

# Maternal and Neonatal Health in Bangladesh

## KEY STATISTICS

Basic data	
Maternal mortality ratio (deaths per 100,000 births)	320*
Neonatal mortality rate (deaths per 1,000 births)	37
Births for women aged 15-19 (per 1,000)	127
Pregnant women who received antenatal care at least once from a medically trained provider (%)	52
Births delivered at home (%)	85
Delivery assistance from medically trained providers (%)	18
Treatment for complications from medically trained provider	42

All Statistics from UNICEF State of the World's Children 2009 report and BDHS 2007  
\* Government of Bangladesh figure. UN adjusted figure is 570.

## BACKGROUND

With impressive progress made in recent years, Bangladesh is one of few developing countries on track to achieve Millennium Development Goal 4 to reduce child mortality. Between 2004 and 2007 child mortality has fallen from 88 per 1,000 live births to 65 per 1,000 live births.<sup>1</sup> However, despite this encouraging trend, neonatal mortality in Bangladesh is still high, accounting for more than half of all under-five deaths and more than two-thirds of infant deaths.<sup>2</sup> An estimated 120,000 newborns die every year in Bangladesh. The share of neonatal deaths to infant mortality has increased over the period 2002-2006, largely because there has been little progress in preventing neonatal deaths. Poor neonatal health and under-nutrition of both mothers and children could affect the current success in improving child survival.

**Maternal death** is the death of a woman who is pregnant or within 42 days of the end of her pregnancy, irrespective of the duration and the site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management.

**Neonatal death** is the death of a baby during the first 28 days of life.

The reduction of maternal mortality has been much slower than child mortality and

<sup>1</sup> Bangladesh Demographic Health Survey 2007.

<sup>2</sup> Neonatal deaths account for 57% are all under-five deaths. Bangladesh Demographic Health Survey 2007.

Bangladesh still records a high maternal mortality ratio, with 320 deaths per 100,000 births. This means that about 12,000 women die from pregnancy or childbirth related complications every year - more than 30 every day. Moreover, a malnourished mother is very likely to give birth to a low birth weight baby, a major underlying cause of death for newborns.

Bangladesh has one of the world's highest rates of adolescent motherhood, based on the proportion of women under the age of 20 giving birth every year. 28% of adolescent women (age 15-19) are already mothers with at least one child and another 5 % is pregnant<sup>3</sup>. The number of deaths among adolescent mothers is double the national average.

These high mortality rates are underpinned by the fact that 85 per cent of women give birth at home, most with unskilled attendants or relatives assisting. The low status of women, poor quality and low uptake of services are some of the reasons for this situation.

Because most births occur at home without skilled attendants, there is a high death rate of children under one month. Almost 80 per cent of neonates do not receive post natal care from a trained provider within six days of birth<sup>4</sup>. The first week of life is the most critical time for a newborn; three in four newborn deaths occur within the first week, almost 50 per cent of them within 24 hours, often at home and with no contact with the formal healthcare system<sup>5</sup>. The major newborn killer is infection (52%) followed by birth asphyxia/unable to breath at birth (21%) and low birth weight/pre-term deliveries (11%)<sup>6</sup>.

Among the women and children who survive complications during childbirth, many are left with crippling disabilities that often cause them to be ostracized from the community.

## ISSUES

Cultural barriers and traditions as well as poverty and lack of information prevent women from accessing maternal and newborn health services. There is also little understanding about the need for rest and additional nutritious food during pregnancy. Moreover, the low status of women within the family means one in every two women will have her health care decided by her husband<sup>7</sup>. Often her mother-in-law will be a key decision-maker.



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Despite being available, the utilization of emergency obstetric and neonatal care services is still low. Delays are often experienced in recognizing a case of emergency, deciding to seek treatment and traveling to treatment facilities. Two in five women could not decide whether to seek treatment within six hours of recognizing complications. For one-fifth of those who decided to go to the

<sup>3</sup> Bangladesh Maternal Health Services and Maternal Mortality Survey 2001.

