CHAPTER 3

ANTENATAL SERVICE UNDER MATERNAL AND CHILD HEALTH PROGRAM IN BANGLADESH

3.1 Health Care Services in Bangladesh

Bangladesh, situated in the north-eastern part of South Asia is bounded by India, Myanmar and the Bay of Bengel. It with a land mass of 147,570 square kilometres, is inhabited by a population of 124.3 milion (1997 estimated) and has one of the highest population densities in the world: 826 persons per square kilometre. Bangladesh is divided into 6 Divisions and belonging 64 Districts, 490 Thanas and 4,500 Unions. About 80 % of the people live in rural area in Bangladesh and 47 % of population of the country living under poverty line. The estimated per capita GNP is US$ 230 and GDP annual growth rate was 4.3 % in the 1990's (UNICEF 1998). Bangladesh spent a total of 54,700 million takas on health in 1996/97, equivalent to 3.9 % of GDP and US$ 10.6 per capita. Bangladesh spends a marginally higher proportion of its national resources on health care than two other low-income developing countries with better health outcomes, China and Sri Lanka, do currently and did previously when they were at Bangladesh's level of economic development. This suggested that the major issues for Bangladesh's financing policy framwork should be improving the efficiency and effectiveness in the use of public sector health care resources (NHA 1998). In Bangladesh public health care system is mostly free of cost except very nominal fee for registration and some other purpose. The treatment cost for pregnant mother has an important role in respect to scarce resources. As a developing country Bangladesh has a fairly comprehensive physical infrastructure for the delivery of maternal health and related services. Unfortunately, these precious resources are not functionally effective. Because of the type, coverage and quality of services has not been able to satisfy the demand especially the demand of rural people of the community. Mainly the availability and quality of services between difference levels varies and than variation is present even within each level.

Health service is provided by both public and private sectors in Bangladesh. These are teaching, general and specialized hospitals at national level, specialized and general hospitals, Maternity and Child Welfare Center (MCWC) at district level and a few in thana level, Thana Health Complex (THC) with Outpatient Patient Department (OPD) and In Patient Department (IPD). Beside those there is 4,451 unions in rural, which have Health Sub Centers and Health and Family welfare center with OPD services in 1998. Thana Health Complex established in the rural and peri-urban areas and Health and Family Welfare Center is situated in rural areas where majority of the people lives. Both the health service centers was established with huge investment with the idea to bring the medical care to the doorstep of the rural people. Especially H&FWC are located nearer to the people and have easy access than THC. In Maternal and Child Health care program both of the level (THC and H&FWC) are providing only outpatient services for pregnant women. Mainly Family Welfare visitor (FWV) provides antenatal care at thana and union level under MCH-FP program. Pregnant mothers can go randomly to any service center to receive the antenatal care in MCH program.

In this program it is assumed that they prefer to get the services to the Thana Health Complex, which is far from the rural people. Because their believe that, in bigger hospitals there are doctors, nurse, Family Welfare Visitor, adequate manpower, modern treatment facilities are available. So they prefer to seek the treatment at the Thana Health Complex rather than local Health and Family Welfare Center.

On the other hand it is desirable that as THC is situated at a far distance from the remote area and there are so many geographical barriers that cause delay in receiving care from THC. So most of the pregnant mothers can availing easy accessibility to the antenatal services in more cost-effective manner as patient's perspective such as less time cost and travel cost. At this level service providers cost may also be less. So usually they like to go to the nearest health center.

Like other health care services the cost and the outcome of antenatal service at public health center especially at Thana Health Complex and Health and Family Welfare

Center are not yet measured and analyzed. So now it is an urgent need to conduct a study to find out the cost which is related to the output/outcome for antenatal services in each level and it must be identified that which is more cost effective from provider's perspective. By doing this research we can determine which level can effectively address the public health problem of increasing the coverage of maternal health care in the community. That's result reduces MMR, IMR and morbidity by given scarce resources. Therefore this study may help to re-plan the ANC service in order to cost-effectiveness manner by best utilization of scarce resources could be possible.

