clients on a continuous basis. The MOs, as with other staff, must be held accountable for their job performance. To ensure accountability it will be necessary to strengthen the supervisory system.

Planning

The number of staff in the PU is insufficient to conduct all of the required activities. This staff shortage has been further exacerbated by the rapid expansion in the number of NGOs (now at more than 800) and development projects for which the unit is responsible. Further, the staff have not received sufficient training to conduct their activities, specifically in the areas of planning, management and supervision.

With its myriad of current responsibilities, the PU has never actually carried out the functions of planning or coordinating activities between the GoB and NGOs. Thus, a review of the functions should be conducted with the objective of reducing and/or eliminating those activities which are not directly related to planning. This workload reduction will allow staff adequate time for planning activities. A training programme will be required to build the necessary skills among the staff.

Training

The inadequate provision of, and capacity for training is a major constraint faced by the family planning programme. Refresher courses organized by NIPORT have not been frequent enough or timely to meet the needs of the expanding MCH-FP services and the needs of trainees. Further, the training target of NIPORT represents only a little over half of the estimated gross training need of the Government system.

Evaluations of the impact of training programmes on the performance of trainees have not been adequately conducted. Furthermore, training institutes and programme managers generally work in isolation from each other, leading to little follow-up of post-training activities and performance, and no assessment of differential impacts of training approaches. This trend needs to be reversed. Post-training activities would not only reinforce material learned, but also help the training institutions assess their own techniques and approaches.

To redress the lack of impact evaluations, assistance should be provided to NIPORT on the development and implementation of an evaluation plan, which will follow-up trainees in the field to assess their performance on a regular basis. It is essential that the trainees are involved in this process. The information provided in the evaluation can be utilized by them to improve their training approaches, and to identify areas of poor trained performance that can be addressed in subsequent training courses.

Training capacity needs to be improved, through the recruitment of additional highly-qualified trainers for NIPORT. Utilization of private sector organisations for the provision of training should also be explored to address the capacity issue.

Serious consideration should be given to utilizing new approaches or styles for training. This is particularly important because the old approaches are not working, and the additional training needs of the ESP will have to be met. A team approach to training, organized at local levels (thana) could be used, so that work disruptions and costs that result from training at Dhaka or regional headquarters is reduced. Training plans can be developed to respond to weaknesses in general information among staff members. These training plans could be used as required for training or refresher courses. The Family Planning and Health Directorates should prepare this plan jointly, to ensure that the needs of both programmes are met. The joint process should also contribute to greater understanding and collaboration between the Directorates and NIPORT and result in the timely selection and release of staff for training. As a part of this process, the need for international training should be considered, so that Family Planning and Health staff can broaden their perspective on programme issues.

The BAVS with USAID funding through AVSC, and technical assistance from AVSC, provided training to 2,800 doctors on VSC between 1970 and 1990. However, there was still a shortage of doctors who were trained in these techniques. This was a contributing factor to the decline in sterilization. VSC training should be provided to MO/MCHs and

MOs from both the Family Planning and Health Directorates to eliminate the shortage of providers who can perform these essential techniques.

Information, Education and Communication (IEC)

During the Third and Fourth Five Year Plans, IEC materials were not produced in sufficient quantities to meet the needs of fieldworkers and clients. However, even with sufficient quantities of materials, there are problems with some of the messages they convey. These are inappropriate focus, e.g., inattention to reasons for non-use of family planning; inconsistencies and contradictions in themes; incongruity with beliefs and values of the target audience; and a lack of emphasis on Islamic views of family planning. There are also constraints related to the lack of audience segmentation and targetting of messages, and with low comprehension and wrong perceptions of messages by the target audience.

Many of these issues could be resolved with the speedy implementation of the existing national MCH-FP IEC strategy for 1993-2000. One part of the strategy - the family planning logo of the "Green Umbrella" - was launched successfully in mid 1996. However, much more needs to be done to address the problems of message content and audience segmentation. This would include the provision of assistance to the IEM Unit that would strengthen their capacity to: (a) segment the target populations, according to their characteristics and elasticity of demand for family planning methods; (b) develop messages tailored to the needs of the specific groups; (c) identify IEC strategies appropriate to the specific needs of different segments of the target population; and (d) determine which medium or combination of media would be appropriate to disseminate the messages among the different segments of the target population.

The ESP will require additional messages incorporated into the existing IEC strategy. The new message will target a broader segment of the population, and will place a greater emphasis on family and reproductive health issues.

