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**HEALTH ATTAINMENT IN BANGLADESH AS REFLECTED BY  
SELECTED PERFORMANCE INDICATORS: A REVIEW OF EVIDENCE**

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**Abstract**

Health Performance Indicators are often utilized as tools for assessing and evaluating the success of different national health programs in achieving their desired outcomes in the health sector. This review article aims to show the trends in health improvement in Bangladesh. The indicators selected are Life expectancy at Birth, Crude Birth and Death Rates, Infant Mortality Rate, Maternal Mortality Ratio and Prevalence of Low Birth Weight. Life Expectancy at Birth shows an increasing trend for both sexes; where as all the four mortality indicators show a declining trend. The trend in Low Birth Weight Prevalence suggests that the desired decline in this field has not yet been achieved and continues as a public health problem. The overall picture suggests that Bangladesh has gone far to achieve the targets of MDG although a lot of formidable challenges are yet to be met.

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**Key Words:** Performance indicators, health attainment.

**Introduction**

A substantial number of countries have indicated their interest in collaborating with the World Health Organization (WHO) in reviewing their own health system, and relate this to policy, thus contributing to future development of the assessment of methods and tools.

Health Performance Indicators help illustrate how well a country is doing in meeting its objectives or achieving the desired outcomes in health sector. They are the means of assessing and evaluating the success of different national health programs in achieving their objectives. Among the major goals of health system performance, health improvement/ better health is unquestionably the primary and the most important goal. This article aims to show the trends in health improvement in some available/ selected performance indicators. The largest service provider in the health sector is the government, primarily the Ministry of Health & Family Welfare (MOHFW). In the private

sector, there are two types of enterprises, those that are for-profit and those that are for non-profit.

**Materials and Methods**

To provide the health improvement in the past and the present status of some selected indicators, the author has gone through different reports and publications. The Directorate of Health Services published the first organized report in 1985 followed by the 2<sup>nd</sup> in 1989, third in 1996, fourth in 1998-99 and the fifth in 1999-2000<sup>1-5</sup>. These reports are reviewed here to see the trends of performance indicators in respect of good health. Data from UNICEF's State of the Worlds' Children, 1996, 1999 and 2003 are also included<sup>6-8</sup>. Low Birth Weight Data are obtained from National Low Birth Weight Survey 2003-04<sup>9</sup>. Infant Mortality Rates for the year 1989 to 2003 period are provided from BDHS 2004<sup>10</sup>. Two other goals of the

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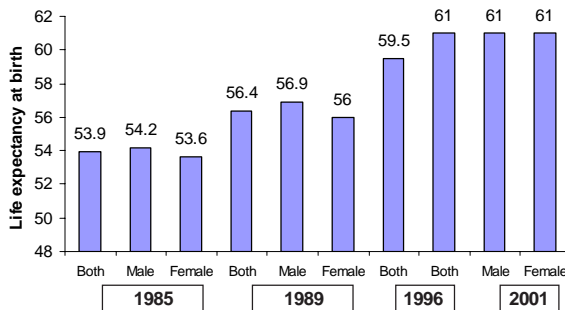
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health sector performance i.e. fair financial contribution and responsiveness were not reviewed here due to lack / shortage of data.

### Health Attainments

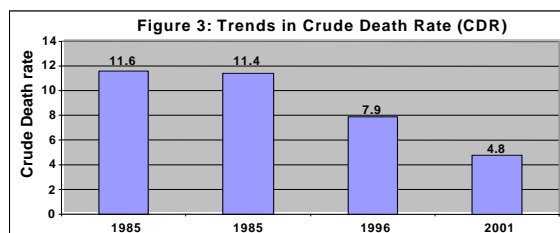
The expectation of life or life expectancy at birth (LEB):

Figure1: Trends in Life Expectancy at birth



Average number of years a newborn can be expected to live if current mortality trends continue, has been continuously increasing over the years (figure 1). The life expectancy at birth in Bangladesh for both sexes increased from 53.9 in 1985 to 61 in 2001. Both male and female life expectancy being 61 revealed that the gap between male and female life expectancies has successfully been narrowed from almost 1 year in 1989 to 0.

*Crude Birth and Death Rate (CBR and CDR):*



The crude birth rate per 1,000 population was 33.6 in 1985. This rate remained unchanged in 1989, followed by a trend of decline up to 2001, where it stood at 19.9 per 1,000 (figure 2). The crude death rate per 1,000 population also showed a decreasing pattern, from 11.6 in 1985 to 4.6 per 1,000 in 2001 (figure 3).

*Infant Mortality Rate (IMR):*

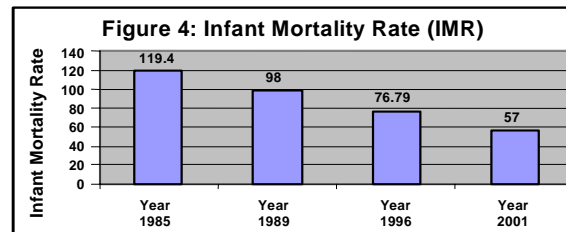
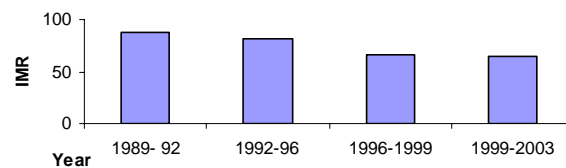
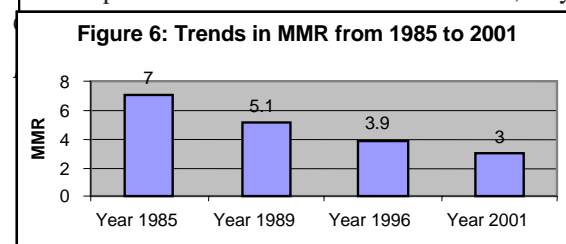


