



World Health  
Organization

# Essential newborn care course

## **PARTICIPANT'S WORKBOOK**

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# Participant's Workbook Contents

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# Essential newborn care course

## Care of the baby at the time of birth **MODULE 1**

### **PARTICIPANT'S WORKBOOK**

<b>Session S1</b>	<b>Introduction to PCPNC</b> (Pregnancy, Childbirth, Postpartum and Newborn Care: A guide for essential practice)	
	Handouts	<b>3</b>
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<b>Answers</b>	<b>Answers to Worksheets for Sessions 1, 2, 3 and 4</b>	<b>23</b>
<b>Clinical practice 1</b>	<b>Participant's instruction and task sheet</b>	<b>29</b>

## How to use this workbook for Module 1

This workbook contains the handouts and session worksheets for Module 1 plus the clinical practice instructions for the first clinical practice.

### How to use the Handouts

The handouts should be used for note taking during the taught sessions.

### How to use the Questions (worksheets)

The worksheets can be used in a number of ways:

#### If you do the intensive course (4–5 days):

During an intensive course of 4 to 5 days the worksheets should be completed as a homework task.

#### If you do weekly sessions

When the course is taught over a longer period of time, e.g. half or one day per week for four or five weeks, the workbook should be completed as instructed by your trainer.

### How to use the Answers

There are 37 questions in Module 1.

- PLEASE do not look at the answers until you have completed the three worksheets.
- If you have answered 30 or more questions correctly, you have done well!
- If you have answered less than 30 questions correctly you need to ask your trainer to go over the areas you are unsure about.

### Clinical Practice instructions and Task Sheet

You will need to have your Clinical Practice information and Task Sheet with you when you go to your Clinical Practice sessions.

- The Task Sheet contains a number of tasks that you have to complete during the Clinical Practice session.
- Each task on the sheet has instructions for you to follow.
- Your trainer or clinical facilitator will give you details of where you should work and the order in which you should complete your tasks.



M1 S2 1

## Standard precautions

Essential Newborn Care Course

M1 S2 2

## Standard precautions

### Objectives

- To be familiar with precautions that will protect the mother and her baby and the health worker from infections with bacteria and viruses.

Essential Newborn Care Course

M1 S2 3

## Standard precautions

### Standard Precautions and cleanliness

- Wash hands
- Wear gloves
- Protect yourself from blood and other body fluids during deliveries
- Practice safe disposal of sharps
- Practice safe waste disposal
- Deal with contaminated laundry
- Sterilize and clean contaminated equipment
- Clean and disinfect gloves
- Sterilize gloves

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M1 S2 4

## Standard precautions

### How to handwash?

Wash hands only when visibly soiled! Otherwise, use handrub!  
Duration of the entire procedure: 40-60 sec.

Essential Newborn Care Course

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# Standard precautions and cleanliness

## Protecting the baby

In all health-care facilities and whenever care is given, certain precautions must be taken to protect the mother and baby and health workers from infections due to bacteria and viruses, including HIV.

Providing “protection” needs planning and preparation before care is given. Time should be allocated to making sure precautions are followed.

1. In which section and page of the PCPNC guide can information on universal precautions and cleanliness be found?
2. List the precautions that should be taken:

All these points are “principles of good care”. They should become routine practice when working with mothers and babies.

Hand washing is of particular importance. It is essential before and after visiting a mother or a baby. This helps to protect both the mother and baby against infection.



M1 S3 1

## Care of the baby at the time of birth

(until around 1 hour after birth)

Essential Newborn Care Course 

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Care of the baby at the time of birth  
(until around 1 hour after birth)

M1 S3 2

### Objectives

- To describe and carry out the evidence based routine care of a newborn baby at the time of birth and prevent complications.

Essential Newborn Care Course 

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Care of the baby at the time of birth  
(until around 1 hour after birth)

M1 S3 3

### The birth of Jojo



Essential Newborn Care Course 

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Care of the baby at the time of birth  
(until around 1 hour after birth)

M1 S3 4

### Second stage of labour: Immediate newborn care

- Call out time of birth
- Deliver baby onto abdomen or into her arms
- Thoroughly dry baby immediately with a warm, clean towel
- Assess the baby's breathing while drying.
- Make sure there is not a second baby
- Wipe eyes
- Discard wet cloth
- Cover with dry cloth
- Change gloves (if possible)
- Clamp and cut umbilical cord
- Place baby on mother's chest in skin-to-skin contact
- Place identification labels on baby
- Cover mother and baby with blanket.
- Cover baby's head with a hat.
- Encourage breastfeeding

Essential Newborn Care Course 

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Answers

Questions

Handouts

FOR PARTICIPANT

Checklist

Task sheet

FOR FACILITATOR

Answers

Questions

Handouts

FOR PARTICIPANT

Checklist

Task sheet

FOR FACILITATOR

Care of the baby at the time of birth  
(until around 1 hour after birth) M1 S3 5

### Drying the baby immediately after birth



Essential Newborn Care Course 

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Care of the baby at the time of birth  
(until around 1 hour after birth) M1 S3 6

### Broken equipment is dangerous



Essential Newborn Care Course 

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Care of the baby at the time of birth  
(until around 1 hour after birth) M1 S3 7

### Skin-to-skin contact: Keeping the baby warm



Essential Newborn Care Course 

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Care of the baby at the time of birth  
(until around 1 hour after birth) M1 S3 8

### Keeping a newborn baby warm after delivery

- Provide a clean, warm, draught free room for delivery at 25-28°C.
- After birth immediately dry baby with a clean, dry, warm cloth.
- Put baby on mother’s abdomen or a warm, clean, dry surface.
- Give baby to its mother for skin-to-skin contact.
- Put naked baby between mother’s naked breasts, cover them both (*as long as immediate medical care is not needed by either*).
- Cover baby’s head.
- Encourage breastfeeding as soon as possible after birth
- *If mother and baby are separated wrap baby in warm covers and place in a cot, in a warm room.*
- Use a radiant heater if the room is not warm or baby is small.

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Care of the baby at the time of birth  
(until around 1 hour after birth) M1 S3 13

### A newborn baby attaching to the breast without help



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Care of the baby at the time of birth  
(until around 1 hour after birth) M1 S3 14

### A newborn baby's first breastfeed



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Care of the baby at the time of birth  
(until around 1 hour after birth) M1 S3 15

### The first breastfeed

To help a baby successfully breastfeed soon after birth, we should:

- Give the baby to its mother for skin-to-skin contact
- Let the baby feed when it is ready.
- Check the position and attachment when the baby is feeding.
- Let the baby feed for as long as it wants on both breasts.
- Keep the mother and baby together for as long as possible after delivery.
- Delay tasks, such as weighing, washing etc until after the first feed.

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Care of the baby at the time of birth  
(until around 1 hour after birth) M1 S3 17

### Summary

**Standard precautions**

- Use soap and warm water to wash and clean hands (**protection**)
- Wear gloves (**Protection**)

**Make sure delivery area is ready for mother and new baby:**

- Keep delivery room warm, close windows (**warmth, protection**)
- Have resuscitation equipment near delivery bed (**breathing**)
- Have clean warm towels/covers/cloths ready for newborn baby at delivery (**warmth**)
- Dry baby with a clean cloth immediately after delivery (**warmth, protection**)
- Have sterile kit to tie and cut cord (**protection**)
- Help mother to wear clothes which make immediate skin contact easy (**warmth**)
- Keeping mother and baby in skin-to-skin contact from birth encourages early breastfeeding (**feeding**)

Essential Newborn Care Course 

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## Care of the baby at the time of birth (until around 1 hour after birth)

M1 S3 16

### If the mother has HIV/AIDS

- **Standard precautions MUST be followed as with ANY other delivery and after care.**
- Her baby can have immediate skin-to-skin contact as any other mother and baby.
- Breastfeeding can begin when the baby is ready after delivery.
- **DO NOT GIVE** the baby any other food or drink.
- Good attachment and positioning is vital to prevent breast problems.
- If replacement feeding prepare formula for the mother for the first few feeds.

Essential Newborn Care Course 

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Answers

Questions

Handouts

FOR PARTICIPANT

Checklist

Task sheet

FOR FACILITATOR





## Care of the newborn baby at the time of delivery

Work through the following exercises and write your answers in the spaces provided.

### The basic needs of a baby at birth

At birth a baby is totally dependent upon its mother and other caregivers.

1. What are a baby's immediate needs in order to stay alive and keep healthy?

These are the basic needs of all babies at the time of birth.

2. Where can you find information on immediate care at birth?

### The second stage of labour and immediate newborn care

3. What should be done for a baby at the time of birth and in what order?

4. Does a baby need help with its breathing if he is crying?

Turn to **K11**: Newborn resuscitation

5. When should resuscitation begin if a baby is not breathing or only gasping after birth?

6. Describe what "skin-to-skin" contact means.

**To be warm** is an immediate and basic need of the newborn baby.

7. How can a baby be kept warm after delivery?

Turn to **D11**: Cord care

**8.** Describe immediate cord care.

Turn to page **D19**: Eye care

**9.** When, after delivery, should eye care be carried out?

**10.** What information does this section give you about eye care?

**11.** Which drugs can be used for eye care?

Turn to **D12** and **D19**: Monitoring the baby

**12.** What information is given on these pages about monitoring the baby?

**13.** For how long should the mother and baby be monitored?

## Skin-to-skin contact and breastfeeding

**14.** Where can you find information on breastfeeding after delivery?

**15.** Why is the baby's first feed important?

**16.** Describe what should be done if a baby does not feed within one hour after birth.

**17.** How can a baby be fed if the mother is ill and unable to breastfeed?

**18.** What options are there for a mother who cannot breastfeed?

## Special situations

**19.** Read the following five statements. Some are true and some are false. Mark the false statements with an F and the true statements with a T.

- A mother who has had a caesarean section cannot breastfeed for at least 24 hours.
- It is necessary for a baby born by caesarean section to go to the neonatal unit for the first 24 hours.
- A baby should be given expressed colostrum in a bottle if the mother cannot breastfeed at birth.
- After an instrumental delivery, skin-to-skin contact can begin as soon as the mother is comfortable.
- A baby born by breech delivery will have difficulty with breastfeeding.

## Routine care of the newborn baby at delivery

**20.** What can interrupt the time a mother and baby should be together immediately after birth?

## HIV and newborn care at birth

**21.** Where can you find information on HIV, breastfeeding and newborn care?

**22.** List the general preparations a health worker needs to make in the delivery area to meet the baby's needs at birth?



M1 S4 1

## Keeping the baby warm

Keeping the baby warm M1 S4 2

### Objectives

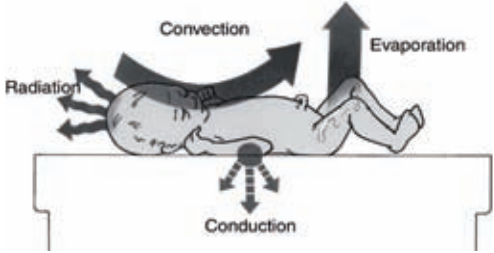
- To describe how to keep a baby warm.
- To understand the factors that contribute to heat loss and how they can be prevented.
- To teach a mother how to keep her baby warm.

Keeping the baby warm M1 S4 3



Keeping the baby warm M1 S4 4

### Four ways a newborn may lose heat to the environment




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Answers

Questions

Handouts

**FOR PARTICIPANT**

Checklist

Task sheet

**FOR FACILITATOR**

Answers  
Questions

Keeping the baby warm M1 S4 5

### First signs of Hypothermia

The baby:

- is less active
- does not breastfeed well
- has a weak cry
- has respiratory distress.

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Handouts

Keeping the baby warm M1 S4 6

### What is Hypothermia?

#### Hypothermia in the newborn baby

Temperature Range (°C)	Clinical Significance / Action
37.5	Normal range
36.5 - 37.5	Normal range
36.0	Cold stress / Cause for concern
35.0	Moderate hypothermia / Danger, warm baby
32.0	Severe hypothermia / Outlook grave, skilled care urgently needed

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FOR PARTICIPANT

Keeping the baby warm M1 S4 7

### Scenario 1

- You work in a busy delivery room. Medical staff report that in the past two months there has been an increase in the number of babies at their first newborn examination who are *hypothermic* and need treatment.
- You and a colleague are asked by senior staff to check if there is a problem in the delivery room. You discover several reasons why the delivery room may be too cold for babies and their mothers.

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- What did you find?
- What can be done to change the situation to keep the delivery room warm?

**Task Card A.**

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Checklist

Keeping the baby warm M1 S4 8

### Scenario 2

- You are newly in-charge of the postnatal ward in a district hospital. You have noticed that mothers are wearing jackets and think the ward is cold.
- You spend an afternoon assessing the postnatal ward.

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- List what you have found that makes your ward cold.
- What changes do you intend to make to keep babies warm in the ward?

**Task Card B**

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Task sheet  
FOR FACILITATOR

Keeping the baby warm M1 S4 9


### The "warm chain"

1. Warm delivery room
2. Immediate drying
3. Skin-to-skin contact
4. Breastfeeding
5. Bathing and weighing postponed
6. Appropriate clothing and bedding
7. Mother and baby together
8. Warm transportation (skin-to-skin)
9. Warm resuscitation
10. Training and awareness

Keeping the baby warm M1 S4 10

### Scenario 3

- What advice will you give to a father who will be taking his wife and baby to a cooler mountainous area?




- How can he and his wife keep their baby warm at home?

**Task Card C**

Keeping the baby warm M1 S4 11

### Scenario 4

- The climate is very hot where you live.



- What advice can you give to mothers and their families when they take their new baby home to prevent their baby from becoming overheated?

**Task Card D**

Keeping the baby warm M1 S4 12

### Using skin-to-skin contact to rewarm a cold baby

- Make sure the room is warm
- BEFORE REWARMING remove cold clothes and *replace* with warm clothes
- Place baby in skin-to-skin contact in a pre-warmed shirt opening at the front, a nappy, hat and socks
- Cover the baby on the mother's chest with her clothes AND an additional warmed blanket
- Check temperature every hour
- Keep the baby with the mother until the baby's temperature is in the normal range

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Answers

Questions

Handouts

**FOR PARTICIPANT**

Checklist

Task sheet

**FOR FACILITATOR**





## Keeping the baby warm

### How a baby loses heat

It is very easy for a baby to get cold, especially at the time of delivery when the baby is also wet with amniotic fluid. The temperature inside the mother's womb is 38°C; once he is born, the wet newborn baby immediately starts to lose heat as he is in a much colder environment.

Heat is lost in four main ways, all of which are commonly seen in our workplaces and in the home.

1. Name the four ways heat is lost and give examples of how they may affect a baby.
2. If heat loss is not prevented and continues, a baby will develop "hypothermia". Define "hypothermia".

Care should be taken not to let a baby get too hot as this can also make a baby ill.

### Keeping a baby warm and preventing heat loss

3. List the 10 steps in "The warm chain".

### Rewarming a newborn baby

Newborn babies cool down much faster than adults because they cannot maintain a stable body temperature as efficiently as adults. The smaller and more premature the baby, the more difficulty he has in maintaining its body temperature. In general, newborn babies need a warmer environment than adults. A baby cannot get warm by himself once he has become cold so he will need to be "rewarmed".

4. How should you rewarm a baby?
5. Where will you find this information?

## When rewarming a baby

6. Why is it necessary to take off all the baby's clothes?
7. Where should the clothes you put on the baby open?
8. How often should you check the baby's temperature after starting to rewarm the baby?
9. How fast should the baby's temperature rise? What temperature range is "normal"?
10. What should you do if the temperature is not 36.5°C or more after two hours of "rewarming"?
11. What should be the temperature of the room where the rewarming is taking place?

## Taking a baby's temperature

12. Is it necessary to take a newborn baby's temperature?
13. When is an accurate temperature needed?

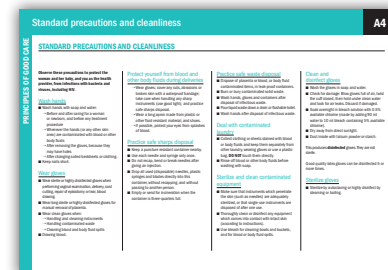
## Recommended reading

- Thermal Protection of the Newborn: A Practical Guide. WHO (WHO/RHT/MSM/97.2)
- PCPNC Guidelines [D11-D12](#), [D19](#), [J2-J7](#), [J10-J11](#), [K9](#)

## Session 2

## Standard precautions and cleanliness

- In which section and page of the PCPNC Guidelines can information on Universal Precautions and Cleanliness be found? **A4**
- List the precautions which should be taken:
  - Wash hands
  - Wear gloves
  - Protect yourself from blood and other body fluids during deliveries
  - Practice safe sharps disposal
  - Practice safe waste disposal
  - Deal with contaminated laundry
  - Sterilize and clean contaminated equipment
  - Clean and disinfect gloves
  - Sterilize gloves



## Session 3

## Care of the newborn baby at the time of delivery

### The basic needs of a baby at birth

At birth a baby is totally dependent upon its mother and other caregivers.

- What are a baby's immediate needs, so that he stays alive and keeps healthy?
  - To breathe
  - To be warm
  - To be fed
  - To be protected

These are the basic needs of ALL babies at the time of birth.

- Where can you find information on the immediate care at birth? **D11**

## The second stage of labour and immediate newborn care

**3.** What should be done for a baby at the time of birth and in what order?

- Call out time of birth.
- Deliver baby onto the mother's abdomen or into her arms.
- Dry the baby with a warm, clean towel or piece of cloth.
- Wipe eyes.
- Assess the baby's breathing while drying.
- Clamp and cut the umbilical cord.
- Put the baby between the mother's breasts for skin-to-skin contact.
- Place an identity label on the baby.
- Cover the mother and baby with a warm cloth.
- Put a hat on the baby's head.

**4.** Does a baby need help with its breathing if he is crying?

- No

**5.** Turn to **K11**, Newborn resuscitation.

When should resuscitation begin if a baby is not breathing or only gasping after birth?

- Within 1 minute of delivery

**6.** Describe what "skin-to-skin contact" means.

- The naked baby against the naked chest of the mother

"To be warm" is an immediate and basic need of the newborn baby.

**7.** How can a baby be kept warm after delivery?

- Immediate drying and wrapping in a warm, dry cloth and then being given to the mother to hold skin-to-skin. Cover mother and baby with a warm blanket

## Cord care

**8.** Turn to **D11** – describe immediate cord care.

- Change gloves. If not possible, wash gloved hands.
- Clamp and cut the cord:
- Put ties tightly around the cord at 2cm and 5cm from the baby's abdomen.
- Cut between the ties with a sterile instrument.
- Observe for oozing of blood.

## Eye Care

9. Turn to page **D19** – when should eye care be carried out after delivery?
- Within 1 hour of birth.
10. What information does this section give you about eye care?
- A baby's eyes should be wiped as soon as possible after birth and an antimicrobial eye medicine should be applied within 1 hour of birth.
  - It should not be washed away.
11. Which drugs can be used for eye care?
- Drugs which can be used to prevent infection at the time of birth include;
    - 1% silver nitrate eye drops
    - 2.5% povidine-iodine eye drops
    - 1% tetracycline ointment

## Monitoring the baby

12. Turn to **D12** and **D19** – What information is given on these pages about monitoring the baby?
- The baby's breathing and warmth should be monitored by a health professional every 15 minutes in the first several hours after birth and delivery of the placenta.
  - DO NOT leave the mother and baby alone for the first few hours after delivery.
13. For how long should the mother and baby be monitored?
- Every 15 minutes during the first hour after delivery of the placenta.

## Skin-to-skin contact and breastfeeding

14. Where can you find information on breastfeeding after delivery? **K2**
15. Why is the baby's first feed important?
- The first feed helps prevent hypoglycaemia; it is colostrum which protects the baby against infection
16. Describe what should be done if a baby does not feed in 1 hour of birth.
- If the baby is healthy leave him with the mother in skin-to-skin contact to try to breastfeed later. Assess the baby again in 3 hours, earlier if he is a small baby.
17. How can a baby be fed if the mother is ill and unable to breastfeed?
- By an alternative method of feeding, for example, by cup.
18. What options are there for a mother who cannot breastfeed at all?
- Home-made or commercial formula.
  - Donated heat-treated breast milk.