GoB and NGOs need to collaborate and coordinate their MCH-FP IEC efforts. This will help to eliminate duplication of efforts and dissemination of inconsistent and contradictory messages and thus strengthen the effectiveness of all the organisations involved.

The IEM Unit should be assisted in developing a coordination mechanism with other government organisations and NGOs. This could be accomplished in a workshop that would bring together the representatives of all organisations involved with IEC to identify areas of duplication and overlap, and to address the issues of targets and message content. Then a schedule for regular IEC coordination meetings between these organisations could be established.

Monitoring and Supervision

Management Information System: FWAs and FWVs are overloaded with recording and reporting duties, because there are too many forms and registers. As many as 43 different forms were being used to collect information on family planning service statistics, MCH and logistics. The three existing systems of information collection function separately with little coordination, and result in the duplication of recording and reporting efforts.

The flow of information back to the field is still not adequate or timely enough to be utilized for local level planning and supervision. The MIS system is supposed to provide programme

managers with data that can be utilized to diagnose field problems and evaluate the performance of individual workers and areas. As a result, the submission of reports and returns is irregular and the quality of the data is poor.

Finally, the data provided by the MIS Unit to the district managers only allow a comparison of their own CAR with the rest of the country. There is no analysis of thana-level data, and information on areas that need further investigation or supervision is not provided to the district or thana managers.

Assistance should be provided to the MIS Unit to refine the MIS, so that only data relevant for the needs of programme managers are collected. This could be accomplished in a workshop for programme managers in which (1) the specific data required for their needs, including those for the ESP, is identified; and (2) the MIS instruments are revised accordingly. The elimination of irrelevant data could also contribute to more rapid feedback, since the volume of information would be reduced.

This activity should be conducted for all three systems of information collection: MCH-FP, ESP components, and logistics. A review of the data needs and duplication among the three systems would follow and provide the basis for the design of a single, integrated system which eliminates duplication and improves coordination of data collection.

Supervision: Supervision at all levels is a major weak link in the family planning programme. Supervision of the union level and domiciliary workers is quite limited, and there is little accountability at the thana level and below. TFPO, ATFPO, MO/MCH and SFWV are supposed to make supervisory visits to about 10-12 FWCs. However, this is not done regularly, and when visits are made they are not conducted effectively.

The FPIs are the primary or immediate supervisors of the FWAs. Weak supervision at this level is a direct cause of insufficient contact between FWAs and clients and results in weak interaction when contact does take place. Since increased client-fieldworker contact and the quality of contact can contribute to enhancing the performance of the programme, improvement in FPIs supervisory skills is essential.

Weak supervision and lack of accountability at all levels of the family planning programme should be addressed by the development and implementation of a standard plan that facilitates supportive supervision. This would include additional training for staff at all supervisory levels in facilitative supervision. Each level would have a checklist of supervisory activities; a fixed number of supervisory visits during a specific time period; and a diary in which the visits and their results are recorded, as well as the results of a follow-up visit for verification by the immediate supervisor.

Meetings on supervision would be held monthly at the thana level and every three months at the district level. These meetings would provide a forum in which the supervisors could discuss problems they have encountered and arrive at solutions to these problems.

Logistics and Supplies

Maintaining an appropriate level of contraceptive stock at various tiers is crucial to an effective family planning and ESP logistics distribution/supply system. Rates of contraceptive stock-outs at the thana level have declined markedly from 23 percent in 1989 to under 5 percent by 1994. This decline, despite the rise in the quantity and types of contraceptives

distributed, is indicative of a major improvement in contraceptive supply management. It will have to become still more efficient however, if it is to handle the anticipated increased volume of contraceptives as well as the additional ESP commodities and supplies in the future. Steps should be taken to decentralize the system by creating an additional storage and supply tier at the union (FWC) level. This additional tier will also help the programme in avoiding stock-out situations in the field and to prevent commodities from becoming damaged or otherwise unusable. Given the popularity of supply-based methods, the growth in demand for contraceptives will pose a major challenge for the storage and distribution components of the logistics system.

It will also be necessary to adopt a decentralized system to handle the additional ESP commodities. This will include the formulation of procedures for determining the level of their demand, and the amount of supplies required to meet this demand.

URBAN MCH-FP PROGRAMME

The high urban growth rate and the presence of a highly mobile population will continue to place increasing demands on a service delivery system that is already unable to meet current needs. Innovative approaches will have to be developed and implemented through an expanding role of government and non-government organisations and the private sector, particularly the SMC, to provide the quality and level of services required.

