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# Primary Health Care in Netrokona Sadar Upazila - A Case Study on Extended Program on Immunization

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**Abstract:** Health related surveys are important as well as critical tool to measure a community's health status, health behavior, and risk factors concerned with health issues. These surveys also help to evaluate the quality of health care level received by the people. By conducting health surveys from time to time, the patterns and beliefs about health and treatment strategies can be identified. The national policy makers can use those survey data to better understand main health problems in the country and correct issues that are obstacles for human and economic development. The Expanded Program on Immunization (EPI) is a World Health Organization (WHO) program that aims to make all the essential vaccines available to all children regardless of nation, region, and socio-economic status. To make the program fruitful, all the United Nations' member states, the national governments make their policies for vaccination programs using the guidelines of EPI. Bangladesh is a south Asian country with a condensed population having different national problems. Ensuring primary health care to each and every individual is a challenging task for the government. The current study was aimed to observe the situation of primary health care system in an upazilla of the district Netrokona. The EPI was considered as a parameter of primary health care system. The data gathered from the study may be used by the government to fix the associated problems and to improve the health care system.

Keywords: Health Care Provider, Immunization, Primary Health Care, Upazilla Health Complex, WHO

## 1. Introduction

Health is the source of all happiness. Bangladesh is a lower middle income country in the world. It has about 160 millions of population struggling to stay in only 1,47,570 square kilometers. There are a number of challenges like ensuring health for all, natural disasters, unemployment etc. to face towards its way of development. Among them health is a pivotal issue to provide to all spheres of population. According to World Health Organization, "Health is the physical, social and mental wellbeing and not merely absence

of any disease". Health is the basic need of people in Bangladesh. Medical care to Bangladeshi citizens is one of the basic necessities. Improvement of nutritional status and public health status is a Constitutional commitment of the Government of Bangladesh [1]. The progress of a nation depends on the condition of health of the population of the country. Basic health is crucial to serve people of Bangladesh. So, Primary Health Care (PHC) is an important arena to study and the focus would be on the Expanded Program on Immunization (EPI).

Although Bangladesh is progressing tremendously

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recently, ensuring health for all is still a big challenge. From the government side along with other health services community clinics are playing important role. Non-Government Organizations (NGOs) are also contributing to this service to a great extent. Government and NGOs are striving to reach to the grass root levels to ensure health for the people of Bangladesh. How primary health care can be strengthened by engaging all players especially NGOs in providing health services is the center point of this study. The present study thus focuses on the Expanded Program on Immunization (EPI).

Health services based on primary health services have been expanding gradually in Bangladesh to improve the health status of the people, especially the maternal health in rural areas where more than 85 percent of the people are living and are underserved and underprivileged groups [2]. The study focused on the degree of people's getting the public health services from different agents as well as government of Bangladesh. It suggested that the people's getting the health services is not satisfactory. Salahuddin et al., (1988) stated that Bangladesh, being a poor country with scarce resources, cannot afford to provide sophisticated medical care to the entire population [3]. Emphasis is therefore given to primary health care covering the unnerved and undeserved population with the minimum cost in the shortest time. Mahmud (2004) explored people's perceptions and reality regarding participation in freshly opened areas inside the Bangladesh public health healthcare delivery system [4]. The noble findings suggest that the effectiveness and ability of community teams to operate as spaces for participation and supply the means for developing capabilities to participate is limited, being constrained by poverty, social inequality and dependency relationships, invisibility, low self-esteem and absence of political clout.

The Government of Bangladesh is spending a remarkable amount of money to provide free primary health care services to the people through various efforts. Present scenario of providing primary health care services and the prospective areas of improvement are important arena to be looked into. The specific objectives of this study were as follows:

- To find the area of cooperation of Government Organization (GO) and NGO in the arena of Public Health Care (PHC) focusing EPI.
- To find the weaknesses in providing the primary health care services.

