

**Meeting MDGs 4 & 5:
the crisis
in human resources for health**

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“Women are not dying because of diseases we cannot treat. They are dying because societies have yet to make the decision that their lives are worth saving.”

Prof. Mahmoud Fathalla, 1997



But:

Maternal deaths amount to about half a million per year and constitute only a small fraction (approx 7%) of all pregnancy-associated deaths: the tip of a non-recognized ice-berg.

The magnitude of the problem of pregnancy-associated deaths:

Approximately 4 million stillbirths are directly caused by maternal disease and poor delivery care.

The magnitude of the problem of pregnancy-associated deaths:

Approx. 3 million early neonatal deaths are directly caused by maternal disease and poor delivery care:

- preterm birth (1 million)**
- asphyxia (1 million)**
- congenital infection (1 million)**



The magnitude of the problem of pregnancy-associated deaths:

In addition to these 7 million deaths there are the half a million maternal deaths, in total 7.5 million deaths associated with poor maternal care.

Recent, approximate figures (WHO):

All aids deaths per year 2.1 millions

All TB deaths per year 1.6 millions

All malaria deaths per year 1.3 millions

Together approx. 5 million deaths

The magnitude of the problem of pregnancy-associated deaths:

7.5 million annual deaths associated with poor maternal care implies 20,000 deaths every day

**This is precisely the link
between MDG 4 and MDG 5**

Harvard University/Joint Learning Initiative:

HUMAN RESOURCES

FOR HEALTH

OVERCOMING THE CRISIS

Africa has 10% of the world's population but only 1% of the world's doctors, nurses and midwives

African countries train about 5,000 doctors per year

European countries train about 175,000 doctors per year

Non-physician clinicians

(“NPCs”)

**Non-physician clinicians in 47
sub-Saharan African countries**

Mullan F, Frehywot S

The Lancet, published online June 14, 2007

**NPC training systems are
established in 53% of African
countries studied**

**But major obstetric surgery by
NPCs are allowed
only in three African countries:
Tanzania, Mozambique and
Malawi
[Zambia & Ethiopia to be added]**

**Current research project between
Karolinska inst (IHCAR) and Columbia
university (AMDD* program):**

**”Assessment of emergency obstetrical
care provided by assistant medical
officers trained for surgery in
Mozambique, Tanzania, Malawi,
Burkina Faso and Zambia”**

***Averting Maternal Death and Disability**

**Which is the quality of
obstetrical care provided by this
category of staff?**

First study

**A comparative study of
caesarean deliveries by assistant
medical officers and
obstetricians in Mozambique**

**Caetano Pereira , Antonio Bugalho,
Staffan Bergström, Fernando Vaz, Manuel Cotiro**

Brit J Obst Gyn 1996;103:508-512

Second study

**Training medical assistants for
surgery**

**Fernando Vaz, Staffan Bergström, Maria da Luz
Vaz, José Langa and Antonio Bugalho**

Bulletin of the WHO 1999;77:688-691.

Third study

**Economic evaluation of surgically
trained assistant medical officers in
performing major
obstetric surgery in Mozambique**

**Margaret E. Kruk, Caetano Pereira,
Fernando Vaz, Staffan Bergström,
Sandro Galea**

Brit J Obstet Gyn, 2007;114:1253–1260

Fourth study

**Meeting the need for emergency
obstetrical care in Mozambique:**

**Work performance and work histories of medical
doctors and assistant medical officers trained for
surgery.**

**Caetano Pereira, Amelia Cumbi, Raimundo Malalane,
Fernando Vaz , Colin McCord,
Alberta Bacci , Staffan Bergström**

Brit J Obstet Gyn 2007;114:1253–1260

Fifth study

Major surgery delegation to mid-level health practitioners in Mozambique: health professionals' perceptions

**Amelia Cumbi ,Caetano Pereira, Fernando Vaz ,
Colin McCord, Alberta Bacci , Staffan Bergström**

Human Resources for Health 2007;7:27-35.

