



Maternal Health Task Force



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The Manoshi Project

Bringing quality maternity care to poor women
in urban Bangladesh

OVERVIEW OF BANGLADESH

Bangladesh is a country of 151 million people of which almost a third live below the poverty line. Nearly a quarter live in urban areas and a third of the urban population lives in slums.⁴ Urban areas are growing fast, mainly due to the influx of poor rural families. With infrastructure and public services unable to keep up with growth, urban poverty is worsening and inequality in urban areas such as Dhaka is higher than the national average. Several key socioeconomic and demographic indicators are summarised in Table 1.

Table 1: Socioeconomic and demographic indicators

INDICATOR	DHAKA	BANGLADESH
Population (millions) ^{5,6}	15.39	150.49
Urban population (%) ⁷	n/a	29.4
Poverty, below national poverty line (%) ⁸	30.5	31.5
Human Development Index (HDI) ⁹	–	0.515
Gini coefficient ⁹	40.6	32.1
Access to improved drinking water (%) ⁵	–	83

Health in Bangladesh

Although Bangladesh has witnessed remarkable progress in health status over the last few decades, the maternal mortality ratio (MMR) remains high at 170 per 100,000 live births.¹⁰ While the neonatal mortality rate has declined from 65 per 1,000 live births in 1990 to 31 in 2010,¹¹ stillbirths remain common, with a reported rate of 36.4 per 1,000 births in 2009.¹² Nearly two-thirds of these (21 per 1,000 births) occur at delivery, illustrating the potential to reduce the rate of stillbirths by expanding access to skilled healthcare personnel during the intrapartum period. Table 2 gives an overview of the health situation in Bangladesh and Dhaka, the country's capital.

Access to health care and health status is quite poor in informal urban settlements across Bangladesh and often worse than in other urban areas. While the distance between women and skilled care is not long, nearly 80 percent of the deliveries in urban slums are attended by neighbours or relatives at home.¹⁷ Just 55% of women in urban slums receive antenatal

care compared with 74% of pregnant women in other urban areas.¹ Newborn and child health care coverage is also low; immunisation coverage is just 63%, much lower than national and urban averages of 73%. Basic hygiene can be difficult, with less than five percent of slum dwellers accessing water-sealed latrines. In short, people living in urban informal settlements face much greater challenges to improving their health than people from other parts of the country.¹

BRAC

BRAC was founded in 1972 with the goal of both alleviating poverty and empowering the poor. It is one of the largest non-governmental organisations in the world, employing over 100,000 people, and has led the charge in promoting sustainable human development in Bangladesh and around the world. BRAC's programmes in education, economic development, and health touch around 100 million people in Bangladesh and many more in other low income countries.¹

The Manoshi Project

Adapting the BRAC Essential Health Care (EHC) programme, which offers a package of basic health services through community health workers (CHWs), the Manoshi project focuses primarily on empowering communities, particularly women, in order to develop a system for the delivery of an essential package of interventions for mothers and babies throughout the continuum of care.

Manoshi works to provide services to eight million people living in urban informal settlements and help improve uptake of health services among mothers, neonates and under-five children. Manoshi was originally developed at the community level, close to women and families, in order to utilise effective community action and solution-oriented initiatives to maximise behaviour change at the household and community levels. BRAC projects that, if universal health coverage continues in Bangladesh, Manoshi will realise a 40% to 50% reduction in neonatal mortality, 50% decrease in under-five mortality, and a substantial drop in maternal mortality in urban informal settlements across six cities in the country.¹

Manoshi focuses on several different aspects of community development, including: providing basic health care for pregnant and lactating women, newborns and under-five children; building a referral system to connect women with quality health facilities when complications arise; creating women's groups to drive community empowerment; skills development and capacity building for CHWs and birth attendants; and linking community organisations with both governmental and non-governmental organisations to further their goals.¹

