The Helping Babies Breathe Program

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An evidence-based neonatal resuscitation curriculum for resource poor areas

Helping Babies Breathe
Where do most neonatal deaths occur?

Global causes of neonatal death

- Severe infections (mainly sepsis and pneumonia): 26%
- Asphyxia: 23%
- Preterm birth: 27%
- Congenital anomalies: 7%
- Tetanus: 7%
- Diarrhoeal diseases: 3%
- Other: 7%

UNICEF 2007
Lee, Wall, Cousens et al. Int J Epidemiol
What causes neonatal death?

- Complications from preterm birth: 35%
- Complications during childbirth: 23%
- Neonatal infections: 28%
- Congenital: 9%
- Other: 6%
- Diarrhoea: 2%
- Sepsis and meningitis: 13%
- Pneumonia: 11%
- Tetanus: 2%

Stillbirths

Annual Global Deaths

- 7.7 million children under 5 years
- 3.1 million neonatal
- 800,000 intrapartum asphyxia related
- 1.0 million stillbirths
Global Progress to MDG 4 for child survival

- Under-five mortality rate (UN)
- Under-five mortality rate (IHME)
- Neonatal mortality rate (UN)
- Neonatal mortality rate (IHME)

3.1 million neonatal deaths, 40% of all under-five deaths
Basic Strategy of HBB

- Evidence Based Medical Action Plan
- Educational curriculum and teaching methodology
- Clinical and teaching equipment
Primary Concepts of the Science of Neonatal Resuscitation

- Asphyxia (intrapartum hypoxia)
- Primary and secondary apnea
- Recovery
Evidence Based Medical Action Plan

• Targeted at the most common neonatal intrapartum problems

• Linked to advanced neonatal care if available

• Designed for use in all places where babies are born
Action Plan

Helping Babies Breathe

1. Birth
2. Crying
   - Dry thoroughly
   - Not crying
3. Crying
   - Check breathing
   - Breathing well
   - Not breathing
4. Breathing
   - Clear the airway and stimulate
   - Breathing?
   - Rectal breathing
5. Rectal breathing
   - Cut cord
6. Cut cord
   - Breathing
   - Ventilate
   - Not breathing? Call for help
7. Call for help
   - Improve ventilation
   - Not breathing?
   - Heart rate?
8. Heart rate?
   - Normal
   - Slow
   - Continue ventilation
   - Advanced care
Routine Care

• Clearing the airway if meconium present
• Drying infant
• Recognize crying
• Keeping warm
• Cutting the umbilical cord
• Encouraging breastfeeding
The Golden Minute ®

- Recognizing infant not crying
- Positioning head
- Clearing the airway
- Stimulating
- Recognizing breathing
- Initiating ventilation by 1 minute
Basic Strategy of HBB

• Evidence Based Medical Action Plan

• **Educational curriculum and teaching methodology**

• Clinical and teaching equipment
Educational curriculum and teaching methodology

- Targeted at all levels of care providers
- Based on teacher-learner pairs
- Knowledge and skill assessments
- TOT cascade implementation
Paired Learning/Teaching
Hands on Practice
Basic Strategy of HBB

- Evidence Based Medical Action Plan
- Educational curriculum and teaching methodology
- Clinical and teaching equipment
Helping Babies Breathe is now in 48 countries

Source: Helping Babies Breathe July 2012 progress report
Implementation

Designed to be integrated into Essential Newborn Care (ENC) or equivalent

Intended to be an evidence-based focus of excellence and change agent
Helping Babies Survive

Ending preventable newborn deaths: GNAP Strategic Approaches

1. Leadership and political commitment: country and global
2. Focus on high impact interventions
3. Move towards universal coverage of essential maternal and newborn care
4. Address the gap in quality of care
5. Create a supportive environment
6. Ensure mutual accountability
Helping Babies Survive
Essential Newborn Care on the First Day
Essential Care for Every Baby
Present and Future Challenges

- Program sustainability
- Quality assessment and improvement