

Pre-term births on the rise

But simple measures could cut the mortality rate of premature babies in poorer countries.

BY EUGENIE SAMUEL REICH

Premature birth is the biggest cause of infant mortality worldwide, yet most of those deaths could be readily prevented, according to a 2 May report from the World Health Organization (WHO) and child-health advocacy groups. The report summarizes the results of a comprehensive survey of the problem, and says that pre-term births are on the rise—a worrying trend—but that low-income countries could reduce deaths among these infants by introducing a few affordable key health-care practices.

Premature babies, defined as those born before 37 weeks' gestation, have higher rates of death and serious illness in the days and weeks after birth than do babies born at term, and are also more likely to be left with life-long disabilities such as blindness and cerebral palsy. The report discusses estimates of the pre-term birth rates and associated infant mortality for most of the countries in the world; the data, which cover 184 countries, are presented in two papers under review at *The Lancet*.

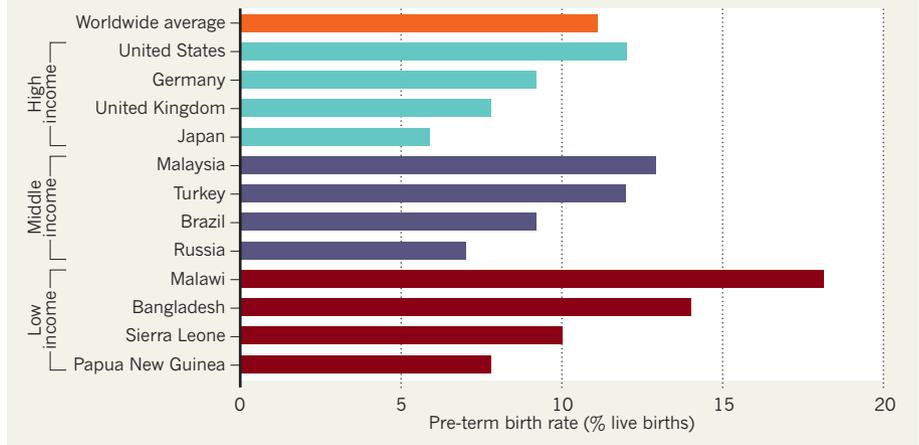
This is the first detailed breakdown and comparison of premature birth rates country by country, compiled from records at national registries and health-care centres, and applying consistent definitions, says Elizabeth Mason, a public-health specialist at the WHO in Geneva, Switzerland, who is a co-author of the report. The researchers hope that their three-year study will encourage countries to take steps to improve survival rates. "We use the evidence to derive policy and action. We don't believe in research for research's sake," Mason says.

The survey estimated that 15 million premature babies are born each year, of which more than 1 million will die. Pre-term births range from a low of 5–6% of live births in Japan and some European countries, including Latvia and Sweden, to more than 16% in many African countries, with a high of 18.1% in Malawi (see 'Ahead of schedule'). Some high-income countries have surprisingly high rates, such as the United States with 12%. Time-trend data compiled for 65 countries, mostly with high incomes, show that rates are rising in most places, the report says, although the underlying causes differ.

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AHEAD OF SCHEDULE

Figures for a selection of countries surveyed by the World Health Organization show that pre-term birth rates vary widely within and across income groups. Rates are increasing in most countries.



In high-income countries, the causes of premature birth are thought to include mothers delaying childbirth to later ages, the growing use of fertility treatments, which can produce multiple pregnancies, and an increase in obesity and diabetes. Pre-term births by caesarean section, both those that are medically warranted and those done for convenience, also contribute to the increase. In many low-income countries, infections, including malaria and HIV, seem to be at least partly responsible for the increase in premature labour. But much of the trend, especially in Africa, remains unexplained, and more research is needed into the causes, says Mason.

The new data reveal striking disparities in mortality rates across different countries, says Chris Howson, an epidemiologist who co-authored the report on behalf of the child-health advocacy group the March of Dimes Foundation in White Plains, New York. In high-income countries almost 95% of babies born between 28 and 32 weeks will survive, but in low-income countries 70% will die.

The mistaken assumption by health-care workers in low-income countries that nothing can be done for premature babies is one probable reason for the survival gap, says Melissa Gladstone, a paediatrician at the University of Liverpool, UK, who has studied the problem extensively in Malawi. She agrees that affordable countermeasures could cut the death rate due to premature birth.

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One such practice

is 'kangaroo' mother care, in which premature babies are strapped skin-to-skin to their mothers for 24 hours a day, keeping them warm without an incubator. In addition, steroid injections for mothers entering premature labour, which trigger a fetus's lungs to mature rapidly, cost about US\$1 and can be given at a rural clinic. The report argues that most of the reduction in neonatal mortality in the United States and United Kingdom over the past 70 years resulted from better obstetric and neonatal care and pre-dated the introduction of expensive neonatal intensive-care units.

Yet many poor countries will struggle to introduce even such simple measures, says Gladstone. "Staffing and motivation is a huge problem," she says. Underpaid nurses, often caring for dozens of children, may lack the time and inclination to explain and supervise kangaroo mother care, for example. Enis Baris, a public-health specialist at the World Bank who has studied improvements in neonatal outcomes achieved by Turkey, a middle-income country, says that implementing such measures will take strong leadership by government officials.

The lesson from developed countries is that governments tend to act in response to the advocacy of bereaved parents, says Joy Lawn, a paediatrician at Save the Children in Cape Town, South Africa, who points to the success in raising awareness of parent-founded groups such as the March of Dimes in the United States and Tommy's in the United Kingdom. "An African woman cares just as much if she's lost her baby, but her voice hasn't been heard," Lawn says. ■