International Journal of Science, Environment
and Technology, Vol. 1, No 5, 2012, 506 - 518

# ESSENTIAL DRUGS IN BANGLADESH AND ROLE OF DIFFERENT STAKE HOLDERS–A QUALITATIVE STUDY

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**Abstract:** In-depth interviews were conducted among 42 purposively selected participants to have an insight into the different issues pertaining to essential drugs such as access, availability, price fixation and update of the Essential Drugs List of Bangladesh. Their opinions seem to be divided as to the availability, production, relationships between price and availability, role of different stakeholders of essential drugs in general. But an unanimous opinion appears that the existing Essential Drugs List of Bangladesh is not enough comprehensive to serve the needs of people and demands at large. Therefore, this list should be updated with widely and wisely prescribed drugs based on scientific evidences.
**Keywords:** Bangladesh, drugs, essential, qualitative, role, study.

## INTRODUCTION

Essential drugs are the foundation for nearly every public health programme aimed at reducing morbidity and mortality in Bangladesh as well as in the developing world [1, 2, 3]. But about one third of the world's population lacks regular access to medicines of a suitable quantity and quality. In poorer areas of Asia and Africa this figure may be as high as one-half. As a result,

millions of children and adults die or suffer needlessly, although their diseases could have been prevented or treated with cost-effective and inexpensive essential medicines [4] and the high disease burden in developing countries such as in Bangladesh is slowing economic growth and worsening poverty levels [5].

Irregular access to high-quality essential medicines is an important issue in many countries. The major cause is either because these are not available or are too expensive, or there are no adequate facilities or trained professionals to prescribe them; or this may be due to inefficient pharmaceuticals policy and management systems, poor selection, bad distribution and use, geographical barriers, lack of resource funding, especially in the public sector, or to a combination of these [3, 4]. The retail prices of several essential drugs are higher in poor developing countries than in affluent developed countries [6].

Although a well-documented Drug Policy and a Drug Administration system including pricing of drugs are available in Bangladesh, there are pricing differentials of drugs and, availability and use of essential drugs are very often lacking even at different levels of health care facilities [4, 7-14].

Several studies on retail prices of essential drugs have been carried out and published. All these studies have reported wide variation in the retail prices of essential drugs among countries [15, 5, 16, 6]. But there is lack of detailed publicly available information about the impact of price control on production, availability and access to essential drugs. There is also limited awareness among related government officials about the impact of relevant trade agreements (TRIPS: Trade-Related Aspects of Intellectual Property Rights) and globalization on access to essential drug. The overall impact of this, inter alia, on the Millennium Development Goals and on poverty reduction is very substantial [3, 4, 5, 16]. On the stated backdrop, generation of pertinent information regarding drug prescriptions, its prices with focussed emphasis on the essential drugs are utmost necessary that might help in quality patient care.

## MATERIALS AND METHODS

An applied qualitative research method - in-depth interview - was used in carrying out interviews of the respondents. The interview was unstructured at the instigation and followed by probing questions. The activities involved in using in-depth interview to study the raised issue–the impact

of drug pricing on access for essential drugs–was organized into a series of steps. These were: plan of conduction of the in-depth interviews, selection of respondents, preparation of the interview schedule, selection of interviewers, training of the interviewers, conduction of the actual interviews, analysis of the data and write-up of the report.

In planning of the in-depth interview, we relied on colleagues who had used the method before. In addition, we sought the assistance of known social scientists who are well experienced in the actual use of the method in need. We identified key pertinent respondents who could provide useful information for the study. The purposively selected respondents for the in-depth interview were well versed about the issue to provide relevant information. They were fairly representative of the various groups in the study population for this technique to be useful.

The interview guide consisted of, inter alia, a list of probing questions to be discussed by interviewers with respondents in the field. The constructed schedule (Annexure-6: In-depth Interview Schedule) used general, non-directive questions instead of direct questions that may end up in "Yes" or "No" answers. The order of topics in in-depth interviews was distinct. The target respondents were contacted and the definite appointments were made with them before the actual interview. The interviews were held in a neutral place where distractions were less likely. Arrangements for transport were made earlier to ensure that the team could arrive at the location on time on the day of the interview. Besides the letter of introduction, interviewers checked to ensure that they had all that were required in the field. These may include: interview schedule, pen/pencil, notebook, tape recorder, batteries.

In addition, on the day of the interview, the interviewer arrived early to ensure that all arrangements were ready. When both interviewer and respondent were seated, the respondent was made to feel completely at ease, uninhibited and unthreatened in order to make the interaction fare and frank. At the outset of interview, the interviewer introduced him/her and expressed affiliation; explained the general purpose of the interview to the respondent; impressed upon the respondent that his/her opinion was important; requested respondent to introduce him/herself and established rapport and assured the respondent of the confidentiality of the interview. At the beginning, free discussion was started with less sensitive issues, and when the respondent was sufficiently relaxed gradually the interviewer attempted to raise the specific issues using probing questions.

