



1. Feedback on knowledge gained and clinical observation:
  - a. Ask the participants whether they have each completed the clinical observation exercise? (They must have completed each clinical observation by the end of the Well baby component)
  - b. Ask the participants about anything new they have learnt?
  - c. How did the practice in your hospital compare with what was taught?
  - d. Average the scores from each participant in order to assess the general compliance of your hospital. (Can be completed once all observations have been submitted).
2. Comments on video: Ask the participants for their impressions of what they saw in the video?
3. Link to KZN tools:
  - a. Discuss the 5 relevant KZN tools
    - i. KZN Thermoregulation guideline
    - ii. Hypothermia management checklist
    - iii. Ambient temperature monitoring tool
    - iv. Neonatal record (Congratulations)
    - v. Daily assessment records
  - b. Are these tools in regular use in the facility?
  - c. Discuss whether temperatures are being recorded in labour ward and theatre and on the Newborn Record (Congratulations) prior to transfer?
4. Questions:
  - a. What quality gaps regarding thermoregulation in your hospital have you noticed?
  - b. What are your concerns and possible solutions? Identify one simple thing you can change that would improve the care in your facility
5. Take home messages: Ask participants what are their take home messages? Share the following if they have not been raised:
  - a. Keeping the baby warm reducing his chances of dying!
  - b. If a baby is cold he needs more oxygen and more glucose.
  - c. Wet babies loose temperature faster.
  - d. Small babies have less reserves to keep them warm
  - e. Warming a room prevents the baby from getting cold.
  - f. KMC is the most effective way of keeping **ALL** babies warm and should be commenced from birth and continued during transfer, in post natal /neonatal units and at home.
6. Ensure all participants complete the case study. Discuss their answers using the guide below:

### **Case Study Answers**

- Q1. Give 3 possible reasons as to why this baby became hypothermic. Accept any of the following.
- a. The baby is preterm and underweight for gestational age. This condition may cause hypothermia as these infants have little brown fat.
  - b. The baby was born by caesarian section and the environmental /ambient temperature in theatre was low.
  - c. The baby was separated from its mother and possibly didn't receive KMC.
  - d. The baby wasn't correctly dried at birth. Wet blanket was not removed.
  - e. The baby was transported in a cot.

Q2. What would be your immediate management of the baby?

- a. Remove the baby from the wet towel and dry well. Ensure the baby's head is dried.
- b. Place a hat on the baby's head to reduce further heat loss.
- c. Commence skin to skin care (KMC) on mother's chest.
- d. Teach the mother to observe the baby's breathing, colour and activity.
- e. Check the baby's glucose levels (and saturations if possible)
- f. Recheck temperature in 30 mins

Q4. Should this baby be fed? Why? How?

- a. Yes.
- b. Cold babies have increased energy requirements. The baby is unable to shiver and is therefore burning brown fat (if available) to produce heat. This requires energy in the form of glucose.
- c. Put to breast immediately. Do not give formula. If the baby does not suck, express and give colostrum orally via syringe.

Q3. How should this baby have been managed in order to prevent hypothermia?

- a. Maintain ambient temperature in LW and theatre at 24-26 degrees
- b. Close windows and curtains. Avoid drafts.
- c. Dry thoroughly (including head) after birth.
- d. Remove wet towels
- e. Place baby skin to skin while mother is sutured. If unable to commence skin to skin in theatre, keep on radiant warmer in theatre and commence skin to skin in recovery.
- f. Transfer mother and baby to post natal in skin to skin position. If this is not possible transfer in functional transport incubator with temperature set at 36 degrees.

Q5. Name and describe the different ways in which heat is lost.

- A. Convection- heat loss to the surrounding air  
Conduction- heat loss to a cold surface in direct contact with the body  
Evaporation- heat loss due to moisture on the skin  
Radiation- heat loss to a cold object in the room eg windows

7. Complete the knowledge check.

8. Ask each participant to exchange their answers with another and mark the knowledge checks together. Then gather the knowledge checks and capture each participant's score on the course register.