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Review article

Achieving Millennium Development Goals 4 and 5 in Bangladesh

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Bangladesh has made commendable progress in achieving Millennium Development Goals (MDGs) 4 and 5. Since 1990, there has been a remarkable reduction in maternal and child mortality, with an estimated 57% reduction in child mortality and 66% in maternal mortality. This review highlights that, whereas Bangladesh is on track for achieving MDG 4 and 5A, progress in universal access to reproductive health (5B) is not yet at the required pace to achieve the targets set for 2015. In addition, Bangladesh needs to further enhance activities to improve newborn health and promote skilled attendance at birth.

Keywords Bangladesh, Progress of MDG4, Progress of MDG5.

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Background

Bangladesh is a densely populated country, with over 164.4 million[1] people living in an area of 147 570 km^2.[2] On average, 1114 people live in 1 km^2. The estimated annual number of births in the country is 3.4 million. The adult literacy rate in the country was 48.8% in 2008[3] and per capita gross national income in 2009 was $590[4] per annum. Life expectancy at birth is 67 years for men and 69 years for women.[5] Even though remarkable progress in the socio-economic condition of the country has been achieved in the last decade, Bangladesh still has high levels of both maternal and child mortality and morbidity.

Maternal, neonatal and child health statistics of Bangladesh

In the last decade, substantial progress has been made in improving maternal and newborn health. However, both the maternal mortality ratio and the neonatal mortality rate in Bangladesh are still high. A total of 24.7% of women in Bangladesh are in the category 'women of reproductive age'.[6] A recent survey shows that, in 2010, the total fertility rate in Bangladesh came down to 2.5 children born per woman,[7] which is close to the set target of reducing the rate below 2.2 by 2015. The adolescent birth rate in Bangladesh is 59 births per 1000 women.[8] According to the findings of the recent Bangladesh Maternal Mortality Survey (BMMS 2010) the maternal mortality ratio is 194 per 100 000 live births which means the maternal mortality rate has fallen by an impressive 40% in the past decade.[7] These latest numbers were provided as a result of a national survey conducted between January and August 2010 in a representative sample of 175 000 households. The selected sample was designed to provide representative estimates for maternal mortality at national level and representative estimates at the national, urban/rural, divisional and district levels for most other indicators. Verbal autopsies were conducted on all deaths in women aged 13–49 years, to ascertain the cause of death and to investigate all maternal deaths.

Bangladesh has successfully reduced the infant and under-5 child mortality in the last two decades, but unfortunately there has been no marked improvement in neonatal mortality. The neonatal mortality rate is 37 per 1000 live births while the infant mortality rate is 52 and under-5

child mortality rate is 65 per 1000 live births; 71% of infant deaths and 57% of under-5 deaths are in the neonatal period.[8] In Bangladesh, the annual reduction in neonatal mortality is 2.6% since 1990. At the same time, the annual reduction in infant mortality rate is 6% and for 1- to 5-year-old children 9.3%.[8]

MDG 4 and 5 targets for Bangladesh

To achieve MDG 5A Bangladesh must reduce the maternal mortality from 574 deaths per 100 000 live births in 1990 to 143 per 100 000 by 2015 and, in addition, needs to increase the proportion of births attended by skilled health personnel to 50% (Table 1). The preliminary results of the BMMS 2010 were disseminated in February 2011 and provided encouraging information. There is evidence of a substantial increase in the uptake of skilled delivery practices, with an increase in the use of institutional delivery from 9% in 2001 to 23% in 2010. Still the country needs to double this to achieve the indicator related to skilled birth attendants (>90%) by 2015.

The same report reveals that uptake of antenatal care through a skilled provider has increased slightly and the proportion of women who made four or more antenatal visits has similarly increased. Despite these gains, further efforts are needed to ensure better coverage of antenatal care, as well as improved quality and content of this care.

The contraceptive prevalence rate increased from 40% in 1991[16] to about 58% in 2007.[8] The incidence of adolescent births, although declining, remains high. The unmet need for family planning has not been significantly reduced.

Unfortunately, but not surprisingly, there is significant disparity in terms of the services women receive according to rural or urban residence, the mother's education level, household wealth and geographic location.

Bangladesh has made considerable progress in child survival over the last several decades. The recent Millennium Report, *Countdown to 2015*,[17] places Bangladesh among only 16 countries in the world that are on track to achieve MDG 4 with regard to child mortality. The successful programmes of immunisation, almost universal breastfeeding practices, control of diarrhoeal diseases and vitamin A supplementation are considered to be the most significant contributors to the decline in child and infant deaths. Unfortunately, neonatal mortality is still high in Bangladesh and only a non-significant decline in neonatal mortality has occurred in the last decade.

Continuum of care

Antenatal care coverage

Antenatal care is an essential component of safe motherhood. The Bangladesh Demographic and Health Survey (BDHS) 1994 and BMMS 2010 indicate steady increases in the past 15 years with regard to the occurrence of at least one antenatal visit. The proportion of women who received at least one instance of antenatal care (by any provider) has increased from 28% in the early 1990s[9] to 71% in 2010.[7] Similarly, antenatal care from a trained provider has also increased from 29% in 1996–97[10] to 54%[7] in 2010.

