Lecture
Generating Political Priority for Maternal survival

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"Women constitute one half of the world's population, they do two-thirds of the world's work, they earn one tenth of the world's income and they own one hundredth of the world's property including land."

United Nations (1979) *State of the World's Women*, Voluntary Fund for the UN Decade for Women, New York

Outline

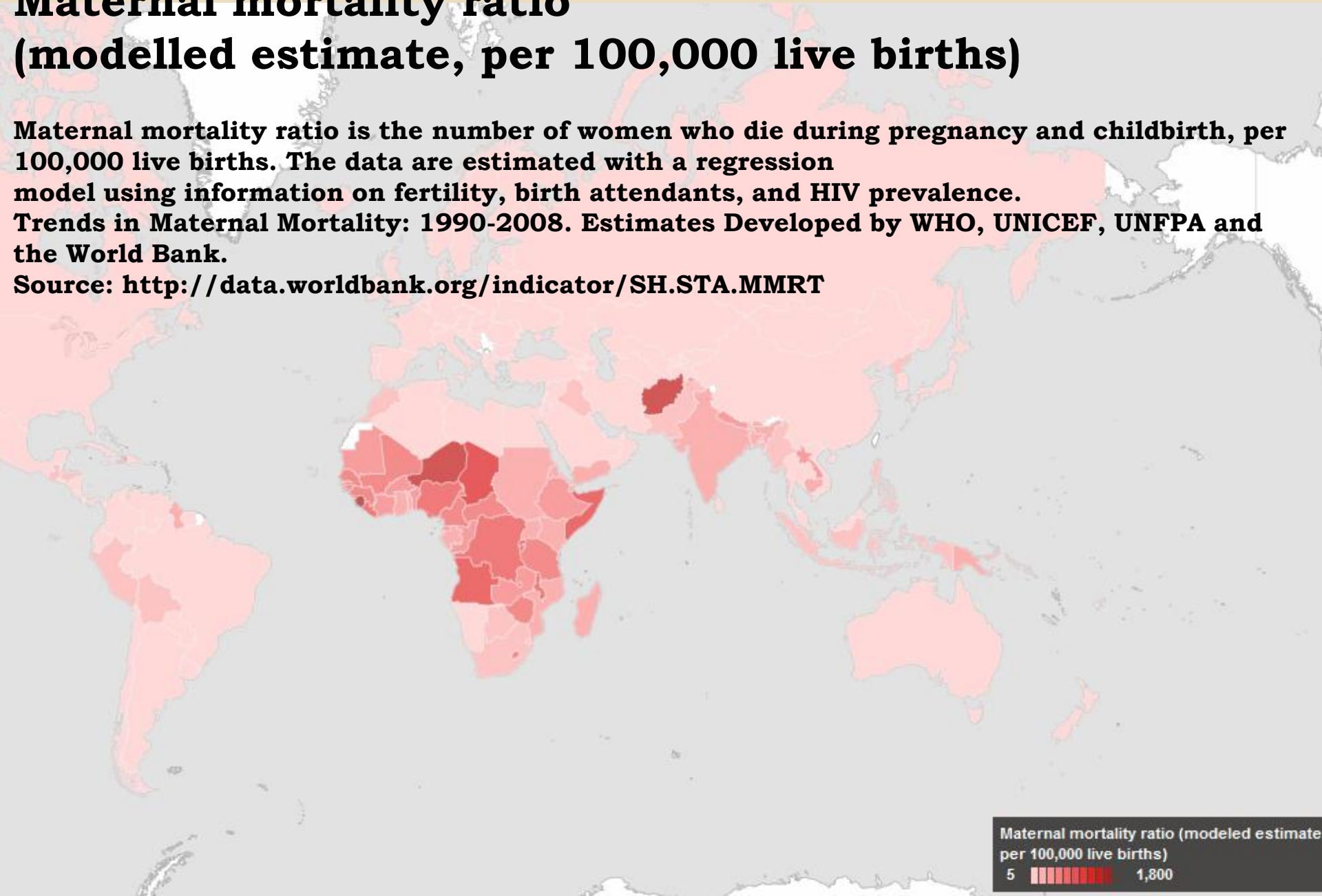
- A glance at global inequalities in Maternal health
- Quantifying maternal mortality
  - Maternal Mortality Ratio
  - Sources of Data
  - Diverging estimates in 2010
- Causes of maternal mortality
- Interventions that work
- Wider determinants: economic growth and advances in maternal health:
  - comparing India to 3 other South Asian states

http://www.rockhopper.tv/the-health-show/programmes.aspx?programmeid=662

Maternal Health inequalities between countries

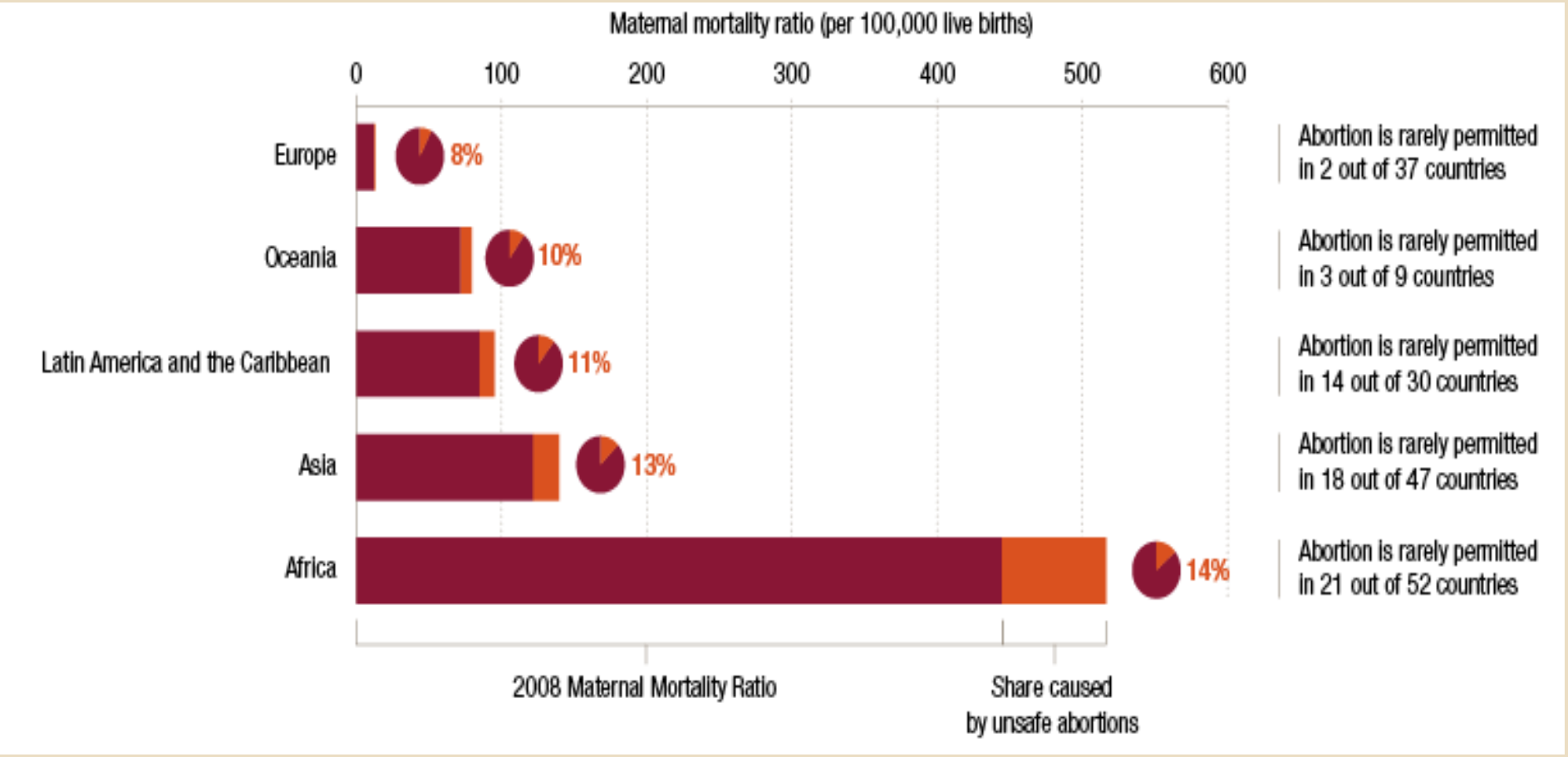
Maternal mortality ratio
(modelled estimate, per 100,000 live births)