A test of the feasibility of withdrawing the existing door-step distribution of contraceptive services, and introducing a cost-effective, static-centre-based delivery system in Dhaka City found that the shift in services produced a slight increase in the CPR. Further testing of the approach should be conducted and expanded to other urban areas.

There is a substantial gap between the desirable and actual quality of many MCH-FP services. A major programme need is to be able to identify and address problems of quality on a regular basis. The testing of quality improvement (QI) approaches such as COPE should continue; and studies which aim to develop standard quality indicators for the family planning programme should be initiated. At present, there is little consensus on quantifiable indicators that could be used by the programme to evaluate quality.

An intervention to institute coordination mechanisms among providers of basic MCH-FP services, and to improve capabilities in programme planning and coordination was successful in establishing a coordination committee in various zones of the city.

Through the course of the intervention, it was learned that the coordination of NGOs at the local level requires local mobilisation plus advocacy at higher levels with parent organisations and groups. It was also recognized that the role of the private sector will have to be expanded if the programme is to achieve success in the urban areas. This intervention should be expanded to other areas, and its success in improving coordination through the inclusion of private sector providers should be evaluated.

An urban field-worker information system was implemented to support the urban field workers in delivering a basic package of maternal and child health services. This system provides a better indication of the range of services provided by field workers than the previous system; and the training given on the use of this information contributes to improving the quality of services and programme performance. This system should continue

and should be expanded to other urban areas. Likewise, the Card-Based Clinic Information System (CIS), including the use of the Family Health Card (FHC) should be expanded to other clinics.

Effective Delivery of Essential Service Package (ESP)

The health and family planning programme is expected to undergo managerial and structural reforms which will produce a "unified management structure" under which the programme components will operate. Three possible ways of implementing managerial reforms have emerged from this review. One is that the process should be initiated in a phased-in manner, both in respect to the programme components as well as the service delivery tiers. The process should begin soon among those components which could be changed immediately - logistics, MIS, training, and supervision. For example, all of the additional commodities and supplies and monitoring information required for the ESP could be placed under a unified logistics and MIS component which includes family planning and health. Similarly, the additional training and supervision required for the ESP could be included along with the family planning and health activities within each of the components. Implementation of these changes would be instituted through a phased approach beginning at the union level and below, followed by the thana and district levels, respectively. The changes should be initiated immediately so that the successive phases are completed by the middle of 1998. Second, instead of adopting a phased in approach, there will be a unified merger and complete integration at all levels of service delivery and all components of the programmes. In order to manage this approach, consensus building is essential. The MOHFW will have to take the critical lead in bringing together the two directorates. Wherever a management approach is tried on a national level, the element of risk increases, and thus, all involved must be willing to appreciate, accept and implement the necessary changes. Third, the second variant, i.e., complete integration, should occur at only a selected high-performing district instead, before its introduction nation-wide. This approach combines elements of the first two. It allows a field-trial of integration. It is less risky, particularly if careful attention is given to the choice of the field-trial district. At the same time, all components will be merged rather than only a selected few. After a testing period, the integrated programme would be ready for nationwide replication.

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What is the Centre for Health and Population Research (ICDDR,B)?



ICDDR,B, or "The Centre", was established in 1978 as the successor to the Cholera Research Laboratory, which was created in 1960 to study the epidemiology, treatment, and prevention of cholera. The Centre is an independent, international, non-profit organization for research, education, training, and clinical services. Located in Dhaka, the capital of Bangladesh, the Centre is the only truly international health research institution based in a developing country. The results of research conducted over the years at the Centre provide, today, guidelines for policy-makers, implementing agencies, and health professionals in Bangladesh and around the globe. Researchers at the Centre have made major scientific achievements in diarrhoeal disease control, maternal and child health, nutrition, and population sciences. These significant contributions have been recognized worldwide.

How is the Centre Organized?

The Centre is governed by a distinguished multinational Board of Trustees comprising researchers, educators, public health administrators, and representatives of the Government of Bangladesh. The Board appoints a Director and Division Directors who head the four scientific divisions and the support service divisions of Finance, and Administration and Personnel.

The **Clinical Sciences Division** has three major functions in addition to providing care and treatment to the patients with diarrhoeal disease at the Clinical Research and Service Centre in Dhaka: (1) implementation of clinical research in diarrhoeal diseases and related areas of nutrition, and operations research; (2) training of health care providers (both Bangladeshi and international) in the case management of diarrhoeal diseases and associated complications as well as in clinical and operational research methodology; and (3) preventive health activities directed toward children and their mothers.

