

Conceiving and dying in Afghanistan

Since the first International Safe Motherhood Conference in 1987, there has been increased focus on maternal health and maternal mortality. The design and implementation of effective programmes for maternal health require data of adequate quality, despite the challenges of generating such data.¹ Typical approaches have produced data of low quality and limited usefulness.² Therefore, Linda Bartlett and colleagues' report in today's *Lancet* is of particular merit for its use of rigorous methodology. The methodology of the reproductive-age mortality study (RAMOS), while costly and cumbersome, represents the gold standard for measuring maternal mortality.³ Bartlett and colleagues should be commended for their efforts, under difficult circumstances, to identify all deaths in women of reproductive age in the study area and further assess whether the deaths were due to maternal causes.

With their two-stage methodology, Bartlett and colleagues recorded 154 maternal deaths in a population of more than 90 000, a national maternal mortality ratio of 1600–2200 maternal deaths per 100 000 livebirths in

Afghanistan, and 6500 maternal deaths per 100 000 livebirths (in Badakhshan province)—the highest maternal mortality ratio ever reported. Maternal mortality, compared with other causes of mortality, remains a relatively rare event, and for this reason is commonly expressed per 100 000 rather than per 1000. This relative rarity often results in wide confidence intervals around estimates of the maternal mortality ratio. Yet the confidence intervals around the maternal mortality ratios reported by Bartlett and colleagues are narrower than other similarly derived maternal mortality estimates.³

Reduction of maternal mortality remains a global-health priority for many reasons. Disparities in maternal mortality are one of the most striking health differences between developed and developing countries, with maternal mortality ratios often 20-fold higher in poorer countries. Because death from maternal causes is unique to women, environments in which women's status is low and their political will is limited can hold back bold initiatives in maternal health. Finally, while obstetric

See [Comment](#) pages 821, 822, and 825

See [Articles](#) page 864

See [Series](#) page 891

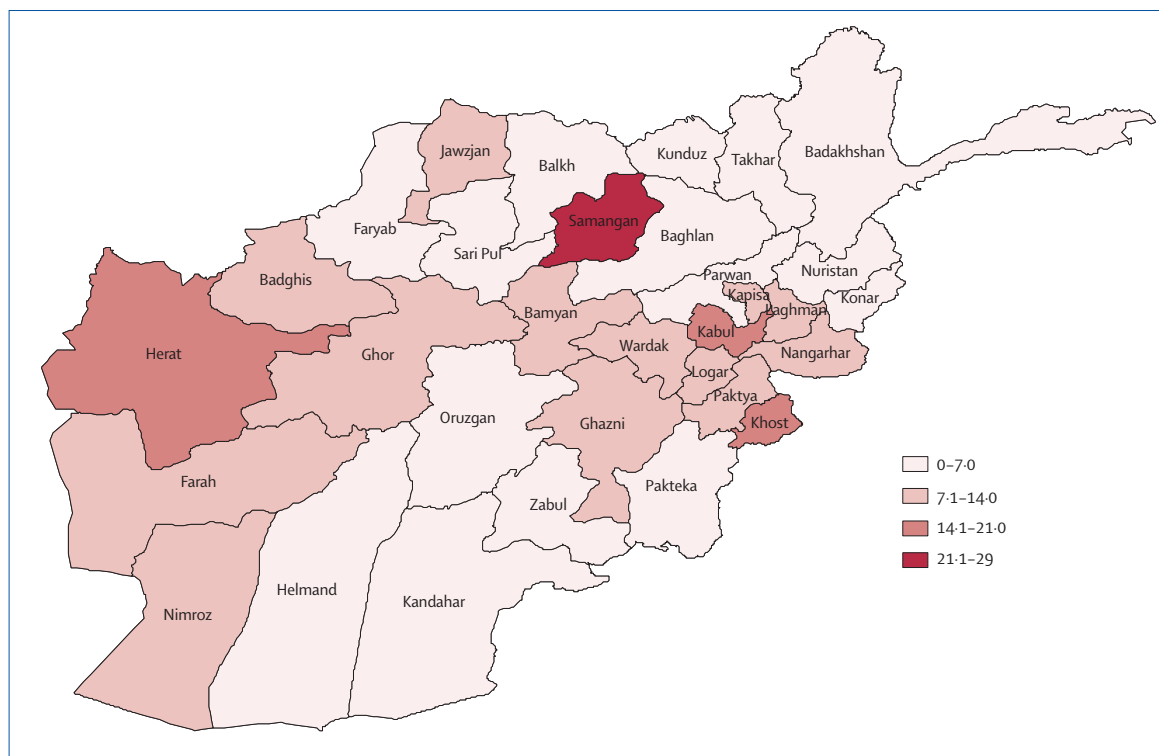


Figure: Deliveries in Afghanistan attended by doctor, nurse, or midwife
UNICEF MICS survey, 2003.

