Improving Maternal, Newborn & Child Health:

Providing Solutions – The Way Forward

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PMNCH – an international partnership of >300 organizations including UN (H4); NGOs; health professionals; academics; donor/funding agencies; countries

Our Aim:

• “Every pregnancy wanted, every birth safe, every newborn and child healthy”
• Saving the lives of over 10 million women and children by 2015
• **Our Timeline:** 2009 – 2015
Global Situation

- 180-210 million pregnancies every year
- 80 million unwanted pregnancies
- 50 million induced abortions
- 20 million unsafe abortions
- 68,000 deaths from unsafe abortion
- 20 million women suffer from maternal morbidity
- Estimated 536,000 maternal deaths
- 3 million babies are born dead
- Almost 10 million children under 5 die
- Of which 3 million newborns die within the first week of life
- 500,000 infants are infected with HIV
- 700,000 infants born with congenital syphilis
Millenium Development Goals

Goal 1: Eradicate extreme poverty and hunger.
Goal 2: Achieve universal primary education.
Goal 3: Promote gender equality and empower women.
Goal 4: Reduce child mortality.
Goal 5: Improve maternal health.
Goal 6: Combat HIV/AIDS, malaria and other diseases.
Goal 7: Ensure environmental sustainability.
Goal 8: Develop a global partnership for development.
Progress towards MDG 4

• Rapid progress is possible. Further analysis of these "well performing" countries is under way.
• No country in sub-Saharan Africa on this list

• The 10 countries with least progress are in sub-Saharan Africa
• Most have contextual factors that threaten MNC health:
  • High HIV prevalence (>5%, 8/10)
  • Conflict (2/10)
None of these countries are in sub-Saharan Africa or South Asia

Even among the ten “best performers”, 7 have ratios over 100

12 of 13 countries with highest MMRs are in sub-Saharan Africa

Pattern of contextual factors differs from that of MDG4.

- High HIV prevalence (>5%, 1/13)
- Conflict (8/13)

Data are rank or deaths per 100,000 livebirths. MDG = millennium development goal.
Coverage failures across the continuum of care

Coverage estimates for interventions across the continuum of care in the 68 priority countries (2000-2006). Vertical bars indicate the range in coverage across countries.

For some interventions:
- Family planning
- Exclusive breastfeeding
- Clinical care for newborn and child illnesses

In some countries:
- Wide gaps in coverage across countries
Why do women die during pregnancy and childbirth?

Informing interventions

Causes of Maternal Mortality

- Post Partum Haemorrhage: 25%
- Infection: 15%
- Unsafe Abortion: 13%
- Eclampsia: 13%
- Obstructed Labour: 7%
- Other Direct Causes: 7%
- Indirect Causes: 20%
Causes of under-five deaths
Globally more than one third of child deaths are attributable to undernutrition

- Diarrhoea: 17%
- Pneumonia: 22%
- Neonatal: 30%
- Other: 14%
- Measles: 4%
- Malaria: 6%
- HIV/AIDS: 4%
- Injuries: 2%

Causes of neonatal deaths
- Congenital: 4%
- Diarrhoea: 4%
- Other: 7%
- Tetanus: 9%
- Preterm: 16%
- Asphyxia: 24%
- Infection: 36%

Source: WHO, 2006
Source: Lawn JE, Cousens SN for CHERG (Nov 2006)
## DEMOGRAPHICS

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value (2006)</th>
</tr>
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<tbody>
<tr>
<td>Total population (000)</td>
<td>81,021</td>
</tr>
<tr>
<td>Total under-five population (000)</td>
<td>13,439</td>
</tr>
<tr>
<td>Births (000)</td>
<td>3,159</td>
</tr>
<tr>
<td>Birth registration (%)</td>
<td>7</td>
</tr>
<tr>
<td>Under-five mortality rate (per 1000 live births)</td>
<td>123</td>
</tr>
<tr>
<td>Infant mortality rate (per 1000 live births)</td>
<td>77</td>
</tr>
<tr>
<td>Neonatal mortality rate (per 1000 live births)</td>
<td>51</td>
</tr>
<tr>
<td>Total under-five deaths (000)</td>
<td>389</td>
</tr>
<tr>
<td>Maternal mortality ratio (per 100,000 live births)</td>
<td>720</td>
</tr>
<tr>
<td>Lifetime risk of maternal death (1 in N)</td>
<td>27</td>
</tr>
<tr>
<td>Total maternal deaths</td>
<td>22,000</td>
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</tbody>
</table>

### Under-five mortality rate

Deaths per 1000 live births

<table>
<thead>
<tr>
<th>Year</th>
<th>Rate</th>
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<tbody>
<tr>
<td>1990</td>
<td>204</td>
</tr>
<tr>
<td>2000</td>
<td>123</td>
</tr>
<tr>
<td>2010</td>
<td>68</td>
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Source: UNICEF, 2006
Countdown to 2015
Maternal, Newborn & Child Survival

Ethiopia

Unmet need for family planning (%) 34  (2005)
Antenatal visits for woman (4 or more visits, %) 12  (2005)
Intermittent preventive treatment for malaria (%) ---

C-section rate (total, urban, rural; %)
(Minimum target is 5% and maximum target is 15%) 1, 9, 0  (2005)

Early initiation of breastfeeding (within 1 hr of birth, %) 69  (2005)
Postnatal visit for baby (within 2 days for home births, %) 2  (2005)
Nutrition (Maternal and Child):

Improve **newborn & child** indicators:

- 20% Low birth weight incidence
- 51% Moderate-severe stunting prevalence
- 12% Wasting prevalence
- 54% Complementary feeding 6-9mths
- 49% Exclusive breastfeeding <6 mths
- 59% Vitamin A supplements between 6-59 mths.

