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NATIONAL STRATEGY
For
A Comprehensive Maternal and Child
Health Programme

Report of MCH Task Force

Ministry of Health and Population Control
Population Control Wing
Dhaka, January 1985

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NATIONAL STRATEGY FOR A COMPREHENSIVE
MATERNAL AND CHILD HEALTH (MCH) PROGRAMME

Report of MCH Task Force

MINISTRY OF HEALTH AND POPULATION CONTROL
POPULATION CONTROL WING

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HEALTH (MCH) PROGRAMME

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FOREWARD

I have great pleasure in officially adopting the "National Strategy for a Comprehensive Maternal and Child Health (MCH) Programme" as the guiding principles for development, strengthening and coordination of MCH programmes in Bangladesh.

I acknowledge the excellent work done by the Task Force for MCH Programmes in pulling together relevant information, designing a structural frame and an administrative process for coordination of different MCH projects. Such a mechanism was needed particularly because of the multi-disciplinary nature of MCH programmes and separate administrative location of different MCH projects.

Successful implementation of this strategy, I hope, will achieve greater organisational efficiency and effective functional integration and, in turn, will have far reaching impact on maternal and child health.

A.B.M. GHULAM MOSTAFA
SECRETARY

Preface

Absence of a comprehensive strategy for maternal and child health coupled with the need for special effort for coordination of mutually inter-dependent MCH tasks and functions of the field functionaries located under separate Health and Family Planning organizations, prompted the Ministry of Health and Population Control to form this Task Force.

The Report provides a brief documentation of the current status of maternal and child health in order to draw a logical link with the proposed programmes under the component MCH projects, EPI, ORS, TBA training and MCH clinics and, accordingly, define the MCH goals and objectives. The most important element of this strategy is to propose a viable mechanism of functional coordination between the complementary tasks relating to MCH programmes under the bifurcated administrative location of the component MCH projects.

To make the strategy effective, recommendations should be pursued to develop clearer job descriptions, a mutually supportive supervision mechanism, an integrated reporting system, a coordinated training programme based on complementary curricula and an integrated MCH work manual, leading ultimately to an effective functional integration of MCH with primary health care and family planning activities.

In preparation of this Report, important contributions were made by the members of the Task Force, specially Ms. Victoria Hammer, Dr. K.A. Pisharotá and Ms. Nancy Terreri, which are sincerely acknowledged.

Atiqur Rahman Khan
Convenor, MCH Task Force

COMPOSITION OF TASK FORCE FOR MCH
PROGRAMMES

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SUMMARY

Maternal and Child Health (MCH) is a multifaceted service, which addresses closely interrelated problems surrounding human reproduction, growth and development. The extremely high levels of maternal, infant and childhood mortality and morbidity in Bangladesh are primarily caused by a few conditions which could be prevented by relatively simple interventions; namely unsanitary birth practices, neonatal tetanus, diarrhoeal diseases and common childhood infections. These are combined with more complex problems of malnutrition, lack of safe water and sanitation, and other infectious diseases, as well as with high levels of fertility.

MCH, including family planning, is an essential element of Primary Health Care, and thus of strategies for achieving health for all by the Year 2000.

The National Strategy for a Comprehensive MCH Programme includes:

1. Functional integration of health and family planning at Upazila and below levels. MCH is incorporated in the job descriptions, work routines, training and supervision of health and family planning workers at these levels. And, joint use is made of static facilities and outreach services. Details are provided in Section VI and Appendices C & D.
2. Gradual development of comprehensive MCH care which aims at the prevention and treatment of the range of major problems affecting mothers and children in the country; that is, immunization against six childhood diseases; prevention and control of diarrhoeal diseases; maternal health care including birth spacing; nutrition surveillance and prevention; and curative care for child health problems. Components are to be incorporated in phases, according to the feasibility of service provision, availability of technology, attitudes and

socio-economic conditions of the people, and so on. Details are provided in Section V.

3. Priority areas are (a) safe deliveries (training of TBAs); (b) expanded programme on immunization (EPI); and (c) oral rehydration therapy (ORT). They are linked with the priority on family planning, an important preventive measure of MCH care. These are interventions which can be applied under present conditions, for which low cost and effective technologies exist. With wide coverage, these could have a significant impact on reducing maternal and infant mortality. Descriptions of each component programme are given in Sections IV, V and VI. The MCH Strategy summarizes these programmes as well as looks forward to a broader, more comprehensive MCH Programme.
4. Extension of service coverage through increased emphasis on outreach services, such as home visits and satellite clinics, liaison with NGOs and community groups, public health education and communications. These are briefly reviewed in Section VI and Appendix B.
5. Establishment of mechanisms of coordination and inter-programme linkages, concerning workers' duties, work routines, supervision, training, logistics, reporting and monitoring, and communications in MCH. Proposals are made for managerial mechanisms of coordination, together with a brief review of special requirements of MCH as a whole. These are described in Sections VI and VII.

The Strategy is developed on the assumption that the Health and Population Wings are to remain divided, and that separate administrative and technical lines of authority are to be maintained. The proposed coordination mechanisms are meant to facilitate integrated service delivery of MCH/FP in the most effective and efficient manner possible under these circumstances.

Implementation of the MCH Strategy will depend upon how well these mechanisms can function, and on the availability of resources for expanded MCH services.

The proposed mechanisms include:

1. MCH Coordination Committees at national, district and upazila levels, to ensure balanced development of MCH components and coordinated geographical and temporal implementation.
2. Special sub-committees, to develop joint or coordinated plans for programme functions, to include mechanisms such as:
 - (a) job descriptions, reflecting all MCH duties and responsibilities;
 - (b) work routines, showing balanced allocation of MCH tasks among health and family planning workers;
 - (c) supervisory checklists, giving all MCH tasks for assessment of job performance and in-service training, and clarification of supervisory functions and relationships;
 - (d) coordinated logistics system for storage and distribution of supplies and equipment for MCH/FP;
 - (e) training plan for combined and coordinated MCH/FP training in basic and in-service programmes, including curriculum revision;
 - (f) integrated reporting system for MCH programme management and evaluation; and
 - (g) communications plan for information, education and motivation (IEM) on interrelated and consistent MCH messages.
3. Preparation and institutionalization of other mechanisms, including:
 - (a) integrated MCH Work Manual, with specific instructions for health and family planning workers, particularly at union and ward levels, in all aspects of MCH;

- (b) regular monthly meetings at upazila and union levels to discuss programme progress and provide in-service training, involving both health and family planning supervisory and field staff;
- (c) MCH service targets set at district level for reaching MCH objectives and encouraging staff motivation and team work; and
- (d) MCH norms and standards for all aspects of MCH.

The sequencing of actions needed to initiate implementation of the MCH Strategy in 1985 is given in Section VIII, and includes among other actions:

- constitution of the National MCH Coordination Committee
- administrative requirements, ie. relocation of TBA project
- preparation of an MCH Plan of Operations, 1985-1990, including work plan and budget
- constitution of sub-committees and establishment of mechanisms, as above
- identification of research and evaluation needs

1. BACKGROUND

1. Concept of Maternal and Child Health (MCH)

Mothers and children make up a special, biological and social group. The specific health needs of reproduction, and early growth and development, make this a particularly vulnerable stage of life. Pregnancy and childbirth subject women and infants to health hazards which are different from the prevalent health problems of the general population. Children in our society are subject to very high risks of mortality and morbidity, and are especially vulnerable to malnutrition and infections. The causes of the high levels of maternal and infant mortality arise from a relatively small number of conditions which can be prevented by simple and well-tested interventions.

Factors influencing the health of mothers and children are closely related and interdependent. The combination of malnutrition, infection and unregulated fertility being the underlying cause of the greatest bulk of both maternal and infant mortality.

These stages of life are critical determinants of adult health. Preventive health actions in early childhood can have a positive impact on adult health.

Comprehensive MCH care is therefore required, to provide specialized health promotive, preventive and curative services. And, require the identification of interrelated problems and integrated approaches toward appropriate planning and design of the programme activities.

MCH, including family planning is one of the essential elements of Primary Health Care, and thus forms a key part of strategies to achieve health for all by the year 2000.

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2. Target Population

The present population of Bangladesh is estimated at 98 million with a crude birth rate of 39 and a death rate of 15 per 1000 population. Because of the high fertility experienced in the past, the population is very young, with 46.7% below 15 years of age as found in 1981 census. This proportion was even higher in 1974 census at 48%.

As per the 1981 census, as seen in Table I below, over 40% of the population are women of childbearing age, and children 0-5 years of age, the target group for MCH care.

TABLE I¹
Percentage Distribution of Population by Age and Sex

Age	Male	Female	Both Sex
0 - 4	16.6	17.4	17.0
5 - 14	29.9	29.5	29.7
15 - 44	38.7	40.4	39.5
45 +	14.8	12.7	13.8
	100.0	100.0	100.0

Modified as per currently married females of reproductive age, as shown in Table II below, this percentage may be calculated at 33.6%. The annual number of child births is estimated at 3,822,000.

TABLE II¹
Population by Selected Age Groups, Sex and Current Marital Status

Age	Male	Female	Both Sex	Currently married female	Percentage female current-married
0 - 4	8,371	8,278	16,649	-	-
5 - 14	15,078	14,034	29,112	982	7.0
15 - 44	19,515	19,219	58,734	16,278	84.7
45 +	7,463	6,042	13,505	1,758	29.1
	50,427	47,573	98,000	19,018	41.8

The sex ratio of men to women is 106, and indicates an excess female mortality in childhood and the reproductive ages, and preferential treatment of males. This reflects the low status of women in the country, with serious health implications.

3. Current Health Conditions of Mothers and Children

Mortality Levels

Health conditions in Bangladesh are in general very poor, with high levels of mortality and morbidity, specially for mothers and children.

Maternal mortality is estimated at 6 per 1000 live births, as shown in the available evidence presented in Table III below. Despite the range of 4.8 to 7.7 per 1000 live births, these are very high by international standards. Taking the Matlab figures from the late 1960's, it appears that there has been no appreciable change in maternal mortality in the past 10 to 15 years.

TABLE III ^{2,3,4,5}
Maternal Mortality Rates (per 1000 live births) Found in Different Studies in Bangladesh

Studies conducted by	Study Area	Approx. size of pop. (1000)	Study Time	Maternal Mortality Rates
ICDDR,B	Matlab	180	1967-68	7.7
ICDDR,B	Matlab	180	1968-70	5.7
BAMANEH	Islampur and Jamalpur	267	1982-83	6.2
Alauddin	Gopalpur and Bhupur	300	1982-83	5.7
BAMANEH Project	Chandina, Gabtali & Tongai	137	1982-83	4.8

The neonatal mortality rate, also derived from several sources, is shown in Table IV, and is considered, for planning purposes, to be 85 per 1000 live births. This very high rate

indicates the significance of maternal health and birth practices as causes of infant deaths.

TABLE IV
Neonatal Mortality Rate (per 1000 live births) Found in Different Studies in Bangladesh

Author	Agency	Year of Study	Place of Study	Rate
Islam et al 1981	ICDDR,B	1976-77	Teknaf	89.0
Rahman, M. et al 1981	ICDDR,B	1976-77	Matlab	73.4
Rahman, S. et al 1981	NIPORT	1979	Ghatail	70.1
Rahman, S. et al	NIPORT	1979	Ghatail	85.2
Jahan, F.A. et al 1984	BAMANEH	1982-83	Jamalpur	80.5
Alauddin, M. 1984	ISWR	1982-83	Tangail	117.0

Infant mortality rates, shown in Table V, varies in different studies; the figure 125 per 1000 live births is used for planning purposes. ICDDR,B rates based on the Matlab demographic surveillance system are believed to be more reliable than others, but are likely to be lower than the national average because of the diarrhoeal disease control programmes under way there. The year to year fluctuation, a distinct feature of infant mortality in the country, is presumably due to environmental factors such as supply of food and nutrition, subject to change through time.

TABLE V
Infant Mortality Rates Derived from Different Sources for Different Time Periods

Year	ICDDR,B (Matlab)	BRSFM	BFS/WFS	CDS Companiganj
1969-70	127.5	-	-	-
1971-72	146.6	-	-	-
1974	137.9	153.0	-	-
1975	191.8	-	150.0	139.7
1976	102.9	-	-	121.0
1978	125.8	-	-	115.2
1980	114.0	-	-	-
1982	114.5	-	-	-

Child mortality in the age group 1-4 is shown in Table VI, with rates varying widely from 14.7 to 57.1 per 1000 population; an average of 25-30 per 1000 population of the age group is used. The year to year fluctuation is even more pronounced in this case.

TABLE VI
Child (1 to 4 years) Mortality Rate in Companiganj and Matlab in Different Years

Year	Companiganj	Matlab
1975	57.1	-
1976	38.0	29.6
1978	14.7	-
1981	-	22.0

Causes of Mortality

Major causes of maternal mortality found in two recent studies are shown in Table VII. The most frequent causes, as seen in these and in other studies, are eclampsia, infections (sepsis due to abortions and/or postpartum sepsis), complications of labour and hemorrhage⁶. The causes of maternal mortality indicate the significance of unhygienic birth practices and unsanitary abortions, causes which are preventable. Over half of the deaths could be prevented through adequate care. Also reflected are high levels of malnutrition and generally poor health status of women.

TABLE VII
Causes of Maternal Death Found in Two Studies, Bangladesh

Causes of death	BAMANEH Study		Alauddin Study	
	No.	%	No.	%
Eclampsia	12	20.7	7	14.6
Haemorrhage (ante & postpartum)	6	10.3	10	20.8
Septic abortion	12	20.7	8	16.7
Postpartum sepsis	6	10.3	5	10.4
Tetanus	4	6.9	-	-
Difficult labour	6	10.3	6	12.5
Retained placenta	4	6.9	8	16.7
Indirect obstetric	8	13.8	4	8.3
Total:	58	99.9	48	100.0

The distribution of maternal deaths per age group follows a typical "U" shaped curve: the highest rates being in the lowest ages (/20) and oldest (40-44), and the lowest rates in the 20-24 age group (Appendix A1). Mortality by parity shows the lowest rates for women with one to four births (Appendix A2). These figures indicate the importance of contraception restricting childbearing to ages 20 through 35 years, and within fourth birth order.

The finding of septic abortion as a frequent cause of death is consistent with other studies; one, carried out in 1978 attributed one-quarter of maternal deaths due to this cause. This confirms the importance of the practice of family planning for reducing levels of maternal mortality.

The main causes of neonatal, infant and child mortality include birth trauma, tetanus, diarrhoeal disease, malnutrition, pneumonia, and measles (Appendix B). The high proportion of deaths occurring in early infancy (neonatal) again indicates the importance of maternal health and birth practices as causes of death. Moreover, the large percent of neonatal mortality caused by neonatal tetanus⁷ emphasizes the need for tetanus prevention, and the significant impact which TT immunization could have on infant mortality. It should also be noted that a large proportion of neonatal deaths are related to low birth weight, most of whom are small-for-gestational age. These infants have less chances of survival or subsequent growth and development.

It is estimated that diarrhoeal diseases contribute to 20% of infant deaths⁸, and at least 50% of the causes are due to tetanus, respiratory infections and diarrhoeal diseases. Malnutrition combined with diarrhoeal diseases cause over 50% of child mortality, followed by measles and its complications. A countrywide survey on morbidity and mortality in 1983 showed that diarrhoeal diseases were responsible for 30% of all death of children under the age of five⁹.

Morbidities

While figures on morbidities of mothers and children are extremely scarce, there are indications of very high levels, as indicated by special surveys. For example,

- (a) more than 12 million children under 5 years are suffering from malnutrition, of whom about 20% suffer from 3rd degree malnutrition¹⁰ and 61% of 0-5 year old children suffer from 2nd and 3rd degree malnutrition¹¹.
- (b) studies have shown that approximately 70% of all pregnant and lactating women are severely anaemic, and that women's weight gain during pregnancy is 50% of the minimum desired¹².
- (c) it is estimated that there are an average of 3.53 episodes of diarrhoea per year per child¹³.
- (d) xerophthalmia (Vitamin A deficiency) which may lead to irreversible blindness is estimated at approximately 5% of the rural children under 6 years of age¹⁴.
- (e) a sample survey showed residual paralysis due to poliomyelitis as 1.24 per 1000 population in the 1 year group, 2.63, in the 1-4 age group; and 1.39, in the 5-9¹⁵ age group.