The Government of Bangladesh and the World Health Organisation (WHO) recommend at least four antenatal

Table 1. MDGs 4 and 5—goal, target and indicators

Indicators	Base year	Status						Target 2015
		1993[9]	1997[10]	2000[11] 2001[14]	2004[12]	2007[8]	2010[7]	
Goal 4: Reduce child mortality								
Target 4: Reduce by two-thirds, between 1990 and 2015, the under-5 mortality rate								
Under-5 mortality rate (per 1000 live births)	151[15]	133	116	94[11]	88	65	–	50
Infant mortality rate (per 1000 live births)	94[15]	87	82	66[11]	65	52	–	31
Proportion of 1-year-old children immunised against measles	54	59	59	64[11]	–	81	85[13]	100
Goal 5 : Improvement of maternal health								
Target 5A: Reduce maternal mortality by three-quarters between 1990 and 2015								
Maternal mortality ratio per 100 000 live births	574[15]	–	–	322[14]	–	–	194	143
Proportion of births attended by skilled health personnel	5[15]	–	–	9[14]	13	18	27	50
Target 5B: Achieve universal access to reproductive health by 2015								
Contraceptive prevalence rate	40[16]	44.6	49.2	53.8[14]	58.1	55.8	–	100
Adolescent birth rate per 1000 women	77[15]	–	–	–	64	59	–	–
Antenatal care coverage (at least one visit), %	27.5[9]	27.5	29	33[11]	49	52	54	100
Antenatal care coverage (at least four visits), %	5.5[9]	6	6	11[11]	16	21	23.4	100
Unmet need for family planning, %	19[9]	–	19	15[11]	11	17	–	7.6

visits for routine monitoring of pregnancy. The BMMS 2010 reveals that currently less than one in four (23.4%) women received these recommended four or more antenatal visits in Bangladesh. Although the number of women who received antenatal care has been increasing gradually, the current trend will not be sufficient to reach the target set for 2015 (Figure 1).

Intrapartum care

The overall proportion of births attended by skilled health personnel has increased more than five-fold in the last two decades: from 5%[15] in 1991 to 26.5%[7] in 2010. Unfortunately, this means that currently in Bangladesh only one in four births is assisted by a skilled health professional. Thus, achieving the MDG target of 50% skilled delivery attendance by 2015 will be extremely challenging.

The BMMS survey in 2010 estimated that 23.3% of all live births in Bangladesh had taken place in a facility, including private (11.3%) as well as public facilities (10%)[7]—this is more than double the coverage in 2001, which was estimated to be 9% (Figure 2).

Every three out of four deliveries are still conducted in the community. In the community, skilled birth attendants conduct only a non-significant proportion of deliveries. In addition to providing safe deliveries, skilled birth attendants can also carry messages for birth preparedness. The Government of Bangladesh has started training existing field-level workers to make them community skilled birth attendants, with about 5800 attendants trained since 2001.

In 2009, comprehensive emergency obstetric care services became available in all public medical college hospitals, 59 district hospitals and 269 *upazila* (subdistrict) health complexes. In addition, basic emergency obstetric care services became available in two district hospitals and 132 *upazila* health complexes. Both private facilities and non-governmental organisation hospitals also provide emergency obstetric care.[18]

The rate of caesarean sections is increasing in Bangladesh. In the last decade, deliveries by caesarean section have increased almost five-fold. This increase has probably been caused by a combination of client choice, provider bias and actual need. In 2001, only 2.6%[14] of births were delivered by caesarean section, compared with 12.2% in 2010.[7]

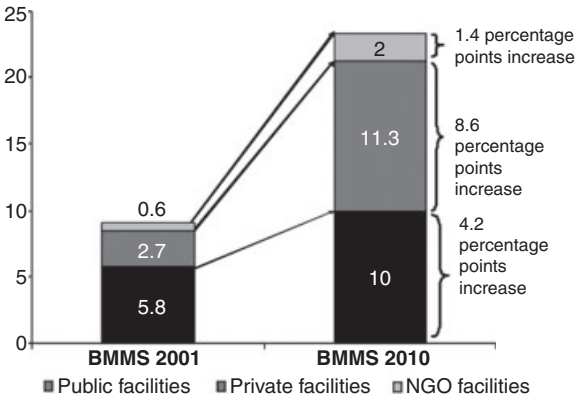


Figure 2. Facility deliveries in Bangladesh, 2001 and 2010.

