Newborn survival

Until the mid to late 1990s, estimates of the number of child deaths occurring during the neonatal period (the first month of life) were drawn from rough historical data rather than from specific surveys. More rigorous estimates for newborn deaths emerged in 1995 and 2000, as data from reliable household surveys became available. Analysis of these data made it evident that previous estimates had seriously understated the scale of the problem. Although the global neonatal mortality rate has decreased slightly since 1980, neonatal deaths have become proportionally much more significant because the reduction of neonatal mortality has been slower than that of under-five mortality: Between 1980 and 2000, deaths in the first month of life declined by a quarter, while deaths between one month and five years declined by a third.

The latest evidence is that 4 million babies die each year in the first month of life than at one month of age. Neonatal deaths occurring during the neonatal period (the first month of life) were drawn from rough historical data rather than from specific surveys. More rigorous estimates for newborn deaths emerged in 1995 and 2000, as data from reliable household surveys became available. Analysis of these data made it evident that previous estimates had seriously understated the scale of the problem. Although the global neonatal mortality rate has decreased slightly since 1980, neonatal deaths have become proportionally much more significant because the reduction of neonatal mortality has been slower than that of under-five mortality: Between 1980 and 2000, deaths in the first month of life declined by a quarter, while deaths between one month and five years declined by a third.

Even these figures underestimate the vast scale of the problems that affect child health during the neonatal period. For example, more than a million children who survive birth asphyxia each year go on to suffer such problems as cerebral palsy, learning difficulties and other disabilities. For every newborn baby who dies, another 20 suffer birth injury, complications arising from preterm birth or other neonatal conditions.

Significant improvements in the early neonatal period will depend on essential interventions for mothers and babies before, during and immediately after birth. According to the latest estimates for 2000–2006, at present in the developing world, one quarter of pregnant women do not receive even a single visit from skilled health personnel (doctor, nurse, midwife); only 59 per cent of births take place with the assistance of a skilled attendant; and just over half take place in a health facility.

Averting neonatal deaths is pivotal to reducing child mortality. The Lancet Neonatal Survival Series, published in 2005, estimated that 3 million of the 4 million deaths could be prevented each year if high coverage (90 per cent) is achieved for a package of proven, cost-effective interventions that are delivered through outreach, families and communities, and facility-based care across a continuum of neonatal care (antenatal, intrapartum and postpartum). While increasing skilled care is essential, the Neonatal Survival Series underlines the importance of interlinked solutions that can save almost 40 per cent of newborn lives in community settings. Expanding programmes that prevent mother-to-child transmission of HIV is also crucial.

Actions required to save newborns include setting evidence-based, results-oriented plans at the national level with specific strategies to reach the poorest, greater funding, agreed targets for neonatal mortality reduction, and promotion of greater harmonization and accountability on the part of stakeholders at the international level.

* Additional interventions for settings with stronger health systems and lower mortality.
* Situational interventions necessary in certain settings, such as areas of high malaria prevalence.

Note: This figure includes 16 interventions with proven efficacy in reducing neonatal mortality. Other important interventions are delivered during this time period but are not shown here because their primary effect is not on neonatal deaths (e.g., prevention of mother-to-child transmission of HIV). For some of the interventions listed, the service delivery mode may vary between settings.


See References, page 104.