World Health Organization

Essential newborn care course

TRAINING FILE

Training File Contents

World Health Organization

Essential newborn care course

Care of the baby at the time of birth MODULE 1

TRAINING FILE

SESSION 1. General introduction
to the Pregnancy, Childbirth, Postpartum And Newborn Care Guidelines

Objectives

At the end of this section, participants will be able to:

- Understand how to use the *Pregnancy, Childbirth, Postnatal and Newborn Care: A guide for essential practice* (PCPNC).
- Identify and use specific references from sections containing information about the care of a newborn baby and his mother.

Session outline

LECTURE LENGTH 40–50 minutes

0:00	Introduce the session	2 minutes
0:02	What is the PCPNC Guide and what is its purpose?	6 minutes
0:08	How is the PCPNC Guide organized?	12 minutes
0:20	Structure and presentation of each section	12 minutes
0:32	Newborn care	15 minutes
0:47	Using the PCPNC Guide during the course	2 minutes

Session preparation

REQUIRED BY FACILITATOR

- Training file
- Slides/overheads 1/1 – 1/4
- PCPNC Guide: Section A-N
- Coloured sticky labels (to use as tabs/ markers)
- Reference books:
  - Managing Complications of Pregnancy and Childbirth
  - Managing Newborn Problems

REQUIRED BY PARTICIPANT

- PCPNC Guide

From the Participant's Workbook

- Handout Session 1

CLASSROOM PREPARATION

- Demonstration
- For Section 4 prepare one participant to play Anna. There are no lines to learn.
- Reference materials

REFERENCE MATERIALS

- PCPNC Guide
  Pregnancy, Childbirth, Postpartum and Newborn Care: A guide for essential practice

- *Managing Newborn Problems: A guide for doctors, nurses and midwives.* Geneva, World Health Organization, 2003

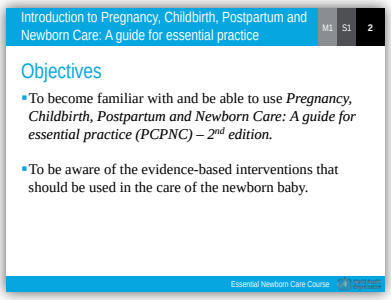
- *Managing Complications in Pregnancy and Childbirth.* Geneva, World Health Organization, 2003

1. Introduce the session

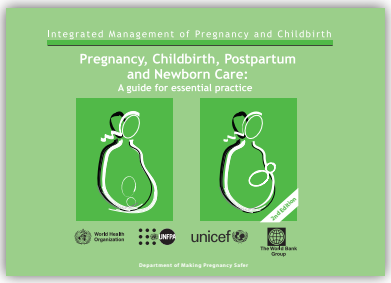
DURATION 2 minutes

- Check that each participant has or can share a copy of the PCPNC Guide.

SHOW slide/overhead 1/2 – Objectives



USE PCPNC **SHOW** participants the Guide as you tell them the objectives of the session.



2. What is the PCPNC Guide and what is its purpose?

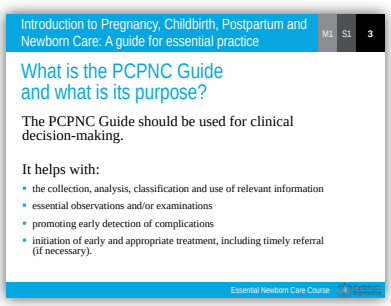
DURATION 6 minutes

MAKE THESE POINTS

The PCPNC Guide:

- Is a comprehensive evidence-based set of guidelines.
- It aims to provide recommendations to guide health workers in the management of women during pregnancy, childbirth and the postpartum period, including post-abortion care, and newborn care at birth, and during the first week of life or later for routine or emergency care.
- It is intended for ALL skilled attendants working at primary health care level either in a health facility or in the community, because it enables health workers to give high quality care to all mothers and babies.
- It is IMPORTANT to remember that most women and newborn babies who use the services described in the PCPNC Guide are not ill and do not have complications.
- For the small proportion of women and newborn babies who ARE ill and do have complications, or are in labour and need urgent attention and care, the PCPNC Guide provides guidance to cover these situations.

SHOW Read aloud slide/overhead 1/3 – What is the PCPNC Guide and what is its purpose?



DURATION 12 minutes

3. How is the PCPNC Guide organized?

ASK How is the PCPNC Guide organized?

Participants to open the Guide at the first page, Table of Contents

- If participants are sharing manuals, tell them to work in pairs.
- As the following points are made, show examples from the Table of Contents.
- The Guide is presented in the following way:
  - It is divided into 14 sections with an introduction and glossary.
  - The 14 sections are identified by a different colour and letter of the alphabet, A–N.
  - The first page of each individual section begins at 1, for example, A1 and B1.

ASK different participants to read out aloud the section headings A to N.

As the following references are read out, ask participants to find the section headings on the Contents pages:

- The clinical content of the Guide is divided into six sections, which are:

A	**Principles of good care**
B	**Quick check, rapid assessment and management of women of childbearing age, and referral and emergency treatment of a woman**
B	**Post-abortion care**
C	**Antenatal care**
D	**Labour and delivery**
E	**Postpartum care**
J	**Newborn care**

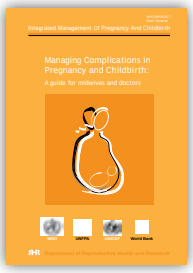
- In each of these sections there are flow, treatment and information charts that we will look at later in this session. These charts provide:
  - Guidance on routine care, including monitoring the well-being of the mother and baby
  - Early detection and management of complications
  - Preventative measures
  - Advice and counselling

- In addition to the clinical care sections, other sections in the Guide include:

F	**Preventative measures and additional treatment for women**
G	**Advice on HIV**
H	**Support for women with special needs**
I	**Links with the community**
K	**Breastfeeding, care, preventative measures and treatment for the newborn**
L	**Drugs, supplies, equipment and laboratory tests**
M	**Information and counselling sheets**
N	**Examples of records and forms**

SHOW As the next point is given, show copies of the two books referred to:

- Recommendations for managing complications of babies referred to secondary health care level can be found in the following two guides for midwives and doctors:
  - *Managing complications of pregnancy and childbirth*
  - *Managing newborn problems*



MAKE THESE POINTS

- Specific references to care of the newborn baby can be found in several of the sections already mentioned, but this may not be obvious from the section headings.
- For quick and easy reference to the relevant sections it may help to mark appropriate pages and sections;[1] for example, J and K are obviously concerned with newborn care.

DEMONSTRATE

Show participants an example of the PCPNC Guide with appropriate pages and sections marked.

1 One way to mark a page or section is to attach coloured strips of paper or tabs.

DURATION 12 minutes

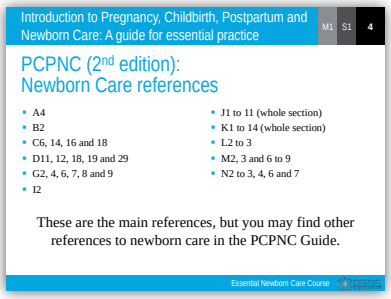
4. Structure and presentation of each section

ASK PARTICIPANTS	INFORMATION TO GIVE
Find the page **Structure and presentation**	This page explains how the Guide works.
Read the information given under the first of the five headings on the page. Then:	
Turn to J2.	Use the following references to section pages to illustrate the information given under each of the headings:
Repeat these directions for the information under the second, third, fourth and fifth headings. Allow 2 to 3 minutes for each.	Flow Charts J2
	Use of colour J4
	Key sequential steps D10 D11
	Information and treatment pages K9 K12
	Information and counselling sheets M6
Find and look at A1	Each section begins with a page illustrating and describing the contents covered.
	Note illustrations of page outlines
	LABEL this section

DURATION 15 minutes

5. Newborn Care

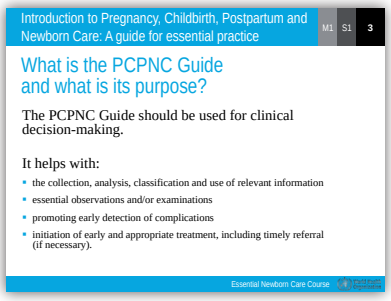
SHOW Read aloud slide/overhead 1/4 – PCPNC: Newborn Care references



Give the following information:

- Newborn care is included in these sections
- Mark these sections so they can be found easily

SHOW Read aloud slide/overhead 1/3 – What is the PCPNC Guide and what is its purpose?



- **Follow the instructions given in the following boxes:**
- **If there is time, cover EACH box, IF NOT cover boxes D, J and K.**

	ASK PARTICIPANTS	INFORMATION TO FIND/OBSERVE
B	**Find** B1	Quick check, rapid assessment and management of women of childbearing age
	Turn to B2	Quick check for newborns needing care
		Follow through each part of the flowchart. Look for references to newborn care.
		Look at the colour of the sections:
		RED for Emergency for baby
		GREEN for Routine care
		Look at cross references to J1–J11
J	**Name the section** J1–J11	Newborn care
C	**Find** C1	Antenatal Care
	Turn to C6	Reference to "Feeding Option" under HIV-positive – G7
G	**Look at** G7	What information does G7 contain?
		Counsel on infant feeding choice
C	**Turn to** C14	Develop a birth and emergency plan
		Find the advice on what to bring to a "facility delivery" and supplies needed for a "home delivery"
	Turn to C16	Advise and counsel on family planning
		Find the family planning options for breastfeeding and non-breastfeeding women
	Turn to C18	Home delivery without a skilled attendant
		Look at instructions given to mother and family
		Look at advice given to avoid harmful practices and danger signs concerning the newborn baby
D	**Find** D1	Childbirth: labour, delivery and postpartum care
	Turn to D11	Find care from "Then lift baby up …"
		What care is covered by the 3 cross references given under "Treat and Advise, if required"?
		D17 – prepare for newborn resuscitation/breech delivery
		K11 – Newborn resuscitation
		D18 – Multiple births
	Turn to D12	Look at the times of monitoring the baby
		Every 15 minutes
	Turn to D19	Care of the mother and newborn WITHIN first hour of delivery of the placenta.
		Monitoring times and cross references to J2
		What is J2? Examine the newborn
		Find care of the newborn and intervention section and cross references
		Look at K9, K5–K6, G8, D24 – what care is covered in these references?
		K9 – Ensuring warmth for the baby
		K5–K6 – Alternative feeding methods
		G8 – If the mother chooses replacement feeding
		D24 – Responding to problems immediately postpartum
	Turn to D29	Home delivery by skilled attendant
		Look at "Postpartum care of the newborn"

	ASK PARTICIPANTS	INFORMATION TO FIND/OBSERVE
G	**Find** G1	Inform and counsel on HIV
	Turn to G2	Provide key information on HIV
		Find references to breastfeeding and risk of transmission
	Turn to G4	References to breastfeeding, note cross references G8–G9, D27, K8
	Turn to G6	Prevent mother-to-child transmission (MTCT) of HIV
	Turn to G7–G8	Find information on drug treatment
		Counselling on infant feeding choice and replacement feeding
I	**Find** I1	Community support for maternal and newborn health
	Turn to I2	Establish links
		Comprehensive list of support groups
J	**Find** J1–J11	Newborn Care
K	**Find** K1	Look at headings and care covered in each part of this section
		Read accompanying notes.
		Look at cross-referenced pages
		Breastfeeding, care, preventative measures and treatment for the newborn
	Turn to K2	Look at headings and care covered in each part of this section
		Read accompanying notes
		Look at cross-referenced pages
L	**Find** L1	Equipment, supplies, drugs and laboratory tests
	Turn to L2 **and** L3	Look at comprehensive list of equipment, supplies, drugs and laboratory tests for postpartum care
M	**Find** M1	Information and counselling sheets (for mothers)
	Look at M2, M3	Look at ALL the suggested information and counselling sheets; cover all main points
	Turn to M6, M7, M8, M9	What do these sheets cover? newborn care, breastfeeding and clean home delivery
N	**Find** N1	Records and forms
	Turn to N2 **and** N3	Referral record
	N4	Labour record
	N6	Postpartum record
	N7	International form of Medical Certificate of Cause of Death
		Remind participants that a Medical Certificate of Cause of Death should always be used in case of the death of a baby.

6. Using the PCPNC Guide during the course

DURATION 2 minutes

TELL participants that by the end of the course, they will be very familiar with using the Guide to help them in their daily work.

MAKE THESE POINTS

- Throughout the course the Guide will be used:
  - During practical demonstrations in the classroom and in the clinical area
  - For problem solving
  - To become familiar with evidence-based practices
  - For reference
- If used correctly, this Guide should make pregnancy and childbirth safer and help to reduce the high rates of death and ill health among pregnant women, mothers and newborn babies.

TELL participants to bring the PCPNC Guide (or appropriate sections) to the class each day because it will be used in most of the sessions.

ASK if there are any questions.

SESSION 2. Standard precautions

Objectives

At the end of this section, participants will be:

- Familiar with the Standard Precautions which protect a mother and her baby and health workers from exposure to diseases spread by blood and certain bodily fluids.

Session outline

LECTURE LENGTH 20 minutes

0:00	Introduce the session	5 minutes
0:05	Standard precautions and cleanliness	15 minutes

Clinical Practice preparation

REQUIRED BY FACILITATOR

- Checklist
- Instructions and Task sheet
- PCPNC Guide

REQUIRED BY PARTICIPANT

- Task sheet
- Breastfeed Observation form 1 (2 copies)
- Notebook and pen/pencil
- Name badge
- PCPNC Guide (1 copy between 2 participants)

Session preparation

REQUIRED BY FACILITATOR

- Training file
- Slides/overheads 2/1 -2/4
- PCPNC Guide A4

REQUIRED BY PARTICIPANT

- PCPNC Guide

From Participant's Workbook

- Handout Session 2
- Worksheet Session 2
- Answers to worksheet Session 2 (only to be given after worksheet is completed)

MATERIAL FOR DEMONSTRATION

- Bowl of water
- Soap
- Disposable towels

REFERENCE MATERIALS

- PCPNC Guide
  Pregnancy, Childbirth, Postpartum and Newborn Care: A guide for essential practice

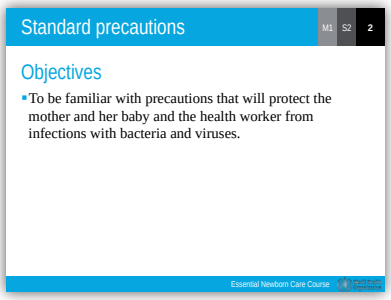
1. Introduce the session

DURATION 5 minutes

MAKE THESE POINTS

- This is a short and important session that contains information that helps to save lives.
- As health workers, we must be familiar with and use in our daily work "Standard Precautions". These are guidelines designed to protect workers from exposure to diseases spread by blood and certain other bodily fluids.

SHOW Read aloud slide/overhead 2/2 – Objectives



In this session you will:
Become familiar with the Standard Precautions that protect a mother and baby and health workers from exposure to diseases from blood and certain bodily fluids.

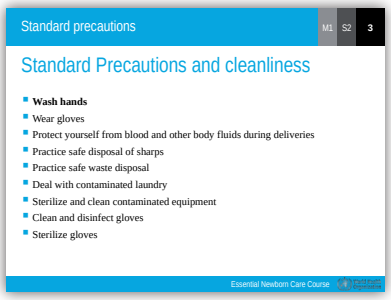
In all health care facilities and wherever care is given, we must take precautions to provide protection from bacteria and viruses, including HIV.

To ensure precautions are followed correctly we must allow enough time to plan properly and think carefully how those plans will be carried out. We must do this BEFORE care is given.

2. Standard precautions and cleanliness: Protecting the baby

DURATION 15 minutes

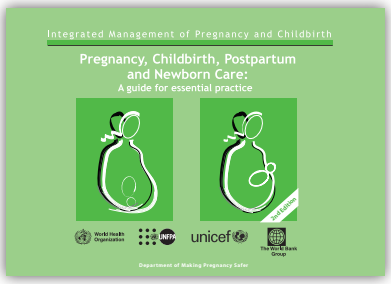
SHOW slide/overhead 2/3 – Standard Precautions and cleanliness



MAKE THESE POINTS as you show the slide/overhead title

DISCUSS each point in turn.

- This slide/overhead goes through the steps for **Standard Precautions and cleanliness**.
- These are "principles" of good care.
- They should become routine practice when working with mothers and babies.



USE PCPNC Participants to turn to **A4**, **Standard precautions and cleanliness**.

ASK a participant to read the first short section aloud, starting with "Wash hands".

ASK participants if they have any comments or questions before continuing to the next section.

MAKE THESE POINTS in the relevant sections:

Wash hands

- Hand washing is of particular importance for all health workers. It is essential before and after visiting and touching any mothers and babies or carrying out any new tasks.
- Hand washing is very effective if done properly.
- Remember to take off unnecessary rings, jewellery and watches.
- Keep fingernails short and remove nail polish.
- If possible, use the recommended hand-washing protocol used in the health facility.

DEMONSTRATE an effective way of washing hands.

Materials:

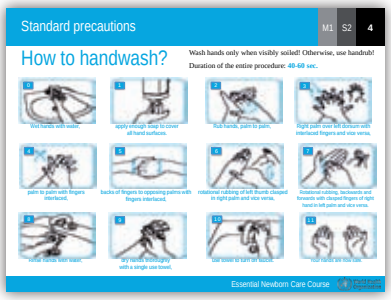
- Bowl of water
- Soap
- Towel

If a protocol does not exist use the following method:

- Apply plain or antimicrobial soap to your hands; work into a lather.
- Rub hands in a circular movement, covering the front and back of the hands, in between the thumb and fingers and the wrist.
- Wash for 15–30 seconds.
- Rinse with a stream of running or poured water.
- Use SINGLE USE towels to dry your hands.

Avoid sharing a towel with other people this greatly increases the risk of spreading infections.

TELL participants they have an exercise to complete on hand washing in their first clinical practice.



SHOW slide/overhead 2/4 – How to handwash

MAKE THESE POINTS

- Posters above the sinks remind health workers, parents and visitors about correct way of washing hands.

Wear gloves

- Gloves worn for the delivery should be CHANGED or washed before cutting the baby's cord or giving the mother further treatment or care.

ASK if there are any questions

SESSION 3. Care of the baby at the time of birth
(until around 1 hour after birth)

Objectives

At the end of this section, participants will be able to:

- Discuss evidence-based routine care of a newborn baby at the time of birth

Session outline

LECTURE LENGTH approximately 90 minutes

0:00	Introduce the session	2 minutes
0:02	The basic needs of a baby at birth	8 minutes
0:10	The second stage of labour and immediate newborn care	25 minutes
0:35	Break	5 minutes
0:40	Specific care of the baby in the immediate period after delivery	35 minutes
0:70	Special situations	5 minutes
0:75	Routine care of the newborn baby at delivery	5 minutes
0:80	HIV and newborn are at birth	8 minutes
0:88	To summarize: Preparing to meet the baby's needs	2 minutes

Clinical Practice preparation

REQUIRED BY FACILITATOR

- Checklist
- Instructions and Task sheet
- PCPNC Guide
- Role play: Delivery (immediately before Clinical Practice 1 takes place. Requires 2 facilitators)

REQUIRED BY PARTICIPANT

- Task sheet
- Breastfeed Observation form 1 (2 copies)
- Notebook and pen/pencil
- Name badge
- PCPNC Guide (1 copy between 2 participants)

Session preparation

REQUIRED BY FACILITATOR

- Training file
- Slides/overheads 3/1 – 3/17
- PCPNC Guide A4; D1,10-13,19; G8; J2-9; K2,10-11; L3

REQUIRED BY PARTICIPANT

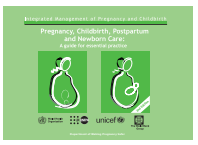
- PCPNC Guide
- Handouts – Session 3
- Worksheet – Session 3
- Answer sheets for Session 3 (only to be given after worksheet is completed)

MATERIALS FOR DEMONSTRATION

- Life sized baby doll (which can be made wet)
- cup of water
- 2 pairs of gloves
- 2 towels
- 1 small clean cloth
- 1 blanket cloth for wrapping baby
- Container of eye ointment or drops
- Cord clamp/ties and cutting instrument/ blade
- Clock with second hand

REFERENCE MATERIALS

- PCPNC Guide
- *Pregnancy, Childbirth, Postpartum and Newborn Care: A guide for essential practice*
- *WHO Recommendations for the Prevention of Postpartum Haemorrhage*



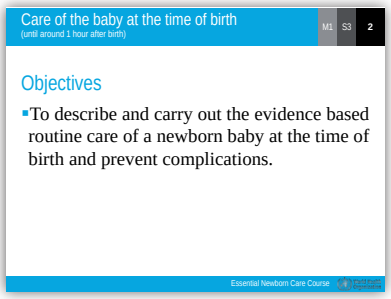
1. Introduce the session

DURATION 2 minutes

MAKE THESE POINTS

- What happens to a mother and her baby during labour, delivery and in the first hours after birth has a major influence on their survival, future health and well-being.
- Health workers have an important role at this time. The care they give is critical in helping to prevent complications and maintaining normality.
- By following the practices laid out in the PCPNC Guidelines health workers are giving care which is based on many years of research evidence, and which is known to save the lives of mothers and their newborn babies.[1]

SHOW Read out slide/overhead 3/2 – Objectives



In this session we will:

- Describe and carry out the evidence-based routine care of a newborn baby at the time of birth in order to prevent complications.

2. The basic needs of a baby at birth

DURATION 8 minutes

- Lay an undressed wet baby doll on the table in front of the class (or show slide/overhead 3/3 – The birth of Jojo)

SHOW Read out slide/overhead 3/3 – The birth of Jojo

ASK To keep Jojo alive and healthy, what are his immediate needs?

- Write each point on the board as mentioned (in the following order). Accept each answer given until these four points are covered, then continue.

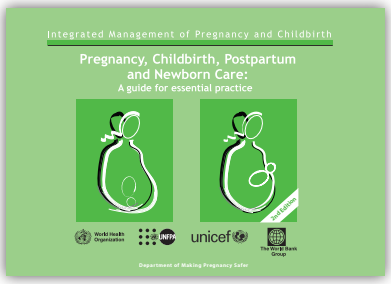
1	To be protected
2	To breathe normally
3	To be warm
4	To be fed

- These are the four basic needs of ALL babies at the time of birth and for the first few weeks of life.
- Remember these basic needs, they will be discussed later in the session.
- A baby's survival is totally dependent upon its mother and other caregivers.
- We want the mother to be alert to her baby's needs immediately after birth. It is therefore important to provide the type of care during labour and delivery that reduces the risk of complications

1 The fourth and fifth Goals of the Millennium Declaration aim to reduce infant mortality by two-thirds and maternal mortality by three-quarters by the year 2015.

and keeps the birthing process as normal as possible. This can be achieved by:

- Following all the "standard" precautions covered in Section A4 and in the previous session, which helps to protect the newborn baby.
- Responding to obstetric problems on admission.
- Giving supportive care throughout labour and delivery.
- Encouraging mothers to have a birth companion of their choice throughout labour.
- Encouraging the mother to be mobile during labour and to be in the position of her choice when she gives birth.
- Keeping the mother as upright as possible at the time of delivery and not letting her lay down completely flat on her back.



USE PCPNC

- **Participants to turn to Section D Childbirth: Labour, delivery and immediate postpartum care.**
- **Quickly read the 12 points on D1 on the right-hand side of the page, which provides a summary of the contents of this section.**

MAKE THESE POINTS

- Although we will not be studying section D in this course it is crucial that we follow the guidance it provides in our care of women at the time of labour and delivery and in our care of the mother and baby in the initial postpartum period.
- If you want any more information you should read all of section D.

DURATION 20 minutes

3. The second stage of labour and immediate newborn care

USE PCPNC Participants to find D10, then ask them the following question:

ASK what preparations should always be made prior to a delivery, which help to protect the newborn baby. Look at the first point under "Deliver the baby".

- All delivery equipment and supplies, including newborn resuscitation equipment, should be readily available.
- The delivery area should be clean and warm (at 25° C).

USE PCPNC Participants to find L3 and quickly look at the lists of equipment and supplies for childbirth care.

- Now that the delivery room is prepared, let us look at what should happen to the mother and baby at the time of delivery.

Perform the following role play

Care of the normal newborn at birth

ROLE PLAY Allow 5 minutes

Scenario

- Mother delivers a normal baby.
- Two trainers/facilitators: One plays the mother and one plays the health worker.

Equipment

- Clock with second hand
- Mannequin/doll
- Bucket of water to wet mannequin/doll
- Towels
- Blanket
- Cord ties and blade
- 2 small blankets or pieces of cloth
- 2 pairs of gloves

Action

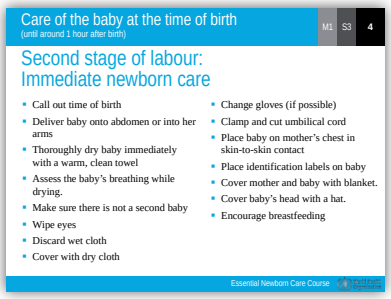
In real time carry out actions detailed below and in D11

- Call out time of birth
- Deliver baby onto the mother's 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
- Change gloves or wash gloved hands
- Wipe eyes
- Discard wet cloth
- Cover with dry cloth

Action: Baby is crying

- Change gloves of wash gloved hands
- 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

SHOW slide/overhead 3/4 – Second Stage of Labour: Immediate newborn care



ASK **As soon as the baby was born in what order did we carry out our immediate care of the mother and baby?**

- Wait for a few responses. If after 3 responses no one has said, "Call out the time of birth", show the first line of the slide/overhead.
- Continue down the list accepting 2 or 3 responses each time before showing the next line.
- Discuss each point in turn. Include the information in the right-hand column of the following text box.

Use information in the right-hand column of the text box in your discussion

ACTION	ADDITIONAL INFORMATION
Call out the time of birth	
Deliver the baby onto a warm, clean and dry towel or cloth on a warm dry surface.	Tell participants to find D11. Ask: A baby should be delivered onto its mother's abdomen or into her arms, If this is not possible where should the baby be delivered? – A clean, warm, safe place close to the mother.
Immediately dry the baby with a warm clean towel or piece of cloth. Wipe eyes	Thoroughly dry the baby to prevent him getting cold. Wipe away any blood or meconium. Do not wipe off the white greasy substance covering the baby's body (vernix). This helps to protect the baby's skin and gets reabsorbed very quickly.
Assess the baby's breathing while drying.	
Make sure there is not a second baby	Palpate the mother's abdomen. Give IM Oxytocin to the mother. Watch for vaginal bleeding
Change gloves	If this is not possible, wash the gloved hands
Clamp and cut the umbilical cord	Clamp only when the cord stops pulsating (after about 2 minutes)
Place the baby between the mother's breasts to start skin-to-skin care	This follows Step 4 of the Ten Steps to Successful Breastfeeding – "Help mothers to initiate breastfeeding within a half an hour of birth"
Place an identity label on the baby	On wrist and/or ankle
Cover the baby's head with a hat. Cover the mother and baby with a warm cloth.	Cover the mother and baby with a blanket if the room is less than 25° C
Encourage the initiation of breastfeeding	

MAKE THIS POINT after the slide/overhead:

- This slide summarizes the care that Jojo – and any baby who is healthy and has no immediate problems – should receive at birth.

CONTINUE WITH THESE POINTS

- Following delivery of the baby the placenta still has to be delivered. Check that IM Oxytocin has been given to the mother.
- Make sure the naked baby is in a position between the mother's breasts where it is easy for breastfeeding to start as soon as the baby is ready. Stimulation of the breast by the baby causes the hormone oxytocin to be released by the brain, this helps breast milk to flow and causes the uterus to contract.
- Wait until the mother feels strong uterine contractions and then deliver the placenta by controlled cord traction. You DO NOT need to separate the mother and baby during delivery of the placenta; skin-to-skin contact can and should continue unless there are complications.
- This is what you should see at a delivery unless there is a medical reason why the mother and baby should be separated at birth.

If you want more information, look at the information on pages D12 and D13 – Third stage of labour "Deliver the Placenta"

This is a convenient point in this session to have a 5-minute break

4. Specific care of the baby in the immediate period after delivery

DURATION 35 minutes

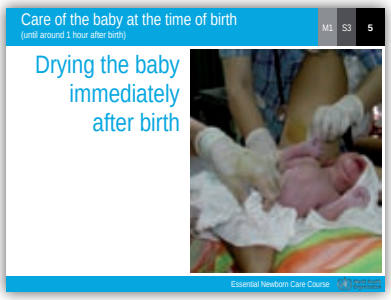
We will now consider in more detail the specific care of the baby at the time of delivery. This will cover:

- The baby's need to breathe normally
- Keeping the baby warm
- Immediate cord and eye care
- Monitoring the baby
- Skin-to-skin contact and breastfeeding

MAKE THESE POINTS

- To "breathe normally" was identified as one of the baby's immediate and basic "needs". A baby can die or become brain damaged very quickly if breathing does not start soon after birth.
- Oxygen is needed to keep the baby's brain and other vital organs healthy. When the umbilical cord is cut the baby no longer receives oxygen via the placenta.
- Once a baby is born, and while he is being dried, the baby's breathing should be assessed. If a baby is breathing normally both sides of its chest will rise and fall equally at around 30 to 60 times a minute.
- If Apgar[2] scores are used, this is the time the baby should be assessed.

SHOW slide/overhead 3/5 – A newborn baby seconds after delivery



- This slide/overhead shows a baby's breathing being assessed as he is being dried.

ASK Does this baby need any help with its breathing?

- This baby does NOT need help. He is breathing normally and crying at birth.

MAKE THESE POINTS

- The majority of babies do not have problems with their breathing after birth. Therefore, it is vital to recognize those babies who do need immediate help.
- The theory and practice of "Resuscitation" will be covered separately in another session. Nevertheless, there are important issues to remember at the time of delivery:
  - Resuscitation equipment should always be close to where the baby is being born
  - It should be READY for use
  - Health workers MUST know how to use it quickly and correctly.
  - Equipment MUST be checked daily and well before a delivery takes place so that if it is broken it can be replaced or mended.

2 The "Apgar score" was devised to examine 5 physiological signs: heart rate, respiration, reflexes, muscle tone and colour. Each sign is given a score between 0 and 2 adding up to a maximum of 10. The higher the score the better the baby's condition is considered to be. The baby is usually assessed at 1 minute and 5 minutes after birth. If a baby's condition continues to cause concern, further assessments may be made.

SHOW slide/overhead 3/6 – Broken equipment

MAKE THESE POINTS

- This bag and mask were in the drawer of a resuscitaire in a delivery room of a small district hospital. It was the only bag and mask for babies in the hospital. The contents of the drawer had not been checked for many days.
- Broken equipment like this is dangerous. A baby needing help to breathe could easily die or suffer brain damage if a bag and mask is not working properly. Please make sure all equipment is checked daily – well BEFORE you need to use it.

USE PCPNC Participants to turn to **D11** and find the fourth SECTION from the top. Read the point beginning "If the baby is not crying …".

TELL participants to look across to the right-hand column and read what it says about a baby who is having problems with breathing

ASK a participant to read aloud the next points, beginning with "Do Not give …".

USE PCPNC Participants to find **K11**.

- **One participant to read aloud the first two instructions in Bold type under the heading "Newborn Resuscitation", beginning with "Start resuscitation …".**
- Remember we looked at **A4** which highlighted the importance of following "Standard Precautions to prevent infection".

Keeping the baby warm

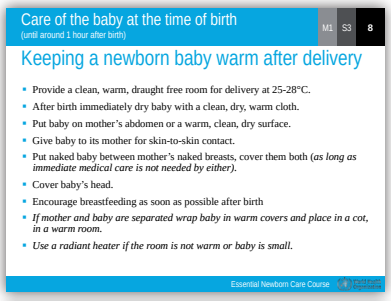
SHOW slide/overhead 3/7 – Skin-to-skin contact: Keeping the baby warm

MAKE THESE POINTS

- A baby's skin temperature falls within seconds of being born.
- If the temperature continues to fall the baby will become ill (hypoglycaemic) and may die.
- This is why a baby MUST be dried immediately after birth and delivered onto a warm towel or piece of cloth, and loosely wrapped before being placed (naked) between the mother's breasts.
- It also explains why the mother and baby should be covered with a warm and dry cover if the room temperature is lower than 25° C.
- The position of the baby between the mother's breasts ensures the baby's temperature is kept at the correct level for as long as the skin contact continues.
- This first skin-to-skin contact should last uninterrupted for at least one hour after birth or until after the first breastfeed.
- Skin-to-skin contact can re-start at any time if the mother and baby have to be parted for any treatment or care procedures.

SHOW slide/overhead 3/8 – Keeping a newborn baby warm at delivery

- This slide/overhead summarizes the important points to remember to prevent the newborn baby from getting cold after delivery.
- **Uncover each line separately. Ask different participants of the class to read one point each aloud.**



SHOW slide/overhead 3/9 – Immediate cord care

MAKE THESE POINTS

The umbilical cord can be clamped/tied (according to local customs) and cut while the baby is:

- on the mother's abdomen
- on a warm, clean and dry surface.

USE PCPNC Participants to turn to D11 and K10. Ask them to find the information about immediate cord care that is on the slide/overhead.

