FACILITY BASED CARE OF SICK NEONATE AT REFERRAL HEALTH FACILITY

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INTRODUCTION

Neonatal Mortality Rate (NMR) in India continues to be high at 37 per 1000 and contributes to over 64% of infant deaths and more than half of under-five deaths. It is estimated that two-thirds of these deaths occur during the first week of life. Because of its large population and relatively high neonatal mortality rate, India contributes about a quarter of all neonatal deaths in the world. It is well known that majority of neonatal deaths can be prevented with low technology; low cost interventions. It is now well recognized that all the pillars of care have to be strengthened which include home care, outpatient care and the inpatient care. Facility based care encompasses care at peripheral health posts such as sub-centre and primary health centre, community health centre and First referral units and the District hospitals. It has been estimated that optimal treatment of neonatal illness can avert up to half of all preventable neonatal deaths.

Under the NRHM, the Government of India is committed to improve the newborn care and bring a significant decline in the neonatal and infant mortality to meet the Millennium Development Goals. In this context, the Government is planning to operationalize the primary health centers for round the clock deliveries and upgrade the health facilities at the district hospitals and referral centers in terms of inpatient neonatal care.

With an aim to strengthen Facility Based Newborn Care in high IMR National Rural Health Mission (NRHM) states, NNF entered into a PCA with UNICEF in the year 2006 with the objective to establish or strengthen existing referral system for providing comprehensive newborn care in 10 high mortality districts of these states by awareness building, sensitization, capacity building and system strengthening. The aim of this project was to operationalize level II Special Care Newborn Units (SCNU) in 10 districts namely: Vaishali (Bihar), Ghatshilla (Jharkhand), Dibrugarh (Assam), Tonk (Rajasthan), Rajnandgaon (Chhattisgarh), Shivpuri (M.P), Lalitpur (U.P), Mayurbanj (Orissa), Faridabad (Haryana) and Durg (Chhattisgarh). Of these 10, seven facilities are functional and some others have been established making the total number of functional units on 1st April 2009 as 15. Many units in various states are under construction and a few are ready to be operationalised. The operationalization involves procurement of necessary equipments as per the toolkit, health personnel employment and training of the health functionaries dedicated to serve the SCNU at the district.

This manual is a self reading material meant to be used for the training of Special Care Newborn Unit’s staff. This module describes the triage process and addresses the ways and means to provide emergency treatment. In addition this manual will deal with care of newborns at birth, the management of hypothermia, Management of Low birth weight neonates and knowledge and skills related to Breastfeeding. The module also focuses on parenteral fluid therapy for sick newborns, management of hypoglycemia and shock as well as evaluation and management of respiratory distress, jaundice, sepsis, perinatal asphyxia and seizures. The training includes skill and equipment demonstration and hospital visit which are discussed in the module and serve as ready reckoners post training.
<table>
<thead>
<tr>
<th>Topic</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. ETAT</td>
<td>1</td>
</tr>
<tr>
<td>2. Hypothermia</td>
<td>7</td>
</tr>
<tr>
<td>3. Care of a normal newborn at birth and beyond</td>
<td>12</td>
</tr>
<tr>
<td>4. Breastfeeding</td>
<td>20</td>
</tr>
<tr>
<td>5. Management of low birth weight babies</td>
<td>31</td>
</tr>
<tr>
<td>6. Fluid management</td>
<td>41</td>
</tr>
<tr>
<td>7. Hypoglycemia</td>
<td>47</td>
</tr>
<tr>
<td>8. Neonatal shock</td>
<td>52</td>
</tr>
<tr>
<td>9. Post resuscitation management of an asphyxiated neonate</td>
<td>56</td>
</tr>
<tr>
<td>10. Respiratory distress in the newborn</td>
<td>61</td>
</tr>
<tr>
<td>11. Neonatal jaundice</td>
<td>69</td>
</tr>
<tr>
<td>12. Neonatal seizures</td>
<td>76</td>
</tr>
<tr>
<td>13. Neonatal sepsis</td>
<td>82</td>
</tr>
<tr>
<td>14. Neonatal transport</td>
<td>92</td>
</tr>
<tr>
<td>15. Neonatal anemia</td>
<td>96</td>
</tr>
<tr>
<td>16. Equipment demonstration</td>
<td>104</td>
</tr>
<tr>
<td>17. Clinical skills</td>
<td>118</td>
</tr>
<tr>
<td>18. Case studies</td>
<td>128</td>
</tr>
<tr>
<td>19. Annexures</td>
<td>135</td>
</tr>
</tbody>
</table>
National Neonatology Forum & UNICEF  
Comprehensive Newborn Care Initiative  
Skill based Training for SCNU Staff (Doctors and Nurses)  
At District Hospital  