NOTES:

1. Estimated by applying 1981 census age structure
2. L.C. Chen et al (1974)
3. F.A. Jahan et al (1984)
4. M. Alauddin (1984)
5. S.F. Begum (1984)
6. "Maternal and Child Health in Bangladesh", UNICEF, Bangladesh, May 1984
7. Studies have shown 30-60% of neonatal mortality caused by neonatal tetanus
8. Plan of Operations for National Diarrhoeal Control Programme; 1974-75 Study in Matlab
9. ibid
10. "A Report on The Situation Analysis of Nutrition Component in PHC System in Bangladesh", Institute of Public Health Nutrition Dietetics & Food Science, 1983
11. Summary, Conclusions and Recommendations of 1981-82 Nutrition Survey, Prof. K. Ahmad, Institute of Nutrition and Food Science, University of Dhaka
12. "Maternal and Child Health in Bangladesh", op. cit.
13. Plan of Operations for National Diarrhoeal Control Programme
14. Xerophthalmia Prevalence Survey 1982-83, Institute of Public Health Nutrition, Ministry of Health, and Helen Keller International, December 1983
15. Expanded Programme on Immunization Draft Plan of Operations, 24 October 1984

II. MCH GOALS AND OBJECTIVES

The overall goal of the MCH programme for the Third Five Year Plan, 1985-1990 is to improve the health conditions of mothers and children, through the reduction of mortality and morbidity, specifically to

- reduce maternal mortality from 6 to 4 per 1000 live births
- reduce infant mortality from 125 to 100 per 1000 live births; and neonatal mortality from 85 to 65 per 1000 live births

The overall objectives are:

- to ensure access of women to care during pregnancy and delivery by trained persons
- to reduce mortality, morbidity and disability from tuberculosis, tetanus, diphtheria, pertussis, measles, and poliomyelitis, through immunization
- to reduce morbidity and mortality due to diarrhoeal diseases and diarrhoea-related malnutrition:
 - to reduce mortality due to diarrhoeal disease by 30%
 - to reduce hospital utilization of intravenous fluids by 50%
 - to reduce hospital/other visits by diarrhoeal cases by 30%
- to reduce crude birth rate of women in extreme age and high parity groups through family planning
- to develop self-sufficient MCH care as part of primary health care and increase coverage of comprehensive services to mothers and children.

The process or specific objectives are:

1. to ensure that at least 30% pregnant women have been contacted, and are
 - assessed for risk; provided knowledge on safe deliveries;
 - educated on nutrition; informed of availability of trained birth attendants in health facilities or of trained TBAs;
 - in addition, the trained FWV will provide ante-natal and postnatal care to about 2000 population around each static facility.

2. to have 30% of deliveries in rural areas attended by trained birth attendants; and about 10% of all births, urban and rural, in institutions, equipped for handling high risk cases
3. to cover 30% of women of childbearing age with two doses of TT
4. to cover 55% children 0-2 years in areas with primary EPI centres with BCG, DPT, Measles and OPV (0.63 million)
5. to cover 30% children 0-2 years in areas with UHFWC's with BCG, DPT and Measles (0.60 millions)
6. to cover 75% families in rural areas with information on prevention and treatment of diarrhoeal diseases; and to have 35% of households using ORT
7. to achieve a 40% contraceptive prevalence rate
8. to cover 30% of mothers and children with curative care in areas surrounding the static health facilities
9. to educate 50% of households in MCH practices including hygiene, maternal nutrition, and infant feeding.

III. MCH STRATEGY: SUMMARY OF APPROACHES

The implementation strategy of the comprehensive MCH Programme is based on existing policies and strategies adopted by the Government of Bangladesh. The strategy represents a pulling together of the aims and approaches of the priority component programmes, i.e. EPI, ORT, TBA and family planning as well as looks forward to an integrated, more comprehensive MCH programme. The MCH Strategy is not intended to change the present location of these component programmes in the Health and Population Wing. Rather the purpose is to improve the efficiency and effectiveness through coordination of interdependent programme activities. The main elements of the MCH strategy include:

1. Functional integration of MCH service delivery at Upazila level and below:

Integration is achieved through rational allocation of priority MCH-FP-PHC functions among the health and family

planning staff and joint use of facilities at the Upazila Health Complexes, the Union Health & Family Welfare Centres (UHFWC's) and sub-centres where available. MCH is made an integral part of the roles and responsibilities of all the field staff and their supervisors, whether working in static centres or in outreach activities. A teamwork approach is aimed at in order to attain a well coordinated and mutually supportive work routine, and optimal use of male and female workers. Apart from sharing facilities, logistics and supplies are to be coordinated, and shared where possible.

Functional integration at this level maximizes the utilization of scarce resources and the effectiveness of each component. People's acceptability is greater for each component, as it is for MCH as a whole, when services are delivered in an integrated way.

2. Gradual development of comprehensive MCH:

Given the present level of resources, services and management capability, it is clear that a total package of MCH is not feasible now. Services will be developed in phases, starting with priority components, and adding new ones linked to establishment of infrastructure, development of training capability and technology. Comprehensive MCH could include:

1. immunization against the six major diseases of childhood
2. prevention and control of diarrhoeal diseases
3. effective management of pregnancies and deliveries (maternal health care), including family planning
4. nutritional surveillance and support
5. recognition and treatment of simple child health problems

3. Priority of MCH Components:

Family planning is an already established priority; improved MCH increases acceptance of family planning, and

/...

family planning (birth spacing) is an effective measure for reducing maternal and infant mortality/morbidity.

In addition it has been agreed that priority is to be given initially to three components:

- immunization (EPI)
- oral rehydration therapy (ORT)
- safe delivery practices (TBA Training)

These priorities were selected on the basis of the high proportion of deaths occurring in the perinatal period, especially neonatal, caused by tetanus; the high levels of maternal mortality caused by poor delivery practices; and the large proportion of infant and childhood deaths caused by diarrhoeal diseases. Interventions in these areas can have a significant impact on mortality reduction, and can contribute to lowering morbidity of mothers and children. It has been shown that by providing 2 doses of TT during pregnancy and having deliveries conducted by a trained attendant, neonatal mortality can be reduced by 30-40%¹⁶. The health messages to people concerning the three priorities are highly interrelated. The programme components are feasible under present conditions in a sizeable number of Upazilas (40%) and Unions (50%), and the technology is readily available and reliable at the present time.

4. Expansion of coverage of MCH services:

While services are yet to be developed in all Upazilas throughout the country, they are to be expanded from established Upazila Health Complexes to functioning Union Health and Family Welfare Centres and further down through out-reach services and other community health actions, including:

- emphasis on satellite clinics: use of UHFWC team of FWV, MA, FWA, HA; a balance of female and male health and family welfare workers
- greater use of household visits

- increased ratio of FVV to population (to reach 1 per 4000 population)
- increased use of and linkages with NGOs and other voluntary community groups
- development of information, education and communications programmes through mass media and community channels

Emphasis on outreach is essential if the at-risk population is to be covered. In general, people do not come to static health services for health promotive and preventive actions; this is particularly true for women, who traditionally remain within the family compound, and who do not consider pregnancy and child birth the concern of health-medical services.

5. Establishment of coordination mechanisms and inter-programme linkages:

Certain coordination mechanisms are included in policy directives, but need elaboration and institutionalization. Others have to be developed along very specific and practical lines. These mechanisms would not represent a change in the present administrative location of component programmes e.g. EPI, ORT/DBC, would remain in the Health Wing, and MCH/TBA would remain in the Population Wing. Although the emphasis is on coordination at the functional level of upazila and below, a multi-tier committee system, with a National MCH Committee at the apex, is essential for adequate managerial and technical direction and supervision. Examples of mechanisms would include (see Section VII):

- coordination committees at national, district and upazila levels
- special sub-committees on MCH programme functions
- MCH target setting
- combined work manual
- coordinated logistics systems

- integrated reporting system
- regular staff meetings at upazila and union levels
- integrated retraining
- coordinated supervisory system.

Coordination is required to ensure that contradictory planning and programming are avoided by "vertical" programmes, and that optimal use is made of scarce human and material resources. Special emphasis will be given to coordinating the functions of training, supervision, logistics, and communications (IEM) Job descriptions will be revised accordingly.

IV. MCH CARE IN BANGLADESH

1. Historical Developments and Structure:

Historically, MCH care lacked a comprehensive approach. Until the late 1950's, the only MCH service in the country was the obstetric care provided in urban-based hospitals, and in a few privately-run maternity centres. In the late 1950's and 1960's, the government initiated an MCH programme through the establishment of Maternal and Child Welfare Centres (MCWCs), run by paramedics. The total number ultimately reach 87, by the late 1960s.

During the 1950's and 1960's priority attention focused on the prevention and control of communicable diseases, such as smallpox, malaria and cholera, and thus MCH never received importance. In the late 1960's after a full-fledged family planning programme was launched, MCH gained some visibility, though family planning continued to receive priority over MCH from that time to the present.

The government's policy since 1976, has been to combine family planning and MCH, recognizing that reduced infant mortality creates favourable conditions for family planning acceptance. The responsibility for MCH was shifted

from the Health Services to the Directorate of Population. The shift however was limited to the transfer of MCWCs. Other MCH-related intervention programmes remained in the Health Division, because of their broader health relevance. This functional split jeopardized the development of a comprehensive MCH strategy.

Rather than merge health and family planning organizationally, the Government decided on a policy of functionally integrating health and family planning services at the Upazila level and below. Government directives on duties and responsibilities of staff at these levels include MCH and family planning, and specify that both health and population staff must carry out both duties, using the same facilities. To facilitate integration, the two Divisions were placed under one Secretary to the Minister. The present organizational structure is shown in the organogram in Figure 1.

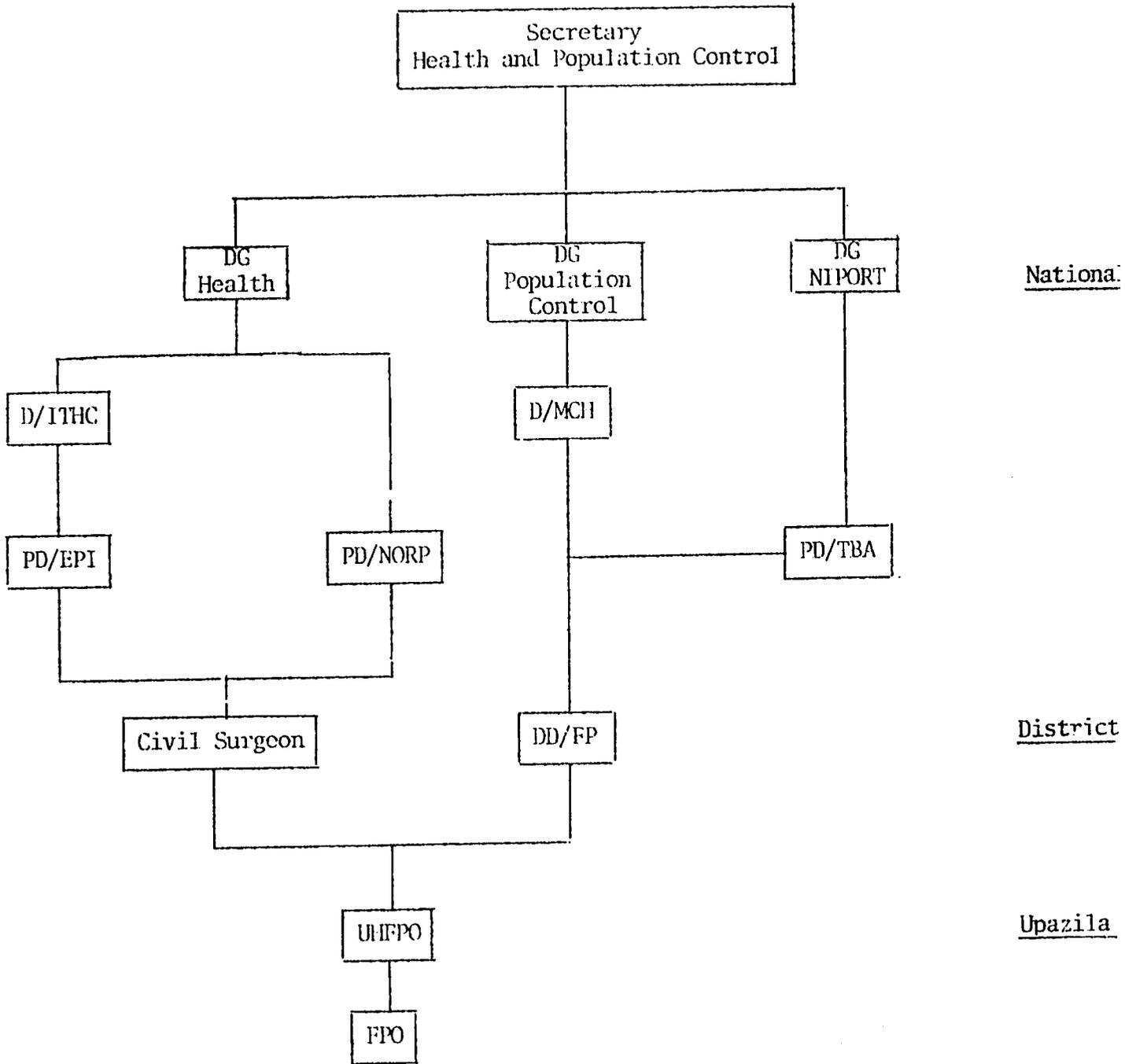
2. Present Programmes and Future Strategies:

(a) MCH Clinical Services

The MCH clinical network consists of 3 main categories of facilities. Maternal and Child Welfare Centres (MCWC), MCH Units in the Upazila Health Complex (MCH/UHC) and Union Health Family Welfare Centre (UHFWC). Of the original 87 MCWC's at different levels (district, erstwhile sub-division, upazila and union) twentyfive union level MCWCs were categorized as FWC's, leaving the remaining 62 as MCWCs. Each of the MCWCs is staffed with 2 FWVs and 1 midwife. MCH Units have already been established in 337 Upazila Health Complexes. Each of the units is staffed with 1 Medical Officer and 2 FWVs who are responsible for the MCH services in the Upazila Health Complex. The UHFWC is the basic institutional facility for primary health care, including MCH and family planning. Presently there are 865 functioning UHFWCs which, by the

Figure 1

Present Organogram: Ministry of Health and Population Control MCH Programme



end of the Second Plan period (June 1985), is expected to reach about 1400. Each of the UHFWCs is staffed with one Medical Assistant, one FWV and one Pharmacist.

The present quantity and quality of the MCH clinical infrastructure is far from satisfactory, and lacks the capacity to meet even the basic needs for care, particularly for maternity care. It is estimated that a minimum 5% of women will require caesarian section, and 5% antenatal or postnatal hospitalization, giving a total of at least 10% requiring hospitalization for childbirth. Even in facilities where beds may exist, the necessary equipment and supplies, such as for anaesthesia or blood transfusions, are not available. Moreover, specialized training in obstetrics/gynecology is lacking, and the numbers of lady doctors available for providing care is grossly insufficient. The needs of high risk cases thus cannot be adequately met.

In the TFYP, therefore, it is proposed to strengthen the clinical infrastructure or referral network of MCH services to meet the needs of a minimum of high risk cases; and to serve as a basis for greater extension in the future to meet the potential demand created through expanded maternal health care services, as well as to provide the back-up services required for family planning and management of child health problems. This will require an assessment of needs in existing facilities; provision of supplies and equipment; and training of staff.

It is recommended that the existing DGO (Diploma in Gynecology and Obstetrics) course, a one year specialist training be strengthened, and that a shorter 3-6 month course be developed for training (or retraining) of the MO/MCH-CC's at Upazila levels and MO's in other

MCH clinical services, especially for lady doctors. Attention is also to be given to longer-term specialist training in Bangladesh or abroad for lady doctors in OB/GYN.

During the Third Plan period, the number of UHFWCs will be increased to 2800 and another 250 UHFWCs will be established through renovation and extension of rural dispensaries. The number of MCH Units in the UZHCs will be increased to 396 to cover all the rural upazilas.