Eye Care

MAKE THESE POINTS

- Eye care is given to protect a baby's eyes from infection.
- Eye drops or ointment should be given within one hour of delivery of the placenta. This can be done after the baby has been dried or when its mother is holding it.
- Eye care is needed soon after delivery because infections such as gonorrhoea can be passed onto the baby during the birthing process which can result in blindness.

USE PCPNC Participants to turn to D19 and look at the section with the heading "Newborn"

ASK What information does this page 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 one hour of birth.
- The antimicrobial should not be washed away.

ASK 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% povidone-iodine eye drops
  - 1% tetracycline ointment

SHOW slide/overhead 3/10 – Eye care

DEMONSTRATE eye care with a doll and pieces of cloth

- Each eye should be wiped with a separate piece of dry clean cloth or two different clean corners of the towel used to dry the baby. The cloth must be clean and dry.
- One drop of the solution or a small amount of ointment should be put on the inside of the baby's lower eye lid.

Monitoring the baby

MAKE THESE POINTS

- The baby should be monitored every 15 minutes.
- The mother and baby should remain in the delivery room from the time of birth until after delivery of the placenta.

USE PCPNC Participants to turn to D12 and D19

ASK **What information on monitoring is given on these pages?**

- The baby's breathing and warmth should be monitored by a health professional every 15 minutes for the first hours after birth and delivery of the placenta.
  - Breathing: listen for grunting, look for chest in-drawing and fast breathing.
  - Warmth: check to see if feet are cold to the touch.
- DO NOT leave the mother and baby alone during the first hour after delivery

Skin-to-skin contact and breastfeeding

MAKE THESE POINTS

- The baby should be kept in skin-to-skin contact after birth until breastfeeding takes place.
- The placenta can be delivered without separating the mother and baby.
- The mother can be gently washed to make her more comfortable without disturbing her and her baby.

USE PCPNC Participants to turn to D19.

- Read under the "Newborn" section what it says about initiating breastfeeding.
  - Encourage the mother to initiate breastfeeding when baby shows signs of readiness.
  - Offer her help.
  - Do NOT give artificial teats or pre-lacteal feeds to the newborn; no water, sugar water or local foods.

USE PCPNC Participants to turn to K2.

- **Participant to read aloud the information under the first 4 bulleted points in the section "Help the mother to initiate breastfeeding within 1 hour, when the baby is ready".**
  - After birth, let the baby rest comfortably on the mother's chest in skin-to-skin contact.
  - Tell the mother to help the baby to her breast when the baby seems to be ready, usually within the first hour. Signs of readiness to breastfeed are:
  - Baby looking around/moving
  - Mouth open
  - Searching
  - Check position and attachment are correct at the first feed. Offer to help the mother at any time.
  - Let the baby release the breast by her/himself, then offer the second breast.

SHOW slide/overhead 3/11 – Initial skin-to-skin contact after birth

MAKE THESE POINTS

The following slides/overheads illustrate what is written in K2

- The baby should be between the mother's breasts during skin-to-skin contact.
- To begin with, the baby will want to rest.
- Every baby is different and the rest period may take from a few minutes to 30 or 40 minutes before the baby shows signs of wanting to breastfeed.
- Help the mother and baby into a comfortable position.

SHOW slide/overhead 3/12 – Signs of readiness to feed in a newborn baby

MAKE THESE POINTS

- Tell the mother that when her baby begins to show signs of wanting to feed, to help him into a position where he can easily reach her breast.
- The baby will open its mouth and start to move his head from side to side; he may also begin to dribble.

SHOW slide/overhead 3/13 – A newborn baby attaching to the breast without help

MAKE THESE POINTS

- Put the baby next to the breast with his mouth opposite the nipple and areola.
- Let the baby attach to the breast by himself when he is ready.
- DO NOT let a health worker attach the baby.
- However, when the baby is attached check that the attachment and positioning are correct, and help the mother to correct anything which is not quite right and to help support her baby if needed.

SHOW slide/overhead 3/14 – A newborn baby's first breastfeed

MAKE THESE POINTS

- A baby's first breastfeed of colostrum is very important because it helps protect the baby from many common diseases and contains many important growth factors that help to develop the gut, the brain and the nerves and eyes.
- This baby is breastfeeding 50 minutes after delivery. Some babies may take up to 80 or 90 minutes before breastfeeding.
- The baby can feed from his mother whether she is lying down or sitting up; her position does not matter as long as she and her baby are comfortable. However it has been demonstrated that if the mother is in a semi-sitting position the baby finds it easier to attach to the breast without help.

ASK Do mothers or grandmothers give any other foods at the time of birth apart from breast milk?

DISCUSS participants comments

MAKE THESE POINTS

- The baby should have no other foods or drinks apart from colostrum, as these reduce the amounts of protective and growth factors the baby receives from this vital first milk.
- Colostrum is produced in small amounts.
- It contains protective factors in a concentrated form that the newborn baby needs to keep him healthy.
- It is a natural form of immunization.

- Let the baby feed for as long as he wants, with no interruption. When he finishes feeding on one breast, let him feed from the other breast.

- Keep the mother and baby together for as long as it is possible after delivery.
- Unless there is a good medical reason, delay the initial routine birth procedures, such as weighing, until after the first feed.
- This first time together is very important in helping the mother and baby to get to know each other and to form a close, loving relationship.
- Another very important benefit is that the baby is colonised by bacteria in the mother's environment.
- Maternal procedures can be done with a baby in skin-to-skin contact unless the mother needs treatment requiring sedation.

SHOW slide/overhead 3/15 – The first breastfeed

If there is time, this slide/overhead can be used to summarize the key points of the first breastfeed.

USE PCPNC Participants to find K2, "Help the mother to initiate breastfeeding within 1 hour, when baby is ready".

ASK **Describe what should be done if a baby does not feed in one hour of birth?**

Examine the baby using J2–J9. If healthy, leave the baby with the mother to try later. Assess in 3 hours, or earlier if the baby is small.

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

- The mother can be helped to express her breast milk.
- The baby can be given the milk by cup.
- On day 1 express into a spoon and feed by spoon.

ASK **What options are there for a mother who cannot breastfeed at all?**

- The baby can be given home-made or commercial formula.
- The baby can be given donated heat-treated breast milk.

MAKE THESE POINTS

- Discourage the mother or other family members from giving the baby any other food or special drinks after delivery.
- The protection against disease and infections that breastfeeding gives is strongest when the baby has had only breast milk and nothing else.
- After breastfeeding the baby can have its first examination.

5. Special situations

DURATION 8 minutes

MAKE THESE POINTS

There is NO NEED to ROUTINELY put babies born by caesarean section, instrumental delivery or breech delivery into a Neonatal Unit.

- Caesarean section, instrumental delivery and breech delivery all carry increased risks to the mother and to the baby.
- Before delivery, preparation for newborn resuscitation should be made in all these cases.
- Monitoring the baby every 15 minutes in the first hour will be particularly important, especially monitoring the baby's breathing.
- Delay between the time of birth and skin-to-skin contact and the first breastfeed may happen in each of these special situations.
- Separation is common, leading to babies receiving pre-lacteal feeds in the first hours after birth. If a long delay between delivery and breastfeeding is expected, encourage the mother to express colostrum. If the mother is too ill to express herself, do it for her.

Caesarean section

- A Mother who has delivered by caesarean section should NOT be routinely separated from her baby unless either the mother or the baby is sick and needs special care. This baby does NOT need to go to a neonatal unit; it can be kept in the same room as its mother.

USE PCPNC Participants to turn to K9.

- Look at the fourth point under the section "At birth and within the first hour(s)".

ASK What should we do if mother and baby separation is necessary until skin-to skin contact can begin?

- Wrap the baby in a clean dry warm cloth and place in a cot. Cover with a blanket. Use a radiant heater if the room is not warm or the baby is small.
- A mother given a general anaesthetic should begin skin-to-skin contact as soon as she is able to respond to her baby. This may be within one hour of birth. A mother who has had an epidural anaesthetic may be able to start skin-to-skin contact very soon after surgery.
- These mothers will need additional assistance in positioning and attaching the baby comfortably. Breastfeeding lying down may be more comfortable in the first days.
- Breastfeeding can begin as soon as the mother is comfortable and able to respond to her baby. It does not have to be delayed.

ASK When do babies of caesarean section mothers begin to breastfeed in your hospitals?

DISCUSS Discuss participants responses

Instrumental delivery

ASK After an instrumental delivery what difficulties may the mother and the baby have in the first hour after birth?

- The start of skin-to-skin contact may be delayed.
- The mother and the baby may suffer some trauma.
- The mother may need repair to an episiotomy.
- The baby may have signs of bruising on the face and head.
- Unless the baby or the mother are ill following an instrumental delivery, skin-to-skin contact should still begin as soon as possible after birth, and as soon as the mother is comfortable.

Breech delivery

ASK What difficulties do you have with babies born in the breech position immediately after delivery?

DISCUSS Discuss participants responses

- As long as there are no complications at the time of delivery, a baby born in the breech position should have no problem beginning skin-to-skin contact and breastfeeding as normal.
- There may be an initial delay because the mother requires an episiotomy which needs to be repaired.

6. Routine care of the newborn baby at delivery

DURATION 5 minutes

ASK What is the normal care of a newborn baby and mother at delivery where you work? Is it the same as described in this session?

- If it is not the same, ask participants to describe how it differs.

ASK What practices interrupt the time the mother and baby may spend together immediately after birth?

DISCUSS Discuss participant's responses.

ASK Which practices are absolutely necessary immediately after birth and which can be postponed until later?

MAKE THESE POINTS if they are not mentioned by participants:

In the first two hours after birth it is not necessary to:

- Weigh or measure the baby
- Bathe the baby
- Give the baby any other food apart from breast milk
- Give the baby to anyone apart from the mother; however, normal cultural practices should be respected.

A newborn baby should not be bathed for at least 6 hours after birth.

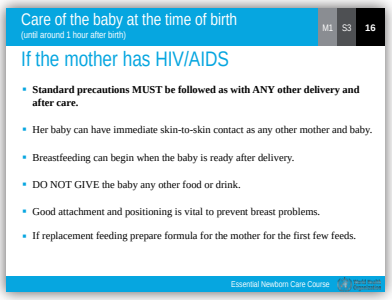
ASK When should these tasks be done?

DISCUSS Discuss participants responses

7. HIV and newborn care at birth

DURATION 5 minutes

SHOW slide/overhead 3/16 – If the mother has HIV/AIDS



MAKE THESE POINTS

- Whether a mother is HIV positive or not, "Standard Precautions" must always be observed and followed when delivering a baby.
- Care of the baby at delivery should be no different to the care already described.
- If the mother has decided to breastfeed, she should begin skin-to-skin contact as soon after delivery as possible and let her baby breastfeed when he is ready (as outlined in K2).
- If the mother has decided not to breastfeed but has chosen replacement feeding instead, the first few feeds should be prepared for her. These feeds should be given by cup NOT bottle.

USE PCPNC Participants to turn to G8 and read the second point under "Teach the mother replacement feeding".

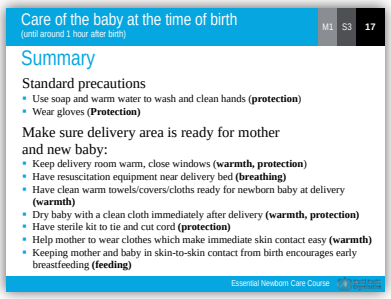
DURATION 3 minutes

8. To summarize: Preparing to meet the baby's needs

- Preparation is essential for good newborn baby care.

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

- Emphasize which of the baby's needs these points cover (in brackets)


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

SHOW slide/overhead 3/17 – Summary

ASK if there are any questions.

Recommended reading

PCPNC Guide

Pregnancy, Childbirth, Postpartum and Newborn Care: A guide for essential practice

- D11–D12 D19–D20

SESSION 4. Keeping the baby warm

Objectives

At the end of this session participants will be able to:

- Describe how to keep a baby warm
- Understand the factors which contribute to heat loss and know how they can be prevented
- Teach the mother how to keep her baby warm after birth and at home

Session outline

LECTURE LENGTH 50-60 minutes

0:00	Introduce the session	2 minutes
0:02	How a baby loses heat	15 minutes
0:17	Keeping a baby warm and preventing heat loss	25 minutes
0:32	Re-warming a newborn baby	15 minutes
0:47	Taking a baby's temperature	5 minutes

Clinical practice preparation

REQUIRED BY FACILITATOR

- Checklist
- Instructions and Task sheet
- PCPNC Guide

REQUIRED BY PARTICIPANT

- Task sheet
- Breastfeed Observation form 1 (2 copies)
- Notebook and pen/pencil
- Name badge
- PCPNC Guide (1 copy between 2 participants)

CLASSROOM PREPARATION

- Write the 8 exercise headings on the board or on a flip chart BEFORE the sesssion begins
- These are listed in the Exercise instructions at the beginning of Section "Keeping a baby warm and preventing heat loss"

Session preparation

REQUIRED BY FACILITATOR

- Training file
- Slides/overheads 4/1 – 4/13
- PCPNC Guide J2–J8, J10, K9
- Alternative session: Slides/overheads 4/13 – 4/16

REQUIRED BY PARTICIPANT

From Participant's Workbook

- Handouts – Session 4
- Worksheet –Session 4
- Task cards A, B, C, D, print 2 sets of cards for each group
- Alternative session: Task cards E, F, G, H, print 3 sets of cards for each group
- Answer sheets for Session 4 (only to be given after worksheet is completed)

MATERIALS FOR SESSION AND DEMONSTRATION

- Flip chart paper and pens for 4 groups
- I baby doll + nappy (diaper), hat and clothes
- 1 soft cloth for wrapping baby
- 1 towel
- 1 Axilla thermometer
- 1 Room thermometer (for classroom temperature)

REFERENCE MATERIALS

- PCPNC Guide
  Pregnancy, Childbirth, Postpartum and Newborn Care: A guide for essential practice

- Thermal Protection of the Newborn: A Practical Guide, WHO (WHO/RHT/MSM/97.2)

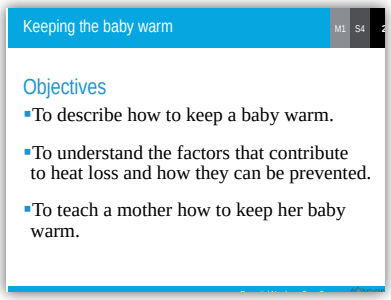
1. Introduce the session

DURATION 2 minutes

MAKE THESE POINTS

- Warmth is one of the four basic needs of a baby. It is critical to the baby's survival and well-being.

SHOW slide/overhead 4/2 – Session objectives



In this session we will:

- Discuss how to keep a baby warm
- Discuss the factors that contribute to heat loss and know how they can be prevented
- Demonstrate teaching a mother how to keep her baby warm

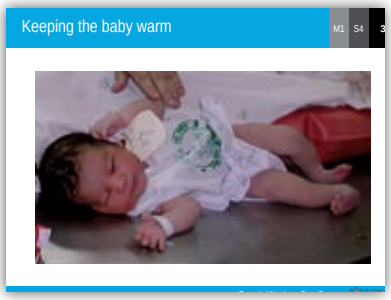
2. How a baby loses heat

DURATION 15 minutes

MAKE THESE POINTS

- 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 the baby is born he is in a much colder environment and immediately starts to lose heat.

SHOW slide/overhead 4/3 – A baby after delivery



ASK How WILL this baby lose heat?

- It is laying on a metal surface
- It is not in skin contact with its mother
- It is not covered
- It is exposed if there is a draught
- Its head is not covered

After 3 to 4 responses give any points not mentioned, then continue.

MAKE THIS POINT

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

DEMONSTRATE

Place a naked wet doll on the table. When discussing the following four ways a baby can lose heat demonstrate how to protect the baby.

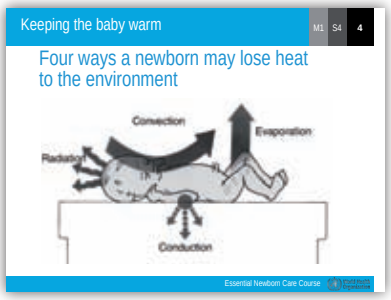
ASK What are the four ways a baby can lose heat?

1	Radiation
2	Conduction
3	Convection
4	Evaporation

ASK **How will this baby lose heat from radiation, and what can we do about it?**

When this question is answered ask the same question for conduction,then convection and then evaporation.

1	Radiation	Not covering the baby's head so that its body heat is able to pass into the surrounding air. **(Put a hat on the baby's head)**
2	Conduction	Leaving the baby on a cold surface, particularly metal (as seen in the previous slide/overhead). **(Take the baby off the tabletop, wrap him up and indicate that you have put him in a cot temporarily)**
3	Convection	Leaving the baby in a draught. **(Take the baby away from an open door or window)**
4	Evaporation	Not drying the baby after delivery when he is wet. **(Dry the doll with a towel)**



SHOW slide/overhead 4/4 – Four ways a baby can lose heat

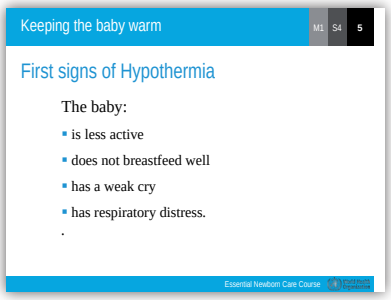
MAKE THIS POINT

- This slide/overhead summarizes each of the four ways a baby can lose heat.

What is hypothermia?

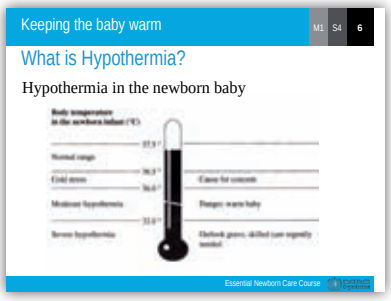
MAKE THESE POINTS

- A baby who is too cold (hypothermic) – especially if he is small and preterm – is at increased risk of becoming hypoglycaemic, ill or even dying.



SHOW slide/overhead 4/5 – First signs of hypothermia

- The body cannot function well when it is cold. Being too cold means that the baby has to use a lot of energy to try to keep warm.
- If the baby continues to be cold these symptoms become more severe and eventually the baby will die.
- Care should also be taken not to let a baby get too hot, because that can also make a baby ill.



SHOW slide/overhead 4/6 – What is hypothermia

3. Keeping a baby warm and preventing heat loss

GROUP WORK 25 minutes

Group exercise instructions

Materials needed:

Task Cards A–D, 2 copies of each.

Divide the class into four groups.

- Give each group one different Task card.
- Each card describes a different scenario.

- Read and discuss the questions on the card.
- Write down brief points for class discussion.

Give the following instructions to the class:

- Choose one person to feedback key points to the class.
- The solutions to the scenario questions **must be from locally available resources**

Allow 5 minutes for group work, then begin class discussion

- **Each group to read the scenario aloud from their Task card or from the slide/overhead and feedback key points.**
- **Open to class discussion.**

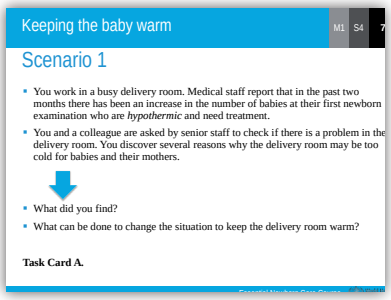
- **Begin with Task Card A slide/overhead 4/7.**
- **When discussion of Task Card A is finished, show slide/overhead 4/8 (Task Card B), 4/9 (Task Card C) and 4/10 (Task Card D). Discuss as described above.**

Write participants' responses on 4 sheets of flip chart paper under pre-prepared headings:

- Task Card A
  - How the delivery room can get cold
  - How to keep the delivery room warm
- Task Card B
  - How a baby can get cold in postnatal (t) ward
  - Changes: to keep a baby warm in PN ward
- Task Card C
  - How a baby gets cold at home
  - How to keep a baby warm at home
- Task Card D
  - How to keep a baby at the correct temperature
  - How to keep a baby from being too hot.

Follow directions given with each scenario.

Use the following discussion boxes as guides of points to include in the discussion.



SHOW slide/overhead 4/7 – Scenario 1

Use the following box in class discussions for Scenario 1

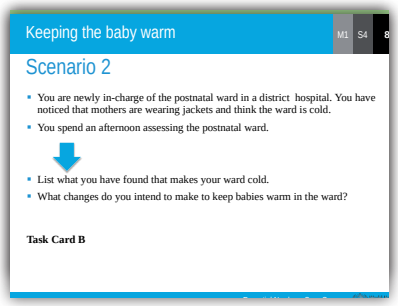
How the delivery room can get cold	How a delivery room can be kept warm
THE ENVIRONMENT	
■ Cold delivery room ■ Open windows ■ Broken window glass, frames, handles ■ Ceiling fans ■ Broken fan sockets ■ No heaters ■ No room thermometer	Have a warm delivery room. It should be kept between 25–28°C with no draughts K9 **ASK** What do you think the temperature of this room is? ■ Let 3 or 4 participants guess the temperature. ■ Give them the correct temperature from the room thermometer. **ASK** Is the delivery room where you work warmer or cooler than this room? Let 3 or 4 participants respond. It is not possible to accurately guess the temperature of a delivery room or any other room. It is better to have a thermometer to measure the temperature accurately. **ASK** If a room thermometer is not available what may make you think the room is cold? ■ You feel cold ■ You need to wear a jacket ■ You feel a draught ■ Babies feel cold to the touch ■ Mothers tell you they are cold
KEEPING THE BABY WARM	
■ Not drying the baby immediately after delivery ■ Not drying the baby's head ■ Baby left on or in a wet cloth ■ Leaving the baby's head uncovered ■ Placing the baby on a cold surface or under a ceiling fan	■ Dry the baby: immediately after birth K9. ■ Dry the whole body and hair thoroughly with a clean dry cloth. Remove wet cloth. Put a hat on the baby. ■ The baby should be placed on the mother's abdomen, in her arms or on a warm dry surface.
No skin-to-skin contact	**Skin-to-skin contact:** Skin-to-skin contact between the mother and baby is the best way to keep the baby's temperature at exactly the right level.
Separating mother and baby and then not covering the baby with sufficient covers	**If a baby and its mother are separated:** wrap the baby in a clean, dry and warm cloth and place it in a cot. Cover the baby with a blanket. Use a radiant heater if the room is cold or if the baby is small.
Not breastfeeding soon after birth	Encourage the mother to breastfeed her baby in this period following birth.
Giving the baby a bath just after birth	Do not bath the baby until he is at least 6 hours old
Not covering the baby adequately if he needs treatment after birth, e.g. help with breathing	If the baby needs any emergency treatment make sure he is kept warm.

ASK

- How many of the changes to be made will need new equipment?
- How many of the changes require a change in practices?

USE PCPNC Participants to find K9 and read the 4 points under "At birth and within the first hour(s)"

SHOW slide/overhead 4/8 – Scenario 2



Use the following box in class discussions for Scenario 2

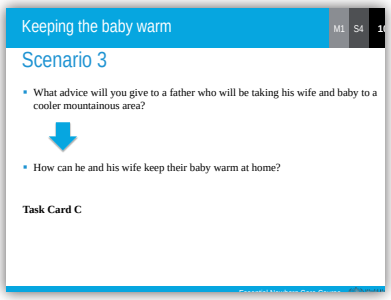
How a baby can get cold in the PN ward	What changes can be made to keep a baby warm in the PN ward
THE ENVIRONMENT	
■ Doors and windows open ■ A cold room ■ The baby is in a draught	■ Close doors and windows ■ Mend any broken windows
■ The baby not wearing enough clothing ■ The mother not well prepared, so the baby has no clothes	Make sure the room for the mother and baby is warm, at least 25°C. Use skin-to-skin contact and extra covers if the room is not warm enough.
The baby separated from the mother	**USE PCPNC** Ask participants to look at the first section at the top of J10 ■ Explain to the mother that keeping her baby warm is important for the baby to remain healthy. ■ Dress the baby or wrap in soft clean cloth. Cover the baby's head with a cap for the first few days, especially if the baby is small
Swaddling the baby too tightly	■ Keep the baby with the mother (rooming-in) within easy reach. Do not separate them. ■ If they are separated, make sure the baby is dressed or loosely wrapped and covered with a blanket.
Not assessing the baby regularly	Assess every 4 hours by touching the baby's feet. If the feet are cold use skin-to-skin contact and add another cover over the mother and baby. In this situation the baby may need to be rewarmed. What this involves will be examined later in this session.
Leaving the baby on a wet surface after a bath	■ Any surface a baby is placed on must be dry and clean with a warm blanket or cloth ready for the baby. ■ Curtains around the beds

USE PCPNC Participants to find K9 and read the 7 points under "Subsequently (first day)"

SHOW slide/overhead 4/9 – The "warm chain" and read aloud the headings

MAKE THESE POINTS

- For the baby in hospital many of the points already discussed are summarized in the "warm chain".
- This is a set of interlinked procedures to be taken at birth and during the next few hours and days that reduce the loss of heat and help to keep the baby warm.



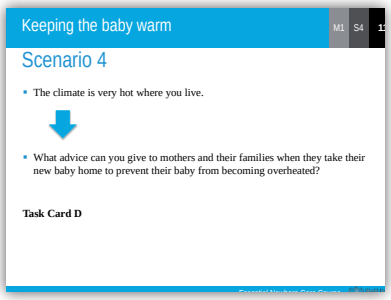
SHOW slide/overhead 4/10 – Scenario 3

Use the following box in class discussions for Scenario 3

How a baby can get cold when he is at home	**How to keep a baby warm when at home**
A cold room	■ In a cold climate, keep one room or part of one room warm (but not smoky if there is an open fire). ■ In daytime, dress or wrap the baby
The baby not wearing enough layers of clothing	Babies need one more layer of clothing than older children and adults. Avoid putting too many clothes on the baby or swaddling in too many layers so that the baby becomes too hot.
Not changing a wet nappy	
The baby sleeps in its own bed or in a separate room	At night, let the baby sleep with the mother or within easy reach for breastfeeding.
Feeding less than 8 times in 24 hours	Use skin-to-skin contact

USE PCPNC Participants to find K9 and read the 4 points under "At home"

SHOW slide/overhead 4/11 – Scenario 4



Use the following box in class discussions for Scenario 4

How to keep the baby at correct temperature	How to keep a baby from being too hot
Avoid hypothermia ■ Hypothermia is a risk to a baby in any climate – whether in the tropics or in a mountainous area. ■ It is a particular problem where there is a large difference in temperature between day and night.	Hyperthermia occurs when the baby's temperature rises above 37.5°C. It is caused by: ■ Too many wrappings/clothes in hot weather ■ The baby being next to a heater ■ The environment being too hot for the baby.
Avoid hyperthermia	■ Make sure the baby does not have an infection. ■ Move the baby away from the source of heat, i.e. heater, sun, etc. ■ Undress the baby. ■ Give the baby a bath if necessary. ■ Give frequent breastfeeds. ■ Monitor temperature regularly.

4. Rewarming a newborn baby

DURATION 15 minutes

MAKE THESE POINTS

- Newborn babies cool down much faster than adults because they cannot maintain a stable body temperature as easily.
- The smaller the baby and the more premature, the more difficulty he has in maintaining its temperature.
- In general, newborn babies need a warmer environment than adults.
- A baby cannot get warm by itself if he has become cold. He will need to be "rewarmed".
- Skin-to-skin contact is the best way to keep a baby warm and the best way to "rewarm" a baby who:
  - has mild hypothermia (35–36.4°C)
  - is found to have cold feet.

- It is a **Danger Sign** if a baby has a temperature of less than 35°C or the baby's temperature does not rise after the "rewarming" procedure has been followed. This baby needs to be referred urgently to another health facility. During referral the baby should be kept in skin-to-skin contact with the mother (or another person accompanying the baby) or should be wrapped in a cloth that has been pre-warmed to approximately 37°C.[1]

1 The cloth for wrapping a baby in for referral should be pre-warmed to 37° C. This can be achieved in the following ways: a warming cupboard; folded cloths placed under a radiant heater; or place cloths in a clean dry place in direct sunshine.

Perform the following role play

ROLE PLAY 5 minutes

Rewarming a baby

DEMONSTRATION

- Ask a prepared participant to be the mother
- Use a dressed doll for the baby

Tell the class the setting for the role play: Delivery room, postnatal room or home

Follow each step of the rewarming procedure as set out in K9 **Rewarm the baby skin-to-skin**, telling the "mother" what you are doing at each step

- Role play 1 to 5 of the points below
- In the role play as you start the rewarming process try to find out from the "mother" why the baby has become cold
- At step 5 demonstrate taking a baby's temperature when he is in skin-to-skin contact with his mother.

- Before rewarming a baby remove all of his clothes.

ASK Why is it necessary to take off all the baby's clothes?
- Take the clothes off because they are cold.

- Put the baby into:
  - A warm shirt that opens down the front
  - A nappy
  - Warm hat and socks

- Put the baby between the mother's naked breasts with skin-to-skin contact. Make sure:
  - The baby's clothes are open in the front
  - Ensure the baby's naked chest and abdomen is next to the mother's naked chest so that skin-to-skin contact is maintained.

- Cover the baby with the mother's clothes and an additional pre-warmed blanket

- Check the baby's temperature every hour until it returns to normal.

Thank the "mother" – participant who played the mother.

MAKE THESE POINTS

- Check the temperature (axilla) until it is between 36.5–37.5°C.
  - If a baby has a temperature of less than 36.5°C the baby has "hypothermia".
  - The temperature should rise by 0.5°C an hour.

- Try to find out WHY the baby became cold; for example, was he in a cold room, in a cot, or maybe there is no obvious reason.

- Keep the mother and baby together until the baby's temperature is in the normal range. If the mother wishes to move around, make sure the baby is safely secured to the mother.

- If the baby's temperature is not up to 36.5°C or more after 2 hours of "rewarming", reassess the baby using J2-J7.

- If the baby is small, encourage the mother to keep him with skin-to-skin contact for as long as possible during the day and during the night.

- The room where the rewarming is taking place should also be at least 25°C, with no draughts. Switch off ceiling fans, air conditioners, etc.

- If the baby needs to be referred to another health facility, he should be kept in skin-to-skin contact with either the mother or another person who is accompanying the baby.

MAKE THESE ADDITIONAL POINTS

- If a thermometer is not available, feel the baby's feet. If they are cold to the touch, the baby is cold and needs to be warmed in the way shown.
- If the baby has a temperature below 36.5°C or above 37.5°C, the baby will need to be observed carefully and his temperature taken hourly until it is in the normal range, after which it should be checked after two hours.

USE PCPNC Participants to find K9. Ask different participants to read aloud the 9 points under "Rewarm the baby skin-to-skin".

5. Taking a baby's temperature

DURATION 5 minutes

DEMONSTRATE taking an axilla temperature with a thermometer

- Use a mannequin or doll and a thermometer.
- Follow the points given below under "Use an 'Axilla' thermometer".

MAKE THESE POINTS

Wash your hands before taking a baby's temperature

- When an accurate temperature is needed because a baby is either too cold or too hot, use a thermometer to take the baby's temperature.
- Keep the baby warm throughout the procedure; the baby can continue to be held in skin-to-skin contact with his mother as you have just seen. The baby does not need to be in a special position for his temperature to be taken.
- A temperature taken in the Axilla, that is, under the arm in the armpit, is one of the safest methods of taking a baby's temperature.

DO NOT take a rectal temperature – it is not necessary.

- Use an "Axilla" thermometer:
  - Make sure it is clean, shake it down, so that it reads less than 35°C.
  - Place the silver/red bulb end of the thermometer under the baby's arm, in the middle of the armpit.
  - Gently hold the baby's arm against his body.
  - Keep the thermometer in place for at least 3 minutes.
  - Remove the thermometer and read the temperature.
  - Record the temperature in the baby's notes.

- A newborn baby's temperature taken under the arm is usually between 36.5°C and 37.5°C.

ASK **Does a newborn baby's temperature need to be taken routinely by thermometer?**

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

An accurate temperature is needed if a baby is:

- 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.

ASK **What are the clinical signs you would expect to see in a baby with hypothermia?**

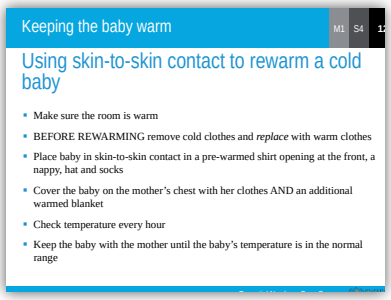
The baby:

- is less active,
- does not breastfeed well,
- has a weak cry,
- has respiratory distress,
- has cold extremities (feet and hands) and may also have a cold body.

- In more severe cases of hypothermia the following signs may also be observed:
  - The baby's face, hands and feet may develop a bright red colour (in all skin colours).
  - The skin over the baby's back and limbs or over the whole body may become hard together with reddening and oedema (scleroma).
  - The baby becomes lethargic and develops slow, shallow and irregular breathing and a slow heartbeat.
  - The baby will have a low blood sugar (hypoglycaemia) and metabolic acidosis with possible internal bleeding.
  - It is important to realize that these signs are danger signs and the baby needs urgent referral for medical attention if he is to survive.

ASK **How will you try to keep this baby as warm as possible during transportation to another hospital?**

- By using the rewarming method so that the baby is in direct skin-to-skin contact with the mother.