The **Public Health Sciences Division**, staffed with public health professionals, epidemiologists, social scientists, and economists, focuses on the evaluation of population-based interventions to improve reproductive and child health. The Division is responsible for the primary health care services in rural Matlab where there is a population of about 210,000 under demographic surveillance. The Division also has programmes in: Reproductive and Sexual Health; Child Health; Health and Demographic Surveillance; Social and Behavioural Sciences; and Health Economics.

The **Laboratory Sciences Division** has a research programme with branches in enteric bacteriology, molecular genetics, environmental microbiology, immunology, virology, parasitology, reproductive tract infections, and nutritional biochemistry; and a laboratory service programme with branches in clinical pathology, histopathology, biochemistry, and microbiology.

The **Health and Population Extension Division** undertakes operations research in family planning, reproductive and child health, epidemic control, and environmental health, and provides technical assistance to the Government of Bangladesh and non-governmental organizations in the application of the Centre's research findings. The Division comprises the two MCH-FP Extension Projects (Rural and Urban), the Epidemic Control Preparedness Programme, and the Environmental Health Programme.

The **Training and Education Department** coordinates efforts to provide a broad-based training programme that aims at contributing toward the development of global human resources in child survival and population programme research, planning, and implementation.

Computing Facilities: The Centre operates an IBM 4361 mainframe computer with eight megabytes (MB) of real memory and an on-line storage capacity of 3,000 MB. It is connected

to 25 terminals. This system provides the capacity to analyze large data sets, and is complemented by over 300 personal computers and a few Local Area Network (LANs) throughout the Centre. New e-mail facilities have been established in the Centre. A new information technology (IT) strategy is in the process of implementation to replace the old mainframe.

Dissemination and Information Services Centre: The Dissemination and Information Services Centre (DISC) provides access to the scientific literature on diarrhoeal diseases, nutrition, population studies, health, environmental, and behavioural studies in general by means of Current Contents (Life Sciences and Clinical Medicine), MEDLINE, AIDS and POPLINE databases, books, bound journals, reprints of articles, documents, some four hundred current periodicals, etc. DISC publishes the quarterly Journal of Diarrhoeal Diseases Research (and bibliography on diarrhoeal diseases within the Journal), two quarterly newsletters Glimpse (in English) and Shasthya Sanglap (in Bangla), a bimonthly bilingual staff news bulletin--the ICDDR,B News, working papers, scientific reports, special publications, monographs, etc.

Staff: The Centre currently has over 200 researchers and medical staff from more than ten countries doing research and providing expertise in many disciplines related to the Centre's areas of research. One thousand two hundred personnel are working in the Centre.

What is the Centre's Plan for the Future?

In the 37 years of its existence, ICDDR,B has evolved into a busy cosmopolitan research centre whose scientists have wide-ranging expertise. Future research will be directed toward finding cost-effective solutions to the health and population problems of the most disadvantaged people in the world. The Centre's Strategic Plan: "To The Year 2000" outlines work in the following key areas:

Child Survival: Diarrhoeal diseases are responsible for deaths of 3 million children every year. Acute and persistent diarrhoea and dysentery will remain priority areas for research on strategies for prevention, including modifications in personal and domestic hygiene behaviours, provision of appropriate water supply to and sanitation for the households, and the development of effective vaccines. The Centre's scientists will contribute to the improvement of the case management of diarrhoea based on better understanding of basic mechanisms, and national and international responses to epidemics. Risk factors for low birth rate and potential interventions, acute respiratory infections, nutritional deficiency states (including micronutrients), and immunization-preventable infectious diseases will also be examined, particularly as they interact with diarrhoea.

Population and Reproductive Health: The Centre has a long history of conducting pioneering research in the areas of population and family planning. The Centre played a key role in raising the contraceptive use rate among women of reproductive age in Bangladesh to almost 45% through technical assistance and operations research. So much so that the 1994 Cairo Conference hailed Bangladesh as a family planning success story. Matlab is now the model for MCH-FP programmes throughout the world, and the Centre is poised to make important contributions to maternal health and safe motherhood. In addition to continuing work in these areas, the Centre has initiated community-based research on reproductive health and STD/RTI/HIV infections.

Application and Policy: The Centre will continue to play a major part in improving both supply of and demand for existing health technologies, and in replicating the successful interventions piloted in its projects through health systems research. The Centre will increase its communication, dissemination and training efforts to influence international and national health policies in the areas of its expertise. ICDDR,B recognizes, and has given a high priority to, the need to transform research findings into actions.
