Child health and survival in the SDG Era

Institutionalizing Integrated Community Case Management (iCCM) to End Preventable Child Deaths
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Outline

● Global trends in child and adolescent health
● SDGs, Global Strategy and shifts in child health agenda
● The care continuum – home, community and facility
● Basic packages for continuity of care
● Bringing child care close to home in the context of PHC
● Why iCCM

Total
- 14.3 million (1990)
- 11.2 million (2000)
- 6.3 million (2017)

Mortality rate (probability of dying per 1,000)
- Children under age 5
- Neonatal
- Children and young adolescents aged 5–14

Year
- 1990
- 2000
- 2017

- 12.6 million
  - Neonatal deaths: 5.0 million (40% of under-five deaths)
  - Total Under-five: 12.6 million

- 9.8 million
  - Neonatal deaths: 4.0 million (41% of under-five deaths)
  - Total Under-five: 9.8 million

- 5.4 million
  - Neonatal deaths: 2.5 million (47% of under-five deaths)
  - Total Under-five: 5.4 million

- 1.7 million
  - Total Children and young adolescents aged 5–14

- 1.4 million
  - Total Children and young adolescents aged 5–14

- 0.9 million
  - Total Children and young adolescents aged 5–14

Global Child (0-14 years) Mortality Trends and Numbers 1990-2017 (> 50% decline)

Mortality rates

Deaths per 1,000

- Under-five mortality rate
- Neonatal mortality rate
- Mortality rate among children aged 5–14 years

Number of deaths

Deaths (in millions)

- Under-five deaths
- Neonatal deaths
- Deaths among children aged 5–14 years
Global causes of death for under fives

- Prematurity: 16.2%
- Sepsis: 6.5%
- ARI: 12.1%
- Congenital anomalies: 5.2%
- Diarrhoeal: 7.8%
- Injuries: 5.6%
- Malaria: 4.9%
- Other infectious: 7.3%
- Other NCDs: 4.5%
- Birth Asphyxia: 11.3%

- neonate
- postneonate
AFRO under 5 causes of death (%): 2017

Top 5 Infectious causes of death:
- Pneumonia
- Malaria
- Diarrhea
- Sepsis
- HIV/AIDS
Mortality rates per 1000 for under-5 year olds by year and modified WHO region

- Pneumonia
- Diarrhea
- Malaria

[Graph showing mortality rates per 1000 for under-5 year olds by year and modified WHO region, with Pneumonia, Diarrhea, and Malaria highlighted.]
Mortality rates per 100,000 population for 5 to 9 year olds by year and modified WHO region

- Diarrhoea
- Pneumonia
- Malaria

[Graph showing mortality rates for different regions and years, with categories for causes of death including Diarrhoea, Pneumonia, Malaria, Other infectious diseases and malnutrition, Other noncommunicable diseases, Diarrhoeal diseases, and Respiratory infections.]
Under-five mortality rate (deaths per 1,000 live births) by country, 2017

Under-five mortality rate (deaths per 1,000 live births):

- >100
- 75 to 100
- 50 to 75
- 25 to 50
- ≤25
- No data

Malaria high burden countries
Probability of dying among children aged 5–14 (deaths per 1,000 children aged 5) in 2017, by country

Probability of dying among children aged 5–14 years (deaths per 1,000 children aged 5):

- >30
- 20 to 30
- 10 to 20
- 5 to 10
- ≤5
- No data

Malaria high burden countries
Inequities in impoverished families or marginalized communities

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CHILD HEALTH IN SDG ERA

CHILD & ADOLESCENT HEALTH
ENSURE SURVIVAL, GROWTH AND PROMOTE WELL BEING OF ALL CHILDREN
GLOBAL STRATEGY

Objectives

1. SURVIVE
   End preventable deaths

2. THRIVE
   Ensure health and well-being

3. TRANSFORM
   Expand enabling environments
# Targets—aligned with the SDGs

**SURVIVE**  
**End preventable deaths**

- Reduce global maternal mortality to less than 70 per 100,000 live births
- Reduce newborn mortality to at least as low as 12 per 1000 live births in every country
- Reduce under-5 mortality to at least as low as 25 per 1000 live births in every country
- End epidemics of **HIV, tuberculosis, malaria**, neglected tropical diseases and other communicable diseases
- Reduce by 1/3 premature mortality from **NCDs** and promote mental health and well-being