(b) Training of Traditional Birth Attendants (TBAs)

The national TBA training programme began in 1979, in view of the lack of adequate care available throughout the country for women during childbirth, and concern for the extremely high levels of maternal mortality.

Over 95% of the deliveries are carried out in the absence of trained personnel, in homes. Although patterns vary in different parts of the country, most deliveries are carried out by (a) relatives; (b) women, themselves, alone; or (c) dais, traditional birth attendants. The term TBA has been used loosely, to cover those women assisting at least several births per year in their villages, and "professional" dais who are paid for services and who assist in deliveries in their own village and other surrounding ones. In addition, it was recognized that the government clinical facilities would never be expanded quickly enough to meet the needs for service in the foreseeable future. The scheme aimed at having one trained TBA in each village.

Prior to its initiation, a curriculum and training manual were prepared and Family Welfare Visitors (FWVs) were trained as trainers. During the two phases, 1979-1980 and 1981-1982, a total of 24,000 TBAs were trained.

Evaluations of the programme revealed serious technical and administrative problems, which cast doubts on its effectiveness or impact. These include the lack of selection criteria; poor training of trainers (FWVs); too broad and imprecise curriculum; insufficient practical training; unsatisfactory teaching methodology. Following training, supervision and follow-up were lacking, and contact between the TBA, the FWA and the FWV was limited. In addition, problems were experienced in the distribution and use of the TBA kits.

The training and utilization of the TBA have suffered from lack of administrative support and cooperation of the field level staff in the mainstream programme, as the TBA training programme was administered by NIPORT, which has no control or supervision over the FWVs working in the Union Health and Family Welfare Centres (UHFWCs). Similarly, links with the clinical infrastructure do not exist. The training programme was suspended in 1983.

Related projects, carried out on a small scale by NGOs, included the development and distribution of safe delivery kits. The kits include very basic supplies and equipment (soap, disinfectant, gauze, cord ties) for safer deliveries, made and sold at low cost (from 3 to 20 Takas). They are intended for use by the TBAs or by women themselves. The projects' experiences show that this is a feasible approach, if adequate education-information complement the kits' distribution.

In the TFYP, the TBAs training programme is to fit within the broader context of MCH. In particular, to be part of activities for providing safe delivery services at home and static centres, closely coordinated with the activities of antenatal and postnatal care and immunization of women with Tetanus Toxoid.

In 1984, the TBA training programme was redesigned and preparations are being made for implementation. It aims to provide knowledge and skills for delivery and care of the newborn; and to enable the TBA to recognize high risk pregnant women for referral to FWV or special institutions. In addition, some training would be provided in the practical aspects of ORT, immunization and family planning. In addition to a Project Director, the scheme provides for two deputies for management and training and 4 area supervisors. An important feature is that the training is to be under the management and supervision of the MO(MCH-CC) and Sr. FWV Supervisor, a new post to be created in each UHC, and the training to be carried out in functional UHFWCs, where MAs & FWV's have been posted. The role of the Sr. FWV will be crucial in upgrading the knowledge and training capabilities of the FWVs, as TBA trainers, and in subsequent follow-up and supervision. She will be specially trained for this purpose. Emphasis will be given to practical training in safe deliveries. Training will be carried out in three phases, at one-month intervals, to be followed by a 21 month close supervision period; this will include meetings between the TBA and FWV at FWC's and in Satellite Clinics.

It is proposed to move the TBA Training project from NIPORT to the MCH Directorate in the Population Control Wing.

The target is to train about 30,000 TBAs during the TFYP.

The programme will also include:

- (i) provision of one TBA kit box per trainee and two safe delivery kits;
- (ii) operational research on education-motivation of women on safe deliveries through the mass media; the development of a discussion guide; and the development and distribution of safe birth kits; and

- (iii) orientation of one additional TBA per village for 3 days.

(c) Family planning/Birth spacing

While family planning is treated as a separate item within the Population Control Programme, namely, MCH and family planning, it is referred to here as a priority component of MCH in view of its important health effects on maternal and infant health in addition to its fertility control objectives. The spacing of births is one of the most effective technologies for the prevention of maternal and infant mortalities, and is thus included here as a measure for achieving MCH aims.

The family planning programme was initiated by the Government (as a national programme) in 1976. An extensive infrastructure for extended coverage has been established through the construction, staffing, equipping and supplying of static health centres; the recruitment and training of special family planning workers at all levels, especially FWVs and FWAs for institutional as well as field-domiciliary activities; development of organizational and institutional structures to support the programme, including management information systems, and a research and training institute (NIPORT).

The family planning programme offers a broad range of contraceptives; it mainly provides clinical contraception through the network of facilities, and conventional contraceptives, delivered at home by field workers. The current contraceptive prevalence rate (CPR) is estimated at 22%. Sterilization Surveillance Teams have been established, and cover all districts, to monitor the safety of the procedures and offer staff training. Technical supervision is provided from the UHC by the MO (MCH-FP); and from the UHFWC by the MA and the FWV Family planning staff work according to targets, and receive financial

incentives for exceeding the expected numbers of acceptors.

The programme has also instituted a grants-in-aid mechanism for financial support to family planning carried out through a large number of non-governmental organizations (NGOs), working at the community level. A social marketing programme has been developed which channels contraceptives through the private sector. Support has also been given for women's programmes, in various sectors such as female education at the primary school level, vocational training, increased employment opportunities in cottage industries, and women's co-operatives for credit, training and marketing. Information, education and communication activities in population and family planning have been developed, both through mass media and inter-personal contacts.

In the TFYP, the strategy is to further strengthen and expand the present population programme, so as to increase the availability and improve the quality of family planning and MCH services. This includes infrastructures for integrated FP/MCH including expanding coverage of priority MCH services; manpower development and training; population related communication activities; management information system; research and evaluation; and multi-sectoral approach involving the ministries of education, rural development, social welfare and women's affairs, labour and manpower, and agriculture. Particular emphasis will be on women's programmes, involvement of NGO's, and increased community participation.

The programme will continue to rely heavily on the work of the FWV's and FWA's in increasing family planning services to women. Field workers will be given priority for training, especially FWA/HA, EPA/AHI, MA/FWV.

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(d) Expanded Programme on Immunization (EPI)

The Expanded Programme on Immunization (EPI) began in 1979, under the Directorate of Health Services. The long-term objective is to reduce morbidity, mortality and disability from neonatal tetanus, non-neonatal tetanus; tuberculosis; measles; diphtheria; pertussis; and poliomyelitis.

Presently, immunizations are being carried out at 927 centres throughout the country. The centres include 388 "Primary Centres" where safe cold storage for vaccines is available; 244 of these primary centres are at Upazila Health Complexes. Specialized EPI technicians, in place in most UZHCs, are currently the only full time EPI staff at this level, and the main persons doing vaccinations at this time. In addition, one medical officer has been designated in each UZHC, to have supervisory responsibility for EPI. It was planned that regular immunization would be carried out by the FWVs and MA's but this has not as yet been implemented. Immunizations are offered once a week at the UZHCs, and at fixed days in certain Union HFWCs, or other sites when the EPI technicians visits, with the vaccines, from the UZHC.

Special attention has also been given to the "Cold Chain". Different categories of staff have been trained in proper vaccine handling, and in cold store and refrigerator maintenance. There are currently 20 district level EPI cold chain technicians who have been trained and placed.

Strategies for expanded outreach services have been planned for testing. A trial TT outreach campaign was launched in December 1984 and January 1985 using both health and family planning staff, and aiming at a minimum of 20 vaccinations a day. Preliminary results indicate

high acceptance by women exceeding targets, and good co-operation among the staff.

Priority is now being given to TT, DPT, BCG and Measles because of the relative stability of the vaccines.

Although overall coverage remains low (2-5%), the programme has recently progressed well in terms of its organization, vaccine availability, and logistics systems. A Plan of Operations is being finalized. Directives have been issued for the introduction of immunization at all functioning UHFWCs, as well as MCWC's and MCH units at UZHC's. Plans focus mainly on services for the rural areas.

In the TFYP, the long-term objectives are to reduce mortality, morbidity and disability from all six diseases; and to develop and promote self reliance in the delivery of immunization services within the framework of comprehensive, integrated services.

The strategy includes:

1. expansion of services: the aim is to achieve everyday availability of immunization through the static rural centres, eg. UZHCs, UHFWC, MCWC's, once adequate storage facilities exist. The Upazila HFPO has full responsibility for implementation, with assistance in all operational and logistics activities from the BPI Technician. At Union level, the MA and FWV will provide the immunization services. By 1990, it is expected that at least 500 UZHCs and 1500 UHFWC's will be offering immunization. In municipal areas, vaccination motivation and follow-up will be done by the Municipal Health Staff, under the supervision of the Municipal Medical Officer. In Urban areas, immunization will be done in the government hospitals and clinics.
2. development of effective outreach strategies: various alternatives will be tested for providing immunization outside the static centres, through health and population staff. Outreach will be the key to achieving high vaccination coverage. Strategies would include regular services at the

satellite clinics, linked with the IEM activities of the field workers (HA, FWA) during home visits. The strategies would differ depending on whether or not there is a functioning UHFWC.

3. strengthening of the cold chain system: the strategy for the system will include:
 - (i) provision and training of staff in the use and care of equipment for vaccine transport and storage (68 EPI cold chain technicians will be positioned);
 - (ii) testing of vaccine storage equipment operating on alternative power sources;
 - (iii) development of routine vaccine delivery schedules and different modes of delivery (eg. with other MCH supplies) according to local needs; and
 - (iv) preparation of procedure for routine monitoring of cold chain effectiveness.
4. strengthening of training activities: all personnel involved from District to Ward level will receive orientation on training; training modules (special EPI training material) will be made available to the regular training establishments for training and retraining of union and field staff; and regular information will be provided through an EPI quarterly newsletter. Special attention will be given to the orientation of District level to ensure proper management and supervision (see targets, Appendix E).
5. improvement of surveillance of EPI target diseases: this will include instituting an information system for collection of data on diseases and immunization performance.
6. promotion of community participation: IEM activities will be developed in cooperation with the Health Education Bureau, IEM Units, utilizing mass media, school education, etc.; and cooperation and support to NGO's will be strengthened by guaranteeing vaccine supplies and providing promotional materials.

In order to ensure full coverage, it is estimated that each village should have one immunization session each month. Immunization schedules proposed are:

BCG	: 0-15 years (one dose)
DPT	: 3 mo - 2 years (3 doses, one month intervals)

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- Measles : 9 mo - 2 years (one dose)
- DT : 2 yrs - 10 yrs (2 doses, one month interval)
- TT : pregnant women, women of childbearing age (2 doses; 2nd dose, at least 2 weeks prior to delivery)

(c) National Oral Rehydration Programme (NORP)

The NORP was initiated in May 1979, to combat mortality from diarrhoea through oral rehydration therapy, using health workers and volunteers. Four cottage type ORS Production Units were established, and produced and distributed a total of more than 16 million ORS packets. A multi-tiered training programme was launched, resulting in the training of workers in all districts, and 50% of all thana tiers. Approximately 98000 village volunteer health workers were also trained to work as depot holders of ORS. Later, the programme was limited to the production and distribution of ORS, as the ORT training activities were to be linked with ongoing PHC training.

Close links were established with the Bangladesh Rural Advancement Committee (BRAC) which developed an intensive programme of family education on oral rehydration therapy (ORT). The programme has covered more than 3 million households.

In view of the significance of the problem of diarrhoeal diseases in the country, it was decided to develop a comprehensive programme for the control of diarrhoeal diseases (CDD), which would greatly expand the scope of NORP.

In the TIYP, the programme is to be implemented as an integral part of primary health care/MCH, though separate organizational and control functions will be maintained. A national council for CDD will be formed.

The main elements of the strategy for achieving the objectives of developing self-sufficiency in CDD

activities and reducing morbidity and mortality due to diarrhoeal diseases and diarrhoea related malnutrition include the following:

1. emphasis on case management to reduce mortality through adequate therapy:
 - (i) case management at home and community level with home made solutions (eg. labon/gur sarbat): extensive education-training will be provided for a wide range of people, ie. mothers and family members, community volunteer health workers, imams and primary school teachers, outreach government health workers, village practitioners and members of local clubs or organizations. Education will be carried out by government health workers in home visits. Education will include knowledge of when ORS is needed, and where to go for treatment and supplies.
 - (ii) case management through static health centres: all MCH workers at the union level (MAs, IAs, FWVs, FWAs) will be involved in proper management of diarrhoeal cases; and Union static centres will maintain stocks of ORS packets, IV bags and medicines. At the Upazila level, UZHCs will play a critical role in all types of therapy as well as training, laboratory services, procurement and supplies, supervision, etc. Upazila Health and FP Officers will be involved, in addition to one MO and Sanitary Inspector. At District level, the Civil Surgeon will have overall responsibility for the programme.
2. development of an epidemiological surveillance and epidemic control system:

in addition to routine information provided through all levels, 64 special surveillance teams will be established at District level.
3. improvement of maternal and child care practices:

in order to promote changes in practices for the prevention of diarrhoeal diseases at the home level, health workers will be trained to provide education during home visits and other contacts, for nutrition support, including proper breastfeeding and weaning practices; and for advice on hygienic handling

of children, handwashing with soap, hygienic food handling, use of safe water, etc.

4. improvement of environmental sanitation:

in addition to national efforts of extending water supply and sanitation facilities, health workers will motivate community members in better acceptance, maintenance and use of environmental sanitation (eg. latrines).

In support of the above strategy, operational activities will give attention to:

- development of manpower, and training at all levels of the health system and the community, in managerial and technical issues, including the development of special training materials (for targets see Appendix E).
- universal coverage of the population with IEM on diarrhoeal prevention and case management, through extensive health education by health workers; community participation by local groups; involvement of various community members (religious leaders, village practitioners, volunteers, etc.); mass media and commercial channels.
- production and distribution of ORS: 8 production units will be producing 12 million packets annually, to be provided free of charge; private industry will also be encouraged to produce and distribute ORS packets.
- strengthened coordination mechanisms for evaluation and monitoring of the programme, and for ensuring inter-sectoral coordination (eg. CDD Council).

(f) Other Areas

There is no national programme on nutrition, though small scale isolated activities exist within government and non-governmental agency programmes; for example in food-dietary supplementation, nutrition gardens, nutrition education, and the control and treatment of certain nutritional deficiency diseases.

A national programme of environmental sanitation has been developed through DPHE; it produces approximately 60,000 latrine sets each year and develops

educational activities. The programme, however, falls short of total coverage to a large degree, as it is estimated that 15 million sets are required. Programmes, furthermore exist for the promotion of safe drinking water supply and utilization.

Education on child care and family planning is included in many of the women's development programmes such as in vocational training, credit and cooperative schemes, etc.

It is also noteworthy that a large number of non-governmental organizations (NGO's) throughout the country, provide integrated MCH services either coordinated with government facilities or in independent areas. These NGO's provide services as well as provide training of health and family planning workers and carry out operational health service research. Many have served as model areas for the further development of the government services.

Each component programme described in this section is developing its own operational strategies, according to its particular technical and managerial criteria. However, there are common features which contribute to the definition and development of the MCH Strategy, and which emphasize the importance of co-ordination mechanisms for MCH, to ensure that programmes can be carried out effectively and efficiently, in an integrated manner.

The programme plans are based on strategies which:

- specify the utilization of FWVs, FWAs, HAs, and MAs at union and ward levels, placing demands on their time
- emphasize expanded outreach services to villages and households
- rely on extensive Information, Education and Motivation (IEM) activities, especially through home visits

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- require timely availability of supplies (eg. vaccines and ORS)
- team training of large numbers of health and family planning workers

V. COMPREHENSIVE MCH CARE

Full coverage of all mothers and children with comprehensive MCH is a goal for the future. The nature of health problems affecting mothers and children explains the need for comprehensive MCH, as these problems are so interrelated: the bulk of mortality during pregnancy, birth infancy and early childhood being caused by the combination of infections, malnutrition and short birth intervals. Effective, long-term prevention of maternal and infant mortality and morbidity requires a total package of services.