SHOW **slide/overhead 4/12 – Using skin-to-skin contact to rewarm a cold baby**

MAKE THESE POINTS

- This slide/overhead summarizes the main points that need to be remembered in rewarming a baby.
- Remind mothers that skin-to-skin contact is the most effective way of keeping a newborn baby warm.

ASK if there are any questions

Recommended reading

- *Thermal Protection of the Newborn: A Practical Guide*, WHO (WHO/RHT/MSM/97.2)
- PCPNC Guide
  D11–D12 D19 J2–J7 J10–11 K9

Alternative session outline

NB: The scenarios for this session can be changed to reflect the local situation.

This session outline and exercise should be carried out in the clinical area.

SESSION LENGTH 60 minutes

Print 3 copies of each exercise Task Card from the **Keeping the baby warm** slide/overheads – 13(E), 14(F), 15(G), 16(H) – a total of 12 Task Cards.

Before the session

Arrange for participants to go in pairs to the following clinical areas to sit quietly and observe their surroundings (maximum of 3 pairs in 1 clinical area):

- Postnatal area
- Labour and delivery area
- Special care baby unit
- Outpatient department (where babies are seen)
- Any other area mothers and babies use regularly

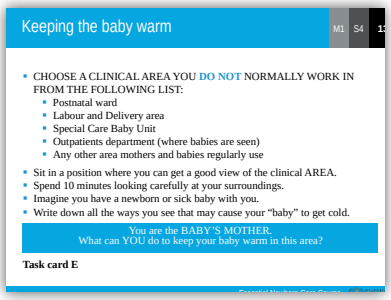
The session

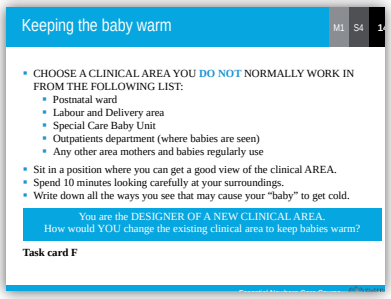
1. Meet in the classroom. Begin the session with the objectives, then:
2. Divide the class into pairs.
3. Give each pair 1 Task Card and ask them to follow the directions written on the card.
4. They should only discuss their particular task with their partner.
5. Send each pair to 1 of the clinical areas.
6. There should be no more than 3 pairs in each area. Each pair in the same clinical area should have a different Task Card.
7. Ask participants to complete this exercise as quietly as possible.
8. Participants should stand if it is not possible to sit.
9. Allow participants 20 minutes for the practical part of the exercise to be completed.
10. RETURN to the classroom

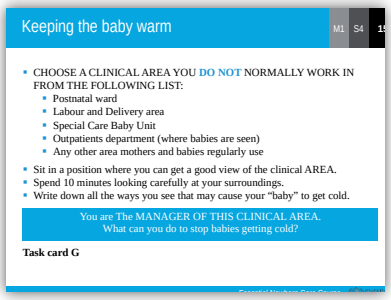
SHOW slide/overheads 13(E), 14(F), 15(G) and 16(H) as they are discussed

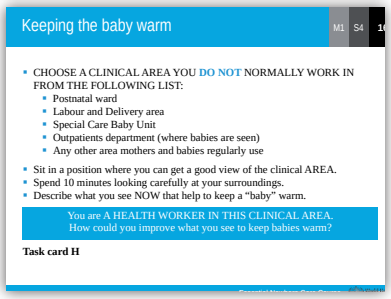
11. Ask the 3 pairs with Task Card E to tell you their findings.
12. Continue in the same way with Task Cards F, G, H and J.
13. Record responses on the flip chart paper.
14. Use SECTIONS 2, 4 and 5 from the following session outline in your discussion where appropriate.
15. Use slide/overheads from Sections 2, 4 and 5 to illustrate any points you wish to make.

ASK if there are any questions









World Health Organization

Essential newborn care course

Examination of the newborn baby MODULE 2

TRAINING FILE

SESSION 5. Breastfeeding: ensuring a good start

This session should be led by a facilitator who has breastfeeding counselling training.

Objectives

At the end of this session participants will be able to:

- Describe how breastfeeding works;
- Teach a mother the key points to good attachment and positioning;
- Offer help to a mother with a poorly attached and positioned baby.

Session outline

SESSION LENGTH 60 minutes

0:00	Introduce the session	2 minutes
0:02	How breastfeeding works	25 minutes
0:27	The "Breastfeed observation form"	4 minutes
0:31	The key points to good attachment and positioning	20 minutes
0:51	Conclusion	9 minutes

Clinical practice preparation

REQUIRED BY FACILITATOR

- Checklist
- Instructions and Task sheet
- PCPNC Guide

REQUIRED BY PARTICIPANT

- Task sheet
- Examination Recording Form (3 copies)
- Breastfeeding Observation form 2 (3 copies)
- Notebook and pen/pencil
- PCPNC Guide (1 copy between 2 participants)
- Name badge

Session preparation

REQUIRED BY FACILITATOR

- Training file
- Slides/overheads 5/1 – 5/16
- PCPNC Guide K3

REQUIRED BY PARTICIPANT

- PCPNC Guide

From Participant's Workbook

- Handouts – Session 5
- Breastfeeding Observation Form 2 (Adapted for class exercise)
- Worksheet –Session 5
- Answer sheets for Session 5 (only to be given after worksheet is completed)

MATERIALS FOR CLASS EXERCISE

- Two baby dolls (more if possible)
- Two model breasts (more if possible)
- 1 large blanket and 2 pillows

(Double the materials if more than 16 participants or class divided into 2 groups

CLASSROOM PREPARATION

Before the session begins rearrange the chairs into a 'U' shape with the facilitator in the front.

REFERENCE MATERIALS

- *Breastfeeding Counselling: A training Course*, WHO (WHO/CDR/93.4)
- *The optimal duration of exclusive breastfeeding. A Systematic Review*, WHO (WHO/FCH/CAH/01.23)
- PCPNC Guide *Pregnancy, Childbirth, Postpartum and Newborn Care: A guide for essential practice*

- *Mastitis: Causes and management*, WHO (WHO/FCH/CAH/00.13)
- *Quantifying the Benefits of Breastfeeding: A Summary of the Evidence*, Linkages, 2002

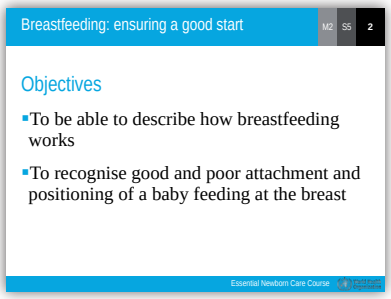
1. Introduce the session

DURATION 2 minutes

MAKE THESE POINTS

- Getting breastfeeding right before a mother leaves hospital will help her succeed in maintaining exclusive breastfeeding for the first 6 months.
- Health professionals have a very important role in helping mothers establish good breastfeeding practices from the time of birth.

SHOW slide/overhead 5/2 – Objectives



In this session we will:

- Describe how breastfeeding works.
- Revise the key points to good attachment and positioning of a baby feeding at the breast.
- Describe how a mother with poor attachment and positioning skills can be helped.

2. How breastfeeding works

DURATION 25 minutes

MAKE THESE POINTS

Understanding "how" breastfeeding works helps explain:

- Why correct attachment and positioning are important to effective breastfeeding.
- The causes of many common breastfeeding difficulties.

How to keep the breasts healthy and how to manage common breast problems.

2.1 Positioning a baby to breastfeed

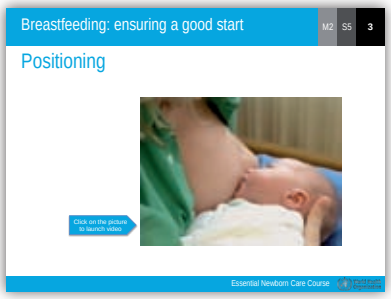
MAKE THESE POINTS

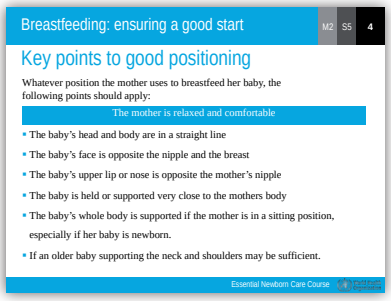
We will begin with **positioning**:

- A mother must be comfortable when she holds her baby. This will help maintain attachment to the breast for the duration of the breastfeed.
- Attachment to the breast has to be correct for successful breastfeeding to take place. However, there is NO one "correct" position for breastfeeding.
- There are many different positions that a mother can use in different situations.
- We must not be rigid about positioning. If a baby is gaining weight, growing well and is healthy, the mother and baby should continue to feed in a way that is comfortable for the both of them and which maintains good attachment.
- When observing a breastfeed in any position, the following five key points are usually seen:

ASK What are the key points to good positioning?

- Baby's head and body in a straight line.
- Baby's face opposite the nipple and breast.
- Baby's nose opposite the mother's nipple.
- Baby held close to the mother.
- Baby's whole body supported – not only the head and shoulders.





SHOW video clip 5/3

Use ONLY if participants DO NOT KNOW the key points to good positioning.

SHOW slide/overhead 5/4 – Key points to good positioning

DEMONSTRATE **Key points of positioning**

Using a doll and a model breast **DEMONSTRATE** these different points as they are mentioned

- As participants mention each point

OR

- As each point on the slide/overhead is read out by a participant

DISCUSS **any points that were not understood**

- A mother can breastfeed her baby in many different positions. For example: she can lie down on her back or on her side, she can sit in a chair, she can sit cross-legged, she can lean over, and she can even stand up.
- She should feed in a position that is comfortable for her and according to her needs. For example: she may lie down at night or sit on the floor or in a chair during the day.

ASK **Why may a mother use different breastfeeding positions?**

The mother may:

- be recovering from a caesarean section, have a painful perineum, be ill, tired, travelling, relaxing, sleeping or working;
- be suffering from engorged breasts, mastitis, flat or inverted nipples.

Her baby may be:

- small, preterm
- large, heavy
- ill
- have a physical problem or an oral problem (for example: a cleft lip and/or palate).

2.2 Attachment of a baby to the breast

SHOW slide/overhead 5/5 – Good and poor attachment (inside the breast)

MAKE THESE POINTS (but ONLY as you show the title of the slide):

- Some of you may have seen this slide before. Whether you have or not look carefully at what it shows.

First **SHOW** the left side showing good attachment

- This picture shows that the milk ducts[1] are all inside the baby's mouth.

Now **SHOW** the right side showing poor attachment

- This picture shows the milk ducts are NOT inside the baby's mouth.

ASK Which of these babies will get milk?

- The baby in the first diagram on the left.

ASK Now look closer at these two pictures. What are the differences between the ways the babies in these diagrams are feeding?

If participants have any difficulty in seeing the differences, show them the following key points:

- How widely the mouth is open
- The position of the tongue
- The position of the lower lip
- Where the chin is touching the breast
- How much of the areola/nipple area is visible outside of the mouth and where it is visible.

ASK Participants to look at their **Breastfeeding Observation Form 1**.

- In the first clinical practice you had to complete **Breastfeeding Observation Form 1**.
- The questions on this form made you look very closely at how the baby is positioned and attached to the breast and at the feeding behaviour of the baby.

ASK What did you notice about the way the mother held her baby to help it attach at the breast?

- If the mother just turned the baby's head towards her or its whole body;
- If anyone saw a mother turn only the baby's head, ask what the result was – it is probable the baby was poorly positioned;
- Give participants a DOLL to demonstrate what they saw the mother do if it is difficult to explain.

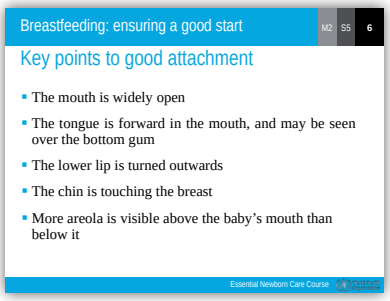
ASK What did the baby do with its arms and hands?

- A baby should have its arms and hands free to touch the breast so as to help stimulate the release of oxytocin that helps stimulate milk flow.

ASK What angle was the head?

- A baby's head should slightly extend to attach at the breast.

1 The milk ducts are also called "lactiferous sinuses", "milk sinuses". Recent findings indicate the ducts dilate making more milk available at the time when the hormone oxytocin is stimulated either by the baby suckling at the breast or by breast massage or hand expression.



ASK Did you see the key points to positioning? And the key points to attachment?

DISCUSS participants' observations, then continue.

SHOW slide/overhead 5/6 – Key points to good attachment

This slide/overhead lists the signs that can be seen in any baby who is well attached to its mother's breast.

SHOW video clip 5/7 – Signs of good attachment

This video clip summarizes what we have been saying about attachment.

ASK What signs will you see when a baby is poorly attached?

- The mouth is not widely opened
- The tongue is far back inside the mouth and definitely would not be seen
- The lower lip is not turned outwards
- The chin is not close to the breast
- As much areola is visible above the baby's mouth as below it
- The lips may be pointing forwards (pursed).

You will often see a mother hold her breast during a feed; usually she uses her thumb and first finger.

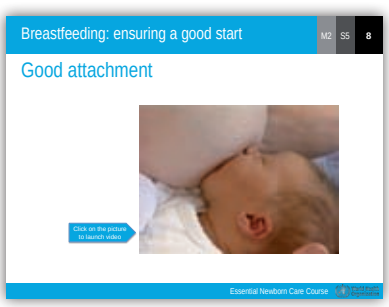
ASK Did you observe any of the mothers holding their breast like this?
ASK Did it have any effect on the baby feeding?

DEMONSTRATE what you mean with a model breast

ASK How can holding the breast like this interfere with good attachment?

- The fingers may prevent the baby's chin from touching the breast.
- The fingers may stop the breast tissue from going far into the baby's mouth.
- The hold may pull the breast out of the baby's mouth.
- The fingers may interfere with good milk flow.

You will see in this video clip that a baby can breathe easily when it is breastfeeding and very close to the breast. Tell mothers they do not need to hold the breast away from the baby. The baby will come away itself from the breast if it has difficulty breathing.



SHOW video clip 5/8 – Good attachment

Participants to turn to K3, look at the section **Teach correct positioning and attachment for breastfeeding.**

This section summarizes what has been covered so far. Read the information under the first three bulleted points.

Classroom exercise

Practicing different positions for breastfeeding a baby

Class to sit in a circle or arrange their chairs so they can see other participants clearly. If there are more than 16 participants, divide the class into two groups, each with a facilitator.

ASK participants who have brought a doll with them to position it as if they are breastfeeding.
ASK them to use a different position to that of their neighbour.

- Go around the class and discuss each position demonstrated.

OR

- If there are only two dolls in the classroom give them to participants at either end of the room. Tell them to position their dolls as if they are breastfeeding.

DISCUSS each position as it is demonstrated.
ASK participants to pass the doll to the person sitting next to them. Ask each participant to use a different position.

- As the positions are demonstrated tell participants the situations when each may be useful.

DEMONSTRATE any positions participants are not familiar with:

- Mother laying down – on her back with her baby placed between her breasts and the baby in other positions on the mother's chest; the mother on her side with her baby alongside her.
- Sitting – on a chair with the mother resting one of her feet on a stool, sitting on a chair with both feet on the floor, or on a bed and cross-legged.
- Standing – with baby carried on the mother's hip.
- Bending over a table/bed or kneeling and bending over on the floor – allowing the mother's breast to fall into her baby's mouth.

MAKE THESE POINTS

The mother or the health worker should look for the signs of good attachment and watch the way the baby suckles. Effective suckling can be seen and heard as slow, deep sucks with pauses in-between and swallowing can be heard. You will see this clearly on the following video clip.

SHOW video clip 5/9 – Effective suckling

ASK Did you notice the pauses when you observed a breastfeed?

- Two or three participants to describe what they observed.
- Ask if they noticed any differences between the behaviour at the beginning of the feed compared to later on in the feed.

- For a baby to attach at the breast, he needs help to reach the mother's nipple area.
- The mother has to position her baby so that he can feed from the breast for up to 30 minutes on each side. During this time the mother must remain quite still. This can be very tiring for her, which is why she must be comfortable and well supported.

ASK **How long did the mothers you observed breastfeed?**
Wait for 3 – 4 responses

- No two babies feed for the same length of time. 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. NEVER interrupt a baby feeding before it has finished, unless there is a very good reason.
- If a mother feels pain when her baby is attached she should remove the baby immediately and start again.
- If the mother shapes her breast with her fingers when she is attaching her baby she should remove her hand once the baby is well attached.

Using a doll, DEMONSTRATE how to detach a baby from the breast.

Give the following information as you demonstrate detachment.

- The mother or carer should slip their little finger into the corner of the baby's mouth to break the suction between the breast and mouth;
- Then gently take the baby away from the breast.

ASK **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.

ASK **Does anyone have any other comments from observing mothers during the clinical practice?**

DURATION 4 minutes

3. The breastfeeding observation form

Instructions for use of the Breastfeed Observation Form 2 (4 minutes)

- Give each participant one copy each of the Breastfeed Observation Form 2 to look at.

MAKE THESE POINTS

- This form summarizes the key points for assessing a breastfeed.
- It will be used to practise observing breastfeeds with mothers and babies during the second Clinical Practice Session.

- NOW it will be used to observe signs seen in the following slides.
- Only two sections, "Body position" and "Suckling", will be used in this session. The other sections of the form can be used to listen to the baby and observe the movements in breastfeeding that cannot be seen on a slide/overhead.

Participants to study the form as the following points are made.

ASK **Are any of the participants familiar with the form or has anyone used it before.**

If they answer YES, ask them:

- Will you describe how you used the form?
- What do the signs in the left- and right-hand columns indicate?

Continue with the following information:

- On the form, the signs are grouped in six sections.

TELL **participants the names of the sections.**

- The signs on the left all show that breastfeeding is going well.
- The signs on the right indicate a possible difficulty.
- Beside each sign is a box ☐
- As the breastfeed is observed mark a tick in the box for each sign observed.
- If NO sign is observed leave the box empty.
- If all the ticks are on the left-hand side of the form, breastfeeding is probably going well.
- If there are some ticks on the right-hand side, then breastfeeding may not be going well. This mother may have a difficulty and may need help.

4. The key points to good attachment and positioning

DURATION 20 minutes

Instructions for showing slides

SHOW **slide/overhead – 5/10 to 5/13**

Show each slide for 10 seconds.

Two participants to come to the screen and ask them:

- Describe and point at what you can see
- What KEY POINT does the slide show?
- Is the attachment or positioning good or poor?

- Use the Breastfeed Observation form 2 (adapted) as a guide.
- **Compliment participants if they identify the slide correctly.**

ASK **the class if they have any comments to add.**

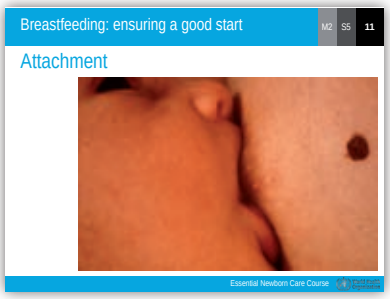
SHOW **slide/overhead 5/10 – Good positioning**

ASK **What signs are clearly visible in this slide?**

- The baby's head and body are in line.
- The baby's face is opposite the breast.
- The baby's head is slightly extended.
- The baby is held close to the mother.
- The head, shoulders and bottom are supported.
- The mother is comfortable and relaxed.
- The mother is sitting cross-legged.
- The baby is well supported on the mother's leg.

ASK What will you say to this mother?

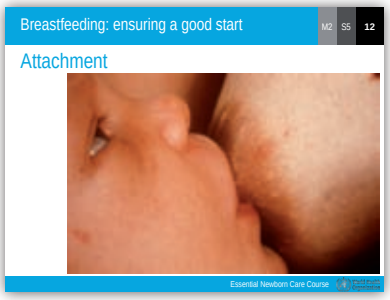
- Congratulate her because her baby is well attached and well positioned.



SHOW slide/overhead 5/11 – Good attachment

ASK What signs are clearly visible in this slide?

- The mouth is wide open
- The lower lip is turned outwards
- The chin is touching the breast
- More areola is visible above the baby's mouth than below it.



SHOW slide/overhead 5/12 – Poor attachment

ASK What signs are clearly visible in this slide?

- The baby's mouth is **not** wide open.
- The lower lip is **not** turned outwards.
- The chin is **not** touching the breast.
- As much areola is visible above the baby's mouth as below it.
- The lips are pointing forwards (pursed).

ASK What advice would you give to this mother?

ASK participants to find PCPNC K3 and tell you the three points on attachment the mother should be given.

- Touch her baby's lips with her nipple.
- Wait until her baby's mouth is opened wide.
- Move her baby quickly onto her breast, aiming the baby's lower lip well below the nipple.

SHOW slide/overhead 5/13 – Poor attachment and positioning

ASK What signs are clearly visible in this slide?

- The baby's head and body are not in line.
- The baby is not well supported.
- The mother's hand may pull the breast out of the baby's mouth.
- The mother is not well supported.

ASK How could you help this mother?

- Remove the baby and begin again
- Turn the baby towards the mother's body so that the head and body are in line
- Support the baby with both arms
- Take the fingers away from the breast.

Instructions for showing slides

SHOW PowerPoint/overhead slides – 5/14 to 5/16

Show a series of slides for 1 minute each.
As each slide is shown ask participants to:

- Decide which signs of good or poor positioning and attachment can be seen
- Decide whether the baby's position and attachment are good or poor
- Fill in the form using a pencil.

Participants to work alone.

After each slide has been shown, discuss the answers.

SHOW slide/overhead 5/14 – Poor attachment and positioning

ASK What signs are clearly visible in this slide?

- The mouth is not wide open.
- The lower lip is not turned outwards.
- The chin is not touching the breast.
- As much areola is visible above the baby's mouth as below it.
- The lips are pointing forward (pursed).
- The baby is far from the mother's body.
- The baby is not held close.
- The baby's head and body are not in line.

ASK What advice would you give to this mother?

- Remove the baby from the breast and begin again.
- Hold the baby close to the mother so that the baby's head and body are in a straight line.
- Hold the baby so the face is opposite the breast.
- Make sure the baby's lip or nose is opposite the mother's nipple.
- Support the baby with both arms.

SHOW slide/overhead 5/15 – Good attachment and positioning

ASK What signs are clearly visible in this slide?

- The baby's head and body are turned to face the mother's breast.
- The baby is well supported.
- The baby's chin is touching the breast.
- The mother looks relaxed and comfortable.
- The baby appears to be well attached and positioned.
- The baby's head and body are in a straight line.

ASK What information will you give to this mother and why?

- Congratulate this mother. Her baby is well attached and positioned.

BUT

- The baby is so well-wrapped that it cannot touch the breast or nipple with its hand and therefore cannot stimulate the release of the hormones prolactin and oxytocin.
- Suggest that she unwraps her baby so that its hands can move freely.

SHOW slide/overhead 5/16 – Poor attachment and positioning

ASK What signs are clearly visible in this slide?

- The baby's mouth is **not** widely opened.
- The baby's chin is **not** touching the breast.
- The baby's bottom lip is **not** turned outwards.
- The baby's lips are pointing forwards.
- There is as much areola seen above the baby's mouth as below it.
- The mother is holding her breast.

ASK Once a baby is well attached, why should a mother take her fingers away from the breast?

- The position of the mother's fingers can prevent the baby's chin from touching the breast.
- The areola and breast tissue can be compressed between the two fingers thereby restricting milk flow.

ASK How could you help this mother?

- The baby has such a thick cover that it is difficult to hold the baby close enough to the breast.
- Remove the thick cover so the mother can hold her baby close to her.
- If the baby needs to be wrapped because it is cold, loosely wrap it in a light-weight blanket leaving its hands free to touch the breast.

ASK if there are any questions.

Next:

- Homework: Questions & Answers
- Clinical Practice:
  - Assessment of a breastfeed
  - Observation of a breastfeed
  - Breastfeed observation form 2

SESSION 6. Communication skills

Objectives

At the end of this session participants will be able to:

- Use listening and learning communication skills.

Session outline

LECTURE LENGTH Approximately 70 minutes + 10 minutes optional

0:00	Introduce the session	5 minutes
0:05	Conducting the examination – the importance of communication skills	25 minutes
0:30	The importance of asking the right questions	15 minutes
0:45	Giving bad news	15 minutes
	Giving bad news (optional)	10 minutes
0:55	Role play 3	5 minutes
0:60	Facilitated group exercise	10 minutes

Clinical practice preparation

REQUIRED BY FACILITATOR

- Checklist
- Instructions and Task sheet
- PCPNC Guide

REQUIRED BY PARTICIPANT

- Task sheet
- Examination Recording Form (3 copies)
- Breastfeeding Observation form 2 (3 copies)
- Notebook and pen/pencil
- PCPNC Guide (1 copy between 2 participants)
- Name badge

Session preparation

REQUIRED BY FACILITATOR

- Training file
- Slides/overheads 6/1 – 6/3
- PCPNC Guide A2 D24 D28 K8 N7
- Role play Dialogue 1 and 2 (2 copies of each)
- 2 sheets flip chart paper and pens

REQUIRED BY PARTICIPANT

- PCPNC Guide

From Participant's Workbook

- Handouts – Session 6
- Worksheet –Session 6
- Answer sheets for Session 6 (only to be given after worksheet is completed)

MATERIALS FOR DEMONSTRATION

- 2 copies of dialogue 1 and 2
- Dressed baby doll
- Soft cover for wrapping the baby
- Weighing scale
- Telephone
- Babies notes

PREPARATION FOR THE ROLE PLAY

The day before this session prepare 2 participants to play the health worker or mother in the 2 role playing exercises. Give them copies of the play beforehand.

REFERENCE MATERIALS

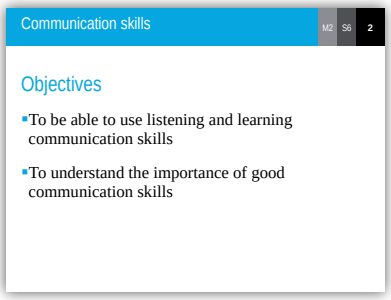
- PCPNC Guide
  Pregnancy, Childbirth, Postpartum and Newborn Care: A guide for essential practice

- Use locally developed information sheets

1. Introduce the session

DURATION 4 minutes

SHOW and read aloud slide/overhead 6/2 – Objectives



MAKE THESE POINTS

- 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 families, our friends, our colleagues, those we care for and the wider world.
- The power of communication through language cannot be overestimated.

ASK Give me some examples of people who very skilfully use language to communicate?

- Politicians, advertisers, teachers, health workers, journalists and media presenters are all good examples.

- Verbal communication (spoken language) can have positive and negative effects on us. It can excite us, frighten us and influence our moods, the way we respond to people and the way we behave.
- Communication is much more than just spoken language; it is all the other ways we relate to the world around us, that is, the "non-verbal" language we use. For example, our facial expressions, our movements and how we use touch. Our "body language" alone can indicate if we are happy, angry, bored, considerate, interested or not interested in something.

DEMONSTRATE using "non-verbal" communication: being happy, sad, angry, bored, in a hurry.

- 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 "skills" of communication to help us interact with new mothers, their family and their friends, and with colleagues.
- We need to become effective communicators. There are a number of simple ways to achieve this.

ASK For example, what kind of things can people say to you that make you feel good?

Accept participant's responses until someone says:

- Compliments
- Praise

ASK What things can people say to you that make you feel bad?

- Accept four or five responses.
- Tell participants to turn to their neighbour and "praise" something about them.

ASK How did that make you feel? Is it easy or difficult to do?

DISCUSS participant's responses.

MAKE THESE POINTS

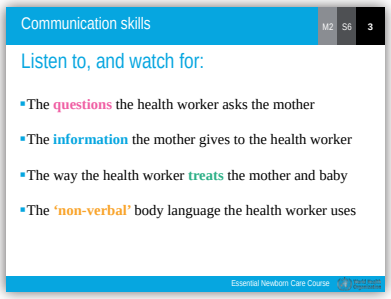
- If we make people feel "good" they are likely to be more confident, more cooperative, accept advice and give us information. "Praising" something about what a mother or father does for their baby can help to gain their confidence. For example, to tell a mother of a sick baby, "You made a good decision to bring your baby to the hospital so that we can help him," will make the mother feel better than saying to her, "Why didn't you bring your baby to us before?"

DURATION 20 minutes

2. Conducting an examination

The importance of communication skills

- You will see two role plays of a health worker carrying out an examination of a baby just before he goes home.
- The examination may be a bit shorter than it would be in reality because it is not the actual examination which is being observed, it is the communication between the mother and the health worker.



SHOW slide/overhead 6/3 – Listen to and watch for

ASK participants to:
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

Turn off projector.

Role play 1

TELL the class to listen and watch
TELL participants or facilitators playing the mother and carer to begin.

Dialogue

The action takes place in a postnatal ward at the side of Shanthi's bed. There are two chairs near the bed.

Health Worker (HW): Do not look up; continue to read the baby's notes as you approach the mother's bed, then look up briefly.

The mother, Shanthi, stands up.
The Health Worker gives instructions and asks the questions quickly, as if she is in a hurry.

HW: "Undress the baby."
HW: (Do not look at the mother.) "How old is the baby?"
Mother: "Almost 1 day."
HW: "Are you breastfeeding?"
M: "Yes."
HW: (Continue to not look at the mother.) "Have you fed your baby in the last hour?"
M: "No."
HW: "Tell me when you feed next time. I need to see you breastfeed. Are you having any difficulty?"
M: "Not really."
HW: "How many times has your baby breastfed in the last 24 hours?" (Looks up at the mother and baby for the first time.)
M: "About 3 times."
HW: (Reach out and feel the baby's feet.) "You can sit down if you wish. Hmm! Your baby feels quite cold. Is your baby satisfied with the feeds?" (Look at the baby's eyes.)

M: "I think so." (Look at the baby's abdomen.)

HW: "Have you given your baby any other foods or drink?" (Turns away from the mother to write in the baby's notes. Look at the baby moving and then feel the head and body.)

M: "No."

HW: "Has your baby passed meconium yet?" (Look at the umbilicus.) A long pause.

M: (Look puzzled.) "I'm sorry. What is that?"

HW: "Black, sticky stool."

M: "Oh! Yes, just after he was born. Is that normal?"

HW: "Yes. How do your breasts feel?"

M: "A bit sore."

HW: (Open the mother's blouse and look at her breasts and feel them.) "Hmm! A bit red, but they are soft. All mothers get sore in the first few days, that's normal" (Looks at her watch, obviously rushed.) "Have you any concerns about your baby?"

M: "Not really."

HW: "Good, come back in three to seven days and again in six weeks time to get your baby immunized. Arrange a date with the nurse."

The HW's mobile telephone rings and she rushes away.

TELL **Participants to work in pairs.**

ASK **participants to write down:**

- Two things you learned about the mother.
- Two things you learned about the baby.
- Any examples of technical language you can remember the health worker used and what the mother did not understand.
- Anything you liked or disliked about the way the health worker behaved towards the mother.

Role play 2

ASK **participants to listen to and watch the mother and health worker again.**

Dialogue

Health Worker (HW): (Looking at Kumar's notes as she approaches Shanthi's bed.)

The mother, Shanthi, stands up.

HW: (Look up at the mother, smile at her and her baby.) "Hello, Shanthi. I'm Dr Lee. Do sit down. I've come to examine Kumar before you go home. Is this a convenient time? What a lovely baby you have."

M: (Nod your head to show this is a convenient time and smile at the HW.)

HW: (Touch the mother gently on the arm (if this is appropriate). Look at the mother as you ask): "Do you mind if I sit down?"

M: (Nods her head.)

HW: "How is Kumar?" (Look at the way the baby moves. Gently touch his cheek.)

M: "He seems well."

HW: (Eye contact with the mother.) "Good! How old is he now?"

M: "Almost 1 day."

HW: "I see he was a good weight when he was born, 3.5 kilograms, and he was well at birth. How are you feeding him now?"

M: "I'm breastfeeding him."

HW: "Good, that will help keep you both healthy. When did you last feed Kumar?"

M: "About half an hour ago."

HW: "Are you or Kumar having any difficulty with feeding?"

M: "Not really." (Then hesitantly): "I'm a bit sore."

HW: "When Kumar feeds next time I would like to watch, if you do not mind, and then maybe we can find out why you are sore."

M: "Thank you. Kumar is my first baby, so I've never breastfed before."

HW: "It takes a few days, sometimes a few weeks, to establish breastfeeding. You seem to be managing very well up to now. How many times has Kumar fed since he was born?"

M: "Three times."

HW: "How does he behave after you have feed him?"

M: "He just goes to sleep."

HW: "Has Kumar had any special foods or drinks since he was born?"

M: "No, not really. He had some honey … but all babies have that, don't they?"

HW: "It is true that a lot of babies are given honey. It is better for Kumar if he only has your milk from now on and nothing else. You should feed him for six months without giving him any other foods. Your milk is all the food he needs right now."

M: "Kumar had quite a long time between his second feed and this last feed. Is that alright?"

HW: "Kumar is only 15-hours-old and is doing very well. Some babies on the day they are born only feed five or six times. After the first day, babies often feed about eight times in 24 hours."

M: "So three times up to now is alright?"

HW: "Yes, that is good. You said your breasts felt a bit sore? May I look at them please?" (Examining the mother's breasts): "Yes, your nipples are red, they must be very sore. We must look at how Kumar feeds, I'm sure we can help him to breastfeed so that you will not get so sore."

