#### CHAPTER 3

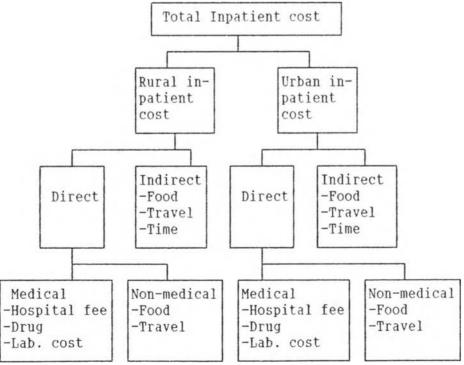
## RESEARCH FRAMEWORK

This chapter was comprised of five parts 1) conceptual framework 2) costing activities 3) costing principle 4) conceptual framework of satisfaction towards health services and 5) operational definition.

## 3.1 Conceptual Framework of Cost Analysis:

The conceptual framework of this study is to show about the different component of cost incurred by patient when they utilize the hospital services. The cost component is the same between rural and urban when they received treatment at the District hospital.

Figure 3.1 Cost of Inpatient for Childhood Diarrhoea:



Cost incurred by patient includes:

Cost incurred by patient consists of direct and indirect cost. The cost component of rural and urban inpatient is the same when

they treats at a District hospital. The direct cost is borne by patient only, including drug, food, and other accessories and also transportation cost to the hospital. Indirect cost is directly relevant to the patients parents side including food, tradal cost, as well as time cost.

The main focus of this research is the cost incurred by patients and their relatives, when patients are treated at the District hospital. Patients parents may incur cost in seeking treatment from other sources and services prior to the current service point. Such costs are not included in this study, suppliers (service providers) also incur costs in providing services like drugs, some of the drugs are supplied by providers, such type of cost are not included in this study.

The cost to be determined in this study are the costs to patients and their parents when they seek diagnosis and treatment at district hospital. A more comprehensive study of costs incurred by patients should include all the costs incurred by patients and relatives prior to the current diagnosis and treatment. This would give a more realistic cost figures for policy formulation concerning diarrhoea control service in Bangladesh.

However, given the limitations of the retrospective data available and time constrains in the thesis. This study concerns only the costs incurred by patients and parents when they receive diarrhoeal treatment at District hospital.

## 3.2 Costing Principles:

There are five main steps to be followed in costing: (Hanson and Gilson, 1993)

- a) Identify the resources used to produce the service being coasted.
- b) Estimate the quantity of each input used.
- c) Assign monetary values to each unit of input and calculate the total cost of the input.
- d) Allocate the costs to activities in they are used.
- e) Use measure of service output to calculate the average (unit) cost.

# 3.3 Costing Activities:

Table 3.1 shows that all the costing activities. Cost incurred by the patients includes direct cost and indirect cost. Direct cost includes bed cost, laboratory cost, food cost of patient and transportation cost of patient.

Indirect cost includes food cost, travel cost of attendants, and wage lost. The measuring unit of all costs are money term. All costing calculation described in chapter 4 in methodology section.

Table 3.1 Cost Analysis: The cost system consists of seven activities, which are as follows:

Activities	Measuring unit	Method	Туре	Source
1. Direct Cos 1.1 Drug cost		Item of drug x market	Primary	Ques.
1.2 Hospital fee 1.3 Lab.test	Money term Money term	price Interview Type of	Primary Secondary	_
1.4 Travel	Money term	test x Market price Interview	Primary	ques.
2. Indirect Cost				
2.1 Food 2.2 Travel 2.3 Time	Money term Money term Money term	Interview	Primary	Ques. Ques. Ques.

Note: Ques= Questionnaire. See appendix, 1 part II (cost part)

## 3.4 Satisfaction Towards Health Service:

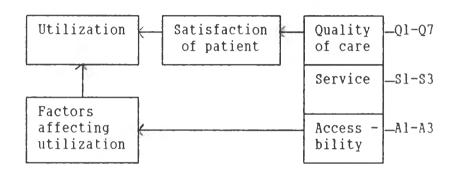
As Feldman (1966-88) defined, people "satisfaction with their present care simply reflects their ignorance of what might be achieved and their lack of any adequate standard of judgement". In other words, expression of satisfaction or dissatisfaction may be reflecting the level of people expectations more than the actual character of the service received.

Every patient initially tries to get treatment in his home town. If the required facilities are not available in Health Complex, patients are not satisfied with the medical services of that Health Complex, in that case patients move to the District Hospital to get better services. Satisfaction of course must be considered relative to expectation.

Many factors influence persons to become patients and utilize

Many factors influence persons to become patients and utilize the health care system. Satisfaction varies with certain demographic characteristics, physician availability, organizational characteristics of health care services and financing mechanism.

Figure 3.2 Conceptual framework of measuring the consumers satisfaction towards health services.



Note: Q1-Q7= Question about quality of care.

S1-S3= Quality of services.

Al-A3= Accessibility of services.

(See questionnaire part III in appendix 1).

Figure 3.2 shows factors affecting satisfaction of the patients towards health services. In this study three indicators were selected for measurement of the respondents satisfaction towards health services; a) Quality of care, b) Quality of services and c) accessibilities. Ql to Q7 are the question about quality of care (see appendix l,in questionnaire part III). This all questions are set to measure the quality of care, question includes availability of doctors, quality of drugs, adequate laboratory facilities, quality of laboratory facilities, doctor's attitude towards patient and doctor's diagnosis. Sl to S3 includes questions about nursing service, laboratory service, food service etc. Al to A3 includes question about convenient location, waiting time to see a doctor etc. The respondent's response to each of the question were coded in a two point scale.

Several factors appear likely to influence the anticipated satisfaction that patients receive from health services. They include the availability of drugs, the qualifications and attitudes of the staff, the sophistication of the equipment and the perceived success of previous contacts with the service. Some studies suggest that perceived quality of service is more important than fees when consumers are choosing a health service. Patients may avoid convenient but suspect health services in order to obtain treatment they prefer elsewhere. A number of studies have shown that when the physician does not meet patients expectation or when the patients has negative expectation about care he or she would receive, satisfaction tends to be low (Schoenherr 1981).

## 3.5 Operational Definitions:

### Childhood diarrhoea:

Three or more loose stools within 24 hours under 5 years is called childhood diarrhoea.

### Acute diarrhoea:

Three or more loose stools per day less than 5 days is called acute diarrhoea.

#### Persistent diarrhoea:

Diarrhoea of acute origin that continues for more than 5 days is called persistent diarrhoea.

## Criteria for diarrhoeal inpatients:

Diarrhoeal inpatients always develop serious dehydration. The assessment of diarrheal children for dehydration was based on the following features (WHO 1990)

a) General condition \* Lethargic or unconscious,

\* floppy

b) Eyes Very sunken and dry

c) Tears Absent d) Mouth and tongue Very dry

f) Skin pinch- \* Goes back very slowly

The diarrhoeal children who had two or more signs as mentioned above including at least one "\*" sign were classified as diarrhoeal inpatients with severe dehydration.

#### Direct cost:

It is a cost borne by patient directly for his diet, drugs, and other accessories including transportation to hospitals.

## Indirect cost:

It is a cost borne by attendant of patient for their food, shelter, and other accessories including transportation to hospital and loss of their earning.

## Average cost (Unit cost):

Total cost divided by total unit of output.