Since 2006, the Ministry of Health and Family Welfare of Bangladesh has initiated a 'demand-side' financing programme through a maternal health voucher scheme to encourage pregnant women to seek antenatal care, delivery and postnatal care from skilled medical personnel. The programme provides a pregnant mother a reimbursable maternal health voucher if she takes any form of pregnancy-related health care from skilled medical personnel or health facilities in the programme area. The maternal health care includes a package of three antenatal check-ups, safe delivery, postnatal care within 6 weeks of delivery, and services for obstetric complications. The programme is administered by the Ministry of Health and Family Welfare, with technical assistance from WHO and other development partners. For a normal delivery, about 700 Bangladeshi taka (about US$10) is provided to the mother. In 2010, this programme expanded to 53 *upazilas* (out of a total of 471) in Bangladesh.[18]

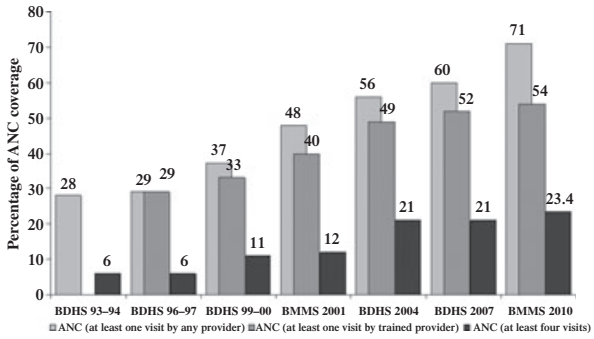


Figure 1. Trends in antenatal care coverage in Bangladesh.

Postnatal care

Postnatal care is a fundamental component of safe motherhood. Postnatal checks provide an opportunity to assess and treat delivery complications and to counsel mothers on how to care for themselves and their children. A large proportion of maternal and neonatal deaths occur during the 24 hours following delivery. In 2010, 22.5% of mothers and 22.6% of newborn babies received postnatal care within 2 days of delivery by a medically trained provider. Qualified doctors provided postnatal care to 18% of mothers and 18.4% of newborns. However, 68% of mothers and 67.9% of newborns received no postnatal care from any type of provider in the 2 days after delivery[7] (Figure 3).

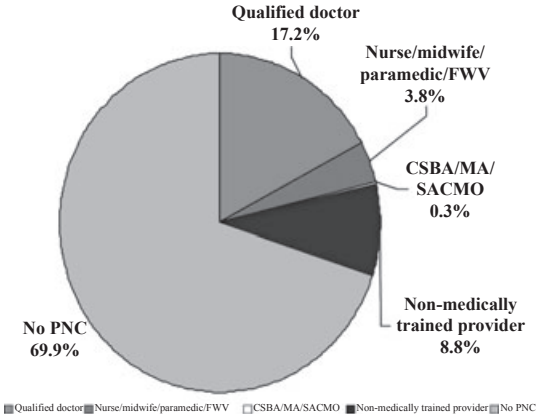


Figure 3. Source of postnatal care of the newborn.

Family planning

Almost 50% of married women in Bangladesh are currently using a modern method of family planning. The combined oral contraceptive is the most commonly used method (29%), with a much smaller percentage (7%) of women using an injectable contraceptive. Male condom (5%) and female sterilisation (5%) contribute equally. A total of 48% of women reported using modern contraceptive methods, while another 8% use a traditional method[8] (Figure 4).

Despite a steady increase in the level of contraceptive use over the past 30 years, unplanned pregnancies are still common in Bangladesh. Overall, three in ten births in Bangladesh are either unwanted (14%) or mistimed and wanted later (15%).[8] Between 2001 and 2010, the total fertility rate fell from 3.2 to 2.5. The fall in fertility has implications for the risk of maternal death. A shift away from higher parity births, which are considered to be at higher risk for maternal mortality, will help reduce the overall risk of maternal deaths. In addition, a reduction in the number of pregnancies will result in a reduced number of risk episodes per woman.

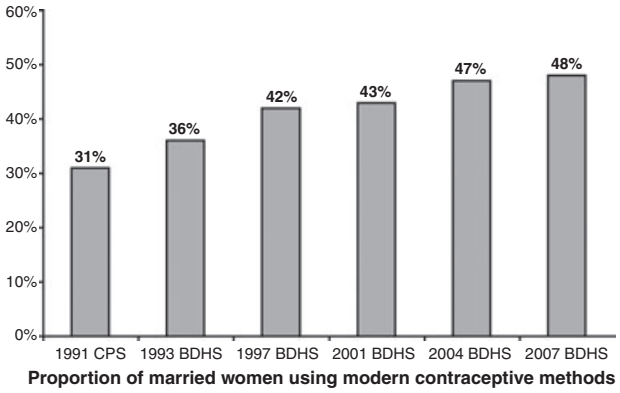


Figure 4. Trends in use of modern contraceptive methods among married women in Bangladesh.

Seventeen percent of married women have an unmet need for family planning, an increase from 11% in the 2004 BDHS. The unmet need for limiting family size (11%) is higher than the unmet need for spacing (7%).[8] A further increase in the contraceptive prevalence rate will require consistent and reliable access to contraceptives for all.

