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| **Session 1: Immediate Routine Care and Essential Care of Newborn**(For use by Nurse Mentors – for All SNs in PHC/CHC/TH)**Learning Objectives**By the end of the session participants will* Recall the steps of immediate routine care of a newborn in the first hour of life.
* Be able to demonstrate the immediate steps of care for the newborn.
* Be able to demonstrate on how to assist a mother to initiate breast feeding, while being in skin to skin care.
* Be able to review skills required for essential care to the newborn (checking weight, temperature, breathing and initial examination) with minimal interruption of skin to skin care.

**Introduction**The first hour is important for the newborn baby to be able to adapt to the external environment. If the baby is kept close to the mother, it would help the baby to maintain temperature, being fed by the mother more easily and both the mother and baby will feel safe. Thus, immediate routine care of a newborn involves simple steps that could help the nurse to classify the baby as stable/well or unstable/unwell and as LBW baby. Let us review and practice these steps.

|  |  |  |  |
| --- | --- | --- | --- |
| **Objective** | **Method** | **Materials** | **Duration** |
| Review the objectives of the module |  |  |  |
| Recall the steps of immediate routine care of a newborn in the first hour of life. | Read out Case Scenario 1. Brainstorm with participants immediate and essential steps of care for a newborn baby Request a participant volunteer to demonstrate the steps just mentioned.  | Copy of the case scenario.Maternal pelvis, new born baby mannequinTowels/clean clothsGlovesCotton swabs Umbilical clampPoster with essential care steps | 15 minutes |
| Demonstrate the immediate steps and essential steps of care for the newborn. |
| Demonstrate how to assist a mother to initiate breast feed while in skin to skin. | Show how this can be done using the preemie natalie.Highlight the cues for readiness to feed and proper position of the baby at breast. | Preemie natalieBreast model | 5 minutes |
| Review Immediate Routine and Essential Care of a LBW newborn. | Divide the participants into groups of 2-4 members and give each one case Scenario 2. Tell them to take turns and demonstrate the steps of immediate and essential care of a LBW baby. They can use the checklist to provide feedback to their partner. | Case Scenario 2: 4 copiesA set of the following for each group:Alcohol scrub, Weighing machine, Cloth to clean the pan of the machinePreemie NatalieThermometerCotton swabsSyringeNeedle 26 GVitamin KSterile cotton swabs | 10 minutes |
| **Session II** |
| Review skills required for essential care to the newborn with minimal interruption of skin to skin.  | Request one participant volunteer each to demonstrate how to * Check weight
* Check temperature using touch method and the thermometer
* Assess breathing
* Give Vitamin K to the baby
 | Alcohol scrub, Weighing machine, Cloth to clean the pan of the machinePreemie natalieThermometerCotton swabsSyringeNeedle 26 GVitamin KSterile cotton swabsShow Global Health Media Video on essential care for small babies | 20 minutes |
| Demonstrate how an initial examination of the newborn baby can be done while on skin to skin. | Show steps of examination* Colour
* Head
* Mouth - cleft
* Chest – shape and breathing
* Abdomen – soft, distended, tolerating feeds
* Back – an dimple, protrusion
* Limbs
* Genitalia
 | Preemie NatalieTowel/clean cloth |  |
| Review signs of being unwell.Classify the LBW as well or unwell and mention appropriate decision about care. | Use poster to show signs of a baby being unwell* LBW (less than 2000gms)
* No movement
* Convulsions
* Poor feeding / intolerance
* Apnea/breathing difficult
* Hypothermia (<35.60C)
* Jaundice
* Cord infection
 | Poster with essential care steps (adapted from Essential care of every small baby) |  |
|  | Give each group a case Scenario 3. Ask them to complete the question in 10 minutes.Elicit from each group their responses to the questions.  | Case Scenario 3: 4 copies | 10 minutes |
| Conclusion | Summarise the key leanings of the session | White board / flip chart and markers |  |

***Case Scenario 1****: A mother at 38 weeks’ gestation delivers a normal term baby in the hospital.* *What would you immediately do for the newborn baby?* *Key points for Facilitator*