M: "Thank you, I will be very happy if you can help me."

HW: (Mobile telephone rings. Look at it and put it away.) "I am sorry about that. May I just examine your breasts?"

M: (Nods.)

HW: (Gently feel both breasts.) "They are soft, which is good. Over the next two days you will probably notice that your breasts may feel fuller and harder. Just keep feeding Kumar as often and for as long as he wants, both in the day and at night, and you won't have any problems. You may also notice that your milk looks thinner and there is more of it, this is normal. Your milk is always just right for your baby."
"Do you have any other concerns about feeding or anything else?"

M: "Not really, except when he stools. (Local terminology, e.g. poos?) It's black. Is that normal?"

HW: "Yes. In the next two days you will notice the colour changes to brown and then to yellow, when it will be very soft as well.

I would like you to bring Kumar back to see me in seven days when you come for your postnatal examination. Can you also make an appointment with the nurse to bring him back in six weeks so that we can give him his second immunization? But bring him back to me at any time if you are worried about him." (Looking in her desk drawer.) "Shanthi, have you been given these two information sheets?" (HW gives Shanthi the "Breastfeeding" and the "Care for the baby after birth" information sheets.)

M: "No, I've not seen them before."

HW: "The form on breastfeeding will help you. The other sheet, on care of your baby, gives you information on everyday care and a list of the 'danger signs'. If Kumar has any of these signs, if he feels cold or too hot or has difficulty breathing, bring him straight to the hospital. I suggest you read the sheets before you go home."

Thank the participants who took part in the role play.

ASK participants to work with their neighbour as before and write:

- Two things you learned about the mother.
- Two things you learned about the baby.
- Any technical terms used.
- Anything you liked or disliked about the way the health worker behaved towards the mother.

DISCUSS the written responses from both scenarios with the class. Emphasize the "non-verbal" communication that took place in the dialogues.

ASK Which Health worker would you prefer to be seen by?
Did you learn anything from the second dialogue between the health worker and the mother, which you did not learn in the first dialogue?

DISCUSS responses from the class.

3. The importance of asking the "right" questions

DURATION 5 minutes

MAKE THESE POINTS

- 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" answers. This type of question is called a "closed" question.

- 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" or "when". These questions are called "open" questions because they provide a person the opportunity to give relevant information.

ASK Were there any differences in the types of questions in the two dialogues between the mother and health worker?

- The first dialogue contained more "closed" questions.

Give some examples from the dialogue.

- It was quite short and the health worker did not learn a lot from the mother.
- The second dialogue contained more "open" questions.

Give some examples from the dialogue.

- It was longer. The mother gave the health worker a lot of useful information.
- It is not simply what kind of questions are asked that can affect the relationships we build up with mothers and their families; it is also the way we behave towards them.

ASK **Were there any differences in the way the health worker behaved towards the mother in the two role plays? Was there a difference in their "body language"?**

DISCUSS **participants' responses.**

DURATION 15 minutes
10 minutes
optional

4. Giving bad news

MAKE THESE POINTS

- Sometimes it is necessary to give a mother or her family bad news. Maybe the baby is ill, he may need to be referred to another hospital, he may have died, or maybe there is a problem with the mother.
- Defining what "bad" news is depends upon what it means to the person receiving the news. Therefore be aware that a health worker may not consider some information as "bad news" but it may have important consequences for a mother or a family. For example, if a baby is jaundiced and needs phototherapy treatment and has to stay in hospital but a mother has to return to her home several days away from the hospital.
- If information we have to give to a mother or family can have negative consequences for them, be aware that the way we communicate the information can help them to accept what has happened.
- Depending upon what the bad news is, if a mother is alone, arrange for a relative or friend to come and be with her.
- Where we give the news is important.

ASK **Where is an appropriate place to give bad news to a mother in a hospital?**

DISCUSS **participants responses**

USE PCPNC Participants to turn to **A2**

- Participant to read aloud the section "Privacy and confidentiality"

ASK **After what has been covered so far in this session how would you approach a mother to give her bad news about her baby's condition?**

- Start first with "non-verbal" communication and then "verbal" communication.
- Put responses on flip chart paper under the two headings: "Non verbal" and "Verbal".
- Include the following points in the discussion:

"Non-verbal" skills to use:
- Being kind and gentle in actions.
- If the mother is sitting down, sit down with her.
- Touch her appropriately.
- Do not leave the mother alone.
- Allow the mother to react in her own way.
- Let her touch or hold the baby.
- Let the mother or father and other members of the family be with the baby.

"Verbal" skills to use:
- Give a simple clear explanation of what is wrong. Do not use technical terms.
- Make sure the mother understands what you are telling her by using "open" questions to encourage her to repeat back to you what you have told her.
- Give her time to ask questions.
- Speak softly.
- Respect her cultural beliefs and customs.
- Ask if there is anyone near to the hospital/clinic who can be with her.
- Express regret.

Role play 3 (optional)

DURATION 10 minutes

Giving bad news

Two trainers/facilitators: One plays the mother and one plays the health worker.

Place: A clinic in the hospital.
Situation: A mother has brought her 4-day-old baby boy for a sick newborn visit.

He has been taken to the emergency room.

Problem: The baby:
- has breathing difficulties with rapid respirations and chest in-drawing;
- feels very hot;
- is not feeding well after the first two days.

The mother:
- Gave birth alone at home.
- She lives a 5-hours' walk away from the hospital.
- She had a long labour.

Scene:
The mother is sitting in the outpatients clinic with other patients.
- A health worker comes to her.

The (bad) news:
- The baby has died.
- Treatment was given.

Instructions to the mother and health worker

- "Mother" to sit in front row of the class with participants as if in clinic.
- Give the "mother" the news about her baby:
  - Where the mother is sitting.
  - Do not sit down.
  - Give the basic information only then leave.
- **ASK** participants to suggest ways to improve how the news is given.
- Give the news to the mother again with suggested improvements from the class
- **DISCUSS** any comments made by the participants.

ASK participants to describe how, in their experience, bad news is given to parents or relatives.

MAKE THESE POINTS

- Throughout the PCPNC Guide, information is given in red, yellow and green boxes.
- Information in the yellow and red boxes means there is something wrong. If the information is in a red box, action is urgent. All the information in these boxes has to be communicated to someone. Often it has to be given to a patient, husband, mother or father, or relative.
- An example can be seen on D24 in the section "If baby stillborn or dead".

USE PCPNC Participants to turn to D24

- Read the section under "If baby stillborn or dead" in the "Treat and advise" column.
- Look at the references to the last three points.
- It can be seen in references K8, D27 and N7 that giving bad news also includes having to think of the consequences of what has happened and dealing with them in the most appropriate way.

USE PCPNC Participants to look at any red box in the Guide and think about the problem and treatment described.

- How would you give the information in that box to a mother or father?
- Are there other references that need to be followed up?
- Now look at any yellow box and do the same.

5. Facilitated group exercise

DURATION 10 minutes

TELL participants they will now practice giving difficult news and asking questions.

- Participants to work in pairs.
- Choose only ONE of the following two exercises.

USE PCPNC

- Participants to look at only one red or yellow box in the Guide. Choose one box:
  - Give the information the box contains to your partner.
  - Take note of any references that need to be followed up.
  - Your partner should role-play either the mother or father.

ASK participants to work in groups of four to practise "open" and "closed" questions.

- One participant to answer the questions;
- One participant to ask five "closed" questions;
- One participant to ask five "open" questions;
- One participant to observe and comment on what they learn about the subject discussed.

Allow each questioner 2 minutes.

ASK questions on any topic. For example:

- What did you do yesterday?
- Describe your home.
- Describe your family.
- What is your favourite music?
- What is your favourite pastime?

- If there is time, swap roles so that another participant answers the questions.

After 5 minutes **ASK**

- How did it feel to answer the questions?
- How did it feel to ask the questions?
- Which type of question gave the fastest answer?
- Which type of question gave you the information you wanted to know?

MAKE THESE POINTS

- Sometimes, when we are busy, it is easier to use "closed" questions because then we can see more people.
- If we really want to get the correct story, we have to allow time for the answers, so "open" questions are more useful.
- It is necessary to practise using a combination of both. Begin to practise in your next clinical sessions.

ASK if there are any questions.

SESSION 7. Examination of the newborn baby

Objectives

At the end of this section, participants will be able to:

- Describe and carry out an examination of a baby soon after birth; before discharge from the facility of birth; during the first week of life at routine, follow-up or sick newborn visit.
- Assess, classify and treat a newborn baby using "Examine the Newborn" J2–J8.

Session outline

SESSION LENGTH 100 minutes – Parts 1 and 2

Part 1 – 35 minutes

0:00	Introduce Part 1	5 minutes
0:05	2 When should a newborn baby be examined?	10 minutes
0:15	3 The examination format	20 minutes
0:35	Break	

Alternative session (clinical area)

Part 2 – 65 minutes

0:00	Introduce Part 2	5 minutes
0:05	How to carry out an examination of a baby	45 minutes
0:50	6 Case studies	15 minutes

Optional Session outline

Part 1 and Alternative Session (see page 17)
SESSION LENGTH 95 minutes

REQUIRED BY FACILITATOR

- Checklist
- Instructions and Task sheet
- PCPNC Guide

REQUIRED BY PARTICIPANT

- Task sheet
- Examination Recording Form (3 copies)
- Breastfeeding Observation form 2 (3 copies)
- Notebook and pen/pencil
- PCPNC Guide (1 copy between 2 participants)
- Name badge

Session preparation

REQUIRED BY FACILITATOR

- Training file
- Slides/overheads 7/1 – 7/25
- PCPNC Guide B2 E8 F5 G2 J2–J8 J10 K3 K7 K12-K14 M1 M4 M6-M7 N2 N6

REQUIRED BY PARTICIPANT

- PCPNC Guide

From Participant's Workbook

- Handouts – Session 7
- Worksheet – Session 7
- Answer sheets for Session 7(only to be given after worksheet is completed)

MATERIALS FOR DEMONSTRATION

- 1 baby doll
- Clock with second hand
- Baby clothes and nappy (diaper)
- 1 warm cover to wrap the baby
- Small bowl of water
- Small piece of cloth
- Container of eye drops or ointment
- Local weighing scales
- Local or PCPNC referral form

REFERENCE MATERIALS

- PCPNC Guide J2–J8 *Pregnancy, Childbirth, Postpartum and Newborn Care: A guide for essential practice*

Part 1

NB: If the Alternative Clinical Session outline is to be used, Part 1 of this session should be completed first.

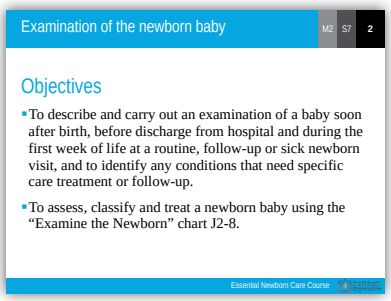
1. Introduce this session

SESSION LENGTH 5 minutes

MAKE THESE POINTS

- Examination of a baby allows us to assess and monitor the baby's condition and promptly treat and give appropriate care as early as possible.
- It is an important part of the overall care contributing to the baby's well-being and survival.

SHOW slide/overhead 7/2 – Objectives of the session



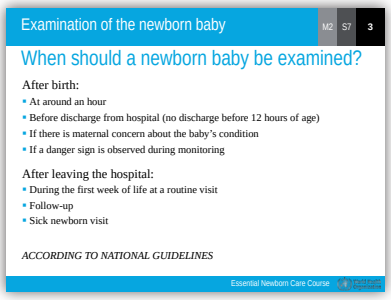
2. When should a newborn baby be examined?

SESSION LENGTH 10 minutes

ASK When should a newborn baby be examined?

DISCUSS Accept 3–4 responses, then

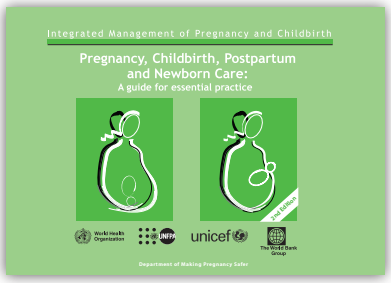
SHOW slide/overhead 7/3 – When should a newborn baby be examined?



USE PCPNC Participants to look at J2, look at the information under heading **Examine the newborn**

This slide/overhead shows when a baby should be examined:

- While he is in hospital
  - Including if a mother is worried or if any danger signs are observed during routine monitoring.
- After discharge.



ASK Why do we want to examine a baby at birth and again at discharge?

Answers should include the following:

At the time of birth

- An overall assessment of the baby's condition
- An initial set of baseline observations
- To provide appropriate care/treatment

Before discharge and thereafter
- To reassess 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

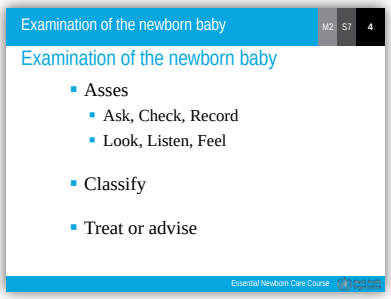
MAKE THESE POINTS
- A baby's condition can change very quickly.
- Make sure the mother is present for the examination. Encourage her to ask about anything she is concerned about.
- Always write the findings in the baby's records.
- A doctor or trained health worker will examine the baby.

SESSION LENGTH 20 minutes

3. The examination format

MAKE THESE POINTS

Examining a baby is a straightforward procedure IF the following four KEY steps are followed:
1 Assess
2 Classify
3 Treat or advise
4 Record the findings



SHOW slide/overhead 7/4 – Examination of the newborn

These steps are exactly the same for ALL of the newborn examinations listed on the previous slide/overhead.

DISCUSS what each step involves following the order on J2.

Assess

ASK	Asking the mother about the baby.
CHECK	Checking the notes of the mother and of the baby.
RECORD	Recording all findings in the baby's notes.
THEN	
LOOK	Carrying out a "visual examination" of the baby, BEFORE touching.
LISTEN	Listening to the baby, particularly breathing sounds – grunting, cry.
FEEL	Feeling the baby for tone, warmth and skin condition
RECORD	Recording all the findings in the notes.

Classify
- After "assessing" the baby by completing all the "steps" discussed, one or more "signs" will be apparent. This will help to classify the baby, in other words, to give a name to the baby's overall condition.
- There may be one or more conditions present, by working through J2 to J8 a detailed diagnosis is built up.
- Each sign fits into a coloured section of the chart, i.e. green, yellow or red, which gives us a clear idea of whether the baby's condition is normal or if there is a problem.

ASK What does a red box indicate?
A danger sign requiring urgent treatment and referral.

Treat and advise

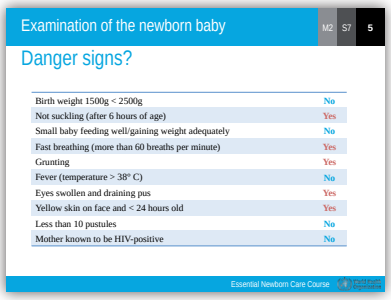
Appropriate treatment, information or advice can now be given. The mother can be taught the most appropriate way to care for her baby.

MAKE THESE POINTS

- Most babies examined will be completely normal.
- To ensure no conditions are left unnoticed the examination must include J2–J8.
- The examination process must be thorough and systematic.
- The whole baby from head to toe and the baby's back must be examined.
- Some babies will have danger signs; it is important that these are recognized and the baby treated immediately and referred urgently to hospital without delay.
- **REMEMBER**: Danger signs are a threat to the baby's life

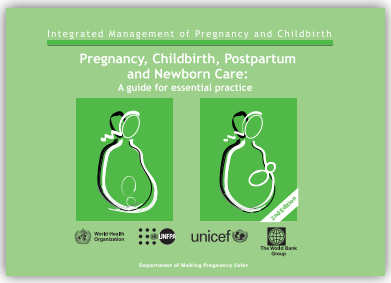
ASK Participants to CLOSE their Guides

SHOW slide/Overhead 7/5 – Danger signs?



- Show each sign in turn.
- Participants to decide if the sign is a danger sign or not.
- Participants to write down "Yes" or "No" in the same order as on the slide.
- After showing all the signs, go through the answers.

USE PCPNC Participants to look again at the list on the slide/overhead and to look through J2 to J8.



Give this information:

- There are 17 danger signs between J2 and J8, but only 6 on the slide/overhead.

ASK Find the other danger signs?

- J3 Birth weight <1500 g, very preterm <32 weeks or >2 months early;
- J4 stopped feeding;
- J6 Yellow palms and soles and >24 hours old;
- J7 slow breathing (less than 30 breaths per minute, severe chest in-drawing, convulsions, floppy or stiff, temperature <35° C or not rising after re-warming, umbilical redness extending to skin, more than 10 pustules or bullae, or swelling, redness, hardness of skin, bleeding from stump or cut, pallor.

ASK What should you do if the baby you are examining shows one of the danger signs just discussed?

- Refer the baby urgently to hospital.
- Refer to the "red" charts for other treatments that may be necessary.

Participants to turn to N2 and N6 or use a local referral form.

- Go through what has to be recorded in the section on the "Baby". A "Referral Record" should always accompany a baby being referred to another ward or hospital.

ASK participants to look quickly at the signs listed in the yellow charts from J2 to J8. Allow 5 minutes for them to do this

ASK participants if they have any questions.

A **BREAK** of at least 5 minutes should be taken between Part 1 and the alternative session or Part 2

Part 2

Continue with this session or the Alternative session Clinical Practice 2. Introduce Part 2. Tell participants that they will carry out an examination of a baby in the next clinical practice session.

4. How to carry out an examination of the baby

SESSION LENGTH 45 minutes

USE PCPNC Participants to find J2 to J8.

MAKE THESE POINTS

- In the examination you are about to see, the health worker will go through **ALL** the sections from J2 to J8. This is necessary to ensure the examination does not miss anything. Even if the baby appears to be completely normal and healthy, you should still go through all the sections in a systematic way.
- Look at the headings on each page.
- **ASK** one participant to read the headings aloud.
- Examine the Newborn; If preterm, low birth weight or a twin; Assess breastfeeding; Check for special treatment needs; Look for signs of jaundice and local infections; If danger signs; If swelling, bruises or malformation
  - These headings cover all the situations which are likely to arise with the newborn baby within the first hours, days and early weeks of its life.
  - J2 to J8 is a valuable working aid.
  - It is made up of flow charts that ensure we carry out a thorough assessment, classify our findings and give treatment and advice according to the baby's needs.

USE PCPNC Participants to look at J5 "Check for special treatment" needs as an example.

- The "Treat and Advise" column has cross references to other treatment and information charts from different sections of the Guide.
- For example:
  - Emilia is RPR-positive
  - She has just given birth to a son, Jivan, who appears well
- Start with the first column (Ask, check, record), and work across the chart.

ASK You have been told that Jivan is well. What other information do the cross references give you which may influence his care and the care of his parents?

- Signs – "Mother tested RPR-positive" can be found on a yellow chart.
- Classify – The baby is at risk of congenital syphilis.
- Treatment and advise – The baby should have one dose of Benzathine Penicillin – drug/dose information on K12.
- The mother and partner need to be treated – drug/dose information on F6.
- Follow-up to take place in 2 weeks.

USE PCPNC Participants to go back to J2.

The coloured flow charts on J2 begin with a green chart.

ASK **What does the colour green tell you about the information in the chart?**

- Green indicates that normal care can be given with appropriate advice for home care and follow-up.

ASK **What do the colours yellow and red tell you?**

- Yellow indicates that there is a problem that can be treated without referral.
- Red indicates there is a DANGER SIGN that requires immediate treatment and in most cases urgent referral to a higher-level health facility.

MAKE THIS POINT

- Section J2 is about the mother's condition and how it may affect the baby's treatment, as with Emilia and Jiv.

We will now look in detail at each part of the examination.

SHOW **slide/overhead 7/6 – Washing hands**

- Remember hand washing before and after examining a baby is critically important in preventing the spread of infections.

Ask, check, record

- The first step in the newborn examination is to "Assess" the baby, beginning with "Ask, check and record".
- Look at first column in J2 as an example.
- The headings written in bold type are instructions on how to get the information listed in the following points, for example, "check maternal and newborn record or ask the mother".
- When a question or piece of information relates to the baby you are examining, work across the page from left to right through each column until "Treatment and Advise".
  - **Give the EXAMPLE of a preterm baby who is 33–36-weeks-old – J2, J3**
  - **Participants to look at all first columns from J2 to J8, noting all instructions in bold type.**

ASK **What information will you find in the mother's notes?**

- Write responses on flip chart paper.
- After 5 or 6 responses, give the following general points if they have not already been suggested.
  - Any pre-existing maternal medical condition and treatment;
  - The mother's condition before the birth;
  - Details of the delivery, e.g. normal, breech, instrumental;
  - If the mother has been transferred, ill or cannot look after her baby.

Participants to turn to J5

ASK **When you are reading the mother's notes, what information will you be looking for that you can see in the first column on J5, and which tells you the baby will require special treatment?**

Any of the following information:

- The mother's membranes ruptured 18 or more hours before delivery and her baby is less than 1 day old.

- The mother has an infection;
  - and is being treated with antibiotics.
- The mother has a temperature of over 38° C.
- 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 2 months ago.

- When finding information in the mother's notes that is relevant, it should be immediately recorded in the baby's notes. Important points are likely to be forgotten if writing the baby's notes is left until the end of the baby's examination.

ASK What information can you ask a mother to give you that MAY NOT be in her notes?

- If she has any concerns about her baby;
- How her feeding is going; and/or
- Information about her family.

ASK What information can be obtained from a baby's notes?

- **Write responses on flip chart paper.**
- **After 3 or 4 responses, give the following points (if they have not already been suggested):**
  - Details of delivery
  - Condition at birth
  - If help was needed with breathing
  - If resuscitation was needed
  - If breastfeeding has taken place
  - Immunizations received
  - Cord and eye care given
  - Urine or meconium passed.
- If this is a second or subsequent examination:
  - Findings from previous examinations
  - Any previous treatments
  - Any referrals
  - Previous treatment.

Look, listen, feel

DEMONSTRATE Scenario

- Health worker examining newborn baby (first examination).
- Mother has a dressed baby, wrapped in a blanket in her arms.
- Demonstrate points as they are discussed below.

- Ask participants to follow on J2 as you work through the examination.
- Continue to "Assess" the baby with "look, listen and feel".
- Use the list in Column 2 (under the heading "Look, listen and feel") as a checklist of the order to carry out the examination on the baby.

- Tell the mother what you find as you examine the baby. Telling her about normal findings will reassure her.

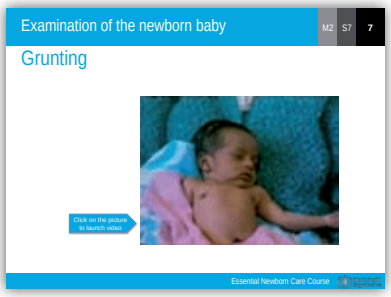
Assess the baby's breathing:

- Gently uncover or undress the baby until you can see the upper chest; keep the rest of the baby covered so that he does not get cold.

ASK **We will start the baby's examination by assessing its breathing. How will we do this?**

- Listen to its breathing:
  Are there any abnormal sounds or "grunting" when he breathes in or out?
- Count the number of breaths it takes in 1 minute.
  Repeat the count if there were more than 60 breaths or less than 30 breaths in a minute.
- Watch how its chest moves:
  Does he move equally on both sides; are there any abnormal movements, such as in6drawing of the chest?

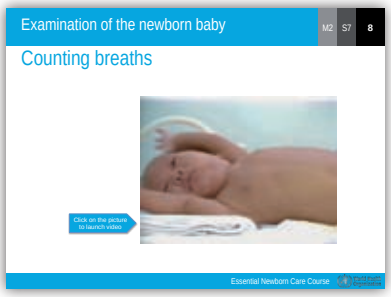
- You will now see some video clips to illustrate the points we have just made.
- The first video is an example of grunting.



SHOW video clip 7/7 – Grunting

The second video is about counting the baby's breaths.

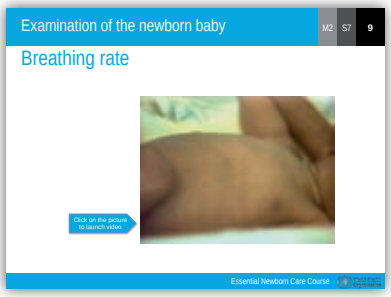
SHOW video clip 7/8 – Counting breaths



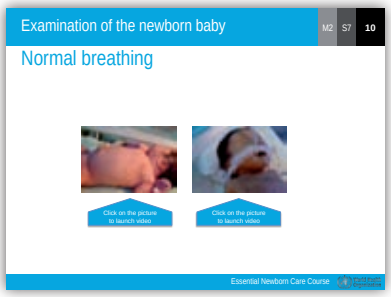
ASK Did you count the same number of breaths as the health worker in the video clip?

The next video clip shows why breaths need to be counted over a full 1-minute period, as some newborn babies have irregular respirations.

SHOW video clip 7/9 – Breathing rate

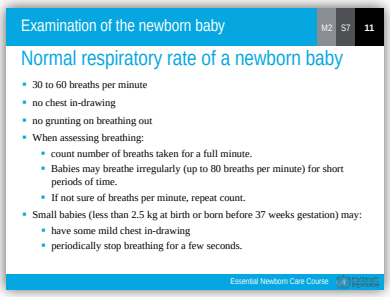


SHOW video clip 7/10 – Normal breathing and chest in-drawing



ASK Look at this video clip. Which baby is breathing normally and which baby has chest in-drawing?
The baby on the right is breathing normally; the baby on the left has chest in-drawing.

SHOW slide/overhead 7/11 – Normal respiratory rate of a newborn baby



- This slide summarizes the information from the video clips.

LOOK at the baby's movements and posture

- Cover the baby's chest.
- Loosen the cloth he is wrapped in so that you can observe his movements clearly.

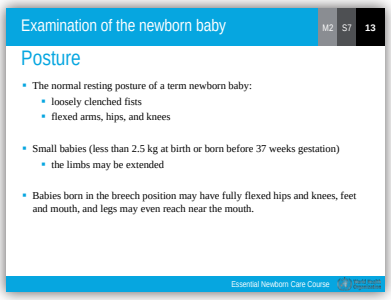
ASK Next we will look at the baby's movements. What are we looking for when we look at the baby's movements?

- The way the baby moves.
  - Does he move his arms, legs and body, and head normally?
  - Does he move his arms and legs equally on both sides?

SHOW video clip 7/12 – Which movements will worry you?

SHOW both videos.

- The movements of the baby on the right are worrying.
- Listen carefully to the commentary.



SHOW slide/overhead 7/13 – Posture

- This slide summarizes the normal resting postures of babies who are term, preterm and born by breech delivery.

Look at the presenting part

- Take the baby's hat off;
- Look carefully at his head.

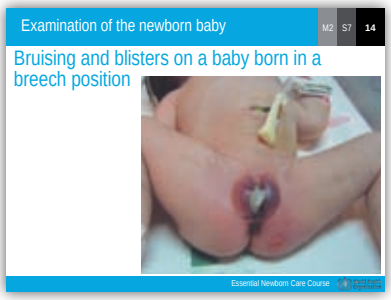
Now we will look at the part of the baby that was born first, that is, the "presenting part". Usually this is the head but it may be the baby's bottom if the baby was born in the breech position.

ASK Why will we look at the baby's "presenting part"?

- To see if there is any swellings or bruising.

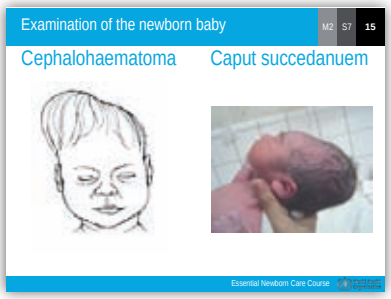
ASK What could happen if the baby is very bruised?

- The baby could become jaundiced.



SHOW slide/overhead 7/14 – Bruising and blisters on a baby born in the breech position

LOOK at the baby's posture; this is typical of a baby born in a breech position.



SHOW slide/overhead 7/15 – Cephalohaematoma and caput succedaneum

- This slide/overhead shows "cephalohaematoma", which resolves slowly over a period of 4 to 5 weeks. Nothing needs to be done.
- The baby may have "moulding" (caput succedaneum) where the head appears misshapen as a result of a head first (cephalic) delivery. The bones of the skull override each other. A mother can be reassured that this resolves in 3 to 4 days.

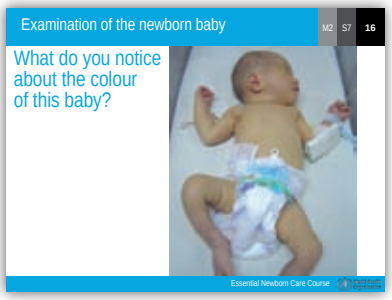
Look at the baby's abdomen

- Undress the baby.
- Keep him wrapped in a soft, warm cloth and expose only the part you want to examine.

ASK Now look at the baby's abdomen. What is so important about looking at the abdomen?

- The colour.
  - The colour of the abdomen is observed because bruising on the face may hide pallor (that is, if the baby is pale it may not be easily seen).
- The umbilicus;
  - Are there any signs of redness, pus or bleeding.

SHOW slide/overhead 7/16 – Jaundice



This baby is jaundiced.

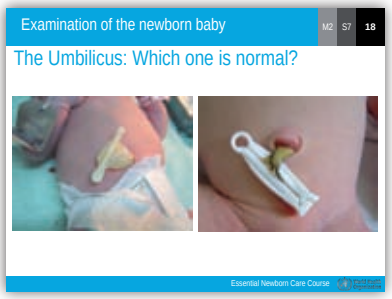
ASK Where will you find information on jaundice?

- J6

SHOW video clip 7/17 – The Umbilicus

- This video clip shows the difference between a normal umbilicus and an umbilicus that will need local treatment as described on K13 of PCPNC.

SHOW slide/overhead 7/18 – The Umbilicus

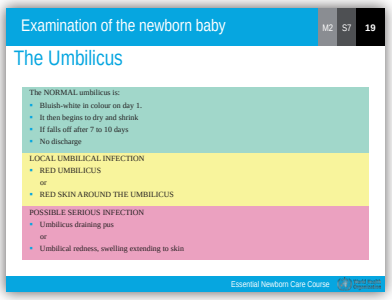


- There is slight reddening of the skin around the umbilicus.

ASK What can you say to the mother?

- Tell her the umbilical stump will fall off in 7 to 10 days.
- Tell her not to bandage the stump.
- Tell her to put nothing on the stump.
- To leave him exposed to the air under loose clothing.
- Wash with clean water and soap if soiled.
- If red or bleeding or draining pus to seek help.
- Do not touch it.

SHOW slide/overhead 7/19 – The Umbilicus



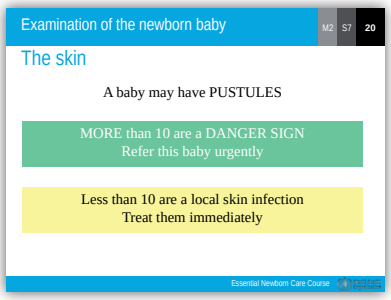
- This slide summarizes important information about the umbilicus.
- The baby with the slightly reddened umbilicus in the previous slide may need local treatment to prevent the infection from getting worse.

Look generally at the baby's skin

- **Uncover only the parts of the baby you want to examine.**
- **Look carefully under the arms and in the groin area, look at the front of the hands and the front of the chest and neck.**
- **Look at the baby's back and legs.**
- **Cover the baby when you are finished.**

MAKE THIS POINT

- When looking at the baby's appearance there are a number of skin conditions that may be seen but which, if the baby is otherwise healthy, should cause no concern.

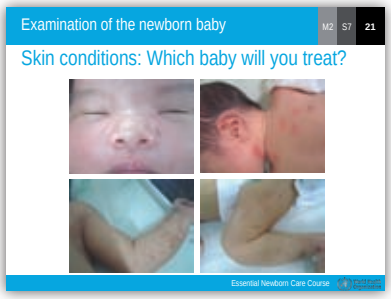


SHOW slide/overhead 7/20 – Skin conditions: Which of these babies will you **treat?**

- The two babies in the top row of the slide have minor skin conditions that are very common in newborn babies and do not need any treatment.
- The baby's arm and leg in the pictures on the bottom of the slide have pustules near the skin folds. Pustules are a **DANGER SIGN**, they indicate a bacterial infection. They are often found under the arms, in the groin area or in the skin folds.
- If you find pustules at an examination, count them.

ASK Look at J7, what will you do if you find 14 pustules?

- Give first dose of 2 IM antibiotics, ampicillin and gentamycin.
- Give treatment for a skin infection.
- Refer baby urgently to hospital.



SHOW slide/overhead 7/21 – The skin

EMPHASIZE the importance of checking the front and the back of the baby.

SHOW video clip 7/22 – Pustules

Look for malformations

LOOK for any malformations

After checking the front of the baby, turn him over and check his back and legs, hands and feet. Make sure the baby stays warm while you are doing this.

Examine a baby with the fingers of your hands together not spread open (**DEMONSTRATE** this to the class).

SHOW video clip 7/23 – Examine the back of the baby

Feel the baby's tone

- Is the baby floppy or stiff; is his tone normal?

