

Challenges to global health: getting what works to those who need it

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Progress towards MDG's

- Better health outcomes depend on :
 - a) effective interventions;
 - b) health systems to deliver those interventions; and
 - c) policies & strategies that set out how resources will be mobilized and deployed sustainably.
- Progress is being made, but is unequal and fragile
- Conflict-affected and fragile states are furthest away from achieving the MDGs.

Accelerating progress towards the health-related Millennium Development Goals, World Health Organisation, 2010

Maternal mortality, Afghanistan



Maternal mortality, Afghanistan

- 2nd highest in world
(1600/100,000 births)
(Australia : 8.5/100,000)

Maternal mortality in such settings

Existing information

- Very little data on current levels , but likely to be areas with highest levels globally
- Reported figures (where they exist) are usually national/regional level.
- 2005 study in Afghanistan : Maternal mortality ratios of 6507 (range 5026-7988) in the most remote province, compared to a maternal mortality ratio of 418 (235-602) in Kabul, the capital ¹.

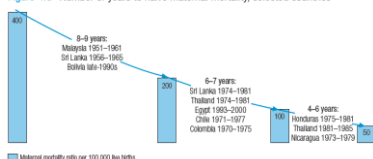
1. Bartlett et al, Where giving birth is a forecast of death: Maternal mortality in four districts of Afghanistan, 1999-2002, Lancet 2005; 365: 864-70

Addressing maternal mortality

The countries that have successfully managed to make motherhood safer have three things in common ^[1]:

1. Policy-makers were confronted with data.
2. Implemented comprehensive strategies
3. Ensured access for the entire population

Figure 4.3 Number of years to halve maternal mortality, selected countries



[1] De Brouweren V, Van Lerberghe W, eds. Safe motherhood strategies: a review of the evidence. Studies in Health Services Organisation and Policy, 17:7-33, 2001.

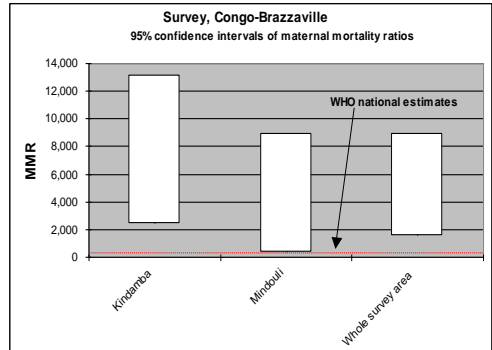
Accepted methodologies : limitations

- Gold standard : vital registration
 - Not implemented in such areas
- National surveys (e.g Demographic and Health surveys)
 - Not representative of highest-risk sub-regions
- Sisterhood surveys ^[1]
 - Measures centered in the past
 - Needs stable population

[1] Graham, W., Brass, W. and Snow, R.W. Indirect estimation of maternal mortality: the sisterhood method. *Studies in Family Planning*, 1989, 20 (3):125-135.

Pilot survey in Congo-Brazzaville

- Primary objective : measure morbidity and mortality in Pool region, Congo-Brazzaville.
- Secondary objective : maternal mortality
 - Rapid health and mortality assessments commonly used and feasible in such settings
 - Initial attempt to pilot feasibility /utility of direct measures of maternal mortality in such a study



Survey in Congo-Brazzaville

Impact of findings

- External advocacy tool : disparities between country as a whole and survey area, advocate for health staff, infrastructure
- Internal advocacy tool : human resources (midwife), opened maternity house



HIV / AIDS

PMTCT, Uganda

- 2009: ~ 400,000 children infected with HIV
- Almost all in low/ middle-countries
- > 90% result of mother-to-child transmission
- Interventions exist to reduce MTCT to <1%



Opt-out ANC HIV testing



- ".. possible to virtually eliminate infant HIV infections in high-income countries....Now we must apply the knowledge and tools to create an AIDS-free generation in Africa and the rest of the world."