## Special situations

**19.** Read the following five statements. Some are true and some are false. Mark the false statements with an F (for false) NOT T.

- A mother who has had a caesarean section cannot breastfeed for at least 24 hours. F
- It is necessary for a baby whose mother had a caesarean section should routinely go to the neonatal unit. F
- A baby should be given expressed colostrum if the mother cannot breastfeed at birth. T
- After an instrumental delivery a mother can begin skin-to-skin contact as soon as she is comfortable. T
- A baby born by breech delivery will have difficulty with breastfeeding. F

## Routine care of the newborn baby at delivery

**20.** What can interrupt the time a mother and baby should be together immediately after birth?

## HIV and newborn care at birth

**21.** Where can you find information on HIV and breastfeeding and newborn care? **G7 G8**

**22.** List the general preparations a health worker needs to make in the delivery area to meet the baby's needs at birth?

- Standard precautions
- Use soap and warm water to wash and clean hands.
- Wear gloves.
  
- Make sure the delivery room is ready for the mother and new baby
- Keep the delivery room warm; close windows.
- Have resuscitation equipment nearby.
- Have clean warm towels/covers/cloths ready for the newborn baby at delivery.
- Dry the newborn baby with a clean cloth immediately after delivery.
- Have a sterile kit to tie and cut the cord.
- Mother to wear clothes which make immediate skin-to-skin contact easy.

Keeping mother and baby in skin-to-skin contact from birth encourages early breastfeeding.

## Session 4

### Keeping the baby warm

**1.** Name the four ways heat is lost, giving examples of how they may affect a baby.

- Convection – leaving the baby in a draught
- Radiation – not covering the baby's head so that its body heat is able to pass into the surrounding air
- Conduction – leaving the baby on a cold surface, particularly metal
- Evaporation – not drying the baby after delivery

**2.** Define "hypothermia".

- A body temperature below normal (less than 36.5°C).

**3.** List the ten steps in "The warm chain".

- Warm delivery room
- Immediate drying
- Skin-to-skin contact
- Breastfeeding
- Bathing and weighing postponed

- Appropriate clothing and bedding
- Mother and baby together
- Warm transportation (skin-to-skin)
- Warm resuscitation
- Training and awareness

**4.** How should you rewarm a baby?

- Put the baby in skin-to-skin contact with its mother
- Cover the mother and baby with one or two extra warm covers
- Keep the temperature in the room where the baby is rewarming between 25–28°C
- Check the baby's temperature regularly

**5.** Where will you find this information?

**K9**

**6.** Why is it necessary to take off all the baby's clothes?

- Because the clothes will be cold

**7.** Where should the clothes you put onto the baby open?

- They should open down the front

**8.** How often should you check the baby's temperature after beginning to rewarm the baby?

- Every hour

**9.** How fast should the temperature rise? What temperature range is "normal"?

- The temperature should rise by 0.5°C an hour. The normal range is between 36.5°C and 37.5°C.

**10.** What should you do if the temperature is not 36.5°C or more after two hours of "rewarming"?

- Reassess the baby using **J2**, **J7**, **J10**, and **K9** charts from the PCPNC Guidelines

**11.** What should the room temperature be where the rewarming is taking place?

- At least 25°C, with no draughts

**12.** Is it necessary to take a newborn baby's temperature?

- No, it is not necessary for the majority of babies

**13.** When is an accurate temperature of the baby needed?

- Preterm/low birth weight or sick
- Admitted to hospital, regardless of reason
- Suspected of being either hypothermic or hyperthermic (too hot)
- Being rewarmed during the management of hypothermia
- Being cooled down during the management of hyperthermia





## Care of the newborn baby at the time of birth

**OBJECTIVES** To observe and carry out the care of a mother and her baby in the immediate period after delivery.

You should have with you:

- Breastfeed Observation Form 1 (2 copies)
- Notebook and pen/pencil
- PCPNC Guide (ONE between two participants)

When you go to the clinical area

- Wear your name badge and appropriate clothing
- Wash your hands BEFORE entering the clinical area and before handling a baby

### Practice review topic

During this Clinical Practice think about the topic for discussion:

Identify one aspect of care at the time of birth that could be done differently.

- What COULD YOU realistically do to bring about any changes?
- What would be the main barriers to change?

## Care of the newborn baby

Task for a group

- Make notes of obvious preparations in the delivery room for the birth of the baby, i.e. resuscitation equipment, warm cloth, etc.

Observing a delivery and the immediate care of the newborn baby

Is the following sequence followed? If NOT make notes of what happens.

- Call out time of birth
- Deliver baby onto abdomen
- Thoroughly dry baby immediately and assess breathing
- Wipe eyes. Discard wet cloth
- Cover/wrap baby with dry cloth
- Cut and clamp/tie cord
- Leave baby on mother's chest in skin-to-skin contact
- Place identification labels on baby
- Cover mother and baby with blanket
- Cover baby's head with a hat
- Encourage breastfeeding

Make sure you are not obstructing midwives and nurses, but are in a good position to view activities.

## Hand washing facilities

Task for 2 participants

In the clinical areas you visit locate the sinks and consider the following points; make notes to remind you of what you see:

- How many sinks are there?
- Is there clean running hot and cold water? Soap?
- How do staff and mothers dry their hands?
- Are sinks easy to get to when staff is busy?
- Can mothers easily use them?
- Are they in a convenient place?
- Any other observations?

## Keeping the baby warm

Task for 2 participants

In the POSTNATAL WARD and LABOUR AND DELIVERY AREA look to see and make notes of:

- How babies are kept warm
- Factors which may contribute to babies getting cold

## Observing a breastfeed

Task for 1 or 2 participants

- Observe at least ONE complete breastfeed in the postnatal area using **Breastfeed Observation form 1**
- If you see a baby take its first feed, note the way the baby uses its existing feeding instincts to help it feed.
- If you observe any mothers having difficulties with attachment and positioning, inform your facilitator or the staff member in charge before you leave the postnatal area.

## Observing eye care after delivery

TASK \_\_\_\_group

Note down the steps carried out:

\_\_\_\_\_

What medication was used? \_\_\_\_\_

Dose? \_\_\_\_\_

- Return to class to prepare for feedback session



World Health  
Organization

# Essential newborn care course

## Examination of the newborn baby **MODULE 2**

### **PARTICIPANT'S WORKBOOK**

<b>Session S5</b>	<b>Breastfeeding the newborn baby: ensuring a good start</b>	
	Handouts	<b>33</b>
	Worksheet	<b>37</b>
<b>Session S6</b>	<b>Communication skills</b>	
	Handouts	<b>41</b>
	Worksheet	<b>43</b>
<b>Session S7</b>	<b>Examination of the newborn baby</b>	
	Handouts	<b>45</b>
	Worksheet	<b>53</b>
<b>Answers</b>	<b>Answers to Worksheets for Sessions 5, 6 and 7</b>	<b>57</b>
<b>Clinical practice 2</b>	<b>Participant's instruction and task sheet</b>	<b>65</b>
	<b>Examination recording form</b>	<b>67</b>

## How to use this workbook for Module 2

This workbook contains the handouts and session worksheets for Module 2 plus the clinical practice instructions for the first clinical practice.

### How to use the Handouts

The handouts should be used for note taking during the taught sessions.

### How to use the Questions (worksheets)

The worksheets can be used in a number of ways:

#### If you do the intensive course (4–5 days):

- During an intensive course of 4 to 5 days the worksheets should be completed as a homework task.

#### If you do weekly sessions:

When the course is taught over a longer period of time, e.g. half or one day per week for four or five weeks, the workbook should be completed as instructed by your trainer.

### How to use the Answers

There are 55 questions in Module 2.

- PLEASE do not look at the answers until you have completed the three worksheets.
- If you have answered 43 or more questions correctly, you have done well!
- If you have answered less than 43 questions correctly you need to ask your trainer to go over the areas you are unsure about.

### Clinical Practice instructions and Task Sheet

You will need to have your Clinical Practice information and Task Sheet with you when you go to your Clinical Practice sessions.

- The Task Sheet contains a number of tasks that you have to complete during the Clinical Practice session.
- Each task on the sheet has instructions for you to follow.
- Your trainer or clinical facilitator will give you details of where you should work and the order in which you should complete your tasks.

M2 S5 1

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## Breastfeeding: ensuring a good start

Module 2, Session 5  
Presentation

Essential Newborn Care Course

M2 S5 2

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Breastfeeding: ensuring a good start

### Objectives

- To be able to describe how breastfeeding works
- To recognise good and poor attachment and positioning of a baby feeding at the breast


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M2 S5 3


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Breastfeeding: ensuring a good start

### Positioning



Click on the picture to launch video

Essential Newborn Care Course

M2 S5 4

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Breastfeeding: ensuring a good start

### Key points to good positioning

Whatever position the mother uses to breastfeed her baby, the following points should apply:

The mother is relaxed and comfortable

- The baby's head and body are in a straight line
- The baby's face is opposite the nipple and the breast
- The baby's upper lip or nose is opposite the mother's nipple
- The baby is held or supported very close to the mothers body
- The baby's whole body is supported if the mother is in a sitting position, especially if her baby is newborn.
- If an older baby supporting the neck and shoulders may be sufficient.

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Answers  
Questions  
Handouts  
FOR PARTICIPANT  
Checklist  
Task sheet  
FOR FACILITATOR

Breastfeeding: ensuring a good start M2 S5 5

### Good and poor attachment

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Breastfeeding: ensuring a good start M2 S5 6

### Key points to good attachment

- The mouth is widely open
- The tongue is forward in the mouth, and may be seen over the bottom gum
- The lower lip is turned outwards
- The chin is touching the breast
- More areola is visible above the baby's mouth than below it

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Breastfeeding: ensuring a good start M2 S5 7

### Signs of good attachment

Click on the picture to launch video

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Breastfeeding: ensuring a good start M2 S5 8

### Good attachment

Click on the picture to launch video

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## Breastfeeding: ensuring a good start

M2

S5

9

### Effective suckling

Click on the picture to launch video



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## Breastfeeding: ensuring a good start

M2

S5

10

### Positioning



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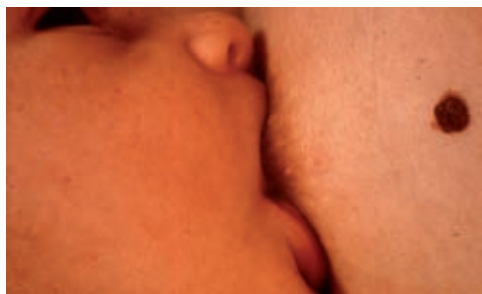
## Breastfeeding: ensuring a good start

M2

S5

11

### Attachment



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## Breastfeeding: ensuring a good start

M2

S5

12

### Attachment



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Answers

Questions

Handouts

FOR PARTICIPANT

Checklist

Task sheet

FOR FACILITATOR

Answers

Questions

Handouts

FOR PARTICIPANT

Checklist

Task sheet

FOR FACILITATOR

Breastfeeding: ensuring a good start M2 S5 13

Attachment and positioning



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Breastfeeding: ensuring a good start M2 S5 14

Attachment and positioning



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Breastfeeding: ensuring a good start M2 S5 15

2 c/h



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Breastfeeding: ensuring a good start M2 S5 16

Attachment



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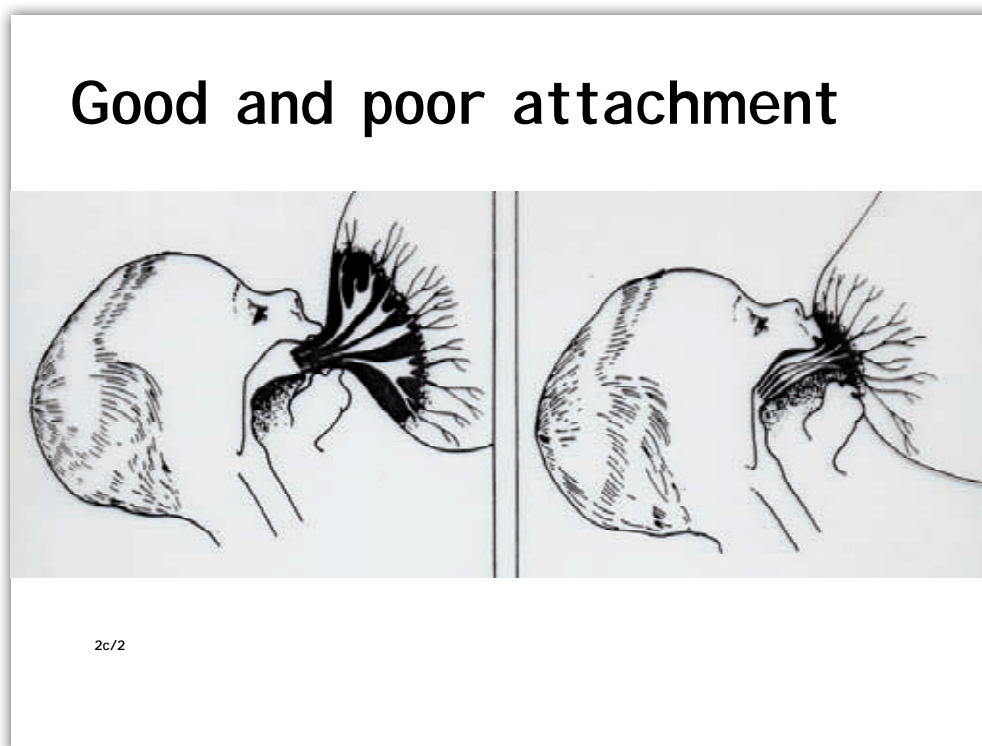
## Breastfeeding: ensuring a good start

Understanding “how” breastfeeding works helps to explain:

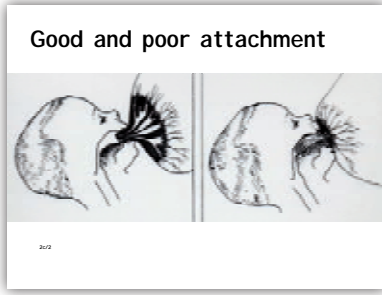
- Why correct attachment and positioning are important to effective breastfeeding.
- The causes of many of the common breast problems.
- How to manage common breast problems.

1. Why are the lactiferous sinuses important to good attachment of the baby to the breast?

2. Look at these two pictures. Which of these two babies will get milk?



Take a closer look at these two pictures.



3. Write five statements to describe what you see in the first picture.

4. Write five statements to describe what you see in the second picture.

5. Based on your answers to questions 3 and 4, what do you think are the KEY points to GOOD attachment?

#### Positioning a baby to breastfeed

**There is NO one “correct” position for breastfeeding. There are many different positions that mothers can use in different situations.**

6. Why may a mother need to use different positions to breastfeed her baby?

7. You have to advise a mother over the telephone on how to position her baby at the breast. What five key points can you tell her?
  
8. What other signs of good attachment may you see or hear of?
  
9. How long should a breastfeed last?
  
10. Is it normal for a mother to feel pain when she first starts breastfeeding her baby?
  
11. What should she do if she feels pain at the beginning of a feed?
  
12. Why should a mother take her baby off the breast if breastfeeding is uncomfortable?

**Look at the next four photographs and answer the questions accompanying them.**

13. Is this good or poor positioning?
  
14. What signs are clearly evident?
  
15. What help could you give this mother?



16. What do you think of this attachment? Describe the signs you see.



17. What would you say to this mother?

18. How could you help this mother correct her positioning?



19. What signs are clearly seen in this photo?



20. How could you help this mother?

M2 S6 1

## Communication skills

Essential Newborn Care Course 

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Communication skills M2 S6 2

### Objectives

- To be able to use listening and learning communication skills
- To understand the importance of good communication skills

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Communication skills M2 S6 3

### Listen to, and watch for:

- The **questions** the health worker asks the mother
- The **information** the mother gives to the health worker
- The way the health worker **treats** the mother and baby
- The '**non-verbal**' body language the health worker uses

Essential Newborn Care Course 

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Answers

Questions

Handouts

**FOR PARTICIPANT**

Checklist

Task sheet

**FOR FACILITATOR**



# Communication skills

## Introduction

Communication is universal. We use it in all aspects of our everyday lives. It is the basis of all the relationships we have with our family, friends, colleagues and those we care for, as well as the wider world.

Verbal means of communication (spoken language) can have positive and negative effects on us. It can excite us, frighten us, influence our mood and influence the way we respond to people and the way we behave. But communication is much more than just spoken language; it is all the other ways we relate to the world around us, i.e. the “non-verbal” language we use; for example, our facial expressions, our movements and how we use “touch”. Our “body language” can indicate – non-verbally – if we are happy, angry, bored, or interested or not interested in something.

As health workers it is vital we understand the power of “verbal” and “non-verbal” communication in relation to our work. We need to learn certain communication skills to help us interact with new mothers, their family, friends and colleagues. We need to become effective communicators. There are a number of simple ways to achieve this.

1. Write down at least three things that you can say to a mother to make her feel GOOD?
2. Write down at least three things that you can say to a mother that could make her feel BAD?

If we make people feel good they are likely to be more confident, more cooperative and accept advice and give us information. Praising something about what a mother or father does for their baby can help to gain their confidence. For example, to tell a mother of a sick baby, “You made a good decision to bring your baby to the hospital so that we can help him,” will make the mother feel much better than to say to her, “You should have brought your baby to us before now.”

3. Describe two “non-verbal” ways you can make a mother feel you are interested in her.
4. Describe two “non-verbal” ways you can make a mother feel you are not interested in what she is saying to you.

## The importance of asking the “right” questions

**5.** The purpose of asking questions is to obtain information. If this is to confirm information already obtained, then it may be correct to ask questions that have “yes” or “no” as answers. What is this type of question called?

**6.** Fill in the missing words:

To obtain more detailed information, questions should be asked so that the person answering has the opportunity to give a full and detailed answer. Questions which give this kind of information often begin with words such as “how”, “why”, “where”, “what” and “when”. These questions are called **open questions**, because they give a person the opportunity to give relevant information.

**7.** Will you learn more information from closed or open questions?


**8.** Write down three examples of open questions.

**9.** Write down three examples of closed questions.



M2 S7 1


## Examination of the newborn baby

Essential Newborn Care Course 

Examination of the newborn baby M2 S7 2

### Objectives

- To describe and carry out an examination of a baby soon after birth, before discharge from hospital and during the first week of life at a routine, follow-up or sick newborn visit, and to identify any conditions that need specific care treatment or follow-up.
- To assess, classify and treat a newborn baby using the “Examine the Newborn” chart J2-8.

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Examination of the newborn baby M2 S7 3

### When should a newborn baby be examined?


**After birth:**

- At around an hour
- Before discharge from hospital (no discharge before 12 hours of age)
- If there is maternal concern about the baby’s condition
- If a danger sign is observed during monitoring

**After leaving the hospital:**

- During the first week of life at a routine visit
- Follow-up
- Sick newborn visit


*ACCORDING TO NATIONAL GUIDELINES*

Essential Newborn Care Course 

Examination of the newborn baby M2 S7 4

### Examination of the newborn baby

- **Asses**
  - Ask, Check, Record
  - Look, Listen, Feel
- **Classify**
- **Treat or advise**

Essential Newborn Care Course 

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Answers  
Questions  
Handouts  
**FOR PARTICIPANT**  
Checklist  
Task sheet  
**FOR FACILITATOR**

### Examination of the newborn baby

M2 S7 5

#### Danger signs?

Birth weight 1500g < 2500g	No
Not suckling (after 6 hours of age)	Yes
Small baby feeding well/gaining weight adequately	No
Fast breathing (more than 60 breaths per minute)	Yes
Grunting	Yes
Fever (temperature > 38° C)	No
Eyes swollen and draining pus	Yes
Yellow skin on face and < 24 hours old	Yes
Less than 10 pustules	No
Mother known to be HIV-positive	No

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### Examination of the newborn baby

M2 S7 6

#### Washing hands



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### Examination of the newborn baby

M2 S7 7

#### Grunting



Click on the picture to launch video

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### Examination of the newborn baby

M2 S7 8

#### Counting breaths



Click on the picture to launch video

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Examination of the newborn baby M2 S7 9

### Breathing rate





Click on the picture to launch video

Essential Newborn Care Course 


Examination of the newborn baby M2 S7 10

### Normal breathing

Click on the picture to launch video


Click on the picture to launch video

Essential Newborn Care Course 

Examination of the newborn baby M2 S7 11

### Normal respiratory rate of a newborn baby

- 30 to 60 breaths per minute
- no chest in-drawing
- no grunting on breathing out
- When assessing breathing:
  - count number of breaths taken for a full minute.
  - Babies may breathe irregularly (up to 80 breaths per minute) for short periods of time.
  - If not sure of breaths per minute, repeat count.
- Small babies (less than 2.5 kg at birth or born before 37 weeks gestation) may:
  - have some mild chest in-drawing
  - periodically stop breathing for a few seconds.