Let the baby hold your fingers, lift his arms and legs, lift his hands. Feel the muscle tone as the baby moves.

Check that the baby is warm

Uncover the baby's feet and hands, and chest. Keep the rest covered.

ASK **What are the different ways you can assess a baby for warmth?**

- Feeling the baby to see if he is warm to the touch.
  - Feel its body, hands and feet.
- Using a thermometer.
  - If a baby feels cold or very warm, take its temperature with a thermometer.

Weigh the baby

ASK **Why is it important to weigh a baby?**

Responses should include the following:

- It provides a baseline and is part of growth monitoring (with length, head circumference);
- 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.

ASK **participants to turn to** K7 **and read aloud the first two sections, "Weigh the baby" and "Weigh the small baby".**

EMPHASIZE the frequency of weighing for:

- NORMAL baby –
  - Monthly if birth weight normal and breastfeeding well; every 2 weeks if replacement feeding or treatment with isoniazid.
  - When the baby is brought for examination because he is not feeding well or is ill.
- SMALL baby
  - Every day until 3 consecutive times gaining weight (at least 15 g/day).
  - Weekly until 4 to 6 weeks or age (reached term).

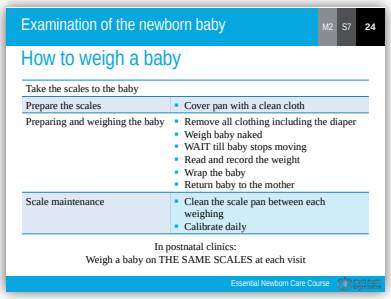
- **ALL** babies should have a birth weight recorded as a baseline measurement.

- Take the scales to the baby. This avoids the baby having to be separated from its mother.

SHOW **slide/overhead 7/24 – How to weigh a baby**

Read the slide.

DEMONSTRATE weighing the baby. Use electronic scales if available. Follow the directions on slide/overhead 7/24



EMPHASIZE these points:
- Keep the baby warm throughout weighing, especially if the baby is sick and or low birth weight.
- If the baby feels cold use skin-to-skin contact to warm it.
- Record the weight in the baby's notes and growth chart/vaccination chart.
- Assess weight gain. Use this information for decision-making and breastfeeding counselling.

USE PCPNC **ASK** **participants to look at the table "Assess weight gain" on K7.**

- If anything unusual is found while examining a baby, ask for a second person to come and repeat the examination, or check on the unusual finding or concern.
- When you have finished the examination DRESS THE BABY; keep the baby warm.

Dress the doll

- If a baby is breastfeeding at the time of the examination, observe and assess the feed. Look particularly at how the baby is attached to the breast and the way the mother positions him to feed. If a baby is not breastfeeding, ask the mother to call a health worker when the baby next wants to feed so that its feeding can be observed and assessed before discharge.

Assess breastfeeding

USE PCPNC Participants to look at J4 "Assess a breastfeed".

ASK **To assess a breastfeed what do you need to ask the mother?**
- The list of questions in the "Ask, Check and Record" column of J4.

ASK **When you observe a mother feeding is it enough to watch a mother for only 2 to 3 minutes?**
- No. At least 5 minutes of a breastfeed should be observed and if possible the full feed.

DEMONSTRATE assessing a breastfeed

Scenario
- Anna is breastfeeding Jojo.
- Health worker assessing breastfeed for newborn examination 5 hours after birth.

- Health worker to follow directions on J4.

- Anna to give the following information:
  - This feed is not comfortable.
  - She feels nipple pain.

- Breastfeeding behaviour:
  - Anna holds her breast with a "scissor hold".
  - Jojo is dressed and wrapped in a thick blanket.
  - Jojo's head and body are not in line.

ASK **How would you classify Jojo?**
- Signs
  - Not well attached or positioned.
- Classify
  - Feeding difficulty.

- Advise K3 – teach correct attachment and positioning.

ASK participants to find J10
- This chart summarizes the care a baby should receive until he is discharged.

ASK **When should Jojo be examined again?**
- Before planning to discharge.

USE PCPNC **ASK** **participants to turn to** M1
This section contains information and counselling sheets.

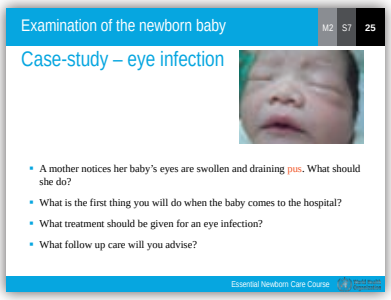
ASK **Which of the forms would be useful for a mother to have when she is discharged?**
- M4 Care of the mother after birth
- M6 Care for the baby after birth
- M7 Breastfeeding

ASK **participants to turn to** K14.

ASK **Should a baby return to a health facility after discharge?**
- Yes.
  - At the postnatal visit, within the first week, preferably within 2 or 3 days.
  - At the immunisation visit at 6 weeks.

ASK 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.

SESSION LENGTH 15 minutes



5. Case studies

SHOW slide/overhead 7/25 – Case study: Eye infection

- This case study is an example of a baby returning to a health facility for a sick newborn visit.

- Participants to work in pairs.
- Show the slide/overhead.
- Participants to answer the questions in writing.
- Include references to all pages used.

USE PCPNC Answers:
- Go to the nearest health facility/hospital as quickly as possible K14.
- Use Quick Check B2, examine the baby using J2 – J8, J6, K12-K13, E8.
- IM single dose of Ceftriaxone or Kananmycin K12.
- Treat eye infection K13.
- Follow-up visits – 2 days K14.

- Record the condition and treatment in the baby's notes.
- Eye infections can happen at anytime, with serious consequences if treatment is not given soon after the infection starts.

ASK participants to refer back to J6.
- You will see that if the baby shows no improvement in 2 days he should be referred urgently to hospital.
- The mother and her partner should be treated for possible gonorrhoea. More information can be found on E8, F5 and G2.

ASK participants to turn to page K13;

DEMONSTRATION of eye care following directions on K13.

Required:
- Doll
- Small cloth
- Small bowl of water
- Container of eye ointment

- A participant to read aloud each point as it is demonstrated.

ASK What is the most important thing a mother should do before and after she cleans her baby's eyes?
- Wash her hands with clean water and soap.

- Remind participants that in the next clinical session they will examine at least one baby each.

ASK participants if they have any questions.

Alternative Session
Part 2 (Clinical practice)

SESSION LENGTH 60 minutes

Session outline

SESSION LENGTH 60 minutes

Following Part 1 of the session "Examination of the Newborn Baby".

Divide the class into groups of 4 participants with 1 clinical facilitator.

Go to the clinical area.

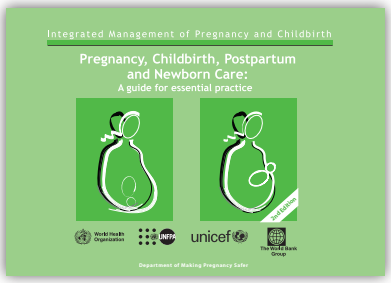
Wash hands BEFORE and AFTER examining a baby

REQUIRED FOR THIS SESSION

- At least 1 newborn baby for each clinical facilitator and group of 4 participants.
- At least 2 well, newborn babies for each pair of participants.
- At least 1 baby from one of the following areas for each pair of participants:
- Neonatal unit
- Mother and baby outpatient clinic.

USE PCPNC

- Each facilitator should demonstrate the examination of the baby using the PCPNC Guidelines J2–J8.
- During the examination the facilitator should explain each step to include information from the Classroom Session, Part 2 of the "Examination of the Newborn Baby".
- Split the group into 2 pairs, one participant to examine a baby and one to observe.
- Each participant should carry out an examination of a newborn baby using the PCPNC Guidelines J2–J8.
- The facilitator should go between the two pairs and observe what is happening, intervening if necessary
- When both groups have examined a baby, the facilitator and the four participants should discuss the examinations, the facilitator adding any further information not yet given.
- If there is still time, participants should continue to work in pairs and examine a baby in either the Neonatal unit or in the clinic and discuss their findings with the facilitator as described above.



World Health Organization

Essential newborn care course

Care of the newborn baby until discharge MODULE 3

TRAINING FILE

SESSION 8. Resuscitation of the newborn baby

Objectives

At the end of this session participants will be able to:

- Assess a newborn baby at birth.
- Perform resuscitation of a newborn baby if needed, using standard equipment.
- Provide after-care if a baby requires help with its breathing at the time of birth.

Session outline

LECTURE LENGTH 60 minutes

0:00	Introduce the session	5 minutes
0:05	Preparation in the delivery room	5 minutes
0:10	What should happen at the time of delivery	20 minutes
0:30	Ventilating the baby	10 minutes
0:40	Follow-up care after successful resuscitation	8 minutes
0:48	Examine the baby	2 minutes
0:50	Summary	10 minutes

Clinical practice preparation

REQUIRED BY FACILITATOR

- Checklist
- Instructions and Task sheet (scenarios)
- PCPNC Guide

REQUIRED BY PARTICIPANT

- Task Sheet
- Scenario cards (optional)
- Examination Recording form (1 copy)
- Breastfeeding Observation form 2 (2 copies)
- Notebook and pen/pencil
- PCPNC Guide (1 copy between 2 participants)
- Name badge

Session preparation

REQUIRED BY FACILITATOR

- Training file
- Slides/overheads 8/1 – 8/21

(The slides/overheads in this session are OPTIONAL. Their purpose is to reinforce the points being made. The slides/overheads MUST NOT replace practical demonstration).

- PCPNC Guide D11 D19 D24 J2–J8 K11 N1 N6 N7
- Flip chart
- Local or PCPNC labour record N4
- Local or PCPNC referral form N2
- Scenario cards

REQUIRED BY PARTICIPANT

- PCPNC Guide

From Participant's Workbook

- Handouts – Session 8
- Worksheet – Session 8
- Answer sheets for Session 8 (only to be given after worksheet is completed)

MATERIALS FOR DEMONSTRATION

- Clock
- 1 resuscitation manikin
- Small bowl of water
- 2 masks: size 0 and 1
- 1 self inflating bag (250-400ml)
- 1 oral suction device and tubing
- Cloth for folding and placing under shoulders
- 2 towels/cloths for drying and warming

REFERENCE MATERIALS

- PCPNC Guide *Pregnancy, Childbirth, Postpartum and Newborn Care: A guide for essential practice*

- Basic Newborn Resuscitation: A practical guide. Geneva, World Health Organization, (WHO/RHT/MSM/98.1).

1. Introduce this session

DURATION 5 minutes

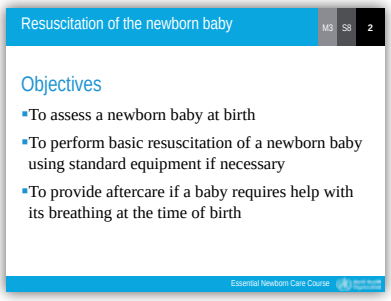
MAKE THESE POINTS

- It is estimated that 1 in 20 babies needs help with breathing at birth, but it is not always possible to know in advance which babies need this help.
- Resuscitation must be anticipated at each birth. Risk factors are poor predictors of birth asphyxia. Up to half of newborn babies who require resuscitation have no identifiable risk factors before birth. It is essential for health professionals who attend the mother at birth to be skilled at resuscitation and know how to recognize babies at risk. They must:
  - anticipate
  - be prepared
  - know what to do in what order, and
  - be able to work quickly.

- Basic resuscitation must begin within 1 minute of life if a baby has breathing difficulties.
- Resuscitation skills are essential to the survival of babies.

A practical session in resuscitation skills using a manikin will follow this session.

SHOW slide/overhead 8/2 – Objectives



During the two sessions you will:

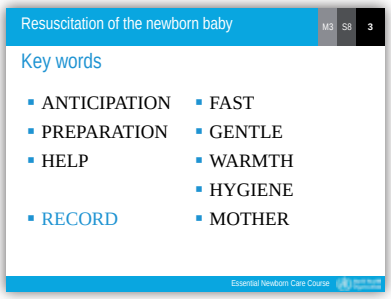
- Learn to assess a newborn baby at birth.
- Perform basic resuscitation of a newborn baby using standard equipment if needed.
- Provide after-care if a baby requires help with his breathing at the time of birth.

MAKE THESE POINTS

- Once the umbilical cord is clamped and cut at birth a baby must start breathing by himself since the oxygen he has been receiving from the cord has stopped.
- For many babies this is not a problem.

ASK **Which babies have difficulty with breathing at birth?**

- Any baby may have breathing difficulties at birth, therefore, it is important for health care staff attending births to anticipate and be prepared for this eventuality.
- An increased risk of breathing problems may occur in babies who are:
  - preterm
  - born after a long traumatic labour
  - born to mothers who received sedation during the late stages of labour.

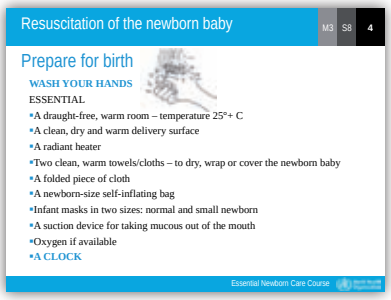


SHOW slide/overhead 8/3 – Keywords

- The keywords are a useful way of remembering the key points to resuscitation.
- A participant to read the key words aloud.

DURATION 5 minutes

2. Preparation in the delivery room



SHOW slide/overhead 8/4 – Preparing for birth

SHOW each point in turn as it is discussed.

MAKE THESE POINTS

- It is essential that the delivery room is draught free, warm and at least 25° C. ALL fans must be switched off BEFORE a birth takes place and windows and doors closed.
- Being prepared is vital. Before a baby is born the delivery area must be checked to ensure it is ready. Resuscitation equipment should be within easy reach of where the delivery will take place.
- There must be a clean, dry and warm surface for the delivery. A radiant heater should be available if possible (that is, a heater which warms the air surrounding the baby).

SHOW each item of resuscitation equipment as it is discussed: Bag, mask, suction device, clock, warm and folded cloths.

- A CLOCK with a second hand is required in a prominent position to note time of birth.

- Essential supplies include:
  - Two clean and warm towels or cloths for drying and wrapping or covering the newborn baby
  - A supply of warm towels and blankets nearby
  - A small cloth for folding and placing under the baby's shoulders to maintain an open airway during basic resuscitation (demonstrate appropriate thickness).

- The following items should be available in a health facility and should be included in a delivery pack if a baby is born at home:
  - A newborn size self-inflating bag (250–400 ml)
  - Infant masks in two sizes: normal and small newborn (sizes 0 and 1)
  - A suction device for taking mucous out of the mouth (mechanical or electrical or mouth operated)

MAKE THESE POINTS

- Resuscitation equipment must be cleaned and checked after each delivery and checked again before the next delivery to ensure it is ready for use.
- Broken equipment is dangerous and should be replaced.
- Equipment must be the appropriate size. Paediatric and adult bags and masks cannot be used on babies, who have small and fragile lungs.

- The volume of the bag should be 250–400 ml and generate a pressure of at least 35 cm of water.
- If a mucus extractor is used the trap should be big enough (20 ml) to prevent suction of the fluids going into the resuscitator's mouth.
- A mucus extractor with a bulb is NOT recommended because they are difficult to clean and are a source of cross-infection.
- Suction should not exceed a negative pressure of 100 mmHg or 130 cm water.

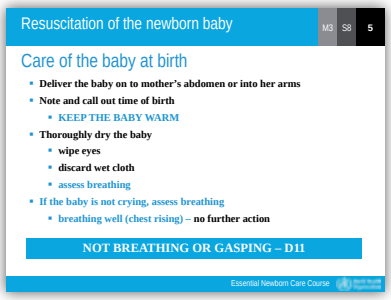
Show a suction device that is safe; then, one with a "bulb" (which should be avoided).

- Resuscitation can be done without having piped oxygen available.
- If oxygen is available it should be used – but do not use 100% oxygen.

3. What should happen at the time of delivery

DURATION 20 minutes

SHOW slide/overhead 8/5 – Care of the baby at birth



Read aloud each point. When you have finished turn off the screen/ projector.

USE PCPNC **ASK** Participants to find **D11**.

MAKE THESE POINTS

- You are already familiar with this page.
- Under the section "Deliver the baby" find the point beginning "place baby on abdomen" .
- Follow the points on **D11** as we demonstrate and discuss them.

Demonstration of a delivery

Scenario

- **Mother delivers a normal baby**
- **Two trainers/facilitators: One plays the mother and the other the health worker.**

Equipment

- **Clock with second hand**
- **Manikin/doll**
- **Bucket of water to wet manikin/doll**
- **Cloths**
- **Towel**
- **Blanket**
- **Infant size bag and masks (2 different sizes)**
- **Suction device**

DEMONSTRATE **each of the following points as it is read out.**

Read aloud the following headings and the points which follow:

- **DELIVER THE BABY**
  - A newborn baby should be delivered onto his mother's abdomen or into her arms.
  - If the baby is not delivered onto his mother's abdomen make sure there is a warm towel or cloth on the bed to put the baby on.
- **NOTE TIME OF BIRTH AND DRY THE BABY**
  - Assess the baby's breathing whilst drying.
  - Assess a baby is breathing normally at birth.
  - Watch 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 in a minute.
  - Keeping a baby warm at birth is a priority. Breathing and warmth go together.
  - Breathing is assessed whilst drying the baby at birth, wet towels or cloths should be replaced and the baby loosely wrapped in clean, dry and warm towels. This way, even if resuscitation is needed, the baby will remain warm.
  - Drying often provides sufficient stimulation for breathing to start in mildly depressed newborn babies.
  - Drying the baby and wiping its eyes will take about 30 seconds, discarding the wet cloth and replacing it with a warm, dry and clean cloth will take about 10 seconds.
- **ASSESS THE BABY'S BREATHING**
  - When a baby's breathing is assessed one of four main behaviours may be seen. These are:

SHOW slide/overhead 8/6 – Baby crying at birth

The baby is crying at birth, like the baby in the picture.

ASK **Does this baby need help with its breathing?**

- No. This baby can be given straightaway to its mother to start skin-to-skin contact and breastfeeding.

ASK **Is suction needed for this baby?**

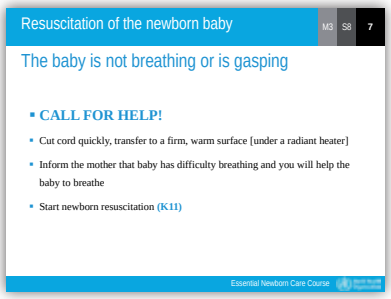
- No. Suctioning is not necessary if the baby is crying.
- Note the "bulb" suction device. This device should be avoided.

The baby is not crying but its chest is rising regularly between 30 to 60 times in a minute.

ASK **Does this baby need help with its breathing at birth?**

- No. This baby needs no help with its breathing as long as its chest is rising and falling equally on both sides (around 30–60 times a minute) and its colour is good.
- This baby can be given straight to its mother for skin-to-skin contact.
- No suctioning is necessary.

SHOW slide/overhead 8/7 – Baby not gasping or breathing



SHOW the title and first line of slide/overhead.
SHOW other points on slide/overhead AFTER questions and class activity.

The baby is gasping.

DEMONSTRATE GASPING; does not breathe regularly and there are long pauses between each breath; or the baby is not breathing at all.

ASK Does this baby need help at birth to breathe?
- Yes. This baby needs immediate help to breathe.
- You MUST start resuscitation within 1 minute of birth if the baby is not breathing or is only gasping for air.

- The baby is NOT breathing
- This baby needs immediate help with its breathing.

DEMONSTRATE To have some indication of how "immediate" the need for help is:

ASK the class to: Close/pinch the end of your nose between your finger and thumb and do not breathe (demonstrate with your first finger and thumb).

ASK How long can you comfortably hold your breath? Look at the clock or your watches.

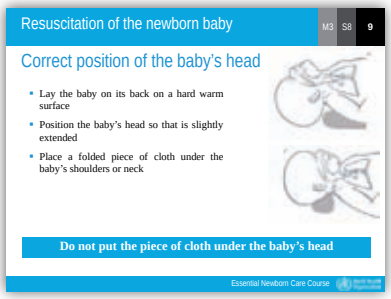
USE PCPNC **ASK** participants to find K11

MAKE THESE POINTS
- This page outlines newborn resuscitation.
- Follow the points on K11 as we discuss them.
- It is absolutely vital to keep the baby warm

DEMONSTRATE resuscitation on the manikin.

If resuscitation is necessary:
- Tie and cut the cord.
- Tell the mother that her baby is having difficulty beginning to breathe and that you are going to help him. Tell her quickly but calmly.
- Remove the wet cloth or towel.
- Lightly wrap the baby in a warm, dry towel or cloth.
- Leave the face and upper chest free.
- Transfer the baby to a warm clean and dry surface, under a radiant heater if possible.

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

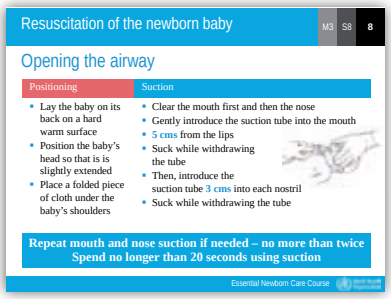


SHOW slide/overhead 8/8 – Correct position of the baby's head

Show each point in turn as it is discussed.

Open the baby's airway – position the head

- Do this by:
  - Placing the baby on its back
  - Positioning the head so that it is slightly extended (to open the airway)
  - Place a folded piece of cloth under the baby's shoulders to help maintain this position
  - The folded cloth should not be too thick as this may cause overextension or flexion, which will close the airway.



SHOW slide/overhead 8/9 – Open the airway

Show each point in turn as it is discussed.

Suction the mouth and the nose

- Suction first 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.
- Use suction while withdrawing the tube and until there is no mucus.

- Repeat suction if necessary, THAT IS, IF THERE IS A LOT OF MUCOUS, AMNIOITIC FLUID OR MECONIUM, but no more than twice and for no more than 20 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.
- Encourage the baby to breastfeed to avoid low blood sugar.
- Monitor the baby every 15 minutes for breathing and warmth, D19.

EMPHASIZE THESE TWO POINTS

- Suction should not be used routinely.
- The procedure JUST DESCRIBED is unnecessary in a baby who starts crying or breathing immediately after birth. Routine suctioning is associated with hazards such as cardiac arrhythmia.

DURATION 10 minutes

4. Ventilating the baby

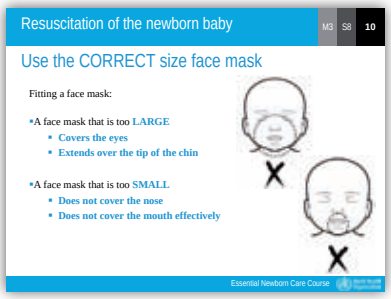
If the baby is still not breathing, VENTILATE.

DEMONSTRATE how to use a bag and mask to ventilate a baby as the following points are made:

How to ventilate the baby

- Recheck the baby's position.
- Slightly reposition the baby so that its neck is extended.
- Put the folded piece of cloth under the baby's shoulders at this time.
- Place a mask of the correct size on the baby's face so that it covers the baby's chin, mouth and the nose.

SHOW slide/overhead 8/10 – Use the correct size face mask

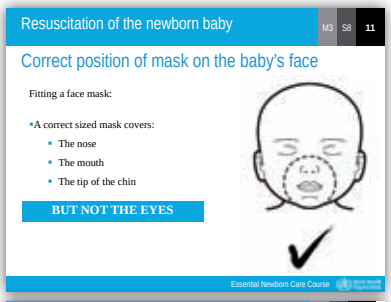


Read aloud the points on the slide/overhead.

Size 1 for a normal weight baby and size 0 for a small baby.

- A mask that is too large covers the eyes and extends over the tip of the chin.
- A mask that is too small does not cover the nose and does not cover the mouth effectively.

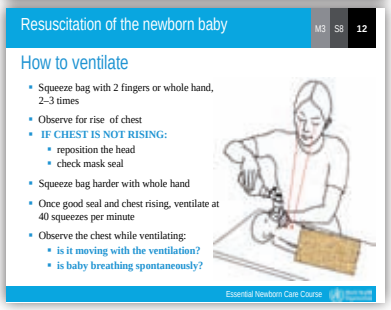
SHOW slide/overhead 8/11 – Correct position of mask on the baby's face



Show slide/overhead to reinforce correct position of mask.

- Make a seal between the mask and the baby's face.
- Hold the mask in place gently but firmly.
- Keep the head in position.

SHOW slide/overhead 8/12 – How to Ventilate



Show points in turn as each is discussed.

- Squeeze the bag attached to the mask with the whole hand (newborn size bag)
- Squeeze and release the bag two or three times.

Watch the baby's chest as the bag is squeezed. Does it rise as the bag is squeezed?

- If the baby's chest IS rising the ventilation pressure is probably adequate.
- If the baby's chest is NOT rising:
  - Reposition the baby's head
  - Check the seal around the mask
  - If it is not good, reposition the mask
  - Squeeze the bag harder using the whole hand.

DEMONSTRATE what happens if you squeeze the bag TOO hard:

- If you squeeze the bag too hard you will collapse the bag and it will not refill with air.
- You may damage the lungs of the baby.

- Make sure there is a good seal around the mask and the chest is rising.
- Use oxygen if available, if not, use room air.
- Squeeze and release the bag (ventilate) at 40 times a minute until the baby starts crying or breathing.
- Count out loud.
- Ventilate for 1 minute and then stop and quickly determine if the baby is breathing spontaneously.

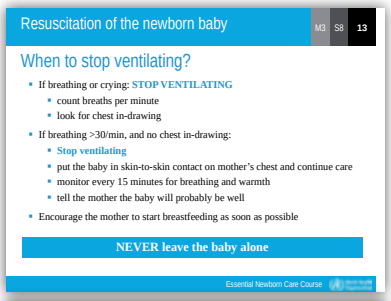
DEMONSTRATE squeezing the bag

As you squeeze and release the bag:

ASK Is this rate fast or slow?

An easy way to count is to use the sequence of numbers: ONE, TWO, THREE in the following way:

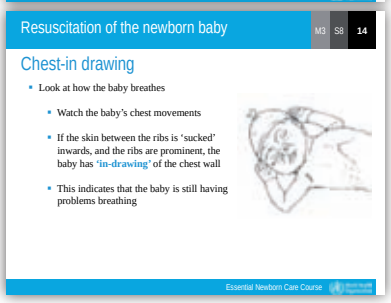
- SQUEEZE (say aloud ONE)
- RELEASE (say aloud TWO, THREE)
- SQUEEZE (ONE)
- RELEASE (TWO, THREE).
- Continue as needed.



SHOW slide/overhead 8/13 – When to stop ventilating

Show each point in turn as it is discussed.

When the baby is breathing or crying, STOP VENTILATION.



SHOW slide/overhead 8/14 – Chest in-drawing

SHOW slide/overhead 8/15 or video clip – to illustrate chest in-drawing

Look at the chest

- Look particularly at how the baby breathes. Watch its chest movements. If the skin between the ribs is "sucked" inwards so that the ribs are very prominent, the baby has "in-drawing" of the chest wall. This indicates that the baby is still having problems breathing.

Count breathing (refer to D19 Monitoring Box)

- Count the number of breaths in a minute.

- If the baby is breathing more than 30 times in a minute and the in-drawing of the chest wall is NOT severe during breathing:
  - Stop ventilating the baby.
  - Place him gently between the mother's breasts with skin-to-skin contact – so that the baby stays warm.
  - Monitor the baby every 15 minutes checking that he is breathing normally and that he is warm.
  - Reassure the mother that her baby will probably be well.

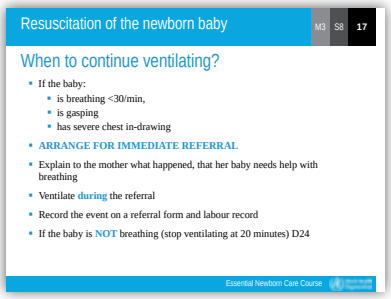
Listen for grunting

SHOW slide/overhead 8/16 – Grunting

Show this video clip to remind participants what grunting sounds like.

- DO NOT leave this baby alone, make sure there is someone with the baby for at least the first hour.
- If breathing is slow – that is, < 30 breaths per minute – or if there is severe in-drawing of the chest, CONTINUE VENTILATING.

SHOW slide/overhead 8/17 – When to continue ventilating?



Show each point in turn as it is discussed.

ARRANGE REFERRAL

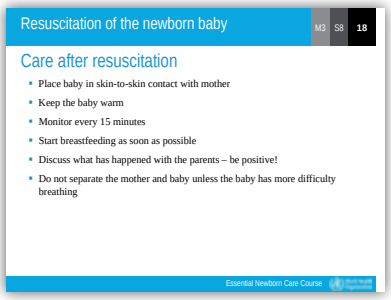
- Arrange (if possible) for this baby to be immediately referred to the nearest neonatal unit.
- Explain to the mother what has happened and what has been done and why.
- Ventilate during referral.
- Later, record the event in the referral form and labour record.

- If the baby is not breathing or gasping after 20 minutes of ventilation using the bag and mask, STOP ventilating. There is nothing more that can be done for this baby.
- Explain what has happened to the mother; be very gentle. Give her supportive care. Make sure someone stays with her. If her relatives are nearby, let them comfort and care for the mother. If the mother wishes to see and hold her baby allow her to do this.
- Record the event N6, N7 or use national forms and records.
- Always fill out an international death certificate N7, D24.

5. Follow-up care after successful resuscitation

DURATION 8 minutes

SHOW slide/overhead 8/18 – Care after resuscitation



DISCUSS each point as it is shown.

MAKE THE FOLLOWING POINTS describing the continuing care and monitoring of a baby after successful resuscitation.

The mother and family

- After resuscitation 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 mother and newborn alone. Monitor them every 15 minutes during the first hour.

The baby

- 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. This will help to prevent hypoglycaemia (low blood sugar).
- Assess the baby's attachment at the breast. Can you hear the baby swallow? Help the mother breastfeed if needed.
- Good suckling is a sign of recovery.

- If the baby is unable to suck effectively help the mother to express colostrum (refer to K5).

- Record what has happened in the baby's notes and in the labour record.
- Record:

- date
- time of the resuscitation
- what has been done
- the outcome.

- Clean and check equipment
- Prepare for the next birth.

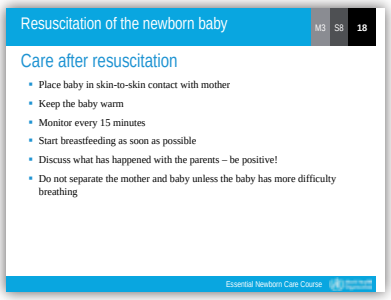
DURATION 2 minutes

6. Examine the baby

- The baby should be thoroughly examined before he is discharged from the delivery room (refer to J2–J8).
- Tell 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 next few days.

DURATION 10 minutes

7. Summary



SHOW slide/overhead 8/19 – Steps in resuscitating a newborn baby

Summarize the steps in resuscitation with this slide/overhead.

MAKE THESE POINTS

- Record what has happened as soon as possible after the baby is stable and with the mother.

USE PCPNC Participants to turn to Section N

- Keeping records of events that occur at the time of delivery and in the immediate period afterwards can be vital.
- The information is important if a baby needs to be referred or becomes sick in the next few days.

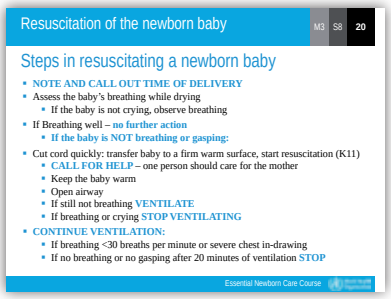
ASK participants to look at the following forms:

- Labour record – Newborn section N4
- Postpartum record – N6
- Referral record – Baby N2
- Death Certificate – N7

ASK participants to read the second point on N1

- READ the point aloud
- It is important to look at national or local versions of these forms. They may need some modifications to ensure they include ALL the relevant sections from these forms.
- Discuss the importance of modifying local or national forms to include ALL the relevant sections from these forms.

SHOW slide/overhead 8/20 – Steps in resuscitating a newborn baby



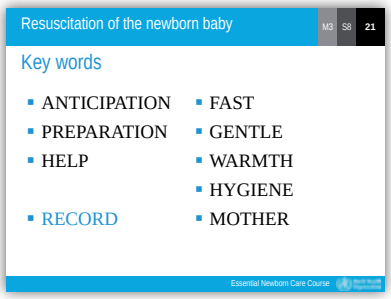
Use slide/overhead to reinforce the steps in resuscitation

DEMONSTRATE to summarize session

- One person to time resuscitation, tidying up and recording events
- The trainer to demonstrate, in real time, using the manikin, the sequence of events as taught above: From delivery to placing the baby in skin-to-skin with its mother.

DISCUSS the time it took to complete the resuscitation and tidy up. Record the events and leave the area ready for the next delivery.

SHOW slide/overhead 8/21 – Key words



- Remember these key words (read them out).
- REMEMBER: Immediate and effective implementation of the essential steps to basic resuscitation will establish spontaneous breathing in more than 75% of infants with birth asphyxia.

ASK if there are any questions.

Recommended reading

- Basic Newborn Resuscitation: A practical guide, WHO (WHO/RHT/MSM/98.1)
- PCPNC Guidelines K11, D11, D19

This section is immediately followed by the facilitated group activity "Practical Resuscitation".