|  |  |  |
| --- | --- | --- |
| *Immediate Care for Newborn* | Yes | No |
| * Call out the time of birth and sex of baby.
 |  |  |
| * Place the baby on mother’s abdomen, wipe dry with a clean cloth/towel. Remove wet towel.
 |  |  |
| * Check if the baby is breathing/ crying.
 |  |  |
| * Cover with second dry clean cloth/towel. Cover the head.
 |  |  |
| * Wipe both eyes separately.
 |  |  |
| * Clamp cord 1-3 minutes after delivery (2.5cms or two fingers’ space from abdomen) with umbilical cord clamp. Place an artery clamp 4 finger space from the umbilical cord clamp. Cut the cord between the two clamps, approximately 2 fingers space from the blue clamp.
 |  |  |
| * Place identity label.
 |  |  |
| * Place baby between mother’s breasts in direct skin to skin, cover the baby and ask her to hold the baby.
* This will keep the baby warm, help initiate breast feeding and prevent common complications of small babies.
* Common complications of LBW babies include breathing problems, low temperature, inadequate feeding and infection.
 |  |  |
| ***Essential care of Newborn*** |  |  |
| * Assist mother with feeding the baby within the first half an hour of life. A baby is alert for the first half an hour of life. Thus, if we use this opportunity to help the mother to feed the baby, the baby will get colostrum that could help the baby fight infections and this will be best suited for the baby.
* Position baby close to breasts.
* Ask mother to express a little colostrum.
* Cues: mouth opening, tongue searching and sucking motions
* Can attach, suck and swallow well – can feed
* Can’t attach and suck but swallow – give pallada
* Choking or coughing or turning blue while feeding– don’t give oral feeds
 |  |  |
| * Administer Injection Vitamin K IM to newborn baby based on weight. This will help reduce the chance of bleeding for the baby.
* 1mg for baby more than 1000grams;
* 0.5mg for less than 1000grams
 |  |  |
| * Recognise and respond to problems promptly, as it is essential for the health of the newborn baby. Hence, it is important to check every 15 minutes for the first 2 hours of life, while the baby still remains in skin to skin contact with mother and is covered with a clean cloth. Check for the following
* **A:** Activity if normal or abnormal – not moving/ lethargic, excessive movement/seizures, jitteriness
* **B**: Breathing by counting the number of breaths for a minute (normal 40-60/minute). Abnormal if there is indrawing of chest and noisy breathing, choking and coughing while feeding.
* **C**: Colour (normal: pink lips and tongue). Abnormal if blue lips or baby is yellow/jaundiced and check the cord for bleeding
* **T:** Temperature /warmth using touch method till temperature is checked with a digital thermometer. Normal is 36.5-37.50C.
* Decide if the findings are normal or abnormal. If abnormal it is important to decide whether you need to continue current care, change care or refer for advanced care.
* Teach the mother how to check A, B, C, T.
 |  |  |
| * Check the weight of the baby. Determine if this baby is less than 2500 grams or more. All babies less than 2500 grams must be provided with KMC as early as possible.
 |  |  |
| * Keep the baby in skin to skin for as long as possible.
 |  |  |

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**CASE SCENARIOS – ROUTINE CARE OF NEWBORN**

**Facilitator’s Copy**

***Essential Care of a LBW baby – Duration 40 minutes***

***Instructions for Use***

Give the Case Scenario to each group (2-4 members). Ask them to take turns and demonstrate both immediate and essential care ***(each can take 10 minutes)***. Remind them to use the checklist to provide feedback to the participant.

**Case Scenario 2**

Ms Basamma with GA of 35 weeks delivered a female baby in a PHC weighing 2000 grams as measured by Group D. 6 hours later SN weighed the baby and the weight was 1700 grams. SN referred the new-born immediately to SNCU.

***What would you immediately do for the newborn baby?***

|  |  |  |
| --- | --- | --- |
| *Immediate Care for Newborn* | Yes | No |
| * Call out the time of birth and sex of baby.
 |  |  |
| * Check if the baby is breathing / crying
 |  |  |
| * Place the baby on mother’s abdomen, wipe dry with a clean cloth/towel, and then cover with second dry clean cloth/towel.
 |  |  |
| * Clamp cord 1-3 minutes after delivery (2.5cms or two fingers’ space from abdomen) with umbilical cord clamp. Place an artery clamp 4 finger space from the umbilical cord clamp. Cut the cord between the two clamps, approximately 2 fingers space from the blue clamp.
 |  |  |
| * Place baby between mother’s breasts in direct skin to skin contact, cover the baby and ask her to hold the baby.
 |  |  |
| ***Essential care of Newborn*** |  |  |
| * Assist mother with feeding the baby within the first half an hour of life. A baby is alert for the first half an hour of life. Thus, if we use this opportunity to help the mother to feed the baby, the baby will get colostrum that is rich in antibodies and best suited for the baby.
* Position baby close to breasts.
* Ask mother to express a little colostrum.
* Cues: mouth opening, tongue searching and sucking motions
* Can attach, suck and swallow well – can feed
* Can’t attach and suck but swallow – give pallada
* Choking or coughing or turning blue while feeding– don’t give oral feeds
 |  |  |
| * Administer Injection Vitamin K IM to newborn baby based on weight. This will help reduce the chance of bleeding for the baby.
* 1mg for baby more than 1000grams;
* 0.5mg for less than 1000grams
 |  |  |
| * Check every 15 minutes for the first 2 hours of life while the baby still remains in skin to skin contact with mother and is covered with a clean cloth. Check the following:
* Activity if normal or abnormal
* Breathing by counting the number of breaths for a minute. It will be between 40-60/minute. There will be no indrawing of the chest and the baby will be able to feed without a problem.
* Colour. Look for the colour of the lips and tongue – it will be pink. Check the cord for bleeding.
* Warmth using touch method till temperature is checked with a digital thermometer
 |  |  |
| * Check the weight of the baby (within 1 hour of life). Determine if this baby is less than 2500grams or more. All babies less than 2500 grams must be provided KMC as early as possible.
 |  |  |
| * Keep the baby in skin to skin contact for as long as possible.
 |  |  |
| * Do the first examination of the baby by 1 hour of life.
 |  |  |