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Examination of the newborn baby M2 S7 12

### Which movements will worry you?




Click on the picture to launch video

Click on the picture to launch video

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Answers  
Questions  
Handouts  
FOR PARTICIPANT  
Checklist  
Task sheet  
FOR FACILITATOR

Examination of the newborn baby M2 S7 13

Posture

- The normal resting posture of a term newborn baby:
  - loosely clenched fists
  - flexed arms, hips, and knees
- Small babies (less than 2.5 kg at birth or born before 37 weeks gestation)
  - the limbs may be extended
- Babies born in the breech position may have fully flexed hips and knees, feet and mouth, and legs may even reach near the mouth.

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Examination of the newborn baby M2 S7 14

Bruising and blisters on a baby born in a breech position



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Examination of the newborn baby M2 S7 15

Cephalohaematoma Caput succedaneum



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Examination of the newborn baby M2 S7 16

What do you notice about the colour of this baby?



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Examination of the newborn baby M2 S7 17

### The Umbilicus

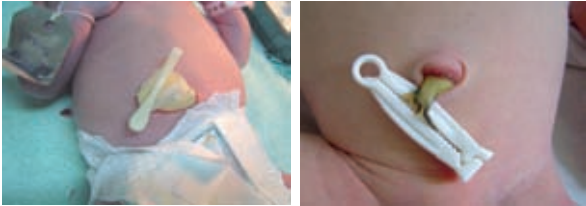


Click on the picture to launch video

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Examination of the newborn baby M2 S7 18

### The Umbilicus: Which one is normal?



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Examination of the newborn baby M2 S7 19

### The Umbilicus

The NORMAL umbilicus is:

- Bluish-white in colour on day 1.
- It then begins to dry and shrink
- It falls off after 7 to 10 days
- No discharge

LOCAL UMBILICAL INFECTION

- RED UMBILICAL or
- RED SKIN AROUND THE UMBILICAL

POSSIBLE SERIOUS INFECTION

- Umbilicus draining pus or
- Umbilical redness, swelling extending to skin

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Examination of the newborn baby M2 S7 20

### The skin

A baby may have PUSTULES

MORE than 10 are a DANGER SIGN  
Refer this baby urgently

Less than 10 are a local skin infection  
Treat them immediately

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Answers  
 Questions  
 Handouts  
 FOR PARTICIPANT  
 Checklist  
 Task sheet  
 FOR FACILITATOR









# Examination of the newborn baby

## Introduction

1. Why is it important to examine a baby?
  
2. When should a baby be examined?
  
3. Why is it important to examine a baby at the following times?

<b>At the time of birth</b>	
<b>Before discharge and thereafter</b>	

## The examination format

4. List the steps involved in examining a baby.
  
5. Are these steps exactly the same for all baby examinations?
  
6. What does “assess” include?
  
7. Where can you find information in the PCPNC Guidelines on what the colours green, yellow and red used in the charts mean?

## The newborn examination

Most babies examined will be completely normal. The examination must be systematic and cover the whole baby from head to toe, and always examining the back. Occasionally a baby will have danger signs and it is important that these are recognized and the baby treated immediately and urgently referred to hospital without delay.

**8.** Which of these signs are danger signs?

- Fast breathing (more than 60 breaths per minute)
- Birth weight 1500 g < 2500 g
- Grunting
- Small baby feeding well/gaining weight adequately
- Mother known to be HIV positive
- Not suckling (6 hours after birth)
- Yellow skin on face and < 24-hours old
- Eyes swollen and draining pus
- Umbilicus draining pus
- Fever (temperature > 38°C)

**9.** Where will you find a “Referral Record”?

**10.** What is your first action when you carry out an examination of a baby?

**11.** What information can you obtain from the mother’s notes?

**12.** What maternal situations indicate the baby requires special treatment?

**13.** Read the following case study. What treatment would you give to Anna's baby?

- Anna was healthy before and during her pregnancy
- She is not being treated for any illness
- Her membranes ruptured one hour before giving birth
- Her temperature was 37°C after delivery.

## Assessing breathing

**14.** What can you learn from listening to a baby's breathing?

**15.** What can you learn from counting the baby's breaths?

**16.** What is the significance of counting more than 60 breaths per minute in a baby?

## Weighing a baby

**17.** Why is it important to weigh a baby?

**18.** When should you weigh:

- a) A normal baby?
- b) A small baby?

## Breastfeeding

**19.** Describe how to assess a breastfeed.

**20.** If a mother complains of breast discomfort, describe how to assess her breasts.

**21.** Where can you find this information in the PCPNC Guidelines?

## After discharge: Examination of the baby

**22.** When should a baby return to a health facility to be examined after discharge?

**23.** Describe the examination the baby will be given at this time.

**24.** Read the following case study and answer the questions.

- A mother notices pus in her baby's eyes. What should she do?
- What is the first thing you should do when the baby arrives at the hospital?
- What treatment should be given for an eye infection?
- What follow-up care would you advise?
- What should the mother do before and after she cleans her baby's eyes?

**25.** A baby is brought to you with yellow skin on the palms of her hands and on the soles of her feet. She is 30-hours old. Describe how you would treat this baby?

## Session 5

**Breastfeeding and the newborn baby:  
ensuring a good start**

1. Why are the lactiferous sinuses important to good attachment of the baby to the breast?
  - Because milk collects in the stretchable areas of the ductal system
  
2. Look at the two pictures. Which of the two babies will get milk?
  - The baby in the right-hand picture
  
3. Write five statements to describe what you see in the first picture.
  - The baby only has the nipple in its mouth
  - The baby is only partially opening its mouth
  - The baby's tongue is far back in its mouth
  - The chin is far from the breast
  - The baby's lips are pushed forwards
  
4. Do the same for the baby in the second picture.
  - The baby is close to the breast
  - The baby has the nipple and much of the areola in its mouth
  - The baby's mouth is widely open
  - The baby's chin is touching the breast
  - The baby's tongue is far forward in the mouth
  
5. Based on your answers to questions 3 and 4, what do you think are the key points to good attachment?
  - The mouth is widely open
  - The tongue is forward in the mouth and may be seen over the bottom gum
  - The lower lip is turned outwards
  - The chin is touching the breast
  - More areola is visible above the baby's mouth than below it
  
6. Why may a mother need to use different positions to breastfeed her baby?
  - She may be recovering from a caesarean section
  - She may have a painful perineum
  - She may be ill
  - She may be tired, travelling, relaxing, sleeping or working
  - She may be suffering from engorged breasts, mastitis, flat or inverted nipples

Or the baby may be:

  - Small, preterm, large or heavy, ill, have a physical problem or an oral problem, such as a cleft lip and/or palate
  
7. You have to advise a mother over the telephone on how to position her baby at the breast. What five key points can you give her?
  - The baby's head and body should be in a straight line
  - The baby's face should be opposite the nipple and the breast
  - The baby's upper lip or nose should be opposite the mother's nipple
  - The baby should be held very close to the mother's body
  - The baby's whole body should be supported if the mother is in a sitting position, especially if her baby is newborn
  
8. What other signs of good attachment may you see or hear?

- Effective suckling can be seen and heard as slow, deep sucks, with pauses in between; the swallowing can be heard
- Swallowing can be seen

**9.** How long should a breastfeed last?

- How long a breastfeed lasts depends upon the individual baby
- Some babies take only a few minutes before they are full and come off the breast, whilst others may take much longer
- After a short rest the majority of babies start breastfeeding again on the other breast
- A mother should feed for as long as her baby wants
- A baby who is breastfeeding should never be interrupted before it has finished, unless there is a very good reason

**10.** Is it normal for a mother to feel pain when she first starts breastfeeding her baby?

- A mother should not feel pain when she first starts to breastfeed but the sensation may be “new” to her and she may find it uncomfortable until she becomes used to it and may use the word “pain”. The health worker should observe a breastfeed and make sure the baby is well attached to the breast.

**11.** What should she do if she feels pain at the beginning of a feed?

- If a mother feels pain when her baby is attached she should remove the baby immediately and start again

**12.** Why should a mother take her baby off the breast if breastfeeding is uncomfortable?

- Because the mother will get sore nipples if the discomfort continues

Look at the next four photographs and answer the questions accompanying them.

**13.** Is this good or poor positioning?

This is poor positioning

**14.** What signs are clearly seen?

- The baby’s body is turned away from the mother (look at the legs)
- The baby is not held close to the mother
- The mother is not supporting the whole baby, only the shoulders and upper back
- The mother is holding her breast away from the baby
- The baby’s face is opposite the nipple and areola

**15.** What help could you give to this mother?

To help this mother:

- The baby’s body needs to be held closer to her
- The baby’s body needs to be turned to face the mother’s body and in line with the nipple and areola
- The mother should take her hand away from the breast and use it to support the lower part of the baby

**16.** What do you think of this attachment? Write down the signs you see.

This attachment is good.

The signs you can see are:

- The mouth is opened widely
- The lower lip is turned outwards
- The chin is touching the breast
- Very little areola is visible. This is sometimes the case if the areola is small.

**17.** What would you say to this mother?

The mother and baby should be congratulated for such good attachment and encouraged to continue to breastfeed for as long as possible.

**18.** How could you help this mother correct her positioning?

This baby is poorly positioned for breastfeeding.

The mother needs to:

- Loosely wrap her baby leaving its arms free
- Turn her baby so that its head and body are straight and in-line with the mother's breast
- The baby's upper lip or nose should be opposite the mother's nipple
- Use both of her hands to support her baby
- Take her baby to the breast not take her breast to the baby as in the photograph
- Be relaxed and in a comfortable sitting position

**19.** What signs are clearly seen in this photo?

- This baby is poorly attached at the breast
- The baby's mouth is not widely opened
- The chin is not touching the breast
- The baby is not held close to the breast
- The baby's lips are facing forwards
- The baby is facing the mother's breast

**20.** How could you help this mother?

The mother needs to:

- Hold her baby closer to her body and breast
- Take her hand away from her breast; she does not need to support her breast
- Support her baby without the "padded" material which stops the baby being held closely
- Make sure before attaching her baby that the baby's upper lip or nose is opposite her nipple
- Wait until her baby has its mouth widely opened before attaching her baby to the breast

## Session 6

**Communication skills**

**1.** Write down at least three things that you can say to a mother that make her feel good?  
[ED NOTE: Answer missing – Please advise]

**2.** Write down at least three things that you can say to a mother that can make her feel bad?  
[ED NOTE: Answer missing – Please advise]

**3.** Describe two “non-verbal” ways you can make a mother feel you are interested in her.  
Examples include:

- Looking frequently at the mother and her baby
- Sitting down with a mother when you are advising her

**4.** Describe two “non-verbal” ways you can make a mother feel you are not interested in what she is saying to you.

Examples include:

- Not looking at her and doing other things during a consultation or bedside visit
- Looking frequently at your watch
- Turning your back on the mother when you are advising her

**5.** The purpose of asking questions is to obtain information. Sometimes this is to confirm information already obtained, when it may be correct to ask questions that have “yes” or “no” as answers. What is this type of question called?

- A closed question.

**6.** Fill in the missing words:

To obtain more detailed information, questions should be asked so that the person answering has the opportunity to give a full and detailed answer. Questions which give this kind of information often begin with words such as “how”, “why”, “where”, “what” and “when”. These questions are called open questions because they give a person the opportunity to give relevant information.

**7.** Will you learn more information from closed or open questions?

- From open questions

**8.** Write down three examples of open questions.

- How do you cook vegetables?
- Where do you keep your expressed breast milk?
- Why did you give your first baby formula milk?
- When did you last breastfeed your baby?

**9.** Write down three examples of closed questions.

- Do you boil your vegetables?
- Did you give your first baby formula milk?
- Have you breastfed your baby this morning?



## Session 7

**Examination of the newborn baby**

1. Why is it important to examine a baby?
- To assess and monitor the baby's condition (whether it is healthy or whether it is sick)
  - To begin treatment or appropriate care as early as possible

2. When should a baby be examined?
- At around an hour after birth
  - Before discharge from hospital
  - If there is maternal concern about the baby's condition
  - If there is a danger sign observed during monitoring
  - During the first week of life at a routine, follow-up or sick baby visit

3. Why is it important to examine a baby, at the following times?

<b>At the time of birth</b>	To have an overall assessment of the baby's condition To have an initial set of observations To provide appropriate care/treatment
<b>Before discharge and thereafter</b>	To re-assess and monitor the baby's condition To provide appropriate treatment if the baby's condition has changed from a previous examination To give the mother guidance on continuing appropriate care

4. List the steps involved in examining a baby.

- Assess
- Classify
- Treat or advise

5. Are these steps exactly the same for all baby examinations?

- YES

6. What does "Assess" include?

- Asking the mother about the baby
- Checking the mother's records and baby's previous notes, if this is not the first examination
- Recording what is found in the baby's notes
- Looking at the baby and carrying out a "visual examination"
- Listening to the baby
- Feeling and recording findings in the notes

7. Where can you find information in the PCPNC Guidelines on what the colours green, yellow and red mean which are used in the charts?

- Page Structure and presentation at the beginning of the PCPNC Guidelines

**8.** Which of these signs are danger signs?

- |   |     |
|---|-----|
| ■ Fast breathing (more than 60 breaths per minute)  | Yes |
| ■ Birth weight 1500 g < 2500 g                      | –   |
| ■ Grunting  | Yes |
| ■ Small baby feeding well/gaining weight adequately | –   |
| ■ Mother known to be HIV positive                   | –   |
| ■ Not suckling (after six hours of age)             | Yes |
| ■ Yellow skin on face and < 24-hours old            | Yes |
| ■ Eyes swollen and draining pus                     | –   |
| ■ Umbilicus draining pus                            | Yes |
| ■ Fever (temperature > 38°C)                        | Yes |

**9.** Where will you find a “Referral Record”?

**N2**

**10.** What is your first action when you carry out an examination of a baby?

- Start with “Assess”. Begin with “Ask, check and record”
- Follow the charts from page J2 to page J8.

**11.** What information can you obtain from the mother’s notes?

- Any pre-existing maternal medical condition
- The mother’s condition before the birth
- The baby’s condition during labour, delivery and immediately afterwards
- Details of the delivery
- Anything that has happened to the mother or the baby that puts the baby’s health at risk or needs special treatment
- If the mother has been transferred and cannot look after her baby

**12.** What maternal situations indicate the baby requires special treatment?

- The mother has an existing infection:
- If she has a temperature of over 38°C
- If she is being treated with antibiotics.
  - Her membranes ruptured 18 or more hours before delivery
  - The mother tested positive to RPR during pregnancy or at delivery
  - The mother is HIV-positive
  - The mother has received counselling for HIV
  - The mother began treatment for TB less than two months ago

**13.** Read the following case study. What treatment would you give to Anna’s baby?

- Anna was healthy before and during her pregnancy
- She is not on any treatment for any illness
- Her membranes ruptured one hour before giving birth
- Her temperature was 37°C after delivery
  - Normal routine treatment only

**14.** What can you learn from listening to a baby’s breathing?

- If there are any abnormal sounds or “grunting” when the baby is breathing in or out

**15.** What can you learn from counting the baby’s breaths?

- If the baby breathes more than 60 or less than 30 times in one minute

**16.** What is the significance of counting more than 60 breaths per minute in a baby?

- It is a danger sign that calls for immediate action

**17.** Why is it important to weigh a baby?

- It provides a baseline and is part of growth monitoring (with length, head circumference)
- It indicates whether the baby is receiving adequate nutrition
- It identifies low-birth-weight babies at risk or needing monitoring or special care
- It helps to calculate drug doses
- It helps to monitor responses to treatment
- It identifies babies who may have an underlying condition and need examination, assessment and treatment

**18.** When should you weigh:

a) a normal baby

b) a small baby

- All babies should have a birth weight recorded as a baseline measurement

**19.** Describe how to assess a breastfeed?

Ask the mother:

- How breastfeeding is going?
- Has the baby fed in the previous hour?
- Is there any difficulty?
- Is the baby satisfied with the feed?
- Has the baby had any other foods or drinks?
- How do the mother's breasts feel?
- Does the mother have any concerns?

If the baby is more than one day old:

- How many times has the baby fed in 24 hours?

Observe a breastfeed:

- If the baby has not fed in the previous hour, ask the mother to put the baby to her breast and observe breastfeeding for about five minutes.

Look and observe:

- Is the baby able to attach correctly?
- Is the baby well positioned?
- Is the baby suckling effectively?

**20.** If a mother complains of breast discomfort describe how to assess her breasts.

Ask the mother:

- How her breasts feel

Look and observe:

- At the nipple for a fissure
- At the breasts for swelling, shininess and/or redness

Examine and feel:

- Gently for any painful part of the breast

Do the following:

- Measure the mother's temperature
- Observe a breastfeed if not yet done

**21.** Where can you find this information in the PCPNC Guidelines?

19

**22.** When should a baby return to a health facility to be examined after discharge?

- At the postnatal visit, within the first week, preferably within two or three days
- At the immunization visit at six weeks

**23.** Describe the examination the baby will be given at this time.

- It will follow the examination procedure set out in **J2-J8**
- It will be the same as already described

**24.** Read the following case study and answer the questions.

- A mother notices pus in her baby's eyes. What should she do?
- What is the first thing you will do when the baby comes to hospital?
- What treatment should be given for an eye infection?
- What follow-up care will you advise?
  - Go to the nearest health facility/hospital
  - Examine the baby
  - IM single dose of Ceftriaxone or Kananmycin, treat eye infection
  - Treat eye infection. Follow-up visits in two days

**25.** What should the mother do before and after she cleans her baby's eyes?

- Wash her hands with clean water and soap

**26.** A baby is brought to you with yellow skin on the palms of her hands and on the soles of her feet. She is 30-hours old. Describe how would you treat this baby?

- Yellow palms and soles after 24-hours of age are a danger sign
- Refer the baby urgently to hospital
- Encourage breastfeeding or give expressed milk by cup
- Follow directions on **K14** for care of the baby during transportation

## Examination of the newborn baby

**OBJECTIVES** To examine the new baby within 12 hours of birth

### You should take with you:

- Examination Recording forms (3 copies)
- Breastfeeding observation forms 2 (3 copies)
- Pen/pencil and notebook
- PCPNC Guide (One between two participants)

### When you go to the clinical area

- Wear your name badge and appropriate clothing
- Wash your hands BEFORE entering the clinical area and before handling a baby

### Practice review topic

During this Clinical Practice you should think about the topics for discussion:

- To describe an example of good or poor communication you observed in the clinical practice. If it was poor, how could it have been improved?
- To describe any interesting cases you examined or observed in the clinical area.

## Session 6

### Communication skills

Task for 1 participant

- During ANY conversation with mothers, take the opportunity to:
  - Practice using “open” and “closed” questions
  - “Praise” what the mother is doing well
  - Give information
  - Be aware of how you show interest in her by your body language.
- If you are “observing” your colleague communicating with a mother, make a note of whether any of the communication skills listed above are used.
- After examining a newborn baby discuss with your facilitator what you noticed about your use of communication skills and your colleagues.