complications are rarely predictable, most maternal deaths are preventable, especially with skilled care at birth. Indeed, Bartlett and colleagues show that 78% of the reported maternal deaths could have been prevented. Together, these factors offset the rarity of the event and raise the profile of initiatives to prevent maternal mortality. These types of studies are crucial as benchmarks of progress in efforts to meet the Millennium Development Goal of a three-quarters reduction in 1990 levels of maternal mortality by 2015.⁴

The causes of death reported by Bartlett and colleagues are similar to global estimates, with haemorrhage causing the largest proportion of deaths. The predominance of maternal death due to obstructed labour in Badakshan, mostly in women in their first pregnancy, reveals the impact of underlying health conditions such as endemic malnutrition and stunting, which has been shown to affect as much as 59% of the Afghan population.⁵ Bartlett's assertion that improved antenatal care should prevent most deaths is contradicted by their data: the two major causes of death in the study population, haemorrhage and obstructed labour, are neither detected nor managed by routine antenatal care.

The challenge for the post-Taliban Ministry of Public Health in Afghanistan is substantial: address the health problems of a mostly illiterate population with disbursed and poorly equipped facilities staffed by poorly trained personnel. To its credit, reduction of maternal mortality has been a central objective of the Ministry of Public Health.⁶ Policy and programming efforts have been dedicated to developing a platform for improved

maternal health and expanded maternal health services (figure). Indeed, preliminary release of the RAMOS data in 2004 brought substantial attention to maternal health in all levels of the Afghan government.⁷ These data have galvanised support for initiatives within the Ministry of Public Health and in the development community within Afghanistan to reduce maternal mortality. Numbers such as these are alarming and should move all stakeholders in the health sector in Afghanistan, as well as those in the global community, to sustained action to reduce Afghanistan's unacceptable maternal health statistics.

Jeffrey M Smith, *Gilbert Burnham

Johns Hopkins University, JHPIEGO/Afghanistan, Karte Se, Kabul, Afghanistan (JS); and Johns Hopkins Bloomberg School of Public Health, Department of International Health, Baltimore, MD 21205, USA (GB)
gburnham@jhsph.edu

We declare that we have no conflict of interest.

- 1 Graham WJ. Now or never: the case for measuring maternal mortality. *Lancet* 2002; **359**: 701–04.
- 2 Gülmezoglu AM, Say L, Betrán AP, Villar J, Piaggio G. WHO systematic review of maternal mortality and morbidity: methodological issues and challenges. *BMC Med Res Methodol* 2004; **4**: 16.
- 3 World Health Organization. Maternal mortality in 2000: estimates developed by WHO, UNICEF and UNFPA. Geneva: World Health Organization Department of Reproductive Health and Research, 2004.
- 4 World Health Organization. Health in the Millennium Development Goals, July 31, 2002: <http://www.who.int/mdg/goals/en/> (accessed Nov 23, 2004).
- 5 Ministry of Health Public Nutrition Department. Public nutrition policy and strategy: 2003–06. Kabul Transitional Islamic State of Afghanistan, 1383, 2004.
- 6 Ahmad K. After years of war and misrule, Kabul struggles to rebuild. *Lancet* 2003; **362**: 622–23.
- 7 Maternal mortality in Afghanistan: summary of findings from RAMOS 2002, presented at the 3rd National Reproductive Health Workshop, Kabul, Afghanistan, March 16, 2004.

Evidence-based: US road and public-health side of the street

See **Viewpoint** page 904

Making the links between health science and health policy is essential to making the most of societal investments in both of these areas. Groups such as the UK's National Institute for Clinical Excellence (NICE), as Michael Rawlins and colleagues point out in today's *Lancet*, are working on this challenge worldwide. The good news is that the best available science no longer takes 200 years to diffuse into routine practice as it did after early work showed that citrus seemed to prevent scurvy.¹ The bad news is that effective approaches can still take decades to be adopted, while unevaluated, ineffective, or harmful approaches also diffuse into health care and public-health practice.

Consistent with less centralisation in health care and public health in the US compared with the UK, many US groups have roles that are analogous to that of NICE. Entities such as the US Task Force on Community Preventive Services (Community Task Force)^{2–5} base recommendations on systematic evaluations of available evidence. Our group at the US Centers for Disease Control and Prevention provides support to the Community Task Force. Although some health agencies in the US can make explicit links between evidence reviews and policy—eg, the Medicare system bases some coverage decisions on systematic reviews, and the US Food and Drug Admini-