Maternal mortality ratio is the number of women who die during pregnancy and childbirth, per 100,000 live births. The data are estimated with a regression model using information on fertility, birth attendants, and HIV prevalence.
Trends in Maternal Mortality: 1990-2008. Estimates Developed by WHO, UNICEF, UNFPA and the World Bank.
Source: http://data.worldbank.org/indicator/SH.STA.MMRT



Maternal Health inequalities between countries

Maternal mortality ratio



Source: Unsafe abortion data from WHO 2007. Maternal mortality data are UN Women calculated unweighted averages using data from WHO, UNICEF, UNFPA and the World Bank 2010. Abortion laws are from UN DESA 2011a. Note: Maternal mortality ratio (MMR) refers to maternal deaths per 100,000 live births. Source:
http://progress.unwomen.org/2011/06/maternal-mortality-and-unsafe-abortion-by-region/

Maternal Health inequalities

- Inequalities in Maternal health include mortality **& morbidity**
  - MMR is the public health indicator with the greatest gap between rich and poor countries
  - Maternal health indicators also show large disparities within countries
- Global maternal mortality rates have declined in last few years albeit not at rate consistent with MDG 5 target
  - 342,900 in 2008
  - < 1% of these in developed world
  - Mostly preventable
- SSA is the hardest hit region accounting for 3/5 deaths (1990-2008)

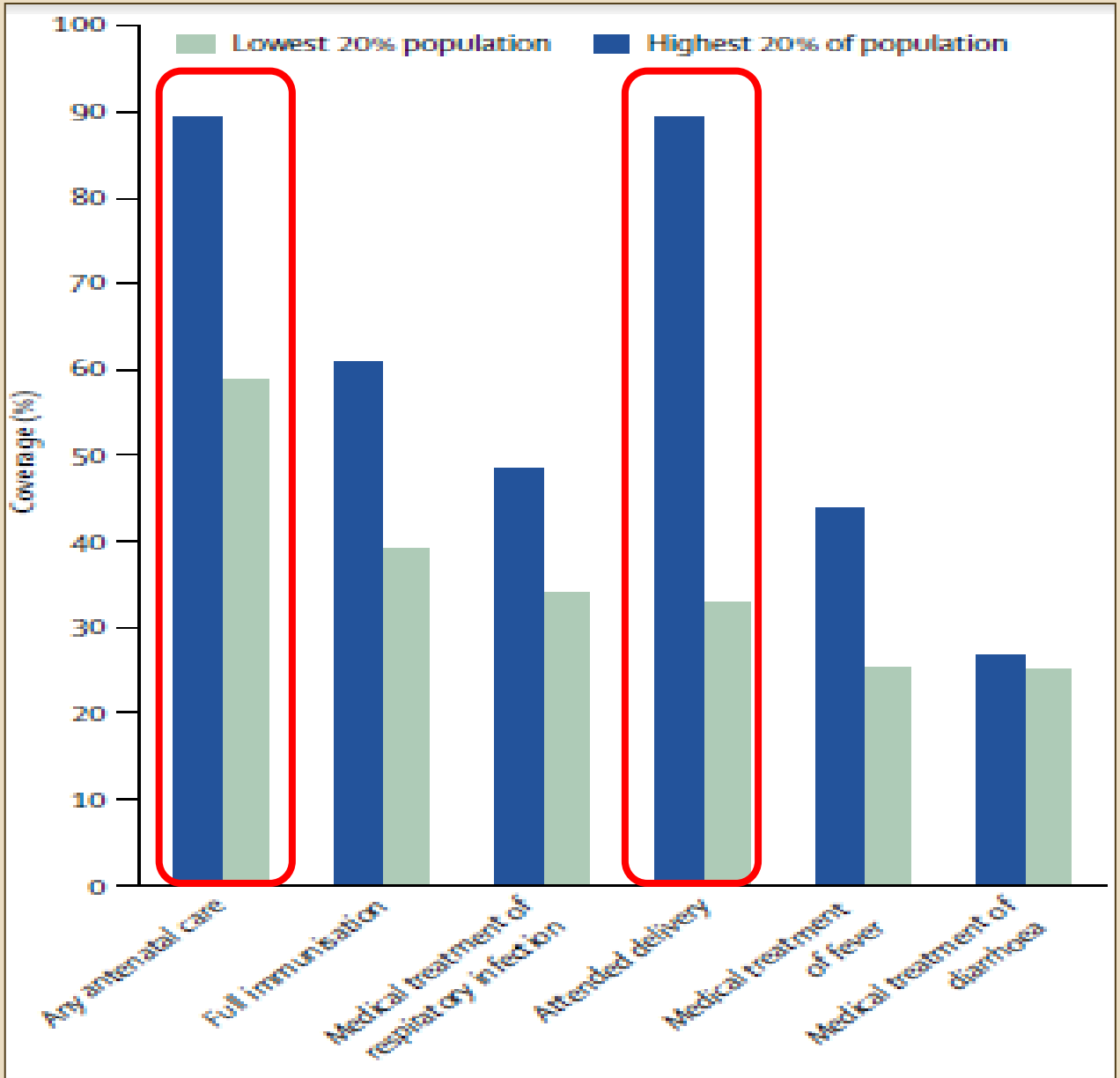
Maternal Health: unequal access within countries