You should practice using your communication skills in all your tasks from now onwards (and at all other times as well).

## Session 7

### Examine the newborn baby

Task for a group, then 2 participants

- Examine a baby as demonstrated by your trainer/clinical facilitator. Follow J2–8 in order to:
  - Identify the signs
  - Classify the baby
  - Treat, advise and give follow-up care.

Record your findings using an “Examination Recording Form” for each baby examined.

- Discuss your findings and the “treatment and advice” you think is appropriate for this baby and mother.
- IF YOU HAVE TIME examine more babies.

### Babies with malformations and difficulties

Task for 2 participants

- With your trainer/clinical facilitator you will see any babies with malformations or noticeable birth injuries in the clinical area.
- If there are enough babies in this category, you will work in pairs to examine one baby.
- Carry out an examination as far as possible without having to touch the baby (if touching the baby is not possible). Follow **J2** and **J8** to:
  - Identify the signs
  - Classify the baby
  - Treat, advise and give follow-up care.

### Observation of a breastfeed

Task for 1 or 2 participants

- Observe at least ONE complete breastfeed using **Breastfeed Observation form 2**
- Discuss your observations with your facilitator
- If you observe any mothers having difficulties with attachment and positioning, inform your facilitator. Discuss with your facilitator what help and advice you would give the mother. If appropriate, advise and help the mother and baby to a better position and improved attachment.
- Return to class to prepare for feedback session

Name (of mother) \_\_\_\_\_ Date \_\_\_\_\_  
 How old is the baby? \_\_\_\_\_ hours/days  
 Does the mother have any concerns about the baby? \_\_\_\_\_  
 How is the baby feeding? \_\_\_\_\_

ASK, CHECK RECORD	LOOK, LISTEN, FEEL	SIGNS (CIRCLE IF PRESENT)
Is the baby preterm (<37 weeks or >1 month early)?		Preterm
Breech birth?		
Difficult birth?		
Resuscitated at birth?		
Is the baby one of twins?		Twin
Has the baby had convulsions?		<b>Danger sign</b>
Is the mother very ill or transferred?		Mother not able to care for the baby
	Assess breathing (baby must be calm) Grunting.  Breathing: More than 60 breaths per minute Less than 30 breaths per minute  Chest in-drawing	<b>Danger sign</b>  <b>Danger sign</b> <b>Danger sign</b>  <b>Danger sign</b>
	Look at the movements: Are they normal and symmetrical? Look at the presenting part: Is there swelling and bruises?	Swelling, bruises or malformation
	Look at the abdomen for pallor	<b>Danger sign</b>
	Look for malformations	Swelling, bruises or malformation
	Feel the tone: Is the baby floppy or stiff?	<b>Danger sign</b>
	Feel for warmth. If cold, or very warm, measure temperature. Is the temperature: >38°C or <35°C?	<b>Danger sign</b>
	35–36.4°C?	Body temperature 35–36.4 °C
	Look for bleeding from stump or cut	<b>Danger sign</b>
	Weigh the baby. Is the weight <2500 g?	Birth weight <2500 g
Has the mother had within 2 days of delivery: Fever >38 °C? Infection treated with antibiotics		Special treatment needs Special treatment needs
Membranes ruptured >18 hours before delivery?		Special treatment needs
Mother tested RPR-positive?		Special treatment needs
Mother tested HIV-positive? Has she received infant feeding counselling?		Special treatment needs
Is the mother receiving TB treatment that began <2 months ago?		Special treatment needs
	Look at the skin. Is it yellow?	Jaundice
	If baby is <24 hours old, look at skin on the face If baby is >24 hours old, look at palms and soles	<b>Danger sign</b> <b>Danger sign</b>
	Look at the eyes. Are they swollen or draining pus?	Local infection
	Look at the skin, particularly around the neck, armpits, inguinal area: Are there <10 pustules?	Local infection
	Are there >10 pustules, or bullae, swelling, redness or hardness of the skin?	<b>Danger sign</b>
	Look at the umbilicus: Is it red? Draining pus? Does the redness extend to the skin?	Local infection <b>Danger sign</b> <b>Danger sign</b>
Assess breastfeeding (as described on page J4) and classify feeding: Is the baby not able to feed?		<b>Danger sign</b>
Does the baby have feeding difficulty?		Not feeding well

If you have not circled any of the signs, classify the baby as a WELL BABY and provide care (as described on page J2).

If you have circled any of the signs, go to the appropriate page to assess, classify, and treat and advise:

- Preterm, birth weight <2500 g or twin – Page J3
- Not feeding well – Page J4
- Special treatment needs – Page J5
- Jaundice or local infection – Page J6
- Danger sign – Page J7
- Swelling, bruises or malformation – Page J8

If mother complained of breast or nipple pain during breastfeeding assessment, assess the mother's breasts – Page J9

Participant's name \_\_\_\_\_

Clinical task name and number \_\_\_\_\_

Additional notes:





World Health  
Organization

# Essential newborn care course

Care of the newborn baby until discharge **MODULE 3**

**PARTICIPANT'S WORKBOOK**

<b>Session S8</b>	<b>Resuscitation of the newborn baby</b>	
	Handouts	<b>71</b>
	Worksheet	<b>77</b>
<b>Session S9</b>	<b>Routine care of the newborn baby</b>	
	Handouts	<b>81</b>
	Worksheet	<b>85</b>
<b>Answers</b>	<b>Answers to Worksheets for Sessions 8 and 9</b>	<b>91</b>
<b>Clinical practice 3</b>	<b>Participant's instruction and task sheet</b>	<b>99</b>

## How to use this workbook for Module 3

This workbook contains the handouts and session worksheets for Module 3 plus the clinical practice instructions for the third clinical practice.

### The handouts

The handouts should be used for note taking during the taught sessions.

### The worksheets

The worksheets can be used in a number of ways:

#### Intensive course (4–5 days)

During an intensive course of 4 to 5 days the worksheets should be completed as a homework task.

PLEASE do not look at the answers until you have completed the two worksheets.

There are 58 questions.

- If you have answered 45 or more questions correctly, you have done well!
- If you have answered less than 45 questions correctly you need to ask your trainer to go over the areas you are unsure about.

#### Weekly sessions

When the course is taught over a longer period of time, e.g. half or one day a week for four or five weeks, the workbook should be completed as instructed by your trainer.

## Clinical Practice instructions and Task Sheet

You will need to have your Clinical Practice information and Task Sheet with you when you go to your Clinical Practice sessions.

- The Task Sheet contains a number of tasks that you have to complete during the Clinical Practice session.
- Each task on the sheet has instructions for you to follow.
- Your trainer or clinical facilitator will give you details of where you should work and the order in which you should complete your tasks.

M3 S8 1

## Resuscitation of the newborn baby

Essential Newborn Care Course

M3 S8 2

### Resuscitation of the newborn baby

#### Objectives

- To assess a newborn baby at birth
- To perform basic resuscitation of a newborn baby using standard equipment if necessary
- To provide aftercare if a baby requires help with its breathing at the time of birth

Essential Newborn Care Course

M3 S8 3

### Resuscitation of the newborn baby

#### Key words

- ANTICIPATION
- PREPARATION
- HELP
- RECORD
- FAST
- GENTLE
- WARMTH
- HYGIENE
- MOTHER


Essential Newborn Care Course

M3 S8 4

### Resuscitation of the newborn baby

#### Prepare for birth

**WASH YOUR HANDS**  
ESSENTIAL



- A draught-free, warm room – temperature 25°+ C
- A clean, dry and warm delivery surface
- A radiant heater
- Two clean, warm towels/cloths – to dry, wrap or cover the newborn baby
- A folded piece of cloth
- A newborn-size self-inflating bag
- Infant masks in two sizes: normal and small newborn
- A suction device for taking mucous out of the mouth
- Oxygen if available
- A CLOCK

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Answers  
Questions  
Handouts  
FOR PARTICIPANT  
Checklist  
Task sheet  
FOR FACILITATOR


Resuscitation of the newborn baby

M3 S8 5

Care of the baby at birth

- Deliver the baby on to mother's abdomen or into her arms
- Note and call out time of birth
  - **KEEP THE BABY WARM**
- Thoroughly dry the baby
  - wipe eyes
  - discard wet cloth
  - assess breathing
- If the baby is not crying, assess breathing
  - breathing well (chest rising) – no further action

**NOT BREATHING OR GASPING – D11**

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Resuscitation of the newborn baby

M3 S8 6

Baby crying at birth



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Resuscitation of the newborn baby

M3 S8 7

The baby is not breathing or is gasping

- **CALL FOR HELP!**
- Cut cord quickly, transfer to a firm, warm surface [under a radiant heater]
- Inform the mother that baby has difficulty breathing and you will help the baby to breathe
- Start newborn resuscitation (**K11**)

Essential Newborn Care Course 

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Resuscitation of the newborn baby


M3 S8 9

Correct position of the baby's head

- Lay the baby on its back on a hard warm surface
- Position the baby's head so that is slightly extended
- Place a folded piece of cloth under the baby's shoulders or neck



**Do not put the piece of cloth under the baby's head**

Essential Newborn Care Course 

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Resuscitation of the newborn baby

M3 S8 8

Opening the airway

Positioning	Suction
<ul style="list-style-type: none"> <li>Lay the baby on its back on a hard warm surface</li> <li>Position the baby's head so that it is slightly extended</li> <li>Place a folded piece of cloth under the baby's shoulders</li> </ul>	<ul style="list-style-type: none"> <li>Clear the mouth first and then the nose</li> <li>Gently introduce the suction tube into the mouth</li> <li><b>5 cms</b> from the lips</li> <li>Suck while withdrawing the tube</li> <li>Then, introduce the suction tube <b>3 cms</b> into each nostril</li> <li>Suck while withdrawing the tube</li> </ul>



Repeat mouth and nose suction if needed – no more than twice. Spend no longer than 20 seconds using suction.

Essential Newborn Care Course

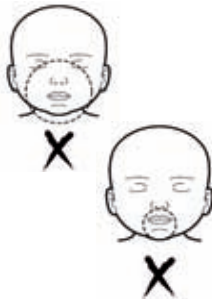
Resuscitation of the newborn baby

M3 S8 10

Use the CORRECT size face mask

Fitting a face mask:

- A face mask that is too **LARGE**
  - Covers the eyes
  - Extends over the tip of the chin
- A face mask that is too **SMALL**
  - Does not cover the nose
  - Does not cover the mouth effectively



Essential Newborn Care Course

Resuscitation of the newborn baby

M3 S8 11

Correct position of mask on the baby's face

Fitting a face mask:

- A correct sized mask covers:
  - The nose
  - The mouth
  - The tip of the chin

BUT NOT THE EYES



Essential Newborn Care Course

Resuscitation of the newborn baby

M3 S8 12

How to ventilate

- Squeeze bag with 2 fingers or whole hand, 2-3 times
- Observe for rise of chest
- IF CHEST IS NOT RISING:**
  - reposition the head
  - check mask seal
- Squeeze bag harder with whole hand
- Once good seal and chest rising, ventilate at 40 squeezes per minute
- Observe the chest while ventilating:
  - is it moving with the ventilation?
  - is baby breathing spontaneously?



Essential Newborn Care Course

Answers

Questions

Handouts

FOR PARTICIPANT

Checklist

Task sheet

FOR FACILITATOR

A series of horizontal lines for writing answers and notes.

Resuscitation of the newborn baby M3 S8 13

When to stop ventilating?

- If breathing or crying: **STOP VENTILATING**
  - count breaths per minute
  - look for chest in-drawing
- If breathing >30/min, and no chest in-drawing:
  - Stop ventilating**
  - put the baby in skin-to-skin contact on mother's chest and continue care
  - monitor every 15 minutes for breathing and warmth
  - tell the mother the baby will probably be well
- Encourage the mother to start breastfeeding as soon as possible


**NEVER leave the baby alone**

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Resuscitation of the newborn baby M3 S8 14

Chest-in drawing


- Look at how the baby breathes
  - Watch the baby's chest movements
  - If the skin between the ribs is 'sucked' inwards, and the ribs are prominent, the baby has '**in-drawing**' of the chest wall
  - This indicates that the baby is still having problems breathing



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Resuscitation of the newborn baby M3 S8 15

Chest-in drawing




Click on the picture to launch video

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Resuscitation of the newborn baby M3 S8 16

Grunting



Click on the picture to launch video

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Resuscitation of the newborn baby

M3 S8 17

When to continue ventilating?

- If the baby:
  - is breathing <30/min,
  - is gasping
  - has severe chest in-drawing
- ARRANGE FOR IMMEDIATE REFERRAL**
- Explain to the mother what happened, that her baby needs help with breathing
- Ventilate **during** the referral
- Record the event on a referral form and labour record
- If the baby is **NOT** breathing (stop ventilating at 20 minutes) D24

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Resuscitation of the newborn baby

M3 S8 18

Care after resuscitation

- Place baby in skin-to-skin contact with mother
- Keep the baby warm
- Monitor every 15 minutes
- Start breastfeeding as soon as possible
- Discuss what has happened with the parents – be positive!
- Do not separate the mother and baby unless the baby has more difficulty breathing

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Resuscitation of the newborn baby

M3 S8 19

Steps in resuscitating a newborn baby

- KEEP THE BABY WARM:** place wrapped under the radiant heater
- Open the airway:
  - Position baby's head so it is slightly extended
  - Suction first the mouth and then the nose
- If still not breathing: **VENTILATE**
- If breathing or crying begins: **STOP VENTILATION**
- If breathing is less than 30 breaths per minute or there is severe chest in-drawing: **CONTINUE VENTILATING**
- If no breathing or no gasping after 20 minutes of ventilation: **STOP VENTILATING**
- Explain events to the mother
- Record the event (N4)

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Resuscitation of the newborn baby

M3 S8 20

Steps in resuscitating a newborn baby

- NOTE AND CALL OUT TIME OF DELIVERY**
- Assess the baby's breathing while drying
  - If the baby is not crying, observe breathing
- If breathing well – **no further action**
  - If the baby is **NOT breathing or gasping:**
- Cut cord quickly: transfer baby to a firm warm surface, start resuscitation (K11)
  - CALL FOR HELP** – one person should care for the mother
  - Keep the baby warm
  - Open airway
  - If still not breathing **VENTILATE**
  - If breathing or crying **STOP VENTILATING**
- CONTINUE VENTILATION:**
  - If breathing <30 breaths per minute or severe chest in-drawing
  - If no breathing or no gasping after 20 minutes of ventilation **STOP**

Essential Newborn Care Course

Answers

Questions

Handouts

FOR PARTICIPANT

Checklist

Task sheet

FOR FACILITATOR

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Resuscitation of the newborn baby

M3 S8 21

Key words

- ANTICIPATION
- PREPARATION
- HELP
- RECORD
- FAST
- GENTLE
- WARMTH
- HYGIENE
- MOTHER

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Answers

Questions

Handouts

FOR PARTICIPANT

Checklist

Task sheet

FOR FACILITATOR



## Resuscitation of the newborn baby

Immediate and effective implementation of the essential steps to basic resuscitation will establish spontaneous breathing in more than 75% of infants with birth asphyxia.

### Anticipation

Resuscitation must be anticipated for each birth. Risk factors are poor predictors of birth asphyxia. Up to half of newborn babies requiring resuscitation have no identifiable risk factors before birth.

1. Where in the PCPNC Guide will you find information on resuscitation?

### Preparing for birth

2. List all resuscitation equipment and general preparation that should be made before each delivery.

### Keep the baby warm

Warmth at birth is a priority. It is especially important if a baby needs to be resuscitated. Wet cloths should be removed after thorough drying of the baby and replaced with dry ones. Drying often provides sufficient stimulation for breathing in mildly depressed newborn babies and no further stimulation is appropriate.

### Assess breathing

3. How will you keep the baby warm at the delivery until skin-to-skin contact can begin?
4. What should you do at delivery at the same time as you are drying the baby?
5. What should you look for to tell you that the baby is breathing normally?
6. Does a crying baby need help with its breathing?
7. What about the baby who is not crying? What should indicate to you that the baby does not need help with its breathing?

**8.** What should your priorities be if a baby is gasping or does not breathe regularly and there are long pauses between each breath?

**9.** What action should you take if at delivery the baby is not breathing at all? [See above]

**10.** Read the following statements. Two are not correct. Find the incorrect statements and correct the information given. If resuscitation is necessary:

- Clamp and cut the cord if necessary.
- Transfer the baby to a cool, clean and dry surface.
- Inform the mother that her baby is having difficulty initiating breathing and that you will help the baby to breathe.
- Keep the naked baby under a radiant heater if possible.

## Open the airway

If drying the baby does not stimulate it to breathe, the first step of resuscitation should be started immediately.

**11.** Read these sentences carefully. There is a mistake in each statement. Rewrite the sentences using the correct words.

OPEN the baby's airway

Do this by:

- Laying the baby on its back on a hard, cold, dry, flat surface.
- Positioning the head so that it is slightly flexed.
- Placing a folded piece of cloth under the baby's head to help maintain this position. The cloth should not be so thick as to cause over extension or flexion, as this will close the airway.

**12.** Fill in the (underlined> missing words:

## Suction

- First suction the \_\_\_\_\_ and then the \_\_\_\_\_, do this by gently introducing a suction tube \_\_ cm into the baby's mouth until the \_\_ cm mark is at the baby's \_\_\_\_\_.
- Use suction while \_\_\_\_\_ the tube.
- Next introduce the suction tube \_\_ cm into \_\_\_\_\_, using suction while withdrawing the tube and until there is no mucus.
- Repeat each suction if necessary but no more than \_\_\_\_\_ and for no longer than \_\_\_\_\_ seconds in total.

Using suction alone may stimulate the baby to start breathing. If this happens place the baby in skin-to-skin contact on the mother's chest; breastfeed to avoid low blood sugar and monitor the baby every 15 minutes for breathing and warmth.

This procedure is unnecessary in a baby who starts crying or breathing immediately after birth. Routine suctioning is associated with hazards such as cardiac arrhythmia.

## Ventilating the baby

13. When should you begin to “ventilate” a baby?
14. Give instructions for ventilating a baby.
15. When should you stop ventilating a baby?
16. Describe “in-drawing” of the chest wall.
17. When should you continue to ventilate a baby?
18. Write out the six steps to resuscitation.
19. If a baby dies, what form must you fill in?
20. Where can you find a copy of this form?
21. Describe the care of a baby after it has been resuscitated?

## Recommended reading

- Basic Newborn Resuscitation: A practical guide (WHO/RHT/MSM/98.1)
- PCPNC Guidelines **K11**, **D11**, **D10**



M3 S9 1

## Routine care of the newborn baby

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Routine care of the newborn baby M3 S9 2

### Objectives

- Demonstrate evidence-based everyday care of the newborn baby.
- Teach the mother how to look after her baby and what to do if her baby has any health problems.

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Routine care of the newborn baby M3 S9 3

### The postnatal environment

Warm room



Keep mother and baby together



Use bednets



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Routine care of the newborn baby M3 S9 4

### The postnatal environment

- Ensure the mother and baby are in a warm room, which is not less than 25°C with no draughts.
- Keep the baby in the same room with the mother, in her bed or within easy reach.
- Provide bednets for the mother and baby to sleep under *especially if there are no screens at the doors or windows*. This will protect them against mosquitos and other insects.

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Routine care of the newborn baby M3 S9 5






- ◀ Breast feeding
- ▶ Keeping warm
- ◀ Cord care
- ▶ Hygiene

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Routine care of the newborn baby M3 S9 6

Breastfeeding care

- Support **exclusive** breastfeeding on demand day and night.

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Routine care of the newborn baby M3 S9 7

Breastfeeding care

- Support **exclusive** breastfeeding on demand day and night.
- Ask the mother to get **help** if there is a breastfeeding difficulty.

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Routine care of the newborn baby M3 S9 8

Jojo and Anna

- Baby Jojo and his mother, Anna, are now in the postnatal area.
- Jojo has had his first examination and has been classified as a "**well baby**".
- Jojo is being breastfed.
- During the first newborn examination Anna said that *she was not sure if Jojo was attached correctly at his first feed.*
- Anna was lying down to feed.