They remained alert to both verbal information and non-verbal behaviour. If necessary, the respondent was allowed to attend to his/her desk works or home distractions during the interview with patience. The interviewer sometimes also tried to adopt techniques to persuade the respondent to elaborate on points, e.g., "What happens next? Can you please elaborate?" clarify issues: "Which year did you join this institute?" The interview was concluded by thanking the respondent and allowing a few minutes for free discussions. Once the interview was formally completed, the interviewers had a cursory look over his/her field notes to make any on-the-spot corrections and seek necessary clarifications before leaving. In first few interviews a tape recorder was used, but it seemed to be threatening. Hence the usage of tape recorder was avoided for the sake of the smooth and cordial interaction.

At the end of each interview, interviewers reviewed their notes and verbatim reports to make sure that they make sense in relation to the study questions. Comments or any observations made during the interview were clarified. Before leaving the field, interviewers completed short summaries of the discussions, ensuring that any additional notes on the interview were included. Occasionally, the Principal Investigator interviewed the interviewers to find out their experiences in the field. This de-briefing covered any problems encountered in administering the schedule as well as any new themes or findings from the field. Some of the interviews were taped, the tapes used transcribed verbatim or summaries based on the purpose of the study. Afterwards, the points that were important to the study topic were coded. These materials were also treated as excerpt and included for analysis.

Constructed excerpts based on the interviews were considered as units of analysis. The analysis was completed manually by categorizing the interview material into various sub-topics, labelling of each category using appropriate headings and describing and interpreting the major findings

**RESULTS**

A total of forty two purposively selected respondents were interviewed from the different organisations on the intended issues of drugs such as availability, price and pricing. The respondents were academics and/ or executives holding positions of Professor and Associate Professor of different departments like-Health Economics, Microbiology, Pharmacy, Pharmacology, and Managing Directors of pharmaceutical industries, principals of medical

colleges, executives of non-government organisations, medical practitioners and social elites. Their opinions on different questions they were asked are summarized in the following sections

- **AVAILABILITY OF DRUGS**

The opinion seemed to be divided as to the availability of essential drugs in general. Half the experts believed that essential drugs were available throughout the country. While the other half thought they were available only in cities, and in rural areas adjacent to the urban ones. A few of the interviewees even thought that they were generally unavailable in most parts of the country. They all identified rural urban divide as a possible source in the variability of drug availability. Price and prescription frequency of drugs were also identified as important factors influencing availability of particular drugs. While there were different opinions about availability, rural-urban divide emerged as an influencing factor from majority of the responses.

Those who believed that essential drugs were sufficiently available identified two reasons behind what they saw as universal availability. One reason was adequacy of the quantity that was being manufactured, the other being the extensive marketing/distribution network of the manufacturers. Those who viewed that the essential drugs were unavailable in most parts of the country or they were occasionally to frequently remaining unavailable also explained how and why some or many drugs could become unavailable. Particularly the higher-priced among the essential drugs have little demand in rural settings. Some of the respondents identified lack of a government initiative in the distribution of essential drugs in rural areas. Quite a good number of interviewees expressed their concern that drug-sellers (storekeepers) in rural areas tend to sell low quality drugs as public awareness about the quality of drugs is low and enforcement of rules about quality of drugs is non-existent.

- **PRICE AND PRICING**

The respondents chose to comment on their perception about pricing of drugs. Nearly half of the respondents believed that essential drugs are unaffordable given the high number of poor in the country. Only a few of the respondents, however, mentioned that the price is low when compared to their pricing in the international market. While some of them thought that the price of essential drugs is affordable, others pointed out that there are essential drugs of varying prices and they estimated that 5%-10% of the essential drugs are very expensive. They also identified antibiotics as being overly priced.

The respondents commented on the government's role in pricing. Interestingly, their views were note-worthily contradictory in nature. While some of them informed that the government recently chose not to control price of drugs, other respondents informed that the government fixed the price of about 160 essential drugs.

- **RELATIONSHIP: PRICE AND AVAILABILITY**

There is a diverse set of issues that the respondents brought up in response to this question. Some of the respondents claimed that less expensive drugs are available more. They meant accessibility/affordability when they used the word availability. But half of the respondents apparently took "availability" to mean actual physical presence of the drugs at home or at a nearby store. The majority of the respondents claimed that price and availability are not related. They also identified two reasons for unavailability of drugs: cross border smuggling of drugs, and poor marketing/distribution system. But a few of the respondents explained that high priced drugs had very few buyers (having poor buying power) in rural areas. As a result, drug-sellers in rural areas have little incentive to stock their stores with such expensive drugs.

