GUIDELINE: CARE OF THE WELL NEWBORN

Approximately a third of all neonatal deaths occur in the first 24hrs. Appropriate assessment and care of the newborn baby from birth until discharge- as detailed in this guideline, is therefore very important.

Maternity staffing Norms:

In order to ensure that both newborns and their mothers can receive the safe care they require, the following maternity staffing norms must be implemented:

Labour ward: 1 Midwife to 1 mother during and after labour; 2 midwives to 1 mother-baby pair at delivery & until both mother and baby are stable post-delivery.

Postnatal ward: Day shift: 1 nurse to 3-4 mother/baby pairs; night shift: 1 nurse to 6-8 mother/baby pairs. Ratio of 1 midwife to 1 EN/ENA. An EN or ENA may never work alone without the supervision of a midwife.

Well-baby cubicle/nursery: 1 EN/ENA must be designated, daily, as the baby nurse to care for babies in the well-baby cubicle, 1 nurse to 4 babies. When the cubicle is empty or no care is required the nurse can assist colleagues in the postnatal ward.

A. Care in labour ward/Theatre:

ALL babies require routine care after delivery. Some require additional specialized and sustained care in a neonatal unit.
At every delivery, there must be a nurse/doctor, trained in basic neonatal care & resuscitation, dedicated solely to care for the baby.

1. Before birth:

Be properly prepared for every birth.

A. Requirements:

- Allocated baby health care worker
- Neonatal Record
- Warm, clean towel
- KMC wrap and cap
- Cord clamp
- Suction unit and neonatal suction catheters (at the maternal bedside)
- Functional pre-warmed resuscitaire with temp. probe
- Functional neonatal resuscitator (Ambubag ®) & mask (on resuscitaire)
- Saturation monitor with neonatal probe
- Emergency trolley

B. Process:

- Introduce yourself to the mother & prepare her for the delivery process including skin to skin care & early breast feeding.
- Ensure a thorough history is recorded in the maternity case record; that risk factors have been identified; and gestational age has been calculated
- Prepare the delivery area:
  - Ensure the delivery area is warm. Ideally - 22-26°C
  - Exclude any cool air currents
  - Ensure adequate light
- Make a plan for emergencies:
  - Identify a helper - who can call for help/make phone calls should an emergency arise. This does not need to be a healthcare worker as long as they are orientated to what is required in an emergency
  - Know how to access a doctor for support - In the hospital a doctor must be assigned and available to respond to emergencies in labour ward 24hrs a day. This doctor must be immediately contactable. For midwife obstetric units (MOUs) this doctor must be available at the referral centre. Ensure that there is clearly understood system to call additional help when the 1st doctor is already occupied or has not responded
- Ensure mother and nurse wash their hands
- Prepare the resuscitation area:
  - Ensure the resuscitaire is pre-warmed and a functional temperature probe is available
  - Ensure that the resuscitation trolley has been checked
  - Check the resuscitator (Ambubag ®) for leaks and that there is a correctly sized clean mask available
  - Check that the suction is functional with an appropriate sized suction catheter

95% of babies require only simple **supportive care** at and after delivery.
Only 5% of all babies will have primary apnoea and will require **assistance to breathe**.
Less than 1% of all babies will have secondary apnoea and will require **advanced resuscitation**.

2. Routine supportive care at birth:

- **DO:** Deliver baby onto mother's chest
- **DO:** Dry thoroughly (face, body, back, arms and legs) and wipe the nose and mouth to remove any secretions
- **DO:** Stimulate the baby (by rubbing the back) with a warm, clean towel
- **DO:** Check for breathing. If baby is not breathing see Resuscitation guideline-Golden Minute
- **DO:** Position baby with neck in neutral (slightly extended) position to ensure a patent airway
- **DO:** Prevent hypothemia by removing the wet towel
- **DO:** Tie baby, with KMC wrap (or sheet/towel if no wrap available), onto mother's chest in skin-to-skin position (head slightly extended and arms and legs flexed in midline position, between baby's body and the mother's chest). Cover the head with a cap (or another dry towel if no cap available)
- **DO:** Delay cord clamping for 1-3 minutes or until cord pulsation has stopped
- **DO:** Assess Apgars at 1 and 5 minutes
- **DO:** Encourage and assist mother to initiate breastfeeding within 30 mins - 1hour if the baby shows feeding cue. Allow baby to crawl to the breast, root & start breastfeeding when ready
- **DO:** Teach mother how to monitor baby's breathing and colour for any changes
- **DO:** Continue skin-to-skin care, commence nasal prong oxygen, and call MO should any of the following problems develop: tachypnoea, nasal flaring, rib recession, grunting or change in colour