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**Routine care of the newborn baby** M3 S9 9

### Breastfeeding care

- Support **exclusive** breastfeeding on demand day and night.
- Ask the mother to get **help** if there is a breastfeeding difficulty.
- Assess breastfeeding in **EVERY** baby before planning for discharge.  
*If the mother reports a breastfeeding difficulty, assess breastfeeding and help her with attachment and positioning.*
- **DO NOT** discharge the baby if breastfeeding is not yet established.

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**Routine care of the newborn baby** M3 S9 10

### Keep the baby warm

<b>Within the first hours</b>	<p>If skin-to-skin contact NOT possible:</p> <ul style="list-style-type: none"> <li>▪ Wrap the baby in a clean dry warm cloth</li> <li>▪ Place the baby in a cot and cover with a blanket</li> <li>▪ Use a radiant warmer</li> </ul>
<b>The first day and later</b>	<ul style="list-style-type: none"> <li>▪ Dress baby.</li> <li>▪ Wrap in soft dry clean cloth and cover head with hat.</li> <li>▪ Ensure baby IS dressed or wrapped and covered with a blanket</li> <li>▪ Assess warmth every 4 hours by touching baby's feet; if feet are cold, place in skin-to-skin contact + extra blanket and reassess.</li> <li>▪ Keep the room warm; if room not warm, cover baby with a blanket or use skin-to-skin contact.</li> </ul>
<b>At home</b>	<ul style="list-style-type: none"> <li>▪ One more layer of clothes than children or adults</li> <li>▪ Keep room warm for baby</li> <li>▪ During the day, dress or wrap baby</li> <li>▪ At night let baby sleep with mother or close by for breastfeeding</li> </ul>

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**Routine care of the newborn baby** M3 S9 11

### Giving cord care

#### Wash hands before and after cord care

- Put nothing on the stump
- Fold diaper below stump
- Keep stump loosely covered with clean clothes
- If the stump is wet, wash with clean water and soap, dry with clean cloth.
- If umbilicus is red or draining pus or blood, see the health worker.

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**Routine care of the newborn baby** M3 S9 12

### Hygiene

#### Wash or bathe a baby in a WARM, draught-free room

- Wash the face, neck, underarms DAILY
- Wash the buttocks when soiled. Dry thoroughly
- Bathe when necessary:
  - Use warm water for bathing
  - Thoroughly dry the baby, dress and cover after the bath
- Use cloth on baby's bottom to collect stool. Dispose as for woman's pads. WASH HANDS
- **DO NOT** bathe a baby before 6 hours of age
- **DO NOT** put anything in the baby's eyes or ear.

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Routine care of the newborn baby M3 S9 13

You are called to see this baby, what action should you take?



Click on the picture to launch video

- If difficulty breathing or the mother tells you of any other abnormality

**Examine the baby J2–J7**

Then?

- Give 2 IM antibiotics
- Refer urgently to hospital

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Routine care of the newborn baby M3 S9 14

Case Study 1

What treatment should a baby be given and for how long:

1. If the mother has a fever?
2. Is being treated with antibiotics at the time of delivery?
3. Her membranes ruptured over 18 hours before delivery?

- 1. Intramuscular injections of ampicillin.
- 2. 50mg/kg every 12 hours and gentamicin.
- 3. 5 mg/kg every 24 hours for a total of 5 days [K12]

Assess the baby daily J2–J7

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Routine care of the newborn baby M3 S9 15

Case Study 2 – Michael

- Baby Michael was born at 10:00 in the morning.
- He weighs 3200 g.
- His mother’s membranes ruptured 22 hours before delivery.
- Michael has been classified as at **risk of bacterial infection**.

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Routine care of the newborn baby M3 S9 16

Case Study 3

A mother has tested positive to RPR (syphilis). Her baby, Sophie, was born at 12:00 midday, weighing 3000 g.

- Which drug is Sophie prescribed?
- How often does it need to be given?
- What dose should she be given?

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## Routine care of the newborn baby

Work through the following exercises and write your answers in the spaces provided.

### Introduction

From the time of delivery until discharge, the mother and her newborn baby require care. This includes teaching the mother how to look after her baby, so that when they are discharged she is able to continue to provide appropriate care.

1. How long should a mother and a term healthy baby stay in hospital after delivery?
2. Where can you find this information?
3. Read the following information then describe the routine care Jojo should be given.

Jojo and Anna

- Baby Jojo and his mother Anna are now in the postnatal area
- Jojo has had his first examination and has been classified as a well baby

### General Care

Turn to page **J10** – Care of the Newborn and look at the left hand column — Care and monitoring

4. Describe the general care of the newborn that applies to all well babies.
5. How should a baby in a cot be kept warm ?

### Breastfeeding

Read the following statements and then answer questions 6, 7 and 8.

- Jojo is being breastfed.
- He fed well at delivery.

**6.** Which pages in the PCPNC Guide will give you information to help support Jojo's mother to breastfeed successfully?

**7.** What should you do if Anna reports a breastfeeding difficulty?

**8.** If Jojo is not feeding well, will it affect him when he is discharged or the birth attendant leaves the home?

Find **K3**, Box 1 containing information on supporting "exclusive breastfeeding".

**9.** For each of the five points give one sentence to summarize the "key" messages.

**10.** What four things may a mother or health worker do which can interfere with exclusive breastfeeding?

Read the following information and then answer questions 11 and 12.

During the examination Anna said:

- She was not sure if Jojo was attached properly for his first feed
- She was laying down for that feed

**11.** Why is it important for you to watch Jojo's next breastfeed?

**12.** Where can you find information on attachment and positioning in the PCPNC Guide so that Jojo and Anna can be given appropriate help if they have problems?

Breastfeeding should be assessed before Jojo is discharged. If he is not feeding well he and his mother should continue to stay in hospital.

Look at the chart "Assess Breastfeeding" **J4**

**13.** What can prevent a baby from feeding well and so delay its discharge?

**14.** What treatment and advice is suggested?

Before discharge give Anna the following information on colostrum and how her breast milk changes over the first few days after delivery. [See question 15].

**15.** In the following paragraph fill in the (underlined> missing words:

On day one and two \_\_\_\_\_ looks yellow and is thick and is only produced in \_\_\_\_\_ amounts – a teaspoonful is common at each feed. About two or three days after birth the appearance of the milk changes, as the quantity \_\_\_\_\_, the milk looks thinner and whiter, it may even look more watery. This is quite \_\_\_\_\_. Reassure Anna that the milk continues to be nutritionally correct for Jojo.

## Teaching the mother how to care for her baby

**16.** What does a mother need to learn about caring for her baby?

**17.** Other important information she will need to know includes (add list):

## Giving cord care

**18.** What should you do before you begin the baby’s cord care?

**19.** Read the following and correct any wrong information:

- Put powder on the cord stump, keep it dry and cover it with a bandage.
- Cover it firmly with clean clothes.
- Fold the nappy (diaper) so that it covers the cord stump.
- If the stump is soiled, wash it with clean water and soap.

**20.** Describe the advice on cord care you will give to a mother before she and her baby go home or the birth attendant leaves the mother’s home.

**21.** On which pages of the PCPNC Guide will you find advice on cord care?

The cord stump should dry and fall off in the first week. The cord area should be checked during the first few days after the stump has fallen off to make sure it does not bleed.

- 22.** What should a mother do if she finds pus is draining from her baby's umbilicus?
- 23.** What will you do as a health professional if a mother brings her baby to you with this problem?
- 24.** What advice and treatment will you give?
- 25.** What else should the mother watch for?
- 26.** On which pages of the PCPNC Guide will you find the relevant information?

## Hygiene

- 27.** Where will you find information on hygiene?
- 28.** Is the following information correct? If not, give the correct information.

**SANDRA TO COMPLETE**

## Monitoring the baby

- 29.** What action should be taken if the mother or her companion says the baby's feet are cold?
- 30.** What action should be taken if the mother or her companion say the baby has a breathing difficulty?
- 31.** What actions should be taken if the baby is bleeding?

**32.** If a baby is healthy does it need any treatment or medicines?

Look at **J5** Check for special treatment needs

**33.** List five reasons why a newborn baby may need “special treatment”.

Read the following statements:

### Case study – Michael

- Baby Michael was born at 10 A.M. in the morning
- He weighs 3200 g
- His mother’s membranes ruptured 22 hours before delivery

**34.** What treatment should Michael be given?

**35.** What antibiotics should Michael be given?

**36.** What dose of ampicillin will he need and how often should it be given?

**37.** What dose of gentamycin (also written as gentamicin) will he need and how often should it be given?

**38.** Gentamycin should be carefully checked, as different concentrations are available in some countries. What concentration is used in the PCPNC Guidelines?

**39.** Read the following case study and answer the questions.

### Case study – Sophie

- A mother has tested positive to RPR (Syphilis).
- Her baby, Sophie, was born at midday, weighing 3000 g.
  - Which drug should Sophie be prescribed?
  - How often does it need to be given?
  - What doses should she be given?

## Recommended reading

- Care of the Umbilical Cord: A review of the evidence (WHO/RHT/MSM/98.4)
- PCPNC Guidelines **J2-J8**, **J10-J11**, **K12-K13**



## Session 8

**Resuscitation of the newborn baby**

1. Where in the PCPNC Guide will you find information on resuscitation?  
K11
2. List all resuscitation equipment and general preparation that should be made before each delivery.
  - A newborn-size self-inflating bag
  - Infant masks in two sizes, normal and small newborn
  - A suction device for taking mucous out of the mouth
  - A small cloth for folding and placing under the shoulders to maintain the open airway during basic resuscitation
  - A draught-free warm room
  - Two clean and warm towels or cloths for drying and wrapping or covering the newborn baby
  - A clean, dry and warm surface with a radiant heater if possible
  - A clock with a second hand
3. How would you keep the baby warm at the delivery and until skin-to-skin contact can begin?
  - Dry the baby immediately using a warm dry and clean towel or cloth
  - Wet towels or cloths should be replaced and the baby loosely wrapped in clean, dry and warm towels
4. What should you do at the same time as you are drying the baby at delivery?
  - Assess his breathing
5. What are you looking for to tell you the baby is breathing normally?
  - The way the baby's chest rises and falls. The chest should move equally on both sides with no difficulty, between 30 to 60 times per minute
6. Does a crying baby need help with his breathing?
  - No
7. What about the baby who is not crying? What will tell you if the baby does not need help with his breathing?
  - This baby needs no help with his breathing as long as his chest is rising and falling equally on both sides, around 30 to 60 times per minute, and his colour is good. This baby can be given straight to his mother for skin-to-skin contact. No suctioning is necessary
8. What should your priorities be if a baby is gasping or does not breathe regularly and there are long pauses between each breath?
  - This baby needs immediate help to breathe. Resuscitation must begin within one minute of birth if the baby is not breathing or is only gasping for air.
9. What action should you take if the baby is not breathing at all at delivery?
  - If a baby is not breathing he needs immediate resuscitation within one minute of birth.

**10.** Read the following statements. Two are not correct. Find the incorrect statements and correct the information given.

If resuscitation is necessary:

- Clamp and cut the cord if necessary

CORRECT

- Transfer the baby to a cool, clean and dry surface.

INCORRECT: Transfer the baby to a warm, clean and dry surface

- Inform the mother that her baby is having difficulty initiating breathing and that you will help the baby to breathe.

CORRECT

- Keep the naked baby under a radiant heater if possible.

INCORRECT: Put the baby lightly wrapped in a warm, dry towel or cloth, under a radiant heater if possible.

**11.** Read these sentences carefully. There is a mistake in each statement. Rewrite the sentence using the correct word.

OPEN the baby's airway. Do this by:

- Laying the baby on his back onto a hard, cold, dry, flat surface.

CORRECTION: Laying the baby on his back onto a hard, warm, dry, flat surface.

- Positioning the head so that it is slightly flexed.

CORRECTION: Positioning the head so that it is slightly extended.

- Placing a folded piece of cloth under the baby's head to help maintain this position. The cloth should not be so thick as to cause over extension or flexion, as this will close the airway.

CORRECTION: Placing a folded piece of cloth under the baby's shoulders to help maintain this position. The cloth should not be so thick as to cause overextension or flexion, as this will close the airway.

**12.** Fill in the (underlined> missing words:

Suction

- First suction the mouth and then the nose, do this by gently introducing a suction tube 5 cm into the baby's mouth until the 5 cm mark is at the baby's lips.

- Use suction while withdrawing the tube

- Next introduce the suction tube 3 cm into each nostril, using suction while withdrawing the tube and until there is no mucus.

- Repeat each suction if necessary but no more than twice and for no longer than 20 seconds in total.

**13.** When should you begin to "ventilate" a baby?

- If the baby is still not breathing



- 14.** Give instructions for ventilating a baby.
- Place mask to cover baby's chin, mouth and nose
  - Form seal
  - Squeeze bag attached to the mask two or three times with two fingers or whole hand, according to bag size
  - Observe rise of chest. If chest is not rising:
- Reposition head
- Check mask seal
- Squeeze bag harder with whole hand
  - Once you have a good seal and the chest is rising, ventilate at 40 squeezes per minute until the baby starts crying or breathing spontaneously.
- 15.** When should you stop "ventilating" a baby?
- If the baby is breathing or crying.
- 16.** Describe "in-drawing" of the chest wall.
- The skin between the ribs is "sucked" inward, so that the ribs are very prominent.
- 17.** When should you continue to ventilate a baby?
- If the baby is breathing less than 30 breaths per minute or there is severe in-drawing of the chest.
- 18.** Write out the six steps to resuscitation.
- Keep the baby warm
  - Open the airway
  - If still no breathing, ventilate
  - If breathing or crying, stop ventilating
  - If breathing less than 30 breaths per minute or severe chest in-drawing continue ventilating
  - If no breathing or gasping at all after 20 minutes of ventilation stop.
- 19.** If a baby dies which form must you fill in?
- An international death certificate.
- 20.** Where can you find a copy of this form?
- N7**
- 21.** Describe the care of a baby after he has been resuscitated?
- After resuscitation, check the mother. Explain to the mother and family what has happened and how the baby is now
  - Keep the mother and baby in the delivery room and do not separate them
  - Never leave the woman and the newborn baby alone. Monitor them every 15 minutes during the first hour.
  - The mother and baby should be kept together with the baby in skin-to-skin contact
  - Encourage the mother to breastfeed her baby as soon as he is ready
  - The baby should be thoroughly examined before he is discharged
  - Tell the baby's parents that although the possibility of complications is low there is still a small probability that the baby may have problems such as feeding difficulties or convulsions in the first few days
  - Instruct them to take the baby to the nearest hospital if these problems occur
  - Encourage the mother to maintain skin-to-skin contact as much as possible in the early days after birth.

## Session 9

## Routine care of the newborn baby

1. How long should a mother and a term healthy baby stay in hospital after delivery?
  - A baby should not be discharged before he is 12-hours old, or before he is feeding well.
2. Where can you find this information?  
J10
3. Read the following information and then describe the routine care Jojo should be given.
  - Ensure care of the newborn baby
  - Examine again before discharge.
4. Describe the general care of the newborn baby that applies to all well babies.
  - Ensure the mother and baby are in a warm room which is not less than 25°C with no draughts
  - Keep the baby in the same room with the mother, in her bed or within easy reach
  - Provide bed nets for the mother and baby to sleep under
  - Support exclusive breastfeeding on demand both day and night
  - Teaching the mother to:
    - Keep her baby warm
    - Give cord care
    - Ensure hygiene
      - Give prescribed treatments according to the schedule on K12
      - Examine the baby before discharge.
5. How should a baby be kept warm if he is in a cot?
  - By ensuring he is dressed or wrapped and covered in a blanket and the baby's head is covered with a hat
6. Which pages in the PCPNC Guide will give you information to help support Jojo's mother to breastfeed successfully?  
K3 and K5
7. What should you do if Anna reports a breastfeeding difficulty?
  - Assess breastfeeding and help the mother with attachment and positioning.
8. If Jojo is not feeding well, will it affect when he is discharged or the birth attendant leaves the home?
  - Yes, he should not be discharged until he is feeding well.

Find K3, Box 1 containing information on supporting “exclusive breastfeeding”.

9. For each of the five points give one sentence to summarize the “key” messages.
  - Practice rooming or bedding in, so that the mother and baby are not separated.
  - Encourage breastfeeding on demand, day and night for as long as the baby wants.
  - Give help to all mothers whenever they need it.
  - Let the baby release one breast then offer the second breast.
  - If a mother is absent feed the baby expressed breast milk by cup.

- 10.** What four things may a mother or health worker do that can interfere with exclusive breastfeeding?
- Force the baby to take the breast
  - Interrupt the feed before the baby has finished
  - Give other feeds or water
  - Use artificial teats or pacifiers.
- 11.** Why is it important for you to watch Jojo’s next breastfeed?
- To be sure Jojo is attached and positioned at the breast correctly
  - To teach Anna different breastfeeding positions, so she can choose an appropriate and comfortable position depending upon where she is and what she is doing.
- 12.** Where can you find information on attachment and positioning in the PCPNC Guide so that Jojo and Anna can be given appropriate help if they have problems?

**K3**

- 13.** Look at the chart “Assess Breastfeeding” **J4**
- What can prevent a baby from feeding well and so delay his discharge?
- Not being well attached
  - Not suckling effectively
  - Breastfeeding less than eight times per 24 hours
  - Receiving other foods and drinks
  - Several days old but with inadequate weight gain

- 14.** What treatment and advice is suggested?
- Help the mother to initiate breastfeeding **K2-K3**
  - Teach correct positioning and attachment **K3**
  - Advise to feed more frequently day and night
  - Advise the mother to stop feeding the baby any other foods or drinks
  - Reassess at the next feed or follow-up visit in two days.

**15.** In the following paragraph fill in the missing words:  
 On days one and two colostrum looks yellow and is thick and is only produced in small amounts, a teaspoonful is common at each feed. About two or three days after birth the appearance of the milk changes, as the quantity increases, the milk looks thinner and whiter, it may even look more watery. This is quite normal, reassure Anna that the milk continues to be nutritionally correct for Jojo.

- 16.** What does a mother need to learn?
- To keep the baby warm
  - To give cord care
  - To ensure hygiene
- 17.** Other important information she will need to know, include:
- The importance of washing her hands before and after handling her baby
  - How to maintain exclusive breastfeeding
  - How to protect her sleeping baby
  - Watching her baby and reporting anything she is worried about.

## Giving cord care

- 18.** What should you do before you begin the baby’s cord care?
- Wash hands.

**19.** Read the following and correct any wrong information:

- Put powder on the cord stump, keep it dry and cover it with a bandage.

Correct response: Put nothing on the stump

- Cover it firmly with clean clothes.

Correct response: Keep cord stump loosely covered with clean cloths

- Fold the nappy (diaper) so that it covers the cord stump.

Correct response: Fold nappy (diaper) below the stump

- If the stump is soiled, wash it with clean water and soap.

Correct response: Dry it thoroughly with a clean cloth.

**20.** Describe the advice on cord care you will give to a mother before she and her baby go home or the birth attendant leaves the home.

Tell the mother **J6-J7**:

- Do not bandage the cord stump or abdomen
- Do not apply any substances or medicine to the cord stump

For example: do not clean the cord stump with alcohol, this may delay healing and is best avoided.

- Avoid touching the cord stump unnecessarily
- To take her baby to a clinic or hospital if the umbilicus becomes red or drains blood or pus.

**21.** On which pages of the PCPNC Guide will you find advice on cord care?

**K10**

**22.** What should a mother do if she finds pus is draining from her baby's umbilicus?

- She should immediately take her baby to a clinic or hospital.

**23.** What should you do as a health professional if a mother brings her baby to you with this problem?

- Examine the baby
- Treat for an umbilical infection before referring to another hospital.

**24.** What advice and treatment should you give?

The mother should be taught to:

- Wash her hands with clean water and soap
- Gently wash off pus and crusts with boiled and cooled water and soap
- Dry the area with a clean cloth
- Paint with gentian violet
- Wash hands.