#### 2. Methods

Methodology plays an important role in performing this kind of research. So, the research followed specific methods to collect data and information by interviewing, personal observation and informal discussion.

Both primary and secondary sources of data were used throughout the study. Questionnaire, interview and discussion were the instruments to collect the primary data. The author selected a non-government organization, BRAC (Bangladesh Rural Advancement Committee), as the service provider regarding primary health care focusing EPI. Upazila health complex was consulted in providing the same. Program Head, Health, Nutrition and Population of BRAC head office was also consulted. Due to time and resource constraints, 20 service recipients, 5 service providers (NGO) and 5 service providers (GO) were randomly interviewed. Both qualitative and quantitative data were collected. Various books, journals and internet open access sources were used to collect the required information. Field visit was used to collect the valuable information. The steps used to conduct the study are shown in Figure 1.

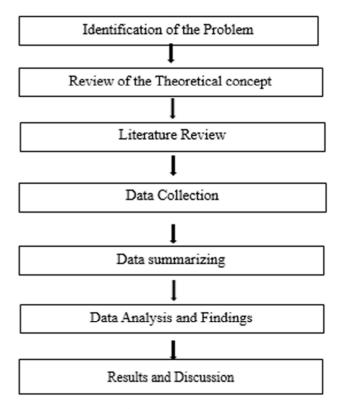


Figure 1. Flow chart used for data collection, compilation and presentation.

#### 3. Results and Discussion

### 3.1. Public Health Care in Bangladesh

Primary Health Care (PHC) refers to "essential health care" that is supported by scientifically sound and socially acceptable strategies and technologies that create universal health care accessible to any or all people and families in a community. It is through their full participation and at a value that the community and also the country will afford to keep up at each stage of their development within the spirit of "self-reliance and self-determination" [5]. In other words, PHC is an approach to health beyond the traditional health care system that focuses on health equity-producing social policy [6]. PHC includes all areas that play a role in health, such as access to health services, environment and lifestyle [7]. Thus, primary healthcare and public health measures, taken together, may be considered as the cornerstones of

universal health systems [8].

Bangladesh government is striving to ensure basic health at the grass root level. As part of the initiative, the following data can be visualized. There are 467 government hospitals at the upazila level and below, which altogether have 18,791 hospital beds. At the union level, there are 31 hospitals with 490 beds and 1,362 health facilities for outpatient services only. So, at the union level, there are 1,393 health facilities. At the ward level, there are 12,584 community clinics in operation till date [9].

#### 3.2. EPI in Netrokona Sadar Upazila

Primary health care includes very basic health care services like EPI, ORS, sanitation and family planning services, comprehensive reproductive health care, reduction of mortality and morbidity of mother and children etc. Of the so many, EPI was selected to measure the status of PHC. EPI is the instrument to prevent the following diseases of the mothers and children. Table 1 indicated the diseases which can be prevented by different vaccines under EPI [10].

Table 1. Diseases to be prevented by EPI.

Sl no.	Name of disease	Name of vaccine
51 110.	Name of disease	Name of vaccine
1	Children tuberculosis	BCG
2	Diphtheria	Pentavalent
3	Hoping cough	Pentavalent
4	Tetanus	Pentavalent
5	Hepatitis B virus	Pentavalent
6	Hib V	Pentavalent
6	Polio	Oral polio vaccine
7	Hum	Measles Rubella

Netrokona sadar upazila was selected to study the impact of EPI of the government, because it is one of the most remote areas of Bangladesh.

A brief description of the population status of the area is given in the Table 2.

Item	Male	Female	Total
Total population	1,45,225	1,31,538	2,76,763
Children (0-59 month)	23,719	20,380	44,099
Adolescent (1 year reg.)		5,860	5,860
Female (15- 49 years)		62,730	62,730
Pregnant women (1 year reg.)		7,666	7,666
Others			1,56,408

Table 2. Population status of Netrokona sadar upazila.

EPI related information of Netrokona Sadar upazila was searched and the scenario was given in the Table 3 [11].

