## **CHAPTER - I**

## **1. Introduction**

Rational prescribing, which is an important aspect in the concept of Rational Use of Drugs, is the concern of this essay. The main issue in this essay is how prescribing practices of the prescribers of BRAC Health Center (BHC), non-governmental health care facilities in the rural areas in Bangladesh, can be improved. Bangladesh faces scarcity of financial resources to provide health care for it's 124 million populations (Bangladesh Bureau of Statistics, 1997). People in the rural area, which comprises 85% of the total population, live in poor socio-economic condition, with poor water supply, sanitation and poor accessibility to health care facilities (Islam, Martinussen & Rifkins, 1997); thus promoting rational use of drugs is very much essentials to the health care system.

Bangladesh Rural Advancement Committee, nowadays is well known by it's acronym 'BRAC' - a non-government developmental organization established in 1972, following Bangladesh's War of Independence, worked on the resettlement of refugees in a village of Sylhet district in the northeastern part of the country. The concept of BRAC Health Center (BHC) is a new approach of service delivery to BRAC. BRAC Health Center (BHC) is a static health facility in the rural area to offer a package of comprehensive health and family planning services especially focused on the reproductive health including other elements of essential services. It is not a traditional clinic or hospital but has emerged from the needs of the community. BHC was established in an effort to ensure health services to the rural people, ensuring the availability of and accessibility to quality services.

Although there is a belief that BHCs have been providing quality health services to the rural people, but it may not be true in case rational use of drugs. As BHC is a new initiative operating since 1995, no study has been carried out so far involving BHC to measure the extent of rational use of drugs. There were three studies carried out in 1997 involving BHC on different aspects. One of study done by Afsana and her team involved the quality aspect of BHCs. In that study she mentioned that management guideline that also includes a list of drugs and a drug formulary, was not properly followed by the personnel of BHCs. She also recommended that emphasis should be placed on rational use of drugs to minimize irrational or inappropriate use of drugs. The other two was covered on server charges including health financing.

The following chapter, this essay deals with the issues of irrational or inappropriate prescribing by the prescribers of BRAC Health Centers in the treatment of acute watery diarrhea in children under-5 years and the introduction of standard treatment schedule on diarrhea through face-to-face education. Similarly, this chapter will go through the analysis of the possible reasons of such irrational prescribing and consequences. Several examples of irrational or inappropriate prescribing have been cited for developing the argument. Two behavioral models (theory of reasoned action and social cognitive theory) are combined together to describe how interventions can improve prescribing. Possible intervention strategies for improving use of drugs have also been discussed in this chapter. Finally, this chapter provides brief information on the concept of each approach with their merits and demerits.

The third chapter of this study is a proposal that deals with the background information and rationale of the study. This is an experimental pretest posttest design study. Study design is diagrammatically represented including the approach and process. The main technique for measuring current practices and comparing the practices after intervention is the retrospective data collection from prescription records before at the beginning of the intervention as well as after the end. The format of data collection is given in the appendices including another format, which will be used for consolidations of the indicators. Several in-depth interviews also will be conducted with prescribers to explore the possible causes of such irrational practices by which possible messages for motivation to prescribers can be developed. Budgets including human resource requirements, sustainability and ethical issues have also been discussed in this chapter.

The fourth chapter of this thesis is data exercise. This part deals with the collection of data from a health center in Thailand. The main objective of the data exercise was to develop skill and to get familiar with the real situation during the data collection time. The format used for collection of data is adapted from WHO and it has been tested widely and has been used frequently all over the world.

Chapter five is the presentation part of my thesis examination. This chapter deals with some transparencies that would be used during thesis presentation. Chapter

six is the annotated bibliography. This chapter provides a brief overview of top six books/chapters that were consulted frequently during writing the thesis.

This is the general overview of my study, which hopes that the improvement will be sustained by enforcing monitoring system in terms of drug treatment auditing on a biannual basis in all BRAC Health Centers. Standard treatment provides a way of helping prescribers to prescribe rationally to improve rational use of drugs. It also provides the feeling to the prescribers that they are keeping their prescription style with the current stream of knowledge. I expect that this study will be the beginning of a concept of rational drug use in BRAC setting and I will try to continue to cover all facets of rational use of drugs such as, prescribing, dispensing and patient use, to improve drug use pattern in BRAC.