This should be repeated three times a day.

The mother and baby should return to be reassessed in two days.

**25.** What else should the mother watch for?

- If the redness spreads despite the treatment
- If the infection becomes worse.

**26.** On which pages of the PCPNC Guidelines will you find the relevant information?

**J7**, **K10**, **K13** and **K14**

**27.** Where will you find information on hygiene?

**K10**

**28.** Is the following information correct? If not, give the correct information.

- A baby should be given a bath daily.

CORRECTION: Bathe when necessary **K10**

- A baby only needs to have his face washed when it is dirty.

CORRECTION: Wash the face daily.

**29.** What action should be taken if the mother or her companion says the baby’s feet are cold?

- Put the baby skin-to-skin with the mother or another carer if the mother is sick
- Assess the baby for warmth after one hour
- If the baby is still cold, measure his temperature and follow the instructions for “rearming” the baby in **K9**.

Monitoring the baby

**30.** What action should be taken if the mother or her companion says the baby has a breathing difficulty?

- Examine the baby using the Examine the Newborn chart **J2-J7**.

**31.** What actions should be taken if the baby is bleeding?

- If bleeding from the cord, check if the tie is loose and retie the cord
- If other bleeding, assess the baby immediately.

**32.** If a baby is healthy does he need any treatment or medicines?

- All babies should be immunized. They should receive:
- BCG
- OPV-0,
- Hepatitis B (HB-1)
  - These vaccines should be given within the first week of life and preferably before discharge from the health facility. It is important that National Guidelines relating to immunizations should be followed.

**33.** List five reasons why a newborn baby may need “special treatment”.

- Baby < one day old and membranes ruptured > 18 hours before delivery
- Mother being treated with antibiotics for infections
- Mother has fever > 38°C
- Mother tested RPR positive

Mother is known to be HIV-positive:

- Mother has not been counselled on infant feeding
- Mother chose breastfeeding
- Mother started TB treatment < two months before delivery.

**34.** What treatment should Michael be given?

- Two IM antibiotics for five days.

**35.** What antibiotics should Michael be given?

- Ampicillin and Gentamycin.

**36.** What dose of Ampicillin will he need, and how often should it be given?

- 160 mg. This is equivalent to 0.85 ml every 12 hours.

**37.** What dose of Gentamycin will he need, and how often should it be given?

- 16 mg, which is 1.6 ml every 24-hours.

**38.** Gentamycin should be carefully checked, as different concentrations are available in some countries. What concentration is used in the PCPNC Guidelines?

- 10 mg per ml.

**39.** Read the following case study and answer the questions.

- Benzathine Penicillin should be given to Sophie
- A single dose
- 0.85 ml (which is 170,000 units per ml).

## Routine care of the newborn baby

**OBJECTIVES** You will be able to carry out routine care of the newborn baby and teach mothers to care for their babies. Using PCPNC Guidelines, you will also be able to give advice on treatment and follow-up.

### You should take with you:

- Examination Recording Forms (1 copy)
- Breastfeeding observation form 2 (2 copies)
- Pen/pencil and notebook
- PCPNC Guide (ONE between two participants)

### When you go to the clinical area

- Wear your name badge and appropriate clothing
- Wash your hands BEFORE entering the clinical area and before and after handling a baby

### Practice review topic

During this Clinical Practice think about the following topic for discussion:

- When there is little time, what is the best way to teach a mother the care of her baby?

## Care and monitoring a baby

Task for a group and for 2 participants

- Your clinical facilitator will demonstrate how to assess a baby and then carry out each of the following tasks using **J2-J8**, **J10** and Section **K**. You should observe carefully, so that you can repeat what you have been shown.
- You will be introduced to a mother and baby.
- You will work in pairs to complete Task 3. Take it in turns to assess a baby and carry out the individual tasks, and to observe your colleague.
- Be aware that in your assessment of the baby you may find the baby requires additional care. If this is the case, discuss the additional care you would give with your clinical facilitator.

You should teach the mother how to:

- Assess the baby's warmth
    - Feeling the feet
    - Measure the axillary temperature
  - Check the cord
    - Is it clean and dry, and left open to the air?
  - Assess the baby breastfeeding
    - Using the PCPNC Guidelines **J4**, **K2-K4**
    - Using the Breastfeeding Observation form 2
  - Assess the baby's breathing
    - Watching the way the baby breathes
    - Counting the number of breaths per minute
- Participants should carry out routine care on a minimum of two babies, more if available.

## Hygiene

Task for 2 participants

- When you watch the Demonstration of a baby being washed or bathed, write down the “key points” that should be taught to the mother.
- You will work in pairs to wash or bath a baby
  - Decide who will do what
  - One person should prepare the equipment and get warm water
  - The other should prepare and wash, or bathe and dry the baby
  - Teach the mother what you are doing, so that she can do the same.
- Follow the instructions on **K10**
- If there are enough babies, each of you should wash or bathe the baby while the other observes.
- Discuss with the facilitator the observations you have both made, including your use of communication skills.

## Other baby care: sleeping

When giving advice to mothers

- When talking to mothers find out what positions they place their babies in to sleep?
- Following the information in the PCPNC Guidelines **K10**, give advice to mothers on sleeping positions and other related issues.
- Use clear, non-technical language to give information or explanations. Ask your colleague to comment on your use of language.

## Examination before discharge or for a follow-up visit

Task for 1 or 2 participants

- Your group will go to the clinic or postnatal ward where you will carry out a full examination for a baby who is:
  - To be discharged
  - Attending a follow-up clinic
- Use **J2-J8** PCPNC Guidelines and the Examination Recording Form
- Discuss your findings with your clinical facilitator, who will advise you whether or not to give information to the mother.

## Giving an injection (optional)

Task for a group

- Observe the preparation and administration of an IM injection. Your facilitator will organize this for you if required.

Return to class to prepare for feedback session





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# Essential newborn care course

## Special situations **MODULE 4**

### **PARTICIPANT'S WORKBOOK**

<b>Session S10</b>	<b>Breastfeeding and the newborn baby: Overcoming difficulties</b>	
	Handouts	<b>103</b>
	Worksheet	<b>107</b>
<b>Session S11</b>	<b>Alternative methods of feeding a baby</b>	
	Handouts	<b>111</b>
	Worksheet	<b>115</b>
<b>Session S12</b>	<b>The small baby</b>	
	<b>1 The small baby</b>	
	Handouts	<b>119</b>
	Worksheet	<b>123</b>
<b>Answers</b>	<b>Answers to Worksheets for Sessions 10, 11 and 12</b>	<b>127</b>
<b>Clinical practice 4</b>	<b>Participant's instruction and task sheet</b>	<b>135</b>

## How to use this workbook for Module 4

This workbook contains the handouts and session worksheets for Module 4 plus the Clinical Practice instructions for the fourth Clinical Practice.

### The handouts

The handouts should be used for note taking during the taught sessions.

### The worksheets

The worksheets can be used in a number of ways:

#### Intensive course (4–5 days)

During an intensive course of 4 to 5 days the worksheets should be completed as a homework task. PLEASE do not look at the answers until you have completed the three worksheets.

There are 52 questions.

- If you have answered 40 or more questions correctly, you have done well!
- If you have answered less than 40 questions correctly you need to ask your trainer to go over the areas you are unsure about.

#### Weekly sessions

When the course is taught over a longer period of time, e.g. half or one day a week for four or five weeks, the workbook should be completed as instructed by your trainer.

## Clinical Practice instructions and Task Sheet

You will need to have your Clinical Practice information and Task Sheet with you when you go to your Clinical Practice sessions.

- The Task Sheet contains a number of tasks that you have to complete during the Clinical Practice session.
- Each task on the sheet has instructions for you to follow.
- Your trainer or clinical facilitator will give you details of where you should work and the order in which you should complete your tasks.

M4 S10 1

# Breastfeeding and the newborn baby: Overcoming difficulties

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## Breastfeeding and the newborn baby: Overcoming difficulties

M4 S10 2

### Objectives

- To help a mother breastfeed her newborn baby.
- Help a mother prevent common problems.
- Understand why breastfeeding is important.

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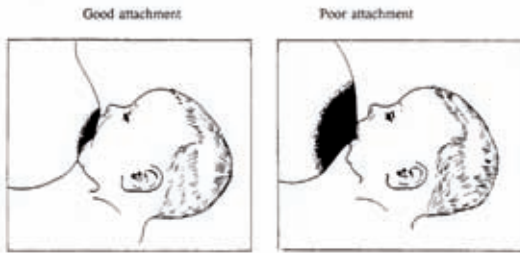
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## Breastfeeding and the newborn baby: Overcoming difficulties

M4 S10 3

### Good and poor attachment



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## Breastfeeding and the newborn baby: Overcoming difficulties

M4 S10 4

### What problems may this mother have?



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Answers

Questions

Handouts

FOR PARTICIPANT

Checklist

Task sheet

FOR FACILITATOR

Answers

Questions

Handouts

FOR PARTICIPANT

Checklist

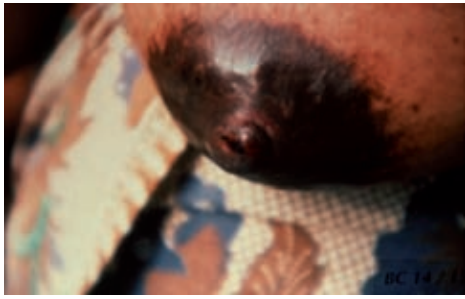
Task sheet

FOR FACILITATOR

Breastfeeding and the newborn baby: Overcoming difficulties

M4 S10 5

Sore and fissured nipple



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Breastfeeding and the newborn baby: Overcoming difficulties

M4 S10 6

Management of sore nipples

- Look for a cause**
  - Check the baby's position at the breast
    - Check the baby's attachment at the breast.
  - Examine the breasts – engorgement, fissures, candida.
  - Check the baby for candida.
- Give appropriate treatment**
  - Build the mother's confidence
  - Improve the baby's attachment and continue breastfeeding
  - Reduce engorgement, feed frequently, express breast milk
  - Treat candida.
- Advise the mother to**
  - Wash breasts only once a day, avoid using soap
  - Avoid medicated lotions and ointments
  - Gently smooth hind milk into nipple and areola after a breastfeed.

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Breastfeeding and the newborn baby: Overcoming difficulties

M4 S10 7

Full breasts = NORMAL



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Breastfeeding and the newborn baby: Overcoming difficulties

M4 S10 8

Engorgement = ABNORMAL



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Breastfeeding and the newborn baby: Overcoming difficulties M4 S10 9


### Summary of differences between full and engorged breasts

Full breasts	Engorged breasts
<ul style="list-style-type: none"> <li>▪ <b>NORMAL</b> 36/72 hours after birth.</li> <li>▪ <b>Hot, heavy, may be hard</b></li> <li>▪ <b>Milk flowing</b></li> <li>▪ <b>Fever uncommon</b></li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>ABNORMAL</b> can occur at any time during breastfeeding</li> <li>▪ <b>Painful, Oedematous</b></li> <li>▪ <b>Tight, especially nipple area</b></li> <li>▪ <b>Shiny</b></li> <li>▪ <b>May look red</b></li> <li>▪ <b>Milk NOT flowing</b></li> <li>▪ <b>Fever may occur</b></li> <li>▪ <b>Engorgement may cause a decrease in milk supply if it happens often</b></li> </ul>

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Breastfeeding and the newborn baby: Overcoming difficulties M4 S10 10

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Breastfeeding and the newborn baby: Overcoming difficulties M4 S10 11

### Case Study 1

- Selim is 6-days-old; he is losing weight.
- Fatma is breastfeeding him 4 times a day and also giving him watered down cows milk.
- You observe a breastfeed and he is well attached and positioned and feeds hungrily.

**Assess, classify, treat and advise, and give follow up to Selim and his mother.**

**Use J2–J8**

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Breastfeeding and the newborn baby: Overcoming difficulties M4 S10 12

### Case Study 2

- When you ask Dulcie how her breasts feel she replies that they are painful and that she feels hot.
- You assess a breastfeed; the baby is not well attached.
- You examine her breasts and measure her temperature. Both breasts are swollen and patchy red. Her temperature is 37.9°C.

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Answers

Questions

Handouts

FOR PARTICIPANT

Checklist

Task sheet


FOR FACILITATOR

Breastfeeding and the newborn baby:  
Overcoming difficulties M4 S10 13

### Case Study 3

- Rachel knows and accepts that she is HIV-positive.
- She has decided to breastfeed John.
- John successfully breastfeeds soon after birth.

How will you help Rachel to exclusively breastfeed?

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## Breastfeeding and the newborn baby: overcoming difficulties

Breastfeeding helps to reduce the risk of a baby becoming ill in the first weeks and months of life. It is important for a mother to know how to care for her breasts to prevent problems occurring that could stop her breastfeeding and limit the possibility of her baby receiving her milk.

A mother needs to know the following:

- How to correctly attach and position her baby at the breast.
- How to express her milk.
- How to prevent or treat common problems.
- Why it is important to give only breast milk to her baby for the first six months of its life.
- When to come for help.

## The importance of correct attachment and positioning

When a baby is not well attached to the breast the baby and the mother may develop a number of problems.

1. What sort of problems may a baby have if it is poorly attached at the breast?
  
2. What sort of problems may the mother have if her baby is poorly attached to her breast?
  
3. What help and advice can you give to a mother with sore/cracked nipples?

Read the following information and then answer question 4.

A mother may have very full breasts in the first two or three days after delivery, when her milk supply is increasing. This is normal and her milk will continue to flow without difficulty.

4. How can she prevent her breasts from also becoming engorged?

Read the following information and then answer questions 5 and 6.

A mother comes to you because her breasts are very painful, which has made feeding difficult. Her breasts have become very full and feel hard. Both breasts are affected. They feel hot and look red. Milk is no longer flowing easily.

**5.** What is the condition this mother is suffering from?

**6.** What advice would you give to this mother?

**7.** Where in the PCPNC Guide can you find information on this condition?

**8.** Sometimes a mother may experience a well-defined, red, sore and swollen area in one of her breasts. She may have a high fever and feel ill, as if she has “flu”.

In the following paragraph fill in the (underlined> missing words:

This condition can also be caused by the baby not taking the milk properly from different parts (lobes) of the breast. This condition is called \_\_\_\_\_. If the milk is not removed by feeding or expression, then the mother may go on to develop an \_\_\_\_\_.

**9.** What advice would you give to this mother?

**10.** What advice would you give to a mother who is HIV-positive and who has mastitis in her right breast?



## General information

**11.** How often should a mother feed her baby in a 24-hour period?

**12.** Does a baby need to be given additional water to drink?

If not, why not?

**13.** When can a mother who has had a caesarean section breastfeed?

**14.** What kind of help will you need to give a mother (who has had a caesarean section) during the first few days after delivery?

Read the following case study and answer questions 15 and 16.

### Case study

- Selim is three weeks old.
- He is not gaining weight.
- His mother, Fatma, is breastfeeding him four times a day and also giving him watered down cow's milk.
- You observe a breastfeed and he is well attached and positioned and feeds hungrily.

**15.** You assess a breastfeed following J4. Selim is classified as “feeding difficulty”. Why?

**16.** How do you advise Fatma?

## Recommended reading

- Breastfeeding Counselling: A training Course (WHO/CDR/93.4)
- PCPNC Guidelines [D19](#), [D27](#), [J2-J4](#), [J9](#), [K1-8](#), [M7](#)



M4 S11 1


## Alternative feeding methods

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Alternative feeding methods M4 S11 2

### Objectives

- To describe the range of alternative methods of feeding available to a baby who is unable to breastfeed at birth or later.
- Teach a mother how to use an alternative feeding method appropriate to her baby’s needs.
- To understand how to hand-express breast milk.

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Alternative feeding methods M4 S11 3

### Expressing breast milk by hand





[Click on the picture to launch video](#) [Click on the picture to launch video](#)

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Alternative feeding methods M4 S11 4

### Hand expression of breast milk

- Have a clean dry container for the expressed breast milk.
- Tell the mother to:
  1. Wash her hands thoroughly.
  2. Make herself comfortable
  3. Hold a wide necked container under her nipple and areola
  4. Place her thumb and first finger behind the nipple (at least 4 cm from the tip of the nipple)
  5. Compress and release the breast between her finger and thumb
  6. Compress and release all the way around the breast, keeping her fingers the same distance from the nipple
  7. Express one breast until the milk just drips, then express the other breast until the milk just drips.
  8. Alternate between breasts 5 or 6 times, for at least 20 to 30 minutes
  9. Stop expressing when the milk no longer flows but drips from the start

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Alternative feeding methods

M4 S11 5

Different ways to massage the breast



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Alternative feeding methods

M4 S11 6

Back massage



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Alternative feeding methods

M4 S11 7

Alternative methods of infant feeding

- A cup and spoon are easy to clean with soap and warm water.



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Alternative feeding methods

M4 S11 8

Examples of cups for feeding newborn babies

- An ideal cup can hold 50 to 90 ml of milk.
- It can be glass or plastic and easily washable.
- The edge of the cup should be rounded and smooth.
- A cup with a lid is useful for storing expressed breast milk.



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Alternative feeding methods M4 S11 9

### Examples of cups with lips and spouts


- Variations of cups with lips and spouts can easily be found.
- They should be used with extreme caution.
- It is **DANGEROUS** to POUR milk into a baby's mouth.



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Alternative feeding methods M4 S11 10

### Direct expression of breast milk



Click on the picture to launch video

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Alternative feeding methods M4 S11 11

### Direct expression of breast milk

To feed the baby using hand expression, the mother should:

- WASH HER HANDS**
- Hold her baby skin-to-skin, with its mouth close to her nipple.
- Express some drops of milk onto the nipple.
- Wait until the baby is alert and opens its mouth widely.
- Stimulate the baby if it appears sleepy.
- Let the baby smell and lick the nipple and attempt to suck.
- Let some breast milk fall into the baby's mouth.
- Wait until the baby swallows before expressing more drops of breast milk.
- When the baby has had enough it will close its mouth and will take no more milk.
- Ask the mother to repeat this every 1 to 2 hours if the baby is very small or every 2 to 3 hours if the baby is bigger.

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Alternative feeding methods M4 S11 12

### Cup feeding



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Answers  
Questions

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FOR PARTICIPANT

Checklist

Task sheet

FOR FACILITATOR

Alternative feeding methods M4 S11 13

### Case Study: Cup-feeding

- Peter weighs 2.3 kg and is 3-days-old.
- How much milk should be given at each feed on days 3, 4 and 5, and how often should it be given?


Day 3 = 27 ml  
Day 4 = 30 ml  
Day 5 = 32 ml  
every 2–3 hours

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Alternative feeding methods M4 S11 14

### Expressing colostrum into a spoon

Expressing colostrum into a spoon on the day of birth



Click on the picture to launch video

Essential Newborn Care Course

Alternative feeding methods M4 S11 15

### Feeding colostrum with a spoon

- A grandmother giving colostrum to her grandson 5 hours after delivery.
- The mother was recovering from a caesarean section.
- A health worker helped the mother express.



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## Alternative method of feeding

### Why an alternative method of feeding may be needed

The majority of babies can breastfeed without difficulty after birth. When breastfeeding is temporarily or permanently not possible, other ways to feed the mother's milk (or sometimes an alternative) to her baby have to be found.

1. What may prevent a baby or a mother from breastfeeding after birth?

### Alternative methods of feeding

2. What methods of feeding can a mother use if breastfeeding is not possible? List at least two different feeding methods?
3. If breastfeeding is not possible soon after birth, which two alternative methods are the simplest and most practical?

### Direct expression of breast milk into the baby's mouth

4. Why is direct expression of breast milk into the baby's mouth useful?

### Cup-feeding

5. What are the advantages of cup-feeding?
6. You are teaching a mother to cup-feed her baby. What instructions should you give her?

- 7.** Why is it important not to pour milk into the baby's mouth?

Read the following case study and answer question 8.

### Case study

- Gemma weighed 3.2 kg at birth.
- She is now three days old.
- Her mother is ill so Gemma is being fed by cup.

