# First World Healthcare by Third World Provider: Position of Bangladesh

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#### **Abstract**

Despite being a third world country, Bangladesh has a huge prospect of providing modern, advanced healthcare in cheap rates. It has started that journey by building new health infrastructures, strengthening primary health care, increasing outputs of doctors, nurses and paramedics, developing a strong health information system and encouraging public-private partnerships. With increasing GDP, health status of people has also been improved as evidenced by achieving targets of the health related indicators in Millennium Development Goals. In spite of having lower per capita health expenditure than neighboring countries, Bangladeshi people have achieved higher life expectancy at birth with progressively strengthened health system. This country is developing resources at a fast pace to attract the medical tourists challenging other Asian countries popular for medical tourism. Bangladesh needs to make curative sector stronger to earn massive sum of foreign currency and emerge as a country of medical tourism in near future.

Keywords: Developing Countries, Health Expenditure, Medical Tourism, Primary Health Care

#### 1. Introduction

Four key artists delineate the structure and function of the health system of Bangladesh namely the government, private sector, Nongovernmental Organizations (NGOs) and donor agencies. The Government, by constitution holds responsibility for health policy, regulation and provision of comprehensive health services. Though Bangladesh is known for poverty, overpopulation, corruption and vulnerability to climate change, recently international community have lauded the country for its headway on the HDI. The achievements in a number of indicators are noteworthy than some of its neighboring countries, such as India and Pakistan, who have higher per capita income. Reduction in under-five mortality, increasing immunization coverage, reducing maternal mortality and total fertility is the outcome of the contribution of the joint donor funded Health, Population, and Nutrition Sector Development Program (HPNSDP). This program has also improved women's education and economic conditions, with persistence of minimal income inequality. Bangladesh is undergoing health transition with the manifestation of the double burden of diseases attributable to the emergence of noncommunicable diseases<sup>1</sup>.

The purpose of this paper is to discuss how a third world country like Bangladesh is going forward with a plan to build a strong health system with the help of donor agencies and involving private sectors and NGOs by setting up targets and efforts to achieve them within stipulated time and also to determine if such a country can emerge as a site of attraction for people around the world particularly from the developed countries by providing cheap but quality health care.

### 2. A Third World Country

In 1952, a French demographer named Alfred Sauvy, wrote an article in the French magazine "L'Observateur" which was concluded by comparing the 'third world'

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with the 'third estate' mentioning in the line - "this ignored third world, exploited, scorned like the third estate". 'Third estate' means the 'common people' of France excluding clergy and aristocrats before the French revolution2. During the cold war, division of countries in groups coined the terms first, second and third world. The syndicate of democratic-industrial countries aligned with the NATO and within the American influence sphere is known as the "first world" and the eastern bloc of the communist-socialist states, the "second world". The remaining greater part of the world's population and states were regarded as the "third world". The concept of the third world serves to identify countries that suffer from high infant mortality, low economic development, high levels of poverty, low utilization of natural resources and heavy dependence on industrialized nations<sup>3</sup>. They have millions of impoverished people in a massive lower economic class and a very small influential upper class who control the wealth and resources of the country but lacks middle class. These are basically the developing nations of Asia, Africa, Oceania, and Latin America who lag behind in technology<sup>4</sup>. Their economies have a tendency to be dependent on the developed countries and their governments are unstable. They tend to have high rates of population growth, illiteracy, and disease burden. Most of them also have a very large foreign debt. Bangladesh is a third world country according to this definition.

