Author(s): Shirley Chen, Lynette Thames, Kathryn Marten, 2010

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MDG 4: REDUCE CHILD MORTALITY

Shirley Chen, Lynette Thames, Kathryn Marten
THE GOAL

Target 5: Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate

Indicators:
13. Under-five mortality rate
14. Infant mortality rate
15. Proportion of 1 yr-old children immunized against measles
WHAT CAUSES CHILD MORTALITY?

In 1993, the number of under-five deaths attributable to malnutrition: 54%
SO WHY IS THE MEASLES VACCINE INCLUDED?

THE MEASLES VACCINE IS INCLUDED BECAUSE...

- 2008: 164,000 measles deaths
- It costs less than $1 dollar to vaccinate a child against measles
- Most common in children in parts of Asia sub-Saharan Africa where child mortality is highest
  - HIV/AIDS, Vit A deficiency, conflict zone co-morbidity
  - WHO Africa region (10% world’s population) accounted for 58% of measles deaths in 2000.
- Access to measles vaccine varies across socio-economic, education, rural location and birth order demographics

WHAT ISN’T INCLUDED?

• Advent of medical advances since 1990
  • Rotavirus vaccine improvement to prevent major cause of diarrheal illness
• Addressing root causes of childhood illness/death
  • Malnutrition
  • Access to healthcare services
• Sanitation: ACCESS TO CLEAN DRINKING WATER
• Example: Cholera outbreak in Haiti
  • Homelessness led to “open defecation”
  • No place in temporary camps to purify water
  • ORT
WHERE ARE WE NOW?

The average rate of decline from 2000 to 2008 is 2.3%, compared to a 1.4% average decline from 1990 to 2000.

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<tbody>
<tr>
<td>Mortality rate, under-5 (per 1,000)</td>
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<tr>
<td>Mortality rate, infant (per 1,000 live births)</td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Immunization, measles (% of children ages 12-23 months)</td>
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</table>

WHERE ARE WE NOW?

Under-5 mortality rate,  2008

<table>
<thead>
<tr>
<th>Country</th>
<th>Value</th>
<th>Rank</th>
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<tbody>
<tr>
<td>Afghanistan</td>
<td>257</td>
<td>1</td>
</tr>
<tr>
<td>Angola</td>
<td>220</td>
<td>2</td>
</tr>
<tr>
<td>Chad</td>
<td>209</td>
<td>3</td>
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<td>Somalia</td>
<td>200</td>
<td>4</td>
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<td>Dem. Republic of the Congo</td>
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</tr>
<tr>
<td>Guinea-Bissau</td>
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<tr>
<td>Mali</td>
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<td>7</td>
</tr>
<tr>
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<td>7</td>
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<tr>
<td>Nigeria</td>
<td>186</td>
<td>9</td>
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<tr>
<td>Central African Republic</td>
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<td>Montenegro</td>
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<td>San Marino</td>
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- U.S. is lagging in child mortality reduction
  - Ranked 42nd (6.7 deaths/1,000 children) compared to 29th in 1990
- 7.7 million child deaths in 2010, down from 11.9 million deaths in 1990
  - Across 21 regions of the world, rates of neonatal, postneonatal, and childhood mortality are declining


Source: UNICEF State of the World’s Children 2010
OVERALL PROGRESS BUT...

- Globally, child mortality has only fallen by 28% since 1990
  - Not yet 1/3 of the way to meeting our target in 2015
  - Out of the 64 countries with highest child mortality rates, only 9 are on track to meet MDG 4.

- 99% of child deaths take place in developing countries

- The highest rates of child mortality rates are found in sub-Saharan Africa, which accounts for half all deaths
  - Increased mortality in Chad, Congo, Kenya, South Africa

http://www.un.org/millenniumgoals/2008highlevel/pdf/newsroom/Goal%204%20FINAL.pdf
• Gap mirrors economic development between countries but there is no obvious correlation between changes in GDP and child mortality
  • South Africa
  • Egypt
• Policy choices
• Distribution of wealth and health resources
Figure 1.2  Under-5 mortality rates by socioeconomic quintile of the household for selected countries

GROWING RICH-POOR GAP

Source: Save the Children analysis using data from Demographic and Health Surveys (DHS)
ADDRESSING INEQUITIES

• Human rights framework for child health
  • UN Convention on the Rights of the Child (1989)

• “Egalitarian approach”
  • Rate of reduction in each quintile matches that in the fastest improving quintile
  • “Equitable approach”?

• Universal access/delivery of essential services

• Comprehensive strategies to tackle wider determinants of child survival
  • Links to other MDGs
WHY AREN’T WE THERE?

- Lack of progress in maternal health (MDG 5)
  - 41% of under-five deaths are due to neonatal causes
- Preventable
  - Antenatal care
  - Skilled birth attendants
  - Emergency obstetric care
  - Continuum of care

Coverage of interventions varies across the continuum of care

Median national coverage of interventions across the continuum of care for 20 Countdown interventions and approaches in Countdown countries, most recent year since 2000 (%)

- Pre-pregnancy
  - Contraceptive prevalence rate
  - At least four antenatal care visits
  - Prevention of mother-to-child transmission
  - Intravenous parenteral nutrition of mother in pregnancy

- Pregnancy
  - Skilled attendant at birth
  - Breastfeeding

- Birth
  - Exclusive breastfeeding (first 6 months)
  - Complementary feeding (age 6-23 months)
  - Malaria prevention and treatment
  - Vitamin A supplementation (at least 1 dose)

- Postnatal
  - Child spacing
  - Vaccination
  - Care-seeking for pneumonia
  - Antibiotics for pneumonia

- Infancy
  - Maternal treatment
  - Diarrhea treatment
  - Improved sanitation facilities

- Childhood
  - Improved drinking water

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a. Target coverage value is not 100%.

Source: Prevention of mother-to-child transmission of HIV/AIDS, UNICEF, Joint United Nations Programme on HIV/AIDS (UNAIDS) and WHO; immunization rates, WHO and UNICEF; postnatal visit for mother, Saving Newborn Lives analysis of Demographic and Health Surveys; improved water and sanitation, WHO and UNICEF Joint Monitoring Programme 2010; all other indicators, UNICEF Global Databases, November 2009, based on Demographic and Health Surveys, Multiple Indicator Cluster Surveys and other national surveys.
WHY AREN’T WE THERE?

• Women’s education
  • 1-3 years of maternal schooling could decrease child mortality by 15%

• Regional instability
  • Conflict zones make food production difficult
    • 44% of child deaths happen in countries considered fragile
  • Lack of sanitary food and water sources
    • Diarrhea and malnutrition

WHY AREN’T WE THERE?

• Lack of funding
  • 1.7 million measles-related deaths are predicted between 2010 and 2013

• Sub-standard funding/aid
  • Food aid

WHAT IS WORKING?

• Enhancing immunization programs
  • Vietnam
  • Egypt
  • Bangladesh
• Encouraging breastfeeding in Cambodia
  • Cambodian Ministry of Health’s “Baby Friendly Community Initiative”
• Offering mosquito nets in:
  • Congo
  • Democratic Republic of Congo
  • Gabon
  • Mali

WHAT IS WORKING?

• WHO and UNICEF contributions
  • GOBI = Growth monitoring, Oral rehydration therapy, Breastfeeding & Immunization
    • GOBI/FFF: World Bank added Family planning, Food production, and female education
  • Expanded Program on Immunization (EPI)
  • Integrated Management of Childhood Illness (IMCI)

• UN Accomplishments
  • Global Strategy for Women and Children's Health

Additional Source Information

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