

Prioritizing Neonatal Health - A Way to Achieve Millennium Development Goals

The child is the future asset and hopes of any nation. They are the foundation for future development. There is a global consensus that improving health of the child and mother paves the way for poverty alleviation and development¹. Investment in maternal, neonatal and child health is not only a priority for saving lives but also critical to advancing other goals related to human welfare². The policy makers have recognized that their commitment to meet the Millennium Development Goals (MDGs) bring nothing unless survival is made a reality for millions of children especially the neonates³. The government of Bangladesh is also committed to improve health of the children by implementing MDG-4 which has set a target to reduce mortality in children less than five years (U5MR) by two thirds between 1990 and 2015. Although U5MR has been reduced from 248/1000 in 1990 to 69/1000 live births in 2005 and infant mortality rate (IMR) from 149/1000 to 46/1000 live births in 2005, only a decade is left to reach the target set by MDG i.e. U5MR 31/1000 live births and IMR 22/1000 live births in 2015⁴. This substantial reduction in mortality will not be possible without giving extra effort to reduce the neonatal death which constitutes major bulk of under five mortality. Moreover intervention in the neonatal period will have a profound effect on early childhood development. Amongst the children who die under 5 years of age, 38% die in the neonatal period⁵, and three quarters of neonatal deaths occur in the first week of life. Almost all (99%) death in newborn occur in the low income and middle income countries. Of the 130 million babies born every year, about 4 million die in the first 4 weeks of life and a similar number of babies are still born⁶. The direct causes of neonatal death in high mortality countries are preterm birth (27%), sepsis (26%), tetanus (7%), diarrhoea (3%), and perinatal asphyxia (23%)⁷. In very high mortality countries (NMR>45) 50% deaths are due to tetanus,

diarrhoea, and severe infection which are entirely preventable. Most newborn deaths occur at home in low income and middle income countries against a backdrop of poverty, suboptimal care seeking and weak health systems⁷. Despite the immense importance of neonates, they had always been neglected.

Child survival programmes in the developing world have tended to focus on pneumonia, diarrhoea, malaria and vaccine preventable conditions, which are important causes of death after the first month of life. Between 1980 and 2000 child mortality after first month of life fell by third, whereas neonatal mortality was reduced only by a quarter⁷. Reduction of deaths in the first week of life have shown no progress, rather deterioration. In 1980 only 23% of deaths happened in the first week of life; by the year 2000 this figure has risen to an estimated 28%.⁷ Our crucial omission has been the neglect of the newborn. While infant and the mother have been at the center of efforts to protect early childhood, the newborn period has been relatively neglected. Newborn baby has now fallen through the cracks between safe motherhood which focus on mother and child survival programme which prioritize children older than 1 month. For example, the generic of IMCI guidelines even do not include first week of life – the period of the highest risk of childhood mortality⁸.

To meet MDG-4, a substantial reduction in NMRs in high mortality countries like Bangladesh is needed and reducing deaths in the first week will be essential to progress. Functioning of maternal and neonatal health system caring for diad of mother and pregnancy, child birth and early neonatal period are essential if neonatal mortality is to be reduced.

The neonatal survival steering team has found out evidence based, cost effective, feasible interventions that could avert up to 41 to 72% of the neonatal deaths⁹. The interventions are preconceptional- folic

acid supplementation, antenatal- tetanus toxoid immunization, syphilis screening and treatment , pre eclampsia and eclampsia prevention, intermittent treatment to malaria, detection and treatment of asymptomatic bacteriuria. Intrapartum interventions such as antibiotics for premature rupture of membranes, corticosteroids for preterm labour, detection and management of breech labor, surveillance for complications, clean delivery practices. Postnatal interventions include resuscitation of newborn, breastfeeding, prevention and management of hypothermia, kangaroo mother care for low birth weight babies, community based management of pneumonia. Cost effective analyses emphasized the benefits of combining interventions into packages with a common service delivery mode rather than providing single intervention in a vertical manner¹⁰.

Antenatal and postnatal care through community intervention including health education of the families and communities to promote adoption of evidence based home care practices , create demand for skilled care and improve care seeking behaviour can bring success. Simultaneous expansion of clinical care for newborn babies and mother are essential to achieve MDG-4⁹.

The question arises, can low and middle income countries reduce neonatal mortality without intensive care technology and allocation of extra budget? The experience of the countries that have reduced NMR successfully over the past century, tells us the answer in a resounding yes¹¹. Reduction in neonatal mortality in developed countries like U K preceded the introduction of expensive neonatal care. Several low income countries have achieved low NMR despite limited resources including Honduras, Indonesia, Sri Lanka, Vietnam due to sustained input in primary care services and facilities at the government sector¹². Effective low cost interventions like tetanus toxoid vaccination, exclusive breast feeding, kangaroo mother care of infants and antibiotics for infections do reduce mortality⁹. As about 90% of the babies are born at home in developing countries, the provision of home based neonatal care by community health care worker and community mobilization for improving maternal and neonatal care through women's group can result in impressive reduction in neonatal mortality¹³.

Recognizing the need for neonatal health in child mortality, India has adopted IMNCI (Integrated Management of Neonatal & Childhood Illness) strategy. The government of India has made mandatory for outreach health workers and community and child development workers to visit all neonates at home within first 10 days, starting soon after birth, to provide home-based preventive care/ health promotion and to detect neonates with sickness requiring referral. Extra contacts are proposed for care of low birth babies, postpartum care for mothers. The cost of including N (Neonatal) in IMCI in clinical care is estimated less than 10 cents per person, given the existence of traditional IMCI programmes¹¹.

To reach MDG and to reduce U5MR, there is no alternative other than giving priority to neonatal health. Negligence of children especially the neonates is an entirely preventable mass destruction of human lives. Without losing time we should come forward to uplift the status of the children and prioritize the neonatal health in order to reach MDG in due time. Nobel laureate Gabriela Mistral rightly said "We cannot wait for tomorrow for our children , it is today".

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