GAP ANALYSIS OF SPECIAL NEWBORN CARE UNIT

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INTRODUCTION

Child Health

In India, 26 Million babies are born every year and 940,000 babies die before one month of life, India carries the single largest share around 25-30 % of Neonatal deaths in the world. The neonatal period is only 28 days; yet, Neonatal Mortality Rate (NMR) contributes to about two- thirds of Infant Mortality Rate (IMR) and about half of under-5 Mortality Rate (U5MR).

The Government of India is committed to improve the availability of quality newborn care services .

Preventable morbidities such as hypothermia, asphyxia, infections, prematurity and respiratory distress continue to be the main causes of mortality in the neonatal period. There is an increasing need to focus on newborn care and survival for significant reduction in IMR and U5MR and strengthen the care of sick, premature, low birth weight newborns at the various levels of facilities right from the moment to birth through the neonatal period.

Special Newborn Care Unit

SNCU is a neonatal unit in the vicinity of the labor room which provides level 2/3 care (all care except assisted ventilation and major surgery) for sick newborns . All district hospitals and sub – district hospitals with more than 3000 deliveries per year should have a SNCU.

National Neonatology forum

The **National Neonatology Forum** (NNF) came into existence in 1980 through the initiative of a handful of leading pediatricians working in the field of neonatology. They set forth the following objectives for NNF:

- To encourage and advance the knowledge, study and practice of the science of neonatology in the country;
- To draw out recommendations for neonatal care at different levels;
- To establish liaison with other professionals concerned with neonatal care;
- To assess the current status of electronic equipment being used in the country for Perinatal care.
- To promote indigenous manufacturing of the equipment; To develop neonatal component of the curriculum for medical as well as nursing teaching

OBJECTIVE

To assess the status of Special Newborn Care Units (SNCU) in Gujarat state at Bhavnagar region using the tool of FBNC Operational Guidelines for Implementation. 2011.

METHODOLOGY

Study area- Special Newborn Care Unit of Rajasthan

- 01 District hospital
- 02 Medical colleges

Study Design -

Study period – April 3rd to June 2nd 2018

Study population- Special newborn care units

Sampling Frame – All Special newborn care units in Bhavnagar Region

Sample Size – 50% Sampling as per convenience : 03 SNCUs

Study Tool – FBNC Operational Guidelines for Implementation. 2011

Data Collection Technique – at first facility based newborn care operational guideline was reviewed but some criteria did not fulfill according to the study objective , hence FBNC Operational Guidelines for Implementation. 2011 was taken for data collection under guidance of Project Director Child Health. Primary data collected from 03 SNCUs that are functional from past one year. For primary data and secondary data was obtained from online software of SNCU. Then data was analyzed using Ms excel.