- **DON'T:** Separate mother and baby (including in theatre or during transfer)
- **DON'T:** Delay skin-to-skin care or breastfeeding
- **DON'T:** Interupt skin-to-skin (to weigh and measure baby) for the first hour
- **DON'T:** Routinely suction the baby unless baby is apnoeic or audible/visible secretions are present
- **DON'T:** Routinely administer oxygen or medications unless baby requires advanced resuscitation

3. Resuscitation See "Resuscitation" Guideline.

- Babies who are not breathing at birth need additional support (positioning/stimulation/suctioning/bagging) to start breathing. This is included in the Helping Babies Breathe (HBB) program
- Babies who are not breathing after bagging require advanced resuscitation

4. Essential care for every newborn after birth:

If at all possible the following assessments and care should be done on mother's chest or on the bed beside her. Where possible do not separate mother and baby. Hospitals must put systems in place to ensure this care is also provided in the theatre on the resuscitaire before moving to recovery room for babies born via caesarean section. Following the immediate assessment for problems, if it is not feasible to give the following basic care, baby should remain skin-to-skin with its mother and this care should then occur upon arrival in the postnatal ward.

- Assess for any risk factors or problems and take appropriate action:
  - No problems identified. **Do:** Keep baby skin-to-skin with mum and transfer to post natal ward with mother once stable after birth
  - Risk factors (as listed in yellow section, on Pg 3 of Neonatal Record). **Do:** Keep baby skin-to-skin with mum and transfer to post natal ward with mother once stable after birth
  - Babies with problems (as listed in the red section, on Pg 3 of Neonatal Record):
    - **DO:** Transfer immediately to the neonatal unit for assessment
    - **DON'T:** Wait for the baby to receive a full examination or to be seen by a doctor
- Prevent Hypothermia. Check axillary temperature. If temperature is ≤36.5°C:
  - Recheck that baby and mother are **dry**
  - Ensure that skin-to-skin care is effectively being practiced
  - Ensure the the the environment is warm and that cool air currents have been excluded
  - Ensure that baby has breast fed
- Measure, plot and interpret length, weight and head circumference:
  - Plot on percentile chart. Ensure the correct chart is used. There are separate charts for boys and girls and term and preterm gestation
  - Assess whether the baby is appropriate, small or large for gestational age
- Examine fully for any abnormalities (See First Examination guideline)
- Identify baby with mother and attach ID bands before leaving labour ward/theatre (see "Identification" guideline)
- Prevent Infection:
  - Clean cord with 4% chlorhexidine and apply a nappy (Fold below cord)
  - Clean eyes with 0.9% saline & apply chloramphenicol ointment to the lower eyelids

- Prevent haemorrhagic disease of the neonate:
  - **DO:** Administer Vitamin K (Konakion®) 1 mg IMI into the lateral aspect of the thigh
  - **DON'T:** Use 10 mg/ml ampoule
- Complete pages 3-5 of Neonatal Record. If the baby has a problem and is being transferred to the neonatal unit page 2 must also be completed
- Transfer with mother in skin-to-skin position to postnatal area

The best place to monitor & care for new-borns, is with their mothers in skin-to-skin position.
This reduces the risk of hypothermia, hypoglycaemia & infection; increases breastfeeding & bonding; & reduces mortality.

B. Care in Postnatal Ward:

NB:

- Don't **s**eparate Mother and baby. If separation is unavoidable due to the mother's condition, the well baby must be cared for in the well-baby cubicle/nursery within the postnatal unit
- "At Risk" and "Well" babies require the same care, apart from increased frequency of observations for "At Risk" babies
- Babies with minor problems eg physiological jaundice or stable neonatal sepsis may require additional therapeutic or prophylactic interventions eg phototherapy or antibiotics. These should also be cared for with the mother
- Bassinets should not be routinely at the bedside unless required for the delivery of phototherapy