1. The Content

Although the elements may vary according to specific problems prevalent in the area, comprehensive MCH would include:

- a. Immunization against the six major diseases of childhood:
 - Tetanus (incl. neonatal tetanus)
 - Tuberculosis
 - Diphtheria
 - Pertussis
 - Measles
 - Poliomyelitis
- b. Prevention and control of diarrhoeal diseases:
 - case management (oral rehydration therapy; other treatment)
 - epidemiological surveillance and epidemic control
 - sanitation, safe water and personal hygiene:
 - child care
 - hygienic food and drink storage and handling
 - handwashing with soap
 - environmental sanitation and use of latrines
 - nutrition support, including breastfeeding (see d)

- c. Maternal health care: effective management of pregnancies and deliveries
- education and motivation of women and families on safe deliveries (use of trained birth attendant; hygiene)
 - antenatal nutrition education and treatment (incl. anaemia detection, promotion of iron-rich foods in diet)
 - antenatal identification/prediction of high risk and referral to institutional backup system
 - postnatal care
 - menstrual regulation
 - family planning advice and service
- d. Nutritional surveillance and support
- breastfeeding education (BF at birth)
 - growth and development monitoring (use of growth chart, mid-arm circumference)
 - education on proper weaning practices (supplement to BF) and young child food and nutrition
 - blindness prevention (distribution of Vitamin A capsules and promotion of Vitamin A-rich foods in diet)
 - anaemia detection and prevention (promotion iron-rich foods in diet)
 - management of mild and moderate malnutrition at home with locally available foods
- e. Recognition and simple treatment of child health problems
- health education to families
 - eye infections (eg. conjunctivitis); ointment
 - skin infections (eg. scabies); neem soap and benzyl benzoate
 - deparasitation (eg. worms); antihelminthics
 - malaria treatment; chloroquine syrup
 - respiratory infections; antibiotics

2. Phasing of Components

In view of the present level of resources and services throughout the country, delivery of a total package of MCH

services is not feasible at this time. Components would be added in different "mixes" as infrastructure and training are extended, and sufficient human resources added. These would be phased in sequences, making sure not to jeopardize the progress of the three MCH priority components, and family planning. Trial "packages" would be tested to ensure that the workload and content are suitable for the level of workers, and that costs are feasible. The ultimate aim is "everyday" availability of MCH to the entire population.

Three Phases (I, II, and III) are proposed. The speed of implementation as well as exact content would depend on (a) local circumstances including socio-economic characteristics of the population, geographical conditions and political commitment; and (b) previous stage of service development; and (c) resource availability. Thus, the phases presented would represent guidelines for implementation and training. The criteria used for the phasing of MCH components are:

- Phase I : - presently established priorities
- specific, "simple" interventions
- require minimal training and institutional support
- technology is simple, low cost, available and acceptable
- dependency on other components or programmes is low
- attitudes of people are positive or amenable to change
- the feasibility of immediate implementation is known
- Phase II : - specific interventions are not complicated
- training required is not too extensive
- institutional backup required exists (eg. functioning UHFWC)

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- technology is low cost, easily available, and acceptable
- dependency on other programmes or resources not great
- attitudes are not too difficult to change
- testing of feasibility for implementation is not too difficult

- Phase III:
- intervention require complicated information, knowledge and practice changes
 - training requires several phases and/or follow-up
 - additional infrastructural buildup and resources are needed
 - technology is relatively costly, not easily available or acceptable
 - dependency on other programmes is great
 - high degree of attitudinal change is required

Applying these criteria, the phased components of MCH are presented in Table VIII.

The general rationale for phasing of specific interventions within each component area include:

Immunization: In addition to the previously cited priorities of providing TT, BCG and DPT, Measles vaccination has been added, since a more robust vaccine is now available.

Oral Rehydration/Diarrhoeal Disease Control: Breast-feeding is a widespread practice throughout the country; earlier commencement of breastfeeding is a single message requiring less behaviour change than other aspects. IEM on water, sanitation and personal hygiene is complicated as it involves extensive attitudinal and behavioural changes, and will require more extensive training of motivators at the field level; it is, moreover, a time-intensive activity at the home level. Effectiveness depends on the availability of safe drinking water supply systems, latrines, soap, etc. (eg. water and sanitation programmes).

TABLE VIII
PHASED COMPONENTS OF MCH

	Phase I	Phase II: Added	Phase III: Added
<u>Immunization</u>	<ul style="list-style-type: none"> - TT, BCG, DPT vaccinations - Measles vaccination 	<ul style="list-style-type: none"> - Poliomyelitis vaccinations 	
<u>Oral Rehydration/ Diarrhoeal Disease Control</u>	<ul style="list-style-type: none"> - Case management: IEM on oral rehydration therapy (home solution and ORS); supply ORS packets - Case management UZHC: ORT, IV therapy, drug therapy - Breastfeeding education (BF at birth) 	<ul style="list-style-type: none"> - Partial IEM on water, sanitation, personal hygiene 	<ul style="list-style-type: none"> - Full IEM on water, sanitation, personal hygiene - Nutrition education
<u>Safe Birth Practices/ Maternal Health Care</u>	<ul style="list-style-type: none"> - Training TBAs - Development of IEM for women/families on use of trained birth attendant, cleanliness, use of safe delivery kits - Antenatal, MR and referral in selected areas 	<ul style="list-style-type: none"> - Extension IEM for women and families - Extension of menstrual regulation service - Antenatal nutrition advice, anaemia detection - Postnatal cord care 	<ul style="list-style-type: none"> - Antenatal identification/prediction of high risk cases - Referral of high risk cases for institutional care - Antenatal examinations - Postnatal maternal care
<u>Family Planning</u>	<ul style="list-style-type: none"> - IEM family planning/methods - Provision contraceptives, clinical care 		
<u>Nutrition Surveillance and Support</u>	<ul style="list-style-type: none"> - Xerophthalmia prevention; distribution Vit.A cap. promotion Vit.A-rich foods in diet - Breastfeeding education 	<ul style="list-style-type: none"> - Anaemia detection and treatment in women and children (promotion of iron-rich foods in diet) - Referral severe cases of malnutrition 	<ul style="list-style-type: none"> - Growth and development monitoring; use of growth chart, arm-circ. tape - Education proper weaning foods and practices - Management malnutrition with local foods
<u>Treatment Child Health Problems (domiciliary)</u>	<ul style="list-style-type: none"> - Treatment of: <ul style="list-style-type: none"> - eye infections (ointment) - skin infections, eg. scabies (neem soap, ben. benzoate) - worms (anti-helminthics) - malaria (chloroquine syrup) 	<ul style="list-style-type: none"> - Treatment, respiratory infections (antibiotics) - Family health education: recognition problems 	<ul style="list-style-type: none"> - Family health education: prevention

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Safe Birth Practices (management of pregnancies and deliveries): Identifying high risk cases requires agreement on indicators that will be adequately selective in view of the large number of potential risk cases and the limited capabilities of the referral system even in the later phases. Greatly increased access to and availability of institutional back-up system is required to handle high risk cases, including supplies and equipment, expertise, anaesthesia, blood, etc. Additional training will be needed for FWVs and FWAs on antenatal examinations and in applying risk criteria.

Nutrition Surveillance and Support: Nutrition monitoring and education cannot be effective in the absence of adequate food or income, and thus nutrition promotion in conditions of extreme poverty is complex. Changes in existing food-use patterns requires difficult attitudinal changes and imparting of relatively complicated information. Additional training of field workers is needed and time-intensive home visiting is necessary. Training on the use of growth charts, although they already exist in Bangla, will be difficult, noting their intended use by semi-literate or illiterate people. Also, weighing scales currently available are problematic for continuous utilization. Detection of malnutrition in women and children, furthermore, has serious implications in view of the high proportions of the population likely to be categorized as such.

Recognition and simple treatment of child health problems: The specific interventions can be introduced with minimal training of field workers. Supplies can be made readily available in mini-kits following relatively easy trials. Acceptability by people of such types of treatment is known to be good. Treatment for respiratory infections involves more difficult diagnosis and treatment, where the use of antibiotics needs careful instructions, supply etc.

3. Phased implementation of delivery strategies

The phasing of components has implications for the programming of resources, institution strengthening and training. These depend, as do the phasing of components, on the existing circumstances, and thus specific programming would vary according to the level of MCH service delivery in particular districts or areas. For example, if a UHFWC is functioning, whether all staff are in place and have received adequate training, if similar programme activities have been carried out previously if the prevailing social attitudes are positive or negative and so on.

Examples of phasing required in programming are shown in Table IX.

TABLE IX

PHASED IMPLEMENTATION OF MCH
(Examples)

	Phase I	Phase II: Added/Revised	Phase III: Added/Revised
<u>Immunization</u>	<ul style="list-style-type: none"> - full immunization in static centres with cold storage - fixed day coverage in static centres without cold storage; and in satellite clinics - special TF campaigns outreach to ward - test alternative outreach strategies in selected areas - assess primary centres; and FWC training and logistics needs - train supervisors; field workers in some areas - liaison BCO's 	<ul style="list-style-type: none"> train field workers fixed day/month outreach in unions without FWC by FWA/BA routine immunization in satellite clinics with FWC IEM to public 	<ul style="list-style-type: none"> daily immunization in all static centres routine immunization in MCH outreach (FWC or no FWC) use of community groups
<u>Oral Rehydration/ Diarrhoeal Disease Control</u>	<ul style="list-style-type: none"> - oral rehydration therapy (ORT) IEM in FWC's outreach - assess needs: supplies - equipment, lab facilities, etc. - train MCH staff in case management (BA's, FVVs, FPA's, FWA's, BA's) - provide ORS packets - produce training/IEM materials - treatment in UEMC's: I.V., drugs, ORS 	<ul style="list-style-type: none"> train pharmacists in ORS use train ORT community members (mothers/families; com. volunteers, imams, pri. school teachers, village practitioners, local groups) provide ORS in all MCH logistics systems train MCH staff in water, sanitation, personal hygiene (IEM) 	<ul style="list-style-type: none"> full coverage outreach on case management extension IEM on diarrhoeal disease prevention to community
<u>Safe Delivery/ Maternal Health Care</u>	<ul style="list-style-type: none"> - train Sr. FVVs & FVAs as TBA trainers - select TBAs and training activities - trials on IEM of women and families on safe birth practices; use of simple kit - assess needs for strengthening clinical back-up; initiate support - train female MO's in obstetrics; strengthen DCO courses 	<ul style="list-style-type: none"> train Sr. FVVs & FVAs in OB/GYN establish referral system: equip/supply 62 MCWC's and hospital's distribute safe delivery kits with education undertake risk indicator studies 	<ul style="list-style-type: none"> train FVVs & FVAs in risk identification and referral extend strengthening of clinical services: equipment supplies, training
<u>Nutrition Surveillance and Support</u>	<ul style="list-style-type: none"> - develop breastfeeding messages - train MCH workers on BF, IEM, recognition Vit. A deficiency - treatment 	<ul style="list-style-type: none"> develop IEM messages and materials for nutrition education and test test use of growth chart; develop training materials 	<ul style="list-style-type: none"> train workers in nutrition education; include in work routines train workers in use of growth chart train workers in management of malnutrition at home
<u>Treatment Child Health Problems</u>	<ul style="list-style-type: none"> - train FWA/BA's in recognition and treatment diseases - provide mini-MCH kits to FWA/BA's 	<ul style="list-style-type: none"> train workers in diagnosis and treatment respiratory diseases develop family health education, IEM and materials 	<ul style="list-style-type: none"> include respiratory disease control in work routine provide general child care in work routine

VI. COORDINATED FUNCTIONS OF THE MCH PROGRAMME

In view of the fact that the location of the various component of MCH are to remain organizationally and structurally separated at the National and District levels, special attention is to be given to coordination of functions at the Upazila levels and below. Mechanisms for coordination are looked at in Section VII below, though in general special sub-committees are planned to work out the details of implementing an integrated strategy for each of the key functional areas. The details would then have to be tested for its applicability before final instructions are issued. It is not intended here to repeat the strategies of each component programme (eg. EPI, CDD, Safe Deliveries, and Family Planning), but rather to present common principles and methods and to indicate requirements for comprehensive MCH, functionally integrated with PHC-FP, not currently reflected.

1. Health and Family Planning Workers' Tasks.

The current job descriptions for all health and family planning workers at Upazila and below levels include MCH. However, they are not specific for all aspects of MCH, nor is the balance of MCH, family planning and other health tasks adequately reflected. Thus, the MCH tasks have to be elaborated upon and made clearer in terms of what is actually to be done. Job descriptions have to be developed in a complementary way, so that contradictory instructions are not given to staff on the same and different levels. The job description is an essential starting point for other functions such as supervision, training, evaluation and so on.

Emphasis here is given to the work of the health and family planning workers at the ward and union levels, as this is where the greatest proportion of MCH care is done, and where the main integration of MCH takes place. Many

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of the duties and responsibilities at other levels are supervisory or supportive of these basic tasks. MCH tasks are listed in Appendix C for the FWA, HA, FWV, MA, FPA/AHI and Sr. FWV.

In the Bangladesh socio-cultural context there is a need to ensure complementary roles of male and female health and family planning workers. The tasks pertaining exclusively to women as "clients" are to be included in the job descriptions of the FWA, FWV, and Sr. FWV. Direct maternal care, where physical contact is required, will for the most part be done by the female workers, and should be considered their major responsibility. This is not to exclude the roles of male workers who, as seen from experiences in the sterilization programme, can have a certain degree of contact with women patients. In addition, male workers have important motivational and educational tasks concerning maternal health care; men in families have to be informed and motivated if women are able to make the basic changes required in birth practices and other aspects of maternal care. It is the family rather than the health workers or TBAs or even the women herself who will make decisions about such changes in behaviour.

This implies the need for increasing the numbers of women health and family planning workers at all levels, including Upazila and above so that adequate back up and supervision can be provided. For example, recruiting more women MO (MCH-CCs) and specialists in Obstetrics/Gynecology for positions in UZHCs, MCWCs, and hospitals is important. In addition, efforts will have to be made to accommodate the special needs of women workers, such as hostel accommodation, posting with husbands, etc.

The allocation of who actually does what in each circumstance is dealt with in work routines, and would have to be specifically defined in each locality, depending

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upon individual capabilities and local conditions. Team work is to be encouraged.

Many of the tasks for each of the MCH components overlap, or are closely related, particularly those concerning information, education and motivation (IEM) in MCH. As the different MCH components are gradually introduced, these tasks will be increasingly merged. For example nutrition education, breastfeeding promotion and hygienic practices are repeated in safe birth education, prevention of infant infections (including diarrhoeal diseases), and family planning. A Table is included in Appendix C, to illustrate these types of duties and responsibilities.

A sub-committee on job descriptions will make recommendations to a national committee, to finalize revised job description for all levels, so that MCH is adequately incorporated.

2. MCH Work Routines

MCH work routines for staff at Upazila and below levels are to be coordinated and functionally integrated with others, so that the demands of each component receive adequate attention within the existing or even planned staffing patterns. Any work routine developed at national or district levels however will be a guideline only, as the actual work routines and division of responsibilities among staff of each level and between levels will have to be worked out in each locality. Alternative work routines, especially for the FWV, should be developed and then tested in operational studies. These will depend upon

- existence of functioning UHFVC (with FWV) or not
- availability of staff at each level
- abilities, training of staff involved
- MCH service demands of the population in the area
- previous experiences in service delivery in the area

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The specific MCH work routines are to be worked out for each month during the UHFWC monthly meetings, or Upazila Health Complex meetings, and are the responsibility of the MA, together with the FWVs at the UHFWC and MO/MCH & FP, Sr. FWV and FPO at the UHC.

Flexibility in work routines are required throughout a year's period in view of the need to accommodate special training sessions, special mini-campaigns, epidemics, and natural seasonal occurrences.

The feasibility of work routines are to be tested in view of the present, unsatisfactory implementation of MCH services, ie.

- present imbalance of duties actually performed between family planning/population control and other MCH components
- low coverage of MCH service delivery in the past (ie. MCH duties not performed by staff despite listing in job descriptions) and, in order to introduce new MCH tasks.

The testing of work routines is to include the use of time by workers at each level; and the allocation of tasks among workers according to expected abilities (eg. literacy levels, both sexes). Testing would also involve an assessment of needs in terms of supervision, training and logistics. Workshops could be organized to review results of operational studies.