- **ROLE OF GOVERNMENT**

All respondents identified that the government can and should influence the price and availability of the essential drugs. But the exact role of the government envisaged by the respondents varied. While some of them believed that law enforcement would be the key, others believed that incentive measures such as tax exemption for new companies, reduced tax for raw materials etc. should be implemented.

The opinion on the performance of the government in controlling the price varied. About half of the respondents pointed out that the government played no effective role in controlling the prices. Almost all of them identified corrupt practices in the government agencies as the reason behind unsatisfactory performance of the government. But a few of the respondents believed that the government is playing a satisfactory role in controlling prices.

Regarding availability, most of the respondents did not mention anything. While some of the respondents suggested that the government should distribute drugs, others pointed out that during emergencies (such as floods) some essential drugs become unavailable. During such times the government should play a greater role in ensuring their availability.

- **ROLE OF PHARMACEUTICAL COMPANIES**

The responses to the previous question (on role of the government) indicate opinion on role of companies varies. A few respondents believed that companies have absolute control on prices to the extent that they are capable of creating artificial crises and monopolizing market through formation of cliques. As a remedy, only a few respondents believed that companies should seek less profit particularly from the essential drugs.

Regarding availability, respondents had also different opinions and suggestions. But most of them informed steadfastly that the local companies produced sufficient essential drugs and even exported the same to several countries. Some of them viewed that market research (such as demand estimate in different seasons) was poor while another respondent claimed that it was very good. Still a few of the respondents believed that the distribution network of companies had ensured the availability of essential drugs. The only suggestion to ensure availability that was proposed was that NGOs and pharmaceutical companies should cooperate in setting up drug stores around the country to offer easy access to essential drugs to all citizens at all times.

- **ADVICE TO INCREASE THE AVAILABILITY**

All respondents gave pertinent suggestions regarding the increasing availability of essential drugs by recommending that the government should play the vital role. There were other suggestions which are noted here: i. Twenty percent suggested keeping dispensary or medical centres all over the country where essential drugs should be made available the year round and the government should take care of it with the help of the Drug Administration. ii. New licenses should be given to more companies and should expand the existing number of companies. iii. Tax should be reduced on the raw materials iv. Pharmacists should play the main role in dispensing of the medicine and making it available v. There should be a committee, as in developed countries, comprising of members from amongst the university teachers, administrators and local people who could look after the availability, demand and quality as well.

- **ROLE OF GENERAL PEOPLE**

Most of the respondents said consumer associations could play an important role. A few respondents were worried to detect a noxious relationship between the pharmaceutical companies and the health care providers. According to them this was a serious threat to the people, who were forced to buy low quality medicines at higher prices. These types of problems

should be brought to the knowledge of the Drug Administration by the local leaders, MPs or consumer associations. On the other hand some of the respondents thought it was more of a top-down matter, so general people had little scope to influence this. Awareness among the general people could influence this issue a lot.

- **PRICE FIXATION**

Most of the respondents said it would be better if the government had fixed the prices and they also added that pharmaceutical companies could express their opinions. Only a few of the respondents who were subject specialists and well versed in the field opined against fixed price of any drugs. They preferred an open market policy, thereby ensuring a free and fair competition amongst the drug producers.

- **REVISION OF ESSENTIAL DRUGS LIST OF BANGLADESH**

Almost all of the respondents strongly opined that the present essential drugs list (EDL) of the country is not adequate enough to meet the current needs of the people at large. Therefore, the existing EDL must be revised i.e., updated, thereby increasing the number of evidence based useful drugs.

## DISCUSSION

When a physician prescribes drugs for a patient, other factors unrelated to the biochemical properties of the drug may impact on the process. These factors are: Physician characteristics; Environment; Information sources; Cultural beliefs; Policies, laws and regulations.

- ***Physician Characteristics:*** A number of studies have shown that age, educational background, training and knowledge influence prescribing practice. Specialist physicians who have more recently graduated and have more postgraduate training with better knowledge have been shown to prescribe more appropriately and prescribe fewer medications for their patients [43-46]. Younger physicians have also been shown to use up-to-date drug compendia [43, 44]. Physicians who are seen as more cosmopolitan and concerned about psychosocial and quality dimensions than their peers were shown to be more appropriate prescribers [47].
- ***Environment:*** The influences of group practice and colleagues have been noted in a number of studies. Physicians who maintain a variety of contacts with a large number of colleagues and in group practice have been shown to introduce new drugs into their repertoire before their isolated colleagues, and have also been shown to write fewer drugs than those in