1. Maintain warmth

- **DO:** Nurse baby skin-to-skin. Dress baby with a cap and nappy. Place baby on mum's chest with arms and legs flexed in midline position between baby's body and the mother's chest, and head slightly extended. Cover them both with a blanket. If mother is going to mobilise: tie baby securely to mother with a KMC wrap/sheet
- **DO:** Swaddle baby tightly with the head covered, if mother has to discontinue skin-to-skin care for a period e.g. going to the bathroom
- **DO:** Maintain a warm environment. Ideally ambient temperature should be 22-26°C. Exclude cool air currents & ensure windows are covered if the weather is cold

2. Monitor/Observe

Assess all babies on admission. Thereafter assess "Well" babies at least 12hrly and "At Risk" babies at least 6hrly:

- **DO:** Give mother a "Caring for our new baby" booklet. Teach her to identify & record baby's danger signs, feeding & elimination. Teach her to continue this at home
- **DO:** Assess temperature, pulse, respiration, colour and activity
- **DO:** Observe that baby has passed urine and stool without abnormality
- **DO:** Assess cord for signs of redness, moistness, bleeding or offensive smell
- **DO:** Observe for any visible signs of jaundice:
  - If baby is jaundiced <u>within 24 hrs of birth</u> transfer immediately to the neonatal unit
  - After 24hrs, commence phototherapy <u>immediately</u> for any baby with any degree of visible jaundice and then take blood for a Total Serum Bilirubin (TSB)
  - Take blood daily for TSB if baby is receiving phototherapy. Transfer to neonatal unit if TSB climbing rapidly (≥100mmol/l over 6 hrs) or nearing exchange transfusion levels on the phototherapy chart
  - Prior to discharge, using a flash bilirubinometer, screen <u>all</u> babies for jaundice:
    - If reading is within 20mmol/l of the phototherapy line do not discharge
    - Do formal TSB and observe closely for increasing jaundice
    - If flash bilirubinometer is not available educate mothers to take their baby immediately to the clinic, if visibly jaundiced and lethargic or not feeding well
  - **DON'T:** Delay starting phototherapy while waiting for a TSB result
  - **DON'T:** Transfer a well-baby with physiological jaundice to neonatal unit for phototherapy
- **DO:** Assess Glucometer readings on admission and 3hrly if:
  - Baby is an infant of a diabetic mother
  - Baby is jittery, lethargic, hypothermic or feeding poorly
  - If glucose <2.6mmol/l - Support mother to breastfeed
  - If <u>persistently</u> less than 2.0mmol/l (despite effective breast feeding and skin-to-skin positioning) - Transfer to Neonatal unit
  - **DON'T:** Routinely assess glucometer readings for "Well" babies. It is normal for term babies to have episodes of lower glucometer readings in the first 48hrs

- **DO:** Monitor and care for "Well" babies, who have been abandoned or whose mother is sick or has died, in the well-baby cubicle/nursery in postnatal ward:
  - **DO:** Ensure there is a designated nurse allocated to the well-baby cubicle/nursery
  - **DON'T:** Leave babies unattended in this area
  - **DO:** Refer immediately to the social worker for urgent placement with the family or in a place of safety
- **DO:** Transfer to neonatal unit if any of the following are present :
  - Persistent hypothermia/hypoglycemia despite skin-to-skin position and adequate support for breast feeding
  - Respiratory distress including apnoea and cyanosis (Ensure baby is warm)
  - Poor feeding and/or persistent vomiting
  - Lethargy; unresponsiveness; hypotonia or seizures
  - Jaundice within 24hrs of birth

The "First Baby Bath" can lead to hypothermia and is therefore no longer routinely provided. This does NOT eliminate the need for thorough cleansing, a full examination and preparation of the mother to bath baby at home.

3. **Prevent infection**
   - **DO:** Check for signs of sepsis (poor feeding, hypothermia, lethargy, pallor)
   - **DO:** Clean eyes and mouth with water twice daily
   - **DO:** Clean umbilicus with 4% chlorhexidine at every nappy change (At least 6 hrly). Ensure cord is outside the nappy
   - **DON'T:** Bath (full immersion) newborn babies unless blood /meconium is present or if liquor was offensive
   - **DO:** After the first 6 hrs support mothers to cleanse baby thoroughly (similar to a bed bath), using a small bowl of warm water and a clean "daily" cloth. While keeping the baby swaddled in a towel, wipe the face and head (including hair), dry, then cover the head and then expose each limb and then the body and perineum drying consecutively and covering in-between. Remove the damp towel. Return the baby to skin-to-skin position with a nappy and cap in place and tie on and cover with a warm dry blanket
   - **DO:** Demonstrate how to do a full immersion baby bath for first time mothers
   - **DON'T**: Bath at night or within the first 6 hrs of birth
   - **DON'T:** Use any oils to wipe baby

