

# Reducing Maternal Mortality in a Context of Poverty

Wim Van Lerberghe and Vincent De Brouwere

## Table of contents

Table of contents .....	1
Reducing Maternal Mortality in a Context of Poverty .....	2
References .....	4

## Reducing Maternal Mortality in a Context of Poverty

Even champions of Primary Health Care have long had a blind spot for the plight of mothers at childbirth. Only in the mid-eighties activists and enlightened professionals started mobilising around this poorly documented, underestimated and neglected tragedy: *“Every four hours, day in, day out, a jumbo jet crashes and all on board are killed. The 250 passengers are all women, most in the prime of life, some still in their teens...”* (WHO 1986).

Fifteen years after the Safe Motherhood Initiative was launched we have a much clearer picture of what is actually happening throughout the world: figures are more reliable and more readily available. Yet there is little scope for triumphalism. More and better data mean that we now realise that the situation is actually worse than even those who were sounding the alarm bell in the 1980s had been thinking.

These years of efforts, documenting and mobilising have been humbling and often discouraging (AbouZahr 2001, Campbell 2001). The successes are overshadowed by the awareness of the persistence of this tragedy in large parts of the world. Whatever their usefulness may be for other purposes, some of the common-sense activities that had been promoted for decades - risk screening at antenatal consultations, training of traditional birth attendants - proved to be of limited direct effect on maternal mortality (Bergsjø 2001, Bergström & Goodburn 2001, Kolsteren & De Souza 2001). By the time the Safe Motherhood Initiative took stock of ten years of mobilisation in Colombo it had become clear that there were no simple solutions (Starrs & IAGSM 1998). Furthermore, the very real constraints of poverty and lack of resources seemed to make maternal mortality into one of those wicked and untrackable problems that are essentially non-vulnerable. The temptation to sit back and wait with tackling maternal mortality until poverty ‘disappears’ is real. It is not justified.

Most maternal deaths do occur in poor countries, and it is well known that poor countries are also the ones with highest maternal mortality rates. In analogy to the link between poverty and infant mortality the relation poverty-maternal mortality has become part of common wisdom. This being said, there are considerable differences, even among countries that carry similar burdens of poverty, and much of this seems related to poverty-constrained access to care (Kunst & Houweling 2001).

It is obvious to many practitioners that professionalisation of delivery care is a key to reducing maternal mortality (Graham *et al.* 2001, Kowalewski & Jahn 2001). Industrialised countries have halved their maternal mortality in the early 20<sup>th</sup> century through access to professional midwifery care at delivery, and further reduced it to current historical lows through access to effective and safe hospital technology (Loudon 1992). One could imagine trying to reproduce a similar sequence: first develop ambulatory midwifery, and develop hospital care at a later stage. This, would, however, lack political credibility and produce results too slowly: speedy reduction to low levels requires both. Moreover, an exclusive midwifery-based strategy would fuel the latent conflicts between midwives and hospital doctors that have characterised maternal health care in most countries for the whole 20<sup>th</sup> century. It would be an illusion to hope to promote midwifery without the support and commitment or at least the agreement of hospital doctors. Winning the hospital battle for access to quality referral delivery care is crucial from a strategic point of view (Van Lerberghe & De Brouwere 2001).

Where one can combine access to quality primary and referral delivery care (Jahn & De Brouwere 2001) maternal mortality ratios can drop over what is, all things considered, a relatively short time-span. Many industrialised countries halved ratios in 10 years or less halfway the 20<sup>th</sup> century.

*Table 1* shows that developing countries that make a deliberate effort at providing professional delivery care through midwives and hospitals can go as fast.

Table 1. Number of years to halve maternal mortality in selected countries

	From 400 to 200	From 200 to 100	From 100 to 50
In 11-12 years	Thailand '62-'74		
In 9-10 years	Sri Lanka '56-'65	Honduras '68-'78; Malaysia '65-'75	
In 7-8 years		Sri Lanka: '66-'74 Thailand '74-'81	Malaysia '75-'83
In 4-6 years		Chile '71-'77	Thailand '81-'85

Situations abound, however, where there are hospitals with trained professional staff exist, and mortality yet remains staggeringly high. In 1996, for example, Brazzaville had a maternal mortality ratio of 645 per 100,000, university hospital and health care facilities notwithstanding (Le Coeur *et al.* 1998). Too little, too late and too sloppy: delivery care is not a mere matter having a hospital with trained clinicians, it is also a question of how professional staff perform and behave (Bergström 2001, Buekens 2001).