**Table 3.** Information regarding EPI centers and related personnel from the government.

SL no.	Item	Number
1	EPI center	288
2	Health inspector	3
3	Assistant health inspector	12
4	Health assistant	45

One health assistant and one family planning worker are dedicated to ensure immunization of each immunization center of the respective ward of the union. There are 288 EPI centres in Netrokona Sadar Upazilla. 3 health inspector, 12 assistant health inspector and 45 health assistant engaged to ensure immunization of the centers. Every month immunization program is implemented by the efforts of the personnel and other resources dedicated for the purpose. Government as well as NGO, Bangladesh Rural Advancement Committee (BRAC) is working to make the program a success. Every health nurse of BRAC visits 15 household every day and he/ she finds out/ identifies the immunization requiring child, adolescent and pregnant mother. He/ she informs them about the immunization center and the date of immunization fixed by the office. If required, the incumbents are carried to the immunization center for ensuring their vaccination. For an instance, data of immunization in Netrokona sadar upazila is given in Table 4 [11].

 Table 4. Monthly immunization report (children 0-11 month), December 2017.

Item	BCG	Pentavalent (1+2+3)	PCV (1+2+3)	OPV (1+2+3)	IPD	MR vaccine (1 dose)	Total
Total number of	503	1.616	1,586	1 616	450	511	6.291
vaccine taken	303	1,616	1,360	1,616	439	311	0,291

Table 4 showed different types of vaccines for different diseases and also the number of vaccines given. The total number of vaccines given to 288 EPI centres is 6,291 for the month of December, 2017.

## 3.3. The Case study of EPI at Netrokona Sadar Upazilla

As a case study one of the immunization centres of

Netrokona Sadar Upazilla was selected and 20 vaccine takers were interviewed through a pre-prepared questionnaire. The immunization center was the house of Nurul Islam Master, Village: Rajendrapur, Block: Kha-1, Ward no. 1, Union: Challisha, Thana: Netrokona Sadar. The respondents were asked how they were informed about the EPI. The status of the observation is given in Table 5.

Table 5. Sources of EPI information.

Sources of EPI information	Health inspector/ health assistant	Family welfare assistant	BRAC health nurse	Others
Number	2	4	11	2
Percentage (%)	10.5	21.0	57.9	10.5

Table 5 showed that 1 respondent did not respond to the

issue. From the responses, it is evident that health inspector/

health assistant, family welfare assistant, BRAC health nurse and others gave the information to the vaccine takers were 10.5%, 21.0%, 57.9% and 10.5%, respectively. It is evident from the data that contribution of GO and NGO (BRAC) in giving the information of EPI was complementary and

supplementary.

When asked the service provider of NGO (BRAC) said about success of the EPI, the respondents' comments were summarized in Table 6:

Table 6. Comments of service providers about success of EPI.

Item	Very good	Good	Satisfactory	Moderate	Not good
Number	5	0	0	0	0
Percentage (%)	100	0	0	0	0

It was observed from Table 6 that among the very good, good, satisfactory, moderate and not good, the very good comment was 100%. From the data it is observed that EPI is a successful endeavor of primary health care service in

Bangladesh.

When asked the service provider of government side about success of the EPI, the respondents' (5) comments were summarized in Table 7.

Table 7. Comments of service providers about success of EPI.

Item	Very good	Good	satisfactory	Moderate	Not good
Number	5	0	0	0	0
Percentage (%)	100	0	0	0	0

It was observed from Table 7 that among the very good, good, satisfactory, moderate and not good, the very good comment was 100%. From the data it was observed that EPI is a successful event of primary health care service.

From the above two tables 6 and 7, both NGO and GO it may be commented about 100% success of EPI. One of the authors (MAR) personally visited the awareness and mobilsation briefing session of BRAC at Village: Rajendrapur, Block: Kha-1, Ward no. 1, Union: Challisha, Thana: Netrokona Sadar near to the EPI center of the house of Nurul Islam Master. A BRAC health worker was briefing the mother and adolescent and persuaded and mobilized them to go to the EPI center to take vaccines. A picture of the BRAC's effort is given Figure 2.



