Christine Edwards reviews the failure to improve maternal health

Photo: Wellcome

MDG 5 – saving the lives of mothers

key points

Millennium Development Goal 5 seeks by 2015 to have reduced maternal mortality by 75% from 1990 levels and to achieve universal access to reproductive health. It is probably the most off-target of all the MDGs.

Mortality and morbidity are quantified, and 'three delays' postulated to explain maternal mortality: in deciding to seek health care, in reaching the facility, and in receiving care once at the facility.

Faith based organisations do better than government hospitals, and the success of an integrated functioning health system in the LAMB project in Bangladesh is described.

MDG 5

Millennium Development Goal 5 aims to improve maternal health, and has two targets:

- to reduce maternal mortality by 75% between 1990 and 2015
- to achieve universal access to reproductive health by 2015

The two key indicators for monitoring the progress towards the first target are the maternal mortality ratio (MMR) and the proportion of births attended by skilled health personnel.

The second is monitored by the contraceptive prevalence rate, the adolescent birth rate, antenatal care coverage, and the unmet need for family planning.

Recent reports [1,2] explain the difficulty of obtaining current data, but all but 12 of the 68 nations working towards these goals still have 'high or very high' MMRs, and in some cases these may actually be rising. [3] The consensus is that MDG 5 is the most off-target of all the MDGs.

Four explanations are proposed, although the situation is too complex for any one to be the entire answer:

- Economics
- Political instability
- International donors and governments preferentially fund other health and development priorities
- Poor governance and corruption

A jumbo jet crashes, killing all on board. International headlines, major investigations, review of protocols, etc. Yet every day the equivalent of three 747 jets of women die as a result of pregnancy and childbirth, more than 500,000 women a year, and it rarely hits the headlines.

An estimated 300 million more live with complications related to childbirth including chronic infection, infertility, prolapse, and the shame and isolation caused by vesicovaginal fistulae. The vast majority are in low-resourced countries. The lifetime risk of dying of pregnancy-related causes is 1 in 3,800 in the UK against 1 in 6 in Afghanistan. Along with the mothers the babies die too, either during birth or due to a subsequent lack of breast milk and care. Four million babies a year die in the first month of life, yet 70% of avoidable neonatal deaths could be averted through access to adequate maternal health services.

Why are these women dying?

The straightforward medical answers are haemorrhage, pre-eclampsia/eclampsia, infection (including HIV), obstructed labour, and unsafe abortion. Nearly 20 million unsafe abortions are undertaken each year, resulting in 70,000 maternal deaths, [4] though this important, if contentious, issue is beyond the scope of this article.

Nevertheless, we do know how to reduce this awful toll. The maternal mortality ratio (MMR) for England and Wales in 1934 was 441 per 100,000 live births. [5] It went down to 87 in 1950, 39 in 1960, and is just 7 today. [6] The regional MMRs for South Asia and sub-Saharan Africa are 560 and 940 respectively. [7]

The main reasons for the reductions in the UK MMR over the last 75 years were universal midwifery care, antibiotics, safe caesarean sections, and blood transfusion. We know the medical reasons for maternal mortality, and in the majority of cases we know how to prevent and treat them to save lives.

Yet despite this understanding, and while some progress has been made in reducing maternal mortality in the poorest nations, many low income countries are still struggling to achieve MDG 5. So why are these mothers dying unnecessarily?

Three delays

Deborah Maine proposed the 'three delays model' which leads to maternal mortality:[8]

Delay 1: delaying the decision to seek care

This is multifactorial and in many ways the most challenging to address. It includes:

- beliefs concerning health – eg eclampsia being regarded as demon possession and therefore needing spiritual rather than medical attention
- beliefs concerning pregnancy – eg the pregnant woman being vulnerable to evil spirits, thus restricting travel out of the home
- traditions and socio-cultural constraints. In many countries most deliveries occur at home, mostly without trained birth assistance. 75% of deaths occur within 24 hours of delivery
- lack of confidence in the maternal healthcare systems
- in some resource-poor settings women are last to receive the limited family resources, so expenditure on maternal healthcare is not prioritised

Delay 2: delay in reaching the healthcare facility

This includes financial, transport and terrain constraints; eg in Ethiopia 75% of people live two days' walk from the nearest road which may then be many miles away from a functioning healthcare facility.

Delay 3: delay in receiving care once at the facility

All too often health centres are so poorly resourced that the woman is subjected to further delay in care because of a lack of supplies and trained staff. This of course reinforces the lack of confidence in the healthcare system.

Only about half of the 123 million women who give birth each year receive the antenatal, delivery and newborn care they need.[9] An additional 215 million who wish to avoid pregnancy do not have access to modern, reliable methods of family planning.

What is needed?

Pregnancy is not a disease and 80% of pregnancies and deliveries are normal. However, all pregnant women are at risk of developing complications, most of which can neither be predicted nor prevented. When a complication develops the woman – and her baby – need prompt access to appropriate emergency obstetric care. Making this accessible to all is the challenge confronting MDG 5. There is a growing consensus that access is needed to an integrated functioning health system which provides for women's care as and when needed.[10]

Gill and Carlough[11] reviewed the literature on mission hospitals and other faith based organisations (FBOs) and concluded that the care provided is often better than in government hospitals. There are many reasons for this, including more resources, commitment to and provision of training, and flexibility in procuring medicines and equipment. They recommend increased collaboration between governments and FBOs, and international funding to encourage effective partnerships.

Case study – LAMB integrated rural health and development project, north west Bangladesh.

Established in the 1970s, LAMB[12] currently works with approximately 700,000 people, among whom it has developed an integrated maternal health system to provide appropriate, accessible and affordable health services for the poor, through a 'household to hospital' continuum of care.

The heart of LAMB's ethos is that men and women are created equally 'in the image of God',[13] and therefore maternal and child healthcare is an issue of justice. These values are explored in women's groups, and in all educational encounters with the community.

The primary health care workers are village volunteers, selected by their own community, and each responsible for 100 households. They link women with antenatal care, birth planning, postnatal care and family planning. Birth planning is an essential component and is part of addressing the 'first delay'.

The next cadre of healthcare providers are the community Skilled Birth Assistants (SBAs) who are trained in antenatal and postnatal care, safe delivery, recognising danger signs and providing obstetric first aid and neonatal care.

The communities run their own Healthcare Centres and in 17 areas these also incorporate Safe Delivery Units staffed by SBAs.

The 'third delay' is addressed through a 150 bed general hospital which provides 24/7 comprehensive emergency obstetric care.

There has been a 26% reduction in maternal mortality in LAMB-served areas,[14] and MMR is 133 per 100,000 live births, against a national ratio of 320.

Conclusion

Much remains to be done, both in Bangladesh and globally, if the MDG to reduce maternal mortality by 75% by 2015 is to be achieved. Efforts need to be targeted across the board – from building relationships of trust and accountability locally, through to stimulating political will to bring about change. M Fathalla, past president of the International Federation of Obstetrics and Gynaecology, has stated 'Women are not dying of untreatable diseases; they are dying because societies have yet to make the decision that their lives are worth saving'.[15] Jesus treated women with dignity and respect, in a time and culture that did not. As his followers, we need to be passionately engaged, stimulating the debate at all levels.

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Photo: PA

So why are these mothers dying unnecessarily?

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