The work routines will include activities to be carried out in the static centres, in satellite clinics and at home visits. Examples of MCH work routines for the Union and Ward levels, including Satellite Clinics and Home Visits are shown in Appendix D, as these are particularly critical for implementation of an integrated and comprehensive MCH strategy. These highlight the need for integrated IEM activities in MCH and planned team work. They are designed in order to maximize coverage of households at the village

level; ensure optimal effectiveness of immunization schedules (ie. doses of vaccines spaced by one month); provide adequate follow-up and referral for family planning acceptors (especially clinical contraception); set apart adequate time for training and supervision of TBAs; provide minimum coverage with comprehensive MCH care; and promote team work.

A sub-committee on work routines will make recommendations on guidelines for Union and Ward levels.

3. Supervision

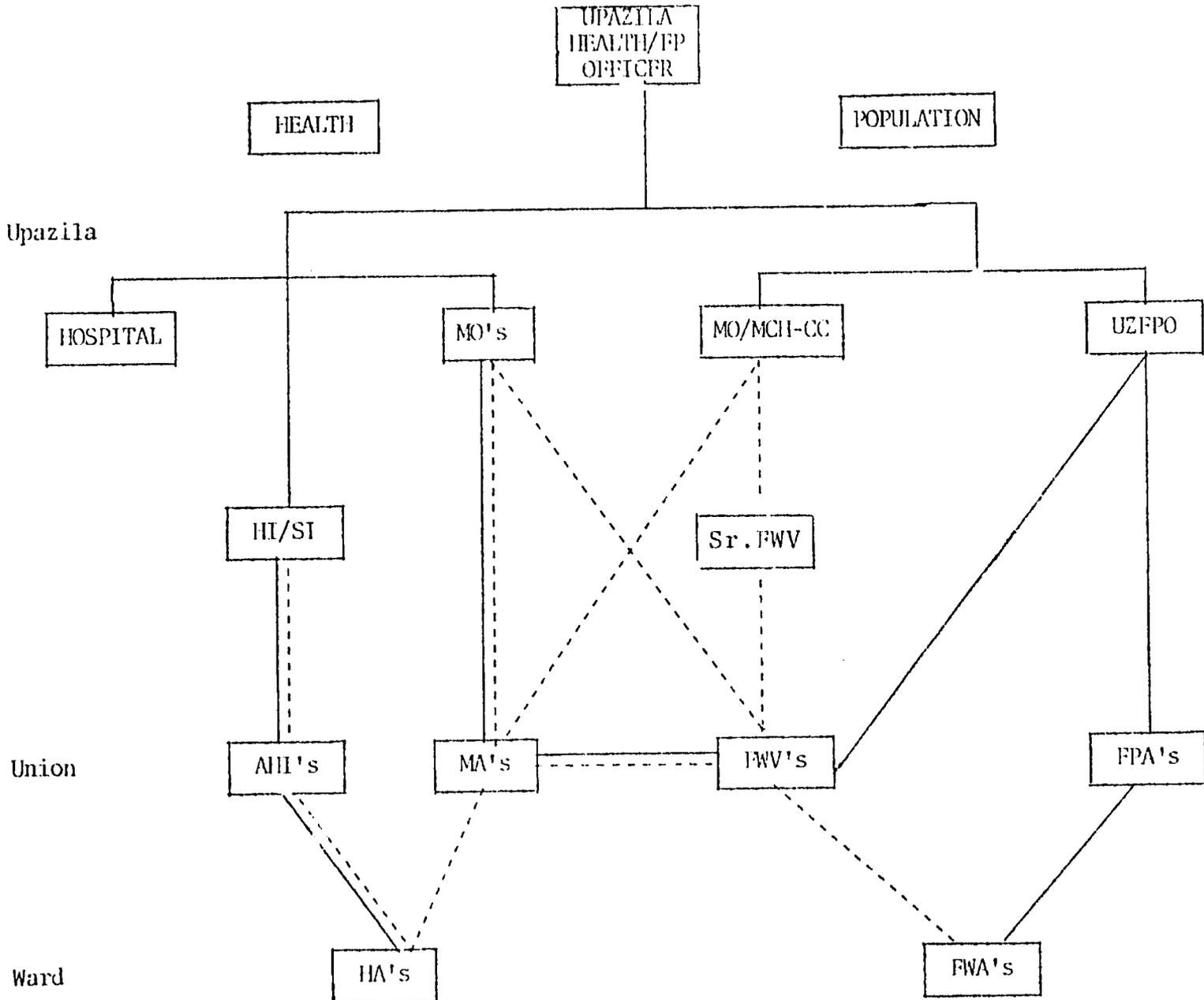
Supervision has been cited as one of the most critical functions in all health and family planning programme; inadequate supervision being considered one of the main reasons for not reaching programme objectives.

The present structure of health and family planning manpower is shown in Figure 2. As is seen from this figure, the lines of supervision are divided technically and administratively, with the Population Wing and the Health Wing, having different supervisory streams for staff who are to perform both health and family planning tasks. The lines cut across for the MCH programme. It is clear that the supervision received by the FWV requires special attention and clarification. Although supervision of the FWA is administratively direct, there is a need for defining her technical link with the FWV. Such division of supervisory functions makes the application of rewards and punishment for job performance in all MCH areas difficult to achieve.

Field workers are dependent on their administrative supervisor for payment of their salaries, payment of family planning incentives, report on job performance, and supplies and equipment. Technical supervisors provide the required information, training and back up service needed by the field workers to carry out their jobs. Both supervisors should collaborate in the design of work routines. There

Figure 2

MCH STAFFING STRUCTURE: PRIMARY LINES OF SUPERVISION
UPAZILA, UNION, AND WARD LEVELS



————— Administrative Supervision
----- Technical Supervision

is a chain of supervision from field to national level, with reporting requirements. Supervisors tend to check on those items which will be, in turn, asked of them from the next level up.

In order for health and family planning workers to satisfactorily carry out MCH activities, co-ordination of supervision is essential. The tools or mechanisms for achieving coordination will include:

- target setting for MCH: targets set in each Upazila will serve as a guide for supervising job performance
- integrated reporting system (see 6 below): this system indicates evaluation or performance criteria which the supervisor must take into account while checking on performance and while training
- job descriptions: the job descriptions of the supervisors will include specific MCH tasks, and will be developed to ensure complementary supervision between supervisors
- supervisory check lists, ie. the specific items to be supervised, for each level (National, District, Upazila, and Union) will be prepared to ensure consistency in the entire chain of supervision
- monthly meetings: meetings at Upazila and Union levels will involve supervisors and supervisees; they will be the main mechanism for coordination of work routines, and for solving any problems which may arise from contradictory instructions to workers, or supply of drugs or equipment; they will also serve as a means for in-service training and group discussions
- training in supervision: training in methodologies of supervision is to be included in the basic and in-service training of supervisors of MCH/FP workers; special orientation sessions are to be given at each level
- training will be provided for the MCH components to be introduced to strengthen technical supervision
- a new post, Senior FWV supervisor will be introduced to strengthen technical supervision for maternal care and family planning, particularly for women workers

A sub-committee on supervision will develop plans for institutionalizing the above mechanisms based on an analysis of contradictions or constraints in the existing systems; identification of complementary actions between supervisors

under the Health and Population Wings; and reporting requirements at each level (National, District, Upazila and Union), and between supervisory staff at each level.

4. Training of Staff in MCH

Existing Plans:

Training of health and family planning workers is essential to the success of all programmes. Plans for the training of health and family planning workers in MCH/FP has been extensively described in the TFYP for Population Control, in the section "Manpower Development and Training". It focuses on the training of health and family planning workers at Upazila and below levels. The plans include the following:

- (i) definition of manpower requirements
- (ii) analysis of existing training activities
- (iii) enumeration of training tasks, eg. needs assessment; curricula development; training course management; evaluation; faculty training; field practice demonstration; materials development
- (iv) assignment of training responsibilities, eg. to NIPORT; NIPSOM; RTC (H&FP); MATS: FWVTIs
- (v) description of training programme 1985-90 for all categories of training, ie. field workers, first line supervisors; MAs, FWVs; clinical training MOs; management training; FWAs skill training; multipurpose workers and community influentials; FP certificate course

The plan also gives attention to methods for improving the quality of all aspects of training, such as curriculum, training of trainers, strengthening field training, and group work. It addresses the problems of manpower development and training including the provision of training stipends living accommodations, especially female staff, as well as conditions of employment such as salaries and career development, all of which are important aspects of increasing and maintaining staff motivation.

Priorities in training have been given as:

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- staff of Union Health and Family Welfare Centres
- field workers, especially the FWA/HA team
- staff with good performance records (ie. training as a reward)

As this programme is aimed at the staff who will carry out the MCH programme, coordination is to be given special attention. In addition to the internal coordination within the Population Wing, a special sub-committee on training in MCH is to be established to make recommendations on incorporating MCH related knowledge and skill into the training curricula of all workers and supervisors.

Training plans have been developed in each component programme which are both specific for their own programme, and which are meant as inputs to the broader MCH and FP training programmes. At the national to district levels, special training courses are planned for managers and mid-level managers in the EPI and ORT/CDD programmes. These include special orientation sessions; management training; specialized technical training, and training of core trainers. They are to be carried out under the auspices of each programme direction; and will be separately planned, organized, funded and implemented. Both EPI and ORT/CDD have prepared the training material required for these types of courses.

With regard to the Safe Deliveries component, the first phase is primarily a TBA training programme, as described in Section IV above. Emphasis has been given to the development of more specific curriculum; practice training; and training of trainers in teaching methods. A new post for Sr. FWV Supervisor is being created, and one of her major tasks is the training of TBAs. Azimpur hospital should be strengthened as a model training centre. In addition to the TBA training, other training programmes will have to be developed, as part of the

institutional strengthening for the MCH referral system; for example, the training of specialists in obstetrics and midwifery.

In general, the three priority component programmes are providing inputs for the overall training in MCH/FP of union and ward level workers, to be carried out through NIPORT. Training modules for the three priority component programmes will also be prepared for the group discussions, for retraining, and for in-service training, to take place at the Upazila or Union levels.

Features of Training in MCH:

Training in MCH requires more than the sum of the specific components mentioned. In view of the comprehensive, and diversified nature of the MCH Programme other subjects and considerations must be taken into account in order to ensure that the content and methodologies of training are relevant to implementation needs of the MCH strategy.

Training in MCH requires the imparting of a wide range of skills and knowledge to multipurpose workers. Therefore, training will need to be sequenced or phased for the different areas, according to the priorities set in the phasing of MCH components. Thus, for example,

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the first priorities in training would include:

- immunizing techniques for each vaccine; cold chain maintenance; equipment sterilization; scheduling immunization
- how to teach use of solutions for ORT to families; problem recognition
- hygienic practices during childbirth
- diagnosis and use of simple medicines for common child health problems
- how to convey early breastfeeding message
- use of family planning methods, or provision of clinical contraceptive services

Whereas, subsequent training, or concurrent, depending on specific circumstances, would include instruction on water and sanitation, nutrition, respiratory infections control and treatment, aspects of maternal care etc. The balancing of components will be worked out at different levels of planning, curriculum development, and financing.

Furthermore, because of the large number of learning objectives, training would have to be adequately spaced through time. This will mean more emphasis on in-service training, in order to introduce new elements as well as to reinforce existing ones. In-service training will be implemented as part of special short (one-two day) courses, of regular monthly meetings, or of on-going supervision.

Emphasis is to be given to practical training for MCH skills development. It is planned to increase practical, field training to over 50%; and to follow-up group training sessions with on-the-job supervisory training. The wide range of subjects and skills as well as the need for more practical training will necessitate training sessions of longer duration, especially in the basic training courses, than previously carried out.

Likewise, attention will be given to developing curricula which meet these requirements of MCH, especially

for the training of health and family planning workers at Upazila and below levels for basic (pre-) and in-service training in all of the training institutions involved. The training modules approach will be used, to facilitate the introduction of each component of MCH in a timely manner.

Training, furthermore, will stress the upgrading of IEM-communication skills for health and family planning workers, so that they are able in turn to train family and community members, and work more effectively with community groups.

As MCH is to be integrated at the Upazila and below levels, training at these levels will be designed to ensure:

- increasing joint or combined training of MCH components
- developing skills and motivation for team work approaches
- encouraging the understanding of how MCH components interrelate and are mutually supportive

The plans for training of workers in MCH for each priority programme component are ambitious, yet realistic if objectives are to be met. Number of staff to be trained are approximated in Appendix E, Training Targets, 1985-1990.

In order to develop a plan of operations for training in MCH, the sub-committee on training coordination noted above, would have to:

- analyse training needs assessed in each MCH component programme
- review present capabilities of existing institutions for training in comprehensive MCH
- review present curricula to identify gaps in MCH subjects covered
- identify MCH subject areas requiring teaching modules, not now available

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Institution strengthening for training in MCH will feature in the programme, with the development of modules for MCH training in, for example, existing Regional Training Centres (H&FP) and FWVTIs.

5. Logistics

Logistics here refers to the provision of supplies and equipment, including the required procurement, storage, form/packaging, distribution, and control system which ensure that drugs and materials are available when needed at the right time, place, number, and in the proper condition for effective and efficient MCH service delivery.

The management of logistics within each component programme in the past has experienced a number of problems, such as

- delivery of drugs after expiry date
- poorly labelled packages (information on contents' quantity and quality)
- inadequate storage (eg. spoilage of vaccine; shelf-life problems)
- unsatisfactory dispatch from Central Medical Stores to final destination (lack of funding for transport, slippage or wastage, delays, non-arrival)

These and other problems have hampered service delivery, and are to be addressed in the development of a management system for logistics for MCH/FP as a whole. This will entail very specific coordination which must be worked out in a specially selected committee, as well as smaller working groups. Joint distribution and storage of supplies where possible may help to overcome some of the problems which arise from insufficient financial resources (eg. for transport) or from time constraints involved in instituting effective control mechanisms (eg. recording and reporting).

EPI has special problems concerning the "cold chain" or vaccine handling, and thus has a special programme area

to deal with this, as described above in Section IV. An arrangement exists between TEMO and EPI for use of the central cold storage facility in the TEMO warehouse (Population Directorate). A working group should be formed with functional responsibilities to ensure effective management and utilization of the cold storage system. Likewise, mechanisms for coordination of cold storage should be established at district levels; with similar working groups.

ORS packets will continue to be produced and distributed free of charge to government health and family planning facilities and workers as part of the national programme. Although the District Reserve Stores are supposed to supply ORS packets to the Upazila Health Complexes, this has not worked properly, mainly due to transportation problems; the UZHCs tend to go directly to production centres for supplies. Difficulties also arise when there are no stores, particularly in new Districts. Ways of smoothing out this process are to be developed.

Kits: The Population Control and Health Directorates distribute a range of health and family planning supplies to health facilities. These are supplied either individually (as per medical and surgical requisitions) or as pre-packed kits. There are presently, five kinds of MCH/FP kits distributed. Drugs are supplied (and resupplied) in the DDS Kits; and equipment, initially supplied in MCH Kits, FWC Kits, Midwifery Kits, and IUD Kits.

It is planned to continue the distribution of these kits, with the same contents, except for including benzyl benzoate and alternative arrangements for ORS. Efforts will be made to improve the labelling and sealing of kits so that the quantities, characteristics and condition of the contents are easily displayed, for the information of all persons along the various distribution channels.

In addition it is proposed to test the feasibility of supplying mini-MCH kits to field workers (eg. FWA, HA), to be used in home visits. The contents of these kits would include simple medicines required for simple treatment, and for family planning, such as:

- pills, condoms, foam tablets
- ORS packets
- anti-helminthics
- chloroquine syrup
- benzyl benzoate, neem soap
- antibiotic eye ointment
- vitamin A capsules

Field workers also act as depot holders for contraceptives and ORS. The mini-kits could supplement this service.

Distribution: The component programmes of MCH/FP will eventually use joint transportation systems to the extent possible. Special funds should be made available for ensuring that the transport system functions on a continuous and timely manner and that it reaches the furthest most static or outreach facilities. The transport and distribution flow should be diagrammed, including all MCH/FP required drugs and materials, and displayed at static centres.

