Child Health in the Majority World

A Billion Reasons to Hope

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Child Health in the Majority World

Scope of the Problem

Biblical basis

Evidenced-based interventions

Lessons and Best Practices

Next steps
Scope of the Problem: Overview
25 years of Child Health in the Majority World

Morbidity and Mortality in under-5’s

Mortality: counted per 1000 who don’t reach age 5
→ rate of 100/1000 (10%) = catastrophe
→ in sub-Saharan Africa rates can be even higher

Cost Effectiveness

Investing in newborn interventions results in more years of life saved than treating adults (e.g., saving the life of a newborn results in 70-80 years of “life saved”...cost effective!)
Scope of the Problem
Morbidity and Mortality in under-5s

5.9 million under-five deaths in 2015

16,000 per day
700 per hour
11 per minute
Scope of the Problem
Morbidity and Mortality in under-5s

Fig. 1: Both the under-five mortality rate and the number of under-five deaths have fallen by more than half since 1990.

Global under-five, infant and neonatal mortality rates and number of deaths, 1990–2015

A. Mortality rates
- Under-five mortality rate
- Infant mortality rate
- Neonatal mortality rate

B. Number of deaths
- Under-five deaths
- Infant deaths
- Neonatal deaths

**Scope of the Problem**

**Causes of Mortality**

- 45% of all under-five deaths occur in the neonatal period.
- Nearly half of all deaths in children under age 5 are attributable to undernutrition.
Scope of the Problem
Root Causes

Figure 14 reflects the disadvantages faced by children from poor families, rural households or mothers without education. The line through the centre of each figure shows what an equal distribution of under-five deaths between the two groups would look like. The further a point departs from the line, the more unequal the distribution of risk between the two categories. The heavy grouping of nearly all the points below the diagonal line makes clear what the data above describe: Children from wealthier families, urban households or mothers with at least secondary education stand a far better chance of surviving their early years than children from poorer families, rural households or mothers without education.

Note: Each dot represents one country. Data from surveys with the most recent reference year since 2005 are shown for 46 countries for education, 50 for wealth and 68 countries for place of residence.

Source: UNICEF analysis based on Demographic and Health Surveys (DHS), Multiple Indicator Cluster Surveys (MICS) and other nationally representative sources.
State of the World’s Children through the lens of Justice and Mercy

God’s Passion is for Justice
Isaiah 1:17, 61:8

God’s Passion is for the Weak
Psalm 140:12, 36:7, 72:4
Matthew 19:14

God’s Passion is for Mercy
Micah 6:8
Zechariah 7:9
Evidence-based Interventions

Figure 1: Conceptual framework
WRA = women of reproductive age. WASH = water, sanitation, and hygiene. SAM = severe acute malnutrition. MAM = moderate AM.
Evidenced-based Interventions

Safe Delivery, newborn resuscitation and care


http://www.biomedcentral.com/content/pdf/1471-2458-11-S3-S12.pdf
More Evidence-based Interventions

Breast-feeding

Exclusive breast-feeding within 24 hours of birth

→ 44% reduction in risk of death (Z.S. Lassi et al. / EBioMedicine 2 (2015) 985–1000)

Immunizations, Vitamin A, malaria prophylaxis

Vitamin A supplementation

→leads to 25% reduction in all-cause childhood mortality

(Imdad A, Herzer K, Mayo-Wilson E, Yakoob MY, Bhutta ZA. Vitamin A supplementation for preventing morbidity and mortality in children from 6 months to 5 years of age. Cochrane Database of Systematic Reviews 2010, Issue 12.)
Evidence-based Interventions
45% of deaths under-5 are attributable to malnutrition

Figure 4: Effect of scale up of interventions on cause-specific deaths

Evidence-based Interventions: Malnutrition Prevention and Treatment

45% of under-5 mortality attributable to malnutrition
## Evidence-based Interventions

<table>
<thead>
<tr>
<th></th>
<th>Estimated deaths (2011)</th>
<th>Deaths averted (2025 vs 2011)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Historical trends (2025)</td>
</tr>
<tr>
<td><strong>All deaths</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Children aged &lt;5 years</td>
<td>7038418</td>
<td>1821329 (26%)</td>
</tr>
<tr>
<td>Neonatal deaths</td>
<td>2918004</td>
<td>787783 (11%)</td>
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<tr>
<td>Infants aged 1–59 months</td>
<td>4120414</td>
<td>1033546 (15%)</td>
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<tr>
<td><strong>Diarrhoea deaths</strong></td>
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<td></td>
</tr>
<tr>
<td>Children aged &lt;5 years</td>
<td>711569</td>
<td>382415 (54%)</td>
</tr>
<tr>
<td>Neonatal deaths</td>
<td>49902</td>
<td>16016 (2%)</td>
</tr>
<tr>
<td>Infants aged 1–59 months</td>
<td>661667</td>
<td>366399 (51%)</td>
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<tr>
<td><strong>Pneumonia deaths</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Children aged &lt;5 years</td>
<td>988578</td>
<td>499859 (51%)</td>
</tr>
<tr>
<td>Neonatal deaths</td>
<td>326308</td>
<td>150143 (15%)</td>
</tr>
<tr>
<td>Infants aged 1–59 months</td>
<td>662270</td>
<td>349716 (35%)</td>
</tr>
</tbody>
</table>

Results are based on implementation of 15 interventions: improved water source, hand washing with soap, improved sanitation, hygienic disposal of children’s stools, breastfeeding promotion, *Haemophilus influenzae* type b vaccine, pneumococcal vaccine, rotavirus vaccine, vitamin A supplementation, zinc supplementation, oral rehydration solution, zinc for diarrhoea treatment, antibiotics for dysentery, oral antibiotics for pneumonia, and case management.

*Table 4: Diarrhoea and pneumonia deaths averted in the 75 high-burden Countdown countries between 2011 and 2025 with the historical trends and ambitious scale-up approaches*
Lessons and Best Practices

Partnership and Relocation

Prevention and Cure (both-and)

Training Others as You Go

Gathering Data

Be Part of a Team

Advocacy: Be the Voice of the Vulnerable
Partnership and Relocation

No substitute for living among the people you want to help
Prevention and Cure

Important to care for the sick
AND
to address root causes of sickness
Training Others as You Go

Important to equip others to multiply your effect
Gathering Data

Important to measure your impact

Count something!
Monitor your progress. Evaluate your impact.
Being Part of a Team

Community is a critical ingredient for impact and longevity
Advocacy

Be the Voice of the Vulnerable

Children often don’t have anyone advocating for their needs
Next Steps..

Pray
For specific missionaries
For justice for children
For God’s leading in your life (the intersection between the needs of the world and the desires of your heart)

Study/Train
Develop skills to benefit children
Medicine (MD, RN, PT/OT, Child Life)
Teaching (Education, Youth Ministry, Arts/Music)
Sports (Coaching, Discipleship)

Support
Seek out organizations which protect and benefit children
Seek out organizations which promote family resilience