# SAVING NEWBORN LIVES

# Care of the Newborn

# Training Guide

Deborah Armbruster, Diana Beck, Susan Goldman, Phyllis Long



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**SAVING NEWBORN LIVES** is a global initiative of Save the Children USA to improve the health and survival of newborns in the developing world. Supported by the Bill & Melinda Gates Foundation, the initiative works with governments, local communities and partner agencies at the community and national levels to make progress towards real and lasting change in newborn health.

**SAVE THE CHILDREN USA** is a leading international nonprofit child-assistance organization working in nearly 50 counties worldwide, including the United States. Our mission is to make lasting, positive change in the lives of children in need. Save the Children USA is a member of the international Save the Children Alliance, a worldwide network of 30 independent Save the Children organizations working in more than 100 countries to ensure the well-being and protect the rights of children everywhere.

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Appendix A: Administrative Documents Appendix B: Care of the Newborn Training Evaluation

# **INTRODUCTION**

This Care of the Newborn Training Guide is based on the Care of the Newborn Reference Manual (referred to as the "Reference Manual"). If possible, each trainer and each participant should be given a copy of the Reference Manual for use during the training and to keep afterwards. Each trainer should also be given a copy of this Training Guide. Trainers can then select which materials from the Guide to copy and distribute to participants as needed.

This Training Guide is for trainers and can be used for both pre-service and in-service programs. It contains training and assessment materials in six modules that correspond to the six chapters of the Reference Manual. Each module of the Training Guide may be divided into more than one teaching session. The suggestions on how to use this Guide and the lesson outlines for each module are just a guide. Trainers are encouraged to adapt or revise as needed and appropriate.

# How to Use this Training Guide

Trainers should prepare carefully to teach each module:

- Read through the overview of the entire module.
- Review the Trainer Preparation for the module (if any). The module topic builds on the knowledge from the suggested readings in the Reference Manual.
- Review the objectives for the module, which describe what participants are expected to learn.
- If possible, visit some of the participants at their job sites and observe their practice using the skills learning checklists from the module to assess their learning needs.
- Review any learning activities (case studies, role plays, etc.) and skills learning checklists to be used in the module.
- Review the suggested lesson plan for the module. Use those parts of the lesson plan that are relevant to your participants' learning needs. Decide if the module should be divided into two or more discrete training sessions. This will depend on the experience, skill, and knowledge level of the participants, and on how much time is available.
- Plan how much time to devote to each learning activity. Figure out how to fit everything into the allotted time.
- Make copies of handouts for participants: objectives, case studies, role plays, skills learning checklists. Make sure you have enough copies of the Reference Manual or selected sections to distribute to all participants and trainers.
- Make enough copies of the pre- and post-test for this module, and a participant registration form.
- Make a wall chart for recording participants' clinical practice experiences. (See example in Appendix A: Administrative Documents.)
- Assemble all necessary teaching materials for the module, including as many newborn manikins as possible.
- Inspect the proposed classroom and make sure that space, seating, work surfaces (tables), lighting, ventilation, handwashing and bathroom facilities, etc. are adequate. If possible, the classroom should be situated very close to the labor/delivery area. Verify that you will have flip charts and markers, chalkboard and chalk or whiteboard and dry-erase markers, and erasers available.
- Arrange for refreshments (coffee, tea, water, lunch), if necessary.
- Write objectives of the module clearly on flip chart(s).

• Make arrangements for practice opportunities in appropriate clinical sites. Visit the authorities in charge of the sites and explain the purpose of the training; obtain their permission. Distribute copies of the Reference Manual to clinical staff in the practice sites. If necessary, hold in-service training for the clinical staff to ensure that they are providing quality care to newborns (as defined in the Reference Manual).

# MODULE 1: INTRODUCTION TO NEWBORN CARE AND THE DECISION-MAKING APPROACH

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# OVERVIEW: INTRODUCTION TO NEWBORN CARE AND THE DECISION-MAKING APPROACH

# **Trainer Preparation**

• Read pages 1–22 of the Care of the Newborn Reference Manual.