SESSION 9. Routine care of the newborn baby

Objectives

At the end of this session participants will be able to:

- 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.

Session outline

LECTURE LENGTH 90 minutes

0:00	Introduce the session	5 minutes
0:05	The postnatal environment	10 minutes
0:15	Everyday care of the baby	50 minutes
0:65	Danger signs and treatment	10 minutes
0:75	Preparing for discharge	15 minutes
	Case studies (optional)	

Clinical practice preparation

REQUIRED BY FACILITATOR

- Checklist
- Instructions and Task sheet
- PCPNC Guide

REQUIRED BY PARTICIPANT

- Task sheet
- Examination Recording form (1 copy)
- Breastfeeding Observation form 2 (2 copies)
- Notebook and pen/pencil
- PCPNC Guide (1 copy between 2 participants)
- Name badge

Session preparation

REQUIRED BY FACILITATOR

- Training file
- Slides/overheads 9/1 – 9/16
- PCPNC Guide D27 J2–J8 J10 K2–K4 K9–K14 M1 M4–M6

REQUIRED BY PARTICIPANT

- PCPNC Guide

From Participant's Workbook

- Handouts – Session 9
- Breastfeeding exercise sheet
- Worksheet –session 9
- Answer sheets for Session 9 (only to be given after worksheet is completed)

MATERIALS FOR GROUP EXERCISE

Each group of three participants requires:

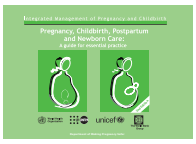
- 1 baby doll (which can be made wet)
- Baby clothes to include; hat, socks, nappy (diaper)
- 1 soft cloth
- 1 small blanket
- Wash cloth
- A small bowl of water
- A cloth to dry the baby
- Cord ties or clamp

PREPARATION FOR GROUP EXERCISE

Before the session prepare 3 separate rooms or areas in the classroom. Each group of three participants requires 1 set of materials listed above. Put the following three posters on the wall in each room or where they can be read easily by ALL participants: Keep the baby warm; Cord care; Hygiene (see Special Instruction Sheets 1, 2 and 3)

REFERENCE MATERIALS

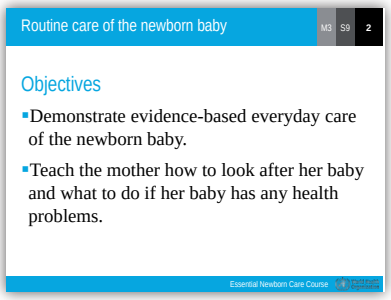
- PCPNC Guide
  Pregnancy, Childbirth, Postpartum and Newborn Care: A guide for essential practice
- Care of the Umbilical Cord: A review of the evidence (WHO/RHT/MSM/98.4).



1. Introduce the session

DURATION 5 minutes

SHOW slide/overhead 9/2 – Objectives



TELL participants the objectives of the session.

MAKE THESE POINTS

- The care and help given to mothers and babies in the first few hours and days after birth, whether in a health facility or at home, should ensure their safety and well-being.
- During this early period all new mothers have a variety of needs:
  - They need time to get to know their babies and time to rest.
  - They need to know what care to give to their baby and how to carry out the care: this is especially true of first-time mothers.
  - They need to know what to do if their baby is not well.

- The majority of mothers and babies who receive their initial care in hospital usually stay for a very short time after birth, unless the baby requires special treatment.
- During the time they are in hospital, health workers provide routine care and in addition they must prepare mothers and babies for discharge and beyond.
- This includes teaching the mother how to look after her baby and how to recognize and respond to early warning signs that indicate her baby needs help.

MAKE THESE POINTS

- The care a mother and baby needs can be divided into four sections.
  - The postnatal environment
  - Everyday care of the baby
  - Looking for danger signs and giving treatment
  - Preparation for discharge.

2. The postnatal environment

DURATION 10 minutes

SHOW slide/overhead 9/3 – The postnatal environment

MAKE THESE POINTS

- Around the world, postnatal facilities look very similar, as can be seen in the slide/overhead. But some important aspects of the environment which should be exactly the same wherever the mother and baby are being cared for.

Exercise

- Participants to work in pairs.
- Each question to be answered before continuing to the next question.

- Show each part of the slide/overhead in order
  - First show the picture on the slide/overhead and ask the question
  - After discussing the answer, show the answer on the slide/overhead
  - Continue to the next picture and repeat the order as above.

LOOK at the first picture on the slide/overhead.

ASK What does this picture tell you about the temperature of the postnatal environment?

- There is a radiator (heater) in this room. A postnatal room should be kept warm with no draughts from fans, open doors or windows. A minimum temperature of 25 °C is required to help keep a baby warm. This postnatal room is in Estonia where winters are cold and the use of a radiator is necessary to maintain the correct room temperature.

LOOK at the next three pictures on the slide/overhead.

ASK What do these pictures tell you about a mother and her baby or babies?

- A mother and her baby should be kept together from birth, either in bed together or very near each other. This helps the mother to get to know her baby and form an early close, loving relationship (bonding), she can also respond quickly when her baby wants to feed, which helps establish breastfeeding and reduce breastfeeding difficulties.
- When a baby is in a bed or a cot, research has shown that he is safer when he sleeps on his back, so ensure that when you lay him down you put him on his back NOT on his front.

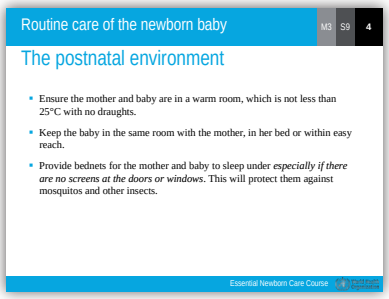
LOOK Look at the last picture on the slide/overhead.

ASK What does this picture tell you about protecting the mother and baby?

- In hot countries a bednet prevents a mother and baby becoming ill from diseases spread by mosquitoes and other insects.

ASK participants if they have any other comments.

SHOW slide/overhead 9/4 – Postnatal environment



- This slide/overhead summarizes the three points, which ensure the environment is safe for a newborn baby.
- Read aloud the 3 points.

3. Everyday care of the baby

DURATION 10 minutes

USE PCPNC Participants to find **J10** "Care of the newborn"
This page outlines the care ALL newborn babies need until they are discharged.

ASK **Looking at the different sections on J10, what are the key areas of everyday care that are important for a newborn baby?**

- Breastfeeding
- Warmth
- Cord care
- Hygiene
- Watching for danger signs.

SHOW slide/overhead 9/5 – Everyday care for the baby

- This slide/overhead illustrates these areas of care.

Breastfeeding

USE PCPNC One participant to read out the four points in the second section on breastfeeding in "Care and monitoring" in **J10**.

SHOW slide/overhead 9/6 – Breastfeeding Care

MAKE THIS POINT **as the slide/overhead is shown:**

- The first point is to ensure the mother is supported to breastfeed exclusively.
- To support mothers to exclusively breastfeed their babies, health workers must be both skilled and knowledgeable. Correct positioning and attachment of the baby to the breast have already been covered in the session Breastfeeding and a newborn baby: Ensuring a good start.
- In addition to teaching mothers about positioning and attachment, health workers must be able to give mothers the correct information about infant feeding.

DURATION 5–10 minutes

Exercise

TELL participants you are going to give them an exercise sheet. The sheet consists of 20 statements and questions containing information, which may be true or false.

Give out the exercise sheet Supporting Exclusive Breastfeeding.

- They must write T for true or F for false after each statement or question.
- Participants must do this on their own.
- Each participant will need a pencil.

TELL participants to close their PCPNC Guides.

Statements and questions

1	The first feed a baby has after birth can be water	F	K2
2	The mother has no milk in her breasts for the first 24 hours	F	K2
3	A baby will not need water or other drinks when it is very hot	T	K2
4	Skin-to-skin contact should begin straight after birth	T	K2
5	The first breastfeed can take place at any time in the first 6 hours	F	K2
6	A mother with other children does not need help with breastfeeding	F	K2
7	A mother who had her baby by caesarean section cannot feed her baby soon after birth. *See Session Care of the baby at the time of birth*	F	
8	A baby can sleep in a nursery at night	F	K3
9	A baby should feed for 5 minutes on each breast on day 1	F	K3
10	A baby needs to breastfeed during the night and during the day	T	K3
11	A baby should feed six times in 24 hours	F	K3
12	Some mothers need more help than others	T	K3
13	The lower lip should be opposite the nipple for good attachment	F	K3
14	The second breast should always be offered	T	K2 K3
15	If the mother is away from her baby, he can be given water or formula	F	K3
16	If a mother thinks her baby has had enough milk she can take him off the breast	F	K2 K3
17	If someone else has to give the baby a feed, milk can be given by bottle and teat	F	K2 K3
18	There is only one correct position for breastfeeding	F	K2
19	In attachment, the nose should touch the breast	F	K3
20	Exclusive breastfeeding means the baby can only feed from the mother's breast	F	K3

- When the class has completed the questions go through the answers.

DO NOT GIVE ANY DETAILS

- Participants to put up their hand if they think the answer is true.
- Count the number.
- Participants to put up their hand if they think the answer is false.
- Count the number.
- When you get to the end tell participants to find K2 and K3 in their Guide.

Participants to read these two pages.

DISCUSS any questions participants may have.

ASK For how long should a mother exclusively breastfeed her baby?

The World Health Organization recommends that a baby:

- Exclusively breastfeeds for 6 months
- Continues breastfeeding along side appropriate complementary feeding until he is at least 2-years-of-age.

MAKE THESE POINTS

- To support a mother to breastfeed for 6 months exclusively, the information in K2 in the section "Counsel on importance of exclusive breastfeeding during pregnancy and after birth" should be given to the mother and her family during pregnancy and again after birth.
- Remind the mother that exclusive breastfeeding can help delay a new pregnancy.

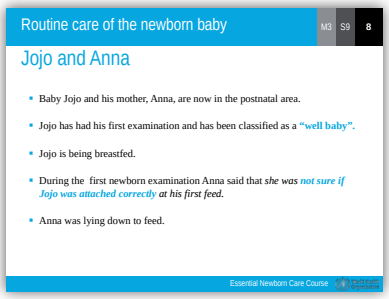
USE PCPNC Participants to turn to D27

- One participant to read aloud the information given under "Lactational Amenorrhoea Method"
- More information can be found in D27.

USE PCPNC Continue with the information on J10

SHOW slide/overhead 9/7 – Breastfeeding Care

SHOW slide/overhead 9/8 – Jojo and Anna



Remind participants that they "met" Jojo in the sessions Care of the baby at the time of birth.

ASK Why should you watch Jojo's next breastfeed?

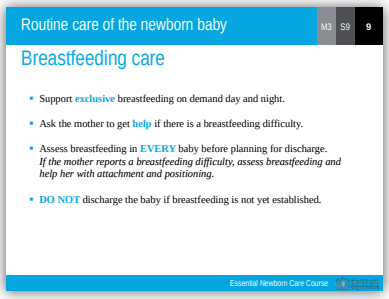
- To be sure Jojo is attached and positioned at the breast correctly. If the mother needs help it can be given early. This will help avoid breastfeeding difficulties later.
- To teach Anna different breastfeeding positions so that she can choose an appropriate and comfortable position depending upon where she is and what she is doing.

ASK **If a mother reports a breastfeeding difficulty what will you do and where can you find information in the Guide to help you?**

- Assess a breastfeed: J4
- Help the mother with attachment and positioning: K2, K3 and J4

ASK **If Jojo is NOT feeding well will it influence when he is discharged?**
Yes, he should NOT be discharged until he is feeding well J10

USE PCPNC Continue with the information on J10



SHOW slide/overhead 9/9 – Breastfeeding care

USE PCPNC Participants to find the chart "Assess Breastfeeding" in J4

TELL **Participants to:**

- **Look at the 'Signs' in the yellow and the red sections, which may delay the discharge of a baby from the health facility.**
- **Look at the treatment and advice given.**

Allow 2 or 3 minutes for discussion of the suggested treatment and advice, and where to find further information in the Guide.

Before discharge, remind a mother of the importance of colostrum. Give her the following information and tell her how her breast milk changes over the first few days after delivery:

- On days 1 and 2, colostrum looks yellow and is thick and is only produced in small amounts. If a mother needs to express at this time a teaspoonful is all that she may get.
- About 2 or 3 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 the mother that her milk continues to be nutritionally correct for her baby.

Everyday care of the newborn baby

USE PCPNC Participants to look at the third section under "Care and monitoring" on J10 beginning "Teach the mother how to care for the baby".

ASK **What should we teach a mother?**

- To keep the baby warm
- To give cord care
- To keep the baby clean (hygiene).

ASK **What should we tell the mother about her baby sleeping?**

- The four points under Sleeping

ASK **When should we teach a mother?**

- It depends upon how long she and her baby are in hospital.
- If discharge is between 12 to 24 hours a mother can be given help and advice on baby care at the time of the pre-discharge examination.
- If discharge is after 24 hours a mother can be given help and advice about baby care as and when her baby needs cord care, has hygiene needs or is sleeping.

Introduce the group exercise

(Facilitated) Group exercise: Care of the newborn

DURATION 30 minutes

Classroom preparation

Group organization

- Divide the class into three groups, each with a facilitator.
- Each group to work in separate areas or in two rooms.
- Participants need the PCPNC Guide.

Materials needed

Keeping the baby warm

- Doll
- Baby clothes, including hat, socks, soft dry cloth and blanket.

Giving cord care

- Doll
- Nappy (diaper)
- Washcloth
- Soap and bowl of water
- Small, clean cloth.

Ensuring hygiene

- Waterproof doll
- Washcloth
- Small clean cloth
- Small bowl of water
- Set of baby clothes.

Instructions

The facilitator should demonstrate to their group each of the following areas of care:

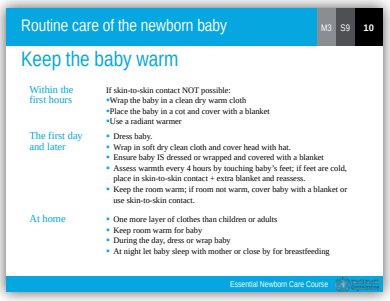
- Keeping a baby warm – follow Special Instruction Sheet 1 (taken from K9)
- Giving cord care – follow Special Instruction Sheet 2 (taken from K10)
- Ensuring hygiene – follow Special Instruction Sheet 3 (taken from K10).

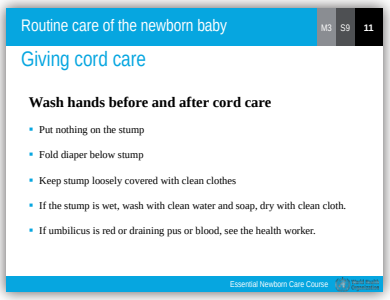
Then, working in groups of three:

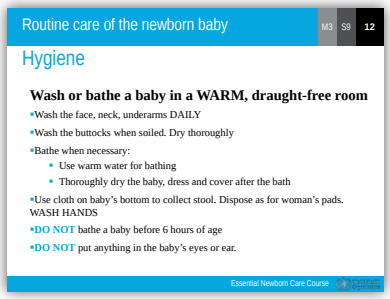
- Participants should each practise playing the role of a health worker teaching a mother about the three areas of care.
- Each small group to be given a doll and materials needed for the task.
- One member of the group should play Anna and one person should be the health worker or carer, and one member should be an observer.

Slides/overheads 9/10, 9/11, 9/12 are OPTIONAL

These slides/overheads can be shown to summarize the three areas of care when the class is together.







DURATION 10 minutes

4. Danger signs and treatment

Groups to be together in PLENARY

MAKE THESE POINTS

- To keep a baby healthy, mothers, carers and health workers have be able to recognize the signs and symptoms that indicate the baby is not well and needs help.
- Responding quickly to a problem can help to save lives.

USE PCPNC Participants to find the fourth section under Care and monitoring on J10

- One participant to read aloud the point on the left of the page under Care and monitoring.
- Different participants to read the four points from the right-hand side of the page under Respond to abnormal findings.

SHOW video clip 9/13 of a baby with breathing difficulty

ASK A mother calls you urgently to see this baby. What do you find and what will you do?

- Examine the baby using the "Examine the Newborn" chart J2–J8
- On J7 – If Danger Signs you note the baby has:
  - Signs – severe chest in-drawing and grunting
  - Classify – possible serious illness
  - Treat and advise.
  - Give the first dose of 2 IM antibiotics.
  - Arrange for the baby to be referred urgently to a higher level hospital.

USE PCPNC Participants to turn to K12, Treat the baby and K14, Advise when to return with the baby. Two participants to read these sections aloud.

K12 Give 2 IM antibiotics

Give first dose of IM ampicillin and gentamicin into thigh with new syringe and needle for each antibiotic.

K14 Refer baby urgently to hospital and During transportation

MAKE THESE POINTS

- Included in the care of the baby between birth and discharge is giving prescribed treatments according to the schedule on K12, and, if necessary, teaching the mother to continue with treatments at home.

USE PCPNC Participants to turn to J5, "Check for special treatment needs"

ASK Which condition in this chart requires the baby to receive daily drug treatment?

- If the mother is diagnosed as having tuberculosis and started treatment less than 2 months before delivery.

ASK What will the baby be given?

- The baby will be given 5 mg/kg isoniazid once a day for 6 months.

DURATION 15 minutes

5. Preparing for discharge

USE PCPNC Participants to look at the section If pre-discharge examination in the green box on J2. One participant to read out the 6 items listed.

MAKE THESE POINTS

- The first five items all need to be covered by the time of discharge.
- The pre-discharge examination is an ideal time to cover the items or check which items have been covered.

Immunization

- The first item is to immunize, if due.

USE PCPNC Participants to turn to K13, Immunize the newborn.

This page gives information about immunizations for the newborn baby.

ASK What immunizations should be given to a well newborn baby?

- Babies 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 are followed.

(If participants need to learn how to give an injection, insert optional session 13 at this point)

Information and counselling sheets

USE PCPNC Participants to turn to M1

MAKE THESE POINTS

- Mothers and babies are in a health facility for a short time. It is impossible for the mother to remember everything she has been taught and told about.
- Section M1 contains Information and Counselling Sheets on several topics. These include individual sheets with key information that can be given to the mother and her partner and family on breastfeeding and the care of the mother and baby after birth.

USE PCPNC Participants to look at AND READ M4, M6 and M7

ASK What other information do these sheets give the mother that has not been covered so far in this session?

- M4
  - The mother's diet
  - Need to take iron tablets
  - Family planning information
  - When the mother should seek care for danger signs.
- M6 A full list of danger signs in the baby requiring help.
- M7 Breastfeeding and family planning.

ASK Do you give information sheets to mothers at discharge in your hospital?

If the answer is "yes" ask what do they include.

ASK What are the advantages of these information sheets?

DISCUSS participants' comments.

MAKE THESE POINTS

- These sheets provide the mother with information to remind her of what she has to do to care for herself and her baby, what to do if her baby shows abnormal signs and clear instructions about when to return for routine visits to the health facility
- For mothers who cannot read it is important to find another member of the family or a friend who is able to read the sheets to the mother.
- These sheets can be usefully included with a mother's home-based maternity records (if they are available).
- Finally, ensure that each baby is examined before he is discharged, after 12-hours-of-age and the findings are recorded.

ASK if there are any questions.

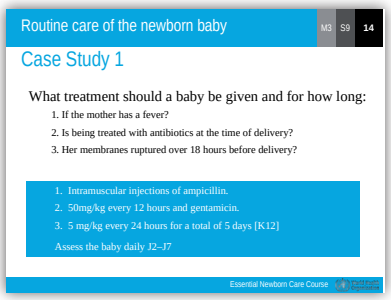
Recommended reading

- Care of the Umbilical Cord: A review of the evidence (WHO/RHT/MSM/98.4).
- PCPNC Guidelines J2–J8, J10–J11 and K12–13.

Case studies (Optional)

Case Study 1

SHOW slide/overhead 9/14 – Case Study 1



- Participants to work in pairs
- Answer the three questions on the slide/overhead.

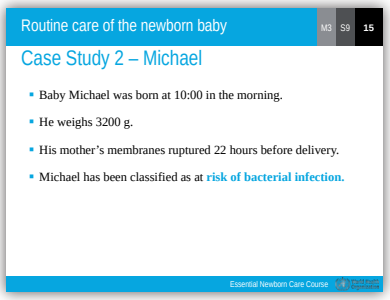
USE PCPNC Start by referring to J2–J7

ASK Which were the main references you used? J5 K12

Show answers when the discussion has finished.

Case Study 2

SHOW slide/overhead 9/15 – Case Study 2



Read aloud the following information:

USE PCPNC Participants to turn to K12

ASK What treatment should Michael be given?

- 2 IM antibiotics for 5 days.

ASK What antibiotics should Michael be given?

- Ampicillin and gentamycin.

ASK What dose of ampicillin will he need and how often should it be given?

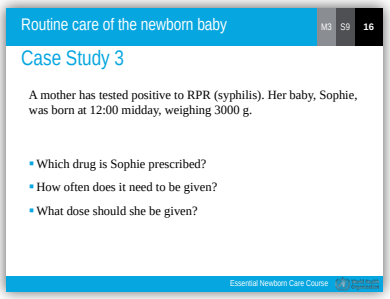
- 160 mg, which is 0.85 ml every 12 hours.

ASK What dose of gentamicin will he need and how often it should be given?

- 16 mg, which is 1.6 ml every 24 hours.
- NOTE: Gentamycin should be carefully checked as different concentrations are available in some countries. This chart is for a concentration of 10 mg per ml.
- ALL treatment must be written in the baby's notes.

Case Study 3

SHOW slide/overhead 9/16 – Case Study 3



Read aloud the following information:

Answers:

- Benzathine penicillin should be given to Sophie.
- A single dose.
- 0.85 ml, which is 170 000 units per ml.
- Record treatment in the baby's notes.

World Health Organization

Essential newborn care course

Special situations MODULE 4

TRAINING FILE

SESSION 10. Breastfeeding and the newborn baby: Overcoming problems

Objectives

At the end of this session participants will be able to:

- Help a mother prevent common breastfeeding difficulties

Session outline

LECTURE LENGTH 60 minutes

0:00	Introduce the session	2 minutes
0:02	The importance of correct attachment and positioning	5 minutes
0:07	How to examine a mother's breasts	5 minutes
0:12	Managing breastfeeding problems	25 minutes
0:27	Case studies	15 minutes

Clinical practice preparation

REQUIRED BY FACILITATOR

- Checklist
- Instructions and Task sheet
- PCPNC Guide

REQUIRED BY PARTICIPANT

- Task sheet
- Examination Recording form (2 copies)
- Breastfeeding Observation form 2 (2 copies)
- Notebook and pen/pencil
- PCPNC Guide (1 copy between 2 participants)
- Name badge

Session preparation

REQUIRED BY FACILITATOR

- Training file
- Slides/overheads 10/1 – 10/13
- PCPNC Guide F5 G8 J2–J9 K3
- References: Mastitis: Causes and Management

REQUIRED BY PARTICIPANT

From Participant's Workbook

- Handouts – Session 10
- Worksheet – session 10
- Answer sheets for Session 10 (only to be given after worksheet is completed)

MATERIALS FOR DEMONSTRATION

- 1 dressed doll
- 1 model breast
- 1 cloth for wrapping the baby

REFERENCE MATERIALS

- PCPNC Guide
  Pregnancy, Childbirth, Postpartum and Newborn Care: A guide for essential practice

- Breastfeeding Counselling: A training Course. WHO/CDR/93.4
- The optimal duration of exclusive breastfeeding. A Systematic Review. WHO/FCH/CAH/01.23
- Mastitis: Causes and managementWHO/ FCH/CAH/00.13
- Quantifying the Benefits of Breastfeeding: A Summary of the Evidence. Linkages 2002

1. Introduce the session

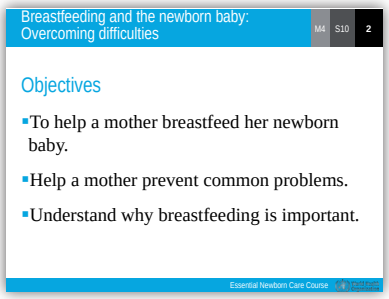
DURATION 2 minutes

MAKE THESE POINTS

- Breast feeding helps to reduce the risk of a baby becoming ill in the first weeks and months of life.
- It is therefore important for a mother to know how to care for her breasts and how to prevent problems from occurring which may stop her breastfeeding and prevent her baby from receiving her milk.

- To keep her breasts healthy 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 only breast milk should be given to her baby for the first 6 months of his life
- when to come for help

SHOW slide/overhead 10/2 Objectives



In this session we will describe how to help a mother to prevent common breast difficulties.

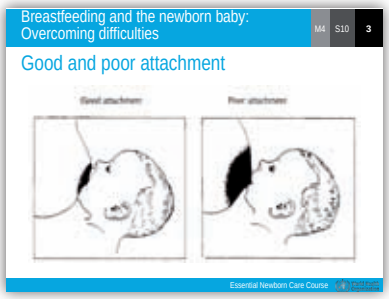
2. The importance of correct attachment and positioning

DURATION 5 minutes

MAKE THESE POINTS

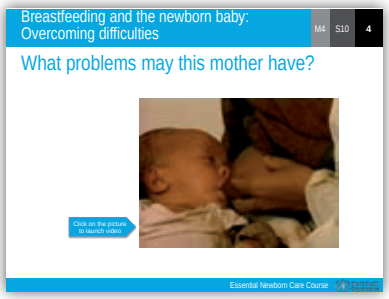
- Proper attachment and appropriate positioning at the breast means a baby can get milk without difficulty and the mother's milk supply can be adequately maintained.
- Attachment at the breast, if correct should not be painful. Some mothers in the first few days after birth however, may describe the sensation of breastfeeding as 'uncomfortable', but this usually passes.

SHOW slide/overhead 10/3 – Good and poor attachment (from the outside)



MAKE THESE POINTS

- This is a similar picture to the one you saw in the first session on breastfeeding. Only this slide/Overhead shows what you may actually see when you watch a baby breastfeed.
- It is clear from these two pictures that if a baby only takes the nipple into his mouth he cannot reach the distended tubes (ducts) where the milk collects. The mother must wait until her baby has his mouth widely opened before she attaches him quickly onto the breast.
- When a baby is not well attached to the breast the baby and the mother may develop a number of problems.



SHOW video clip 10/4 – Poor positioning

ASK **What sort of problems may this baby develop as a result of poor attachment?**

The baby may:
- cry a lot because he is still hungry.
- be irritable
- be slow to gain weight,
- lose weight if he cannot get enough milk for his needs.

USE PCPNC Participants to find J9.

ASK **What sort of conditions may the mother have as a result of poor attachment?**

- The mother may:
  - develop sore and fissured nipples J9
  - develop engorgement J9

- If these conditions are not resolved through regularly removing milk from the breast the mother may develop:
  - Blocked ducts or mastitis J9.
  - A breast abscess.
  - She may produce less milk.

DURATION 5 minutes

3. How to examine a mother's breasts

MAKE THESE POINTS
- It is not necessary to examine a mother's breasts as a part of routine care.
- However, if a mother complains of nipple or breast pain an examination of her breasts should be carried out.
- A postnatal breast examination can be carried out before, during or after a feed depending upon the nature of the problem.

USE PCPNC Participants to look at J9

ASK **Using page J9 describe how you will examine a mothers breasts?**

Ask the mother 'How do your breasts feel?

Look at the breasts, look for:
- Sore or fissured nipples.
- Swelling, shininess, redness of the breast.
- Any scars, rashes or dry skin.

Feel gently for the painful part of the breast.

Measure the mother's temperature.

Observe a breastfeed if not yet done – following J4

USE PCPNC Participants to look briefly at the section on 'Observe a breastfeed' J4

4. Managing breastfeeding problems

DURATION 25 minutes

SHOW slide/overhead 10/5 Sore and fissured nipples

A mother may get sore and fissured nipples if her baby is not attached to the breast correctly.

ASK This mother has come to you complaining of painful nipples when she breastfeeds. How will you help her?

DISCUSS participants responses

Write responses on flip chart paper (if assess/observe a breastfeed is suggested ask participants to turn to and read J4

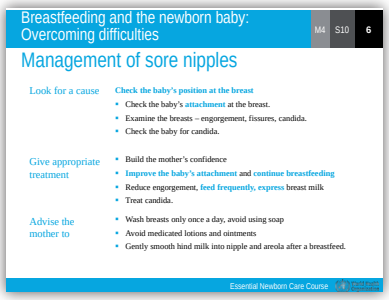
USE PCPNC Participants to turn to J9 – Assess the mother's breasts if complaining of nipple or breast pain.

ASK Describe how you will assess this mother's breasts using the chart on J9

- Start at 'Ask, check, record',
- go to Look, listen, feel
- look at the signs (Nipple sore or fissured)
- classify (nipple soreness or fissure)
- treat and advise

A participant to read the points under the Treat and advise column.
LOOK at K3

SHOW slide/overhead 10/6 –Management of sore nipples



- This slide/overhead summarizes the management of sore nipples.
- Poor attachment and positioning are usually the cause of sore nipples but there are other causes, as you can see on the slide, for example candida.

DISCUSS the slide/overhead as you show each point.

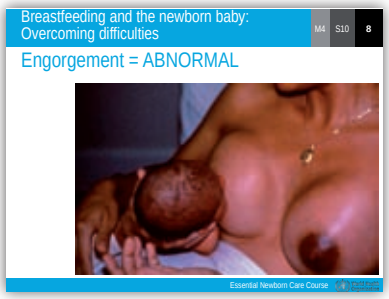
SHOW slide/overhead 10/7 – Full breasts = NORMAL

- A mother may have 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 easily and a baby can breastfeed without difficulty.
- Both breasts are affected.

ASK what other information and advice could you give this mother?

She should feed whenever her baby wants to be fed (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.
- The mother needs to be reassured that this 'condition' is normal and lasts for around 36 to 72 hours.



SHOW slide/overhead 10/8 – Engorged breasts = ABNORMAL

ASK What do you think is wrong with this mother's breasts?

USE PCPNC Look at J9 and assess this mother's breasts using the information on the chart.

- This mother has engorged breasts which can make feeding more difficult – as you can see in this slide/overhead.
- The mother's breasts may become very full and feel hard.
- Engorged breasts may feel hot and feel uncomfortable or painful. Milk will not flow easily and may stop flowing.
- The milk is not being removed effectively or often enough.
- Usually engorgement affects both breasts at the same time, though it can affect only one.
- Engorgement can happen at any time if milk is not regularly removed from the breasts. It is more common in the first few weeks after birth, until the mother's breasts know how much milk to make for the baby's needs.

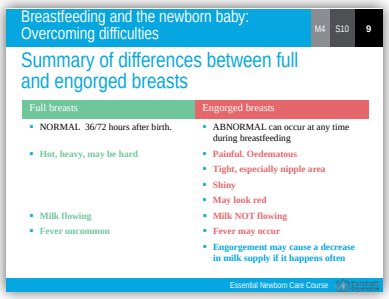
ASK What advice will you give to this mother?

Accept 4 or 5 responses

USE PCPNC Participants to turn to J9. Look at the Treat and Advise column.

MAKE THESE POINTS

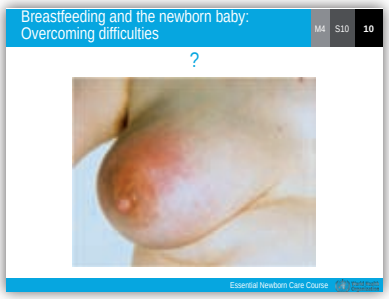
- If the mother has very full or engorged breasts, and her baby has difficulty attaching, advise her to express a little milk to soften the nipple area. This makes it easier for the baby to attach correctly. The expression of milk is discussed in another session.
- It is important that this mother continues to feed on demand and does not restrict the time the baby breastfeeds.
- Breastfeeding more frequently may help the mother, and making sure the baby is correctly attached and positioned is very important.
- Look for a cause:
  - Is the mother leaving for long periods between feeds?
  - Is she restricting the length of the feeds?
  - Is her baby well attached?



SHOW slide/overhead 10/9 – Summary of differences between full and engorged breasts

This slide/overhead summarizes the differences between full breasts and engorged breasts.

SHOW slide/overhead 10/10 – Mastitis



USE PCPNC Participants to look at J9

ASK Using the chart on J9 decide what is wrong with this mother's breast and how you will treat her?

- Mastitis
- The mother should continue breastfeeding
- Assess and correct poor attachment and positioning
- Give the mother Cloxacillin for 10 days
- If in severe pain give her paracetemol
- Reassess in 2 days. If no improvement refer her to hospital

MAKE THESE POINTS

- Mastitis, like engorgment, can happen at any time.
- Mastitis is different to engorgement because it commonly affects only one part of one breast. It appears as a well-defined, red, sore and hardened area usually following the margin of one or two breast lobes – as can be seen in the slide/overhead. It is not common for it to be in both breasts at the same time.

- The mother may feel as if she has 'flu'. She will have a high fever and feel ill.
- Mastitis happens if there is a blocked tube (duct) and the milk does not flow from that part of the breast. It can be caused by infections entering a fissured or damaged nipple, not feeding often enough, tight clothing, or the mother holding the breast during a feed – as we discussed in the last session on breastfeeding.
- It can also be caused by the baby being poorly attached and not removing the milk properly from all parts (lobes) of the breast.
- If no treatment is given and the milk is not removed by feeding or expression the mother may develop an abscess.