Areas where Criteria was fulfilled by SNCUs	Amreli	Junagadh	Bhavnagar
24-hr delivery and newborn care support Yes / No	1	1	1
Radio-diagnostics – X-ray (essential) and/or USG/CT (either sourced from the hospital or from an private radiology centre under an MOU)	1	1	1
Laboratory services (either sourced from the hospital lab or from an private lab under an MOU)	1	1	1
Immunization services Yes / No	1	1	1
Neonatal transport service Yes / No	1	1	1
24-hr electricity backup (generator, UPS, solar power, etc.) Yes / No	1	1	1
24-hrs water supply (either direct or through storage tanks) Yes / No	1	1	1
Stores – both medical and general stores Yes / No	1	1	1
Equipments (available in the Unit)	1	1	1
Step down room for non-critical/stable babies to stay with their mothers If “Yes”, then mention number of beds available for mothers YES/NO	1	1	1
House keeping services Yes / No -	1	1	1
Ambulance services Yes / No -	1	1	1
Autoclaving / CSSD (of parent hospital) Yes / No -	1	1	1
Laundry Yes / No -	1	1	1
Kitchen services (for mothers) Yes / No -	1	1	1
Management of Bio-Medical Waste (BMW) Yes / No -	1	1	1
Pharmacy Yes / No -	1	1	1
Security Yes / No -	1	1	1
Referral services (if yes, mention the name of the most commonly, referred to centre) Yes / No	1	1	1
Prevention of infection by means of infection control measures Yes / No	1	1	1
Provision of warmth – thermal care protocols Yes / No	1	1	1
Resuscitation measures and protocols Yes / No	1	1	1
Care of umbilical cord Yes / No	1	1	1
Weighing the newborn – adequate availability of weighing scales Yes / No	1	1	1
Protocols for hand washing and eye & cord care Yes / No	1	1	1
Breast feeding / feeding support to mother-baby unit – protocol for the same Yes / No	1	1	1
Managing of low birth weight infants <1800 grams – protocols for same Yes / No	1	1	1
Phototherapy for newborns with hyperbilirubinemia – protocols for same Yes / No	1	1	1
Follow up of all babies discharged from the unit and high risk newborns Yes / No	1	1	1
Immunization services – as per MOHFW/GOI guidelines Yes / No	1	1	1
Referral services –Protocol followed for referring in of a newborn Yes / No	1	1	1
Protocol for transfer of a sick newborn to a referred to facility Yes / No	1	1	1
Protocol followed for maintenance of “Warm Chain” Yes / No	1	1	1
Does the staff inform/teach the mother how to breast feed the newborn Yes / No	1	1	1
Daily weighing of baby Yes / No	1	1	1
Promotion of breast feeding Yes / No	1	1	1
Promotion of skin to skin care Yes / No	1	1	1
Involvement of mother and family in care of the baby Yes / No	1	1	1
Protocol for managing intravenous (IV) fluids in newborn Yes / No	1	1	1
Protocol for rational use of antibiotics Yes / No	1	1	1
Protocols for cleaning of equipments and facility Yes / No	1	1	1
Protocols for Bio-Medical Waste management (as per guidelines) Yes / No	1	1	1

SUGGESTIONS

Manpower:

1.Number of sanctioned positions (4) of class IV staff must be fulfilled for the proper cleaning and dusting of SNCU.

2.Sanctioned positions of Medical Officers (4) for SNCU must be fulfilled for the better and smooth functioning of SNCU.

Training:

All medical staff must be FBNC trained as early as possible after joining in SNCU and at least one FBNC trained MO must be available round the clock at the SNCU.

Infrastructure:

There must be separate area in SNCUs for mothers of out born babies and also a separate area for keeping asymptotic high risk babies along with their mothers with good nursing cover, beds and separate toilets/ washrooms for mothers.

Cleaning and disinfection:

1.There must be at least one wash basin with soap having mechanism which doesn’t require use of washer’s hands (e.g. elbow or foot operated taps) for every 5 beds. Poster on hand washing should be displayed at all hand washing stations

2.Adequate quantity of disinfectants, soaps, diapers, eye patches for phototherapy, disposable hand wipes/sterile paper, color coded BMW bins must be available in the unit.

Improvement in referral rate:

There is a need to reduce number of referrals from SNCU to higher centers by providing all required facilities (e.g. lab tests) at that unit.

Areas where gap were found in SNCUs	Amreli	Junagadh	Bhavnagar
24-hr on-call support by a qualified Paediatrician Yes / No	1	0	1
Facilities for respiratory support (CPAP, etc.) Yes / No	0	0	1
Blood transfusion services Yes / No	0	1	1
Baby receiving room Yes / No -	1	0	0
Special room for invasive procedures Yes / No -	0	0	0
Isolation room (for infected babies) Yes / No -	0	0	0
Intravenous fluids preparation area Yes / No -	1	1	0
Oxygen bay (in stand alone facility) or availability of central oxygen Yes / No -	0	1	1
Information Technology (facilities in the unit but managed by parent hospital or by an outsourced agency) Yes / No -	0	1	1
Maintenance of facility Yes / No -	1	0	1
Supply Chain Management (drugs, consumables and other materials) Yes / No -	1	1	0
Early initiation of breast feeding – when after birth is it started Yes / No	1	1	0
Is staff aware of these “Priority Signs”? Yes / No	1	0	1
Managing all sick newborns (except those requiring mechanical ventilation and major surgical interventions) Yes / No	1	0	0
Maintenance of feeding tube Yes / No	0	1	1
Total	8	7	8

CONCLUSION

The findings of this study clearly shows that facilities in district hospital of Bhavnagar district is very poor Specifically, Sanitation & Hygiene facility of Bhavnagar district hospital is very disappointing. as compared to other two districts namely Amreli and Junagadh.