# **General Objectives**

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

- 1) Discuss the three main causes of newborn death
- 2) Explain when newborns are most likely to die
- 3) Explain how maternity care can increase newborn survival
- 4) Use the decision-making approach to care for babies

# **Specific Objectives**

- 1) List the three main causes of newborn death and explain which is most important
- 2) Explain the "Two-Thirds Rule" of newborn mortality
- 3) Discuss maternity care activities and maternal care advice which can help newborns survive:
  - a) Antenatal care
  - b) Delivery care
  - c) Advice for mothers and families in the postpartum period
- 4) Explain the decision-making approach
  - a) The steps
  - b) Why use the decision-making approach
  - c) How to use the decision-making approach

# Materials Needed for Training

- General and specific objectives written on flip chart pages
- Flip charts and markers (*Note:* If flip charts are not available, you can use a chalkboard and chalk, or a whiteboard and markers.)
- Care of the Newborn Reference Manuals for trainers and participants
- Case Study 1.1: The Story of Joseph—How Do We Solve Problems in Everyday Life?

# LESSON PLAN

Objectives and Content	TEACHING METHOD	MATERIALS NEEDED
Introduction of objectives	<ul><li>Ask participant(s) to read the objectives to the group.</li><li>Ask if anyone has any questions.</li><li>Answer any questions.</li></ul>	Flip chart with written objectives
1. Discuss the three main causes of newborn deaths.	<ul> <li>Ask the participants to tell about newborn deaths they have seen or experienced. Write the causes of these deaths on a flip chart.</li> <li>Group the causes of death together into these categories: <ul> <li>Infections</li> <li>Birth asphyxia and injuries</li> <li>Complications of prematurity and low birth weight</li> <li>Congenital anomalies</li> </ul> </li> <li>Show the participants Chart 2: Direct Causes of Neonatal Deaths (page 3 in the Reference Manual) and explain that infection is the most important cause of newborn deaths.</li> <li>Ask whether deaths due to infection can be prevented. (Answer: yes)</li> <li>Ask whether deaths due to birth asphyxia and injuries can be prevented. (Answer: yes)</li> <li>Ask whether deaths due to prematurity and low birth weight can be prevented. (Answer: yes)</li> <li>Explain that most neonatal death is preventable. The purpose of this training is to teach how to prevent newborn deaths.</li> </ul>	Flip charts and markers Chart 2: Direct Causes of Neonatal Deaths (page 3 in the Reference Manual)
2. Explain the "Two- Thirds Rule" of newborn mortality.	<ul> <li>Ask participants to define the infancy period. (Answer: the first year of life)</li> <li>Ask participants to define the newborn period. (Answer: the period from birth through 28 days of life)</li> <li>Explain the Two-Thirds Rule: About two-thirds of all infant deaths occur during the newborn period. Two-thirds of newborn deaths occur during the first week of life, and of those deaths, about two-thirds occur during the first twenty-four hours of life.</li> <li>Discuss the meaning of these facts for health workers and families. (The baby is most vulnerable and needs most careful attention during the first hours and days of life.)</li> </ul>	Chart 1: "The Two-Thirds Rule" (page 2 of the Reference Manual)

