Saving Newborn Babies

GERTRUDE KAMPEKETE
PRINCIPAL IMCI-NEWBORN
GLOBALLY

- Globally, newborn deaths, occurring within the first 28 days of life, account for 40% of under-five child mortality.
- In 2012, 2.9 million newborn deaths occurred worldwide and Southern Asia and sub-Saharan Africa bore the heaviest burden, with both the largest number of annual births and the highest neonatal mortality rates.
- Globally it is estimated that NMR can be reduce from 34% to 10% by 2035 if high impact interventions are implemented universally.
Almost 40% of under 5 deaths are neonatal – 4 million a year

MDG-4 can only be achieved if neonatal deaths are addressed and this necessitates both maternal and child health interventions

Source: Lawn JE et al Lancet 2005
Neonatal deaths and MDG-4 in Africa

Almost 25% of under 5 deaths are neonatal – 1.12 million a year

MDG-4 can only be achieved if neonatal deaths are addressed and this necessitates both maternal and child health interventions.
1.12 million neonatal deaths in Africa:

Where?
The Information Problem

The majority of deaths... with the minority of information

Source: WHO
4 million newborn deaths - Where?

99% of newborn deaths are in low/middle income countries
66% in Africa and Southeast Asia
28% in Africa = 1.12 million babies

Source: Lawn JE et al Lancet 2005
Where? Countries with the highest numbers of neonatal deaths are similar to those with high maternal deaths

<table>
<thead>
<tr>
<th>Country</th>
<th>Ranking for numbers of neonatal deaths</th>
<th>Ranking for numbers of maternal deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>China</td>
<td>2</td>
<td>9 =</td>
</tr>
<tr>
<td>Pakistan</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Nigeria</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>6</td>
<td>4 =</td>
</tr>
<tr>
<td>Dem. Rep. Congo</td>
<td>7</td>
<td>4 =</td>
</tr>
<tr>
<td>Indonesia</td>
<td>8</td>
<td>11</td>
</tr>
<tr>
<td>Afghanistan</td>
<td>9</td>
<td>7</td>
</tr>
<tr>
<td>Tanzania</td>
<td>10</td>
<td>6</td>
</tr>
</tbody>
</table>

2.5 million neonatal deaths
Approx 66% of global total

325,000 maternal deaths
Approx 61% of global total

Where within countries is the risk highest for newborn deaths?

Mean NMR for rural and urban populations in 26 DHS surveys 1994-2001

![Bar graph showing average neonatal mortality rate per 1000 live births for rural vs. urban populations. Rural has a much higher bar compared to urban.]

Neonatal mortality and poverty


If all babies in Africa had the same neonatal mortality rate as the richest in their own countries then deaths would be reduced by 20%.
Each year in Africa at least 30 million women become pregnant.

Why focus on newborns?

1. Big number of deaths – relatively neglected
2. Up to 800,000 newborn deaths in Africa could be prevented each year with MNCH interventions which are already policy in most countries
3. Strengthening newborn health is a win-win-win for mothers, babies and children as well as health system building

Country demand!
1.12 million newborn deaths in Africa - When?

Up to 50% of neonatal deaths are in the first 24 hours.

75% of neonatal deaths are in the first week – 3 million deaths

Birth and first week is key: when most babies die yet when coverage of care is lowest for mothers and babies

1.12 million newborn deaths in Africa – Why?
Almost all are due to preventable conditions. Infections are the biggest cause and most feasible to prevent/treat.

- Preterm, 23%
- Sepsis/pneumonia, 27%
- Asphyxia, 24%
- Tetanus, 10%
- Diarrhoea, 4%
- Congenital, 6%
- Other, 7%

Source: Lawn JE, Wilksynska K, Cousens SN for the CHERG Neonatal Group, Int J Epi 2006 and as used in WHR 2005
Delivering an opportunity..

2005 – a year of opportunity for Africa
Africa’s newborns – double opportunity

New focus and opportunities for previously neglected newborns
Globally almost 3 million babies could be saved each year with low tech care

If the essential interventions described in *The Lancet* series reached 99% of women and babies then up to 72% of newborn deaths could be prevented

819,000 babies per year could be saved in Africa alone

At a cost of 96 cents per capita – of which 70% of the cost benefits mothers and children. Over 60% is obstetric care cost
WE KNOW WHAT TO DO
Integrated MNCH packages in the continuum of care

**Clinical**
- **Reproductive Health Care**
  - Family planning
  - Prevention & management of STIs & HIV
  - Folic acid

- **Antenatal Care**
  - 4-visit focused package
  - Postnatal care
  - Malaria ITN for malaria
  - PMTCT for HIV/AIDS

- **Childbirth Care**
  - Skilled obstetric care and immediate newborn care (hygiene, warmth, breastfeeding) and resuscitation, PMTCT
  - Emergency obstetric care

- **Postnatal Care**
  - Promotion of healthy behaviours
  - Early detection and referral of complications
  - Extra care of LBW babies
  - PMTCT for HIV

- **Emergency Newborn and Child Care**
  - Integrated management of childhood illness (IMNCI)
  - Extra care of preterm babies including kangaroo mother care
  - Emergency care of sick newborns
  - Care of children with HIV

- **Preventive Child Care**
  - Immunisations
  - Malaria ITN
  - Nutrition
  - Care of children with HIV including cotrimoxazole

**Family/community**
- **Adolescent Health Care**
  - Adolescent and pre-pregnancy nutrition
  - Education
  - Prevention of HIV and STIs

