

## CHAPTER 6

### CONCLUSION, DISCUSSION AND RECOMMENDATION

#### 6.1 Conclusion

The objective of this thesis is to compare the cost and effectiveness of antenatal care between Thana Health Complex and Health and Family Welfare Center under Maternal and Child Health Program in Bangladesh. There were 381 pregnant women covered with total 901 visits in THC and 424 pregnant mothers with 1,345 visits in H&FWC. Data on cost and outcome of the study referred to the year 1998. Data collected for the study lasted for two weeks from 6<sup>th</sup> February to 20<sup>th</sup> February, 2000.

Total costs were analyzed by the inputs like capital cost/fixed cost, recurrent cost/variable cost. Effectiveness/outputs were measured by the pregnant women covered, provided at least 3 antenatal visits and had normal delivery, who received antenatal visits from the specific service center i.e. in THC or H&FWC.

It was found that the average cost including capital cost per visit of pregnant mother was Tk 46.30 in THC and Tk 33.95 in H&FWC, so it was lower in H&FWC than THC. The capital cost of building for administration and the recurrent cost of salary incurred for administrative purpose were equally distributed into each service center. But the average cost was different between two centers. It was due to the greater number of visits made in H&FWC. Recurrent cost items as compared separately showed that the average cost of all cost items with regard to maternal and child health services performed at THC was higher than that performed at H&FWC. With almost same material cost consumed in both centers, H&FWC (average 3.17 visits) showed higher efficiency than THC (average 2.36 visits) in terms of number of visits paid by the pregnant mothers. It was also found those more antenatal visits in H&FWC minimized the cost per pregnant mother (Tk 107.68) than THC (Tk 109.50) and as

well as increased the number of normal delivery. It indicates the efficiency of service providers in H&FWC is higher in terms of cost and effectiveness of antenatal care.

It was also found that the differences of effectiveness between two service centers in terms of pregnant women of coverage, at least 3 antenatal visits per mother and normal delivery were 8.95%, 27.06 % and 5.63 % respectively higher in H&FWC than 79.38 %, 42.52 % and 93.37 % respectively in THC. So the percentage of difference in the effectiveness between THC and H&FWC was significant except normal delivery. The effectiveness of antenatal care in THC was considerably small but the average capital cost and average recurrent costs were comparatively high. Comparing the cost-effectiveness of MCH program performed in THC and H&FWC, it was summarized that the more cost effectiveness was in H&FWC.

## **6.2 Discussion**

Providing health care at least cost is the primary aim of every health care provider. But due to absence of sound policy the aim is not being translated into reality. This is the main drawback of health system of many developing countries including Bangladesh. The infrastructure of health system of Bangladesh is better than that of many developing countries. But health care performance is comparatively low. The reason behind such low output seems to be weaker policy. There are one Thana Health Complex at thana level and one health sub-center at each union and there is one post for Medical Officer and one post for Family Welfare Visitor (FWV) to provide outdoors-antenatal care. But at present most of the H&FWC is lack of medical officer.

In this study it was found that the both service centers incurred higher recurrent costs like salary of health personnel than the capital costs and this was mainly because of government may employ sufficient health personnel to provide maternal and child health services. The average cost of H&FWC was lower than THC and this might due

to the fact that pregnant mothers preferred to seek antenatal care at the nearby facilities and more severe cases wanted to go to the THC.

H&FWC have been constructed at the union level of the country with the prime objective of providing smooth delivery of health and family welfare services to the rural people at the grass root. While these H&FWCs are, on the whole, rendering the services satisfactory, their efficiency and or effectiveness have, to a large extent, been limited by a number of impediments. These impediments are, for example, absence of physical facilities for outdoor treatment, lack of privacy arrangement for the women patients. At the moment there is no indoor treatment facility either for mothers and children or for other patients needing emergent treatment.

Population of each union is increasing and so are their needs. As the consumers have to travel a longer distance to have antenatal care services, they generally incur a higher travel cost and wage lost, so they would like to go to nearer service center. Actually a large number of patients is rushing to the H&FWCs creating an increasing additional pressure on the existing facilities of the H&FWCs. As revealed from the present study that if doctors are provided at sub-centers and family welfare visitor is trained by modern treatment as per needed of population, consumers should be constantly encouraged to receive antenatal care services from their nearest sub-center, so that they can make full utilization of it. In addition these services should give not only satellite clinic but also at the doorstep of the consumers, service utilization rate would be higher. Both provider and consumer cost for services would be lower. So to increase coverage of antenatal care as well as to improve the quality of the services, policy of providing MCH services should be modified.

In present situation under MCH-FP program both levels provide only outpatient services. In severe condition medical officers provide only prescription, there is no sufficient drug for complication, diagnostic testing, other modern facilities for the mother and baby and also practice for referral system in all levels. From the study it is also suggested that the existing maternal and child health facilities in THC to serve the pressing needs of the severity of pregnant mothers due to drugs, diagnostic test

and other facilities would be required. So there is an imperative need to carry out up-gradation of these activities as well as an emphasis on referral care at secondary and tertiary levels.

### **6.3 Recommendations**

From the empirical results and analysis shown above the following recommendations are put forward:

- 1). Analysis of the results also implies that if we want to reduce the average cost in Thana Health Complex utilization rate should be increased, i.e. more pregnant mothers are encouraged to seek antenatal care under maternal and child health care program at THC. To induce more pregnant mothers to come for the service, it is suggested that diagnostic test facilities must be provided e.g. complete urine analysis, stool examination, blood test and blood grouping for pregnant women treated. It is also advisable to improve antenatal service by ensuring the quality of service like quality of drugs as required, laboratory facility as well as efficiency of service providers.
- 2). More coverage of the pregnant mothers under MCH program in THC should be provided in patient services and service providers must be encouraged or motivated women to receive more antenatal visits as required, that would indeed be a most cost-effective method of improving the efficiency of the THC.
- 3). We have to provide health service in terms of more cost-effective way considering the efficiency as well. Antenatal care should be provided more for the existing costs, or same services at less cost, in a more accessible way.
- 4). To maintain danger signals or complication during pregnancy strict and effective referral system should be introduced.

#### **6.4 Limitations of the Study**

This study was conducted by selecting Thana Health Complex and Health & Family Welfare Center in Fultala thana as a case study. Although this area is a high performance area with MMR and IMR gradually declining and thus been fallen below national level and the data for ANC services is believed to be more complete than others thanas. But since data collection time was very limited and data was not available as per needed. So some assumptions were made for data analysis. There were no real costs available for the capital cost items as well as some recurrent cost items such as building cost, equipment cost, drug cost etc. It was difficult to calculate the utility costs like electricity and water bill, because there is no separate meter to measure the unit used specific for MCH services.

It was a retrospective survey and due to time limitation some variables could not be obtained. The further study should be prospective one and include other variables, for example Family Welfare Assistant (FWA), Traditional Birth Attendance, Volunteers, who worked and participated under MCH-FP program and stayed in the villages and also trained by the program. To assess the effectiveness of antenatal care data can be collected by interviewing mothers, who got services from the specific health center. In addition service delivery surveys can be conducted with the support and collaboration of assigned institutions such as private sector, NGO etc to collect necessary information of annual performance for evaluation. The appropriate information to be collected with prospective surveys for a few months.