3.2 Inception of the Maternal and Child Health Program in Bangladesh Historical Perspective

The concept of Maternal and Child Health might have been, the first effective intervention on MCH was initiated with the establishment of a MCH Unit in the Directorate of Health in 1952-53. The Maternal Child Health Training Institute (MCHTI), Azimpur was also functioning as a training center for the Lady Health Visitor. During 1953, 10 Maternal and Child Welfare Center (MCWC) also started functioning. Many of these were at the district level and some were at Thana level.

The first Rural Health Center (RHC) was established in 1961. Untill 1971, there was 152 RHSs, each with 6 MCH beds. During the decade of sixties, 93 MCWCs were established: outs of these 40 were established at the private initiative, 53 were established by the government. At present in view of comprehensive Primary Health, Maternal and Child Welfare Care and Family Welfare Service to the people a total of 80 MCWCs out of which 53 are in the district head quarters are functioning by the government (GOB 1998).

Until about 1975, MCH services were integrated with the Health Service and they are not receiving adequate support and priority. Family Planning program in Bangladesh was also singly focused pursuing birth control as an exclusive measure to arrest the

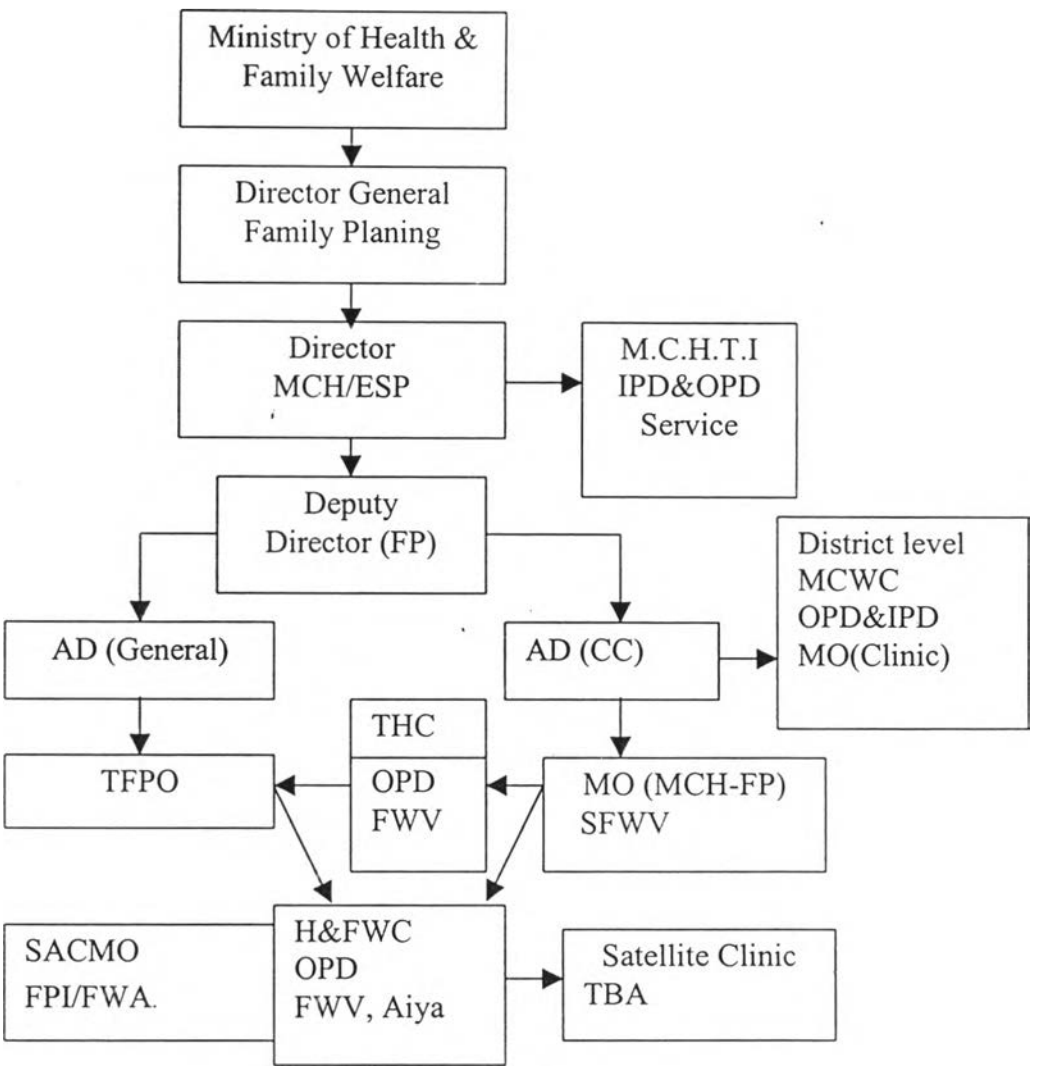
unbridled growth of population in this country. In 1975 it was realized that without effective control of mortality, birth control would not succeed. Hence in 1975, MCH was integrated officially with the Family Planning program of the country. The aim of MCH based Family Planning service is to provide a package of MCH- Family Planning service. For providing this package serviced name "Strengthening of MCH-Service" was under taken in 1996 to strengthen the existing MCH services. The basic services rendered on MCH include 1). Antenatal care including counseling, 2). Safe delivery, 3) Postnatal services including counseling, 4) Immunization, 5) Vitamin A, 6) Health and Nutrition education, 7) Emergency Obstetric Care, 8) Medical treatment of pregnant mothers and children under five, and 9) Detection of risk pregnancy and referral of complicated cases.

