

## Editorial

---

# Community Based Maternal, Neonatal and Child Health Care

Bangladesh is committed to Millennium Development Goal (MDG) for goal 4 - reduction of child mortality by two third from the 1990 rate, though it is on right track but needs reduction of neonatal mortality to achieve it. During the last decade there has been a substantial reduction in infant mortality rate in Bangladesh.

The fifth Millennium Development Goal (MDG) is to reduce maternal mortality by 75% between 1990 and 2015<sup>1</sup>. An intrapartum care strategy, preferably delivered in health centers and supported by referral-level facilities, is the key to achievement of MDG-5.2 This strategy would fit well within a district-health-system approach, and most interventions that make up the package of intrapartum care could be delivered by a skilled attendant. However, research to quantify the effectiveness of such a strategy for maternal mortality is scarce: with no randomized controlled trials to compare an intrapartum care strategy with alternative strategies, and only a few time-series studies from resource-poor countries to inform the magnitude of effect<sup>2</sup>. Many poor countries, especially those in South Asia, are undergoing rapid economic growth, with associated improvements in women's education and empowerment. Economic growth clearly contributes to a reduction in maternal mortality, but does not fully explain variations between countries<sup>3</sup>. Inequalities within poor countries, both in access to obstetric care and in maternal survival, persist<sup>4,5</sup>. However, the effect of overall improvements in social and economic indicators on access to care and maternal health outcomes is not yet known.

According to the report of Bangladesh maternal mortality survey, 2011 76.7% of deliveries occur at home. By the end of first week of postnatal period more than half of all maternal deaths<sup>6</sup> and three quarter of neonatal deaths occur<sup>7</sup>. Postnatal care is needed to reduce deaths of mothers and neonates, and to support adoption of healthy behaviors. By comparison with the large trials and detailed guides for implementation of antenatal care, postnatal care has been neglected, or fragmented into postpartum care for the mother and newborn care for the baby. However,

new evidence is shaping the development of the postnatal package<sup>8,9,10</sup>. The postnatal package for mothers and babies should include routine visits in the first days after birth, when risk is high, to promote healthy behaviors, to identify complications, and to facilitate referral. Some mothers or babies will need extra support, especially for preterm babies or HIV-positive mothers. Delivery strategies for postnatal care should be context-specific. If a woman gives birth in a facility, she and her baby should receive a pre-discharge postnatal visit, with an early follow-up visit at home and return visits to the facility<sup>11</sup>. Even in settings where most births happen in a facility, most mothers and babies go home within a few hours and are unlikely to return in the first few days because of transport, costs, and cultural constraints<sup>11</sup>. If a woman gives birth at home, as is the case for 50 million women every year, a trip to the health facility on the first or second day after childbirth is even less likely. We need to investigate, test, and adapt integrated postnatal home visit packages in various settings, with appropriate health workers and linking referral care<sup>8</sup>.

A community based postnatal care package has been designed to deliver in two locations through two different service delivery mechanisms in Bangladesh through Govt. Health System (GO) and GO-NGO system. The core content of the package is to deliver services by the community health care providers through six main contacts with the mother and the newborn at household level. The first two contacts are to provide antenatal care counseling to the pregnant women at home during second and third trimester. The third contact is for caring of mothers during delivery. The fourth, fifth and sixth to provide postnatal care of mothers and newborns at home within 24 hours, 2-3 days and 4-7 days respectively. Additional visits will be made to LBW babies on the 14th and 28th days. Also, an opportunistic visit will take place on the 42nd day at the EPI centre. During these contacts the community health care providers offer some simple but lifesaving care.

An independent surveillance system was designed in order to monitor community level activities, in addition to the regular monitoring system, The findings of the surveillance would provide an opportunity to find out any gaps in the antenatal, delivery and postnatal care over time, provide quarterly feed back of progress of activities, and evaluate the effectiveness of the PNC package.

---

**Prof. Sameena Chowdhury**

Member Editorial Board  
BJOG

**References**

1. Sachs JD, McArthur JW. The Millennium Project: a plan for meeting the Millennium Development Goals. *Lancet* 2005; 365: 347–53.
2. Campbell OMR, Graham WJ. Lancet Maternal Survival Series steering group. Strategies for reducing maternal mortality: getting on with what works. *Lancet* 2006; 368:1284–99.
3. Van Lerberghe W, De Brouwere V. Of blind alleys and things that have worked: history's lessons on reducing maternal mortality. In: De Brouwere V, Van Lerberghe W, eds. *Safe motherhood strategies: a review of the evidence*. Antwerp, Belgium: ITG Press, 2001. *Stud Health Serv Organ Policy* 2001; 17: 1–25.
4. Gwatkin DR, Bhuiya A, Victora CG. Making health systems more equitable. *Lancet* 2004, 364: 1273–80.
5. Ronsmans C, Graham WJ; Lancet Maternal Survival Series Steering Group. Maternal mortality: who, when, where and why. *Lancet* 2006; 368: 1189–200.
6. Ronsmans DC, Graham WJ, Lancet maternal survival series steering group. Maternal mortality: who, when, where and why. *Lancet*. 2006;368: 1189-1200.
7. Lawn JE, Cousens S, Zupan J, Lancet neonatal survival steering team. Lancet. 4 million neonatal deaths: when? where? why? 2005;365(9462); 891-900
8. Haws RA, Thomas AL, Bhutta ZA, Darmstadt GL. Impact of packaged interventions on neonatal health: a review of the evidence. *Health Policy Plan* 2007; 22: 193–215.
9. Lawn JE, Zupan J, Begkoyian G, Knippenberg R. Newborn Survival. In: Jamison D, Measham A, eds. *Disease Control Priorities*. 2 edn. Washington, DC, USA. Oxford University Press and The World Bank, 2006: 531–549. [www.dcp2.org](http://www.dcp2.org) (accessed June 6, 2007).
10. Bang AT, Bang RA, Reddy HM. Home-based neonatal care summary and applications of the field trial in rural Gadchiroli, India (1993 to 2003). *J Perinatol* 2005; 25: 108–22.
11. Warren C, Daly P, Toure L, Mongi P. Postnatal care. In: Lawn J, Kerber K, eds. *Opportunities for Africa's Newborns*. Cape Town, South Africa: Partnership for Maternal, Newborn and Child Health, 2006: 79–90. <http://www.who.int/pmnch/media/publications/africanewborns/en/index.html> (accessed June 6, 2007).