***Essential Care of a LBW Baby – Mothers can actually help in my busy schedule!***

***(Participant’s Copy)***

**Instructions:** Use this case scenario to review and to identify areas for improvement. Stay in your groups. Complete the questions given after the case scenario in 10 minutes.

**Case Scenario 3**

Ms Mallawa a primi delivered a female baby at 34 weeks of gestation at District Hospital. Weight of the newborn was 1850 grams, cried immediately after birth and was stable. Newborn was kept in the radiant warmer. Mother was stable. Mother was given the baby after an hour when baby was cleaned, cord cut, baby was weighed. Mother and the family members were counselled about KMC and KMC was initiated 6 hrs after the delivery. Mother provided KMC for 5 hrs each day and was discharged on the 3rd day. Advice on KMC was given to the mother and family.

***Identify areas that could have been done differently. What are the advantages of doing it differently?***

|  |  |
| --- | --- |
| ***Areas that could have been done differently***  | ***Advantages of doing it differently***  |
|  |  |

***Essential Care of a LBW Baby – Mothers can actually help in my busy schedule!***

***(Facilitator’s Copy)***

**Instructions:** Use this case scenario to review and help staff nurses to identify areas for improvement. Divide them into groups and ask them to complete the questions given after the case scenario in 10 minutes. Brainstorm with the group for each question. Elicit responses from each group.

**Case Scenario 3**

Ms Mallawa a primi delivered a female baby at 34 weeks of gestation at District Hospital. Weight of the newborn was 1850 grams, cried immediately after birth and was stable. Newborn was kept in the radiant warmer. Mother was stable. Mother was given the baby after an hour when baby was cleaned, cord cut, baby was weighed. Mother and the family members were counselled about KMC and KMC was initiated 6 hrs after the delivery. Mother provided KMC for 5 hrs each day and was discharged on the 3rd day. Advice on KMC was given to the mother and family.

***Identify areas that could have been done differently. What are the advantages of doing it differently?***

|  |  |
| --- | --- |
| What could have been done differently  | Advantages |
| * Baby should have been kept in skin to skin contact over the mother’s abdomen, wiped, cord cut after 1-3 minutes.
 | * Early skin to skin can help the baby maintain temperature, in early initiation of breast feeding.
* Keeping the baby in skin to skin contact between the breasts helps the flow of milk for the mother and for the baby – to search for the nipple since colostrum smells like amniotic fluid.
* Cutting the cord after 1-3 minutes could help the baby.
 |
| * Mother should have been assisted to breast feed the baby within ½ hours.
 | * The baby is alert the first few minutes after birth. Colostrum smells like amniotic fluid and this will stimulate the baby to move towards the nipple.
* Encourage the mother to give colostrum since this has anti-infective properties and can protect the baby from getting infections. It could help to breast feeding successfully.
 |
| * The baby is well since the baby breathes at birth, has no danger signs. The baby is a LBW baby and hence, must be initiated on KMC as soon as possible.
 | * Keeping the baby in KMC will help the busy nurse to have the baby monitored by the mother or the care taker.
* The baby’s temperature can be maintained by keeping the baby in KMC.
* The baby can initiate on breast feeding early and successfully.
* The mother and the baby will be secure.
* Breast feeding could help the uterus contracting and thus, reduces the chance of bleeding.
* The mother and family member could have been taught to monitor the baby every 15 minutes for the first hour:
* A- Activity
* B-Breathing
* C- Colour and cord
* T- Temperature
* Reinforce the need to breast feed every 2-3 hours and to give KMC for as long as possible.
 |
| * Within 1 hour, check weight, do a quick examination to rule out any abnormalities, and give Inj. Vitamin K.
 | * Checking weight accurately will help to classify the baby and thus, we will be able to determine if the baby requires routine care, little extra care or advanced care. A baby who is less than 2000 grams needs close observation.
* Doing a quick examination of the baby will help you to determine if the baby requires specialised care.
* Giving Inj Vitamin K reduces the risk for bleeding in a newborn.
 |