Table 2: Health and epidemiologic indicators

INDICATOR	DHAKA	BANGLADESH
Average life expectancy at birth (total/female/male) ⁵		70 / 69 / 70
Physicians (per 10,000 population) ¹³	10.8	5.4
Nurses and midwives (per 10,000 population) ¹³	2.8	2.1
HIV prevalence (per 100,000) ⁵	–	5.1
Anti-retroviral therapy coverage for advanced HIV (%) ⁵	–	31
Total fertility rate (live births per woman) ¹⁴	2.2	2.3
Maternal mortality ratio (per 100,000 live births) ^{15,16}	158	170
Under-five mortality rate (per 1,000 live births) ¹⁴	54	53
Neonatal mortality rate (per 1,000 live births) ¹⁴	36	32
Married women using any contraceptive method (%) ¹⁴	61.0	61.2
Birth interval, months since preceding birth (median) ¹⁴	47.3	47.4
Antenatal care coverage, at least 4 visits (%) ⁵	44.7 ^a	26
Births attended by skilled provider (%) ¹⁴	31.5	31.7
Births delivered in a health facility (%) ¹⁴	29.9	28.8
Birth weight < 2500g (%) ¹⁴	16.5	17.7
Births by Caesarean section (%) ¹⁴	20.2	17.1
Postnatal care visit within 2 day of birth (%) ¹⁴	29.0	27.2

a: All urban women

b: Includes births in all facilities, regardless of quality

The Manoshi project provides several specific services along the continuum of care, from pregnancy through the postnatal period, which include:

- Identifying all pregnant women and offering high-quality antenatal, delivery, postnatal (for the mother and the baby), and child health care
- Tracking all eligible couples and offering the most appropriate family planning methods
- Encouraging pregnant women to give birth at ‘delivery centres’ or ‘maternity centres’ that have been established by BRAC inside the informal settlements
- Offering Emergency Obstetric Care (EmOC) in pre-selected referral facilities
- Monitoring all birth records, offering essential newborn care, and managing or referring newborns with complications
- Arranging immunisation, ensuring adequate Vitamin A intake, and performing quarterly growth monitoring of children under five years of age
- Educating and motivating mothers to take up and continue exclusive breastfeeding and, at later ages, complimentary feeding, and referring severely underweight children to hospitals for treatment
- Forming committees with local stakeholders to strengthen community health actions, monitor activities, provide supervision and safety-net operations, assist in referral mechanisms, conduct verbal autopsies, and assist with a range of community activities

CHWs are selected from the community and the local vicinity. There are several cadres, including first-line workers, midwives, paramedics, and 'Urban Birth Attendants' (UBAs), which are drawn from the local pool of Traditional Birth Attendants.

Birthing centres, locally known as 'BRAC delivery centres', have been set up to serve about 2,000 households each (10,000 people). Women come to deliver with UBAs or midwives. These are basic, clean facilities that maintain privacy and dignity, provide the necessary supplies and expertise for normal births, and have direct referral mechanisms to pre-selected facilities if complications arise. Mothers are given misoprostol tablets (400 micrograms) during the third stage of labour after the delivery of the baby and before the delivery of the placenta to reduce postpartum blood loss. They are taught to keep the baby warm, to breastfeed, and to identify and report any danger signs during the neonatal period.

Actions undertaken by the CHWs are guided by BRAC standards and protocols and include:

- Identification and registration of pregnant women
- Provision of antenatal care (ANC) services to pregnant women through household visits; ANC includes physical examination, education on healthy practices and hygiene, counselling on nutrition, information about tetanus toxoid immunization, iron-folic acid supplementation, education on danger signs, and birth and emergency preparedness.
- Provision of intrapartum services at delivery centres and maternity centres; this includes assistance to the mother, immediate essential newborn care, management of birth asphyxia, vitamin A supplementation, and the weighing of babies. UBAs and midwives also teach mothers to take care of low birth weight (LBW) babies. Mothers can stay in these centres up to 12 hours after giving birth.
- Delivery of postnatal care via frequent visits to mothers and newborns during the postnatal period; visits are scheduled for days 1, 3, 7, 21, and 28 post-partum, with a special visit at day 14 for LBW babies. PNC visits include health education on newborn care, exclusive breastfeeding, maternal nutrition and hygiene, immunisation, and family planning. Neonatal complications such as sepsis are identified and referred to appropriate facilities for treatment.
- Monitoring and basic health care services for under-five children; services include a follow-up system, home visits, record-keeping of immunisations and vitamin A uptake, promotion of infant and young child feeding practices and micronutrient supplementation, health education, and recognition and management of diarrhoea and respiratory infections.

One of the key features of the Manoshi project is the pre-selection of referral facilities. This was established at the outset of the project in collaboration with local community networks. Several public hospitals, including the Dhaka Medical College, as well as some private hospitals were selected and partnerships built with hospital managers to assure ready access to quality care for emergency obstetric and newborn complications. Memoranda of Understanding were developed to deliver emergency services at fixed low prices. Local transport drivers were identified to provide transport in case of emergencies, and BRAC referral staff were stationed at all selected hospitals to navigate any referred patients through the admission process to subsequent care.