# 3. Country of Medical Tourism

'Medical tourism' is an increasingly used term that indicates travelling a country in search of medical care in cheaper rate without compromising quality. The main purpose of this tour includes avoidance of treatment delays and ensuring timely access to standard health care, though unintended and undesired outcomes are not so rare. Some Asian countries have successfully established their images as destinations for 'medical tourism.' This bloc includes India, Indonesia, Malaysia, and the Philippines, Singapore, Thailand and many others. With globalization, increasing number of patients are leaving their home communities in the first world in search of better medical care including orthopedic surgery, head-neck surgery, ophthalmologic care, dental surgery, cardiac and thoracic surgery and other medical interventions. With progressive reductions in health benefits by some states and employers, medical tourists looking for affordable care in the global market are likely to increase<sup>5</sup>. In addition, there is growing awareness about diseases and available therapies, increasing the demand for good quality healthcare services. People are now ready to travel extra miles to receive treatments at affordable prices. This common tendency creates a great demand for sophisticated, privatized, well advanced healthcare even in lower income countries. But advancement in healthcare is not uniform across the world<sup>6</sup>. Disparity in the socio-economic conditions of the population may lead to situations where despite having the ability to pay, patients may not access quality healthcare due to the lack of availability. If the government of the respective country has limited resources and budget in healthcare and private sector also not evolved as much, the country may fall short to meet the healthcare needs of their people simply due to lack of proper system.

# 4. Promising with Timely **Achievements**

Bangladesh, a small country of 1,47,570 square kilometers, bears the potential of being one of the most successful medical tourist spot. Government sectors as well as private investors are well aware of building a strong healthcare delivery system both to meet the social needs and for financial reasons. It has a huge scope of building a strong economy structure by emphasizing on strengthening medical sector. This country had a population of 159.71 million on 3 December, 2015 with very high population density of 1222 people per square kilometer. To serve this large group of people with limited capacity and resources, Bangladesh planned and so far executed it to build up a strong healthcare delivery system<sup>7</sup>. Expenditure for advanced and modern treatment facility is negligible compared to the developed countries. According to the latest Bangladesh National Health Accounts, Bangladesh spends US\$ 16.20 per person per year on health, a total of US\$ 2.3 billion and 64% of it comes through out-of-pocket payments. According to WHO estimates, Bangladesh spends US\$ 26.60 per person per year currently on health, which is less than half of India (US\$ 61)7. Despite that, life expectancy at birth is 70.69 years now, which was only 60.01 years in 19908 whereas in India it is 66.21 years. This country has already proven enough for achieving various health related indicators from MDGs with current health

infrastructures9. By getting more strength, it will surely approach towards achieving targets successfully in Sustainable Development Goals (SDGs).

Some health indicators with benchmark and achievement stated below:

# 5. Strengthening Health System

To build an alternative to first world countries, health care system does not need to be absolutely perfect, rather making available modern ammonites with advanced technology and well trained manpower can be considered essential. In US, an estimated 44,000 to 98,000 people die as a result of medical error<sup>10</sup> that surely does not reflect perfection in medical care. Bangladesh has taken a strategy to be self-reliant in health sector. A country where about 9,659 new doctors are produced cumulatively from public and private medical colleges and another 1,887 from dental colleges each year, number of physicians is not a problem at all. Though other supporting staffs should be increased and the Government is also trying to do that. At present, 8,740 seats are available for various courses in nursing, 320 in midwifery; 13,051 in medical assistant training schools and 17,631 in institutions of health technology for each session (year). Still doctorpopulation ratio is 1:4,336 and nurse-population ratio is 1:8,226.

Recent studies, which used physicians to population ratios, have shown that the higher the primary care physicians to population ratio in a state, the better most health outcomes are. The influence of specialist physicians to population ratios and of specialist to primary care physician's ratio has not been intensely studied, but preliminary analyses suggest that the contrary may be the case. 5 countries of the 7 top average health ranked countries have strong primary care infrastructure<sup>11</sup>. Although better access to care, including universal health insurance, is considered to be the best solution, it is evident that major benefit of access accrues only when it facilitates receipt of primary care. From this perspective, the journey of health sector seems to keep on line with developed nations<sup>12,13</sup>. At present, primary care infrastructure is quite strong and stable in this country with the establishment of community clinics even in remote areas for each 6000 people, with government providing medicines worth about 1 lakh BDT for each of the 13,070 community clinics per year. In addition to the community clinics, important components of primary healthcare, among others, include domiciliary healthcare, essential service delivery, along with urban primary healthcare, maternal healthcare (inclusive of some screening programs for women's health), child healthcare, nutrition program, school health program, and adolescent health program. It is one the topmost countries providing primary health care free of cost at the community level. There are 484 government hospitals at the upazila (sub-district) level and below, which altogether have 17,686 hospital beds. There is now 1 bed for each