**Skills required for Routine newborn care and Essential newborn care**

|  |  |
| --- | --- |
| **Requirements for Station** | **Steps to cover for teaching station** |
|  **Immediate Routine Care of Newborn*** Table
* Two chairs
* Mannequin (abdominal and foetus)
* Two baby sheets / Towels
* Suction catheters-DeLee’s
* Clamps – artery and umbilical clamp
* Watch
 | **Immediate Routine Care of Newborn (5 ?)*** Call out the time of birth and sex of the baby.
* Place the baby on mother’s abdomen, wipe dry with a clean cloth/towel. Remove wet towel.
* Cover with second dry clean cloth/towel. Cover the head.
* Check if the baby is breathing / crying.
* Wipe eyes with sterile cotton swab (one for each eye) from inner to outer canthus.
* Clamp cord 1-3 minutes after delivery (2.5cms or two fingers’ space from abdomen) with umbilical cord clamp. Place an artery clamp 4 finger space from the umbilical cord clamp. Cut the cord between the two clamps, approximately 2 fingers space from the blue clamp.
* Place identity label.
* Place baby between mother’s breasts in direct skin to skin contact, cover the baby and ask her to hold the baby.
* Assist mother with feeding the baby.
 |
| **Assist mother with feeding the baby** | **Assist mother with feeding the baby*** Position baby close to breasts.
* Ask mother to express a little colostrums.
* Assess the baby’s cues like mouth opening, tongue searching and sucking motions.
* After attachment, assess for sucking and swallowing ability of the baby decide the method of feeding (DBF or EBM and pallada).
* Monitor for choking or coughing or turning blue while feeding. If yes, then do not give oral feeds.
* Rule out congenital anomalies.
 |
| **Checking weight of the newborn*** Mannequin -
* One baby sheet/ towel
* Cotton swab with spirit
* Weighing machine
* Kidney tray
* Chit of paper to record weight of mannequin
* Table
* Chairs (2)
 | **Checking weight of the newborn*** Clean the tray/pan / weighing bag with spirit swab or soap and water soaked cotton swab or gauze. Then clean with a dry swab.
* Place clean cloth over the tray / pan / bag of weighing scale in centre and sets the weighing machine scale to zero.
* Adjust knob so that reading is zero in beam scale.
* Allow the digital scale to adjust to zero automatically or use the knob.
* Clean hands using alcohol hand rub.
* Place the mannequin baby in the centre of the tray/pan.
* Note and records the weight accurately.
* Note the reading on the scale to the nearest 0.01kg.
* Wait till the number displayed is more or less stable, freeze the reading.
* Place the newborn on mother for direct skin to skin contact immediately after checking the weight.
* Record the weight (accurately without rounding off decimal) in the newborn’s case sheet.
 |
| **Checking temperature*** Thermometer
* Dry cotton swabs
* Spirit swabs
* Kidney tray
* Mannequin baby
 | **Checking temperature** * Collect all supplies /articles required.
* Wash hands.
* Wipe the digital thermometer from bulb to stem end with cotton swab and switch on the button.
* Place the bulb of thermometer horizontal to body of the baby mannequin in arm pit, so that bulb is in close skin contact. Hold the arm close to the body.
* Remove the thermometer once it beeps/after 3 minutes, wipe the thermometer with spirit cotton swap from stem to bulb.
* Read the temperature on the display.
* Record the temperature in case sheet.
* Take measures, if needed, to keep the baby warm-KMC/Swaddling.
 |
| **Initial examination of the newborn baby*** Baby Mannequin
 | **Initial examination of the newborn baby*** Perform complete examination within 90 minutes after birth.
* **A:** Activity of the baby, observe spontaneous movement or arms and legs, they are equal on both sides. Limbs are flexed at rest. Tone-floppy nor rigid.
* **B**: Breathing by counting the number of breaths for a minute (normal 40-60/minute). Abnormal if there is indrawing of chest and noisy breathing, choking and coughing while feeding.
* **C**: Colour (normal: pink lips and tongue). Abnormal if blue lips or baby is yellow/jaundiced and check the cord for bleeding.
* **T:** Temperature /warmth using touch method till temperature is checked with a digital thermometer. Normal is 36.5-37.50C.
* Identify any life-threatening congenital anomalies and birth injuries.

