Making little progress to Millennium Development Goals 4 and 5 for maternal and child health: a personal perspective from Uganda

Katie M Moynihan

The Millennium Development Goals Report, 2010

“Child deaths are falling, but not quickly enough to reach the target.”
“Most maternal deaths could be avoided.”

True stories

WHERE WE ARE NOW IN TERMS OF HEALTH SERVICE DELIVERY SHOULD BE MEASURED AGAINST WHERE WE HAVE COME FROM AND NOT WHERE WE IDEALLY SHOULD BE. A LOT OF PROGRESS HAS BEEN MADE.
Mary L Nannono, Permanent Secretary at Uganda’s Ministry of Health, 2008

What are the Millennium Development Goals for maternal and child health and where does Uganda stand in achieving them?

Millennium Development Goal (MDG) 4 aspires to a global target of a two-thirds reduction by 2015 in the mortality rate of children aged under 5 years. For Uganda, this means a decrease to below 56 deaths per 1000 live births; however, the rate only declined from 186 to 135 deaths per 1000 live births during the period 1990 to 2008.8 Globally, neonatal mortality accounts for 38 per cent of deaths in children aged under 5 years; hence, a substantial reduction in neonatal deaths is necessary if this goal is to be attained.4 A 2006 Ugandan survey reported a perinatal mortality rate (comprising the stillbirth rate and early neonatal mortality rate) of 36.3 per 1000 pregnancies.9 This amounts to 44 500 newborns dying and 45 100 stillborn babies each year.7 Childhood is the time of greatest lifetime risk of mortality for a mother and her baby. Intrapartum complications account for an estimated 42% of the world’s 358 000 annual maternal mortality rate (MMR). Sub-Saharan Africa contributes 57% to the world’s annual MMR.8 The first target of MDG 5 is to reduce the MMR by three-quarters before 2015, equivalent to a reduction in 131 deaths per 100 000 live births in Uganda — the estimated MMR is currently 435 deaths per 100 000 live births.7 A 2005 study estimated the MMR at 645 deaths per 100 000 live births at the National Referral Hospital, my workplace.10 Many obstetric and newborn complications can be prevented or successfully managed with prompt interventions. The Lancet Newborn Survival Series demonstrated that skilled clinical care could effect a reduction in neonatal mortality rates of up to 72 per cent.11 Timely identification and management of childbirth complications is paramount, and while more mothers and newborns die during this period than at any other, coverage and quality of care often remains inadequate in resource-limited settings.12 It is also important to note that with gross under-reporting (deaths at home or en route to hospital are often not recorded), the true figures are undoubtedly substantially higher.

However, Uganda’s slow progress towards MDGs 4 and 5 has put the spotlight firmly on maternal and child health delivery. The government has responded by developing a national roadmap to accelerate the reduction of maternal and child mortality and morbidity. It has been placed high on the political agenda and, with the country’s upcoming elections in February 2011, all major political parties in the country are promising to make maternal and child health a priority. In addition, the World Bank in May 2010 released a new 5-year action plan to help poor countries reduce their maternal and child deaths. Uganda is one of the sub-Saharan African countries targeted. There is hope that, with time, Uganda will achieve the aim of the United Nations 2009 global consensus on maternal, newborn and child health: to have “every pregnancy wanted, every birth safe and every newborn and child healthy”.13

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I am now coming to the end of a 6-month sabbatical in Uganda. I am an Australian doctor training in paediatrics under the Royal Australasian College of Physicians. I also intend to train in anaesthesia. I decided to take a year-long break from the training scheme to do humanitarian aid work in a developing country, and my first day at the Kampala hospital theatre was particularly disappointing — six emergency caesarean sections resulted in two fresh stillbirths, one macerated stillbirth and two admissions to the special-care baby unit. We hand-ventilated one baby for an hour because there was no mechanical ventilator. Later that afternoon, the baby stabilised on continuous positive airway pressure, but died overnight. My colleagues and I decided to undertake a 1-month audit to review maternal and neonatal outcomes: were anything be done about them? The maternal mortality rate in my sample of 435 was 1%, the stillbirth rate was close to 7% (equivalent to the hospital’s 1968 rates14) and mothers waited on
average for 5 hours for the emergency procedure. Reasons for delays included staff unavailability, a lack of running water, a non-functional autoclave (and hence no sterile drapes and gowns), and no spinal needles or drugs for spinal anaesthesia. As a result of the audit, the hospital expedited the building of two new obstetric and gynaecological operating theatres and undertook to ensure that highly qualified and experienced staff ran them.