Newborn care

One of the major challenges in achieving MDG 4 is the slow progress in preventing neonatal deaths, which now account for 57% of all under-5 deaths and 71% of infant deaths.[8] There is a disappointingly low uptake of essential newborn care practices such as immediate drying, wrapping and delayed bathing of the baby. Only 6% of newborns were dried and 2% were wrapped within 5 minutes of birth, and less than 20% of newborns had their first bath delayed until after the first 72 hours.[8]

Only 22.6% newborns received postnatal care by a medically trained provider within 48 hours of birth and 9.5% received care from non-medically trained providers.[7] Recent data show that 45% of last-born infants who were ever breastfed were put to the breast within 1 hour of birth.[8] Exclusive breastfeeding of children under the age of 6 months has not improved in the past 15 years and has remained at around 42–45%. In 2007, the rate of exclusive breastfeeding of newborns was 43%.[8] The supplementary feeding of babies who are also breastfed has greatly increased over the past 15 years (Figure 5).

The Government of Bangladesh adopted a national neonatal health strategy in 2009, which aims to address several key issues in neonatal health. Its implementation is seen as urgent, with a clear focus on national scale-up of neonatal health services in a continuum of care approach. The integrated management of childhood illness programme has incorporated essential newborn care and sick newborn care in the programme in Bangladesh. Different donor-funded maternal and newborn care projects are currently providing essential newborn care and sick newborn care services in 22 of 64 districts in Bangladesh.

Care for the under-5s

The expanded programme of immunisation is considered a success story in Bangladesh because of its remarkable progress during the past 20 years. The programme was started in Bangladesh in 1979 to combat six vaccine-preventable diseases. After the introduction of hepatitis B in 2003 and the *Haemophilus influenzae* type B vaccine in 2009, currently the programme in Bangladesh vaccinates infants against eight diseases. There is almost universal access to immunisation, with a total of 75.2% of children aged 12–23 months having received all scheduled vaccines by 12 months of age in 2009[19] (Figure 6).

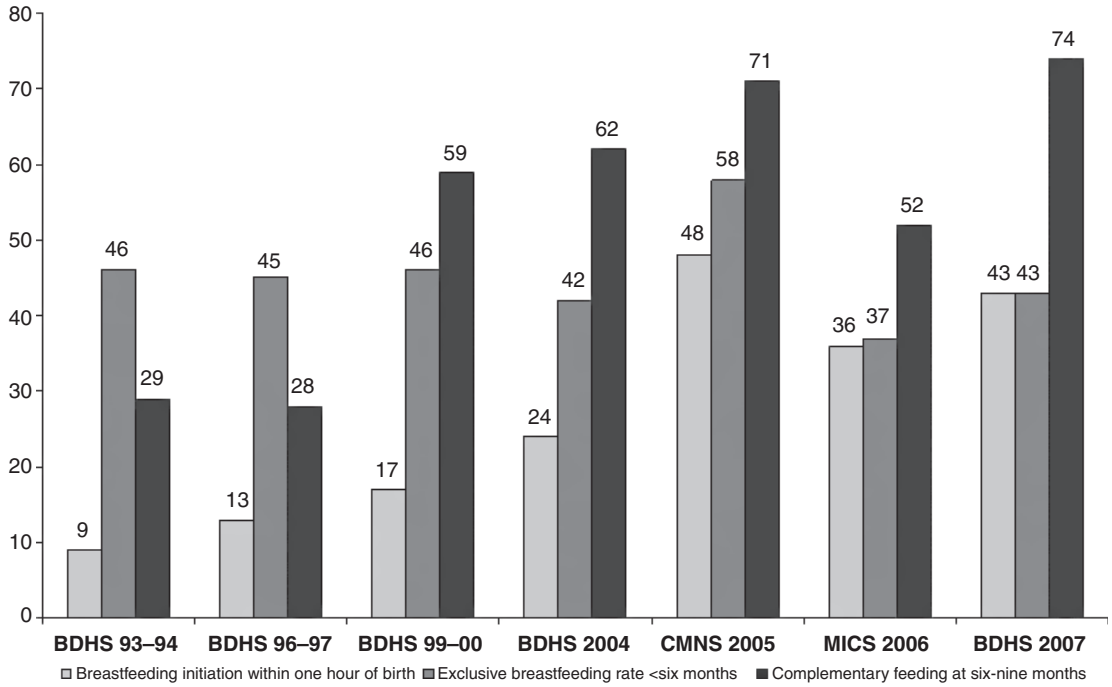


Figure 5. Trends in breastfeeding practice in Bangladesh by percentage of newborns.

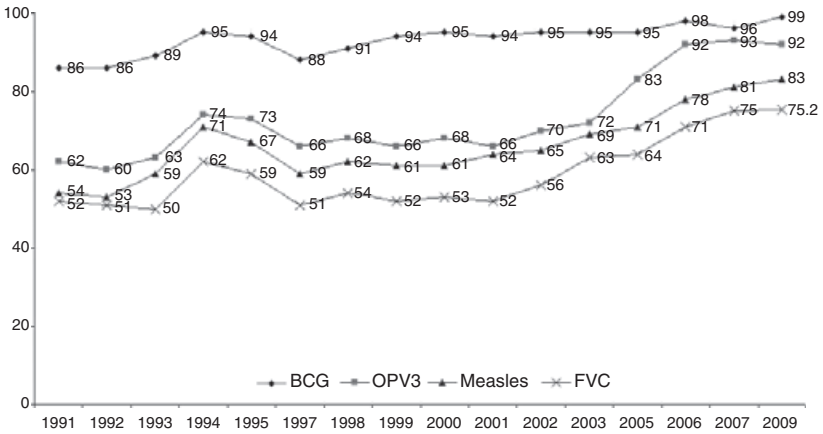


Figure 6. Trends in infant immunisation in Bangladesh.