ASK Apart from the treatment listed on J9, what other advice will you give to this mother?

After 3–4 responses continue

- The mother must get the milk flowing again.
- She should breastfeed frequently, at least every 3 hours. Using a different feeding position may help to clear the blockage.
- If the mother cannot breastfeed from the sore breast she should express her milk every 3 hours until there is an improvement or her baby can continue to breastfeed from that breast. If necessary, she can give her breastmilk by cup.
- If the mother lives far from the health facility she should begin antibiotics immediately. Otherwise she should follow the advice in the previous two points. Then if there is no improvement within 24 hours the mother should begin a course of antibiotics (refer to J9+F5 for information about the drug treatment).
- If mastitis is not treated quickly an abscess can form which will require surgical drainage.

ASK What advice will you give to a mother who is HIV positive and who has mastitis in her right breast?

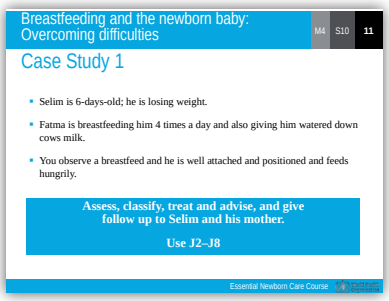
USE PCPNC Participants to look at the information given on J9

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

DURATION 15 minutes

5. Case studies

Case study 1



SHOW slide/overhead 10/11 – Case study 1

Read aloud the information on the slide/overhead

USE PCPNC Participants to use J2 to J8

Follow the instructions on the slide/overhead:

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

Participants to write their answers.

DISCUSS answers with class.

- J4

Signs

- Several days old and inadequate weight gain
- Breastfeeding less than 8 times per 24 hours
- Receiving other foods or drinks

Classify

- feeding difficulty

Treatment/advise

- feed more frequently, day and night.
- Reassure the mother she has enough milk
- Advise the mother to stop giving other drinks/food to Selim

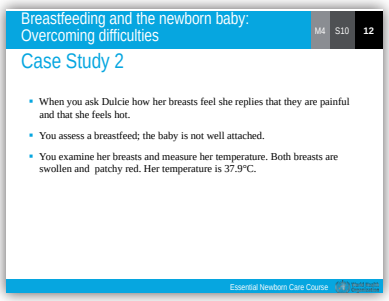
Follow up

- Re-assess at the next feed or follow up visit in 2 days

Case study 2

Participants to work with the person sitting next to them for the NEXT TWO case studies

SHOW slide/overhead 10/12 – Case study 2



Read aloud the information on the slide/overhead.

ASK Using J4, What is wrong with Dulcie and how will you treat her?

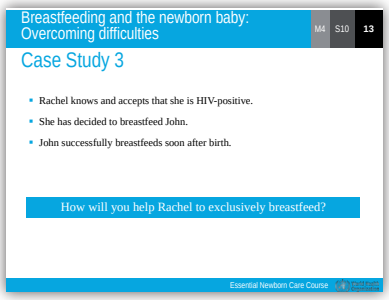
- Dulcie has Engorgement.
- She should be encouraged to continue breastfeeding.
- Teach her correct attachment and positioning
- Advise her to feed more frequently
- Reassess after 2 feeds (1 day).
- If not better teach the mother to express enough breastmilk before the feed to relieve the discomfort.

ASK what other questions may you ask her?

- When did you last feed your baby? And when did you feed before that?
- How does the feed end? Does your baby come off the breast by himself or do you take him off? (Let a baby finish the breast when he is ready)

Case study 3

SHOW slide/overhead 10/13 – Case study 3: Rachel and John



Read aloud the information and the question on the slide/overhead.

DISCUSS the answer:

Rachel will need the same help as any other mother.

- She will need to be supported in her choice to breastfeed
- Her positioning and attachment should be checked at the first feed.
- Her breastfeeding should be assessed at the first examination or when her baby is next ready to feed.
- She should be given help whenever she needs it.

ASK where will you find a reference of the special counselling Rachel will need in addition to the routine advice you will give her?

- G8

USE PCPNC Participants to turn to G8 and read the information in the section 'Give special counselling to the mother who is HIV-positive and chooses to breastfeed'.

To finish the session go around the room and ask each participant in turn to tell you one of:

- the 5 key points to attachment, when these have all been given continue with
- the 5 key points to positioning

ASK if there are any questions

Recommended reading

- Breastfeeding Counselling: A training Course. WHO/CDR/93.4
- PCPNC Guidelines G8 J2–J8 J9 K3

SESSION 11. Alternative methods of feeding a baby

Objectives

At the end of this session participants will be able to:

- Teach a mother to express her milk by hand and stimulate her milk flow.
- Use alternative methods of feeding if breastfeeding is not possible.

A trainer with breastfeeding counselling training should lead this session.

Session outline

LECTURE LENGTH 60 minutes

0:00	Introduce the session	2 minutes
0:02	Why an alternative method of feeding may be needed	5 minutes
0:07	Helping a mother to hand-express her breast milk	20 minutes
0:27	Alternative methods of feeding	10 minutes
0:37	Direct expression of breast milk into the baby's mouth	5 minutes
0:42	Cup-feeding	10 minutes
0:52	How much milk to give to a baby – Case study	8 minutes

Clinical practice preparation

REQUIRED BY FACILITATOR

- Checklist
- Instructions and Task sheet
- PCPNC Guide

REQUIRED BY PARTICIPANT

- Task sheet
- Examination Recording form (2 copies)
- Breastfeeding Observation form 2 (2 copies)
- Notebook and pen/pencil
- PCPNC Guide (1 copy between 2 participants)
- Name badge

Session preparation

REQUIRED BY FACILITATOR

- Training file
- Slides/overheads 11/1 – 11/5
- PCPNC Guide K5 K6
- Flip chart and pens

REQUIRED BY PARTICIPANT

- PCPNC Guide

From Participant's Workbook

- Handouts – Session 11
- Worksheet –session 11
- Answer sheets for Session 11 (only to be given after worksheet is completed)

MATERIALS FOR DEMONSTRATIONS

- 2 dressed baby dolls
- 2 model breasts
- 2 cloths for wrapping babies
- Examples of locally used and available cups
- A spoon which can be used for feeding
- At least 3 examples of containers suitable for expressing breastmilk into.
- A bowl with soapy water
- A kettle or jug of water

PREPARATION FOR HAND EXPRESSION DEMONSTRATION

- Before this session prepare a participant to play the mother.

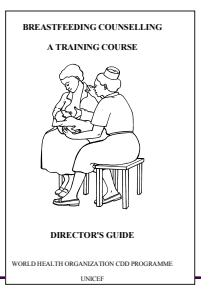
Back massage demonstration

- Ask for a volunteer or prepare a participant before the session.

REFERENCE MATERIALS

- PCPNC Guide *Pregnancy, Childbirth, Postpartum and Newborn Care: A guide for essential practice*

- Breastfeeding Counselling: A training Course (WHO/CDR/93.4).



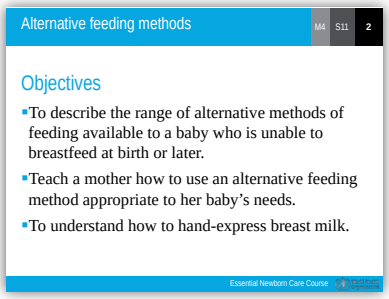
1. Introduce the session

DURATION 2 minutes

MAKE THESE POINTS

- The majority of babies have no difficulty breastfeeding after birth.
- A small percentage of babies for a variety of reasons may not be able to breastfeed at this time. They may need to be temporarily or permanently fed their mother's milk using alternative methods of feeding.
- The mother's own breast milk is the milk of choice when using any alternative methods of feeding.

SHOW and read out slide/overhead 11/2 – Objectives



In this session we will:

- Learn how to help a mother to express her milk and stimulate her milk flow.
- Use alternative methods of feeding if breastfeeding is not possible.

2. Why an alternative method of feeding may be needed

DURATION 5 minutes

ASK What situations may prevent a mother or a baby breastfeeding after birth?

- Write participants' replies on a board or flip chart. As they are written up discuss how each point interferes with breastfeeding.
- The following situations should be included:

The baby is:	The mother is:
Not suckling effectively because he is: ■ preterm ■ ill ■ has an abnormality, e.g. cleft lip and/or palate	**Unable to feed because she is:** ■ ill ■ on incompatible medicines
Separated from his mother: ■ referred to another hospital	**Separated from her baby:** ■ in a different hospital working away from her baby
Not breastfeeding effectively: ■ sometimes attachment and positioning at the breast are not correct from birth and the baby has to relearn how to breastfeed correctly.	**The mother may have or develop:** ■ flat or inverted nipples ■ sore cracked nipples ■ engorged breasts, mastitis or an abscess.

DURATION 20 minutes

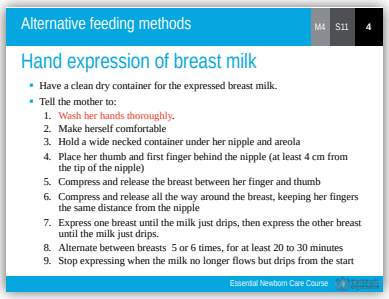
3. Helping a mother to hand-express her breast milk

SHOW video clip 11/3 – Expressing breast milk by hand

Show the clip on the left-hand side first. Give the information in the following four points before showing the clip on the right-hand side.

- A mother's own breast milk is the ideal milk for her baby.
- If breastfeeding cannot begin soon after delivery, encourage the mother to express her milk so that it can be given by an alternative method of feeding.
- The mother should learn to express her milk by herself. A health worker should not need to do it for her unless there is no other way the mother can obtain her milk for her baby.
- Remind the mother that colostrum is thicker than later milk. Because it is thicker, she will notice that it does not spurt from the breast in the first two to four days. You can see this clearly in the first video clip. The mother will also notice that she expresses about a teaspoonful of colostrum at each expression; this is normal.
- The amount of milk the mother expresses will increase quickly after day 2 or day 3 and she will find expression easier and that the milk comes more quickly, in spurts. This can be seen in the second video clip.
- In the first two days after delivery a baby only needs the smaller quantities of breast milk or colostrum the mother has. It is not the quantity that is important at this time but what the milk (colostrum) contains. Colostrum is vital to the baby's health because it contains many protective factors and special growth factors that have a long-term effect on the baby's health and well-being.

The expression of breast milk should be demonstrated in a way the trainer is comfortable with, e.g. using a model breast or demonstrating on her own body.



SHOW slide/overhead 11/4 – How to hand express breast milk

DISCUSS each point in turn.

DEMONSTRATE

- Have a clean container
- Show a selection of containers that can be used for expression.
- Demonstrate preparing a container as described in the following instructions.

Prepare a container for the expressed breast milk:

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

One trainer, one participant/trainer to play health worker and mother
"Mother" to pin model breast to clothing.

The "mother" to follow the instructions given. Tell the mother to:

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

Thank participant.

What to do to help the milk flow

MAKE THESE POINTS

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

ASK What can you suggest we do to help a mother relax so that her milk flows more easily?

- Discuss suggestions given by participants.
- Continue when the following points have been included:
  - Apply warm compresses to the breast (e.g. warm towels).
  - Massage to the back and neck before expressing.
  - Breast and nipple massage.

ASK What do mothers do locally?

- Discuss any local methods participants may know about.
- Encourage participants to demonstrate any local methods of massage if these are suggested.

MAKE THESE POINTS

- Remember to ask the mother if she or her family know of any ways to help her milk to flow.
- It is easy to teach a mother how to massage her breasts and to teach her family to massage her back and neck.

SHOW slide/overhead 11/5 – Different ways to massage the breast

DEMONSTRATE (on yourself or on a model breast) the different ways a mother can massage her breasts, as suggested below.

MAKE THESE POINTS

- Massage or stroke the breasts lightly and very gently. Some mothers find that it helps if they:
  - Roll their closed fist over the breast towards the nipple.
  - Stroke the nipple and areola gently with their fingertips or with a comb or anything that gives a pleasant sensation.

SHOW slide/overhead 11/6 – Back massage

- This slide/overhead shows the position of the hands and thumbs for back massage.
- Back massage can be taught to the mother's husband or other family members and can be used at home.
- You can teach mothers how to do this to each other.

DEMONSTRATE back massage:

ASK for a volunteer from the class.

Give these instructions aloud while demonstrating 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 should hang loose and unclothed.
- 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 massaging for as long as she or the mother wants.

ASK participants to work in pairs and massage each other's backs.

ASK How often should a mother express her milk?

Praise correct answers.

MAKE THESE POINTS

- If a baby is not able to breastfeed the mother should begin expressing her milk as soon after delivery as possible, even if she has had a caesarean section.
- She should express at least 8 times in 24 hours, including at night and during the day: approximately every 3 hours
- She should express as much milk each time as she is able to.
- Freshly expressed breast milk should, whenever possible, be given immediately to the baby.
- If this is not possible, the milk should be stored in a cool, clean and safe place in a container with a well-fitting lid.

ASK How long can expressed breast milk be stored?

Accept a few responses and then give the following information.

Breast milk can be stored:
- At room temperature for a maximum of 6 hours (even in tropical countries).
- It should be stored in the coolest place in the room.

4. Alternative methods of feeding

DURATION 10 minutes

ASK Having obtained the mother's milk, what methods of feeding do you know that a MOTHER can use if breastfeeding is not possible?

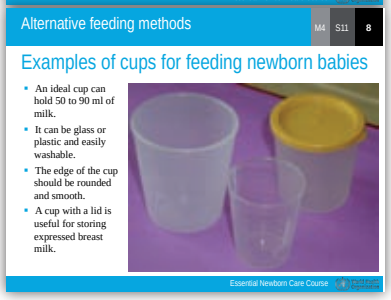
- Write responses on the board/flip chart.
- Praise participants who suggest the three methods at the top of the following list. When these three are on the board, stop writing:
  - Cup
  - Spoon
  - Direct expression of breast milk
  - Bottle

SHOW examples of cups and spoons while the following slide/overheads are shown.

Read aloud the information on the slide/overheads.

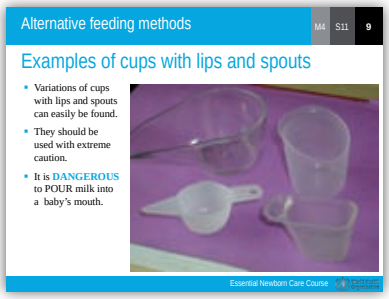
SHOW slide/overhead 11/7 – Alternative methods of infant feeding

SHOW slide/overhead 11/8 – Examples of cups for feeding newborn babies



- Read aloud the information on the slide/overhead.
- Show some examples of cups with handles that can be used.

SHOW slide/overhead 11/9 – Examples of cups with lips and spouts



(NOTE: Only show this slide/overhead if cups with lips and spouts are commonly used or available.)

MAKE THESE POINTS

- The most practical alternative methods of feeding a baby are:
  - Direct expression of milk into the baby's mouth.
  - Cup-feeding.
- These two methods can be safely used at home.

DURATION 5 minutes

5. Direct expression of breast milk into the baby's mouth

SHOW video clip 11/10 – Direct expression of breast milk

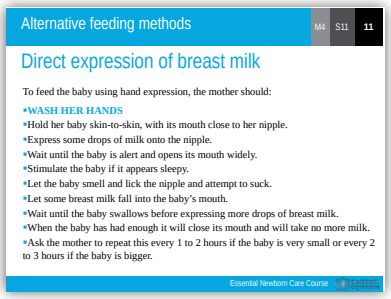
- This short video clip shows a mother expressing breast milk directly into her baby's mouth.

ASK Why is direct expression useful?

- Praise participants who mention any of the following points. Wait for five responses and then continue.
- Direct expression of milk into the baby's mouth is useful because:
  - It can be done before the baby is able to coordinate swallowing, sucking and breathing.
  - It can be used by a weak baby.
  - The mother can do it.
  - It can be done at any time and any place.
  - The milk is at the correct temperature

Also:

- Less contamination
- Needs no equipment
- Encourages frequent contact
- 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 his instinctive responses
- It encourages breastfeeding.



SHOW slide/overhead 11/11 – Direct expression of breast milk

TELL a participant to read aloud the points on the slide/overhead. As the points are read out:
DEMONSTRATE feeding by direct expression using a model breast and doll.

MAKE THESE POINTS

- It is important that the mother has been taught how to hand-express her breast milk so that she can use the same technique for direct expression with her baby.
- The baby should be weighed daily.

USE PCPNC Ask participants to turn to K5 and look at the section "Hand express breast milk directly into the baby's mouth"

- The slide/overhead is the same as what is written in this section except there is an extra sentence on K5. Look at the last bullet point.

ASK a participant to read it out.

- This point is very important. A baby will not take the same amount of milk from the breast or from a cup at each feed. Daily weighing will monitor whether the baby is getting enough milk.

USE PCPNC Ask participants to turn to K6

- To check that this baby is getting enough milk look at the five points under "Signs that baby is receiving adequate amounts of milk".

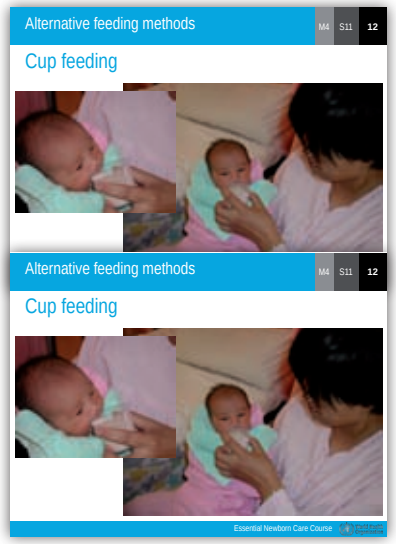
TELL a participant to read aloud the five points, then make this point:
- Babies who are growing adequately are receiving enough milk.

MAKE THIS POINT
- Sometimes direct expression can be combined with cup-feeding.

6. Cup-feeding

DURATION 10 minutes

SHOW slide/overhead 11/12 – Cup-feeding



MAKE THIS POINT
- Cup-feeding is a safe and useful method of feeding breast milk to a newborn baby.

SHOW a small locally obtained cup to the class that could be used to feed a baby

ASK Who should do the cup-feeding?

DISCUSS participant's responses then give this information if it has not been covered already:
- The mother should be taught to cup feed her baby safely. She is usually to be involved in her baby's care.
- If the mother and baby are separated, teach the father or grandmother to cup-feed the baby.
- Health workers should only cup-feed if no one more suitable is available.

ASK Why is cup-feeding such a useful way to feed a baby?
Praise participants who mention any of the following points:
- A cup is a simple piece of equipment and easy to clean.
- It is an easy method of feeding.
- The baby can the amount he wants, in his own time.
- The mother can do it herself.
- There is good eye contact between the mother and baby.

(If the Session "A Small Baby" is taught before this session you do not have to include the following instructions on cup-feeding)

USE PCPNC Ask participants to find "Cup-feeding" in K6

DEMONSTRATE Cup-feeding
- A participant to read aloud each point.
- Demonstrate each point as it is read.

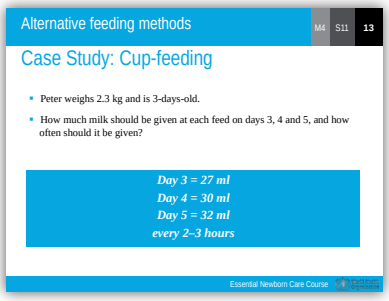
Ask the mother to:
- Measure a quantity of milk into the cup.
- Hold the baby in a semi-upright, sitting position on her lap.
- Hold the cup of milk to the baby's lips:
  - Rest the cup lightly on the lower lip
  - Touch the edge of the cup to the outer parts of the upper lip
  - Tip the cup so that milk just reaches the baby's lips
  - Do not pour milk into the baby's mouth – this can cause aspiration.

You can see in this slide/overhead that the milk in the cup is just at the baby's lips.

- When a baby smells breast milk he quickly becomes alert and opens his eyes and mouth, often he will put his tongue into the milk to start the feed. This does not happen when other fluids, such as formula milk, are given by cup.
  - Once a term baby is used to cup-feeding he sips or sucks the milk into his mouth.
  - Preterm babies take milk into their mouth with their tongue, using a lapping movement. They may use this "lapping" movement for some time before sipping the milk into their mouth. This is normal.
  - Preterm babies do not dribble as much as older babies.
  - Babies who are term normally dribble because they have more active tongue movements than preterm babies.
- When the baby has had enough milk he will close his mouth and refuse any more.

DURATION 8 minutes

7. Case study: How much milk to give to a baby



SHOW slide/overhead 11/13 – Case Study: Cup-feeding

Read aloud the information and question (first two points) on the slide/overhead.

USE PCPNC Ask participants to work in pairs to answer the questions using the section "Quantity to feed by cup" in K6

ASK participants at random for their answers to day 3. Collect four answers then show them the answer on the slide/overhead.
Repeat this for day 4 and day 5 and frequency of feeds.

ASK **How can you help a mother to put the right amount of milk into the cup?**

- The mother expresses her breast milk into a container then has to measure a quantity of milk into a cup.
- The mother is not going to measure the exact amount. If an exact amount is required, a health worker should use a syringe to put the right amount of milk into the cup.
- The mother can measure the milk by using a dessertspoon, which holds approximately 10 ml of liquid.
- If she needs approximately 30 ml she can put three dessert spoonfuls into the cup every 2 to 3 hours.
- The mother can put a little extra milk in each day.
- The baby is likely to take different amounts at each feed.
- Weigh this baby daily.
- A health worker can mark the outside of a small glass jar or cup with a 10 ml scale up to 50 ml. Use an indelible pen to indicate where 30 ml is. This will provide a guide for the mother.

MAKE THESE POINTS

- If a baby does not take the amount required feed him more often or for longer.
- It is normal for a baby to take different quantities at each feed:
  - The mother should keep a record of the baby's 24-hour total intake rather than just the amount taken at one individual feed.
  - It is how much the baby takes over a 24-hour period that is important.
- A baby is cup-feeding well when he takes the required 24-hour amount of milk, gains weight and does not spill too much milk.

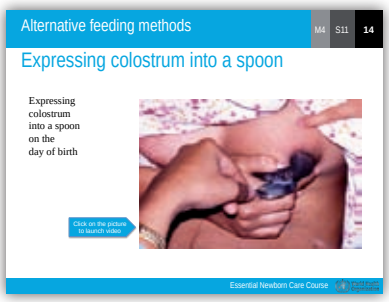
Option: Use the following information only if spouted or lipped cups (such as a paladai) are commonly used:

- Sometimes cups with spouts or lips may be used. This design of cup should be used with caution because it is easy to pour too much milk into the baby's mouth. To use these cups safely put the point to the baby's lips so that a very small amount of milk goes into the baby's mouth.
- Allow the baby time to swallow the milk before you give it more milk.
- It is extremely important to feed the baby in a semi-upright position.
- DO NOT POUR a large quantity of MILK INTO THE BABY'S MOUTH.

ASK **Why should not pour milk into the baby's mouth?**

- Because the baby is at risk of aspiration.
- Option: Demonstrate with a "paladai-shaped" cup if commonly used locally.

SHOW **slide/overhead 11/14 – Expressing colostrum into a spoon**



- Spoon-feeding is the method of choice for collecting small amounts of colostrum in the first days after delivery when the quantity of milk produced is small.
  - The mother should avoid pouring the milk or colostrum into the baby's mouth. She should allow the baby to take milk from a spoon in the same way as from a cup.
  - Spoon-feeding can be a very slow method of feeding a larger quantity of milk.

SHOW slide/overhead 11/15 – Feeding colostrum with a spoon

ASK the class if there are any questions.

Recommended reading

- Breastfeeding Counselling: A training Course (WHO/CDR/93.4).
- PCPNC Guide K2–K8

SESSION 12. The small baby

Objectives

At the end of this session participants will be able to:

- Describe the additional care needed by the small baby.
- Help the mother learn how to care for her small baby.

Session outline

LECTURE LENGTH 60 minutes

0:00	Introduce the session	5 minutes
0:05	Defining the small baby	10 minutes
0:15	Care of the small baby	15 minutes
0:30	Facilitated group work	30 minutes

Clinical practice preparation

REQUIRED BY FACILITATOR

- Checklist
- Instructions and Task sheet
- PCPNC Guide

REQUIRED BY PARTICIPANT

- Task sheet
- Examination Recording form (2 copies)
- Breastfeeding Observation form 2 (2 copies)
- Notebook and pen/pencil
- PCPNC Guide (1 copy between 2 participants)
- Name badge

Session preparation

REQUIRED BY FACILITATOR

- Training file
- Slides/overheads 12/1 – 12/10
- PCPNC Guide J2–J11 K12–K14 N2 K2–K9 M6–M7

REQUIRED BY PARTICIPANT

- PCPNC Guide
- 1 copy local or PCPNC Referral form
- 3 copies Examination recording form

From Participant's Workbook

- Handouts – Session 12
- Exercise sheet: Case Study 2, Kumar and Laxmi
- Worksheet –session 12
- Answer sheets for Session 12 (only to be given after worksheet is completed)

MATERIALS FOR GROUP WORK

Each group of 3 participants requires:

- 1 dressed doll
- 1 model breast
- 1 cloth for wrapping the baby
- Cup for feeding a baby

REFERENCE MATERIALS

- PCPNC Guide
  Pregnancy, Childbirth, Postpartum and Newborn Care: A guide for essential practice

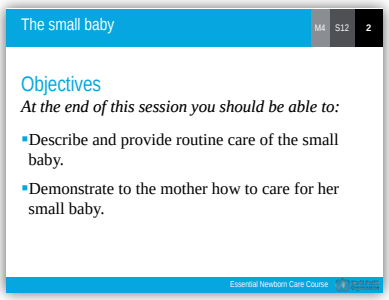
1. Introduce this session

DURATION 5 minutes

MAKE THESE POINTS

- A small baby needs more care and monitoring than a baby born at term with a weight above 2500 g.
- A small baby is at increased risk of becoming sick and dying if he is discharged before he is breastfeeding well, gaining weight and able to maintain a stable body temperature.

SHOW slide/overhead 12/2 – Objectives



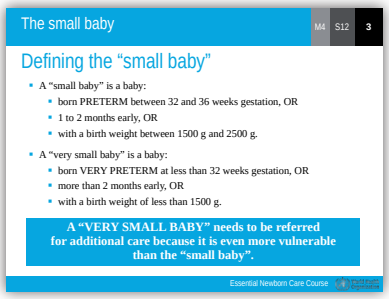
During this session you will:

- Describe the additional care needed by a small baby.
- Help the mother learn how to care for her small baby.

2. Defining the small baby

DURATION 10 minutes

SHOW slide/overhead 12/3 – Defining the "small baby"



- This slide/overhead defines what we mean by a small baby. The term "small baby" is used because it is not always possible to know a baby's gestational age.
- A participant to read aloud the points on the slide/overhead.

MAKE THESE POINTS

- A small baby may be preterm or he 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 charts on J2 to J8, particularly the charts that specifically refer to the "small baby": J3 and J11.

USE PCPNC Ask participants to find J3 "If preterm, birth weight <2500 g or twin" and the "Additional care of a small baby (or twin)" on J11.

- Ask participants to read J3.
- Ask participants to read aloud the MAIN bulleted points on J11.
- Explain any point that is not clear.

Additional needs of the small baby

USE PCPNC Participants to turn to J10

In addition to the care and monitoring given to all babies until they are discharged (as described on page J10), the small baby needs:

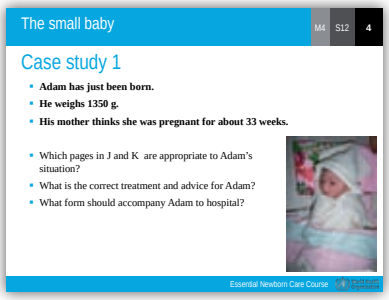
- Care in a health facility for longer than a term healthy baby.
- Help with breastfeeding to prevent hypoglycaemia.
- Feeding every 2–3 hours.
- To be kept warm.
- Daily monitoring, including: weighing, measuring temperature, assessing breathing and checking for jaundice.
- A small baby can be cared for in a primary health facility as long as he stays well.

DURATION 15 minutes

3. Care of the small baby

Case Study 1

USE PCPNC Ask participants to turn to J2 to J8



SHOW slide/overhead 12/4 – Case Study 1

Read aloud the three pieces of information about Adam and the questions.

ASK **Which pages in J and K are appropriate to Adam's situation?**
J3 red section, indicating an emergency requiring immediate treatment and referral to a higher-level health facility.

ASK **What is the correct treatment and advice for Adam?**
K14 Adam should be referred urgently to hospital.
J3 Extra warmth must be ensured during referral.

ASK **What form should accompany Adam to hospital?**
N2: Fill in a Referral Record Form.

- A very small baby should always be urgently referred to a higher-level health facility.

- The more preterm or the smaller the baby is the more likely he is to have problems.
- Very small babies have feeding and breathing difficulties for a long period of time. They are at a high risk of death from complications.[1]

DURATION 30 minutes

4. Facilitated group work

Divide the class into groups:
- One facilitator for each four to six participants
- Participants can work in pairs.

Case Study 2 is a written or verbal exercise.
- Give each participant a copy of the Exercise Sheet for Case Study 2.

Case Study 3 and Case Study 4 are verbal and practical exercises.
- Case studies 3 and 4 are in "The Small Baby" section of the Participant's workbook.

Participants will require:
- one Examination Recording Form for each case study
- a pencil.

1 More information can be found in *Managing Newborn Problems: A guide for doctors, nurses and midwives*. Geneva, World Health Organization, Dept. of Reproductive Health and Research.

Case Study 2: Kumar and Laxmi

SHOW slide/overhead 12/5 – Kumar and his mother Laxmi

- Read the following Case Study and answer the questions:
  - Fill in an Examination Recording Form.

- Kumar was born 55 minutes ago at 35 weeks gestation.
- He had no problems at delivery.
- Before giving Kumar to his mother to hold, a nurse weighed and dressed him.
- He weighed 2000 g.
- His mother had colostrum leaking from her nipples.
- After 15 minutes, the nurse told Laxmi it was time to try and feed Kumar.
- The nurse held Laxmi's breast and tried to attach Kumar. Kumar showed no interest in feeding.
- After 10 minutes of trying to breastfeed, the nurse took Kumar away from Laxmi, wrapped him up and put him in a cot next to Laxmi's bed.

1. You are asked to do Kumar's first examination. What have you learned from his notes and what his mother has told you?

- From Kumar's notes:
  - 35 weeks gestation
  - No problems at delivery
  - Birth weight 2000 g
  - Has not breastfed (not interested)
  - Now in a cot.

- Kumar's Mother has told you:
  - No skin-to-skin contact after delivery
  - Kumar was dressed when given to her
  - Her breasts are leaking milk (colostrum)
  - The nurse tried to attach Kumar
  - After a few minutes Kumar was tired and looked as if he was going to sleep.

2. Name the three parts of the newborn examination: ACT

- Assess
- Classify
- Treat

3. You have now finished assessing Kumar and in addition to information from his notes and given by his mother you have found:

- His feet and body are cold to the touch.
- His temperature is 35.7 °C.

USE PCPNC Ask participants to find Section **J**

- Classify Kumar using section **J**, pages **J2–J8**.
  - Mild hypothermia
  - Small baby
  - Feeding difficulty.

4. What colour are the sections of the chart where these signs were found?

- Yellow sections of the charts, pages J2, J3 and J4.

What does the colour indicate?

- There is a problem that can be treated without referral.

5. Your next step is to follow the "Treat and advise" column. What will be the first treatment and advice you will give to Kumar and his mother? Why?

- To give immediate treatment for mild hypothermia: J2
- Rewarm the baby skin-to-skin. Follow K9, sections:
  - Keep a small baby warm
  - Rewarm the baby skin-to-skin
- Explain the condition to the mother (and her companion) and the importance of skin-to-skin contact in keeping Kumar warm.
- A baby whose temperature is < 35 °C or not rising after rewarming may have a possible serious illness and need urgent referral to hospital: J7.

6. What other treatment and advice will you give to Kumar and his mother?

- To ensure Kumar receives his mother's breastmilk. Small baby: J3
  - Give special support to breastfeed the small baby (preterm and/or low birth weight): K4
  - Hand-express breast milk directly into the baby's mouth: K5
  - Help the mother to initiate breastfeeding: K2
  - Teach correct positioning and attachment: K3
  - Support exclusive breastfeeding: K3
- Ensure additional care for a small baby: J11
  - Reassess daily: J11
  - Do not discharge before feeding well, gaining weight and body temperature stable.
  - If feeding difficulties persist for 3 days and baby is otherwise well, refer for breastfeeding counselling.

7. You have to reassess Kumar daily J11. What will you assess?

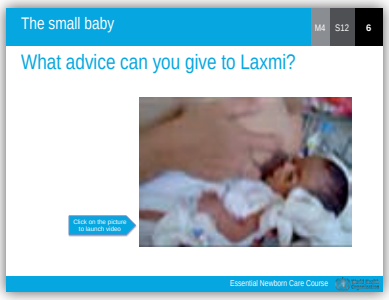
- Temperature
- Breathing
- Jaundice.