**THRIVE**  
**Ensure health and well-being**

- End all forms of **malnutrition**, and address the nutritional needs of adolescent girls, pregnant and lactating women and children
- Ensure **universal access to sexual and reproductive health-care services** (including for family planning) and rights
- Ensure that all girls and boys have access to good quality **early childhood development**
- Substantially reduce pollution-related deaths and illnesses
- Achieve **universal health coverage**, including financial risk protection, and access to **quality essential services**, medicines and vaccines

**TRANSFORM**  
**Expand enabling environments**

- Eradicate **extreme poverty**
- Ensure that all girls and boys complete free, equitable and good quality **secondary education**
- Eliminate all harmful practices and all discrimination and violence against women and girls
- Achieve universal and equitable access to safe and affordable drinking **water** and to adequate **sanitation and hygiene**
- Enhance scientific research, upgrade technological capabilities and encourage innovation
- Provide legal identity for all, including **birth registration**
- Enhance the global partnership for sustainable development
Global Strategy: What are the implications?

- **Universality and equity**: For all children and leaving no one behind – including most vulnerable, marginalized and hard to reach.

- **Life-course approach**: Health and well-being are interconnected at every stage of life, and across generations.

- **Broader child health agenda**: “Survive – Thrive – Transform”

- **Integrated and multi-sectoral approach**: actions across core sectors to address health determinants e.g. nutrition, education, WASH, environment, infrastructure, etc.
Strategic shifts in child health programming

1. **Expanded focus from predominantly under-five child survival to 0-19 life course** programming for the first two decades of life across health, nutrition, psychosocial and supportive environment.

2. **Expand and refocus the survive agenda** to target age specific high mortality burden with greater emphasis on quality, high coverage and equity for vulnerable populations.

3. **Increase emphasis on thrive agenda to build children’s resilience** through nurturing care, early learning and promoting optimal health, growth and development, and by addressing the high morbidity burden along the life course.

4. **Adopt a multi-sectoral delivery of comprehensive** family, child and adolescent-centered care, services and actions across all health programs and health related sectors.
Effective interventions exist

### Intervention

<table>
<thead>
<tr>
<th>Postnatal (newborn)</th>
<th>Referral level</th>
<th>1st level</th>
<th>Community</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediate thermal care</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Initiation of exclusive breastfeeding (within first hour)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Hygienic cord and skin care</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Neonatal resuscitation with bag and mask (professional health worker)</td>
<td>✓</td>
<td>✓</td>
<td>-</td>
</tr>
<tr>
<td>Case management of neonatal sepsis, meningitis and pneumonia</td>
<td>✓</td>
<td>✓</td>
<td>-</td>
</tr>
<tr>
<td>Kangaroo mother care for preterm and for less than 2000g babies</td>
<td>✓</td>
<td>✓</td>
<td>-</td>
</tr>
<tr>
<td>Management of newborns with jaundice</td>
<td>✓</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Surfactant to prevent respiratory distress syndrome in preterm babies</td>
<td>✓</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Continuous positive airway pressure (CPAP) to manage babies with respiratory distress syndrome</td>
<td>✓</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Extra support for feeding small and preterm babies</td>
<td>✓</td>
<td>✓</td>
<td>-</td>
</tr>
<tr>
<td>Presumptive antibiotic therapy for newborns at risk of bacterial infections</td>
<td>✓</td>
<td>-</td>
<td>-</td>
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</table>

### Infancy and Childhood

<table>
<thead>
<tr>
<th>Referral level</th>
<th>1st level</th>
<th>Community</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exclusive breastfeeding for 6 months</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Continued breastfeeding and complementary feeding from 6 months</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Prevention and case management of childhood malaria</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Vitamin A supplementation from 6 months of age</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Comprehensive care of children infected with or exposed to HIV</td>
<td>✓</td>
<td>-</td>
</tr>
<tr>
<td>Routine immunization and H. influenzae, meningococcal, pneumococcal and rotavirus vaccines</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Management of severe acute malnutrition</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Case management of childhood pneumonia</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Case management of diarrhoea</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

### Cross-cutting community strategies

- Home visits for women and children across the continuum of care | - | - | ✓ |
Health system linkages to support continuum of care

Increased quality and coverage of child health interventions

Home and community-based services → Outreach → Health facility-based services

Health System Policies and Supports
- supportive supervision, medicines & supplies, referral
- (systems, HIS and quality improvement)

Trained & motivated CHWs

Trained & motivated HWs
IMPROVING QUALITY OF CARE AT HEALTH FACILITIES

ALL SICK CHILDREN are encouraged to seek prompt care in health facilities but we should be ready to provide **HIGH QUALITY CARE** for better health outcomes.