Figure 2. Briefing session for mobilization program of BRAC.

The author MAR visited the EPI center and saw that GO and NGO (BRAC) were working together to make the immunization program a success. In the EPI center, one health worker and one family welfare assistant from UHFPO were immunizing the mother, children and adolescent. And side by side, one health nurse was mobilizing the vaccines takers to the Centre. A symbol of cooperation and coordination between care provider and patient in the field level is given in the Figure 3.



Figure 3. Immunization at the EPI Center.

As per the information from the Deputy Commissioner's (DC) office of Netrokona district, there remain 63 NGOs in Netrokona. They meet in coordination meeting monthly in DC office and discussed various issues of collaboration and problems as well. Coordination meeting of NGOs is also held in Upazila level. Especially EPI and other health issues are discussed in the meetings of civil surgeon and UHFP office. This is how collaboration is being practiced between GO and NGOs at the local level.

One of the authors (MAR) met with Dr. Mohammad Ariful Alam, Program Head, Health, Nutrition and Population of head office of BRAC and discussed relevant issues regarding EPI. He commented that EPI is one of the successful sector of primary health care of Bangladesh. He added that government does the hard part and BRAC does the soft part of EPI as for example mobilization. Through excellent cooperation and coordination between GO and NGO, EPI became a grand success. But he claimed that government does not recognize the contribution of NGOs in this arena.

The author also meet with UHFPO of Netrokona Sadar upazila. UHFPO commented that BRAC is supporting the mobilization for EPI, but sometimes proper cooperation is not noticed as expected.

From the information and data included in the study, it is evident that diseases like children tuberculosis, diphtheria,

whooping cough, tetanus, hepatitis B virus, Hib V, polio and measles can be prevented by vaccines through EPI as part of the endeavors/ efforts of primary health care services of the government. In the journey of primary health care services through EPI, collaboration of GO and NGO works effectively to a great extent. Government ensures the hard part of the EPI like procurement and supply of vaccines, pushing or injecting vaccines etc. Along with government, NGO works for the soft part like awareness and mobilization of the incumbents/ clients. The study found that through collaboration and cooperation between GO and NGO, EPI becomes a successful program of the government. The study also finds some areas of development/ improvement. The areas identified might be more coordination, endorsement of contributions of the players in the smooth running of the EPI.

#### 4. Conclusion

Healthy population can contribute to the economy in a better way. So, investment in health has a long term positive impact to the economy at large. Although government is the giant organization, it has also limitations because it looks for development and sustainability of the all sectors of the country. NGOs can play the complementary and supplementary role to government in ensuring optimum service to the public. EPI of primary health care service is a successful version of GO and NGO collaboration in Bangladesh. Coordination and collaboration between GO and NGOs could be applied to all other areas of service to public for overall development and sustainability of the country. The following points should also be taken into consideration:

- Social acceptance: The mindset of general people is yet to be convinced to accept the good works of the NGOs in the country.
- ii. Coordination at all levels: The study found some lack of full coordination especially in the implementation level. This issue should be well addressed.
- iii. Transparency and accountability: Transparency and accountability of the NGOs should be revisited and revised in all levels for the betterment of the country.
- iv. Role of NGOs and making public: NGOs are playing roles in the service to people in the country and it should be made public.
- v. Contributions of parties: Contributions of both parties-GO and NGOs should be recognized and rewarded.
- vi. Partners of Government: NGOs may be treated as complementary/ supplementary to Government initiatives.

## Limitations

Enough time was not allocated to go in detail of study. Data collection was limited to Netrokona Sadar Upazila only. Secondary sources of data were used to enrich the primary data.

# **Conflict of Interest**

The authors declare no conflict of interest.

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