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Challenges in measuring maternal mortality

In today's *Lancet*, Kenneth Hill and colleagues from the Maternal Mortality Working Group present new estimates of maternal mortality for 2005, and examine trends in such mortality since 1990.¹ The authors estimate that there were nearly 536 000 maternal deaths in 2005, mostly in sub-Saharan Africa and Asia.

In an environment that demands results-based approaches to development assistance, and which uses the Millennium Development Goals (MDGs) to motivate donor assistance and global action,^{2,3} it is hard to argue against Hill and colleagues' efforts in their calculations of global and country estimates for maternal mortality. But even without the relatively recent renewed focus on impact and outcomes at the global level, country-level estimates of outcome measures, such as maternal mortality, child mortality, fertility rates, and nutritional status, are crucial for understanding the nature of problems in the health sector, for planning and prioritising interventions or policy directions, and for setting targets. To the extent that the global community and national actions require such efforts in measurement, the Maternal Mortality Working Group is to be commended for tackling what is arguably the most difficult of the MDG health indicators to measure, maternal mortality.

What stands out beyond Hill and colleagues' main findings, however, is that years after the launch of the MDG agenda, a crucial indicator such as maternal mortality remains so difficult to measure. The honesty of the authors, about the difficult methodologies used and the guesswork that continues to play too large a role, points to the continued challenges faced by countries and the global health community in measuring this important outcome. This failure comes from the inability of national health programmes to measure and explain the

causes of maternal mortality, and the limited success of the donor and development community in helping countries strengthen national health-information systems.

To be fair, a large part of the problem here is the nature of the outcome measure in question. Even in countries with high mortality and in demographic transition, maternal mortality is a rare event from a statistical point of view, which makes it hard to measure in surveys. This fact argues for the need to build better national information systems. But, as Hill and colleagues imply, such systems remain weak even in countries that are developing at a fast pace (eg, India and China).

We find ourselves in a situation in which a global effort, defined mainly by measuring outcomes and outputs (the MDGs), is unable to measure a crucial outcome and not likely to do so with any confidence at the national level for the foreseeable future. It is highly likely that, 5 years from now, the agencies that sponsored Hill and

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colleagues' work will find themselves yet again reporting on maternal mortality at the global and country level by using tortuous statistical techniques and educated guessing.

A simple, and some would argue bad, solution could be to drop maternal mortality as a measure on the global agenda and replace it by some proxy measures for maternal health. The reproductive health community has been trying to find such proxies, but without too much success to date.⁴ A more difficult alternative, although much more time and resources would be needed, would be to intensify efforts to build national capacity for countries to develop reliable information systems that can at least measure crucial health outcomes, explain their causes, and track national responses.

This is an exciting time in global health. Initiatives by the UK and Norway are providing real hope for a more rational approach to development assistance in health, by moving away from fragmentation to stronger coordination and harmonisation and for renewing the focus on health systems.^{5,6} The Bill & Melinda Gates Foundation is investing considerable resources in systems, including measurement.⁷ Bilateral and multilateral agencies are collaborating far more than in the recent past, and are re-emphasising work on health systems. The interagency support and authorship of the

paper by the Maternal Mortality Working Group provides hope that the new environment of collaboration is real. But the difficulty in coming up with the estimates of maternal mortality shows how far we are in many countries from having national health systems that can measure problems, much less solve them.

Abdo S Yazbeck

Health and AIDS Program, World Bank Institute, World Bank, Washington, DC 20433, USA
Ayazbeck@worldbank.org

I declare that I have no conflict of interest.

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Rethinking interventions for women's health

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Since its birth in 1971, Bangladesh has made impressive progress, especially in the social sector. The population has doubled, but fortunately the trebling of food production has contained the food shortages and famines that previously characterised this land. Net enrolment in primary schools has exceeded 85%, and the gender gap has disappeared. Both infant mortality and total fertility rates have more than halved. Life expectancy has risen by 50%, with women now living longer than men. Such gains have benefited disproportionately groups that were hitherto marginalised, such as women and poor people.^{1,2}

How did these gains occur? Bangladesh has seen many good public-health interventions, such as oral rehydration therapy, immunisations, vitamin A distribution, clean water, and family planning, along with increased national commitment to reduction of inequities, as

described in the Poverty Reduction Strategy Papers³ and other documents. Actions that favour marginalised groups, such as a stipend for girls in schools and a food incentive to attend school for pupils from poorer families, have also contributed to a reduction of inequity. The independence war defeated religious dogmatists, effectively ending their resistance to new ideas such as family planning and emancipation of women. Then came the rise of non-governmental organisations that promoted progressive values and that scaled up their interventions for women's empowerment, education, health, and family planning to reach the whole nation.

The country has also seen decreased maternal mortality. In today's *Lancet*, Mahbub Chowdhury and colleagues' report on the reduction in maternal mortality in Matlab, Bangladesh.⁴ Their report is interesting not only because they document an absolute decrease but