UNAIDS Executive Director
Michel Sidibi

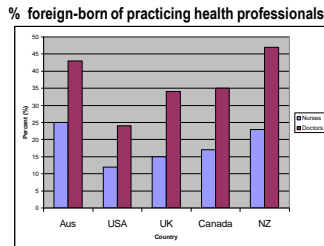
HIV treatment program in rural Zambia

- < half of all clinical officer positions filled
- Attrition due to resignation (32%), death (38%)



Human resources for health: global perspective

- Foreign-trained doctors in OECD countries, as a % of shortage in region of training
 - Africa : 12%
 - Americas : 526 %
 - S-East Asia: 9%
 - East Med: 23%
 - Western Pacific: 652%

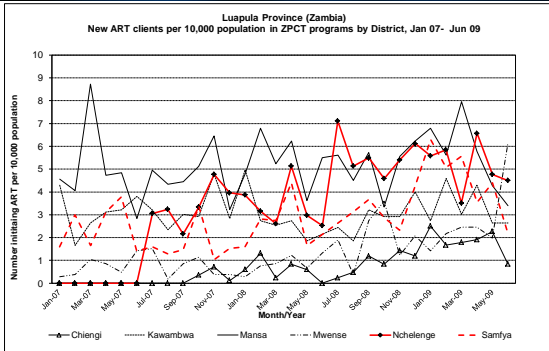


Human resources

- Task shifting
 - Counselling and testing
 - Treatment adherence
- Facilitated by :
 - low cost rapid diagnostic tests
 - Simplified treatment regimes, combination therapy



Capacity building



No prevention without care ?

“ Peter Piot led UNAIDS into initiatives to make ARVs available to all in need. **But this cannot go on at the present rate of spread.** So Sidibe must somehow mobilise the world community to tackle the tricky issue of prevention.”

The Hon Michael Kirby
ANU reporter, Spring 2009



Responding to viral hemorrhagic fever



Hendra (2009-2012)



Since 1994 (when Hendra was discovered) :

| | Lassa | Hendra |
|---------------------|----------------------------------|------------------------|
| Cases | 5-8 million | 15 |
| Deaths | >80,000 | 4 |
| Risk groups | Entire community, health workers | Horse handlers, vets |
| Prevention | Widespread vector control | Good infection control |
| Population affected | West Africa | Queensland /NSW |

So which disease will have a vaccine first?

Hendra vaccine developed, 17 years after first case
 By Mitch Grayson from Rockhampton 4700
 Tuesday, 17/05/2011

A hendra virus vaccine for horses could be available as early as next year. The CSIRO will today announce it has developed a vaccine to protect horses against the deadly virus. The vaccine has passed an initial testing stage. Hendra virus was first identified in 1954 in Brisbane. The virus was responsible for the death of horse trainer Mr. Rail.

Since then 14 horses have been known to contract the virus, all of which have either died or had to be put down. Seven people have been confirmed to have had the virus, four of which have died.

The latest human case killed Rockhampton veterinarian Alistair Rodgers. Australian Veterinary Association president, Dr Barry Smyth says this is a massive boost for the industry.

"I think it is great news for the industry," he says.

"It's great news that the hard work at CSIRO seems to have had some pretty good outcomes and good results.

"It's come to fruition a lot earlier than we might have anticipated so I think it's a real live out on the track for all the exercise that have been involved."

Hendra vaccine given horse trial (7pm TV News QLD)

Audio
 Hendra virus vaccine discovered, Reporter Mitch Grayson speaks with Dr Barry Smyth



International, medical humanitarian organisation that delivers emergency assistance to people affected by :

- armed conflict
- epidemics
- natural disasters
- healthcare exclusion



- Emergency medical assistance for those who need it most;
- When medical assistance alone is not enough to continue saving lives, speak out/bear witness
- Currently, worlds largest non-governmental humanitarian medical agency



We need :

- effective interventions;
- health systems to deliver those interventions; and
- policies & strategies that set out how resources will be mobilized and deployed.

Through partnerships with implementers and end-users, it is possible to achieve this even in complex settings.



Thank you !