Beyond Newborn Survival: A life-course perspective

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#Stillbirth  #EveryNewborn  @HannahBlencowewith
MDG 2015 results for women & children

No woman should die whilst giving life

No baby stillborn

No newborn is born to die

No child dying

303,000 die

2.6 million die

2.7 million die

3.2 million die

~ 9 million deaths affecting women, two-thirds related to birth

It is every woman’s right to quality respectful health care and the highest attainable level of health across the life course for herself and her child
Sustainable Development Goals era

- End preventable maternal newborn and deaths, and stillbirths
- Realize highest attainable standard of health
- Achieve transformative and sustainable change

By 2030, a world in which every woman, child and adolescent in every setting realizes their rights to physical and mental health and well-being, has social and economic opportunities, and is able to participate fully in shaping prosperous and sustainable societies
Ending preventable child and newborn deaths

Mortality targets in Every Newborn Action Plan and A Promise Renewed

Every Newborn target by 2030: National NMR of 12 or less

From 2.8 to 0.8 million neonatal deaths

~100 countries have already met the target — focus on equity gaps
About 29 countries will have to more than double their rates of progress
Progress towards ending preventable child deaths

47% of all U5 mortality reduction from reductions in pneumonia diarrhoea and measles

What do children die of?
Estimates of global causes of U5 child death for 2013

Complications of preterm birth estimated top cause of CHILD deaths

Neonatal Deaths 44%

Ending preventable stillbirths

The “big five” causes:
1. Childbirth complications
2. Maternal infections in pregnancy e.g., syphilis
3. Maternal conditions, esp. hypertension and diabetes
4. Fetal growth restriction
5. Congenital abnormalities

Every Newborn target by 2030: National SBR of 12 or less

From 2.6 to 1.1 million stillbirths
Ambitious change needed. Limited policy attention.
ENAP target, now included in WHO 100 core indicators and GS2.0 not in SDGs
Maternal health is key to fetal pre-natal health

Maternal Morbidity
“Any health condition attributed to and/or complicating pregnancy and childbirth that has a negative impact on the woman’s wellbeing and/or functioning.”

Fetal pre-natal health is key to childhood and adult health
Overview of impact of maternal morbidity on the next generation

- Maternal morbidity/ sub-optimal maternal health
- Effects on placenta
  - Disorders of growth
  - Disorders of development (Congenital abnormalities)
  - Congenital Infections
  - Disorders of growth
- Maternal and Family psychological and mental health
- Disorder of neonatal morbidity:
  - Intrapartum-related (preterm, infection or combination)
  - Respiratory, cardiovascular, infection, metabolic, neurological

Possible adverse fetal outcomes:
- Increased risk of intra partum stillbirth
- Possible adverse fetal outcomes: TOP, miscarriage, antepartum stillbirth
- Fetus with sub-optimal prenatal health alive at the start of labour

Increased risk of neonatal morbidity:
- Increased risk of neonatal death

Increased risk of neonatal death

- Long term complications for the next generation affecting
  - Cognitive/developmental outcomes
  - Motor outcomes
  - Respiratory/cardiovascular outcomes
  - Metabolic/growth outcomes
  - Psychological/mental health

Impact on care-giving and care-seeking throughout the life-course
Small babies - highest risk of adverse outcomes

### Preterm

**Global Estimates**
- Affected stillbirths - ???unknown
- 14.9 million preterm livebirths
  - (6.3 million not LBW)

**Geography**
- Highest rates in Africa
- Increased risk of intrapartum and post-natal complications
- Very high risk of neonatal death (GA and care specific)

### Small for gestational age

**Global Estimates**
- Affected stillbirths - ???unknown
- 10.6 million (SGA and LBW)
- 19.0 million (SGA not LBW)

**Geography**
- Highest rates in South Asia
- Increased risk of intrapartum and post-natal complications
- Increased risk (X2) of neonatal death

Estimated to account for ¾ of all neonatal deaths
- 2.8 million both preterm and small for gestational age highest risk

Varying underlying patho-physiology, but maternal health critical to reducing burden and improving outcomes
Beyond Newborn Survival: Long term neuro-developmental impairment after neonatal conditions

Estimates of incidence & neurodevelopmental impairment for 2010:
- Preterm birth
- Retinopathy of Prematurity (ROP)
- Intrapartum-related neonatal encephalopathy
- Neonatal infections
- Neonatal jaundice

Findings:
- Estimated >1.5 million impaired survivors
- The world you are born into determines your survival and your risk of disability
- Disability is not inevitable
- Critical to address coverage and quality of childbirth and newborn care to optimise outcomes

GBD2013: Neonatal and congenital conditions accounted for an estimated 250 million DALYs in 2013
10.1% of worldwide DALYs (many linked to maternal morbidity)
## Wider Determinants of health:
- Education
- Poverty reduction
- Empowerment
- Gender equality
- WASH
- Conflict and violence

## Pre-pregnancy and antenatal care
- Contraceptive and reproductive health services
- Pre-conception screening
- Folic acid/Fe, micro-nutrient supplementation
- Improved women's health (smoking, nutrition, etc.)
- Antenatal care: Prevention/Mx of infections eg malaria/syphilis
- Screening/Mx of medical disorders including hypertensive disorders diabetes
- Detecting/Mx complications including growth restriction/prolonged pregnancy

## Childbirth and neonatal care
- Skilled birth attendance
- Monitoring/detect complications
- Availability of emergency obstetric care
- Neonatal resuscitation
- Essential newborn care
- Ongoing neonatal supportive care for newborns with complications

## Ongoing paediatric and life-long care
- Ongoing care tailored to child's needs to maximise health and functioning
- Prevention and early detection of longer term complications eg metabolic, cardiovascular, respiratory

## Opportunities to improve outcomes
- Holistic Woman/Family centred respectful care to maximise physical and mental health and functioning including palliative and bereavement services when required
Women’s Health Central to survive, thrive and transform...
...for herself and her child

Â Increased attention to maternal morbidity and women’s health is a positive step for women
Â Noting adverse fetal, neonatal, child and long-term outcomes in next generation are strongly linked to these

Â Critical to quantify the full effects of interventions to reduce this burden on both the woman and her child, including the effect of stillbirth and longer term outcomes for the woman and child
Â Current data gaps

Â Ending preventable child deaths and stillbirths and improving health outcomes must commence with a focus on women’s health and empowerment, access to contraceptive services and improved coverage and quality of respectful care during pregnancy and childbirth
Â But attention and resources also required for postnatal care of complications in newborns to improve outcomes in those with poor pre-natal health
Five things to do differently to end preventable deaths in women and their babies

- **Implementation with Innovation**
  Address health system bottlenecks, *innovate* for Quality of Care

- **Integrated Plans, invest for impact**
  Integrated service delivery, continuum of care, coordination, partner alignment

- **Increase the voice of women**
  Women’s rights, and their voices for accountability, attention to bereavement care

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**Thank you**

- **Intentional leadership development**
  Especially in countries with highest burden

- **Indicators & metrics**
  Targets in post 2015
  Measurement of progress and impact