- **Outreach/outpatient**
  - Adolescent and pre-pregnancy nutrition
  - Post-abortion care, TOP where legal
  - STI case mx

- **Child Health Care**
  - Healthy home care including: promotion of exclusive breastfeeding, hygienic cord/skin care, keeping the baby warm, danger sign recognition and careseeking for illness
  - Integrated Case Management (iCCM) for pneumonia, malaria, diarrhoea, neonatal sepsis, where referral is not available

**Pre-pregnancy**
- Adolescence health

**Clinical**
- Post-abortion care, TOP where legal
- STI case mx

**Family/community**
- Adolescent and pre-pregnancy nutrition
- Education
- Prevention of HIV and STIs

**Child Health Care**
- Healthy home care including: promotion of exclusive breastfeeding, hygienic cord/skin care, keeping the baby warm, danger sign recognition and careseeking for illness
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Coverage of MNCH Interventions across the continuum of care, African Region, 2012

Time trends for some essential packages in sub-Saharan Africa

Source: Opportunities for Africa’s Newborns – based on information from www.childinfo.org
ZAMBIAN SITUATION

- Neonatal mortality of 34/1000 live births (ZDHS,2007). In 2011, the first day mortality rate was 10/1000 live births. Of all newborn deaths:
  - 37% are attributed to preterm birth complications;
  - 26% constitute newborn infections (tetanus, meningitis, sepsis, pneumonia and diarrhoea); and
  - 28% are due to intrapartum causes and asphyxia (Source: WHO, 2012).

- In working towards MDG 4 (Child survival), there is need to address newborn care adequately.
Progress towards MDG 4 in Zambia for child health impact indicators

TRENDS IN CHILD MORTALITY RATES, ZDHS 1980-2007

- NMR
- IMR
- U5MR

YEAR of ZDHS:
- 1980
- 1990
- 1992
- 1997
- 2002
- 2007

No. per 1,000 Live Births:
- 1980: 179
- 1990: 167
- 1992: 177.6
- 1997: 192.2
- 2002: 168
- 2007: 119

- 1980: 97
- 1990: 90
- 1992: 98.2
- 1997: 107.7
- 2002: 95
- 2007: 70

- 1980: 40
- 1990: 36.1
- 1992: 37
- 2002: 34
FOCUS ON REDUCING NEONATAL DEATHS

- The Framework developed in 2013 provided the basis for developing guidelines.
- A full package on Essential Newborn Care (ENC) has been developed by Ministry of Community Development Mother and Child Health with support from partners.
- The high impact evidence based interventions included in the ENC guidelines will save newborn lives across the continuum of care commencing at community level to health facilities. The focus is to reduce neonatal deaths.
This is possible through dissemination and implementing of the newborn care framework and Essential Newborn Care guidelines.

Zambia is already implementing:
- Helping Babies Breath (HBB)
- Kangaroo mother care (KMC)
- Initiation of exclusive breastfeeding (EBF) within one hour of birth and continued EBF
- Keeping the cord clean and dry
- Recognition of danger signs and prompt referral.

Currently these interventions are disseminated separately.
FOCUS ON REDUCING NEONATAL DEATHS

- The Newborn health care scale-up framework is assisting government and collaborating partners to determine strategic objectives and priorities for scale up of newborn health interventions.
- Guide further development of national strategies and interventions for improving newborn health that are integrated into maternal and child health plans.
- and Essential newborn care guidelines at all levels of health care.
- To increase the number of skilled birth attendants.
- Increase number of Health workers and Community volunteers trained in ENC at primary levels.
- Plan TOT/HW training in neonatal health care.
<table>
<thead>
<tr>
<th>Community Package: Caring for Newborns and Children at home</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Promotion of ANC and skilled care at birth</td>
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<tr>
<td>• Promotion of good care for the mother</td>
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<tr>
<td>• Care in first week of life</td>
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<tr>
<td>• Recognition and referral for danger signs</td>
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<tr>
<td>• Special care for Low-birth-weight babies</td>
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<td>• Community-level integrated case management of childhood illness</td>
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<tr>
<td>• Treatment in the community</td>
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<tr>
<td>• Diarrhoea</td>
</tr>
<tr>
<td>• Fever (malaria), Pneumonia</td>
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<tr>
<td>• Feeding problems/malnutrition</td>
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<tr>
<td>• Referral of children with danger signs</td>
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<tr>
<td>• Promotion of key family practices at home and in the community</td>
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<tr>
<td>• Care-giving skills and support for child development</td>
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<tr>
<td>• Infant and young child feeding</td>
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<tr>
<td>• Family response to child’s illness</td>
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<tr>
<td>• Prevention of illness</td>
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<tr>
<td>• Caring for the Newborn at Home</td>
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</tbody>
</table>
Conclusions

- MDG-4 cannot be met unless neonatal deaths are reduced – yet newborn deaths have been invisible on policy agendas.
- The first week of life is key – but gap between maternal services and child health services especially for those born at home.
- Infections, complications of preterm birth and asphyxia together account for > 85% of neonatal deaths, yet we have solutions.
- There are strong links between maternal deaths, stillbirths and newborn deaths:
  - Time and place of death, delays in access to care.
- There are strong links between newborn health and child health:
  - Similar morbidity after first week of life - transition to ARI, diarrhoea etc
  - Major risk of long term disability
  - Healthy behaviours, many of which start in the first week of life.

BUT Coverage is low – and lower for the poor.

Business as usual will not save these lives…
Thank you