Sixth study

**Postoperative outcome of
caesarean sections and other
major emergency obstetric
surgery by clinical officers and
medical officers in Malawi**

**Garvey Chilopora, Caetano Pereira,
Francis Kamwendo, Agnes Chimbiri,
Eddie Malunga, Staffan Bergström**

Human Resources for Health 2007, 5:17

Seventh study

**Emergency obstetrical surgery
by non-physician clinicians in
Tanzania: an inventory of
38,758 deliveries**

**Caetano Pereira, Godfrey Mbaruku, Calist
Nzabuhakwa , Staffan Bergström, Colin McCord**

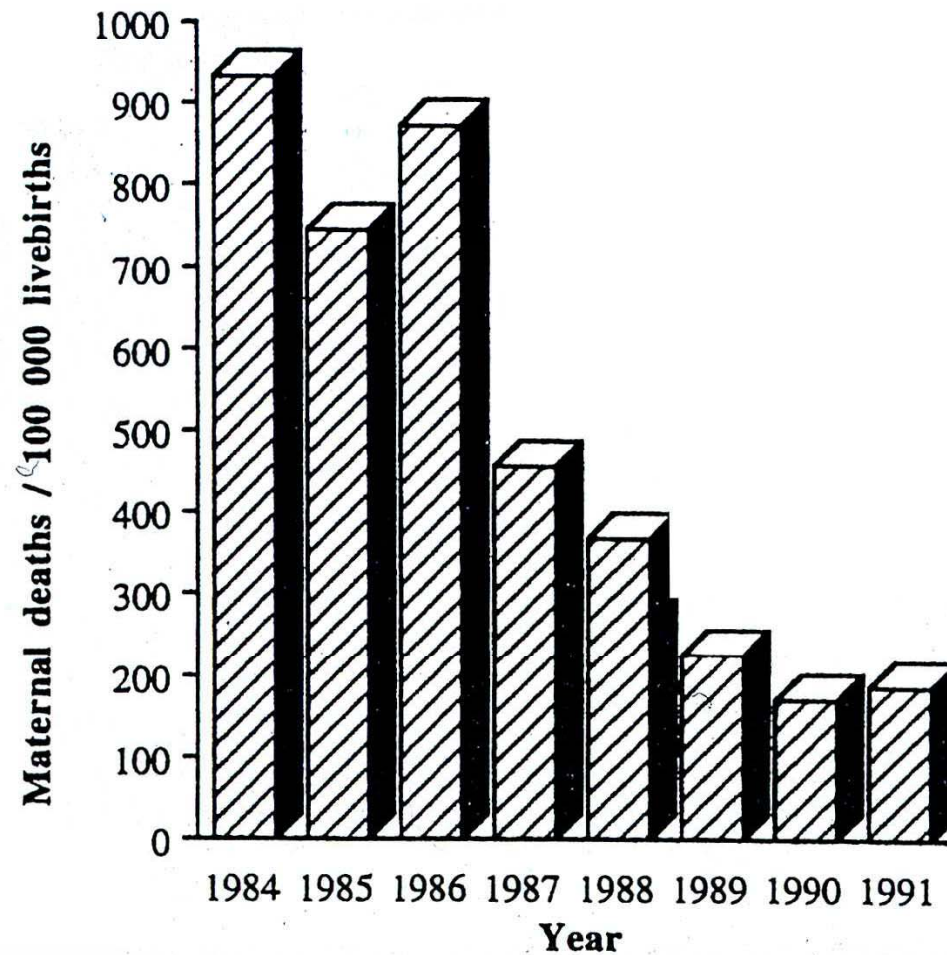


Figure 1. Development of registered maternal deaths per 100 000 livebirths at the Kigoma Regional Hospital, Tanzania 1984-1991. The intervention programme was launched in 1987.

Conclusion:

Non-physician clinicians (NPCs) in Mozambique, Malawi and Tanzania carry most of the burden of life-saving emergency obstetric care, particularly caesarean sections, with adequate skills in the countries investigated.

Is this enough?

**Mozambique is now
the first country in the world
to train specialised midwives to
perform major obstetric surgery**