Bangladesh has maintained its polio-free status since 2006. Neonatal tetanus elimination has been validated in 2008. Through successful measles vaccination campaigns, measles outbreaks have become a rare incidence in recent years. Ensuring that children aged 9–59 months receive enough vitamin A is considered an effective child survival intervention. Children after the age of 9 months receive one dose of 100 000 iu vitamin A during their routine measles vaccination. Children aged 1–5 years receive 200 000 iu vitamin A twice a year through mass campaigns. The 2007 BDHS found that 88% of children aged 9–59 months had received a vitamin A supplement in the last 6 months. Consumption of foods rich in vitamin A is another way to ensure that children are protected from blindness or infection. Overall, 78% of children aged 6–59 months consume such foods.

The 2007 BDHS measured all children under 5 years in households surveyed and found that (using to the new WHO Child Growth Standards) 43% of children were stunted, and 16% were severely stunted. Seventeen percent of children under 5 were wasted, and 3% severely wasted. Stunting reflects chronic malnutrition, wasting reflects acute malnutrition; underweight reflects chronic or acute malnutrition or a combination of both (Figure 7).

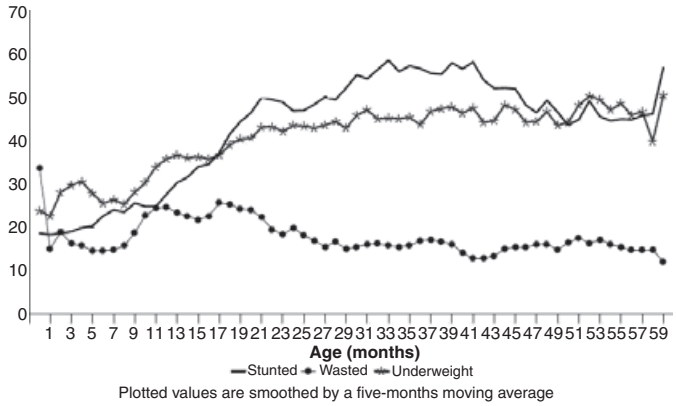


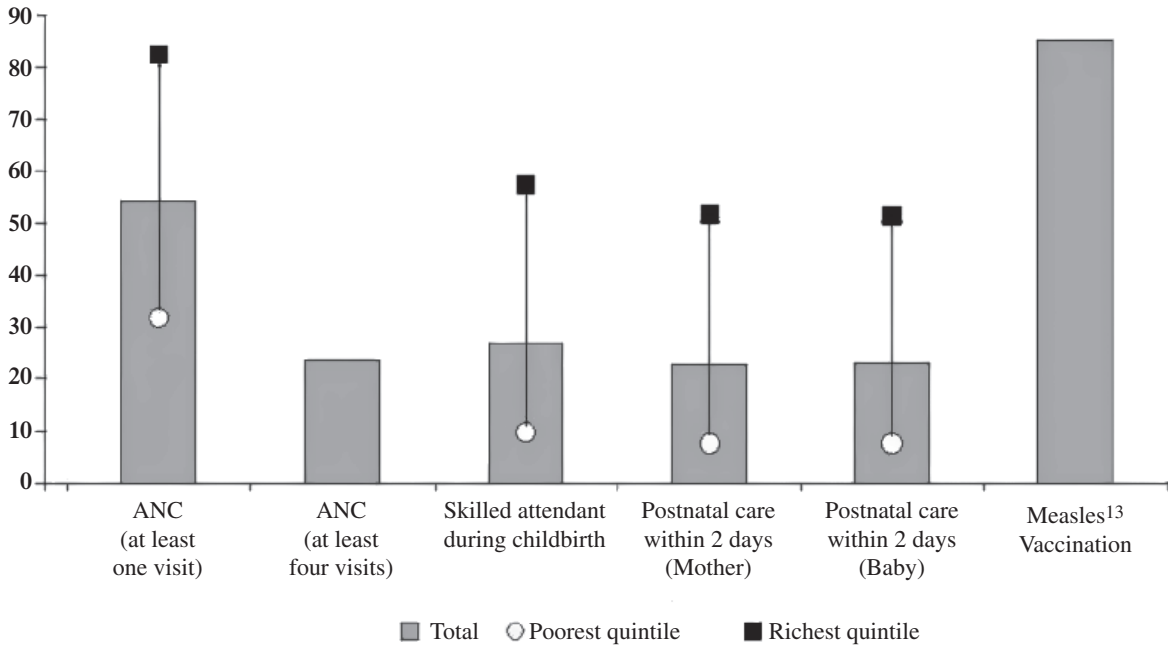
Figure 7. Nutritional status of the children of Bangladesh by age.