Regressive healthcare in maternal and child health

Use of health services by lowest + highest wealth quintiles, developing & transitional countries

Vertical bars = unweighted averages for 51–56 countries by service

Source: Gwatkin et al. 2004



Maternal Death
Definition and Measures

- Maternal death:

  "The death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and the site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes." ICD-10, WHO,1994

- Measures:
  - Maternal Mortality Ratio (MMR): Ratio of maternal deaths in a period to live births (proxy for risky events) in the same period (x 100,000). This is independent of the fertility rate.
  - PMDF: Proportion of maternal among female deaths 15-49
  - Lifetime risk of a maternal death: An estimate of the likelihood that a woman who survives to age 15 will die of maternal causes

Maternal Death

Challenges to measuring it

Challenges to accurate identification:

- No civil registration systems:
  - death of women delivering at home often not be recorded
  - Pregnancy status may be unknown
  - No medical certification of death therefore no records of cause
- Civil registration system in pace:
  - UK CEMD (2003–2005)identified 90% more maternal deaths than was reported in the routine civil registration system

Sources of maternal mortality data

Sources of data used in developing WHO 2008 estimates

Group	Source of maternal mortality data	Number of countries/ territories	% of countries/ territories in each category	% of births in 172 countries/ territories covered
A	Civil registration characterized as complete, with good attribution of cause of death [a]	63	37	15
B	Countries lacking good complete registration data but where other types of data are available	85	49	82
C	No national data on maternal mortality	24	14	4
	Total	172	100	100

WHO 2010 Trends in **Maternal Mortality: 1990 to 2008**

a For the Bahamas, Belgium, Iceland, and Malta (0.1% of global births), the statistical model was used because the paucity of the event of maternal mortality gave implausible trends.

CONTROVERSIES IN MATERNAL MORTALITY ESTIMATES...

...nal mortality: surprise, hope, and urgent action

The apparent failure to reduce maternal mortality during 20 years of the Safe Motherhood movement has been one of the most deforming scars on the body of global health. Despite strong advocacy efforts,[1] political leaders have either ignored the call or failed to make the health of women in pregnancy their priority. This striking lack of progress, despite maternal mortality reduction being awarded its own Millennium Development Goal (MDG-5) in 2000, has been a source of puzzlement and embarrassment to global health leaders. A sense of failure has triggered deeply reflective analyses to isolate its causes.[2]

Meanwhile, maternal health advocates, facing the prospect of missing MDG-5 targets badly, have tried to reframe the predicament women face in order to galvanise action. One strategy was to integrate maternal health with programmes to reduce newborn and child mortality—the continuum of care.[3] Another was to position maternal health as part of an even broader stage—women deliver for development.[4] The Women Deliver movement was launched at a conference in London in 2007. Its second gathering will take place in Washington, DC, in June

wholly through better reporting, show an increase in maternal mortality ratios (notably the USA, Denmark, Austria, Canada, and Norway).

What lessons can be drawn from these new data? First, the latest figures are, globally, good news. They provide robust reason for optimism. More importantly, these numbers should now act as a catalyst, not a brake, for accelerated action on MDG-5, including scaled-up resource commitments. Investment incontrovertibly saves the lives of women during pregnancy.

Second, the intimate connection between HIV and maternal health is now explicitly laid bare. Such an association, including tuberculosis, has been gaining important recent ground.[7] This latest evidence therefore supports growing calls[8] to integrate maternal and child survival programmes into vertical funding mechanisms for the MDGs, such as the Global Fund to fight AIDS, Tuberculosis, and Malaria. The Global Fund is the best model we have for effective development financing in the 21st century. Maternal, newborn, and child health offer a unique opportunity to give the Global Fund a fresh and expanded mandate, rewarding its already great success.

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See Online/Articles
DOI:10.1016/S0140-6736(10)60518-1

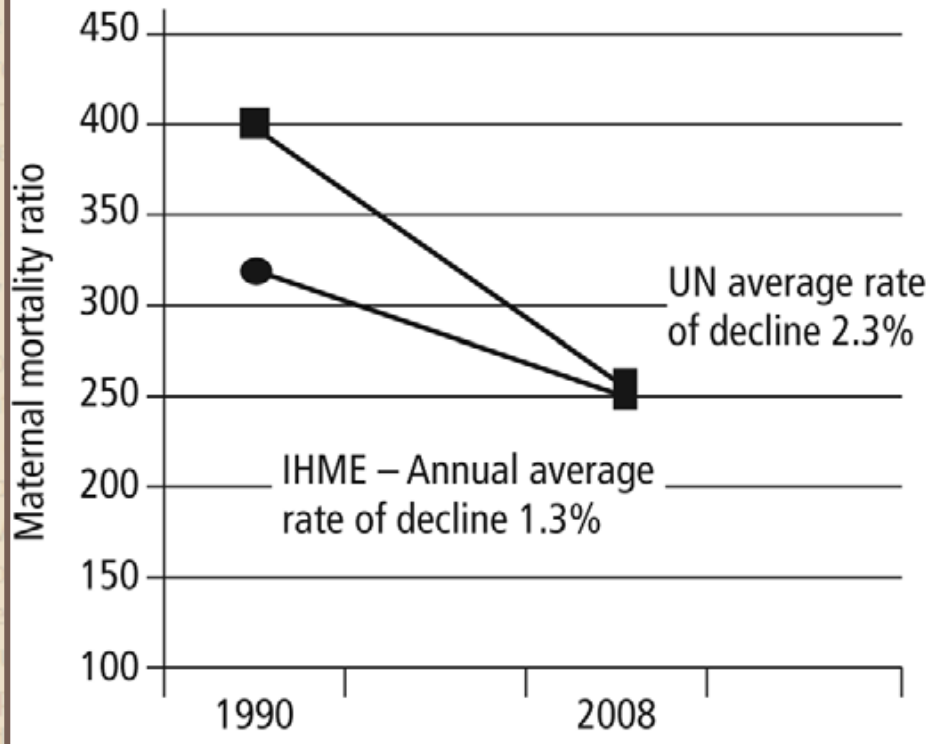
CONTROVERSIES IN MATERNAL MORTALITY ESTIMATES…

Source AbouZahr 2011

Global MMR for 2008 (confidence interval) – differing results:

