THE CONTRIBUTION OF FAMILY PLANNING TO REDUCING MATERNAL DEATHS

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THE CORE FOUR

1. Family planning with related reproductive health services
2. Skilled care during pregnancy and childbirth
3. Emergency obstetric care
4. Immediate postnatal care
What have been the separate contributions of declines in fertility and in the maternal mortality ratio to reducing the number of maternal deaths over the past 15 years and what are the variations by major region?
RESEARCH QUESTIONS

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How have maternal mortality rates declined?

In which countries is it most feasible to accelerate efforts to achieve declines in the number of maternal deaths?
FOCUS ON NUMBER OF DEATHS

• Deaths = WRA x GFR x MMR
  – WRA: women of reproductive age (15-49)
  – GFR: general fertility rate (births/year/1000 WRA)
  – MMR: the maternal mortality ratio

• Deaths are directly related to each determinant.
  – For example, if the GFR declines by one third, deaths decline by one third.
EXAMPLE

Deaths = \( WRA \times GFR \times MMR \)

Sub-Saharan Africa

In 1990
\[
117,817,000 \ WRA \times 196 \ GFR \ = \ 23,000,000 \ Births \times 920 \ MMR \\
= 212,000 \ deaths
\]

In 2005
\[
179,061,000 \ WRA \times 168 \ GFR \ = \ 30,000,000 \ Births \times 900 \ MMR \\
= 270,000 \ deaths
\]
DATA SOURCES

UN Population Division 2008 Database
  – No. of women of reproductive age
  – Births

• WHO/UNICEF/UNFPA/The World Bank
  – Maternal mortality ratios, 2005 and 1990
Numbers of Women and Births in Developing Countries, 1990-2005

Year

Women/Births (000's)


Women

Births
Changes in Determinants of Number of Maternal Deaths
Developing Countries, 1990 to 2005

- WRA: 35%
- GFR: (28)
- Births: (1)
- MMR: (6)
- Deaths: (5)

Percent
Upward and Downward Forces on Numbers of Deaths
South Asia, 1990-2005

WRA Increase: 492,156
GFR Decline: -655,164
MMR Decline: -375,709
Net Savings in Deaths: -538,717
Upward and Downward Forces on Number of Deaths
Sub-Saharan Africa, 1990-2005

- WRA Increase: 706,687
- GFR Decline: -320,602
- MMR Decline: -41,874
- Net Increase in Deaths: 344,211
The maternal mortality RATE fell by half in South Asia, 16 percent in Sub-Saharan Africa, and 31 percent in the developing world.
Maternal deaths are concentrated in only a few countries.
# 116 Countries Distributed by No. of Deaths and Social Setting Index*

<table>
<thead>
<tr>
<th># DEATHS</th>
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**Social Setting Index** includes 7 measures of SES and health system strength
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*"Social Setting Index" includes 8 measures of SES and health system strength
CONCLUSIONS

About half of all maternal deaths occur in six countries – India, Nigeria, D.R. Congo, Bangladesh, Afghanistan, Indonesia.

Where the use of contraception is low – Nigeria, D.R. Congo, and Afghanistan - substantial gains in the number of maternal deaths could be made through increases in use, although these are among the most difficult settings.
CONCLUSIONS

In countries where contraceptive prevalence is higher - India, Bangladesh, and Indonesia - a priority would be to expand and sustain access to:

- multiple contraceptive methods
- skilled care at delivery
- emergency obstetric services, and
- postpartum and postabortion care.
CONCLUSIONS

Without past declines in fertility – due largely to increased contraceptive use - the numbers of maternal deaths would have been about 19% higher, with 1.5 million more deaths between 1990 and 2005.

The MMR has declined by 6% as maternal health services have improved. This improvement has prevented deaths of mothers by lowering the risk of dying once pregnant. Without this decline, the numbers of maternal deaths would have been about 267,000 higher.
Maternal Health Task Force

Please register at:
www.maternalhealthtaskforce.org