The previous RHCs were converted to Thana Health Complexes (THCs); now a total of 402 THCs have been established in the country at thana level with 31 beds facilities (GOB 1998). Thana Health Complex are responsible for providing health and family planning service for the thana population. The MCH-FP unit is located in the same building of the THC. The Family Planning department managed this MCH-FP unit and H&FWCs.

Government realized that the present health and family planning system was not meeting the expected level of function. So ministry of health and family welfare made provision for a sector wide approach. The thana and below the over all health and family planning services are providing now under a single management since 1999.

These union level centers are responsible for providing clinical and preventive maternal and child health and family planning services. Family welfare visitor and some where medical officer is supposed to provide services on family planning, maternal health and health care delivery to children under five years of age. Organogram of MCH-FP services is shown in Figure 3.1

Figure 3.1: Organogram of MCH-FP Program in Bangladesh



M.C.T.I = Maternity & Child Health Training Institute

ESP = Essential Service Pakage

MCWC=Maternity & Child Welfare Center

SACMO=SubAsst CommunityMedical Officer

FPI=Family Planning Inspector,

FWA=Family Welfare Assistent

TBA=Traditional Birth Attendant

A.D = Assestant Director,

T.F.P.O= Thana Family Planning Officer.

MO(MCH-FP)=Medical Officer (MCH-FP)

ATFPO=Asst. Family Planning Officer

SFWV=Senior Family Welfare Visitor

3.3 Antenatal Service Performance of MCH

The ANC service is going on under the family planning department as the part of Maternal and Child Health (MCH) programe. The primary aim of ANC is to promote, protect and maintain the health of the mother and child during pregnancy and to ensure that the pregnancy results in the birth of a healthy child to a healthy mother.

In MCH program ANC service is given in Thana Health Complex at thana level and in H&FWC at union level. In addition at district level MCH program is supported by Maternity and Child Welfare Center (MCWC), all district hospitals have a separate unit for MCH-FP program. At present mainly FWVs provide ANC services in MCH program at thana and union level and to some extent by FWAs during their home visit through IEC (Information, Education and Communication). Medical Officer (MCH- FP) provides ANC only for risk pregnant mothers and to manage complications. Both FWV also provide patients services in satellite clinic at word level where FWA (Family Welfare Assistant) and TBAs assist her.