Mothers are advised to bring a delivery pack when they come to hospital — not a dressing gown, slippers and baby clothes, but their own cannulae, sterile swabs, suture materials and 10 packets of sterile gloves, in case the hospital supply runs out. During my second week, a woman in her seventh pregnancy joined the section queue. Her indication for surgery was obstructed labour at 38 weeks gestation, with a “poor obstetric history” that translated as six previous stillbirths. She waited patiently in line but when it was her turn there were no gloves in stock and she had brought only one packet. She waited while women with gloves had their procedures. Her blank emotionless expression when the surgeons told her over the drapes that her baby was stillborn will remain with me forever. How can this hospital function as a comprehensive emergency obstetric care provider when caesarean section priority relates to the number of gloves the patient can supply rather than the underlying urgency of surgery?

My responsibility for a 23-bed children’s ward (often with two to three patients per bed) in rural Uganda also brought me many challenges. At this hospital, one difficult day started with a mother in obstructed labour who delivered her baby with shoulder dystocia. During our attempt to resuscitate the baby, there was a power failure and, as there was no fuel for the back-up generator, the oxygen concentrator did not work. The oxygen cylinders were empty, so there was no oxygen in the hospital. Sadly, we were unable to save the baby. The same day, a 4-day-old twin died of jaundice because our phototherapy machine was broken and the parents could not afford to travel to another hospital. Then the mother decided to discharge herself from hospital with her surviving twin, also jaundiced and on intravenous antibiotics, and consult a traditional healer.

I remember a 3-year-old patient referred from a larger regional centre to our rural hospital for a blood transfusion because there was “no blood available”. The child’s haemoglobin level was 2 g/dL and she was in severe respiratory distress. I was confused by the cross-match form and unit number noted in her case notes, yet the clearly documented reason for transfer was “no blood available”. The mother reported that, while she and her daughter were at the regional centre, another child, as sick as her own, had arrived whose need for the blood, already cross-matched for our patient, was decided to be the more urgent because his or her mother could contribute money.

As health care practitioners, we make decisions that are generally evidence based and (hopefully) in the patient’s best interests. A premature neonate, with a gestational age of 27 weeks, had been labelled a “fighter” after surviving 3 days on only a whiff of oxygen. This was going to be a success story for Africa — the survival of a premature baby. One night, a 6-month-old boy presented in severe respiratory distress when the oxygen concentrator was away being repaired and the only oxygen cylinder that wasn’t empty (it was one-quarter full) was with the fighter, who hadn’t tolerated a trial on room air. Reluctant to take oxygen away from her, I told the mother of the boy that I had done all I could. He died 3 hours later and I could hear the mother wailing from my room. The next day, the condition of the fighter on oxygen therapy suddenly deteriorated and I was unable to revive her. Had I made the wrong decision? Hindsight is a torment for one’s conscience. However, the oxygen dilemma prompted us to adapt the oxygen tubing so that two children could receive low-flow oxygen at the same time.

When I received my first Ugandan arrest call, I ran to the bedside. Almost 5 minutes after I arrived, the suction and some monitoring equipment appeared. Oxygen was not available until later and we also had to wait for resuscitation drugs. The outcome was poor, both for the patient and my confidence. After my third resuscitation call, I didn’t run any more. I walked “mpola mpola” (slowly, slowly) with the rest of the team to the bedside. The next day, the condition of the fighter, who hadn’t tolerated a trial on room air, was with the fighter, who hadn’t tolerated a trial on room air. Reluctant to take oxygen away from her, I told the mother of the boy that I had done all I could. He died 3 hours later and I could hear the mother wailing from my room. The next day, the condition of the fighter on oxygen therapy suddenly deteriorated and I was unable to revive her. Had I made the wrong decision? Hindsight is a torment for one’s conscience. However, the oxygen dilemma prompted us to adapt the oxygen tubing so that two children could receive low-flow oxygen at the same time.

So far I have painted a somewhat bleak picture, but there were good days and successes. A 6-week-old girl was brought in with respiratory distress when the oxygen concentrator was away being repaired and the only oxygen cylinder that wasn’t empty was one-quarter full. I walked “mpola mpola” (slowly, slowly) with the rest of the team — arrests are difficult to manage without basic equipment, and usually fatal because of delayed treatment.

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improved outcomes while there is such a disparity between demand and supply, between concept and reality. Reliable running water and electricity; hospital supplies like basic disposables, oxygen, and blood for transfusion; and adequate staffing and staff training are essential requirements for emergency obstetric and paediatric care. My story highlights that if basic hospital facilities were improved and some systemic delivery deficiencies overcome, more progress towards the MDGs 4 and 5 in Uganda and all of sub-Saharan Africa would be made. Ensuring that 90 per cent of African mothers and newborns have access to the essential interventions already written into policy would cost a very affordable US$1.39 per capita.\textsuperscript{15}

**Competing interests**

None identified.

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**References**


(Received 4 Aug 2010, accepted 7 Nov 2010)