Better Cord Care Saves Babies’ lives in Nepal

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## Presentation outline

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(7.1% chlorhexidine digluconate)
The Nepal Context - Child Mortality

Under five mortality rate
Infant mortality rate
Neonatal mortality rate

Marked decline in infant and child mortality

Source: NDHS&NHSP*
Causes of neonatal deaths: Global Vs Nepal

Global
- Severe infections 42%
- Intrapartum complications 23%
- Preterm birth complications 34%
- Other disorders 6%
- Tetanus 2%
- Pneumonia 11%
- Sepsis or meningitis 13%
- Congenital abnormalities 9%
- Other 10%

Nepal
- Severe infections 42%
- Injury 19%
- Other 10%
- Birth asphyxia 15%
- Preterm/LBW 6%
- Congenital Anomaly 8%
- Other disorders 6%

Source: NDHS, 2006

The Nepal context- delivery

- 63% deliveries at home
- 82% used clean delivery kit or new/boiled blade
- 41% of babies had some material on stump.

Source: NDHS, 2011
Nepal context – policy

Strategies to reduce neonatal mortality

Expansion of community-based neonatal care, role of CHWs

Promote institutional delivery, SBAs
Infection: significant cause of neonatal mortality

Exposure to pathogens is high at birth and immediate postpartum

Umbilical cord vessels remain somewhat patent for 24-48 hours after birth

Stump is rapidly colonized
WHO Recommendations

- Sept 2012 – Geneva expert consultation
- Endorsement of CHX use in high mortality settings, home-births
- Formal statement expected soon
Evidence for use of CHX

Sarlahi District, Nepal: 2002-2006
34% reduction if initiated within 24 hours (early application of Chlorhexidine for the cord care reduces local cord infections and overall neonatal mortality)
(Mullany et al, Lancet 2006)

Sylhet District, Bangladesh: 2007-2009
20% lower mortality among neonates (single CHX)
(Arifeen et al, Lancet 2012)

Sindh Province, Pakistan: 2008-2009
38% lower mortality among neonates
(Soofi et al, Lancet 2012)
Pooled Analysis from Nepal, Bangladesh and Pakistan study

23% reduction in mortality among those receiving CHX

68% reduction in serious cord infection among those receiving chlorhexidine
Nepal experience

- RCT result – evidence for efficacy
- Close partnership b/w MoH & technical assistance partners, local manufacturer
- Formative work on current practices, perceptions, preferences
- Validating a suitable formulation (gel)
- Learning phase – in 4 districts
- Replication RCTs & decision to introduce program
- National scale-up, drawing on learning phase
Implementation approach

• Use for institutional deliveries
• Advance distribution: CHWs, ANC, (social marketing)
• District by district roll-out AND system-wide institutionalization
• Integration with existing services, systems
District Roll-Out Modality

CHX orientation to district supervisors and Health facilities in-charges

CHX orientation to service providers at hospital

Training to FCHVs and periphery level Health Workers

Application of CHX to each newborn

FCHV provides CHX tube to mother at 8 months of pregnancy

Each baby receives CHX at home birth
CHX supply in Nepal

3 gram of 4% CHX* gel in a tube - Nepali brand Name **Kawach**.

Pictorial instruction inside box.

Current CHX price is Rs.18 ($0.23) for Government.

Supply is ensured through the government logistics supply system

Job aid to counsel mother

*(7.1% chlorhexidine digluconate)*
Pilot-4 districts
Planned for 2013- 7 districts

Completed- 22 districts including pilot
Ongoing- 13 districts
Planned for 2013- 7 districts

Implementing partners

Chlorhexidine Navi Care Program
One Heart Worldwide

NFHPPII
Plan Nepal

UNICEF
Save the Children

Health Right International
Care Nepal
Conclusions

- CHX cord cleansing can save newborn lives
- CHX is safe, acceptable and low-cost
- Harmful cord care practices can be displaced by CHX use
- Mother or family members can apply easily
- Easy to distribute to mothers through CHWs
- In the Nepal context it is feasible to get high coverage throughout the country using government public health delivery system
- Other countries with similar situations should consider CHX.
Thank You