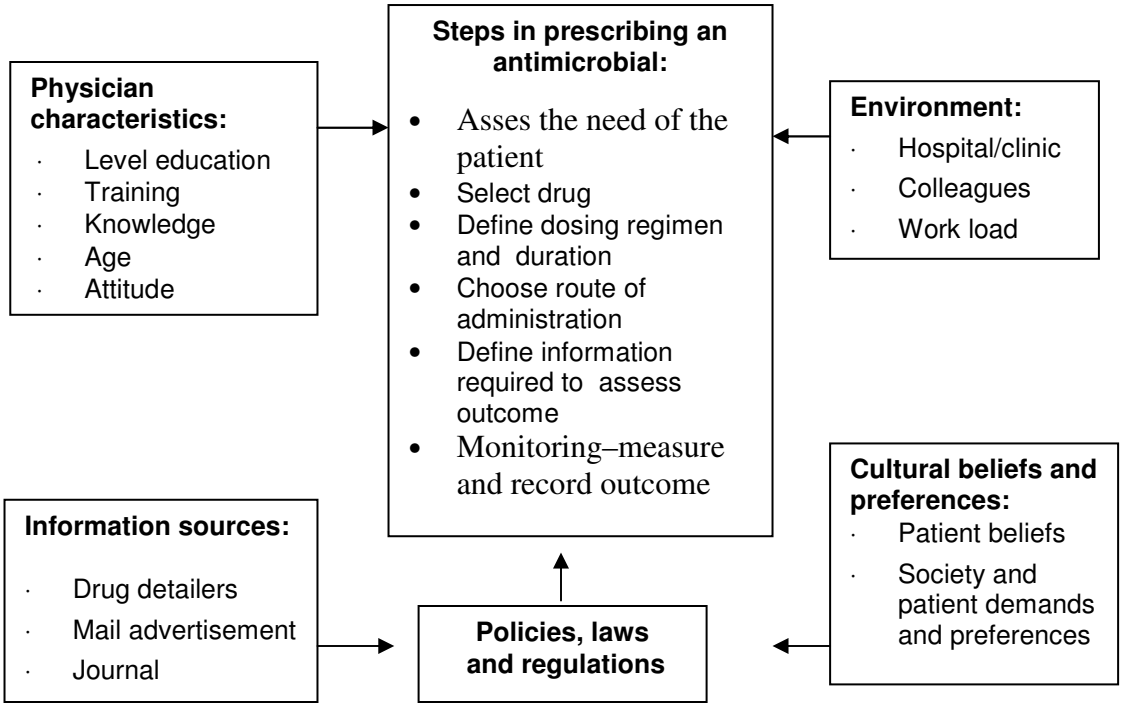
solo practice [43]. Physicians with low workloads and in public health facilities have been shown to be better prescribers than in fee-for-service group practice [48].

- ***Information sources:*** Prescribing practices of physicians are affected by their interactions with the pharmaceutical industry; whether it be through company-funded trials, company-sponsored educational training or information for physicians supplied by pharmaceutical detailers and other forms of advertising [49-52].

Decisions to use drugs in clinical practice are also influenced by journal articles. The number of journals read has been linked with the more rapid acceptance of a new drug [53].

- ***Cultural beliefs and preferences:*** There is a widespread perception that for every symptom there is a specific remedy or drug. Antimicrobials are viewed as wonder drugs capable of healing a wide variety of illnesses ranging from gastrointestinal disorders to headaches[54] and physicians respond to what they perceive as patient demand for drugs. Bradley [55] described the prescription in terms of an interaction of social and cultural decisions. Cultural norms can affect the openness of communication between patients and physicians and result in physicians obtaining incorrect histories and consequently over-prescribing drugs [56].
- ***Policies, laws and regulations:*** The extent of drug related policies, laws and regulations, and their enforcement and compliance within a country govern the availability, sale and prescription of antimicrobials [57, 58]. It appears from different reports that enforcement and compliance with drug policies successfully controls and improves antimicrobial prescriptions [57-59]. Different non-biochemical factors that can impact on the prescription process of physicians are represented diagrammatically in Figure 1 overleaf.

**Figure 1.** Factors influencing drugs prescribing.




So, a prescription is the final end result of a complex process. Many factors unrelated to the biochemical properties of the drug itself also have impact on the process of prescribing practices of physicians and subsequent outcomes of prescriptions, , availability, use and price of drugs.

## CONCLUSION

To make the existing Essential Drugs List comprehensive and capable to meet the clinical need and demand, updating is utmost necessary by including evidence based effective and price friendly drugs.

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*Received Oct 20, 2012 * Published Dec, 2012*