- **WHO, UNICEF, UNFPA, and World Bank collaboration:**
  - **260 (200-370) (WHO 2010)**
- **alternative methodology by Institute for Health Metrics and Evaluation:**
  - **251 (221—289) (Hogan et al 2010)**

Figure 2. Trends in maternal mortality ratios 1990–2008: IHME and UN estimates



Controversies on Maternal Mortality Rate estimates for 181 countries

Burkina Faso

MMR in death deaths per 100 000 live births (uncertainty interval)

- Original estimates (Hill et al 2007):
  - UN agencies used a regression model to estimate MMR

  MMR 700 (390—1000) in 2005

  falling from 1400 (750—2600) in 1995
- New estimates (Hogan et al 2010):
  - Calculated with different regression model

  MMR 332 (208—522) in 2008

  Falling from 541 (342—830) in 1980

Maternal Survival and MDGs

- **Targets of MDG 5 by 2015 =**

  reduce maternal deaths by 75%

  achieve universal coverage to RH services

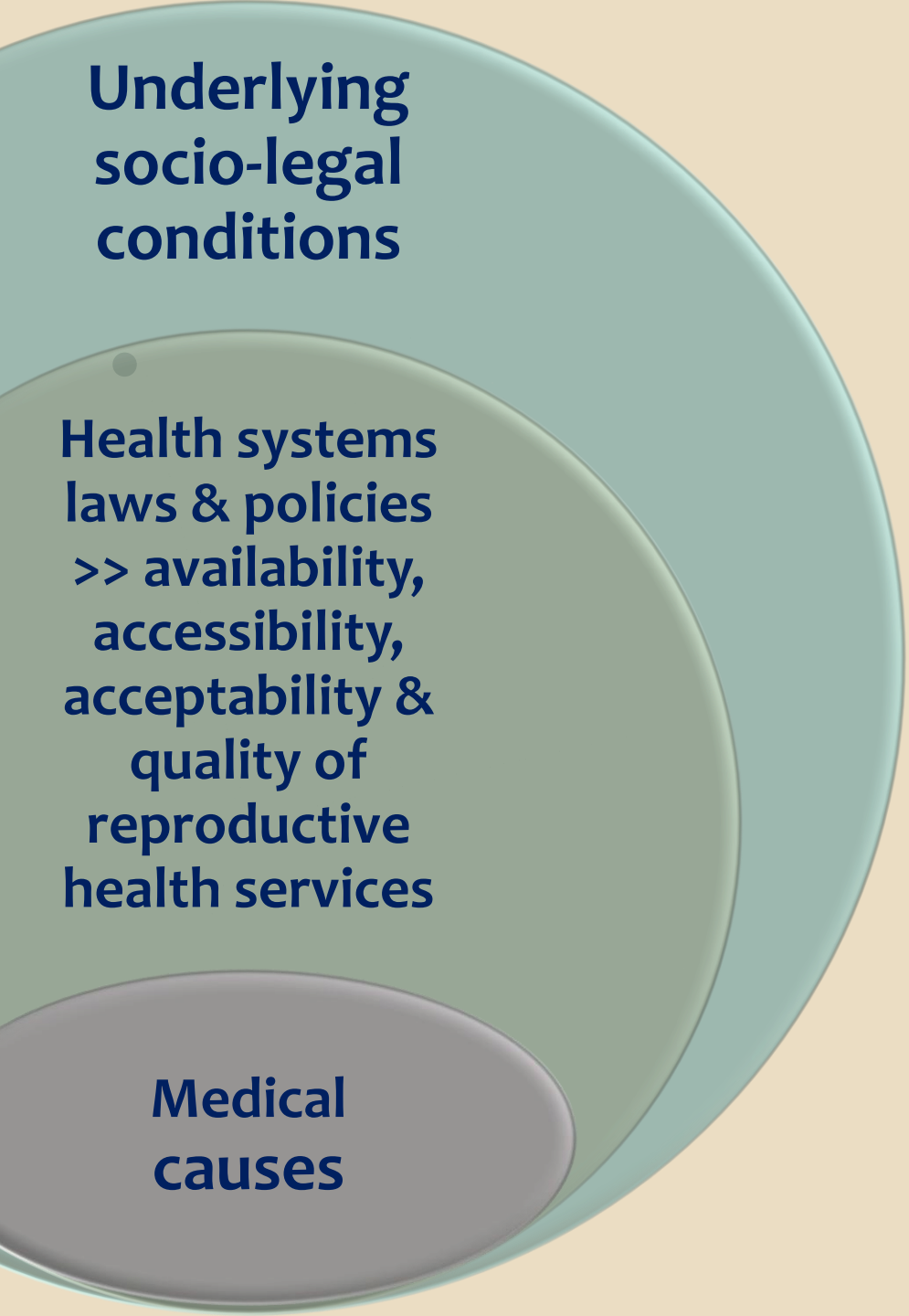
- **Link to MDGs for poverty reduction, female empowerment, and infectious diseases**
- **Enhances promotion of MDG4 (newborn survival and improve the health of the child)**
- **Improves the welfare of the whole family**
- **Supports health systems strengthening**

Enough financial resources for Maternal Health?

- Many countries are progressing too slowly for their national MDG targets 2015
- Average MMR per 100 000 live births substantially higher in countries with low expenditure for health WHO 2006):
  - 372 for the 25 countries which spent < US$ 34 p.c.
  - 126 for the 15 countries which spent > US$ 34 p.c.

Arguments supporting investments in maternal health

- Proven effectiveness and cost-effectiveness of many MH interventions (Adam et al 2005)
- Reduced mortality and morbidity of newborn babies as a direct effect of most MH interventions (Lawn et al 2004)
- Older children: at 3-10 times increased risk of death in orphans compared to those with living parents (WHO 2005)
- Equity and alleviation of global poverty: pregnant women living in poverty are more vulnerable (poorer access to healthcare)
- Synergy with health system improvement



Why do women die in childbirth?