Access to treatment for sick children, particularly those suffering symptoms of pneumonia, infection, diarrhoea, malaria or malnutrition, is extremely important. The number of children under the age of 5 years who were taken to healthcare providers when suffering symptoms of pneumonia increased from 20% to 30% between 2004 and 2007.[20]

The Government of Bangladesh decided to pilot the integrated management of childhood illness strategy in 1998. After adaptation of the generic guidelines, implementation started in 2001 in three *upazilas*. By December 2010, facility-based integrated management of childhood illness had been implemented in 360 *upazilas*. The Government in addition has endorsed a community-based strategy and so far 17 *upazilas* have started this activity. The facility-based strategy focuses on the management of sick children in the facility, whereas the community strategy focuses on advocacy activities for the prevention of childhood infection, together with identification and referral of sick children to the facility by community health workers (Figure 8).

Causes of maternal and newborn mortality and morbidity

In Bangladesh, 14% of all deaths among women of reproductive age (15–49 years) are maternal deaths.[7] In 2010,



Data Source: BMMS 2010, exxept Measles vaccination (national coverage evaluation survey 2010)

Figure 8. Bangladesh coverage and equity of key packages along the continuum of care, 2010.

an estimated 7300 maternal deaths occurred and 65% of those deaths were attributable to direct obstetric causes. Haemorrhage is still the main cause of death across all age groups, followed by eclampsia, especially in younger women. Postpartum deaths comprise 73% of all maternal deaths.[7]

Maternal death from the complications of termination of pregnancy has shown a decline, which is attributed to the widespread availability of legal 'menstrual regulation services' to terminate unwanted early pregnancies in both government and private facilities. According to BMMS 2010, 1% of all maternal deaths were attributable to complication of termination, which was 5% in 2001[7] (Figure 9).

Between 1994 and 2007, Bangladesh experienced a dramatic decline in infant and under-5 child mortality. Under-5 mortality decreased from 133 to 65 deaths per 1000 live births and infant mortality decreased from 87 to 52 deaths per 1000 live births. During the same period, neonatal deaths declined from 52 to 37 deaths per 1000 live births (Figure 10).

Infection, asphyxia and preterm birth or low birthweight are estimated to be the major causes of newborn death in Bangladesh. This is in line with findings from the BDHS 2004 and international estimates. The extent of low birthweight in the country has not been well documented. Neonates are not commonly weighed, owing to a lack of established practices for measuring birthweight at home or at the community level. A nationwide survey conducted in 2005 estimated that 36% of neonates were of low birthweight[21] (<2.5 kg)[22] (Table 2).

WHO and UNICEF's Child Health Epidemiology Reference Group (CHERG) undertook the last comprehensive review of the causes of child mortality worldwide for 2008[25] (Figure 11).

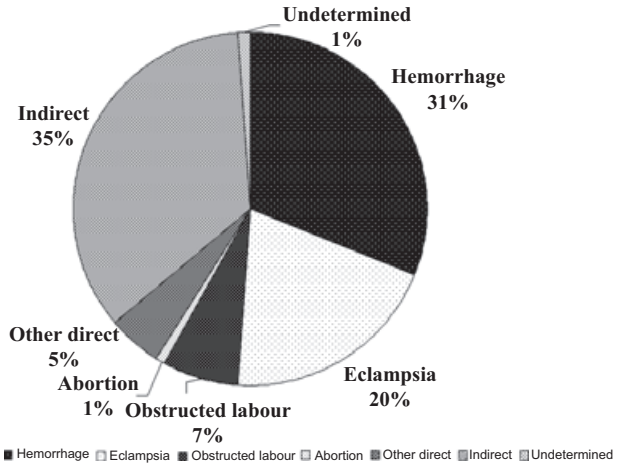


Figure 9. Causes of maternal mortality in Bangladesh in 2010.

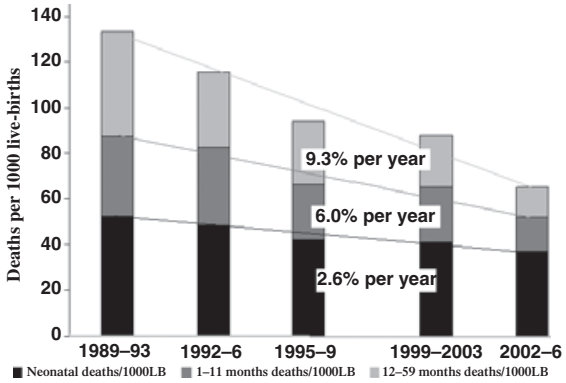


Figure 10. Trends in under-5 mortality reduction in Bangladesh.