Controls: Management of the logistic system requires good recording and reporting, to include information on the quantities needed, ordered, delivered, and used; and on the quality of drugs/supplies, eg. expiry date, storage conditions; handling conditions. This information should be made readily available in standardized format to the staff involved, so that they are aware of the system. Problems could then be discussed at the monthly staff meetings at Upazila and Union levels.

The logistics recording and reporting system to be established has to be linked with the health/family planning information system, indicating levels of the need for the supplies. For example, the prevalence of childhood diseases, estimated diarrhoeal disease episodes, couples using contraceptives, other eligible couples, estimated childbirths expected, and so on.

A well-functioning control system, built into the overall management of the programme should prevent a great deal of the slippages now occurring.

Training: The delivery of drugs and materials alone cannot be effective unless there is also proper training in the use of medicines, i.e. when and how to use them. A special manual for MCH supplies could be prepared for this purpose, and included in the training of all MCH/FP workers. Furthermore, information and education is to be provided to the public about the use of drugs and materials to reinforce the messages of the health and family planning workers and to enable the proper use of drugs purchased in local pharmacies or from drug peddlers.

In addition, commercial channels are to be used, for example through the social marketing programme which distributes contraceptives through the private sector (eg. pharmacies, other stores). ORS is also produced and sold through commercial channels. Possibilities are to be explored for the social marketing of safe delivery kits (containing minimal supplies, eg. sterile razor blade, cord ties, soap, gauge) at low cost.

The sub-committee on logistics will make recommendations on the coordination of logistics in each Directorate, and on the sharing of transport, storage and supplies and equipment at Upazila or Union levels, to the extent possible; to review periodically the contents of the kits; and to review the management of the system. The sub-committee's

findings should be reviewed by the Upazila and District Coordination Committees on a regular basis.

6. Reporting and Monitoring

Data and information on the programmes are essential to the overall management of the programme activities, including for

- managerial decisions on programme directions
- proper supervision of job performance, and judgement for staff rewards/punishment
- smooth functioning of logistics system
- evaluation of programme efficiency and effectiveness; and of impact on mortality/morbidity reduction objectives

Information is needed on a monthly basis at Upazila, District and National levels, to detect the performance of the field operations in relation to targets set.

At present, the Population Control Wing has a Management Information System (MIS), which includes a series of monthly and other reports on the performance of the Population Control Programme. Other information activities, such as the service statistics system established in selected Upazilas, have been developed. The Expanded Programme on Immunization also has developed an information system which collects data on EPI target diseases and immunization performance on a monthly basis. The ORT programme is developing an epidemiological surveillance system which will keep up to date information on disease prevalence by age groups.

Much of the work of data collection and reporting of programme activities for MCH falls on the field level workers, especially the FWA and HA. In view of their level of literacy and education, it has been found that these reporting tasks are difficult and time-consuming. Long delays in reporting and inaccurate reporting have been

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experienced; also in many instances reports have been lacking altogether. Moreover, in the area of MCH the data is particularly uneven and inconsistent, as certain aspects are covered (eg. family planning acceptors, eligible couples, immunization childhood diseases, ORS use, etc.) whereas others are not (eg. maternal deaths, TBA coverage, etc.). Efforts are being made to not overload staff with reporting responsibilities, but to only include the basic information needed.

An integrated reporting system is required which can meet the management needs of each of the component programmes, as well as those of a comprehensive MCH programme itself. It must be part of the reporting and monitoring of the functional integration of MCH/FP PHC at the Upazila level, and those of both the Health and Population Control Wings at other levels. An integrated system would greatly contribute to the simplification of reporting and monitoring duties and responsibilities of the field level staff at ward and union levels, and thus is expected to improve the quality and quantity of information. There will be one common reporting form for HA & FWA, one for the FWC, and one for BEHCs. The system could begin as part of the strengthening of the MCH reporting system, now part of the MIS Unit.

A coordinating mechanism is needed in order to develop an integrated MCH reporting system, to:

- specify objectives of the system
- define the scope of information required
- review the simple format, with instructions for its use at different levels
- ensure a balance of all MCH information components
- ensure the provision of adequate training to establish and use the system
- monitoring its implementation

7. Communications in MCH

Information, Education and Motivation (IEM) or Communications, aspects are especially critical to the success of the MCH programme, since a significant part of MCH care involves basic changes in families' life styles; home environment; private behaviour (sex, sanitation, birth); deep rooted traditional customs surrounding birth, diets and feeding patterns; and attitudes towards women's roles and status. MCH, in contrast to various technology-based, single message intervention services, is a wide ranging programme of care, with actions taken by people themselves (self-care) within the family setting. Health education is therefore needed in its broadest sense. The targets of the IEM are women, men, children, families as a whole, and community leaders and community groups.

The content of the IEM messages would initially focus on the three priority programmes, together with family planning, ie. the importance of

- hygienic birth practices to reduced infant and maternal deaths; the need for a trained birth attendant, and institutional care
- immunization to prevent deaths and sickness from common childhood diseases
- oral rehydration to save children from death from diarrhoeas
- family planning for the health of mothers and children

Other messages would be introduced on early breast-feeding, maternal and child nutrition, safe water use, and sanitation (including latrines, hygienic practices), respiratory disease control and prevention, maternal care, and so on. The messages would aim to increase awareness and understanding about maternal and child health problems; how they are interrelated; and what the expected benefits are to mothers, children, families and the community as a whole. The educational programmes must introduce the

concepts of changing basic health practices and of health prevention and promotion, which are future-oriented and largely new messages. Health service providers, village workers and community leaders will be stimulated to support the MCH programmes; and increased efforts will be made to strengthen the liaison with non-governmental organizations (NGO's) and other voluntary community groups working in health and family planning.

At the present time, the Population Control Programme has a well-developed Information, Education, Communications (IEC) programme, aimed at increasing family planning practice. It involves several agencies including a IEM Unit in the Population Control Wing. The Programme encompasses different types of communications strategies, such as interpersonal communications, which focuses on the work of the field workers in individual and communities; social support, which includes orientation for community leaders and groups; mass media, which uses the radio and public information campaigns among other techniques; and audio-visual materials, which are made at low cost. The programme plans to strengthen these areas in the TFYP, and to better link communications with service delivery programmes, to integrate personal communications and group activities, and to better suit messages to programme needs. The Programme will continue to work with community groups, such as mothers' clubs, vocational training centres, women's cooperatives, swanirvar villages, religious leaders, etc.

The three priority component programmes of EPI, ORT, and Safe Deliveries have initiated or have plans for IEM activities, as described in Section VI above though they are much less developed. The ORT will continue to collaborate with BRAC in family educational activities and assist training of community volunteers. Community and family education will be introduced. The Safe Deliveries activities will incorporate a women's awareness programme

through various channels including women's organizations. EPI will strengthen IEM, primarily through health and family planning workers, in addition to messages through radio networks; this will be done through cooperation with the pertinent departments such as Health Education Bureau, the IEM Unit, etc.

As a first stage of a communications strategy in MCH, the priority MCH messages will be introduced and promoted within the IEM network of the Population Control Wing and Health Education Bureau through an intensive programme of education. This will require close coordination through a centralized mechanism for:

- preparation of a detailed strategy and plan of operations
- development of an integrated message which balances all components
- review-supervision of the development of appropriate educational materials for different levels of community groups
- establishment of liaison mechanisms with NGO's and community groups
- review-supervision of the preparation of educational modules or model packets for use in training and in field IEM activities
- monitoring and evaluation of IEM activities

Moreover, as is described in other sections of the MCH strategy, IEM in MCH will be a major feature of the re-definition of the job descriptions of the health and family planning workers, particularly at union and ward levels; of the work routines at field level; of the supervisory functions; and of the training programmes for the health and family planning workers.

VII. COORDINATION MECHANISMS

The intention of the proposed coordination mechanisms is to institutionalize the means for manpower, facilities

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and other resources of each of the component programmes under the Health and the Population Control Wings to be most efficiently and effectively utilized for achieving the broader MCH programme objectives. Although the most direct coordination takes place at the Upazila and below, parallel coordination is needed at all other levels so that they are supportive and so that directives issued are in line with the needs of implementation of the integrated MCH programme. Special attention here will be given to coordination between the Civil Surgeon and Deputy Director Family Planning. At Upazila level, the UHFPO will be the controlling officer for both health and family planning.

The proposed mechanisms are seen in conjunction with the coordinated functions which are described in Section VI above and shown in Appendix F. They include:

1. Coordination Committees:

- a. National MCH Coordination Committee: The Committee would be composed of the following members:

Chairman : Secretary, Health & Population Control Ministry

Members : Additional Secretary, DG (health), DG (Population Control); Director, MCH; Director, ITHC; Director, EPI; Director, NORP; PD, TBA; Joint Chief, Population; Joint Chief, Health of the Planning Commission

Observers: Invited as and when needed (eg. officers-in-charge of warehouses, training programmes, communications programme, special sub-committee chairmen, etc.)

The Terms of Reference may include:

- (i) to finalize the draft MCH strategy and periodically review and update the same
- (ii) to ensure that MCH programme goals and objectives are incorporated in the component programme proformas and that national level targets are set accordingly
- (iii) to design and monitor a functionally integrated plan of operations for the MCH programme

- (iv) to review and approve recommendations for functional coordination
- (v) to establish and periodically review appropriate norms and standards (technical and administrative) as guiding principles for MCH care
- (vi) to review and approve the composition, terms of reference, and performance of the district and upazila level MCH coordinating committees
- (vii) to review and monitor MCH training needs, the present status of training, available training resources and assign training responsibilities to appropriate training agencies
- (viii) to review and approve the integrated national reporting system for MCH
- (ix) to ensure proper coordination in the geographical and temporal phasing of component programmes
- (x) to identify the need for any operational studies on integrated MCH service delivery and arrange for conducting the same
- (xi) to monitor implementation of the MCH strategy, and make recommendations for changes, as required

Member-Secretary: The Director, MCH will act as the Member-Secretary and also provide the required secretarial service for the National Committee.

The committee will meet once a month for an initial 6 month period, and then decide on periodicity of meetings for subsequent periods.

- b. District MCH Coordination Committees: These Committees are proposed, along the same pattern to be comprised of the following members:

Chairman : Civil Surgeon
Vice-Chairman : Deputy Director, Family Planning (DDFP)
Members : Training Officer, FWATC, EPI Supervisor, Principal FWVTI (where present)
Member-Secretary: MO/MCH/CC

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The terms of reference will be prepared in line with those of the national committee but reflecting more direct functional details.

- c. Upazila MCH Coordination Committees: These Committees are proposed, along similar lines as above:

Chairman : Health & Family Planning Officer (HFPO)
Members : Family Planning Officer (FPO), Medical Officer (EPI), Senior FWV, EPI Technician
Member-Secretary : Medical Officer (MO/MCH/CC)

The terms of reference will be prepared in line with National and District Committees but including functional details and operational plans.

- d. Special Subject Sub-Committees: Sub-Committees are proposed for each of the coordinating functions described in Section VI above.

Certain of these may be time-limited, and meet only a few times to finalize recommendations for the National MCH Coordination Committee (eg. for job descriptions, work routines, and supervision), whereas the others may need to continue, after such recommendations are made, in order to monitor progress of the programmes and up-date recommendations as more experience is gained.

While the terms of reference of each sub-committee will vary according to the specific subject covered, in general they would include:

- to assess the needs of each MCH component programme in the area
- to review the present situation and identify major problems and constraints to coordination

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- to identify and make recommendations on ways of either coordinating functions or integrating functions for overall managerial efficiency
- to assess funding or resource requirements for either modifying existing systems or creating new ones, as the situation warrants
- to plan proper coordination in geographical and temporal phasing of component programmes
- to make specific recommendations on monitoring of the functions requiring coordination or integration at Upazila, District and National levels

2. MCH Work Manual

In order to implement an integrated MCH/FP programme, detailed operational plans will have to be prepared, with specific targets of activities to be accomplished. These will have to be done at the local levels. Complex team functions of different categories of personnel will be involved in view of the two-dimensional administrative and technical lines of authority (eg. between Health and Population), and the multi-directional activities (eg. among various component programmes)

It is therefore planned to prepare a comprehensive MCH Work Manual on the basis of the plan of operations of the total package, to include information on:

- work routines of field staff, including home visits, satellite clinics, and other duties
- instructions on individual and group IEM messages
- format, with instructions, of the integrated reporting system
- instructions on use of the contents of the mini-MCH kit (drugs, ORS and contraceptive supplies)
- instructions on procedures, including immunization, equipment sterilization
- information on service targets

The manual would replace separate manuals previously planned by each component programme.

A separate, integrated MCH Programme manual may also be prepared giving brief descriptions of the various MCH components, their objectives, targets and work plans.

3. MCH Norms and Standards

MCH norms and standards are to be prepared on technical aspects of all aspects of the MCH Programme, as noted in the terms of reference of the National MCH Coordination Committee. This will provide a national point of reference for the Programme.

4. MCH Service Targets

MCH Service Targets will be set at Upazila level for the MCH programme as a whole and componentwise, in accordance with the national targets. These will be revised as new elements are introduced. This will enhance motivation and job performance of health and family planning staff to deliver integrated MCH/FP as the actions and goals will be made very specific. It is also meant to clarify supervision, and to promote team work. The target setting will be linked with the integrated reporting system.

5. Monthly Meetings

At the Upazila and Union levels, there will be meetings held, at least once a month, to be attended by both health and family planning staff. These meetings will be institutionalized, and will have the purpose of:

- planning of work routines or schedules for the next time period
- group discussion on overall programme performance and problems
- ensuring timely delivery of supplies and equipment
- providing in-service training

Guidelines for group discussions and in-service training are being developed by NIPORT to facilitate the work of these meetings.

As has been described above in Section VI other mechanisms for coordination of the various functions of the programme are to be established, for:

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6. Job descriptions, reflecting all MCH duties and responsibilities
7. Work routines, showing the allocation of MCH tasks
8. Supervisory checklists, giving all MCH tasks and ensuring complementary roles
9. Training plans, for planning of integrated MCH/FP training and retraining
10. Coordinated logistics system, for shared or coordinated storage and distribution of supplies and equipment
11. Integrated reporting system, for MCH programme monitoring and improved supervision
12. Communication plans, for IEM on inter-related, consistent MCH messages
13. Coordinated NGO liaison, for consistent policy and technical guidance and support

VIII. SEQUENCING OF IMPLEMENTATION OF THE MCH STRATEGY

- | | <u>1985</u> |
|---|-------------|
| 1. Constitution of National MCH Coordination Committee | 1st quarter |
| 2. Adoption of the National MCH Strategy | -do- |
| 3. Review the component schemes in the light of National MCH Strategy | -do- |
| 4. Preparation of MCH Plan of Operations 1985-1990, including work plans and budget requirements | -do- |
| 5. Relocation of the TBA Training Project under the Directorate of Population Control | -do- |
| 6. Constitution of the District and Upazila level MCH Coordination Committees as per recommendation of the National Committee | -do- |
| 7. Constitution of Sub-Committee along with their terms of reference, as per recommendation of the National Committee | -do- |
| 8. Prepare MCH norms and standards | 2nd quarter |
| 9. Finalize job descriptions and include MCH tasks | -do- |

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1985

10. Prepare integrated supervision check list for national, district and upazila level supervisory officials 2nd quarter
11. Prepare integrated MCH Work Manual 2nd & 3rd quarter
12. Prepare functional work routine for the union and ward level workers -do-
13. Prepare and institute integrated MCH reporting system -do-
14. Review training curricula and revise according to required MCH contents -do-
15. Review the IEM and health education strategies in order to incorporate the MCH communication strategy 4th quarter
16. Identify required MCH evaluation and applied research needs and assign responsibilities -do-
17. Identify means of coordination with NGO's -do-
18. Prepare guidelines for coordinated logistics system -do-

Appendix A

Table A1 - Maternal Mortality Rates in the Study Area,
September 1982 to August 1983 by Age of the mother

Age of the mother	Number of live births	Number of maternal deaths	Maternal mortality rate per 1000 live births
<20	1,744	10	5.37
20 - 24	3,006	8	2.66
25 - 29	2,537	11	4.71
30 - 34	1,221	9	7.37
35 - 39	729	13	17.83
40 +	280	7	25.00
Total:	9,517	58	6.23

Table A2 - Maternal Mortality Rates in the Study Area
September 1982 to August 1983 by parity of the mother

Previous Parity of the mother	Number of live births	Number of maternal deaths	Rate per 1000 live births
0	2,353	9	3.82
1 - 2	3,797	16	4.21
3 - 4	1,833	14	7.64
5 - 6	827	10	12.09
7 +	507	9	17.75
Total:	9,317	58	6.23

Source: F.A. Jahan et al "Use of Traditional Birth Attendant for Monitoring Maternal and Neonatal Mortality", PIACT Bangladesh, 1984

Appendix B

Table I - Causes of Death Among Children under 5 Years of age in Matlab (1981) and Companiganj (1975-76)

Causes of death	Companiganj						Matlab			
	0-28 days		1-11 months		1-4 years		1 year		1-4 years	
	No.	%	No.	%	No.	%	No.	%	No.	%
Birth injury	67	54.2	-	-	-	-	-	-	-	-
Tetanus	31	25.0	3	3.2	-	-	340	38.5	20	3.8
Measles	1	0.8	4	4.5	12	7.1	14	1.6	65	12.3
Pneumonia	15	12.0	31	32.9	23	13.5	-	-	-	-
Respiratory diseases	-	-	-	-	-	-	103	11.6	54	10.2
Malnutrition	2	2.4	26	27.7	39	22.9	-	-	-	-
Diarrhoeal diseases	1	0.8	12	12.8	54	31.8	31	5.5	122	23.1
Drowning	-	-	2	2.1	14	8.2	3	0.3	53	10.0
Others	6	4.8	16	17.0	28	16.5	397	44.7	215	40.6
Total:	124	100.0	94	100.0	170	100.0	888	100.0	529	100.0

Note: Respiratory diseases include cold, fever, cough, T.B., asthma, etc.

