Maternal Health – a Global Perspective

Siladitya Bhattacharya
Professor of Reproductive Medicine
University of Aberdeen
Global Maternal Mortality & Morbidity

- 1 maternal death every 2 minutes*
- 543,000 deaths (1990)
- 585,000 deaths (2008)
- 358,000 deaths (2010)
- 287,000 deaths (2012)
- >99% of cases in less developed countries
- >80% preventable
- >20 million severe morbidity

*http://www.who.int/mediacentre/factsheets/fs348/en/
Methods for Measuring Maternal Deaths

Facility Based

• Notification by law
• Confidential Enquiries
• Maternal death review
• Audit
  • Critical Incident audit
  • Criterion Based Clinical Audit

Community based

• Notification by law
• Vital registration
• Sisterhood method
• Verbal Autopsy
Cause Distribution of Maternal Mortality

Causes of maternal deaths
(350,000 deaths every year/around 1000 preventable deaths every day)

- Haemorrhage 35% (i.e. blood loss)
- Hypertension 18% (i.e. high blood pressure)
- Indirect 18% (e.g. malaria, HIV/AIDS, cardiac diseases)
- Other direct 11% (e.g. complications of anaesthesia and caesarian sections, and postnatal depression suicide)
- Unsafe abortion 9%
- Sepsis 8%
- Embolism 1%
Maternal mortality ratio per 100,000 livebirths

Figure 3: Maternal mortality ratio per 100,000 livebirths, 2008

Hogan et al, Lancet 2010
Decline in maternal mortality ratio 1990-2008

Figure 4: Yearly rate of decline in maternal mortality ratio, 1990–2008
Hogan et al, Lancet 2010
Linking why with where

Ronsman et al, Lancet 2006
Why do Mothers Die?

Closing the Gap: Policy into Practise on Social Determinants of Health.

WHO 2011
The 3 Delays Model

- Delay in decision to seek care
  - Lack of understanding of complications
  - Acceptance of maternal death
  - Socio-cultural barriers to seeking care
  - Low social status of women

- Delay in reaching care
  - Mountains, islands, rivers — poor organization

- Delay in receiving care
  - Supplies, personnel
  - Poorly trained personnel with punitive attitude
  - Finances

Improving Care in Pregnancy and Childbirth

• Antenatal Care
  • 4 visits, monitoring weight, blood pressure and proteinuria, folic acid, malaria

• Skilled attendant at birth

• Emergency Obstetric Care
  • Clean delivery
  • Active management of 3rd stage
  • Parenteral antibiotics/ oxytocics/ magnesium sulphate
  • Manual removal of placenta/ products of conception
  • Blood transfusion
  • Caesarean section / operative delivery
Abortion: a global perspective

- 22 million abortions performed each year
- Death occurs in 47,000 women
- Disability in 5 million women
- Almost all preventable
- 49% of abortions were unsafe in 2008
- In developing countries 56% (74% excluding China) are unsafe
- Clear WHO guidelines

Abortion death by liberal abortion laws in 2008

Sedgh et al, 2012
Abortion: current status

• Stalling of abortion rates
• Widespread availability of medical abortion
• Increase in proportion of unsafe abortions
• Restrictive abortion laws are not associated with lower rates
• Investment in family planning and safe abortion is critical
Maternal Morbidity - Obstetric Fistula

• 20-30 serious complication for every maternal death
• Obstructed labour occurs in 7 million women each year
• Estimated 2-3 million women have obstetric fistulae
• Most are in Sub-Saharan Africa
• Based on medical records and self reported surveys – hence under-reported
• Assuming 2% of obstructed labour, 130,000 new cases each year

Ahmed and Tuncalp Lancet 2015
Low socio-economic status
Early marriage & childbearing
Cephalopelvic disproportion
Lack of access to care
Obstructed labour
Faecal incontinence
Fetal death
Fistula formation
Urinary incontinence
Stigmatisation
Divorce or separation
Poverty

Adapted from & Watt, Lancet 2006
Obstetric Fistula

• Preventable condition
• Associated with poverty
• Access to care critical
• Existing backlog with regards to surgery
• Surgery – anaesthetic, sutures, grafts
• Surgical centres
• Prioritisation of condition

Watt, Lancet 2006
Subfertility

• Affects 80 million women worldwide

• Often secondary & associated with post partum/abortal sepsis

• Serious impact on quality of life

• Stigmatisation, separation and loss of dignity

• Catastrophic expenditure

• Surrogacy - 2.3 billion industry in India before ban – 5000 babies / year

• Political commitment - reproductive health - MDG 5 and SDG

http://www.bbc.co.uk/news/world-asia-india-34876458
Millenium Development Goals

3.1 By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births

5.2 Eliminate all forms of violence against all women and girls in the public and private spheres, including trafficking and sexual and other types of exploitation.

5.6 Ensure universal access to sexual and reproductive health and reproductive rights

Sustainable Development Goals

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Life course – when to intervene?

WHO 2013
Focus on preconception care

Preconception care is the provision of biomedical, behavioral and social health interventions to women and couples before conception occurs.

What is its aim?

• Aims at improving health status and reducing behaviors and individual and environmental factors that could contribute to poor maternal and child health outcomes.

• Its ultimate aim is improved maternal and child health outcomes, in both the short and long term.
WHO Pre-pregnancy Care

Areas addressed by the package

- Nutritional conditions
- Genetic conditions
- Vaccine preventable diseases
- Environmental health
- Infertility/ subfertility
- Female genital mutilation
- Too early, unwanted and rapid successive pregnancies
- Sexually transmitted infections
- Interpersonal violence
- Tobacco use
- Human immunodeficiency virus (HIV)
- Psychoactive substance use
- Mental health

WHO 2013
Global Maternal Health: Summary

• Global burden of maternal death and ill-health
• Measurement is complicated & imprecise
• Personal, social, clinical, political and legislative factors
• Tackling mortality and morbidity
• New challenges – new strategies
• Holistic approach to reproductive health