Table 2. Causes of neonatal death in Bangladesh over time

Causes of death	2000[23] (%)	2005[24] (%)	2008[25] (%)
Infection	36	34	31
Preterm	25	28	26
Asphyxia (intrapartum related)	23	22	28
Congenital	4	4	5
Other	6	6	5
Tetanus	4	4	2
Diarrhoea	2	2	2

National strategies to address MDGs 4 and 5

The following major national policies and strategies are being implemented in Bangladesh to facilitate efforts to achieve the targets set for MDG 4 and 5:

1 Poverty Reduction Strategy Paper (PRSP II)
2 Health, Nutrition and Population Sector Programme (HNPSP) 2006–11
3 National Maternal Health Strategy
4 National Neonatal Health Strategy and Guidelines
5 National Anaemia Strategy
6 Infant and Young Child Feeding Strategy
7 National HIV/AIDS Strategy and Guidelines
8 National Guidelines for Severe Acute Malnutrition
9 National Communication Strategy for Family Planning and Reproductive Health
10 National Adolescent Health Strategy

Key strategies to achieve MDG 4 include:

1 Strengthen the existing routine expanded programme of immunisation: continue the polio eradication campaign, with emphasis on the elimination of neonatal tetanus and measles and scale up of the new vaccination.
2 Scale up the implementation of facility- and community-based integrated management of childhood illness strategies.

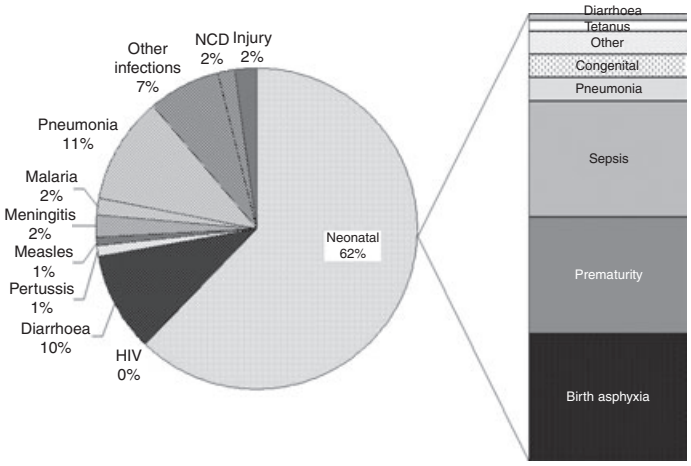


Figure 11. Estimated causes of under-5 mortality in Bangladesh in 2008.

3 Continue the existing acute respiratory infection, control of diarrhoeal disease and malaria control programmes in areas of the country which do not currently have an integrated management of childhood illness strategy, which will be phased out with the expansion of these strategies.

Key strategies for reducing maternal mortality and to achieve MDG target 5A include:

1 Public information campaigns to raise awareness of antenatal care, problems during pregnancy, labour and the postnatal and neonatal period, and obstetric complications including the three delays.
2 Health voucher programmes to increase demand for maternal and neonatal health services.

Key strategies for reproductive health and to achieve MDG target 5B include:

1 Public information campaigns and service quality improvement to shift family planning use from short-term (oral pill) to longer-term, lower-cost clinical methods (intrauterine contraceptive devices) and permanent methods such as sterilisation.
2 Increased provision of a variety of hormonal methods with proper counselling and treatment for adverse effects and method switching, and inclusion of the topic in school curricula.
3 Targeted household visits, to bring more high-parity couples into the family planning programme.
4 Cross-sectoral efforts to provide alternative roles to young women outside of early marriage and childbearing, in particular greater access to education and employment:
   - **i** greater access to and support through secondary schooling, possibly through stipend schemes
   - **ii** opportunities for formal sector employment made available to young women in urban and rural areas
   - **iii** mounting targeted adolescent reproductive healthcare activities.

Programmes and policies to implement the strategy

Figure 12 summarises the major national programmes set out to implement the identified strategies to address MDG 4 and 5. Different programmes funded by different donor agencies are being implemented in the country. Some programmes have comprehensive packages for maternal and newborn health; others have specific individual components related to maternal or newborn or child health. Table 3 summarises the major programmes and projects relating to maternal, newborn or child health initiatives.

Achievements to date

Bangladesh is on its way towards achieving the MDG 4 targets. The rapid reduction of mortality in under-5s and the trend towards infant measles vaccination coverage puts the country in a comfortable position to be on track for achieving MDG 4. According to the latest DHSB (2007), the under-5-year child mortality rate is 65 per 1000 live

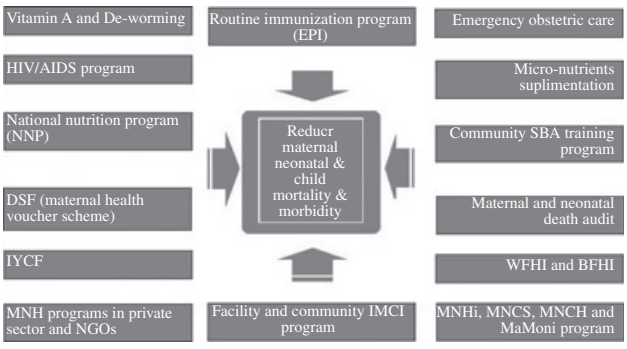


Figure 12. Major national programmes in Bangladesh to address MDGs 4 and 5.