Table 1. Indicator, Benchmark, Achievement and Target of some health indicators (8)

| Indicator  | Benchmark (Year) | Achievement (Reference)                          | Target(Year) |
|--|------------------|--|--------------|
| Prevalence of UW children<5 years of age (%)                     | 66.0 (1990)      | 32.6 (Health Bulletin 2015)                      | 33.0 (2015)  |
| Population below minimum level of dietary energy consumption (%) | 32.8 (1990)      | 16.4 (FAO 2015)                                  | 16.4 (2015)  |
| <5 year mortality rate/1000 live birth                           | 144.0 (1990)     | 41.0 (SVRS 2013) 46.0 (BDHS 2014) 38.0 (UN 2015) | 48.0 (2015)  |
| IMR/1000 live birth  | 94.0 (1990)      | 31.0 (SVRS 2013) 38.0 (BDHS 2014) 31.0 (UN 2015) | 31.3 (2015)  |
| 1 year old children immunized against measles (%)                | 52 (1991)        | 86.6 (BECES 2014)                                | 100.0 (2015) |
| MMR/100,000 live birth   | 574.0 (1990)     | 194.0 (BMMS 2010) 176.0 (UN 2015)                | 143.5 (2015) |
| HIV prevalence among population aged 15-24 years (%)             | 0.005 (1990)     | 0.7% (DGHS 2015)                                 | Halt (2015)  |
| Malarial death rate/100,000 population                           | 0.106 (2008)     | 0.007 (DGHS 2012)                                | 0.053 (2015) |
| TB (all forms) prevalence rate/100,000 population                | 639.0 (1990)     | 402.0 (NTP 2013)                                 | 320.0 (2015) |
| TB death rate/100,000 population                                 | 76.0 (1990)      | 51.0 (NTP 2013)                                  | 38.0 (2015)  |
| TB cure rate (%) with DOTS                                       | 73.0 (1994)      | 92.0 (NTP 2013)                                  | ≥85.0 (2015) |

BDHS - Bangladesh Demographic and Health Survey; BECES - Bangladesh EPI Coverage Evaluation Survey; BMMS - Bangladesh Maternal Mortality Survey; FAO - Food and Agricultural Organization; NTP - National Tuberculosis Control Program; SVRS - Sample Vital Registration Survey.

1,699 population, which is still inadequate<sup>8</sup>. Altogether, there are 14,976 public health facilities at the upazila (subdistrict) level and below1.

In formal private sector, a fusion of both western and traditional (Unani and Ayurvedic) services is rendered through clinics, hospitals and even from drug stores. This is particularly developed in urban area. In rural areas, informal practices of western, homeopathic and kobiraji medicine prevails. Both formal and informal private sector is poorly regulated<sup>1</sup>.

The third sector, NGO has emerged as a vibrant sector particularly for the poor. They managed only 6% of total health expenditure in 1997, whereas it went up to 9% in 2007, 3% increment in a decade. Partnerships between the Government and NGOs in the areas of planning, financing, capacity building, education, service delivery, and monitoring have resulted in some gains for the people1.

On recent WHO ranking of countries according to health care system, Bangladesh ranked 88, which is above India (112), Russia (130) and China (144) and that was due to a large contribution of public health. Comparing in GDP to highlight limited resource, Bangladesh is way ahead of its neighbors. For instance, GDP per capita in Bangladesh (\$1777) was half than that of India (\$3650) in 2011, and lower than that Pakistan (\$2567), yet average life expectancy, percentage of children immunized against diphtheria and measles, and the literacy rate for young women were higher in Bangladesh than in India and Pakistan<sup>14</sup>.