Cooke et al 2001

Maternal Deaths

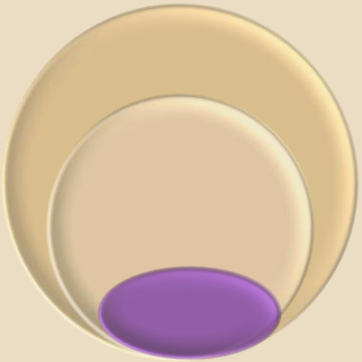
Medical or proximal causes

The death of a pregnant woman can be:

- Direct
- Indirect
- Incidental

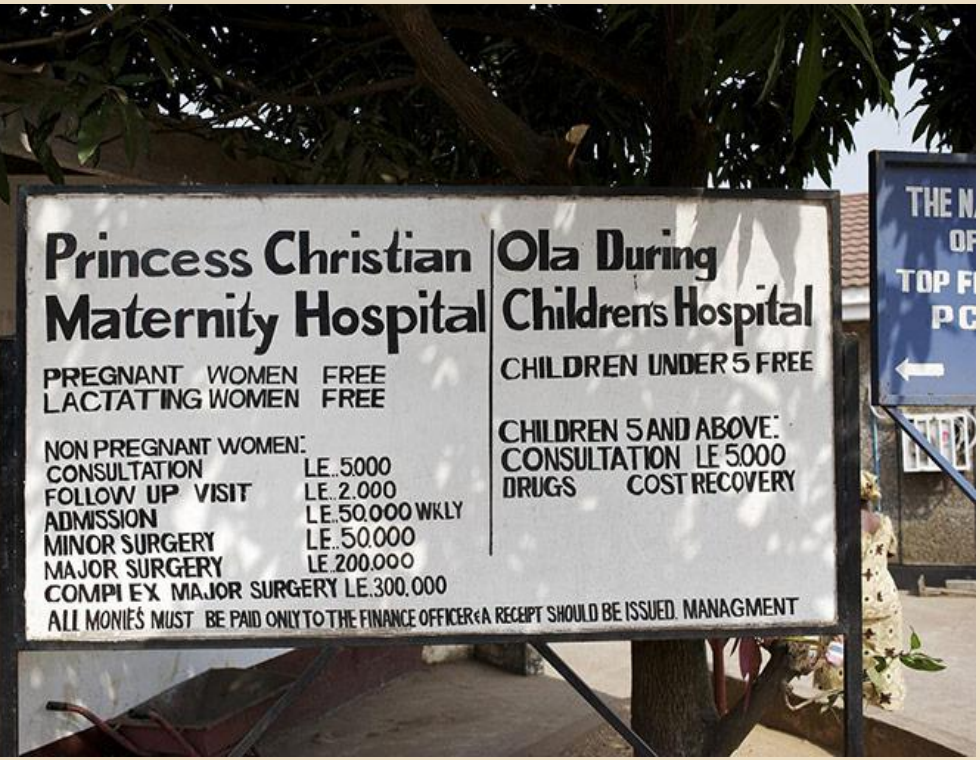
A maternal death

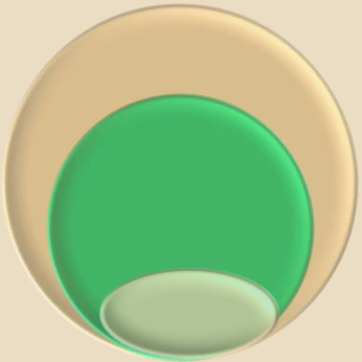
A pregnancy-related death



Maternal Deaths

Health Services determinants





Fertility component

- Family planning services
- Abortion services

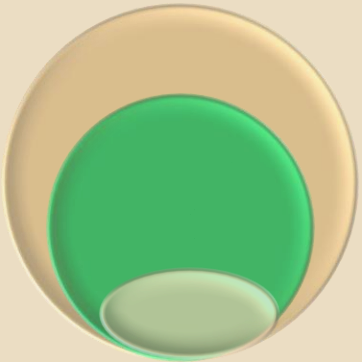
Obstetric component

- Antenatal Care
- Postpartum Care
- Delivery Care

Many effective interventions but how to deliver these most effectively?

Maternal Deaths
Health Services determinants
The debate around TBAs

- Support in pregnancy
- Rarely evaluated:
  - Recently banned in Sierra Leone under FHI
- Effective in referring for danger signs
- Limited capacity for averting death
- Managing transition to other professionals esp in rural areas



Maternal Deaths

Underlying sociolegal conditions

Maternal Health

The Human Rights discourse

Cooke et al 2001

Several treaties and convention have included a gender perpective in their interpretation of human rights.

- rights to life, survival and security,
- rights relating to maternity and health,
- rights to nondiscrimination and due respect for difference, and
- rights to information and education relevant to women's health protection during pregnancy and childbirth.

States can be held accountable for failure to address the prevnetable causes of maternal death

Maternal Health

The Human Rights discourse

>4,500 mothers die each year in South Africa when:

- 87% of women give birth in clinics or hospitals
- maternity care is free
- government spending on health = $748 per person, per year

Why?

"Stop Making Excuses"

Accountability for Maternal Health Care in South Africa

http://www.rockhopper.tv/programmes/200/

Maternal Health and Economic Growth

A perpective on South Asia

Jayati Ghosh (Jawaharlal Nehru University): *the growing divide between economic growth and women's health outcomes in India as the result of poor public policy*

- Undernutrition: women and girls in poor households take the brunt of food scarcity.
- Distribution of income: growth concentrated among the top 10% of the population, whose health indicators were similar to HIC profile
- Lack of good and affordable reproductive-health services: nearly 3/4 health spending is OOP by households contributing to catastrophic health expenditures and poverty

