Evidence-based neonatal health interventions

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The BASICS for newborn care

- Thermal care
  - Drying, warming, skin-to-skin, delayed bathing

- Infection prevention
  - Clean birth practices, hand washing, clean cord and skin care

- Feeding support
  - Skin-to-skin contact, early initiation and exclusive breastfeeding

Essential care for all babies
And three packages for special care

- **Package 2:** Neonatal resuscitation
- **Package 3:** Kangaroo mother care
- **Package 4:** Special care of premature babies and phased scale up of intensive newborn care
Effective interventions for newborn health: Evidence summaries

“Of the 130 million babies born every year, about 4 million die in the first 4 weeks of life—the neonatal period. A similar number of babies are stillborn…”

Newborn health: a key to child survival
Effective interventions

**Before pregnancy**
- Prevention of too early, unwanted, or rapid successive pregnancies
- Adequate nutrition, including iron and folic acid supplementation, and treatment of anaemia
- Immunization (rubella, HepB, TT)
- Prevention of HIV and STIs
- Prevention and treatment of substance use
- Smoking cessation
- Protection from harmful exposures and from interpersonal violence

**During pregnancy**
- Tetanus toxoid immunization
- Birth and emergency planning
- Detection and management of problems complicating pregnancy
- Detection and treatment of syphilis
- Intermittent preventive therapy for malaria*
- Information and counseling on self-care
- Sleeping under an insecticide treated bednet
- Prevention of mother to child transmission of HIV* (PMTCT)
# Effective interventions

<table>
<thead>
<tr>
<th>During child birth</th>
<th>In the newborn period</th>
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<tbody>
<tr>
<td>- Monitoring of progress of labour, maternal and foetal wellbeing with partograph</td>
<td>- Exclusive breastfeeding</td>
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<tr>
<td>- Social support (companion) during birth</td>
<td>- Thermal care</td>
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<tr>
<td>- Immediate newborn care (resuscitation if required, thermal care, hygienic cord care, skin-to-skin contact, early initiation of BF)</td>
<td>- Hygienic cord care</td>
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<td>- Emergency obstetric and newborn care for complications</td>
<td>- Prompt care-seeking for illness</td>
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<td>- Antibiotics for pre-term premature rupture of membranes (pPROM)</td>
<td>- Extra care for low-birth-weight babies, including kangaroo mother care</td>
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<td>- Antenatal corticosteroids for preterm labour</td>
<td>- Immunization</td>
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<td>- PMTCT</td>
<td>- Management of newborn illness</td>
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<td>- PMTCT</td>
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</table>
Health services working together

Clinical care
- Child birth care
  - Skilled obstetric and immediate newborn care (hygiene, warmth, breastfeeding) & resuscitation
  - Antenatal steroids, antibiotics for pPROM
  - PMTCT for HIV
  - Emergency obstetric care if needed
- Emergency newborn care
  - Extra care of preterm babies including Kangaroo mother care
  - Extra care of sick newborns

Outreach/primary care services
- Antenatal care
  - 4-visit antenatal package including
    - IPTp and bednets for malaria
    - Prevention and management of STIs and HIV
    - Nutrition supplementation
    - Detection and treatment of maternal conditions

- Outreach care
  - Folic acid
  - Family planning
  - Preconception care

Family-community
- Counseling and preparation for newborn care and breastfeeding, emergency preparedness

Pre-pregnancy
- Pregnancy
- Birth
- Neonatal period
- Infancy

Antenatal 8% (6 – 9%) reduction of NMR
- Intrapartum 27% (18 – 35%) reduction of NMR
- Postnatal 29% (17 – 39%) reduction of NMR

Healthy services working together

- Prevention and management of STIs and HIV
- Nutrition supplementation
- Detection and treatment of maternal conditions

Extra care of at risk mothers and babies
- Prevention of mother to child transmission of HIV

Healthy home care
- Breastfeeding promotion, hygienic cord/skin care, thermal care, promoting demand for quality care
- Extra care of low birth weight babies
- Case management for pneumonia

For health systems with higher coverage and capacity

10 - 30% NMR reduction
23 - 50% NMR reduction
15 - 32% NMR reduction
Coverage of critical interventions remains low

Source: Countdown 2012 Report: Median levels for selected indicators of intervention coverage, all countries with available data
Access to care is limited and quality is often poor

Baby friendly hospital initiative: status in selected countries, 2006 - 10
Guidelines updated

- Care of the newborn immediately after birth
- Newborn resuscitation
- Newborn immunization
- Postnatal care
- Care of the preterm and low birth weight baby
- Management of neonatal sepsis
- Management of neonatal seizures
- Management of neonatal jaundice
- Management of necrotizing enterocolitis
- Care of the HIV-exposed newborn
Driving progress: The continuum of care