The ANC services include:

1. Registration of all pregnant women under the cathment area.
2. Health education to all pregnant women.
3. Supply of iron/folic acid tablet, vitamin B capsules to all anemic women.
4. To enssure TT vaccination to all pregnant women.
5. Advice on diet, drug, work, excersise and denger signals.
6. Advice for the safe delivery
7. At least three ANC visits to each pregnant mother.
8. Couincelling about place of delivery.
9. All relevant medical check ups of the pregnant women which include :

- Measure of height and weight
- Measurement of blood pressure
- Detection of oedema

- Measurement of the height of the uterus.
- Monitoring fetal growth by assing weight.
- Detection of anaemia by the estimation of haemoglobin
- Detection of albomin and glucose in urine.

10. Detection of risk pregnancy and their referral to Medical Officer (MCH-FP) or hospital IPD section.

Recently health sector is reforming in Bangladesh. Ministry of Health and Family Welfare decided to implement reproductive health care service. These are the services to increase more pregnant women coverage, to provide at least 3 antenatal visits among the pregnant women that aim of safe pregnancy and delivery, including fertility regulation and treatment of abortions, avoiding unwanted pregnancies and post phone births.It also includes reproductive morbidity and mortality, including STD/HIV, other aspects of sexual and reproductive health among adults and adolescents. (HPSP, Part-1)

3.4 Demographic and Health Status of Study Area

Fultala Thana is the entering point of Khulna district by road and located in Khulna district. This thana is located in Khulna district. There are many small cottage industries, brick field industries, jut industries, social welfare organization, so most of the people are occupied by these organization. The literacy rate is 60 %, female literacy rate is 54.45 % and male literacy rate is 65 % (GOB, 1998).

The demographic and health status of Fultala is gradually increasing along with the socioeconomic development of the family. Now most of the people of Fultala thana know the importance of family planning, education and health. Most of the eligible couple use contraceptives, 90 % of the family have sanitary latrine and 90 % of children are getting primary education. Role of community leaders, female volunteers contributed a lot in this sector.

Table 3.1 shows that Fultala thana has undergone a remarkable demographic transition from 1993 to 1996. Total population, total eligible couple and family planning acceptors were gradually increased, while growth rate, infant mortality rate (IMR), maternal mortality rate (MMR) as well as under 5 years death showed a stable or even decreasing trend. Only neo- natal mortality rate was reduced 37.1 to 28.98 from 1993 to 1994, but again increased 36.05 to 39.87 from 1995 to 1996. The total fertility rate (TFR) declined also below national level. The crude birth rate (CBR) and crude death rate (CDR) has fallen little 18.76 to 17.05 and 4.3 to 4.22 respectively per 1000 population from 1993 to 1996. Contraceptive acceptance rate increased from 70.1 to 75.36 in 1996. Population growth was also reduced 1.46 to 1.28 over the same period.

Table: 3.1 Demographic and Health Status of Fultala Thana, Khulna District in Bangladesh.

	1993	1994	1995	1996
Total Population	102,187	104,102	105,148	110,111
Total Eligible Couple	19,110	19,298	19,594	20,089
Total FP Acceptors	13,396	14,131	14,730	15,139
Total Births	1,918	1,932	1,969	1,881
Death 0-28 Days	71	60	71	75
Death 29-1 Years	53	46	55	35
Death 0-1 Years	124	106	126	110
Death 1-5 Years	21	41	27	29
Death 0-5 Years	145	147	153	139
Death Pregnancy Complication	7	5	3	6
Death During Delivery	-	-	2	-
Death (Others)	269	362	299	308
Total Death	419	535	456	465
CBR	18.76	18.55	18.72	17.05
CDR	4.10	5.23	4.33	4.22
Growth Rate	1.46	1.33	1.43	1.28
MMR	2.6	2.5	2	2.6
Neo-Natal Mortality Rate	37.1	28.98	36.05	39.87
IMR	64.65	53.31	63.99	58.47
TFR	-	2.75	-	-
Contraceptive Acceptance Rate	70.1	73.32	75.18	75.36

Source: Thana Family Planning Office, Fultala, Khulna, Bangladesh.