<sup>4</sup> Bangladesh Demographic Health Survey 2007.

<sup>5</sup> Lancet 2004.

<sup>6</sup> Bangladesh Demographic Health Survey 2004.

<sup>7</sup> Bangladesh Maternal Health Services and Maternal Mortality Survey 2001.



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health facility, the travel time to a treatment facility was more than one hour<sup>8</sup>. There are often delays in actually receiving treatment at the facility and the cost of treatment is another deterrent for many people in a country where 41 per cent of the population live on less than US\$1 a day<sup>9</sup>.

Inadequate obstetric and neonatal care provided by health facilities also adds to the problem. Poor quality of services precludes optimal utilization of services. Lack of skilled health care providers is a major problem both at facility and community level. Referral services are not always accessible or simply available. Provision of health services is inequal according to the regions and coordination between child and maternal health programmes is often missing. In addition, in the past, neonatal health has had little attention in policy and strategy documents of the Health sector.

Families often ignore very simple healthy practices or do not accept them because it is against tradition or common belief. Similarly most people are not able to recognize when it is necessary to seek care for the mother or the baby.

The knowledge of caregivers plays a crucial role in avoiding the unnecessary maternal and newborn death. There is a great need for better understanding of essential newborn care practices such as clean and safe delivery, drying and wrapping for thermal protection, early initiation of exclusive breastfeeding, tactile stimulation and resuscitation, care of eyes, skin and cord for infection prevention.

Violence against women is another problem in curbing maternal mortality, with 14 per cent of the deaths of pregnant women associated with injury and violence<sup>10</sup>. Few women visit hospital after violence, or even for a check up, because of the patriarchal social structure.

<sup>8</sup> Bangladesh Maternal Health Services and Maternal Mortality Survey 2001.

<sup>9</sup> UNDP Development report 2007/2008.

<sup>10</sup> Bangladesh Maternal Health Services and Maternal Mortality Survey 2001.



## ACTION

UNICEF actions to curb maternal and neonatal mortality have focused on the "three delays". Interventions target families, communities and health facilities. Through the development of community support systems, UNICEF programmes address the first delay (seeking care) and second delay (getting to the health facility) experienced by pregnant women. By strengthening

emergency obstetric care services and accrediting hospitals as Women Friendly Hospitals UNICEF addresses the third delay (receiving quality care at the facility).

In the recent years, UNICEF adopted a comprehensive approach, with the aim of providing to all mothers and newborns a continuum of care -before delivery, during delivery and after delivery. This continuum of care is possible through better integration of quality maternal, newborn and child health care.

UNICEF and other partners are also providing the Government of Bangladesh with technical and financial support to develop a National Neonatal Health Strategy and Guidelines. The strategy will set the programme directions in terms of operationalizing neonatal health care across the country.

### ***Upgrading health facilities for maternal, neonatal and child care***

Since 2000, UNICEF has been able to support a national programme for emergency obstetric care under the Women's Right to Life and Health project. More recently UNICEF supported health facilities to provide improved newborn care. Health facilities have been equipped with necessary equipment for comprehensive emergency obstetric and neonatal care. Some facilities were also provided with laboratory facilities to enable safe blood transfusions. The equipment is regularly maintained and record keeping and reporting systems have been institutionalized.

In addition, doctors and nurses received emergency obstetric/neonatal care and anesthesia training. Laboratory technicians were trained to handle safe blood transfusions. Hospital staff was sensitized through training to women's needs and concerns -including the issue of domestic violence to ensure that the rights and dignity of female patients are respected.

Standards for infection prevention practices have been developed and enable service providers to minimize patient and staff risk of exposure to infectious materials. All health facility staff received infection prevention practices training.

### ***Community Support System***

To stimulate demand for skilled medical treatment, an intensive community mobilization effort through the formation of a community support system has been initiated in six

upazillas. The objective is to enable the community to provide support to pregnant women and families during any obstetric emergency through collective efforts. Communities are encouraged to identify the key barriers to care and select the most appropriate interventions for their situation.