- Household
- Community & outreach
- Health facilities

- Adolescence and before pregnancy
- Pregnancy
- Birth
- Postnatal (mother)
- Maternal health
- Postnatal (newborn)
- Infancy
- Childhood
Improving quality of facility-based care

Immediate essential newborn care
- Keep the baby warm and keep clean especially cord
- Early and exclusive breastfeeding, BFHI
- Early recognition of danger signs

Neonatal resuscitation (basic)

Extra care of small babies
- More support for feeding, warmth, kangaroo mother care
- Rapid recognition / management of danger signs,

Emergency newborn care
- Improved care of ill babies especially infections, complications of preterm birth and of birth asphyxia
Increasing access to home care

**Pregnancy visits to support:**
- Antenatal care
- Skilled birth attendant
- Newborn care at birth: immediate drying and skin-to-skin contact, early initiation of breastfeeding, clean cord care

**Postnatal visits to support:**
- Early and exclusive breastfeeding
- Keeping the newborn warm, hygienic cord care
- Extra care for LBW babies
- Timely recognition of danger signs
Extra care for LBW and preterm babies

**Prevention**
- Preconception care package especially family planning
- Antenatal care package
- Effective childbirth care
- Policy support including smoking cessation and employment safeguards of pregnant women

**Extra baby care**
- Essential and extra newborn care, especially feeding support
- Neonatal resuscitation
- Kangaroo Mother Care
- Management of premature babies with complications especially respiratory distress syndrome, infections and jaundice
- Comprehensive neonatal intensive care

**Management of preterm labour**
- Tocolytics to slow down labour
- Antenatal corticosteroids
- Antibiotics for PROM

**Reduction of preterm birth**

**Mortality reduction among babies born LBW and preterm**
Quality care for women and children in emergencies

Infant and young child feeding

- Emphasize that breastmilk is best
- Actively support women to breastfeed
- Avoid inappropriate distribution of breastmilk substitutes
- When necessary, use infant formula if available
- Do not distribute feeding bottles/teats, promote cups
Stimulation, sensitivity and responsiveness

From WHO/UNICEF training materials on Caring for newborns and children in the community
# Newborn health with the programme cycle

**GUIDELINES & POLICIES**

- Guideline products: critical for policy adoption of the new guideline
- Technical update: specific changes needed in implementation tools in response to the new guideline

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<tr>
<th>STRATEGIC PLANNING</th>
<th>PROGRAMME MANAGEMENT CAPACITY</th>
<th>HEALTH FACILITY</th>
<th>COMMUNITY LEVEL CAPACITY</th>
<th>M &amp; E CAPACITY</th>
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<tbody>
<tr>
<td><strong>MATERNAL</strong></td>
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<td>Strategic planning tool for MNCAH including rights (IT* 1)</td>
<td>Programme managers course for MNCAH including nutrition (IT* 2)</td>
<td>Managing Complications of Pregnancy and Childbirth (IMPAC) (IT* 3)</td>
<td>PCPNC training package (IMPAC) (IT* 6)</td>
<td>CHW training package for MNCH, including community mobilization and participation (IFC) (IT* 10)</td>
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<td><strong>NEWBORN</strong></td>
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<td>Pocketbook for managing newborn problems (IT* 4)</td>
<td>Essential Newborn Care Course (including NR and Young Infant IMCI) (IT* 7)</td>
<td>CHW training package for MNCH, including community mobilization and participation (IFC) (IT* 10)</td>
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<td><strong>CHILD</strong></td>
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<td>Pocketbook for hospital care of children (IT* 5)</td>
<td>IMCI training package (IT* 8)</td>
<td>Counselling materials for teachers, parents etc (IT* 11)</td>
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<td><strong>ADOLESCENT</strong></td>
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<td>Orientation Programme (IT* 9)</td>
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World Health Organization
Accountability for newborn health

- Birth registration
  - New United Nations Human Rights Council Resolution on the right of everyone to recognition everywhere as a person before the law

- Access to health as a basic right
  - Inter-Parliamentary Union Resolution on maternal and child health:

- Information and accountability for women's and children's health
  - Tracking intervention coverage, financial flows, maternal and perinatal death surveillance and response

- Commission on Commodities
  - Universal access including resuscitation devices, antibiotics, chlorhexidine
A story in closing

This young mother lives in an area covered by a home-based newborn care program

- **HOME:** She and her family were visited by a CHW during pregnancy, who encouraged ANC and early care-seeking for danger signs.

- **HOSPITAL:** When the mother went into premature labour, her husband urged her to go to the hospital, and delivered a LBW infant weighting 1.5 kg.

- **HOME:** When discharged from the hospital on day 5, the CHW started home visiting to assist with feeding, ensuring warmth and screen for danger signs.
Thank you