- Sources: 1. S.A. Chowdhury, "Census of Death Companiganj, Bangladesh, 75-78", CCDB, 1980
 2. M.K. Chowdhury et al "Demographic Survey Systems - Matlab Vol. Eleven", ICDDR,B, 1983

Appendix C

MCH TASKS FOR UNION AND WARD LEVEL HEALTH
AND FAMILY PLANNING WORKERS

1. MCH Tasks : Family Welfare Visitor (FWV)
2. MCH Tasks : Medical Assistant (MA): (MCH Duties and Responsibilities abstracted from existing Job Description)
3. MCH Tasks : Family Planning Assistant/Assistant Health Inspector (Existing Job Description)
4. MCH Tasks : Family Welfare Assistant (FWA)
5. MCH Tasks : Health Assistant (HA)
6. MCH Tasks : Senior Family Welfare Visitor Supervisor, New Post
7. MCH at Ward Level: FWA and HA

MCH TASKS: FAMILY WELFARE VISITOR

A. Technical Functions, at the FWC:

1. Maternal care

- antenatal care, including taking history, clinical examination, treatment of minor ailments, tetanus toxoid immunization, nutrition advice, and advice on delivery including screening high risk cases and their referral to Upazila Health Complex or District Hospital, as required
- menstrual regulation
- postnatal care including checking on uterine involution, lactation, advising on contraception, insertion of IUDs, treating complications; checking on new born

2. Family Planning: counselling on methods; issuing of contraceptives (pills, condoms, foam tablets); inserting IUDs; providing injectables; and follow-up care to acceptors of all methods;

3. Sterilization: assist Medical Officers in sterilization operation and arrange appropriate medical care for post-operation complications;

4. Child Care: weighing and maintaining growth chart, and advice on nutrition; treat sick children; hold once - weekly immunization sessions;

5. Refer patients as appropriate to Medical Officers at the time of supervisory visits concerning sterilization, and at other times to the MOs at the Upazila Health Complexes, through the Medical Assistant.

B. Technical Functions at the Satellite Clinics:

Hold satellite clinics in each ward each month at selected villages (minimum 8 days per month).

Duties at satellite clinics include:

- conduct antenatal, postnatal examinations of women
- insert IUDs, if possible
- treat complications of contraception, if possible
- treat serious child infections, diarrhoeas, if MA absent
- supervise vaccination sessions (or vaccinate if FWA/HA not trained), including injections, sterility and cold chain, records, cleanliness, education

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- meet with TBAs for continuous training-supervision
- visit households at request of FWA/HA
- provide group health education sessions, if scheduled

C. Home and Community Visits:

- visit select cases, as requested by field staff, as concerns complications of pregnancy, childbirth or postpartum, sterilization or IUD follow-up; support field workers and encourage mothers to attend clinics
- visit community women's groups, such as Mothers' Clubs, Women's Cooperatives

D. Training of TBAs:

Assume the main responsibility for the training of TBAs under the supervision of the Sr. FWV supervisor, where appropriate, including

- assisting in the selection of TBAs for training
- training-supervisory meetings with TBAs once each month at the FWC, and at Satellite Clinics, to discuss problem cases and encourage TBAs to attend MCH clinics
- visiting patients referred by TBA
- holding group training sessions of TBAs

The FWV will spend 5 days, or the equivalent, each month training and supervising the TBAs.

Appendix C2

MCH TASKS: MEDICAL ASSISTANT (MA)
(abstracted from existing Job Description)

A. Technical Functions, in the FWC

- (general treatment of patients, includes children)
- assist FWV as necessary with MCH services, especially treatment of sick children
- assist visiting MO in sterilization camps
- supervision of standard of sterilization of instruments and equipment used in treatment room for sterilization and for immunization
- participation and carry out immunization programme

B. Technical Functions, in the Community

- (health education campaigns and communicable disease control)
- work with the union parishad/village committees and enlist their cooperation in planning and implementing health/family planning programmes particularly of sanitation, immunization and family planning
- assist and coordinate in distribution of Vitamin A capsules, vaccines, and others
- attend satellite clinics with FWVs

MCH TASKS : FAMILY PLANNING ASSISTANT (FPA)/ASSISTANT
HEALTH INSPECTOR (AHI)*

1. The FPA/AHI will be responsible for implementation of the programmes on Primary Health Care, Nutrition, Immunization, Family Planning and MCH in a Union. The FPA and the AHI will work directly under the supervision of Assistant Thana Family Planning Officer (ATFPO) of Population Control Division (Population Control Division) and Health Inspector of Health Division, respectively.
2. The FPA/AHI will supervise the work of the Field Workers at domiciliary level as per their monthly advance schedule of work. Besides, they will regularly ensure collection of bloodslides, execution of immunization programme, recruitment of clients by the Field Workers of Health and Population Control Division.
3. They will ensure proper follow-up of the identified cases of Malaria for treatment, and directly assist the Field Workers in spraying DDT.
4. Collect monthly reports of performances of the Field Workers and submit the same to their respective Supervisors in a consolidated manner.
5. Regularly check the status of availability of MSR, Medicines, Contraceptives and other logistical supplies with the field workers and ensure regular replenishment of the same.
6. Monitor motivation and education programmes in the community through mass media and other indigenous techniques. Specially they will ensure regularity and effectiveness of interpersona contact by the field workers.
7. Maintain regular liaison with Union Parishad, Voluntary Agencies, NGOs, eminent community influentials in order to mobilize social support for Health and Family Planning Programme.
8. They will discharge any other responsibility assigned to them by their authorities from time to time.

* Existing job description

Appendix C4

MCH TASKS: FAMILY WELFARE ASSISTANT (FWA)

*** Tasks to be added gradually with training

1. Family Planning/Birth Spacing

- a. Motivation and information to women
- b. Supply contraceptives: pills, condoms, foam tablets (CDP)
- c. Refer for clinical contraception (sterilization, IUD insertion, injectable) and menstrual regulation
- d. Follow-up of acceptors

2. Registration

- a. Eligible couples
- b. Pregnant women
- c. TBA's practicing
- d. Children under 5

3. Immunization

- on - TT for pregnant women, and women of childbearing age
- DPT, BCG for children under 2
- Measles for 9 months to 2 years

***- Poliomyelitis

- a. Educate on importance of immunization, and motivate
- b. Inform days and location of immunization sessions
- c. Assist at immunization sessions within ward (Satellite Clinics and others)

- Registration

- Sterilization of equipment

***- (Vaccinate if required)

- d. Follow-up: identify children and mothers for 2nd and 3rd doses; motivate to return

4. Oral Rehydration (Diarrhoeal Disease Control)

- a. Educate/motivate women on need for, preparation of, and use of oral rehydration solution (ORS) and care of diarrhoea in every household
- b. Educate on treatment of diarrhoea cases with home solution or ORS in home and in ORS depot

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- c. Act as depot holder of ORS packets
- d. Refer serious diarrhoea cases to the UHFWC or Upazila Health Complex
- ***e. Educate on water and sanitation:
 - hygienic handling of children
 - handwashing with soap
 - hygienic food and drink handling
 - use of safe water
 - use of latrines
- f. Assist in epidemic control campaigns (provide information, pass out leaflets and ORS packets, report new cases, assist in setting up emergency treatment centres)

5. Safe Birth Practices

- a. Motivate/educate mothers and family members on the essentials of safe delivery, and nutrition during pregnancy
- b. Assist in selection of TBA's for training
- c. Follow-up visits to homes with new borns: check cord care, give breast feeding advice, talk about mother's nutrition
- d. Supply safe birth supplies to women and trained TBA's
- e. Follow-up visits to trained TBA's to discuss problems
- ***f. Identify women at high risk and refer to FWV, MO/MCH, Sr. FWV to Upazila Health Complex, or District Hospital
- g. Refer emergencies to MC/MCH, Sr. FWV or District Hospital

6. Preventive and Curative Child Care

- a. Educate/motivate on recognition, treatment and prevention of:
 - scabies (Neem soap, benzyl benzoate)
 - worms (anthelmintic)
 - eye infections: conjunctivitis (ointment), neonatal eye infection (ointment), xerophthalmia (Vitamin A capsules supply to children and lactating mothers, 6 monthly and use of Vitamin A-rich foods)
 - diarrhoea (ORS)
 - malaria (chloroquine syrup)
- b. Educate/motivate on nutrition: breastfeeding; weaning ***
- ***c. Use growth charts or arm circumference tapes to monitor children's growth and health care

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7. Satellite Clinics

- a. Identify and arrange site for Satellite Clinic. Coordinate date with HA in ward, and FWV and MA at monthly meetings
- b. Assist FWV and/or MA with patients
- c. Refer cases to FWV or MA for checking
- d. Assist in immunization (see above)

8. Community Involvement

Meet with community women's groups (eg. mother's clubs; Grameen Bank, IDRB or other cooperatives; women's programmes' activities) to discuss health and family planning. Bring in FWV, MA, HA, FPA or Sr. FWV when necessary

9. Supervision and Training

- a. Prepare reports on activities carried out and family planning acceptors/referrals
- b. Visit Upazila Health Complex each month to:
 - pick up pay checks
 - hand in reports
 - meet supervisors (FPA: Sr FWV)
- c. Attend monthly meeting at UHFWC
 - discuss problems and progress with FWV, MA, OR MO/MCH/CC
 - hand in reports
 - attend retraining sessions
 - collect supplies
- d. Participate in retraining courses (every 2 years)

MCH TASKS: HEALTH ASSISTANT (HA)

***Tasks to be added gradually with training (see phasing of MCH components Section V)

1. Family Planning/Birth Spacing

- a. Motivate and inform men, village leaders
- b. Supply contraceptives: pills, condoms, foam tablets (CDP)
- c. Refer for clinical contraception: male and female sterilization, IUD insertions, injectables

2. Registration

- a. GR updating
- b. Births and deaths reporting

3. Immunization

- on - TT for pregnant women and women of childbearing age
- DPT, BCG for children under 2
- Measles for 9 months to 2 years

***- Poliomyelitis

- a. Educate on importance of immunization for wives and daughters
- b. Inform days and location of immunization sessions
- c. Hold immunization sessions in ward (satellite clinics)
- d. Follow-up: identify children and women for 2nd and 3rd doses; motivate to return
- e. Recognize and report common communicable diseases, e.g. diphtheria, measles, polio

4. Oral Rehydration (Diarrhoeal Disease Control)

- a. Educate/motivate families on need for, preparation of, and use of Oral Rehydration Solution (ORS), and care of diarrhoea in every household
- b. Educate on treatment of diarrhoea cases with home solution or ORS in home and in ORS depot
- c. Act as depot holder of ORS packets
- ***d. Educate men on sanitation in household, latrines and supply of safe drinking water
- e. Organize epidemic control campaigns in ward: set up emergency treatment centres; provide ORS packets; report

5. Safe Birth Practices

***Motivate men on the importance of safe birth practices, the need for trained attendant during delivery, and referral of high risk women and emergencies to FWV, MO/MCH/CC, Sr FWV, or District Hospital

6. Preventive and Curative Child Care

Educate/motivate on recognition, treatment and prevention of:

- Scabies (Neem soap, benzyl benzoate)
- Worms (anthelmintic)
- Eye infections: conjunctivitis (ointment), neonatal eye infection (ointment), xerophthalmia (Vitamin A capsules supply to children and lactating mothers 6 monthly; and use of Vitamin A-rich foods)
- Diarrhoea (ORS, proper feeding)
- Malaria (chloroquine syrup)

7. Malaria

- a. Identify cases (children and adults)
- b. Collect blood slides
- c. Treat
- d. Spray with DDT

8. Satellite Clinics

- a. Identify and arrange site for Satellite Clinic: Coordinate date with FWA in ward; and FWV and MA at monthly meetings
- b. Assist FWV and/or MA with patients; or handle cases, as possible
- c. Hold immunization sessions (see above)

9. Community Involvement

- a. Motivate/inform village/ward leaders
- b. Meet with men's community groups (union parishad, cooperative farmers groups) to discuss health and family planning. Bring MA or UHFPO when necessary.

10. Supervision and Training

- a. Prepare reports on activities carried out and family planning acceptors/referrals
- b. Visit Upazila Health Complex each month to:
 - pick up pay checks
 - hand in reports
 - meet supervisors

- c. Attend monthly meeting at UHFWC
 - discuss problems and progress with MA or MO, Sr.FWV, FWV
 - prepare work plan for next month
 - hand in reports
 - attend training sessions
 - collect supplies
- d. Participate in retraining courses (every 2 years)

PROPOSED MCH TASKS OF FWV SUPERVISOR

1. Up-grading the skills of the Union Level FWV, in the supervision and training of field level staff and TBAs, including
 - organization of satellite clinics
 - proper use of medicines
 - obstetric care
 - continuous training and back up of TBAs
 - group teaching methods

2. Assisting the MO (MCH-CC) in the management of training programmes for the TBAs:
 - organization and implementation of the programme
 - distribution of supplies
 - reports on programme progress
 - selection of training centres
 - associate with training throughout the programme (with 50% of her time devoted to supervision of safe birth practices)

3. Checking the quality of MCH/FP services by regular visits to the static centres (MCWCs, UZHC, UHFWC) and satellite clinics
 - ensure implementation of correct maintenance of clinics
 - ensure timely and adequate supply of drugs and equipment to FWVs and field staff in MCH/FP
 - random check of IUD and sterilization cases, and other family planning acceptors
 - ensure provision of maternal care (including safe deliveries, risk case referrals, menstrual regulation, education/motivation of women)
 - upgrade knowledge of staff in record keeping and reporting

4. Attending Union level and Upazila Health Complex meetings each month, and provide group training sessions for FWVs, and for FWA, HAs on MCH/FP priorities