2005 figures
Example: Anaemia

- Pregnant women most at risk group for anaemia globally 50-60% (2000)
- SE Asia 60-70% children 0-5yrs anaemic (2000)
- Causes:
  - Iron deficiency (affects about 1.25b globally)
  - Hookworm
  - Vitamin A deficiency
  - Malaria

Some interventions therefore country/region specific

No clear evidence that iron supplementation decreases maternal mortality
Example: Post-Partum Haemorrhage

Active Management of the Third Stage of Labour (AMTSL)

An effective, low cost strategy for the prevention of post partum hemorrhage

From community to major hospital

• Administration of a **uterotonic drug** within one minute of childbirth

• **Controlled traction of the umbilical cord** with counter-pressure to the uterus

• **Massage of the uterus** after delivery of the placenta
The way forward for Canada to lead in the area of Maternal and Child Health

• **Increased funding** for maternal, newborn and child health programs

• Capitalize on **Canada’s expertise** in the field of maternal and child health to strengthen programs and improve health outcomes

• Focus attention on **family planning**

• Upgrade the skills of health professionals, especially in the area of **Emergency Obstetric Care**

• Ensure programs are directed at all levels of service delivery (local, regional, national)

• Use the **three delays model** to influence program design and fund allocation

• Allocate funding in a way that **addresses gaps along the continuum of care**
The interventions needed to save the lives of Mothers, Newborns and Children are:

1. **Political leadership, community engagement** and mobilization
2. **Effective Health systems** that deliver a package of high impact interventions at key points along the continuum of care:
   - Comprehensive family planning - advice, services and supplies
   - Quality, skilled care for women and newborns during and after pregnancy and childbirth, including antenatal care, quality delivery care in a health facility, emergency care for complications, postnatal care, and essential newborn care
   - Improved child nutrition and prevention and treatment of major childhood illnesses
3. **Removing barriers to access**, with services for women and children being free at the point of use where countries choose
4. **Skilled and motivated health workers** in the right place at the right time, with the necessary infrastructure, drugs, equipment and regulations
5. **Accountability** at all levels for credible results
What will it achieve?

Saving lives and more

- Prevent the deaths of up to 1 million women from pregnancy and childbirth complications
- Save the lives of at least 4.5 million newborn babies
- Save the lives of at least 6.5 million children (1 month to 5 years)
- Prevent 1.5 million stillbirths
- A significant decrease in the global number of unwanted pregnancies and of half the number of unsafe abortions
- An effective end to the current unmet need for family planning services
- Reduce by over one-third the rate of chronic malnutrition in children age 12 to 23 months
What Will It Take?

In 2015,

• An additional 50 million couples using modern methods of family planning
• An additional 234 million births taking place in facilities that provide quality care for both normal and complicated births
• 276 million additional women receiving quality antenatal care
• 234 million additional women and newborn babies receiving quality postnatal care
• More than 164 million additional episodes of child pneumonia taken for appropriate treatment
• 2.5 million additional health care professionals and 1 million additional community health workers, towards the WHO target of at least 2.3 health workers per 1,000 of population
What will it cost?

The total additional programme cost of achieving these targets is $30 billion for the period 2009-2015, with annual costs ranging from $2.5 billion in 2009 to $5.5 billion in 2015.
What are we spending now?

ODA for MNCH in 2007 from G7 countries (current US$, thousands)
% MNCH ODA directed to maternal and neonatal health

Progress is possible: learning from Canada’s moment in history

Maternal mortality and economic growth in Canada 1915-2006

A success story:
Maternal mortality fell by 80% between 1930 & 1950, across times of economic slow-down & political fragility. Politicians & the public agreed “enough was enough”. Resources were invested in a health system to provide quality maternity care – rapidly, at scale & equitably. Commitments to Canada’s mothers & babies were honoured.
PMNCH and SOGC’s contribution

• Global consensus on key interventions to reduce maternal, newborn and child mortality

• Expertise in the field of maternal, newborn and child health

• Clinical experience, lessons learned and best practices

• ALARM International Program for upgrading the skills of health professionals to respond to emergency obstetric complications

• Use local resources in partner countries and build on local initiatives rather than introducing foreign programs

• Strengthen national professional associations so that they may become leaders in the field of sexual and reproductive health
Issues of Equity

• In many low-income countries, there are large disparities in access to maternal and child health services between the rich and poor and urban and rural populations;

• Indonesia under 5 mortality rate
  – < 30 per 1000 for the wealthiest 20%;
  – > 100 per 1000 for the poorest 20%.*

• In Canada, Canadian Perinatal Surveillance System suggests that the disparities in fetal and infant mortality range from 2-fold to 5-fold higher rates among the Indian and Inuit populations as compared with the French and English populations in Quebec.

*Ref: Victora, Lancet 2003 – Applying an equity lens
Many of the problems faced by health professionals arise from broader social, cultural, and economic causes.

- Child Marriage
- Female Genital Mutilation
- Sex Trafficking
- Violence against women
- Lack of Education
- Poverty
- Lack of decision-making power

Increasing recognition by UN that maternal mortality is a violation of human rights.