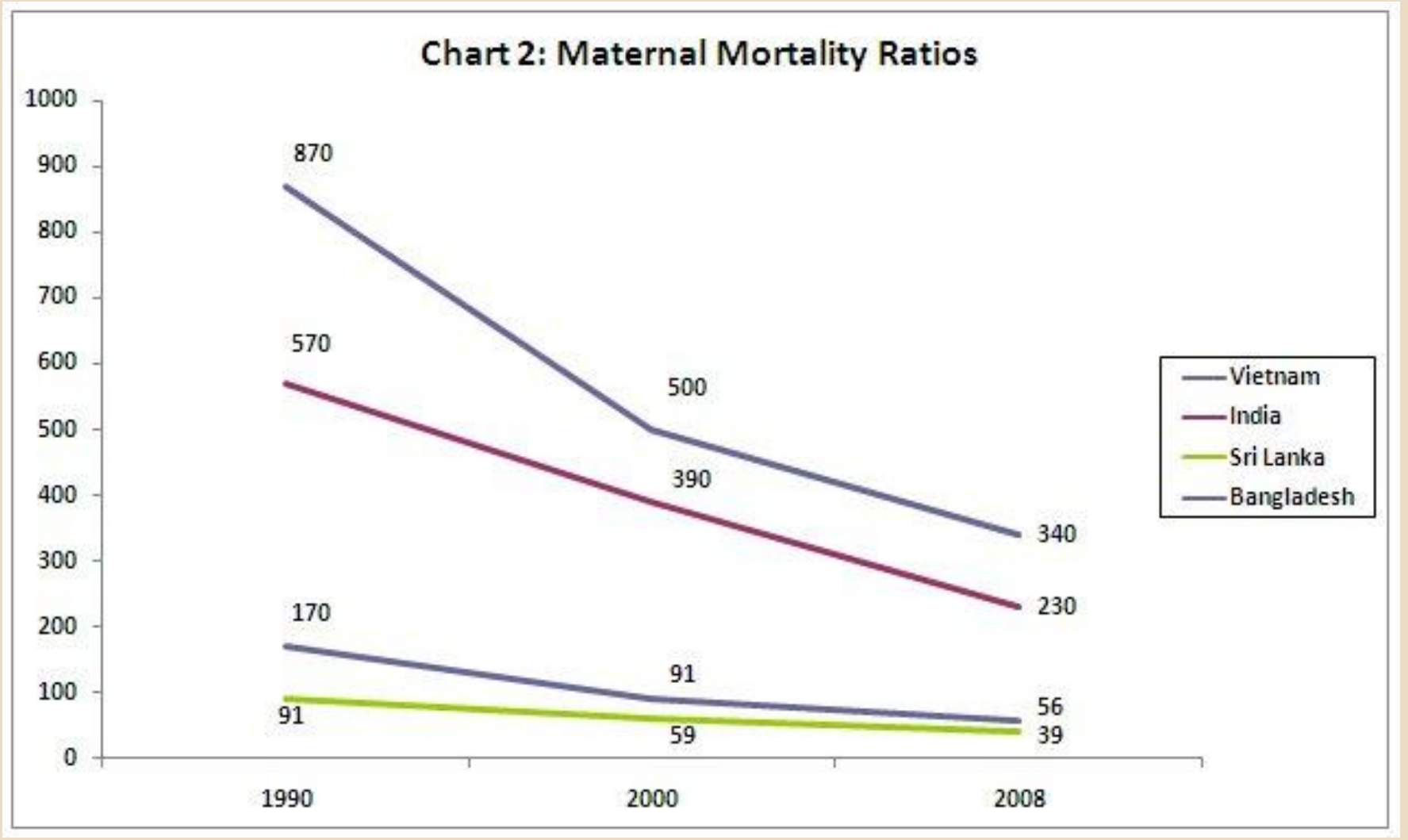
Maternal Health and Economic Growth

A perpective on South Asia

- Rising per capita income can increase family income and public spending on health
- This is not always the case:
  - Rapid economic growth and ↓ MMR: Vietnam
    - 6% growth in p.c. income per annum in 2 decades up to 2010
    - MMR fell by 6% to 56
  - Slow economic growth and ↓ MMR: Sri Lanka
    - MMR 39 in 2008
  - Significant economic growth and slow improvements in MMR: India
    - MMR 230 2008 (nearly five times that of Vietnam)