Table 3. Major programmes implemented by development partners to address MDGs 4 and 5

Programmes/projects	Subdistrict	District
Maternal neonatal child survival programme—MNCS (Joint GoB-UNICEF)	53	7
Maternal neonatal health initiatives—MNHI (Joint GoB-UN)	22	4
Urban primary health care programme—UPHCP	6 City Corporation and 5 municipality	6
Maternal neonatal and child health programme—MNCH (Joint UNICEF-BRAC)	33	4
Safe motherhood promotion programme—SMPP (JICA)	6	1
Community health care programme (CARE)	4	4
Comprehensive reproductive and sexual health programme including MR services training and BCC	25	
Integrated safe motherhood, newborn care and family planning project—MaMoni (USAID/Save the Children USA)	15	2
Mayer Hashi Project (USAID)	–	21
USAID funded NGO network —Smiling Sun Franchise Project (SSFP)	–	61
Working towards safe motherhood	6	4

births and the infant mortality rate is 52 per 1000 live births. The reduction in the maternal mortality ratio is impressive and suggests that it is possible to reduce it below 143 per 100 000 live births by 2015. The targets of conducting more than 50% of deliveries by a skilled birth attendant and ensuring universal access to reproductive health, however, still seem unreachable by 2015.

Challenges and opportunities

Reluctance to use services and poor quality of services detract from use where the services are available, whereas lack of care providers and lack of supportive infrastructure are barriers in areas of deprivation. Causes include no knowledge about the need for skilled care at birth, high costs and very little idea about birth preparedness or danger signs in pregnancy.

The problems related to health services, such as lack of availability and access to health services, inequitable distribution of health service, insufficient number of health workers, reluctance of health staff to work in rural settings, together with socio-economic problems such as poverty, illiteracy, lack of awareness and natural disasters make the situation challenging. The following challenges will need to receive special attention if Bangladesh wishes to achieve MDGs 4 and 5:

1 high proportion of home delivery
2 high prevalence of malnutrition
3 lack of skilled birth attendants and trained human resources
4 low coverage and quality of antenatal, postnatal and sick newborn care
5 poor care-seeking behaviour
6 deep-seated community norms and practices
7 lack of access to information, care and social support
8 coordination and harmonisation among different programmes and departments.

Increasing age at marriage is important to reduce the risk of teenage pregnancies. This is a change which is difficult to implement for a variety of social reasons. In Bangladesh, marriage is synonymous with the beginning of reproduction.

Opportunities to overcome challenges

There is in Bangladesh currently a positive notion prevailing to strengthen and expand the existing government and non-government public sector programmes, as well as private sector programmes, to address maternal, newborn and child health. There is strong political commitment and a political agenda which aims to achieve the MDGs, especially those related to child and maternal health.

Improving trends in female literacy and other socio-economic factors are contributing to the improvement of the overall health situation of the country. Improvement in infrastructure, together with improved mobile phone communication, creates new opportunities for people as well as the service providers to reach one another. So reaching the facility and providing health messages have become easier in Bangladesh.

A strong coordination and cooperation between the government, donors, development partners, professionals and civil society is found in the sectors dealing with mother and child health. The government is strengthening and revitalising community clinics, with one planned for every 6000 head of population, which will also create an opportunity for people to have health services right on their 'door step'.

Conclusions

The country is on track with regard to achieving MDG 4 and MDG 5A (Table 4). Significant strides have been made in all three indicators for MDG 4 and, if the trend is sustained, the country will be able meet the 2015 target. A major problem is the persistent high neonatal mortality.

Table 4. Will the MDG 4 and 5 targets be reached in Bangladesh

Targets and indicators	Unlikely	Potentially	No data
5A: Reduce maternal mortality by three-quarters between 1990 and 2015			
Maternal mortality ratio		✔	
Proportion of births attended by skilled health personnel	✔		
5B: Achieve universal access to reproductive health by 2015			
Contraceptive prevalence rate		✔	
Adolescent birth rate	✔		
Antenatal care coverage (at least one visit and at least four visits)	✔		
Unmet need or family planning	✔		
4: Reduce child mortality			
Under-5 mortality rate		✔	
Infant mortality rate		✔	
Proportion of 1-year-old children immunised against measles		✔	

Implementation of the National Newborn Health Strategies and Guidelines can play a vital role in the reduction of neonatal deaths.

Bangladesh is also on track for reducing the maternal mortality ratio by 75% between 1990 and 2015. However, achieving the target of universal access to reproductive health and fulfilling each of the indicators specified for this will be extremely challenging for the country. Bangladesh needs to enhance the activities to improve newborn health and to ensure improved coverage with skilled attendance at birth and availability and uptake of reproductive health services. The coordinated efforts of the Ministry of Health and Family Welfare, professionals, development agencies and non-governmental organisations, as well as the private sector, are extremely important if Bangladesh is to achieve MDG 4 and 5.

Disclosure of interests

All authors declare that there are no competing interests.

Contribution to authorship

SC, LAB, TAC, SR and SK were contributors to the paper in relation to the concept and design, documents and data collection, situation analysis and drafting of the review article. All authors contributed to the interpretation of data, reviewing the article and provided final approval for the version to be published.

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