When participants have finished questions 1 to 7 complete the exercise with question 8.

8. Two days after birth Kumar is beginning to breastfeed. You observe Laxmi feeding him.

This is what you see.

SHOW video clip 12/6 – What advice can you give to Laxmi?



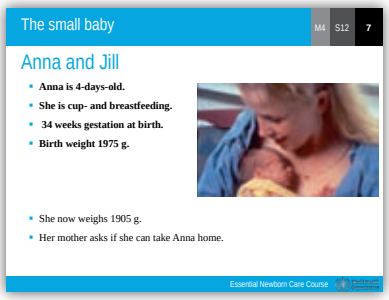
- Discuss what breastfeeding advice can be given.

Include the following points in the discussion:

- Laxmi needs to reposition Kumar.
- This baby needs to have his head and shoulders and bottom supported.
- The baby needs to be turned towards the mother's body.
- Tell Laxmi to take her fingers from the breast. The "scissor" hold with the fingers can prevent Kumar from taking enough breast tissue into his mouth.
- Laxmi may find using the "underarm" position for breastfeeding is better when feeding a small baby such as Kumar.

Case Study 3: Anna and Jill

SHOW video clip 12/7 – Case Study: Anna and Jill



Read the following Case Study and answer the questions:

1. How many ml at each cup-feed and for a 24-hour period should Anna be given?

- To calculate turn to K6

- Anna was 1975 g at birth. On day 4 she should be receiving:
  - Approximately 23 ml every 2 to 3 hours.
  - Approximately 184 ml over a 24-hour period.

This is approximately 92 ml/kg per day.

2. Cup-feeding: Anna is cup- and breastfeeding.

USE PCPNC Ask participants to turn to K6 and allow 5 minutes to read the sections on cup-feeding.

DEMONSTRATE Cup-feeding

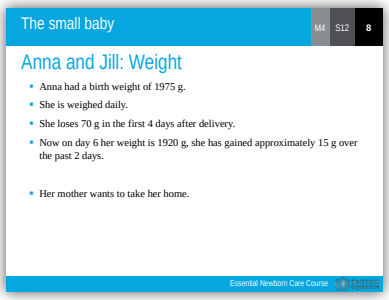
- Each facilitator should demonstrate teaching cup-feeding to their group following the directions given below.
- One participant to play the role of a mother.

- Wash hands
- Measure quantity
- Hold baby in semi-upright position
- Rest cup lightly on lower lip
- Tip cup so that milk just reaches the baby's lips but do not pour milk into the baby's mouth.

After demonstration:

- **Participants should work in pairs. One as mother and one as a health worker.**
- **The "health worker" should teach the "mother" how to cup-feed.**
- **Ensure all points in K6 are covered.**

3. Weight



SHOW slide/overhead 12/8 – Anna and Jill: Weight

ASK Is this an acceptable weight gain?
An acceptable weight gain for a small baby is at least 15 g per day.

ASK What advice will you give to the mother?
Advise Jill to leave the health facility when:

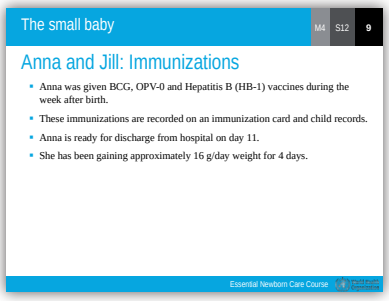
- Anna gains at least 15 g on 3 consecutive days: K7
- When Anna is breastfeeding well: J11

- Discuss with theplan for discharge with Jill: J11

- If Jill insists on taking Anna home ensure daily home visits or send to hospital: J11

ASK What advice do you give Jill about when to return with Anna for a follow-up visit?

- Anna is low-birth-weight and older than 1 week and is also gaining weight adequately. She should return in 7 days.



SHOW slide/overhead 12/9 – Anna and Jill: Immunizations

ASK When should Anna return for further immunizations?

- Anna will return for a routine immunization visit at 6-weeks-of-age (or according to National Schedule). See "Immunize the newborn" K13

ASK 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.

USE PCPNC Ask participants to find K14
Ask each participant in turn to read out a point from "Advise the mother to seek care for the baby".

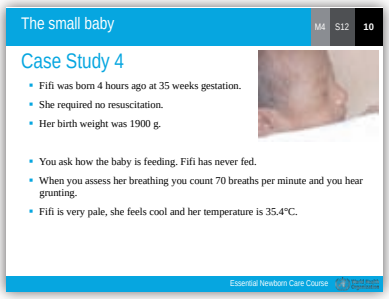
ASK Which information and counselling sheets should be given to Jill?

- Give Jill relevant "Information and counselling sheets". These are:
- Care for the newborn: M6
- Breastfeeding: M7

Case Study 4: Fifi

USE PCPNC Participants to turn to J2
Fill in the following forms:
- Examination Recording Form
- Referral form

SHOW slide/overhead 12/10 – Case Study 4



1. ASK How will you classify classify Fifi?

- Small baby
- Not able to feed
- Mild hypothermia
- Possible serious illness.

Two of these classifications are danger signs, "not able to feed" and "possible serious illness".

2. ASK In what order will you carry out the actions that should be taken?

- Keep the baby warm: J7
- Give the first dose of IM antibiotics: K12
- Refer Fifi urgently to hospital: K14

3. ASK What antibiotics will you give to Fifi and what dose should be given?

- Ampicillin 50 mg/kg IM every 12 hours (95 mg or 0.5 ml): K12
- Gentamycin 5 mg/kg every 24 hours (9.5 mg or 0.7ml): K12.

4. ASK What should happen next?

- Refer Fifi urgently to Hospital: K14

5. ASK Describe what should be done for Fifi during transportation.

- The mother should accompany the baby.
- Keep the baby warm by skin-to-skin contact with the mother or someone else.
- Cover the baby with a blanket and cover head with a hat.
- Protect baby from direct sunshine.
- Encourage breastfeeding during journey.
- If baby does not breastfeed and the journey is longer than 3 hours, consider giving expressed breast milk by cup: K6.

6. ASK Now fill out the Referral Form

Remind them to document all findings in the baby's notes.

7. ASK 3 participants at random: Read out what you have written on your referral form.

DISCUSS participants' responses.
ASK if there are any questions.

Recommended reading

PCPNC GUIDE B4 B9 N2–N7

World Health Organization

Essential newborn care course

Optional modules MODULE 5

TRAINING FILE

OPTIONAL SESSION 13. Giving an injection

Objectives

At the end of this session participants will be able to:

- Give an IM injection.

Session outline

LECTURE LENGTH 60 minutes

0:00	Introduce the session	2 minutes
0:02	Introduction to giving an injection	10 minutes
0:12	Preparing to give an injection	15 minutes
0:27	Where to give an injection	3 minutes
0:30	How to give an injection	16 minutes
0:46	Case study practice	10 minutes

Session preparation

REQUIRED BY FACILITATOR

- Training file
- Slides/overheads 13/1–13/10
- PCPNC Guide J5 K12 K13

REQUIRED BY PARTICIPANT

- PCPNC Guide

From Participant's Workbook

- Handouts – Session 13
- Worksheet – Session 13
- Answer sheets for Session 13 (only to be given after worksheet is completed)

MATERIALS FOR DEMONSTRATION

- 1 dressed baby doll wrapped in a cloth
- 1 orange
- 1 disposable syringe in sealed package
- 1 capped needle
- Cloth or swab
- Medicine container or vial or ampule,
- Vial of sterile water
- Medicine tray
- Sharps box

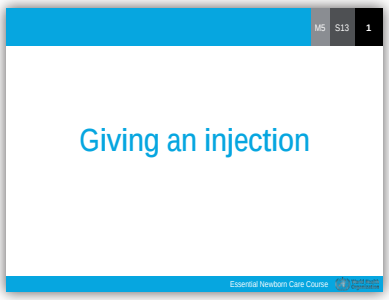
REFERENCE MATERIALS

- PCPNC Guide
  Pregnancy, Childbirth, Postpartum and Newborn Care: A guide for essential practice

1. Introduce the session

DURATION 5 minutes

SHOW slide/overhead 13/2 – Objectives



2. Introduction to giving an injection

DURATION 5 minutes

ASK participants to look at K12 and K13 in their PCPNC Guide and write a list of the situations where an intramuscular injection may be given to a baby.

Allow 5 minutes for this exercise then ask different participants around the class what they have written down.

K12	K13
Give first dose of 2 IM antibiotics (first week of life): Ampicillin and gentamycin: ■ Before referral for possible serious illness. ■ Severe umbilical infection. ■ Severe skin infection.	Immunizations: ■ BCG ■ OPV-0 ■ Hepatitis B (HB-1) In the first week of life, preferably before discharge.
Give 2 IM antibiotics for 5 days Ampicillin and gentamycin: ■ For asymptomatic babies classified "at risk of infection".	
Give a single dose of IM benzathine penicillin to a baby: ■ If mother tested RPR-positive.	
Give a single dose of IM ceftriaxone or kanamycin to a baby: ■ For possible gonococcal eye infection.	

MAKE THESE POINTS

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

ASK What should a health worker do FIRST before preparing to give an injection?

- Wash their hands with soap and warm water.

ASK What might a health worker do that would make giving an injection dangerous for a baby?

- Write participants' replies on either the flip chart or on the left-hand side of the board.
- Include all of the following:
  - Not washing hands properly
  - Using a dirty syringe or needle
  - Not cleaning the skin properly
  - Giving it in the wrong place

- Giving it the wrong way
- Using the wrong medicine or the wrong dose
- Not disposing of the sharps safely

ASK **What must the health worker do to make giving an injection to a baby a safe procedure?**

- Write participants' replies on either the flip chart or on the right-hand side of the board.

Include all of the following:

- Wash hands thoroughly with soap and warm water (wearing gloves if available).
  - Use a clean new/disposable syringe and needle
  - Clean the skin properly
  - Give it in an appropriate place on the baby's body
  - Use the correct method to give the injection
  - Use the correct medicine in the correct dose
  - Dispose of the sharps safely

- Leave these lists in place for the session.

NOTE: It cannot be emphasized enough how important it is to make sure a clean needle and syringe are used for each baby.

DURATION 15 minutes

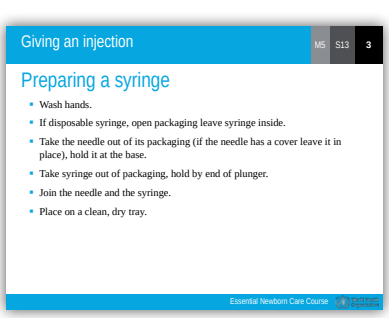
3. Preparing to give an injection group work

- Organize groups
- Divide the class into groups of four participants to one facilitator.
- Each facilitator will demonstrate how to give an injection and supervise group members.
- Participants will require a record form and a pencil.

Group work

- Give group instructions:
- Tell participants to work with the person sitting next to them for the practical part of the session.

- Give each pair:
  - One syringe
  - One needle
  - Medicine vial
  - Medicine bottle
  - An orange
  - An alcohol swab.



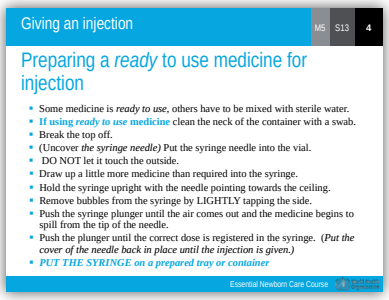
SHOW slide/overhead 13/3 – Preparing the syringe

DEMONSTRATE **how to prepare the syringe as each point is read.**

- Show participants the equipment needed to give an intramuscular injection:
  - 1 syringe (disposable)
  - A capped needle
  - Medicine container, vial or ampoule
  - An alcohol swab.
- To use a disposable syringe 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.
- Show participants how and where to hold the syringe and needle when joining them together.
- Attach the needle to the syringe.

SHOW slide/overhead 13/4 – Preparing an IM injection

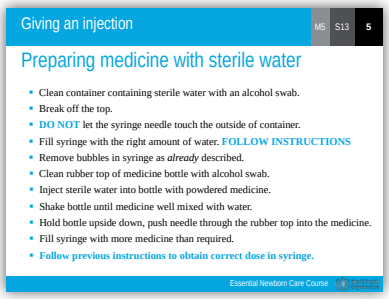


DEMONSTRATE how to prepare an injection as each point is read.

- As you read out the first point give participants this information:
  - Gentamycin is ready to use
  - Ampicillin and benzathine penicillin must be mixed with sterile water.

ASK if there are any questions before continuing to the next section.

SHOW slide/overhead 13/5 – Preparing medicine with sterile water



DEMONSTRATE how to prepare medicine with sterile water as each point is read.

- When you read the last point on the PowerPoint slide/overhead give participants this information (which they will have seen on the previous PowerPoint slide/overhead):
  - Remove bubbles in the syringe in the same way as previously described.
  - 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.

(Cover the needle until the injection is given.)

ASK participants if they have any questions.

Repeat the demonstration. Ask participants to follow and copy what you are doing.

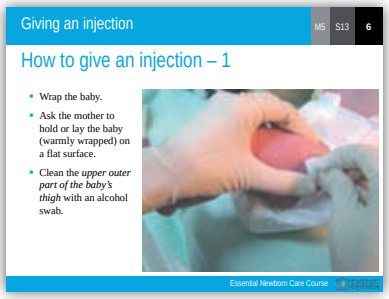
4. Where to give an injection

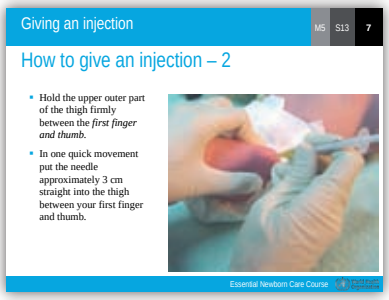
DURATION 3 minutes

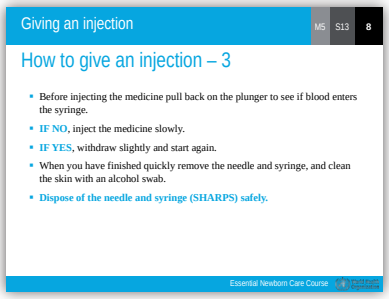
MAKE THESE POINTS

- With a baby, an intramuscular injection is usually given into the upper outer part of the thigh.
- Indicate on the doll where an injection for a baby should be given.

DURATION 16 minutes







5. How to give an injection

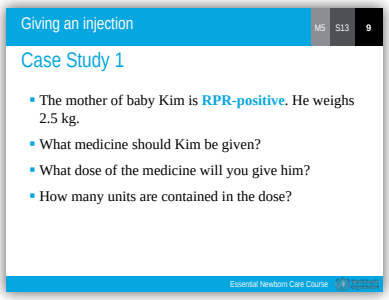
SHOW slides/overheads 13/6, 13/7 and 13/8 – How to give an injection 1, 2 and 3.

DEMONSTRATE the preparation for giving an injection on a doll. Ask a participant to play the role of a mother. Demonstrate giving the injection using an orange as the slide/overheads are shown.

MAKE THESE POINTS

- Do not give an intramuscular injection of more than 2 ml of medicine into only one injection site. If the dose is higher than 2 ml, it is better to divide the dose into two smaller injections giving the second IM injection into another place on the thigh. More than 2 ml injected into one place may be painful.
- The angle of giving the injection is between 45 and 90 degrees.1
- Encourage the mother to breastfeed her baby to comfort him. Studies have shown that substances in breast milk help control pain.
- Tell participants to practise giving an injection using the orange.
- Observe each participant practising this skill. Ask them to repeat any part of the process not correctly carried out.

DURATION 10 minutes



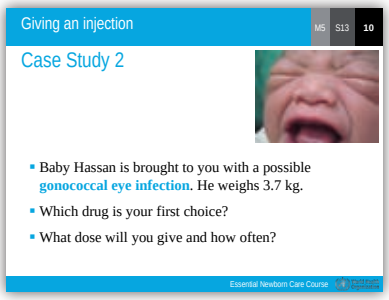
6. Case study practice

SHOW slide/overhead 13/9 – Case study 1

USE PCPNC Ask participants to find K12 and K13.

ASK participants to work in pairs using their PCPNC Guidelines to write down the answers to the questions for Case study 1 and Case study 2.

- Check participants have the correct answers to Case study 1 before continuing to Case study 2.
- Check that participants have the following answers:
  - J5 A single dose of benzathine penicillin.
  - K12 0.75 ml.
  - 150 000 units (200 000 units per ml).



SHOW slide/overhead 13/10 – Case study 2

- Check that participants have the following answers:
  - J6 Single dose of ceftriaxone.
  - 3.5 ml single dose (for a single dose, this is over 2 ml, therefore, draw the amount into two syringes: one with 1.7 ml and one with 1.8 ml. Inject into two different places on the baby's thigh.)

ASK participants if they have any questions.

1 According to Hospital Care for Children, WHO, 2005, an intramuscular injection into the thigh should be given at a 45-degree angle (pp. 305–306), elsewhere, at a 90-degree angle. In Managing Newborn Problems, WHO, 2003, it states: "Insert the needle at a 90-degree angle through the skin with a single quick motion." (P16–17)

OPTIONAL SESSION 14. Kangaroo Mother Care

Objectives

At the end of this session participants will be able to:

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

Session outline

LECTURE LENGTH 60 minutes

0:00	Introduce the session	5 minutes
0:05	The advantages of kangaroo mother care	10 minutes
0:15	When to start KMC	10 minutes
0:25	Kangaroo mother care: The practical issues	10 minutes
0:35	The mother's activities during KMC	5 minutes
0:40	Feeding the baby	5 minutes
0:45	How long should KMC last?	5 minutes
0:50	Group exercice	10 minutes

Clinical practice preparation

REQUIRED BY FACILITATOR

- Checklist
- Instructions and Task sheet
- PCPNC Guide

REQUIRED BY PARTICIPANT

- Task sheet
- Examination Recording form (2 copies)
- Breastfeeding Observation form 2 (2 copies)
- Notebook and pen/pencil
- PCPNC Guide (1 copy between 2 participants)
- Name badge

Session preparation

REQUIRED BY FACILITATOR

- Training file
- Slides/overheads 14/1 – 14/14

REQUIRED BY PARTICIPANT

- PCPNC Guide
- 1 copy local or PCPNC Referral form

From Participant's Workbook

- Handouts – Session 14
- Worksheet –session 14
- Answer sheets for Session 14 (only to be given after worksheet is completed)

MATERIALS FOR DEMONSTRATION AND GROUP EXERCISE

Each group of 4 participants requires:

- 1 baby doll
- Baby clothes, including: sleeveless vest/ shirt which opens down the front, hat and socks
- Example of local binders or 1 long piece of cloth for use as a binder or a long scarf.

PREPARATION FOR DEMONSTRATION

Ask for a volunteer or prepare a participant before the session to demonstrate how a baby is put into the correct position for KMC and how to place a binder.

REFERENCE MATERIALS

- PCPNC Guide
  Pregnancy, Childbirth, Postpartum and Newborn Care: A guide for essential practice

- Kangaroo Mother Care: A practical guide. Geneva, WHO, Dept. of Reproductive Health and Research (RHR), 2002.

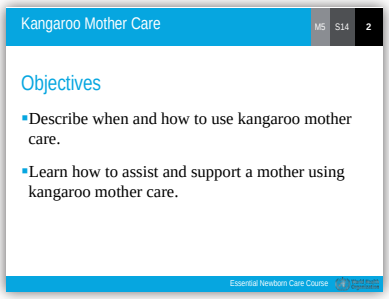
1. Introduce the session

DURATION 5 minutes

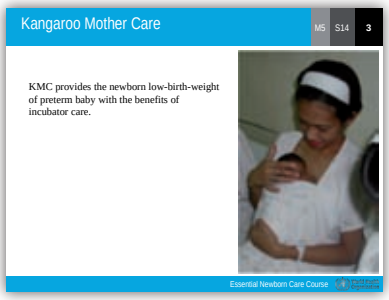
MAKE THESE POINTS

- Kangaroo mother care is more than simply placing the baby skin-to-skin with the mother. It is a way of providing a well preterm or low-birth-weight baby with the benefits of incubator care, by keeping the mother and baby 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 important central role the mother plays in the survival and well-being of her baby.

SHOW slide/overhead 14/2 – Objectives



SHOW slide/overhead 14/3 – A mother and baby using kangaroo-mother care



ASK Do any of you work in a hospital where kangaroo mother care is practised?

- If any participant(s) answer "Yes", ask them the next question.

ASK Which babies receive kangaroo mother care?

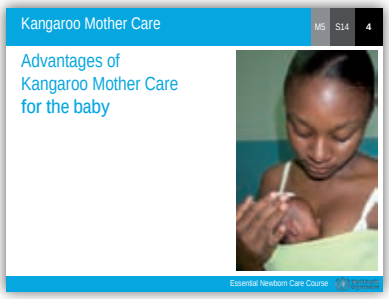
- Well small babies, particularly the preterm or low-birth-weight babies who need their initial care in a special newborn unit.

2. The advantages of kangaroo mother care

DURATION 10 minutes

MAKE THESE POINTS

- Kangaroo mother care offers a number of advantages to the baby, to the mother and to the health services.
- Many (research) questions remain unanswered when comparing kangaroo mother care to conventional methods for caring for preterm and low-birth-weight babies in hospitals.
- Even so, KMC appears to offer the best way to care for these babies in areas where facilities do not exist or are insufficient.
- Even where expensive technology does exist and adequate care is available in a hospital setting, KMC offers a uniquely personal humanized form of care that helps with the bonding of the mother and her baby and helps to promote breastfeeding. It is therefore a form of care which should always be considered for the stable small baby.



SHOW slide/overhead 14/4 – Advantages of Kangaroo Mother Care for the baby

ASK What are the advantages of kangaroo mother care for the baby?

Write responses on flip chart paper.

- The baby is next to his mother's breasts. This helps to:
- Keep the baby warm and his temperature stable, so the baby uses less energy.
- May reduce hypothermia, i.e. 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. In other words, in an incubator.
- Maintains sleep patterns.
- Reduced stress in preterm and low-birth-weight babies, which results in less crying.
- Growth rates are equal to babies not receiving KMC. Larger daily weight gain whilst in hospital.
- The baby has ready access to the breast.

SHOW slide/overhead 14/5 – Advantages of Kangaroo Mother Care for the mother

ASK 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.

MAKE THESE POINTS

- All mothers giving birth to a small baby, whether or not kangaroo mother care is being considered, should be encouraged to start expressing her breast milk within 6 hours of delivery.
- The father and other relatives can be involved in providing kangaroo mother care if the mother is sick or needs to be away from her baby.

ASK What other general advantages of KMC are there to the health services?

- Lower capital investment and recurrent costs.
- There is less need for incubators, which are a source of hospital-acquired infections.
- Earlier discharge times are possible for small babies; reduced readmission rates.
- The mother and family are involved, leaving staff free to provide medical and nursing care.

3. When to start Kangaroo mother care (KMC)

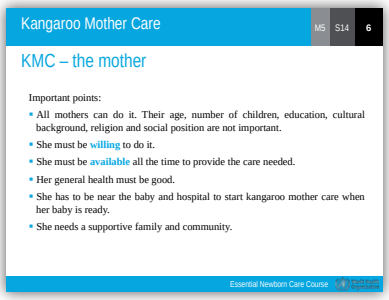
DURATION 10 minutes

MAKE THESE POINTS

- When to begin kangaroo mother care depends upon the condition of both the mother and the baby. It is necessary to look at each mother/baby pair separately as they will each have their own unique set of circumstances to be considered.

- The care of a small baby will depend on his condition. The more preterm the baby and the lower the birth weight, the more problems that are likely to occur. Experience indicates that babies of 1800 g and above can in most cases start KMC after birth, if they are in a stable condition. Babies below this weight commonly have problems that need hospital care and treatment for several days or weeks. The more premature the longer it takes before the baby is stable enough to begin KMC.
- However, kangaroo mother care may provide a sick baby with his best and in some cases, only chance of survival in a situation where referral to a specialized newborn unit is not possible.
- Before starting KMC, the following issues should be considered.

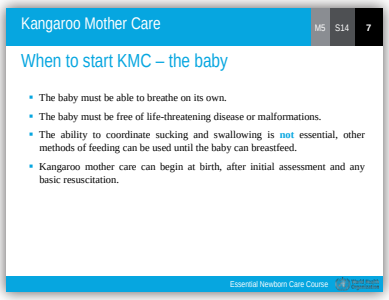
SHOW slide/overhead 14/6 – KMC – the mother



TELL a participant to read aloud the points on the slide/overhead

- It is important that the mother and father do not smoke.
- Tell the parents of the dangers of other people smoking near their baby or in the same house – this particularly applies to other family members and friends.

SHOW slide/overhead 14/7 – When to start KMC – the baby



- The ability to coordinate sucking and swallowing is NOT an essential requirement as both preterm and low-birth-weight babies can be fed by gastric tube and later by cup or another feeding method.
- The baby must be free of life-threatening disease or life-threatening malformations. (The management of these conditions has priority over kangaroo mother care, though skin-to-skin contact will still be beneficial until KMC is possible.)

MAKE THESE POINTS

Before starting KMC, the mother needs to be well-prepared.

Discussion should cover the following points:

- **The need for continuous skin-to-skin contact;**
- **How her baby will be fed;**
- **How to position and attach her baby for breastfeeding;**
- **How to express her breast milk;**
- **How she will care for her baby; and**
- **What she can and cannot do.**

DURATION 10 minutes

4. Kangaroo mother care: The practical issues

SHOW slide/overhead 14/8 – What should the baby wear?

ASK What do you think the baby should wear?

- Show the class appropriate baby's clothes and dress a doll ready for the demonstration.

MAKE THESE POINTS

- If the surrounding temperature is 22–24 °C, then the baby should be naked inside the "pouch" except for a diaper, a warm hat and socks.
- If the temperature is below this, 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. The mother then covers herself and her baby with her usual clothes.

SHOW slide/overhead/video clip 14/9 – What should the mother wear? (Video clip: The mother with the pink binder)

MAKE THESE POINTS

- The mother should wear whatever she finds most 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. In the slide/overhead you will see mothers wearing special clothes, but these are not necessary unless traditional garments are too tight.
- Temperatures below 18 °C may not be high enough to keep the mother warm and her clothing may not provide enough warmth for her baby. In this situation, the room they are in will need to be warmed.

MAKE THESE POINTS

- The mother with the "pink binder" is from a very hot country. She has a long piece of cloth that she uses to support her baby. As you watch the video look at how simply the cloth is tied.
- A mother does need 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 from a length of traditional locally available materials.

Show the class one or two examples of "binders" used for KMC.

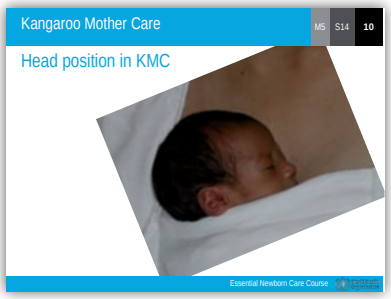
DEMONSTRATE KMC with a doll or mannequin.

Ask one of the students or a facilitator to model the practical aspects of KMC.

Follow these directions:

- Use a doll.
- Place the doll in an upright position between the mother's breasts, chest to chest.
- Secure the doll in this position with a support binder.

SHOW slide/overhead 14/10 – Head position in KMC



This slide/overhead shows some of the practical steps necessary to practise KMC.

MAKE THESE POINTS

- 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 is just beneath the baby's ear.

MAKE THESE POINTS

- Tie the cloth firmly enough so that when the mother stands up the baby cannot slide out.
- Ensure that the tight part of the cloth is over the baby's chest.
- The baby's abdomen should not be constricted and should be somewhere at the level of the mothers stomach. This way the baby has enough room to breath. The mother's breathing helps stimulate the baby.
- The hips should be flexed and extended in a "frog-like" position; the arms should also be flexed.

Moving the baby

MAKE THESE POINTS

- Whenever the baby is taken out or put back into the pouch or binder it should be as stress free as possible and comfortable for the baby. This can be done in the following way.

DEMONSTRATE this manoeuvre with a doll and a participant playing the role of the mother.

- Hold the baby with one hand placed behind the neck and on the back.
- Lightly support the lower part of the jaw with your thumb and fingers to prevent the head from slipping down and blocking the airway when the baby is in an upright position.
- Place the other hand under the baby's buttocks.

5. The mother's activities during KMC

DURATION 5 minutes

SHOW slide/overhead 14/11 – Everyday activities

MAKE THESE POINTS

- Once the baby is positioned correctly, during the day the mother can do whatever she likes; she can walk, stand, sit or engage in different activities, recreational, educational or income-generating.
- The only requirements she has to meet are cleanliness and hygiene, including washing her hands frequently, maintaining a low level of noise and regular feeding of the baby.

SHOW slide/overhead/video clip 14/12 – The sleeping position

MAKE THESE POINTS

- When the mother wants to rest or sleep, a reclined or semi-sitting position is best, as in the slide/overhead. Pillows or cushions or folded blankets can help achieve this on a bed. A semi-sitting position helps the baby to breathe normally.
- If the mother finds the semi-sitting position uncomfortable and cannot sleep she should sleep in her usual position because the advantages of KMC are greater than the risk of her baby developing breathing problems.
- In the video clip mothers caring for their babies using KMC are seen sharing a postnatal ward.

DURATION 5 minutes

6. Feeding the baby

SHOW slide/overhead 14/13 – KMC: Feeding the baby

MAKE THESE POINTS

- Initially, many KMC babies need to use an alternative feeding method. Some require gastric tube feeding. An ideal size tube is a number 5 to 8 French gauge, which can be left in the baby's stomach between feeds. It needs to be well secured with tape by the side of the baby's nose.
- Before a baby is able to totally breastfeed some babies need the help of other methods of feeding such as a cup, spoon, syringe or dropper, while other babies are able to move straight from milk expressed into their mouths or from tube feeding to breastfeeding. This transition takes varying amounts of time; about a week is the usual time period.

- Explain to the mother that she can breastfeed her baby in a kangaroo position using the same directions as for direct expression of expressed breast milk into the baby's mouth; although for the first breastfeeds, the baby should be taken out of the pouch and wrapped so that he does not get cold.
- It is helpful to teach the mother about attachment and positioning in advance, otherwise, at this point, teach her the key points to correct positioning and attachment.
- Ask the mother to breastfeed at regular intervals, every 2 to 3 hours during the night and during the day. Continue with frequently scheduled exclusive breastfeeding until the baby shows a satisfactory growth (15 g/day or more) or until the baby reaches 1800 g of weight. Then tell the mother to breastfeed on demand.
- If the mother notices the baby seems to be tired or looks blue or dusky or his colour is not right, then tell her to stop feeding and let the baby rest. Check the baby's breathing after a few minutes.

DURATION 5 minutes

7. How long should KMC last?

Kangaroo mother care can be used for babies until they are about 2.5 kg or 40 weeks post-conceptual age. It should continue at least until the baby can maintain a stable body temperature.

ASK **How long should kangaroo mother care last each day?**
Kangaroo-mother care should last for as long as possible each day. It may be difficult for the mother to have skin-to-skin contact with her baby continuously for 24 hours a day.

SHOW slide/Overhead 14/14 – The wider family can help with KMC

ASK How can skin-to-skin contact be continued when the mother needs to interrupt it for a short period?

The father or another relative or a close friend can be asked to take over. In this slide/overhead you can see a grandmother, a husband and a mother's brother.

MAKE THESE POINTS

- If the mother needs to have a bath and the air temperature is not too low, the baby can be wrapped in warm towels, cloths and laid on the mother's bed for 10–20 minutes without any harm.
- It is important to reassure the mother that most of the care the baby needs can be done while the baby is in skin-to-skin contact. The only routine reasons the baby will need to be taken from skin-to-skin contact are:
  - For clinical assessment
  - Cord care
  - Cleaning and nappy (diaper) change.
  - Sometimes for feeding, especially for cup feeding

Show the video of kangaroo-mother care, if available.

8. Group exercise

DURATION 10 minutes

Divide the class into pairs or groups of 4. One facilitator for 8 participants. Give each pair a doll, clothes and a binder.

Each group should practise teaching a mother by:

- Dressing a doll appropriately.
- Placing and supporting a "baby" in kangaroo position.

MAKE THESE POINTS

- The slightly extended head position to keep the baby's airway open.
- The flexed position of the hips and arms.
- The binder cloth needs to be tight enough to prevent the baby slipping out, without constricting his abdomen, which would restrict his breathing.

Participants should practise moving the baby in and out of the binder.

Facilitators should emphasize:

- Holding the "baby" with one hand behind his neck and on his back.
- Lightly supporting the "baby's" jaw to prevent his head slipping and airway blocking when upright.
- Placing the other hand under the "baby's" buttocks.

ASK if there are any questions.

Recommended reading

- Kangaroo Mother Care: A practical guide. Geneva, WHO, RHR, 2003.
- recommended video: Kangaroo mother care, rediscover the natural care for your newborn baby. Dr Niels Bergman 2005. (Available from the Author).

Implementation needs

- Institutions planning to implement KMC should have both a policy and guidelines to cover KMC in order to ensure that all health workers working with low-birth-weight infants are trained to support KMC.
- Health workers should also be trained in breastfeeding. Early implementation should be monitored, supported and supervised by experienced KMC staff.

World Health Organization

Essential newborn care course

TRAINING FILE

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