- **EFFECTIVE AND SAFE PROVISION OF CARE:**
  At the health facility children need to receive appropriate and timely evidence based care with seamless continuity of care.

- **GOOD EXPERIENCE OF CARE**
  Care provided with effective communication, participation, respect and fulfillment of children’s rights with educational, emotional and psychological support.

- **APPROPRIATE HUMAN RESOURCES, ENVIRONMENT, MEDICINES AND SUPPLIES**
  Care provided with competent empathetic staff in a child and family friendly environment with age appropriate equipment, medicines and supplies.
IMNCI FOR OUTPATIENT CARE AT PRIMARY LEVEL FACILITIES

- aims to reduce death, illness and disability, and to promote improved growth and development
- focuses on the whole child on both curative & prevention of disease.
- uses a systematic integrated approach to common childhood illnesses
- improves case management skills of health-care staff and the health systems support
- improves family and community health practices.
1st Level Referral Hospital Care

- focuses on the management of severely ill children referred from primary level facilities
- focuses on common childhood illnesses including some surgical conditions that are major cause of mortality.
- addresses emergency triage, assessment and treatment of common emergency conditions in children.
- uses a systematic approach to assessment, diagnosis, treatment and supportive care for severely ill children in the context of small hospitals
Bringing care closer to families

Sick child and their families should be able to universally access quality services as close to their homes as possible.

- **HOME:** to promote health, growth and development through individual and family empowerment in generation of health, parenting and home care, prevention of disease and risk of factors and care seeking.

- **COMMUNITY:** to increase quality, coverage and equity of essential health services to reduce deaths and illnesses and lower disease burdens.
Caring for the Newborn and Child in the Community: 3 Generic Packages

**Care for the newborn at home**
- Promotion of ANC and skilled care at birth
- Promotion of good care for the mother
- Care for newborn in the first week of life
- Recognition and referral for danger signs
- Special care for Low-birth-weight babies

**Healthy Growth and Development**
- Promotion of key family practices at home and in the community
- Care-giving skills and support for child development
- Infant and young child feeding
- Family response to child’s illness
- Prevention of illness

**Sick Child**
- Recognition and referral of children with danger signs
- Recognition, assessment and treatment of common childhood illness in the community
  - Diarrhoea
  - Fever (malaria)
  - Pneumonia
  - Feeding problems/malnutrition
  - HIV/TB screening
- Advice on home care and prevention
Malaria, Diarrhoea, and Pneumonia are three major causes of post-neonatal, under-5 deaths

Overlap of clinical presentation of malaria and pneumonia

Decreasing burden of malaria in many settings

Issue of how to manage non-malaria febrile cases, many of which are due to pneumonia
Caring for the Sick Child

- Identify signs of illness
  - Fever
  - Diarrhoea
  - Fast breathing
  - Chest indrawing
  - Severe malnutrition
  - HIV/TB screening

- Refer child with danger signs (or other problems) and begin treatment

- Treat the sick child
  - Diarrhoea at home (ORT and zinc)
  - Treat fever (antimalarial), and
  - Fast breathing (antibiotic) at home
Overall approach

OVERVIEW: Caring for the Sick Child in the Community
(child age 2 months up to 5 years)

Identify problems:
ASK and LOOK

If any DANGER SIGN
REFER CHILD WITH DANGER SIGN URGENTLY TO HEALTH FACILITY
Begin treatment and Assist referral
Follow up child on return

SICK but NO Danger Sign
TREAT diarrhoea, malaria, and fast breathing at home and ADVISE caregiver
Check the vaccines the child received
Screen for HIV/TB infection
Follow up child in 3 days
Refer to health facility

If OTHER PROBLEMS or any condition you cannot manage
Refer child to health facility

If child becomes sicker or does not improve, REFER URGENTLY TO HEALTH FACILITY
Training Materials

- CHW Chart booklet
- CHW Manual
- Facilitator notes
- Counseling cards
- Inpatient instructor guide
- Outpatient guide
- Job aids
- Photo booklet
- iCCM videos
WHY iCCM

- addresses the top causes of child mortality
- increases access, quality, coverage and equity enhancing program effectiveness and efficiency
- promotes timely care seeking and appropriate treatment leading to improved health outcomes
- operationalizes primary health care as a vehicle to achieving universal health coverage for all.

iCCM offers the best platform to increase malaria treatment access, quality, coverage and equity in the context of PHC & UHC.
Thank you