- 8.** Work out how much milk Gemma should be given over the next three days:
- at each feed
  - the approximate 24-hour totals.

- 9.** How can a mother put the right amount of milk into a cup for her baby?

- 10.** What can you suggest to a mother if a baby does not take its required amount?

### Other methods of feeding

- 11.** Why should you not use a bottle and teat for a baby who is breastfeeding?

- 12.** In what situations is it useful to use a spoon to feed?

### Helping a mother to express her breast milk

- 13.** If a mother cannot breastfeed her baby from birth when should she begin to express her milk and how often should she express her milk in a 24-hour period?

- 14.** Describe the steps for hand expression.



The mother should:

- 15.** A mother needs to be relaxed for her milk to flow. If she is tense, expressing her milk can be difficult. There are a several ways a mother can be helped to relax.

List at least six ways a mother can be helped to relax.

- 16.** Describe back massage.

- 17.** Describe how you should prepare a container for storing expressed breast milk.

- 18.** How long can expressed breast milk be stored?

## General information

**19.** Where in the PCPNC Guide does it tell you how much milk a baby needs each day?

**20.** How do you know if a baby is getting enough breast milk?

## Recommended reading

- Breastfeeding Counselling: A training course (WHO/CDR/93.4)
- PCPNC Guide [K2-K8](#)

M4 S12 1

## The small baby

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The small baby M4 S12 2

### Objectives

*At the end of this session you should be able to:*

- Describe and provide routine care of the small baby.
- Demonstrate to the mother how to care for her small baby.

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The small baby M4 S12 3

### Defining the “small baby”

- A “small baby” is a baby:
  - born PRETERM between 32 and 36 weeks gestation, OR
  - 1 to 2 months early, OR
  - with a birth weight between 1500 g and 2500 g.
- A “very small baby” is a baby:
  - born VERY PRETERM at less than 32 weeks gestation, OR
  - more than 2 months early, OR
  - with a birth weight of less than 1500 g.

A “VERY SMALL BABY” needs to be referred for additional care because it is even more vulnerable than the “small baby”.

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The small baby M4 S12 4

### Case study 1

- Adam has just been born.
- He weighs 1350 g.
- His mother thinks she was pregnant for about 33 weeks.

- Which pages in J and K are appropriate to Adam’s situation?
- What is the correct treatment and advice for Adam?
- What form should accompany Adam to hospital?



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Answers  
Questions  
Handouts  
FOR PARTICIPANT  
Checklist  
Task sheet  
FOR FACILITATOR

The small baby

M4 S12 5

Kumar and his mother Laxmi



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The small baby

M4 S12 6

What advice can you give to Laxmi?



Click on the picture to launch video

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The small baby

M4 S12 7

Anna and Jill

- Anna is 4-days-old.
- She is cup- and breastfeeding.
- 34 weeks gestation at birth.
- Birth weight 1975 g.



- She now weighs 1905 g.
- Her mother asks if she can take Anna home.

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The small baby

M4 S12 8

Anna and Jill: Weight

- Anna had a birth weight of 1975 g.
- She is weighed daily.
- She loses 70 g in the first 4 days after delivery.
- Now on day 6 her weight is 1920 g, she has gained approximately 15 g over the past 2 days.
- Her mother wants to take her home.

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The small baby

M4 S12 9

### Anna and Jill: Immunizations

- Anna was given BCG, OPV-0 and Hepatitis B (HB-1) vaccines during the week after birth.
- These immunizations are recorded on an immunization card and child records.
- Anna is ready for discharge from hospital on day 11.
- She has been gaining approximately 16 g/day weight for 4 days.

The small baby

M4 S12 10

### Case Study 4

- Fifi was born 4 hours ago at 35 weeks gestation.
- She required no resuscitation.
- Her birth weight was 1900 g.
  
- You ask how the baby is feeding. Fifi has never fed.
- When you assess her breathing you count 70 breaths per minute and you hear grunting.
- Fifi is very pale, she feels cool and her temperature is 35.4°C.



Answers

Questions

Handouts

**FOR PARTICIPANT**

Checklist

Task sheet

**FOR FACILITATOR**

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## The small baby

1. Look at page J3. Define a small baby:
2. In the following paragraph fill in the (underlined> missing words:

A small baby may be preterm or it may be      with a weight between      and     .

A term “small baby” is more mature than one who is “preterm”, but in both cases the baby is at increased risk of infection, breathing difficulties and jaundice. These problems can be detected early or prevented by following the chart “If Preterm, Birth Weight < 2500 g or Twin” on page J3 and the “Additional Care of a Small Baby (or Twin)” outlined on page J11.

Additional needs of the small baby

3. In addition to the care and monitoring given to all babies until they are discharged (as described on page J10), what are the small baby’s needs?

## Read the information about Vishnu and answer questions 4, 5, and 6.

Vishnu

- Vishnu has just been born
- He was 29 weeks gestation at birth
- He weighs 1200 g

4. What page and section in the PCPNC Guide describe Vishnu’s condition?
5. What is the correct treatment and advice for Vishnu?
6. Where will you find the Referral Form?

## Anna and Jill

Read the Case Study about Anna and her mother Jill and answer the questions that follow.

### Case study (Part 1): Anna

- Anna is four days old
- She is cup- and breastfeeding
- She was 34 weeks gestation at birth
- Birth weight 1975 g
- She currently weighs 1905 g

7. How many millilitres (mls) at each cup feed over a 24-hour period should Anna be given on days 3 and 4 after birth?

### Case study (Part 2): Anna

- Anna had a birth weight of 1975 g
- She is weighed daily
- She lost 70 g in the first four days after delivery
- Now at six days her weight is 1920 g. She has gained approximately 15 g in the past two days
- Her mother is very keen to take her home

8. Is Anna's weight gain acceptable?
9. What advice would you give to Jill about going home now?

### Case study (Part 3): Anna

- Anna was given BCG, OPV-0, Hepatitis B (HB-1) vaccines during the week after birth
- These immunizations are recorded on an immunization card and child records
- Anna is ready for discharge from hospital on day 11
- She has been gaining approximately 16 g of weight per day for four days

10. What advice would you give Jill about when to return with Anna for a follow-up visit?
11. When should Anna return for further immunizations?
12. What other information should Jill be given about seeking care for Anna?



## Information and counselling sheets

**13.** Which information and counselling sheets should be given to Jill?

### Fifi

#### Case study: Fifi

- Fifi was born 74 hours ago at 35 weeks gestation
- She required no resuscitation
- Her birth weight was 1900 g
- You ask how the baby is feeding and are told that Fifi has never fed
- When you assess her breathing you count 70 breaths per minute and you hear grunting
- Fifi is very pale. She feels cool and her temperature is 35.4°C.

**14.** Classify Fifi.

**15.** Prioritize the actions that should be taken based on the information you have.

**16.** What antibiotics should be given to Fifi and at what dose?

**17.** Describe what should be done for Fifi during transportation.



## Session 10

## Breastfeeding and the newborn baby: overcoming difficulties

1. What sort of problems may a baby have if it is poorly attached at the breast?
  - The baby may cry a lot and be unhappy because it is always hungry
  - The baby may have slow weight gain. It may lose weight because it cannot get enough milk for its needs.
  
2. What sort of problems may the mother have if her baby is poorly attached to her breast?
  - She may get sore/cracked nipples
  - She may become engorged if the baby is not removing milk but is stimulating milk production by licking the nipple.
  
3. What help and advice can you give to a mother with sore/cracked nipples?
  - Assess her breastfeeding
  - Teach correct attachment and positioning
  - Teach a different position for feeding
  - Encourage her to continue to breastfeed
  - Reassess after two feeds (or one day). If no improvement, teach the mother to express her breast milk from the affected breast and give the milk by cup. Continue breastfeeding from the unaffected side.
  
4. A mother may have very full breasts in the first two or three days after delivery, when her milk supply is increasing. This is normal and her milk will continue to flow without difficulty.
  
5. How can she prevent her breasts from also becoming engorged?
  - She should feed her baby whenever it needs feeding (on demand)
  - She should not restrict the length of time the baby spends at the breast
  - If she becomes uncomfortably full she should offer to feed her baby more often.
  
6. A mother comes to you because her breasts are very painful, which has made feeding difficult. Her breasts have become very full and feel hard. Both breasts are affected. They feel hot and look red. Milk is no longer flowing easily.

What is the condition this mother is suffering from?

- This mother is suffering from “engorgement”.

7. What advice would you give to this mother?
  - If the baby has difficulty attaching, advise the mother to express a little milk to soften the nipple area to make it easier for her baby to attach correctly at the breast
  - It is important that this mother continues to breastfeed on demand and does not restrict the time the baby breastfeeds
  - Frequent breastfeeding may help
  - Teach the mother to express her milk if her baby cannot breastfeed for any reason and feed the breast milk to the baby by cup
  - Make sure the baby is correctly attached and positioned
  - Look for a cause. It may be that the mother has had long periods between feeds, has been wearing tight clothing that has restricted milk flow, or has been holding her breast when feeding.
  
8. Where in the PCPNC Guide can you find information on this condition? **J9**
  
9. Sometimes the mother may get a well-defined, red, sore and swollen area in one of her breasts. She may have a high fever and feel ill, as if she has “flu”.  
In the following paragraph fill in the missing words.

This condition can also be caused by the baby not taking the milk properly from different parts (lobes) of the breast. This condition is mastitis. If the milk is not removed by feeding or expression then the mother may go on to develop an abscess.

**10.** What advice would you give to this mother?

- Encourage the mother to continue breastfeeding
- Teach correct attachment and positioning
- Encourage the mother to breastfeed or express her breast milk regularly
- Give cloxicillan for 10 days
- Reassess in two days; if no improvement, refer the mother to hospital
- If in severe pain give paracetamol.

**11.** What advice would you give to a mother who is HIV-positive and who has mastitis in her right breast?

- Let her baby continue to breastfeed on the left breast
- Express milk from the right breast and throw this milk away until the mother has no fever.

**12.** How often should a mother feed her baby in a 24-hour period?

- At least six to eight times.

**13.** Does a baby need to be given additional water to drink?

- No

If not, why not?

- Breast milk contains a high percentage of water
- Even when the weather is very hot the baby will get enough water from its mother's milk to satisfy its thirst.

**14.** When can a mother who has had a caesarean section breastfeed?

- As soon as she is conscious
- There are no medical reasons for delaying skin contact and the first breastfeed unless the mother or baby is sick.

**15.** What kind of help will you need to give a mother who has had a caesarean section during the first few days after delivery?

- She will need help to get into a comfortable position for feeding her baby.

Read the following case study and answer questions 15 and 16.

Case study

- Selim is three weeks old
- He is not gaining weight
- His mother, Fatma, is breastfeeding him four times a day and also giving him watered down cow's milk
- You observe a breastfeed and he is well attached and positioned, and feeds

**16.** You assess a breastfeed following **J4**. Selim is classified as "Feeding difficulty". Why?

- He has inadequate weight gain
- He is receiving other drinks.

**17.** How do you advise Fatma?

- Support exclusive breastfeeding
- Advise Fatma to feed more frequently, day and night
- Reassure her that she has enough milk
- Advise her to stop feeding watered down cow's milk
- Reassess Selim and Fatma at the next feed or at the follow-up visit in two days time.

## Session 11

**Alternative methods of feeding**

1. What may prevent a baby or a mother from breastfeeding after birth?
  - The baby is:
    - Preterm
    - Ill or has a malformation, such as a cleft palate
    - Referred to another hospital
  - The mother is:
    - Ill
    - In a different hospital to the baby
    - Referred to another hospital
    - Sometimes attachment and positioning from birth are not correct
    - The mother may have sore, cracked nipples, engorged breasts, mastitis or an abscess
2. What methods of feeding can a mother use if breastfeeding is not possible. List at least two different feeding methods?
  - Direct expression of breast milk
  - Cup
  - Spoon
3. If breastfeeding is not possible soon after birth, which two alternative methods are the simplest and most practical?
  - Direct expression of breast milk into the baby's mouth
  - Cup-feeding
4. Why is direct expression of breast milk into the baby's mouth useful?
  - The mother can do it
  - It can be done at any time and anywhere
  - It does not require the baby to use a lot of energy
  - It encourages skin-to-skin contact between the mother and baby
  - It encourages the baby to use its instinctive responses
  - It can be done before the baby can coordinate swallowing, sucking and breathing.
5. What are the advantages of cup-feeding?
  - A cup is a simple piece of equipment and easy to clean
  - It is an easy method of feeding
  - The baby can take what it needs in its own time
  - The mother can do it herself
  - There is good eye contact between the mother and baby
6. You are teaching a mother to cup-feed her baby. What instructions should you give her?
  - Put a quantity of milk into the cup
  - Hold the baby in a semi-upright, sitting position
  - Hold the cup of milk to the baby's lips
  - Rest the cup lightly on the lower lip
  - Touch the edge of the cup to the outer parts of the upper lip
  - Tip the cup so that milk just reaches the baby's lips
  - Do not pour milk into the baby's mouth
  - Do not take the cup from the baby's lips, leave in place until baby has finished
  - When the baby smells the breast milk it quickly becomes alert and opens its eyes and mouth, putting its tongue into the milk to start the feed
  - When a baby is familiar with cup-feeding it sips or sucks the milk into its mouth
  - Babies who are term normally dribble because they have active tongue movements
  - When the baby has had enough it will close its mouth and refuse any more milk.

**7.** Why is it important not to pour milk into the baby's mouth?

- This can cause aspiration

**8.** Gemma weighed 3.2 kg at birth. She is now three days old. Her mother is ill so Gemma is having her feeds by cup.

Work out how much milk Gemma should be given over the next three days:

- at each feed
- the approximate 24-hour totals.
 

■ Day 3	35 ml	280 ml
■ Day 4	35 ml	280 ml
■ Day 5	40 ml	320 ml

**9.** How can a mother put the right amount of milk into a cup for her baby?

- She can use a small (dessert) spoon that holds approximately 10 ml
- If the baby needs 35 to 40 ml, the mother can use four spoonfuls
- A mark can be put onto the outside of a cup or small glass container to guide her on how much milk is needed.

**10.** What can you suggest to a mother if a baby does not take its required amount?

- Feed it more often or for longer.

**11.** Why should you not use a bottle and teat for a baby who is breastfeeding?

- The way a baby feeds from a bottle teat and from the breast is very different
- Bottle-feeding a baby who is also breastfeeding can have a negative effect on the success of breastfeeding
- Bottles and teats are difficult to keep clean and can cause the baby to become ill and die.

**12.** In what situations is it useful to use a spoon to feed?

- It is useful for collecting small amounts of colostrum for a small or sick baby in the first days after delivery when the quantity of milk produced is small
- It can be a useful way of feeding a baby with a cleft lip and/or palate.

**13.** If a mother cannot breastfeed her baby from birth when should she begin to express her milk and how often should she express her milk in 24 hours?

- She should begin expressing her milk as soon after delivery as possible even if she has had a caesarean section
- She should express at least eight times in 24 hours, which means she should express at night and during the day approximately every three hours. Each time she should express as much milk as she is able to.

**14.** Describe the steps of hand expression.

The mother should:

- Wash her hands thoroughly
- Make herself comfortable
- Hold a wide-necked container under her nipple and areola
- Place her thumb and first finger behind the nipple (about 4 cm from the base of nipple)
- Compress and release the breast between her finger and thumb
- Compress in the same way all the way around the breast, keeping her fingers the same distance from the nipple
- Express one breast until the milk just drips, and then express the other side until the milk just drips
- Alternate between breasts for at least 20 to 30 minutes
- Press slightly inwards towards the breast as she compresses and releases (this works well for some mothers).

**15.** A mother needs to be relaxed for her milk to flow. If she is tense, expressing her milk can be difficult. There are a number of ways a mother can be helped to relax.

List at least six ways a mother can be helped to relax.

- Apply warm compresses to the breast
- Gently massage the breast
- Back massage
- Having her baby next to her
- Having a warm, safe, private area to express breast milk
- Listening to calming music.

**16.** Describe back massage.

- The mother sits down, leans forward, folds her arms on a table in front of her, and rests her head on her arms. Her breasts hang loose and uncovered
- Place a towel or piece of cloth on her lap
- The helper works down both sides of the spine at the same time, from the neck to just below the shoulder blades
- She uses her closed fist with her thumbs pointing forwards
- She presses firmly making small slow circular movements with her thumbs
- The helper continues for two or three minutes.

**17.** Describe how you should prepare a container for storing expressed breast milk.

- This can be a cup, a glass, a jug or a jar with a wide neck and a lid
- Wash the container in soapy water
- Pour boiling water in the container and leave for a few minutes
- When ready to express pour the water out.

**18.** How long can expressed breast milk be stored?

- At room temperature: Maximum eight hours even in tropical countries
- In a refrigerator: For 24 hours at the back of the top shelf of the refrigerator.

**19.** Where in the PCPNC Guide does it tell you how much milk a baby needs each day?

K6

**20.** How do you know if a baby is getting enough breast milk?

- Weigh the baby once a day and assess weight gain
- Check that it has several wet nappies every day
- Babies who are growing adequately are receiving enough milk.

## Session 12

## The small baby

1. Look at page J3. Define a small baby.
  - Birth weight 1500 g and < 2500 g
  - Preterm baby (32 to 36 weeks or one to two months premature)
2. In the following paragraph fill in the (underlined> missing words:  
A small baby may be preterm or it may be term with a weight between 1500 g and < 2500 g. A term “small baby” is more mature than one who is “preterm”, but in both cases the baby is at increased risk of infection, breathing difficulties and jaundice. These problems can be detected early or prevented by following the chart “If Preterm, Birth Weight < 2500 g or Twin” on page J3 and the “Additional Care of a Small Baby (or Twin)” outlined on page J11.
3. In addition to the care and monitoring given to all babies until they are discharged, as described on page J10, the small baby needs:
  - Special support for breastfeeding
  - Additional warmth
  - Daily assessment
  - Planned discharge.
4. What page and section in the PCPNC Guide describes Vishnu’s condition?  
J3: “SIGNS – CLASSIFY – TREAT AND ADVISE” (SMALL BABY)
5. What is the correct treatment and advice for Vishnu?
  - Vishnu should be referred urgently to hospital
  - He will need extra warmth during referral.
6. Where will you find the Referral form?  
N2
7. How many millilitres (mls) at each cup-feed over a 24-hour period should Anna be given on days three and four after birth?

To calculate turn to K6

Anna was 1975 g at birth. On day four she should be receiving:

- Approximately 23 ml every two to three hours
  - Approximately 184 ml per 24 hours.
8. Is Anna’s weight gain acceptable?
    - Yes. An acceptable weight gain for a small baby is at least 15 g per day.
  9. What advice would you give to her mother about going home now?
    - Advise Jill to leave the health facility when:
      - Anna gains at least 15 g on three consecutive days
      - Anna is breastfeeding well
        - Discuss a plan for discharge with Jill
        - If Jill insists on taking Anna home, ensure daily home visits or send her to hospital
  10. What advice would you give Jill about when to return with Anna for a follow-up visit?
    - Anna is low-birth-weight and older than one week and is also gaining weight adequately. She should return in seven days.



- 11.** When should Anna return for further immunizations?
- Anna should return for a routine immunization visit at six weeks of age. (See Immunize the newborn **K13** or act according to National Schedule).
- 12.** What other information should Jill be given about seeking care for Anna?
- Jill will be advised to get medical care immediately or as quickly as possible if Anna shows any of the danger signs listed in the chart **K14** – “Follow-up visits”].
- 13.** Which information and counselling sheets should be given to Jill?
- Care for the newborn **M6**
  - Breastfeeding **M7**
- 14.** Classify Fifi.
- Small baby
  - Not able to feed
  - Mild hypothermia
  - Possible serious illness
- 15.** Prioritize the actions that should be taken based on the information you have.
- Give the first dose of IM antibiotics **K12**
  - Refer Fifi urgently to hospital, because:
- She has 70 breaths per minute
  - She is grunting
- 16.** What antibiotics and what dose should be given to Fifi?
- Ampicillin 50 mg/kg IM every 12 hours (95 mg or 0.5 ml)
  - Gentamycin 5 mg/kg every 24 hours (9.5 mg or 0.7 ml).
- 17.** Describe what should be done for Fifi during transportation.
- Keep the baby warm with skin-to-skin contact with mother or someone else
  - Cover the baby with a blanket and cover its head with a cap
  - Protect the baby from direct sunlight
  - Encourage breastfeeding during the journey
  - If the baby does not breastfeed and the journey is over three hours consider giving expressed breast milk by cup.



