

Saving mothers and newborn lives – the crucial first days after birth

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Investing in post-natal care can generate high returns in maternal and newborn survival

Across the human lifespan, an individual faces the greatest risk of mortality during birth and the first 28 days of life – the neonatal period. Each year, nearly 4 million newborns die during this period – equivalent to around 10,000 per day. Three quarters of these deaths take place within one week of birth, and 1–2 million die during the first day following birth. Most of these deaths occur at home, are unrecorded, and remain invisible to all but their families. Millions more suffer severe illness each year, and an unknown number are affected with lifelong disabilities. Moreover, the risks of maternal mortality and morbidity also are highest at birth and in the immediate post-natal period.

For babies and mothers facing such complications as neonatal sepsis or post-partum haemorrhage, delay of even a few hours before appropriate care is delivered can be fatal or result in long-term injuries or disability. Important new data from Bangladesh show that a home visit on the first or second day after birth can reduce neonatal deaths by two thirds, but later visits are less effective at reducing mortality. The early post-natal period – the first seven days of life – is also the critical period for initiating high impact life-saving behaviours, including exclusive breastfeeding. Optimal breastfeeding does not start at the six-week visit for infant immunization – evidence shows that effective support and counselling in the first days of a child's life directly increase rates of exclusive breastfeeding. Other key behaviours during the neonatal period, such as hygienic cord care and keeping the baby warm, can make the difference between life and death – particularly for babies who are born prematurely. The post-natal period is also a critical time for preventing mother-to-child transmission of HIV and for providing women with access to family planning options.

Coverage gap for early postnatal care

Providing effective care for mothers and newborns during the early post-natal period has the potential to generate the greatest gains in survival and health of any period in the continuum of care. Despite this promise, however, the first days following birth are the time when coverage of appropriate services and behaviours is currently lowest. Among the 68 priority countries identified by the Countdown to 2015 initiative, a median of just 21 per cent of women received post-natal care.

Changing paradigms in post-natal care

Growing recognition of the critical importance of providing care to mothers and newborns, and the substantial gaps in coverage that currently exist, along with evidence generated mostly from trials in South Asia, have prompted paradigm shifts. Three tenets have emerged:

- **Who for?** Integration of post-natal care for mothers and newborns provides more effective and efficient care than separate approaches to post-partum and newborn care.
- **Where?** Routine post-natal visits should be provided at home or close to home, both to promote healthy behaviours and to link with curative care – instead of just hoping that the mother or baby will be brought to a health facility if problems arise.
- **When?** Early contact with mothers and babies is critical, ideally within 24 or at most 48 hours of birth for the first visit – instead of the more common visit six weeks after birth. The indicator measuring post-natal care published by the Countdown to 2015 in its 2008 report focuses on care within two days of birth. Large-scale surveys are changing to measure this indicator in more countries and communities.

Closing the gap between policy and action

Changing policies and indicators to reflect the importance of post-natal care is necessary, but not sufficient, to save lives. Services must also be scaled up to ensure high coverage and quality care during this period. While the content of a post-natal care package is fairly clear, the most effective delivery mechanism will vary, especially to provide services in remote rural areas and to reach newborns and mothers immediately after birth. Figure 4.5 maps delivery options with conditions of access to health facilities and human-resource availability in facilities and at community level. Many of the tasks involved in post-natal care can be delegated to an extension worker who is adequately supervised and effectively linked with the health system.

Case management of neonatal infections is an urgent priority

While early post-natal care visits for preventive care are immensely important, these are most effective at reducing mortality rates when integrated with curative care. Almost one third of newborn deaths result from infections; in poor, high-mortality settings, this proportion is far higher. Many of these babies are born preterm.

With an effective post-natal care package, infections in newborns will be identified early. In most countries, however, newborn illness can only be treated through referral to a health facility; even then, only a low percentage of those referred will actually seek the care. One option is to have first level, routine IMCI health-care workers begin antibiotic treatment. In countries where community health workers already provide case management for pneumonia or malaria, case management of neonatal infections may also be considered to bring care closer to home. Several Asian studies have shown how such strategies can result in large reductions in neonatal mortality, and community case management of neonatal sepsis is now being scaled up in Nepal, linked to case

management of childhood pneumonia. Of the 68 Countdown priority countries, 39 have changed policy to include case management of neonatal sepsis within the Integrated Management of Childhood Illness framework. The key challenge now is to identify the appropriate providers of such care in each country.

Closing the knowledge gap

Almost all (98 per cent) of newborn deaths occur in low- and middle-income countries. Yet most research and funding have focused on incremental advances in highly technical care for the 2 per cent of newborn deaths occurring in high-income countries. An increasing number of studies are providing new guidance on the 'how, who, when and where?' questions for

provision of life-saving interventions where the majority of newborn deaths occur and particularly where access to health facilities is low. A network of studies is under way in eight African countries examining nationally adapted packages and potentially scalable cadres of workers. Analysis of lives saved and costs will help guide policies and programmes to improve maternal and newborn care in the earliest days of life.

See References, page 111.

Figure 4.6

Post-natal care strategies: Feasibility and implementation challenges

	Possible strategies for post-natal care contact	Mother-friendly	Provider-friendly	Implementation challenges
1	Mother and baby go to facility	*	***	Requires mother to go to the facility within a very short time after birth. More likely following a facility birth, but still challenging in first days after birth.
2	Skilled provider visits the home to provide post-natal care for mother and baby	***	*	Conditional on sufficient human resources, which is challenging. Providing post-natal care may not be highest priority for skilled health personnel in settings where their attendance at birth is still low. Many post-natal care tasks can be delegated to another cadre. A skilled provider may be able to provide home visits during the post-natal period if rural health facilities are quiet during afternoons.
3	Community health worker visits home to see mother and baby	***	*	Requires sufficient numbers of community health workers with adequate training, supervision and incentives.
4	Combination: Facility birth and first post-natal care visit in facility, then home visit within two to three days, with subsequent post-natal care visits at a health facility	**	**	Requires team approach between facility-based and community health workers, sufficient human resources, management and supervision, effective referral systems and an efficient information tracking system so that the progress of the mother and baby is easy to track.

Note: * Low degree. ** Moderate degree. *** High degree

Source: Lawn Joy, and Kate Kerber, editors, *Opportunities for Africa's Newborns: Practical data, policy and programmatic support for newborn care in Africa*, Partnership for Maternal, Newborn and Child Health, Cape Town, 2006.