All women access services free of charge at the community level. Financial support is provided to those patients unable to pay the cost attached to treatment at the hospital. Treatment costs for caesarean sections, pregnancy and childbirth, neonatal and child health complications are sometimes covered by Manoshi's financial support.

MONITORING, EVALUATION, AND RESULTS

The Manoshi project has recognised the importance of ongoing monitoring and operational research to assess the effects of the program, tracking access to health services as well as maternal and child health outcomes. These processes are providing feedback to improve the project along the way.

Evaluations of Manoshi have shown promising results, both in terms of access to maternity care (process outcomes) and improved health outcomes for mothers and newborns (impact). Demand for and access to services provided by Manoshi has increased substantially since the programme's inception. For example, in Manoshi's target areas, the proportion of pregnant women receiving at least four antenatal care visits increased from 2007–2011 from 27% to 52%, while this proportion in the comparison area hovered around 36% over the same period.² Homebirths without any skilled attendance in the target areas decreased from 65% to 24% over the four-year period.² Manoshi financial support (paying for medicines or transport) and social support (supporting the family's decision-making, arranging transport, accompanying the woman to the hospital) were important elements in reducing the time to access emergency care.¹⁸ Pregnancy outcomes were better in women referred from the birthing facilities than those referred from home.¹⁸ Evaluation of Manoshi also revealed that 73.3% of the women referred from home delayed deciding to seek care, compared to 66.2% of those who were referred from delivery centres.¹⁸

Postnatal health promotion behaviours have become more common in Manoshi areas as well. Postnatal care visits have

become much more common within the community, and are recognised as a core component along the continuum of care. PNC visits within 24 hours of birth increased from 15% to 62% from 2007 to 2011, compared with an insignificant rise from 26% to 28% in comparison areas.² Initiation of breastfeeding within the first hour of birth increased from 50% to 71% in the four-year period in Manoshi areas, while in comparison areas the increase was from 49% to 62%.²

While access to care and health outcomes have improved, several barriers still exist, particularly regarding access to and uptake of care in the community delivery centres.¹⁸ First, the delivery centres face a lack of medicine, supplies and doctors, contributing to low uptake and substandard care. Oxytocin, in particular, is strictly prohibited in the community delivery centres, restricting their effectiveness at managing complications. In addition, out-of-pocket expenses for women who deliver at the birthing centres still remain; only a portion of the costs incurred when referred to a hospital are reimbursed by Manoshi.

Human factors have also played a role in Manoshi's success. In the beginning, Manoshi was unknown to its target communities. Traditional Birth Attendants, who have been in the community a long time, often had greater trust from the families, particularly given the existing culture among settlement inhabitants to deliver at home. However, as evidenced by the increase in ANC and PNC as well as skilled attendance at birth, Manoshi is successful in encouraging women to seek care during pregnancy. At the same time, health workers' remuneration is low, leading to limited motivation, particularly regarding the leadership roles that Manoshi's health care workers are expected to play in their local communities. Also, referral to higher-level facilities can be slow because of lack of community education and training on pregnancy-related danger signs.¹⁸

INSIGHTS FROM THE MANOSHI PROJECT

The Manoshi project has led to important improvements in maternal and newborn health in the urban slums in Bangladesh. Several factors have been crucial contributors to the successful development and implementation of Manoshi.

- **Context is key.** Maternal and newborn health programmes which are developed close to home and contextualised to respond to the needs of the community will best serve women, neonates and children. Local buy-in and feedback from community-based committees have been crucial for Manoshi's success.
- **Woman-centric, culturally-appropriate birth centres are needed.** Birth centres should play a catalytic and intermediary role in moving women from home to institutions that can care for them in a respectful way.
- **Community health workers can increase access to care.** Active community engagement of trained CHWs and birth attendants can increase coverage and utilisation of services and address inequities.
- **MNH services should be set up along the continuum of care.** Manoshi's community health workers deliver antenatal, labour and delivery, and postnatal care and also link women to facilities through an active referral system.
- **Standards ensure quality.** Having evidence-based protocols for all aspects of care (for ANC and PNC, for birthing care and referral as well as within the referral facilities) is important to establish and maintain quality of care across facilities and communities.
- **Monitoring and evaluation improve care.** Continual monitoring and evaluation is crucial for improving service delivery and outcomes. This will also allow programme managers to develop and modify services along the way to meet rising needs and expectations. For example, after receiving community feedback and increased demand, Manoshi worked to develop better-quality birthing facilities to replace the original birthing huts.

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