## Sessions 11, 12 and 14

# Special situations

**OBJECTIVES** For participants to carry out routine daily care of the low-birth-weight and premature newborn baby requiring special care, including cup-feeding for small babies unable to breastfeed.

You should take with you:

- Examination Recording Forms (2 copies)
- Breastfeeding Observation Form 1 (2 copies)
- Pen/pencil and notebook
- PCPNC Guide (ONE between two participants)

When you go to the clinical area

- Wear your name badge and appropriate clothing
- Wash your hands BEFORE entering the clinical area and before handling a baby

## Practice review topic

During this Clinical Practice think about the following topic for discussion:

- If you could change just one of the practices in your workplace after this course, what would it be and why?

## Examine the small baby

With your group you will observe at least TWO small babies:

- One preterm baby
- One “small” term baby (both low birth weight)
- Look carefully at both babies. Can you see any differences between them?
- Discuss with your clinical facilitator and group colleagues how these babies are similar and how they are different.

Task for group and 2 participants

- Watch your clinical facilitator Demonstrate how to examine a small baby (following **J2-J8**)
- You will be introduced to a “small” baby and its mother
- In pairs, examine a small baby using the PCPNC Guidelines **J2-J8**. Use the Examination Record Form for each baby examined. Note additional risk factors and danger signs.

NB: ensure small babies are kept warm during the examination

- Discuss with the clinical facilitator and your colleague the advice and treatment you think should be given to the mother and baby.

## Giving help and advice to mothers with breast conditions

Task for 1 or 2 participants

- You will be introduced to a mother with a breast condition.
- With the mother's permission, look at and examine her breast/s and ask her about her symptoms (using **J9**)
- Discuss the diagnosis, advice and treatment if appropriate with the mother, or with your clinical facilitator and colleagues in another part of the clinical area. Follow **J9**

## Alternative methods of feeding a baby

Task for a group

- Your clinical facilitator will show you examples of alternative methods of feeding used in the health facility and in the special care unit, and tell you when they are used.
- Discuss the methods with your colleagues and clinical facilitator. Consider whether or not the methods are appropriate for the baby's needs.

## Cup-feeding

Task for a group and 1 participant

- Your clinical facilitator will demonstrate cup-feeding, following the directions on K6.
- If possible, observe a baby being cup-fed by a mother or another health worker.
- If possible, observe at least one other alternative method of feeding.
- If possible, demonstrate cup-feeding a baby to your clinical facilitator.
- Observe a baby with a cleft lip and/or palate, or other difficulty, being fed with an alternative feeding method or breastfeeding.

## Hand expression of breast milk

Task for 1 or 2 participants

- Observe a mother hand express her breast milk.
- Teach a mother how to hand express following the instructions given on **K5**.
- Give the mother information about how to store the milk.

## Kangaroo mother care (Optional)

Task for 2 participants

- With your group you will observe a mother who is practising KMC. Look at the position of the baby and how he is secured. If possible, observe how the mother feeds and cares for her baby.
- In pairs, you will be introduced to a mother and baby practising KMC.
- Find out:
  - How the mother feels about KMC.
  - What information she was given about KMC before she started it.
  - What it involves for the mother and the rest of her family.
  - How long it will last?
  - How is her baby feeding?
  - Observe the position of the baby and method for securing the infant.
  - How many hours per day does the mother practise KMC?
  - What does she do with the baby when she needs to bathe or attend to other personal functions?
  - Observe the baby's growth and feeding charts. Note anything of interest.

Return to class to prepare for feedback session.





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# Essential newborn care course

Optional sessions **MODULE 5**

**PARTICIPANT'S WORKBOOK**

Optional Session <b>S13</b>	<b>How to give an injection</b>	
	Handouts	<b>141</b>
	Worksheet	<b>145</b>
Optional Session <b>S14</b>	<b>Kangaroo Mother Care</b>	
	Handouts	<b>147</b>
	Worksheet	<b>151</b>
<b>Answers</b>	<b>Answers to Worksheets for Optional Sessions 13 and 14</b>	<b>153</b>
<b>Clinical Practice</b>	<b>See Module 4</b>	

## How to use this workbook for Module 5

This workbook contains the handouts and session worksheets for two optional sessions.

### The handouts

The handouts and the worksheets should be used in the same way as those for Module 1, 2, 3, and 4.

There are 25 questions in the worksheets for these two sessions:

- If you have answered 20 or more questions correctly, you have done well!
- If you have answered less than 25 questions correctly you need to ask your trainer to go over the areas you are unsure about.



M5 S13 1

## Giving an injection

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M5 S13 2

### Giving an injection

#### Wash hands



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M5 S13 3

### Giving an injection

#### Preparing a syringe

- Wash hands.
- If disposable syringe, open packaging leave syringe inside.
- Take the needle out of its packaging (if the needle has a cover leave it in place), hold it at the base.
- Take syringe out of packaging, hold by end of plunger.
- Join the needle and the syringe.
- Place on a clean, dry tray.

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M5 S13 4

### Giving an injection

#### Preparing a *ready to use* medicine for injection

- Some medicine is *ready to use*, others have to be mixed with sterile water.
- **If using *ready to use* medicine** clean the neck of the container with a swab.
- Break the top off.
- (Uncover *the syringe needle*) Put the syringe needle into the vial.
- **DO NOT** let it touch the outside.
- Draw up a little more medicine than required into the syringe.
- Hold the syringe upright with the needle pointing towards the ceiling.
- Remove bubbles from the syringe by **LIGHTLY** tapping the side.
- Push the syringe plunger until the air comes out and the medicine begins to spill from the tip of the needle.
- Push the plunger until the correct dose is registered in the syringe. (*Put the cover of the needle back in place until the injection is given.*)
- **PUT THE SYRINGE on a prepared tray or container**

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### Giving an injection

M5 S13 5

#### Preparing medicine with sterile water

- Clean container containing sterile water with an alcohol swab.
- Break off the top.
- **DO NOT** let the syringe needle touch the outside of container.
- Fill syringe with the right amount of water. **FOLLOW INSTRUCTIONS**
- Remove bubbles in syringe as *already* described.
- Clean rubber top of medicine bottle with alcohol swab.
- Inject sterile water into bottle with powdered medicine.
- Shake bottle until medicine well mixed with water.
- Hold bottle upside down, push needle through the rubber top into the medicine.
- Fill syringe with more medicine than required.
- **Follow previous instructions to obtain correct dose in syringe.**

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### Giving an injection

M5 S13 6

#### How to give an injection – 1

- Wrap the baby.
- Ask the mother to hold or lay the baby (warmly wrapped) on a flat surface.
- Clean the *upper outer part of the baby's thigh* with an alcohol swab.



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### Giving an injection

M5 S13 7

#### How to give an injection – 2

- Hold the upper outer part of the thigh firmly between the *first finger and thumb*.
- In one quick movement put the needle approximately 3 cm straight into the thigh between your first finger and thumb.



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### Giving an injection

M5 S13 8

#### How to give an injection – 3

- Before injecting the medicine pull back on the plunger to see if blood enters the syringe.
- **IF NO**, inject the medicine slowly.
- **IF YES**, withdraw slightly and start again.
- When you have finished quickly remove the needle and syringe, and clean the skin with an alcohol swab.
- **Dispose of the needle and syringe (SHARPS) safely.**

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Giving an injection M5 S13 9


**Case Study 1**

- The mother of baby Kim is **RPR-positive**. He weighs 2.5 kg.
- What medicine should Kim be given?
- What dose of the medicine will you give him?
- How many units are contained in the dose?


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Giving an injection M5 S13 10

**Case Study 2**



- Baby Hassan is brought to you with a possible **gonococcal eye infection**. He weighs 3.7 kg.
- Which drug is your first choice?
- What dose will you give and how often?

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Answers

Questions

Handouts

**FOR PARTICIPANT**

Checklist

Task sheet

**FOR FACILITATOR**



## Optional Session 13 worksheet questions

## How to give an injection

### Introduction

An injection must be given in the correct way. If it is not, it can be dangerous for the baby.

1. What is the **FIRST** thing a health worker should do in preparing to give an injection?

## How to prepare to give an injection

2. List the equipment you need to give an intramuscular injection?
3. Describe the preparations you need to make **BEFORE** giving an injection.
4. Describe how to reconstitute powdered medicine with sterile water.

## Where to give an injection

5. Where should you give a baby an IM injection?

## How to give an injection

6. Describe how to give an IM injection.
7. Why should a mother breastfeed her baby as the injection is being given?

Read the following case study and answer questions 8, 9 and 10.

### Case study

- The mother of baby Kim is RPR positive
- Kim weighs 2.5 kg

8. What medicine should Kim be given?
9. What dose of the medicine should you give him?
10. How many units are contained in the dose?

M5 S14 1


## Kangaroo Mother Care

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Kangaroo Mother Care M5 S14 2


### Objectives


- Describe when and how to use kangaroo mother care.
- Learn how to assist and support a mother using kangaroo mother care.

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Kangaroo Mother Care M5 S14 3

KMC provides the newborn low-birth-weight of preterm baby with the benefits of incubator care.



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Kangaroo Mother Care M5 S14 4

### Advantages of Kangaroo Mother Care for the baby



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Answers  
 Questions  
 Handouts  
**FOR PARTICIPANT**  
 Checklist  
 Task sheet  
**FOR FACILITATOR**

Answers

Questions

Handouts

FOR PARTICIPANT

Checklist

Task sheet

FOR FACILITATOR

Kangaroo Mother Care M5 S14 5

### Advantages of Kangaroo Mother Care for the mother



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Kangaroo Mother Care M5 S14 6

### KMC – the mother

Important points:

- All mothers can do it. Their age, number of children, education, cultural background, religion and social position are not important.
- She must be **willing** to do it.
- She must be **available** all the time to provide the care needed.
- Her general health must be good.
- She has to be near the baby and hospital to start kangaroo mother care when her baby is ready.
- She needs a supportive family and community.

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Kangaroo Mother Care M5 S14 7

### When to start KMC – the baby

- The baby must be able to breathe on its own.
- The baby must be free of life-threatening disease or malformations.
- The ability to coordinate sucking and swallowing is **not** essential, other methods of feeding can be used until the baby can breastfeed.
- Kangaroo mother care can begin at birth, after initial assessment and any basic resuscitation.

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Kangaroo Mother Care M5 S14 8

### What should the baby wear?



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Kangaroo Mother Care M5 S14 9

What should the mother wear?

Click on the picture to launch video

Essential Newborn Care Course World Health Organization

Kangaroo Mother Care M5 S14 10

Head position in KMC

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Kangaroo Mother Care M5 S14 11

Everyday activities and KMC

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Kangaroo Mother Care M5 S14 12

The position for sleeping

Click on the picture to launch video

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Answers  
Questions  
Handouts  
FOR PARTICIPANT  
Checklist  
Task sheet  
FOR FACILITATOR

Kangaroo Mother Care **M5 S14 13**

### KMC: Feeding the baby



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Kangaroo Mother Care **M5 S14 14**

### The wider family can help with KMC



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## Kangaroo mother care

### Introduction

1. What is “Kangaroo Mother Care” (KMC)?
2. Which babies benefit most from KMC?
3. What are the advantages of KMC for the baby?  
If the baby is next to its mother breasts, this position helps to:
4. What are the advantages of KMC to the mother and the rest of the family?

### When to start KMC

5. When can a baby start KMC?
6. Which mothers can practice KMC?
7. Is the ability of the baby to coordinate sucking and swallowing a requirement for KMC?

### Preparing the mother and baby for KMC

8. What information should you give to a mother to prepare her for KMC?

### Kangaroo mother care: The practical issues

9. What should the baby wear if the surrounding temperature is 22–24°C?

What should the baby wear if the surrounding temperature is below 22–24°C?

## Clothing for the mother

- 10.** What should a mother wear?
- 11.** What if the temperature is below 18°C?

## Practical steps needed to practice KMC

- 12.** Describe the baby's head position for KMC.
- 13.** How should the baby's body be positioned?

## The mother's activities during KMC

- 14.** What can a mother do during KMC?

## Feeding the baby

- 15.** Describe the methods of feeding a baby that can be used during KMC?

## General information

- 16.** How long should KMC last each day?
- 17.** How can skin-to-skin contact be continued if the mother needs to interrupt it for a short period?

## Recommended reading

- Kangaroo Mother Care: A practical guide. RHR, WHO. Geneva, 2002

## Session 13

**How to give an injection**

1. What is the first thing a health worker should do in preparing to give an injection?
  - Wash their hands with soap and warm water
  
2. List the equipment you need to give an intramuscular injection?
  - One syringe (disposable)
  - A capped needle
  - A medicine container, vial or ampoule
  - An alcohol swab
  
3. Describe the preparations you need to make before giving an injection.
  - Wash hands
  - If a disposable syringe is used carefully open the packaging and take the syringe out, holding it by the end of the plunger
  - Take the needle out of its packaging (if the needle has a cover leave it in place), hold it at the base
  - Attach the needle and the syringe
  
4. Describe how to reconstitute powdered medicine with sterile water.
  - Clean the vial containing the sterile water and then break the top off
  - Fill the syringe with the amount of water required (follow the instructions) being careful not to let the needle touch the outsides of the vial
  - Remove bubbles in the syringe by tapping the syringe
  - Clean the rubber top of the medicine bottle with an alcohol swab
  - Inject the sterile water into the bottle with the powdered medicine
  - Shake the bottle until the medicine is well mixed with the water
  - Holding the bottle upside-down, put the needle into the medicine and fill the syringe with slightly more medicine than required
  - Remove the bubbles by tapping the syringe and then push the medicine out until the correct dose is registered. (Keep the needle covered until the injection is given.)
  
5. Where should you give a baby an IM injection?
  - Into the upper outer part of the thigh.
  
6. Describe how to give an IM injection.
  - Wrap the baby in a cover
  - Ask the mother to hold the baby in her arms or lay the baby on a flat surface covered with a warm cloth
  - Clean the upper outer part of the baby's thigh with an alcohol swab
  - Hold the upper outer part of the thigh firmly between the first finger and thumb
  - In one quick movement put the needle approximately 3 cm straight into the thigh between your first finger and thumb
  - Before injecting the medicine into the baby's thigh gently pull back on the plunger of the syringe
  - If blood is seen to enter the syringe withdraw slightly and start again
  - Pull back on the plunger to see if blood enters the syringe; if it does not, inject the medicine slowly
  - Remove the needle and again clean the skin with an alcohol swab

- Dispose of the sharps safely

- 7.** Why should a mother breastfeed her baby as the injection is being given?
- To comfort the baby. Studies have indicated that substances in breast milk help to control pain.

Read the following case study and answer questions 8, 9 and 10.

## Case study

- The mother of baby Kim is RPR-positive
- Kim weighs 2.5 kg

- 11.** What medicine should Kim be given?
- A single dose of benzathine penicillin

- 12.** What dose of the medicine should you give him?
- 0.75 ml

- 13.** How many units are contained in the dose?  
150 000 units (200 000 units per ml)

## Session 14

**Kangaroo mother care**

1. What is “Kangaroo Mother Care” (KMC)?
  - Kangaroo mother care (KMC) is a way of providing a well preterm or low-birth-weight baby with the benefits of incubator care. The mother and baby are kept together with body contact both day and night.
  - The baby “lives” next to the mother’s skin, inside her clothes. This kind of care has many advantages; it also emphasizes the central role the mother plays in the survival and well-being of her baby.
  
2. Which babies benefit most from KMC?
  - Well small babies, particularly preterm or low-birth-weight babies who need initial care in a special newborn unit.
  
3. What are the advantages of KMC for the baby?
 

The baby is next to its mother breasts. This position helps to:

  - Keep the baby warm and its temperature stable, so less energy is used by the baby
  - Reduce hypothermia, (that is, babies becoming clinically cold)
  - Keep the baby’s heart and breathing rates stable
  - Keep oxygenation, oxygen consumption and blood glucose levels equal or better than infants receiving conventional treatment
  - Maintain sleep patterns
  - Reduce stress in preterm and low-birth-weight babies, which results in less crying
  - Promote growth rates equal to babies not receiving KMC; larger daily weight gain whilst in hospital
  - Ready access to the breast.
  
4. What are the advantages of KMC to the mother and the rest of the family?
  - It helps the mother to form strong emotional bonds to her baby
  - The mother feels more confident in handling her baby
  - The mother feels good about herself and the care she can give her baby
  - The mother feels less stressed during kangaroo mother care
  - The mother is more likely to exclusively breastfeed her baby.
  
5. When can a baby start KMC?
  - This depends upon the condition of both the mother and the baby
  - Babies of 1800 g and above can usually start KMC after birth, if they are in a stable condition
  - The more premature the baby the longer it takes before the baby is stable enough to begin KMC
  - KMC may provide a sick baby with its best chance of survival if referral to a specialized newborn unit is not possible.

- 6.** Which mothers can practice KMC?
- All mothers can do it. Their age, number of children, education, cultural background, religion and social position are not important
  - The mother must be willing to do it
  - She must be constantly available to provide the care needed
  - Her general health must be good at the outset
  - She should be close to the baby and hospital to start KMC when her baby is ready
  - She will need support from her family and community.

- 7.** Is the ability of the baby to coordinate sucking and swallowing a requirement for KMC?
- No

- 8.** What information should you give to a mother to prepare her for KMC?

Mothers need to be prepared in advance to know exactly what KMC is. Discussions should cover the following points:

- Continuous skin-to-skin contact
- How she will feed her baby
- How to position and attach her baby for breastfeeding
- How to express her breast milk
- How she will care for her baby
- What she can and cannot do.

- 9.** What should the baby wear if the surrounding temperature is above 22°C?

- The baby should be naked inside the “pouch” except for a diaper, warm hat and socks.

What should the baby wear if the surrounding temperature is below 22°C?

- In addition to the diaper, warm hat and socks, the baby should wear a sleeveless cotton shirt. The shirt should be open in the front to allow the baby’s face, chest, abdomen and arms and legs to remain in skin-to-skin contact with the mother’s chest and abdomen.

- 10.** What should a mother wear?

- She should wear whatever she finds comfortable and warm for the surrounding temperature
- She should ensure that her clothes are big enough to accommodate the baby and that skin-to-skin contact can be maintained
- She needs one special item – “a support binder”. This helps her to hold her baby safely close to her chest, preventing the baby from slipping down. Binders can be made of a length of cloth and of traditional locally available materials.

- 11.** What if the temperature is below 18°C?

- Temperatures below 18°C are unlikely to be enough to keep the mother warm and her clothing may then be insufficient to provide enough warmth for her baby.

- 12.** Describe the baby’s head position for KMC.

- The baby’s head should be turned to one side and slightly extended. This slightly extended head position keeps the airway open and allows eye contact between the mother and baby.
- The top of the binder should be just beneath the baby’s ear.



- 13.** How should the baby's body be positioned?
- The baby's abdomen should not be constricted and should be at the level of the mother's stomach.
  - The hips should be flexed and extended in a "frog-like" position. The arms should also be flexed.
- 14.** What can a mother do during KMC?
- Once the baby is positioned correctly, during the day the mother can do whatever she likes. She can walk, stand, sit, eat, sleep or engage in different activities, whether recreational, educational or income-generating.
- 15.** Describe the methods of feeding a baby that can be used during KMC.
- Any method of infant feeding
- 16.** How long each day should KMC last?
- For as long as possible each day.
- 17.** How can skin-to-skin contact be continued if the mother needs to interrupt it for a period?
- The father or another relative or a close friend can be asked to take over.







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# Essential newborn care course

## **PARTICIPANT'S WORKBOOK**

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