The project also aims to educate families about available services, identification of danger signs during pregnancy, and the importance of seeking care from skilled medical professionals during obstetric and newborn emergencies.

Volunteers from the community support group visit pregnant women to monitor their status and help plan for the birth. Families receive money boxes to encourage saving for emergency medical costs and hospital transport. Ensuring emergency transport is one of the most effective interventions in preventing maternal and neonatal death. Members of the community support group also maintain regular communication with health personnel and the upazilla health complex, reporting on their activities.

### ***Women friendly hospitals***

Tailoring health services to meet the social and cultural context in Bangladesh is imperative to increase women's confidence in, and use of, the formal health care system. By creating Women Friendly Hospitals, UNICEF is enhancing the availability of services to women and creating suitable environments for women requiring medical attention.

Seven facilities (four district hospitals and three upazila health complexes) were assessed for Women Friendly Hospital accreditation. Sensitization of providers has been completed in these facilities. Assessment tools, criteria for accreditation and accreditation rules and

procedures have been finalized after thorough consultation. Doctors and nurses were trained to provide information about violence against women in these facilities.

Government of Bangladesh-UN joint initiative to address maternal and neonatal health UNICEF joined with the World Health Organization (WHO) and the United Nations Population Fund (UNFPA) to support the Government of Bangladesh to reduce maternal and newborn mortality and morbidity. The initiative will ensure that women are aware of their right to safe motherhood and that communities are conscious of how mothers can be assisted in achieving this right.

The initiative adopts a decentralized approach that takes into account local needs and demands, through participatory local planning processes. District and upazila health and family planning teams develop their own plans, identify maternal and neonatal health problems specific to their communities and according to the plans, obtain adequate funding.

Provided with training and planning tools, health personnel, together with the community and local authority, are encouraged to implement solutions that will improve health facilities and increase uptake of their services by the community.



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### ***Integrated Management of Childhood Illness and newborn health***

Integrated Management of Childhood Illness (IMCI) interventions aims to reduce child deaths by increasing the quality and coverage of treatment, counseling and home-care. The initiative also aims to improve health care practices of mothers and caregivers through the intervention of trained health providers. This initiative focuses on sub-district health facilities and rural health centers. Training and logistics have been provided to health facilities on 300 upazillas.

In addition a community-based component has been initiated in six upazilas of three districts during 2008, providing an integrated package of maternal, neonatal, and child survival interventions. The initiative will expand to 106 upazilas of 14 districts by 2011. Trained community health workers visit households to provide antenatal counseling and conduct postnatal care visits within 48 hours after birth to ensure essential neonatal care.

## **IMPACT**

Considerable progress has been made to increase the coverage of emergency obstetric care services. More and more women are seeking and receiving essential and emergency obstetric care during pregnancy, delivery and after delivery.

Emergency obstetric care is now provided in 191 facilities (147 providing comprehensive services, 44 providing basic services). This has tripled the number of facilities providing emergency obstetric care in the past five years. The number of public facilities providing comprehensive emergency obstetric care services has increased more than seven-fold since 1994.

The number of deliveries at these selected public facilities has increased. In total 127,374 deliveries took place in 2008, compared with 93,388 in 2005. The proportion of caesarian-sections also increased considerably with 33,364 cases in 2008 compared with 19,810 in 2005. The number of complications treated was 81,196 compared to 58,620 in 2005. Facility based fatality rate decreased to 0.8 per cent (compared to 1.3 per cent in 2005).

Since the community support system programme began there have been no reported maternal deaths in the pilot communities. The project now serves around 15,000 families in 60 communities. This approach will be expanded so that maternal, neonatal and child health initiatives can be implemented in other districts.

The WHO/UNFPA/UNICEF initiative for maternal and neonatal health is currently targeting four districts (Thakurgoan, Narail, Moulvibazaar and Jamalpur) and may later expand to cover 16 districts. By 2010, the initiative hopes to save the lives of an additional 885 mothers and 23,607 newborn babies and avoid crippling disabilities link to child birth for both women and babies.