**Head :-*** Unilateral/Bilateral cephalohaematoma and moulding.

**Face and Mouth:-*** Examine the oral cavity for cleft palate.
* Examine for oesophageal patency by passing an orogastric tube, especially if the mother has a history of polyhydramnious or the newborn is frothing, excessive salivating, choking or coughing or turning blue while feeding.

**Chest:-*** Examine the chest for shape and breathing, then rule out diaphragmatic hernia or pneumothorax.

**Abdomen:-*** Inspect the cut end of the cord for number of vessels-two umbilical arteries and one umbilical vein.

**Back:-*** Examine the back for protrusion or dimple.

**Genitalia and anus:-*** Rule out anal atresia by inspecting the anal opening at the normal site.
* Genital malformation or sexual ambiguity

**Limbs:-*** Birth defect or birth trauma
 |
| **Administer Injection Vitamin K IM to newborn baby*** Injection Vitamin K ampoule
* Syringe (2cc/1cc)
* Needle ( 24G or 26G)
* Cotton swaps
* Spirit
* Kidney tray
* Sharp container to discard the needle and syringe.

 | **Administer Injection Vitamin K IM to newborn baby*** Wash hands.
* Assemble needle and syringe. Choose 1 ml syringe and 24/26G needle, as available.
* Break ampoule carefully and draw the required amount in the syringe.
* 1mg for baby more than 1000grams;
* 0.5mg for less than 1000grams
* Identify the site for the injection mediolateral (Vastus lateralis). This means it is between the middle and side surface of thigh.
* Wipe the site with spirit swap in a circular motion. Allow to dry.
* Grasp the muscle gently with thumb and fingers. Insert the needle at 90 degree angle, aspirate and administer the medication if no blood visible.
* Withdraw needle. Massage the site.
* Discard the needle in puncture proof container or use needle cutter and put the syringe and other materials in appropriate bins.
* Wash hands.
* Record the injection name, dose, site and route.
* Check if the baby is comfortable.
 |
| **Classify the newborn as well and unwell** | **Classify the newborn as well and unwell**Babies should be classified as* Normal- can be managed routinely
* Well- needs close observation
* Unwell- might need special care
* Unwell- might need intensive care.

Classification is based on* Measured weight
* Temperature
* Findings of examination.

Normal babies * Breathe well at a normal rate (40-60minutes) without effort.
* Maintains normal temperature **without thermal care** (36.5-37.5 degree C)
* Weighs >2000gms.

Well, having a problem* Breathes well at a normal rate (40-60minutes) without effort.
* Maintains normal temperature **with thermal care** and having temperature of 35.5-36.5 degree C
* Weighs between 1500-2000gms
* Feeds poorly

Unwell, needing advanced care.* Has a DANGER SIGN
* Fast breathing or severe chest indrawing
* Temperature >35.5 or <37.5 degree C
* No movement
* Convulsions
* Develops a problem
* Weighs >1500gms.
* Apnea
* Cord infection
* Jaundice
* Feeding intolerance
* Poor weight gain or excessive loss

*Do on-going routine assessments for all small babies, because they are at risk of developing problems.* |
| **Assist mother in providing skin to skin and monitor during skin to skin care.** | **Assist mother to provide skin to skin and monitor during skin to skin care.*** Begin skin-to- skin care at birth and continue for at least one hour.
* Cover with dry clean cloth/towel. Cover the head.
* Avoid interruptions (skin-to-skin care) and uncover only the body areas needed for care.
* Check the baby every 15 minutes for the first 2 hours, while the baby still remains in skin to skin contact with mother, for the following:
* **A:** Activity if normal or abnormal – not moving/ lethargic, excessive movement/seizures, jitteriness
* **B**: Breathing by counting the number of breaths for a minute (normal 40-60/minute). Abnormal if there is indrawing of chest and noisy breathing, choking and coughing while feeding.
* **C**: Colour (normal: pink lips and tongue). Abnormal if blue lips or baby is yellow/jaundiced and check the cord for bleeding
* **T:** Temperature /warmth using touch method till temperature is checked with a digital thermometer. Normal is 36.5-37.50C.
* Decide if the findings are normal or abnormal. If abnormal it is important to decide whether you need to continue current care, change care or refer for advanced care.
* Teach the mother how to check A, B, C, T.
 |

CLASSIFY A NEWBORN BABY AS WELL / UNWELL AND DECIDE ON APPROPRIATE CARE

**

**Source: AAPs – Training material for newborn babies**