Program  

Day 1  

1. **Inauguration & Welcome**  
   Objectives of the workshop and Introduction  
   Of the participants  
   9.00 – 10.00 am  

2. Tea  
   10.00 – 10.30 am  

3. **Neonatal Resuscitation**  
   (Interactive sessions with Demonstration on manikin)  
   10.30 – 1.40 pm  
   Pretest  
   10.30 - 10.50 am  
   Initial Steps  
   10.50 – 11.35am  
   Bag & Mask: Equipment & ventilation  
   11.35– 12.20 pm  
   Chest Compression  
   12.20– 12.40 pm  
   Endotracheal Intubation  
   12.40 -  1.20 pm  
   Medications  
   1.20 -  1.40 pm  

4. **LUNCH**  
   1.40 – 2.25 pm  

   Work Stations (SKILL STATIONS – Hands on)  
   2.25 – 4.00 pm  
   Post Test  
   4.00 – 4.15 pm  

**SELF READING CLASS ROOM SESSIONS**  

5. Communication  
   With one Role play  
   4.15 – 4.45 pm  

6. Emergency Triaging & Management  
   With a 4 minute video  
   4.45  5.30 pm
Day 2

Welcome & Plan of the Day

SELF READING SESSIONS (Class Room)

1. Hypothermia and Thermal control
   With a 13 minute Video on KMC
   9.00 – 10.30 am

2. Care at and after birth
   With a Role play
   10.30 – 11.00 am

3. Tea
   11.00 – 11.30 am

4. Breastfeeding
   With 1 drill, 1 role play, 8 minute Video and 4 Posters
   11.30 – 1.00 pm

5. Care of Low birth weight neonate
   With 1 drill and 4 minute Video
   1.00 – 2.00 pm

6. LUNCH
   2.00 – 2.45 pm

7. Skill Stations (Hospital)
   (45 minutes each)
   2.45 – 5.45 pm
   - Thermal Control
   - Breastfeeding / Assisted Feeding
   - Prevention of Infection
   - IV access, Umbilical cannulation, CRT evaluation
Day 3

Welcome and Plan of the Day

SELF READING SESSIONS (Class Room)

1. I/V fluids & management of Hypoglycemia
   Management of shock
   With one drill on Fluid therapy 9.00 – 10.30 am
2. Tea 10.30 – 11.00 am
3. Post asphyxia Management 11.00 – 12.00 am
4. Neonatal seizures
   With one 3 minute video 12.00 – 12.30 pm
5. Respiratory distress in Newborn
   With one Video on respiratory signs 12.30 – 2.00 pm
6. LUNCH 2.00 – 2.45 pm
7. Neonatal jaundice
   3 Posters and one drill 2.45 – 3.30 pm
8. Equipment Demonstration
   (Hospital Visit) 3.30 – 5.30 pm
   - Radiant warmer, Weighing scale,
   - Phototherapy unit, Suction machine
   - Oxygen concentrators, O2 Source & O2 Delivery systems
   - Pulse oximeter, Infusion pump & Burette sets
Day 4

Welcome and Plan of the Day
SELF READING SESSIONS (Class Room)

1. Neonatal sepsis 9.00 - 11.00 am
   (With one 12 minute Video, 2 Drills and 1 poster)

2. Bleeding neonate 11.00 – 11.30 am

3. Anemia 11.30 – 12.00 noon

4. Neonatal transport 12.30 – 1.30 pm

5. LUNCH 1.30 – 2.15 pm

6. Checklist for Newborn care & NB Casesheet 2.15 – 2.45 pm

7. Case studies 2.45 – 3.45 pm

   **Hospital Visit** 3.45 – 5.15 pm

8. Clinical Case presentation & discussion 3.45 – 5.15 pm

10. Valedictory 5.15 pm onwards