Management of Newborn Infection – When Referral is Not Possible Implementation in four countries in SSA and SEA

Tedgabe Degefie, Health Specialist
Health Section, PD, NYHQ
Global TWG, November 7th, 2018
Effective referral remains a challenge in Low-income and middle-income countries with a high burden of disease

High case fatality can result because of delay in appropriate and timely care seeking

Ill infants whose families do not accept referral would benefit from prompt treatment

Implementation across different country contexts requires policy change and systematic learning and adaptation

Health system readiness challenges-HRH, LMIS, HMIS, care seeking and referral linkages need to be addresses
Purpose and Countries

**Purpose?**

- Improved essential newborn care
- Improved use of services,
- Enhanced enabling environment
- Improved use of data for decision making and continuous quality improvement (CQI)

**Countries?**

- Pakistan, Indonesia, Niger and Tanzania
- Burden on newborn mortality
- Public health system willingness and readiness to implement the new WHO simplified treatment regimen

UNICEF’s program for Newborn health
Inception Period

- 12 months of preparation
- Experience/learning sharing visit

- Identification and selection of districts
- Engage with key stakeholders
- Agree on scaleup plan

UNICEF’s program for Newborn health
Key policy decisions need to be made with MOH and professional associations

- Who will identify SYI in the community?
- Where will SYI be assessed? And by whom?
- Who will provide treatment if referral to hospital is not accepted by the family?
- Where will this treatment be provided? What treatment regimen will be given for clinical severe infection?
- What treatment regimen will be given for fast breathing only if SYI has critical illness and referral is not feasible what treatment will be done?
Minimum Supply Need for Management of PSBI at the Lowest Health System Level

- Current IMCI guideline- SYI chart booklet,
  ✔ - Registration book,
  ✔ - Referral form

- Weighing scale with high precision
  ✔ - Thermometer
  ✔ - RR counter
  ✔ - 1cc syringe and needle

Antibiotics and ORS
  ✔ Amoxicillin, injectable Ampicillin, pediatric formulation gentamicin,
  ✔ ORS
### Implementation Readiness Assessment

<table>
<thead>
<tr>
<th>Skills</th>
<th>Supervision</th>
<th>Supplies</th>
<th>Demand for service</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHCF staff has knowledge and skills to manage PSBI</td>
<td>PHCF received regular supportive supervision and mentoring</td>
<td>PHCF has essential equipment and supplies to manage PSBI</td>
<td>Counseling skills, Community engagement</td>
</tr>
</tbody>
</table>

Pictures credit Save the Children

UNICEF | for every child
Implementation Readiness Assessment

- Desk review
- Rapid health facility assessment
- FGD/IDI/KII
- Indonesia - seven districts, (Klaten (Central Java), Gresik (East Java), Timor Tengah Selatan/TTS (NTT), Central Maluku (Maluku), Tidore (North Maluku), Jayapura (Papua), and Sorong (West Papua))
- Pakistan - two districts of Punjab (Bahawalnagar and Sheikhupura)
- Niger - four districts, Madarounfa, Mayahi, Guidan Roundji and Dakoro
- Tanzania - one district, Busekelo

UNICEF's program for Newborn health
Baseline Findings - Pakistan

- Few LDHW assessed newborns regarding danger signs (16.9%) and counselled mothers on danger signs of sick young infants (SYI) 25.7%
- 72.2% mothers had knowledge of at least 5 dangers signs in newborns
- 73.7% accepted referral on being counselled by LHW
- Only 38.1% mothers went for follow up to referred health facility after initial visits
Baseline Findings - Pakistan

Availability of Equipment and drug supply at PHCF
24% of the surveyed PHCF ENC including the management of severe infections
9.2% of the health workers in the targeted health facilities are IMNCI trained
21.6% have gentamicin, amoxicillin, thermometers, weighing scales, and timers
66.7% of district hospitals, maternal and child health centers, and regional hospitals have a functioning QI team
Key Baseline Findings- Indonesia

- Strong awareness of the community on newborn vulnerability
- Beliefs, myths and traditional practices are still common in eastern region of Indonesia that delay seeking proper care
- Home care and self-treatment using over the counter drugs or traditional remedies were the first choice of care for sick infants
- Not becoming better within 2-3 days is the most common decision to seek care
- Health workers in PHCF remain major source of information on child health
Conclusion

• Implementation readiness is varied across the four countries
• HMIS, supply and supervision will be the focus of implementation
• Each country has made some adaptation to its specific situation
  • E.g. Tanzania decided 0-6 days fast breathing as the only sign of PSBI to be included in critical illness and mandatory referral
  • Pakistan included Amikacin as an option if gentamicin is not available
• South to South collaboration was important strategy for capacity building
• Engagement of professional associations is key
• Defining scale-up strategy and plan at the designing stage
• Continuous sharing of learning to catalyze rapid scaleup (review meetings, site visits and webinars from CoP)
Thank You
Role of private providers

• In Indonesia Java and Aceh where the private providers equality significant as the public sector-refresher training will include health provider from private primary care facilities
• The other countries will focus only on the public sector
At the community level sensitivity to first line AM is good (ANISA study Lancet 2018; 392 145-49)

Prevention and prompt management affect morality

Availability of treatment by trained and supervised health worker at PHCF will provide a prudent and limited use of irrational use antibiotics

Expanding access to antimicrobials while preventing irrational use is key

Improving awareness through effective communication