5. Upgrading IEM skills of workers in MCH/FP in imparting information, educating, and motivating clients

M C H AT WARD LEVEL: FWA and HA

Task	Family Planning	Safe Birth	Immunization	Oral Rehydration(DDC)	Child Care(Prev.&Curat)	Primary Location
Provide Information, Education, Motivation (IEM)	-Importance FP; motivate -Information on FP methods, side effects -Follow-up	-Need for & essentials of safe delivery -Panger of respective customs -Nutrition/immediate breastfeeding	-Need for; importance of -Days, location of imm. sessions -Follow-up: 2nd & 3rd doses	-Need for, importance of -Preparation/use of ORS & home solu. -Prevention:water/sanitation -Breastfeeding	-Prevention: EPI, water sanitation -Nutrition education and use of growth chart	Domicilliary Visit (Satellite Clinic)
Recognize problems	-Serious side effects, post-sterilization problems	-High risk pregnancies (FWA)		-Degree seriousness of episodes	-Common diseases: eg. eye and skin infections, malaria	Domicilliary Visit (Sat. Clinic)
Refer cases	-For OC to FWV,MO/MCH/CC -For complications to MO/MCH/CC -For menstrual regulation	-High risk to FWV/MO -Emergencies to Sr. FWV,UZHC, District Hospital		-Serious cases to FWC, UZHC, or District Hospital	-Serious cases to MA	Domicilliary Visit (Sat. Clinic, UHFWC)
Provide supplies treat cases	-COP: pills, condoms foam	-Safe delivery kit -Assist difficult deliveries -Iron supplementation, where possible)		-Depot. ORS packets	-Vitamin A capsules -Antibiotic ointment -Neem soap, benzyl benzoate -Anthelmintics -Paracetamol -Chloroquine syrup	Domicilliary Visit (Sat. Clinic) Home Depot (Mini-drug Kit)
Assist in clinics, campaigns	-Arrangements Satellite Clinics		-HA: bring vaccines hold clinic vaccinate -FWA:sterilize equipment assist arrangement	-Assist, set-up emergency epidemic control centres -Communicate information		Satellite Clinics
Train, supervise		-Assist selection TBA's -Follow-up TBAs		-Community volunteers		Domic. Visits
Report; Register	FWA: eligible couples -FP acceptors and referrals	-Pregnant women -TBA's, others practising	-List women/ children -Record immunizations		-List children/5 yrs. -HA: GR updating	
Meet at UHFWC and UZHC	1. Monthly meetings of staff with FWV/MA: discuss problems and progress; plan work routines - schedules; collect supplies; in-service training; reports 2. Monthly visit Upazila Health Complex: reports, paychecks, meet supervisors					
Meet with Community Groups	-Mothers Clubs(FWA) -Women's Co-operatives (FWA) -Men's Cooperatives (HA)	-Mothers Clubs -Women's Cooperatives	-NGO's doing EPI	-Mothers Clubs -Women's Cooperatives	HA: Union Parisad	Community; Ward

Appendix D

EXAMPLES OF MCH WORK ROUTINES: UNION AND WARD LEVELS

1. Draft MCH Work Routine: Ward Level Each Month
2. Draft MCH Work Routine: Home Visit
3. Draft MCH Work Routine: Ward Satellite Clinics
4. Draft MCH Work Routine: Ward Level, Each Month, by Week
5. Draft MCH Work Routine: Union Level (UHFWC) by Month

DRAFT MCH WORK ROUTINE: WARD LEVEL EACH MONTH

TASKS	Days	5	10	15	20	25	30
Home Visits	IEM, Referrals: Family Planning, Safe Birth/? care, EPI, ORT, Child Care						
Satellite Clinics (2 Clinics)	EPI / Other MCH						
FP Referrals Follow-up & Care	FP, IUD, Ster. Care (MR, High Risk)						
UHFWC Meeting	Dtg / Trg						
Upazila Meeting	Admin						
Community Groups	IEM: MCH						
Holidays							
<u>UNION</u>							
FWV role	Sat. Clinics 8 FP/? Care 3-5 Wards						
FPA/AHI role	Supervision: MCH/FP						

DRAFT MCH WORK ROUTINE: HOME VISIT

Responsibility: FWA and HA

Coverage : 1 FWA & 1 HA per Ward - 6,600 population per Ward
1 FWA & 1 HA per 5-6 Villages -

and approx. 200 households, 40 bari's/village
approx. 1,100 households, 250 bari's/ward

Frequency : at 20 minutes per household or bari
and 10 minutes travel
and travel time at beginning and end of each day
12 visits possible per day, 15 days per month
for FWA and for HA
180 visits per month for each
if small bari's visited (3 households seen)
for 90 of these visits
and
households for 90 of these visits
then 360 "households" would be visited each month
by FWA and by HA

Although this could total 720 "households" visited by two workers, it would be more realistic to assume that at least 70% of households would be visited by both FWA and HA as one reaches mainly women, and the other, mainly men. Also, tasks may vary to a small degree. The distribution of tasks and households visited between the FWA and HA would be decided at the Union level meetings, together with their supervisors (FPA/AHI).

Thus, on average, 468 "households" would be visited in each ward, each month.

Tasks : 1. Provide information, education, motivation on:
- family planning: advantages, methods, follow-up, location CC
- safe birth practices: importance of cleanliness
use of trained birth attendant
- immunization: need for, benefits, days, location immunization sessions (for all doses)
- oral rehydration: need for, benefits preparation/use of home solution
ORS (demonstration)
- water/sanitation: one message; need for, how to improve

- nutrition: breastfeeding
 Vit A and iron-rich foods
 diet during pregnancy/lactation
 - general services: advise day, location
 satellite clinic
2. Recognize problems and refer cases
- family planning: follow-up CC, side effects
 accompany client for
 sterilization
 - safe birth: high risk to care
 - immunization: problems
 - oral rehydration: serious cases to care
 - common diseases: serious cases to MA
3. Provide supplies and/or treatment
- family planning: pills, condoms, foam
 - safe birth : delivery kits
 - oral rehydration: ORS, if case presented
 - infections, problems: Vit A capsules
 eye ointment
 soap, benzyl benzoate
 anthelmintics
 chloroquine

Task Frequency: All tasks would not be carried out at each visit depending on

- number of previous visits and subjects covered
- situation of household: numbers of eligible couples, at risk couple: under 2's, under 5's sick children problem cases
- time of year and time available to women (for FWA), to men (for HA) for visit
- relationship with families (known, not known)

The distribution of tasks would on average result in 70% of the time on IEM, 30% on recognizing, referring, and treating problems.

The effectiveness of the home visits, and time needed for each task will change through time as contacts with the families increase, and a good relationship has been developed; and as different subjects are introduced.

Supervision : FPA/AHI: direct, administrative supervision
FWV/MA: technical supervision

- Evaluation : The effectiveness of home visits would be evaluated according to:
- a. reach family planning acceptance targets
 - b. increase number women delivered by trained birth attendant
 - c. reduction maternal deaths, neo-natal deaths
 - d. number of children/women vaccinated I,II, III doses
 - e. reduction deaths, numbers diarrhoeal disease episodes.

DRAFT MCH WORK ROUTINE: WARD SATELLITE CLINICS (WITH FUNCTIONING UHFWC)

Responsibilities

1. The MA has the overall responsibility for the organization of all Satellite Clinics in the Wards. He will attend part time, as appropriate, to attend serious cases.
2. The FPA/AHI, as supervisors of the FWAs/HAs, will be responsible for their participation in the satellite clinics. They will collaborate in organization and support as decided in union coordination meetings (eg. delivery vaccines, supplies, equipment).
3. The FWV will hold the satellite clinics (immediate responsibility for planning and implementation) and
 - conduct antenatal, postnatal examinations of women
 - insert IUD's, if possible
 - treat complications of CC, if possible
 - treat serious child infections/diarrhoea if MA absent
 - supervise vaccination sessions (or vaccinate if FWA/HA not trained)
 - meet/train TBA's
 - visit households at request of FWA/HA
 - provide group health education session, if scheduled
4. The FWA will
 - assist in the arrangements (eg. site selection, clinic set up)
 - organize women for immunization sessions
 - accompany FWV on home visit
 - sterilize equipment for immunization and/or IUD insertion
 - assist FWV as require
 - fill in health charts/immunization records
 - distribute supplies as required
 - refer women for CC
5. The HA will assist in the main tasks of the satellite clinics, and
 - deliver vaccines, supplies, equipment from UHFWC, if no other arrangements made
 - supervise sterilization of equipment
 - vaccinate children and women
 - treat simple child problems; refer serious cases to MA, if attending
 - consult men on family planning; provide condoms, refer for sterilization (esp. vasectomy)
 - assist MA or FWV as required

All staff will work in a team, with specific responsibilities distributed previously in a work plan, decided at Union monthly meeting.

Coverage and Frequency : 1 clinic per village, approximately 1,200 pop.
: - 8 clinics per union per month
: - clinics would be rotated throughout the union or conveniently distributed
: - then, each ward has access to clinic each month

Duration : - each clinic would last 1 day

Tasks : Provide services for

1. Family planning: distribution of supplies
IEM and case referrals
IUD insertion, if possible
treat side effects/complications, if possible or refer cases
follow-up clients
2. Safe deliveries: IEM during antenatal sessions
distribution safe delivery kits to TBAs
follow-up with TBAs
3. Immunization : vaccinations*
available throughout clinic time
4. Oral rehydration : IEM when seeing such children or
in special sessions when scheduled
supply, instruction ORS for cases as presented
5. Child Care : treatment, prevention
common infections

The tasks performed at each satellite clinic would depend on availability of FWV or MA at each session and abilities of FWA or HA.

Evaluation : The effectiveness of the satellite clinics would be evaluated according to:

- a. family planning targets reached
- b. numbers of children/women vaccinated
- c. number of children treated

*For greatest effectiveness, doses should be given one month apart. Each village or unit will take 3 months for coverage with all doses: 1,640 vaccinations per ward per year = 136 contacts per month per ward.

DRAFT MCH WORK ROUTINE: WARD LEVEL, EACH MONTH, BY WEEK

Week	Task	Days	Personnel
1	Home visits	3	FWA/HA
	Satellite clinic	1	FWA/HA FWV/MA-FPA
	FP referrals (IUD/Ster.)	1	FWA
	Upazila meeting	1	
	Holiday	1	
2	Home visits	4	FWA/HA
	FP referrals, follow-up	1	FWA/HA
	UHFWC meeting	1	FWA/HA - FWV/MA
	Holiday	1	
3	Home visits	4	FWA/HA
	FP referrals, follow-up maternal care	1	FWA/HA
	Satellite clinic	1	FWA/HA - FWV/MA
	Holiday	1	
4	Home visits	4	FWA/HA
	Satellite clinic	1	FWV/HA - FWV/MA
	FP referrals, maternal care	1	FWA/HA
	Holiday	1	
Extra days	Meetings, community groups reporting	= 28 days 2-3 days	

Monthly Summary

Home visits	-	15
Satellite clinics	-	3
FP referrals, follow-up	-	4
UHFWC meetings	-	1
UZHC visit	-	1
Community groups	-	2
Holiday	-	4
		<hr/> 30 days

DRAFT MCH WORK ROUTINE: UNION LEVEL (UHFWC) BY MONTH

<u>Task</u>	<u>Days: FWV</u>	<u>MA*</u>	<u>FPA/AHI*</u>
Administrative Duties	2		
FWC-meetings	(1)	X	X
UZHC meetings	(1)	X	X
Other: reporting, supervising, etc.		X	X
Supplies		X	X
Technical Functions			
(1) FWC	10	X	
(2) Satellite Clinics	8	X	
Home and Community Visits	1	X	X
Training, Supervision			
TPA training	5		
Field Workers			X
Holidays	4	X	X
Total days -		<u>30</u>	

*Many of task of each are part-time or overlap and thus it is difficult to calculate in days

SUMMARY, BY MCH COMPONENT

	F W V	M A	FPA/AHI
FP	technical tasks	assists MO	supervises FWA/HA IEM supplies community programmes
♀ care	technical tasks		supplies IEM programmes
EPI	clinics in FWC - 4 days/mo satellite cli- nics 8 days/mo	assists	supervises satellite clinic IEM programmes
ORS		education	supervises FWA/HA supplies IEM programmes
Child Care		treatment	supervision malaria tasks IEM programmes

TRAINING TARGETS: 1985-1990
Upazila and below Health and Family Planning Workers

	FWAs/HAs	FWVs	Sr. FWVs	M As	FPAs/AHIs	UHFPOs	MO's	TBA's	Others
Clinical MCH			460 ⁽⁵⁾				100 ⁽⁵⁾		
Safe Delivery (TBA)		2,170	460					32,550	
Family Planning	27,000 ⁽³⁾ 3,600 ⁽⁴⁾	6,000			9,000	1,500	5,200		
E P I	35,000 ⁽¹⁾	6,000 ⁽²⁾		3,500	9,000	350	350		350 EPI Tech 68 Cold Chain Tech.
ORS/CDD			32,000			464	464 Uz		100,000 community members

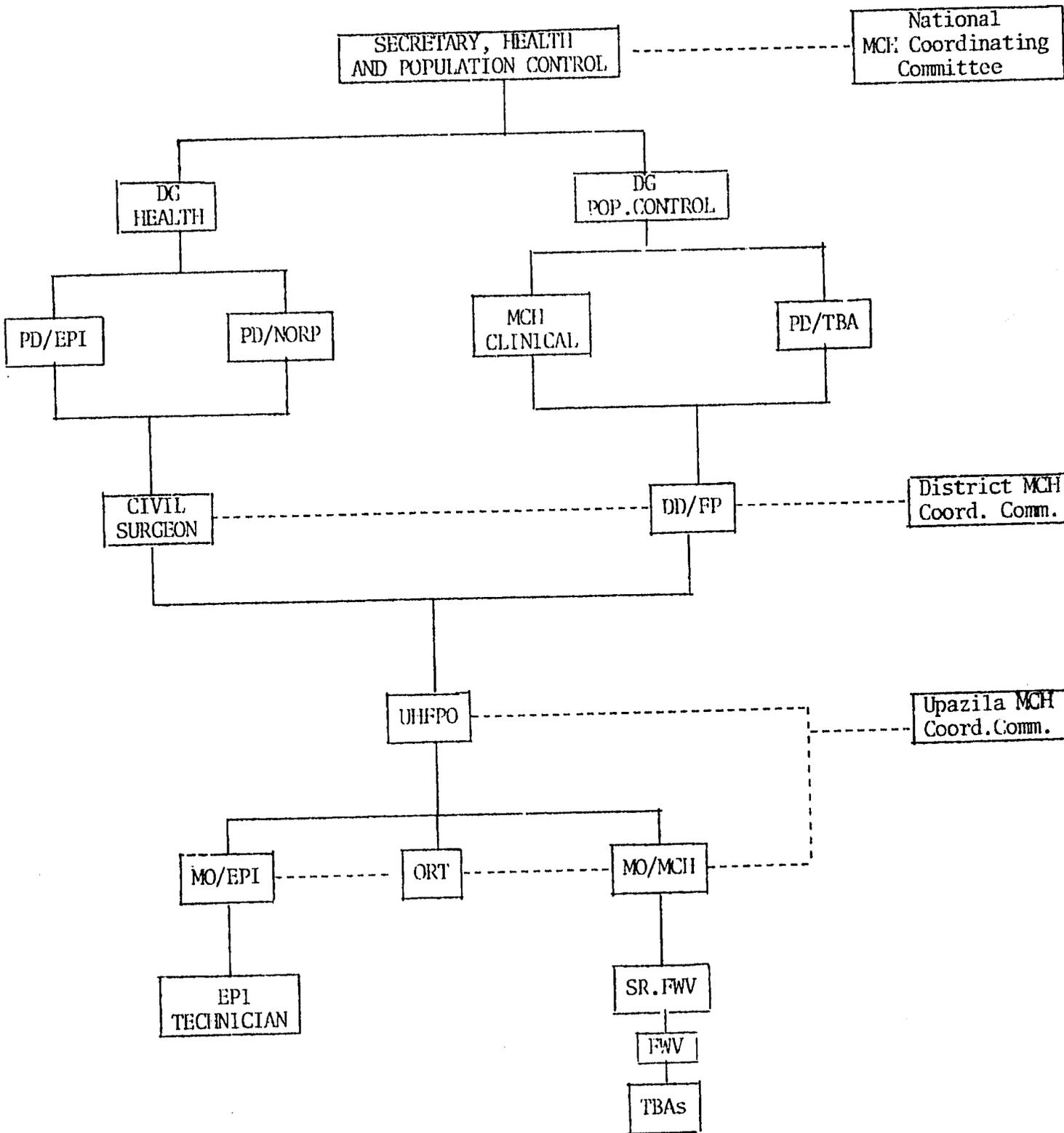
(1) based on 25,000 existing, 10,000 more FWA's expected

(2) estimated number by 1990

(3) refresher training

(4) basic training

(5) estimated only



Note: The structure represents lines of Project Implementation, not necessarily lines of authority.