Figure 5: Trends in IMR from BDHS



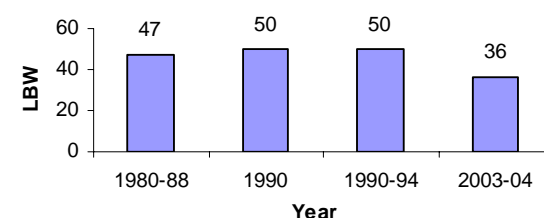
A gradual downward trend in infant mortality was observed in reports of UNICEF (figure 4), which showed that between 1985-2001, infant mortality fell dramatically from 119 to 57/1000 live births. In contrast, IMR compiled from the four BDHS surveys presented a different picture; IMR seems to have leveled off during recent years (figure 5). The 2004 BDHS shows the striking feature that while neonatal deaths were 39 percent of all under five deaths in 1991, they



The data showed a remarkable decline from 7 in 1985 to 3/1000 live births in 2001 (figure 6). There remains a possibility that some of the reported 'accidental' deaths might have been included in the MMR.

*Low Birth Weight (LBW):*

Figure 7: Trends in LBW prevalence



The trends in LBW in Bangladesh are shown in figure 7. LBW data for years 1980 to 1994 have been compiled from the UNICEF reports of the State of World's Children 1996 and 1998, whereas 2003-2004 data were taken from the National Low Birth-weight Survey of Bangladesh. The prevalence of LBW in Bangladesh (36%) in recent years is more than twice the 15% threshold.

### Discussion

These days, the long-term measure of good health is life expectancy. For the nation as a whole, life expectancy has increased from just over 53 years at birth to 61 years between 1985 and 2001. Women in developed countries almost always have higher life expectancies than men<sup>11</sup>. Currently, the worldwide life expectancy for all people is 64.3 years but for males it is 62.7 years while for females, it is 66 years, a difference of more than three years. The sex difference ranges from four to six years in North America and Europe to more than 13 years between men and women in Russia, whereas in Bangladesh females had a lower life expectancy than males till 2001<sup>11</sup>. This reverse statistics indicates a disadvantageous position of women in this society. At the same time, narrowing the gap between life expectancies of male and female over this period indicates that 'inequality' and 'gender discrimination' issues are being rightly addressed in different health, education and awareness programs. WHO credits this increase in life expectancy to the decline in infant and child mortality due to the successful implementation of certain health programs like immunization as well as disease control programs such as those for ARI and diarrhoeal diseases<sup>11</sup>.

In the absence of other information, a high birthrate is assumed to be a general indication of health impairments, low living standards, low status for the women, and low levels of education. In the process of economic development and accompanying social change, the birthrate declines as conditions improve, and potential parents choose to have fewer children by adopting contraception. Typically, a birthrate of 10 to 20 per 1,000 is low, and a rate of 40 to 50 per 1,000 is high. Over the period of 15 years CBR in Bangladesh showed a transition from high to low level. The decrease in birthrate is an evidence of socio-

economic development of the country and success of provision of family planning services. CDR also declined from 11.6 to 4.8 in this period. But as an indicator for performance assessment, CDR has considerable limitations as this rate is greatly influenced by the age and sex composition of the population (population containing a high proportion of males and elderly have a higher CDR than that with an excess female and younger persons).

The infant mortality rate (IMR) has been criticized as a measure of population health because it is narrowly based and likely to focus the attention of health policy on a small part of the population to the exclusion of the rest. More comprehensive measures such as disability-adjusted life expectancy (DALE) have come into favor as alternatives. But IMR and DALE data for 1997 obtained from the World Bank and the World Health Organization for 180 countries found a strong (generally) linear association between DALE and IMR ( $r=0.91$ ). Countries with high DALE tend to have a high IMR and so for countries with limited resources that require an easily calculated measure of population health, IMR may remain a suitable choice<sup>12</sup>.

The neonatal and post-neonatal mortality rates, included in IMR, showed that there are still some formidable challenges to be met to reduce the level of mortality for infants<sup>13</sup>. The BDHS 2004 recommends to focus on programs for reducing neonatal deaths, since most infant deaths occur during the first month of life.

The reduction in maternal mortality in the past 15 years is 22%, right on target towards Millennium Development Goal (MDG) of a 75% reduction between 1990 and 2015<sup>13</sup>. However, the Maternal Mortality Ratio (MMR) still remains unacceptably high (320 per 100,000) in Bangladesh, which is one of the highest, even by the standards of other developing countries<sup>14</sup>. The National Strategy for Maternal Health will be successful only when families are motivated to make use of the medically trained providers for dealing pregnancy related complications<sup>15</sup>.

Low birth-weight (LBW) has serious negative implications on future health and survival of babies. Small-scale studies in Bangladesh have indicated that the prevalence of LBW may be among the highest in the world<sup>9</sup>. Nationally-representative survey on LBW

prevalence by ICDDR,B indicates it as a public-health problem. LBW seems to be an area where much has been done but the desired decline has not yet been achieved.

### Conclusion

The results suggest that Bangladesh has gone far to achieve the targets of MDG, but still there are a lot of formidable challenges to be met. The author admits the limitation of this review. Here only a few indicators were analyzed to show trends in different health status achievements, most of whom were mortality indicators. Different countries are now using composite indicators to evaluate their morbidity and disability status; unavailability of such data did not permit to do such analysis in this review for Bangladesh.

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