# 6. Health Information System

Hillstad et al<sup>15</sup>, showed that electronic medical record implementation and networking can save more than \$81 billion annually<sup>15</sup>. The government of the peoples' republic of Bangladesh realized the issue pretty early. The present government vowed to build a 'Digital Bangladesh' and hence racing towards keeping their words. In health sector, health information system has been strengthened ensuring it to be active and effective with skilled manpower. The way MIS-DGHS has improved national health information system, has been recognized by BMZ as the global best practice for the year 2014. The Bangladesh COIA secretariat established in 2014 with the help of WHO Head Quarter and has been expanded with the help of UNICEF to local level planning to facilitate overall improvement of health situation at the district and upazila (sub-district) level through using the government healthcare platform. The evidence is being generated through the same national HMIS portal based on DHIS28. The lifetime health records, known as Shared Health Records, for the citizens of Bangladesh is ready for piloting by MIS-DGHS8. It is a platform for keeping universal electronic health records. In this country, no established system present for checking the professional knowledge and skills of the clinicians. But now, Annual Confidential Reports (ACR) of the doctors have been made available online from the year 2014 so that it can be viewed from the same platform of the Human Resource Information System (HRIS)8.

# 7. Capable of Quality Healthcare?

Uninsured individuals from the first world countries can easily access to medical care in astoundingly cheaper rate in Bangladesh at present and it has great potential of being a country popular for medical tourism with a stronger health infrastructure. This country has already set an extraordinary example of attaining good health at a very low cost and has been proposed as a role model for other developing countries in the region for a number of programs. While the achievements in health have been credited to the Ministry of Health and Family Welfare, the progress of other ministries relevant to public health catalyzed the success of overall health agenda of the Government. Beside medical tourism, the pharmaceutical companies can heavily contribute from health sector to build up a healthy economy and according to some studies from Bangladesh, local drugs (anti-diabetics, for instance) are prescribed more and gained popularity for their low cost, high quality and easy availability. It is a paradox that in spite of lacking accountability of the Government to the public regarding health and minimal coordination of the health ministry with other sectors<sup>16</sup>, a number of vertical health programs, particularly in preventive care (for instance, Expanded Program on Immunization) have been sustained successfully over a long period, which has a positive impact on health outcomes<sup>1</sup>.

#### 8. Conclusions

Making a third world country self-reliant in health sector is also beneficial for people of developed countries, as

these countries provide health care at minimum cost, only quality needs to assure. Malaysia and Singapore can be a good example of short time turnaround. Bangladesh has improved preventive medicine and this has been achieved by improvements in coverage with some interventions like childhood immunization and management of diarrhea with oral rehydration salts and zinc and treatment success rates for TB. For the growing burden of non-communicable diseases, several service provisions have just begun. But quality of curative care in both public and private sectors is still below expectations, with little assessment of the quality, professional knowledge and application of health care providers at regular interval of time. Without top class curative services, Bangladesh will not succeed to attract people of developed countries to seek for medical care there. If they go on with present strategy, they will probably be able to ensure health care for their own people only. To earn foreign currency from this sector and to challenge countries with already established image of better healthcare in the same category, they will have to make their health system more lucrative, particularly curative sector.

# 9. Ethical Approval

Not Required.

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#### **Abbreviations**

wirtschaftliche BMZ: Bundesministerium fuer Zusammenarbeit und Entwicklung (German Federal Ministry for Economic Cooperation and Development).

COIA: Commission on Information and Accountability for Women's and Children's Health.

**DHIS2:** District Health Information System 2.

**GDP:** Gross Domestic Product.

**HDI:** Human Development Index.

MIS-DGHS: Management Information System-

Directorate General of Health Services.

NATO: North Atlantic Treaty Organization.

UNICEF: United Nations Children's Fund.

WHO: World Health Organization.