4. **Ensure adequate nutrition.** See "Establishing breastfeeding" guideline
   - Support and establish breast feeding or cup feeding if mother has appropriately chosen formula feeding:
     - Formula should not be readily available in the postnatal unit unless issued for a specific baby by the dietician
     - Formula should only be chosen for HIV exposed babies if mother has a high vial load and proven treatment failure
     - Orphaned or abandoned babies who do not have access to human milk whilst in hospital / MOU
   - Put to breast frequently on demand
   - Ensure mother receives adequate support

5. **Give routine treatment and immunisations.** See "Immunizations" guideline
   - **DO:** Give Oral Polio and BCG vaccines on discharge:
     - **DON'T:** Give BCG immunization to any neonate with a mother diagnosed with TB in the last 2 months and baby on TB prophylaxis
     - **DON'T:** Give BCG immunization to any neonate who is HIV PCR positive AND shows signs of HIV infection
   - **DO:** Give BCG immunization if HIV status is unknown or baby is exposed or PCR positive but asymptomatic
   - **DO:** Take a PCR and commence prophylactic HIV treatment for all HIV exposed babies according to "PMTCT" guidelines

6. **Examine for any problems or congenital abnormalities.** See "First Examination" guideline
   - Examine baby fully from head to toe prior to discharge unless baby has already been examined in labour ward
   - Ensure the First Examination is completed in the Neonatal Record
   - Ensure Rh status and syphilis serology of mother is known for every mother before discharge:
     - If Rh is negative - Ensure mother receives Anti-D if indicated
     - If syphilis test is positive and mother is not fully treated - Examine baby closely for signs of syphilis. See "Neonatal Infections" guideline for management

7. Prepare mother for discharge

- Complete and issue the mother with the Road to Health booklet (RtHB) and Messages in her language and postnatal card. Stress their importance as the RtHB and Side by Side campaign are crucial to ensure that 2/3^{rds} of children growing up in poverty not only **survive** but **thrive**
- Explain her role as a partner in nurturing care and the Side by Side campaign
- Explain the 5 icons/pillars: Love, nutrition, protection, health care and extra care
- Educate her regarding:
  - Danger signs: Jaundice/pallor/cyanosis, lethargy, poor feeding, convulsions, respiratory distress, hypo/hyperthermia and vomiting and diarrhoea
  - Common problems: Sticky eyes, colic, poor sleep, diarrhoea, nappy rash
- Explain the ongoing care of her baby:
  - Monitoring for danger signs using the "Caring for our new baby" booklet
  - Continuing skin-to-skin at home (Until the baby is no longer comfortable)
  - Prevention of hypothermia
  - Basic and hand hygiene and cord care
  - Breast feeding exclusively for 6 months and continued until at least 2 years
  - Ongoing clinic visits-combined mother and baby postnatal visits, immunization and health checks
  - Importance of love and play

8. Prepare for discharge

- Where possible do not discharge well babies before 24hrs. If discharged much sooner, e.g. 6 hours post-delivery, then the mother/baby pair should be reviewed the following day either at the local clinic or at home by a CCG:
  - Well babies can be reviewed & discharged by a midwife/ doctor/medical intern/ clinical associate (based on facility policy). Medical interns & clinical associates must always work under the supervision of a qualified doctor
- At risk babies must be observed for a minimum of 24hrs:
  - At risk babies must be reviewed daily by a doctor and be discharged by a doctor
- Inform mother of any follow up visits and the next well mother and baby clinic appointment. The first visit should be around Day 6 post birth. Document in the RtHB, the postnatal card and the discharge summary
- Refer mother and baby to the appropriate CCG for her area. If not already visited the mother and baby should receive a home visit on day 3 to assess maternal and infant wellbeing
- Inform mother when and where to return for her baby's HIV PCR result
- On the Neonatal record: Complete the discharge checklist and list any resolved or ongoing problems
- Discharge baby in skin to skin position

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