Comparing Maternal Health in 4 South Asian Countries

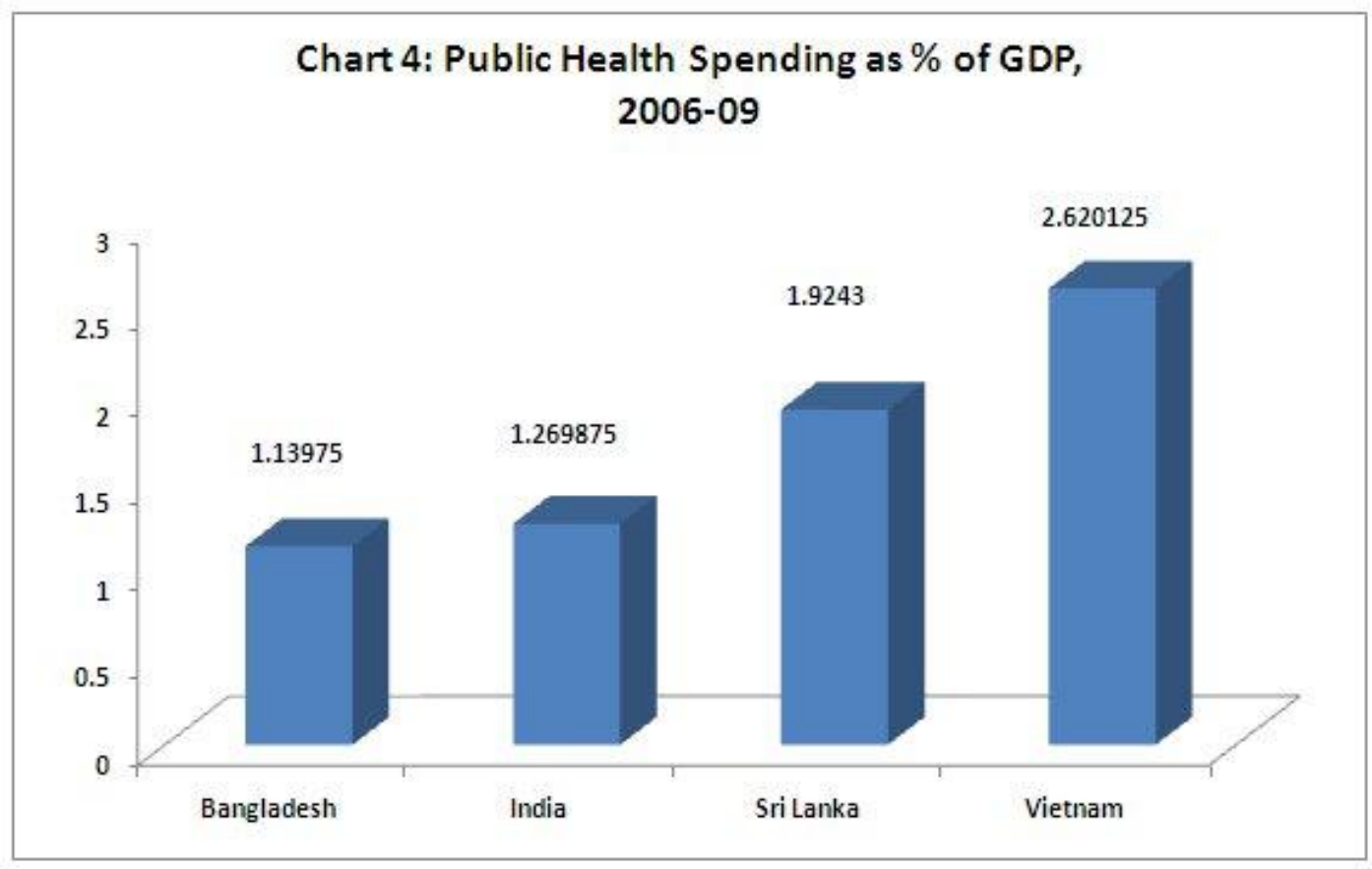
MMR Over 2 decades



Source: Chandrasekhar & Ghosh 2011

Comparing Maternal Health in 4 South Asian Countries

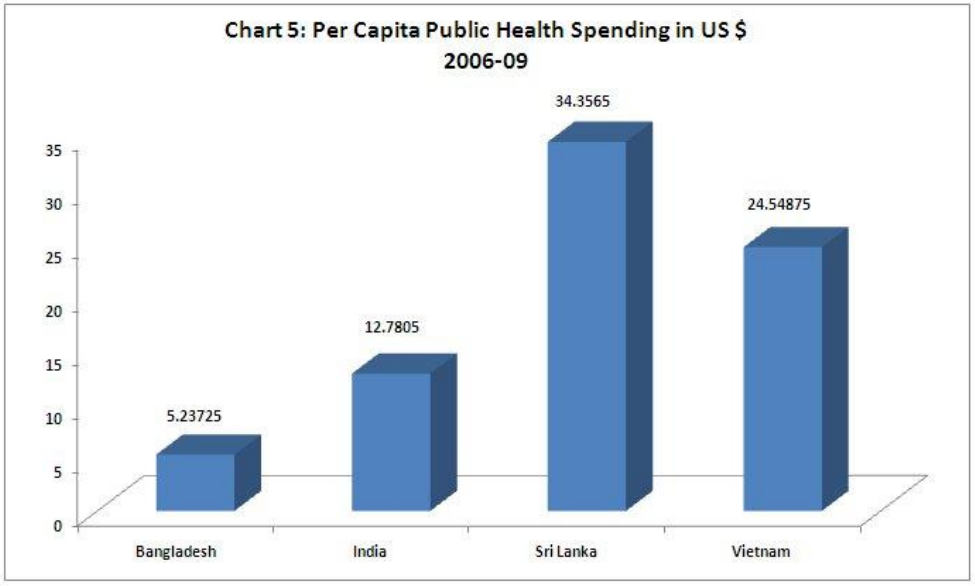
Public Health Spending

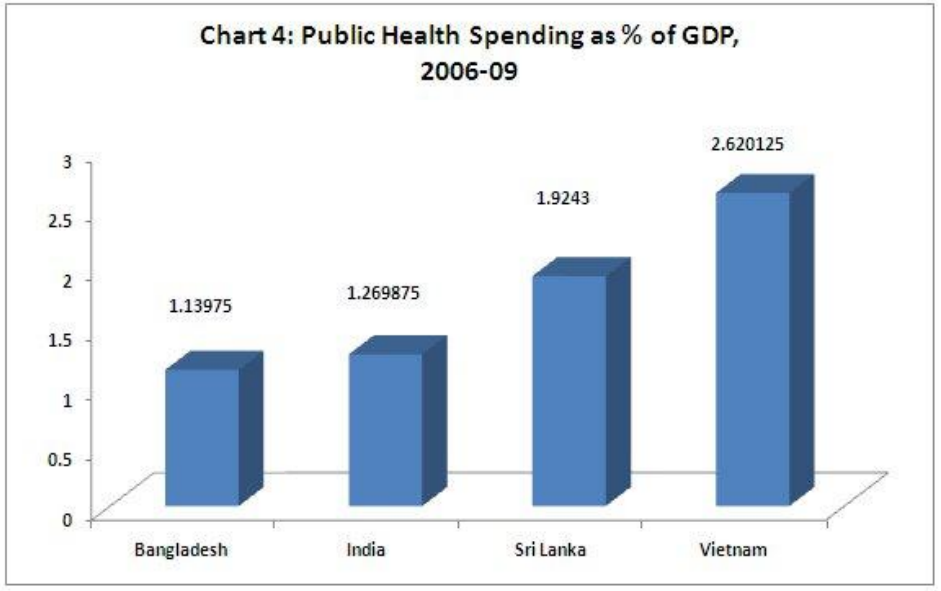


Source: Chandrasekhar & Ghosh 2011

Comparing Maternal Health in 4 South Asian Countries

Public Health Spending

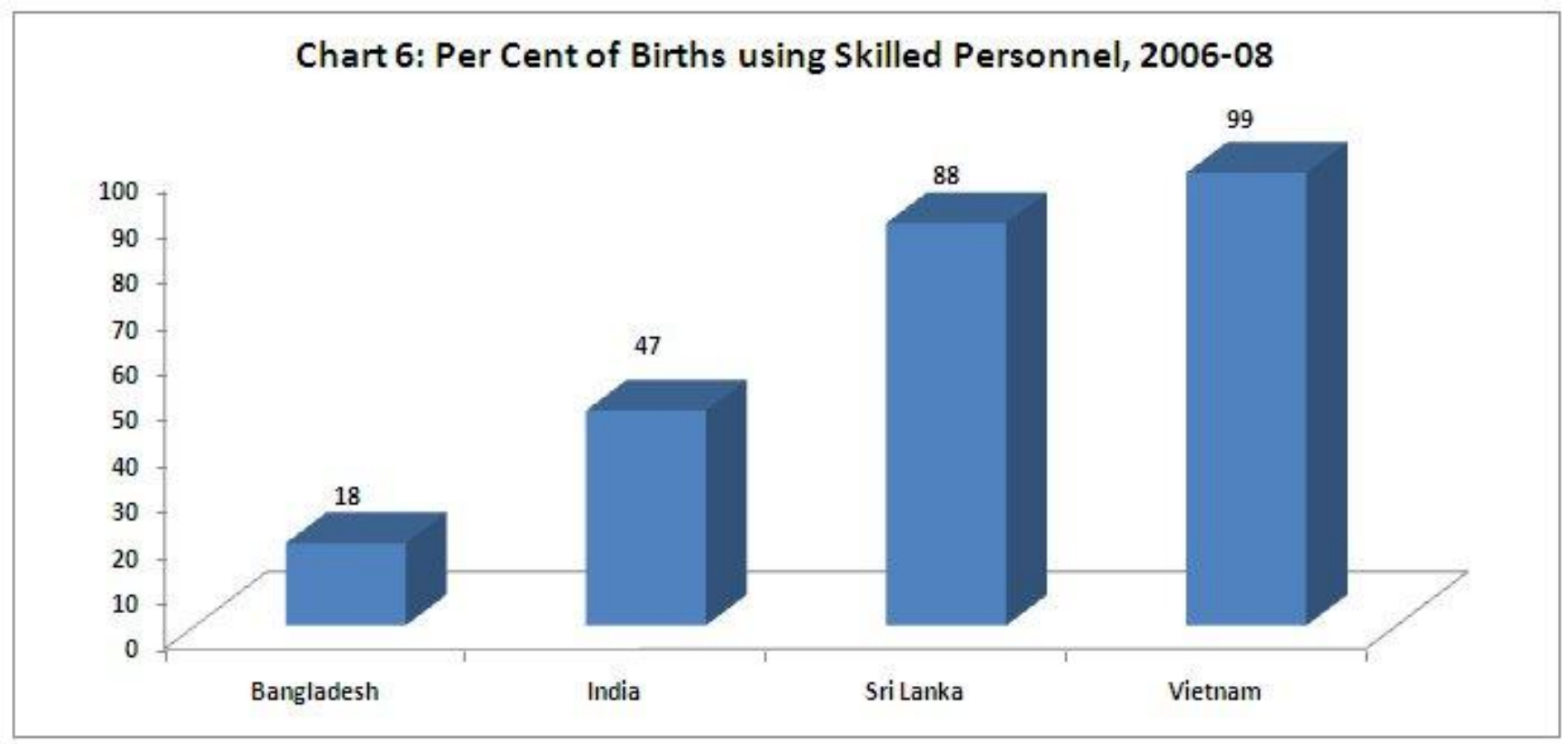




Source: Chandrasekhar & Ghosh 2011

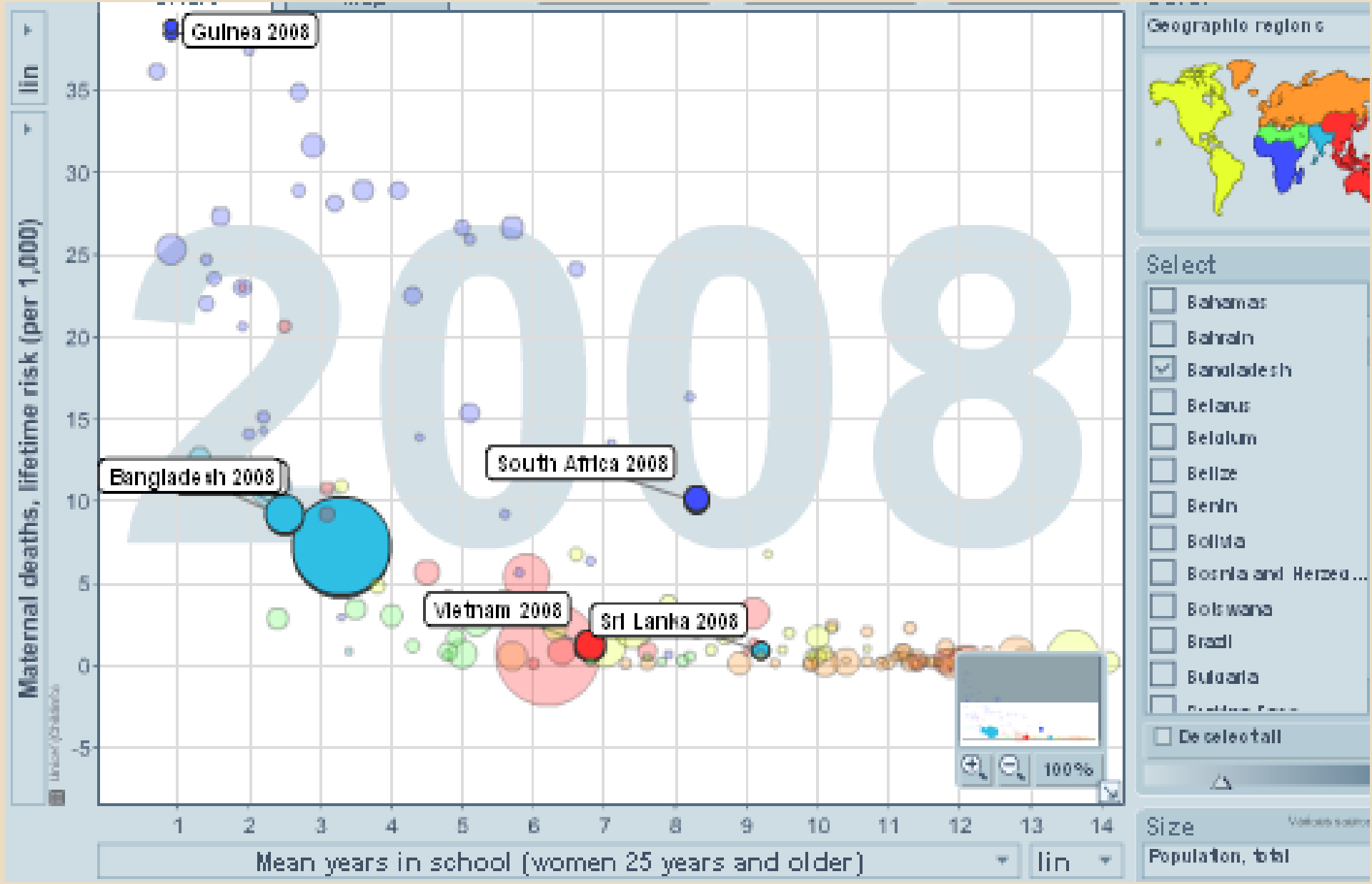
Comparing Maternal Health in 4 South Asian Countries

Births attended by skilles personnel



Source: Chandrasekhar & Ghosh 2011

Lifetime risk of maternal death and Mean Years in School



Conclusions

- MMR is the public health indicator with the greatest gap between rich and poor countries
- The determinants of maternal survival can be classified into: medical, health system and socio-legal
- Wealth and maternal health are not directly correlated and improvements in maternal survival have been achieved in countries with limited economic growth (importance of strong political will)
- The human rights discourse can be applied to maternal survival

Seminar
Generating political priority for maternal survival

You have become involved in a Civil Society Organisation based in London, which has been fundraising for a campaign to raise the profile of maternal survival globally. Funds have mainly come from private personal donations. You have a small bugdet available and an office. Your team consists of 2 part-time staff (admin) and many advisors working ona voluntary basis.

- Set out a strategy for the next year of the chosen actions you will take to further your advocacy objective
- What may be the challenges you encounter and how will you solve them?

Useful Readings

- Jeremy Shiffman, Stephanie Smith, Generation of political priority for global health initiatives: a framework and case study of maternal mortality, The Lancet, Volume 370, Issue 9595, 13–19 October 2007, Pages 1370-1379

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