Problems with accountability have often become so prevalent that they are hardly noticed any more. Epidemiological documentation of their impact is hard to come by, although sensitised professionals are more than convinced by the anecdotal evidence of day-to-day field experience. Their intuition is corroborated if one uses the (admittedly crude) aggregate responsiveness scores developed by WHO as proxy indicators of accountability. Responsiveness - in its WHO operationalisation of respect towards the patient (dignity, confidentiality, autonomy) and attention devoted to the client (promptness, quality of environment, access to social assistance and free choice of provider) - has only an indirect a priori relationship to maternal mortality, and in the present state of affairs its measurement is rather crude. Still, in low-income countries, it has an explanatory power that is significantly superior to that of female literacy rate and wealth expressed as GNP-PPP<sup>1</sup> This puts common wisdom on the role of poverty and female literacy into a somewhat different perspective.

What are the implications? It would seem that at a given income level - which is correlated with the availability of services - how well their staff responds to the expectations and needs of their clients does make a difference. In other words, if countries of comparable wealth or poverty have different maternal mortality ratios, this may well have to do not only with the availability of health services, but also with how services relate to their clients.

The whole issue of accountability for performance and for responsiveness is a delicate one for which evidence-based solutions are not readily available. Quality assurance programmes may play a role (Ronsmans 2001), but if history is anything to go by, peer pressure and, more decisively still, client pressure is what makes professionals behave in a responsible and accountable way.

The good news is that even in poor countries health services can make a difference to reduce maternal mortality (Mc Donagh & Goodburn 2001). The bad news is that resource mobilisation alone, however necessary, is not enough. If one wants to tackle maternal mortality, investments in health care will only be really worthwhile if they go along with an investment in the civil society's capacity to build up pressure for accountability.

---

<sup>1</sup> In a multiple stepwise regression of 68 countries with a GNP < 1,000 US\$ per capita, the most powerful independent variable predicting maternal mortality is the score for responsiveness, yielding a total  $r^2$  of 0.53. Female adult literacy rates increase  $r^2$  to 0.61 ( $p < 0.005$ ) and GNP-PPP further to 0.65 ( $p < 0.02$ ).

## References

- AbouZahr C. 2001. Cautious champions: International agency efforts to get safe motherhood onto the agenda. *Studies in Health Services Organisation and Policy*, **17**, 387-414.
- Bergsjø P. 2001. What is the evidence for the role of antenatal care strategies in the reduction of maternal mortality and morbidity? *Studies in Health Services Organisation and Policy*, **17**, 35-54.
- Bergström S. 2001. Appropriate obstetric technologies to deal with maternal complications. *Studies in Health Services Organisation and Policy*, **17**, 175-194.
- Bergström S, Goodburn E 2001 The role of traditional birth attendants in the reduction of maternal mortality. *Studies in Health Services Organisation and Policy*, **17**, 77-96.
- Buekens P. 2001. Over-medicalisation of maternal care in developing countries. *Studies in Health Services Organisation and Policy*, **17**, 195-206.
- Campbell O. 2001. What are maternal health policies in developing countries and who drives them? A review of the last half-century. *Studies in Health Services Organisation and Policy*, **17**, 415-442.
- Graham WJ, Bell JS & Bullough CH. 2001. Can skilled attendance at delivery reduce maternal mortality in developing countries? *Studies in Health Services Organisation and Policy*, **17**, 97-130.
- Jahn A & De Brouwere V. 2001. Referral in pregnancy and childbirth: Concepts and strategies. *Studies in Health Services Organisation and Policy*, **17**, 229-246.
- Kolsteren P & De Souza S. 2001. Micronutrients and pregnancy outcome. *Studies in Health Services Organisation and Policy*, **17**, 55-76.
- Kowalewski M & Jahn A. 2001. Health professionals for maternity services: Experiences on covering the population with quality maternity care. *Studies in Health Services Organisation and Policy*, **17**, 131-150.
- Kunst A & Houweling T. 2001. A global picture of poor-rich differences in the utilisation of delivery care. *Studies in Health Services Organisation and Policy*, **17**, 297-316.
- Le Coeur S., Pictet G., M'Pelé P., and Lallemand M.. 1998 Direct estimation of maternal mortality in Africa. *Lancet* **352**:1525-1526.
- Loudon I 1992 *Death in childbirth. An international study of maternal care and maternal mortality 1800-1950*, Oxford: Oxford University Press.
- Mc Donagh M & Goodburn E. 2001. Maternal health and health sector reform: opportunities and challenges. *Studies in Health Services Organisation and Policy*, **17**, 371-386.
- Ronsmans C. 2001. What is the evidence of the role of audits to improve the quality of obstetric care? *Studies in Health Services Organisation and Policy*, **17**, 207-228.
- Starrs A. & IAGSM. 1998. *The Safe Motherhood Action Agenda: priorities for the next decade*, Report on the Safe Motherhood Technical Consultation, 18-23 October 1997, Colombo, Sri-Lanka. New York: Inter-Agency Group for Safe Motherhood.

Van Lerberghe W & De Brouwere V. 2001. Of blind alleys and things that have worked: History's lessons on reducing maternal mortality. *Studies in Health Services Organisation and Policy*, **17**, 7-34.

WHO 1986 Maternal mortality: helping women off the road to death. *WHO Chronicle*, **40** (5): 175-183.