Neonatology in developing countries

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"The idea that some lives matter less is the root of all that is wrong with the world."

Paul Farmer
Subsaharian Africa

- 38% of global neonatal deaths
- the highest NMR - 34/1000
- NMR stands for 40% of U5MR
- prematurity is a major cause of neonatal deaths

NMR – neonatal mortality rate
U5MR – under-five mortality rate

Kenya

- intrapartum-related deaths - the 3rd cause of all childhood deaths


Global initiatives
to decrease neonatal, child and maternal mortality

- 1987 – Nairobi, International Safe Motherhood Conference
- 1999 – Save Motherhood Institute, Making pregnancy safer, WHO
- 2000-2015 Millennium Development Goals
- 2010 Newborn Care Training – trainings for community-based birth attendants has reduced the stillbirth rate
- 2014 – The Every Newborn Action Plan

GOALS
Evidence-based cost effective interventions that increase neonatal survival

**INTRAPARTUM INTERVENTIONS**
1. antibiotics for PPROM
2. antenatal steroids

**NEONATAL INTERVENTIONS**
1. delayed cord clamping
2. vit K
3. **Newborn Life Support**
   4. Kangaroo-care
   5. early breastfeeding
   6. thermal care
7. early CPAP
8. surfactant for RDS
9. care management for sepsis

Small steps: Treatment with Mission
student’s medical project in Kenya

S.I.M.B.A
Smart Infant Management and Breath Aid

• 50 nurses, midwifes and doctors trained on newborn life support
• 2 bubble CPAP systems implemented to the hospitals
• 6 pulse oximeters for newborn’s units
• new baby care supplies
Bubble CPAP
Challenges?
Case study

- 32 wks GA
- 1500 g
- **bubble CPAP** from 3rd hour of life
- 10% dextrose + Ringer lactate
- minimal enteral feeding (expressed breastmilk via orogastric tube)
- aminophiline
- antibiotics (X-penicilin + gentamycin)
- weaning CPAP on day of life 6
Challenges

- Parenteral nutrition
- Sepsis management
- Laboratory and imaging diagnostics
- Neurodevelopmental outcome

„Best interests of the child should be replaced by the concept of a broader benefit to the family and society“

The need for a larger debate and guidelines for practitioners in low- and middle-income countries.
It is all about the cooperation!