OBJECTIVES AND CONTENT	TEACHING METHOD	Materials Needed
3. Discuss maternity care activities and maternal care advice which can help newborns survive:	<ul> <li>a) Ask participants to list and explain specific antenatal care activities which help prevent newborn mortality.</li> <li>Write the activities they mention on a flip chart of "Antenatal care activities." Discuss how each activity helps prevent newborn deaths.</li> <li>Help them complete their list, if necessary, so that it</li> </ul>	Flip chart and markers
a) Antenatal care	<ul> <li>includes:</li> <li>Tetanus toxoid immunization</li> <li>Syphilis screening and treatment if positive</li> <li>Screening and treatment for other sexually transmitted infections</li> <li>Malaria prevention</li> <li>HIV screening and antiretroviral therapy if positive</li> <li>Screening and treatment for anemia and hookworm</li> <li>Micronutrient supplementation (vitamin A, iron, folate, iodine)</li> <li>Teaching pregnancy danger signs and complication readiness to mothers and families</li> <li>Teaching mothers and families to prepare birth</li> </ul>	
b) Delivery care	plans	
c) Advice for mothers	<ul> <li>b) Ask participants to list and explain elements of delivery care which help prevent newborn mortality. Write the activities they mention on a flip chart of "Delivery care activities." Discuss how each activity helps prevent newborn deaths. Help them complete their list, if necessary, so that it includes: <ul> <li>A skilled and equipped birth attendant if possible</li> <li>Birth attendants, mothers and families educated about danger signs during delivery</li> <li>Delivery in an appropriate place with access to emergency care in case of complications during labor or delivery</li> <li>Labor monitoring with a partograph</li> <li>Safe delivery practices (avoidance of invasive procedures; standard precautions for prevention of infections)</li> <li>Recognition and management of fetal distress during labor</li> <li>Birth attendant at every birth prepared and equipped to perform newborn resuscitation if necessary</li> </ul> </li> </ul>	Flip chart and markers
c) Advice for mothers and families in the postpartum period	<ul> <li>necessary</li> <li>c) Ask participants to list and explain topics of postpartum maternity care advice which help prevent newborn deaths.</li> <li>Write the postpartum maternity care advice topics they mention on a flip chart of "Postpartum maternity care advice." Discuss how each topic helps prevent newborn deaths.</li> </ul>	Flip chart and markers

Objectives and Content	TEACHING METHOD	Materials Needed
c) Advice for mothers and families in the postpartum period (continued)	<ul> <li>Help them complete their list so that it includes:</li> <li>Maternal danger signs in the postpartum period</li> <li>Newborn danger signs</li> <li>Breastfeeding and management of breastfeeding problems</li> <li>Child spacing</li> </ul>	
<ul><li>4. Explain the decision-making approach:</li><li>a) The steps</li></ul>	<ul> <li>a) Explain that the decision-making approach is an organized step-by-step thinking process which leads to purposeful, safe, and effective care. Describe and write the steps of the decision-making approach on a flip chart:</li> <li>Step 1: Take a history.</li> <li>Step 2: Perform a physical examination.</li> <li>Step 3: Identify any needs and problems.</li> <li>Step 4: Make a plan of care for the needs and problems.</li> <li>Step 5: Follow up to evaluate the plan of care.</li> </ul>	Flip chart and markers
	<ul> <li>Use Case Study 1.1 as a class exercise to show how we go through these steps to make decisions in everyday life.</li> <li>Give each participant a copy of Case Study 1.1. Ask a participant to read the case study aloud to the group.</li> <li>Then ask the group to identify the steps Joseph's mother went through to decide what to do for Joseph.</li> <li>Write their correct answers on the flip chart under the steps listed above.</li> <li>Discuss the correct answers to make sure everyone understands.</li> </ul>	Case Study 1.1: The Story of Joseph— How Do We Solve Problems in Everyday Life?
b) Why use the decision-making approach	<ul> <li>b) Ask the participants to explain why the decision-making approach is used to give health care.</li> <li>Write their answers on a flip chart. If necessary, help them come up with these three answers: <ul> <li>It helps the health worker collect information in an organized way.</li> <li>It helps the health worker use information so a problem or need can be correctly identified.</li> <li>It helps the caregiver provide only the</li> <li>care or treatments that are needed.</li> </ul> </li> </ul>	Flip chart and markers
c) How to use the decision-making approach	<ul> <li>c) Describe how to do the steps of the decision-making approach to care for newborns.</li> <li>Use the example of Baby Cara on pages</li> <li>6-11 of the Reference Manual to illustrate your explanation. Have different participants read different parts of the example as you discuss it.</li> </ul>	Flip chart and markers

Objectives and Content	TEACHING METHOD	Materials Needed
c) How to use the decision-making approach (continued)	<b>Step 1</b> : Explain how to take a newborn's history, including history of the pregnancy and the birth. History-taking includes reviewing records, listening to what the mother and family members say, and asking them specific questions.	
	<ul><li>Step 2: A complete newborn physical exam is described in detail in Chapter 2.</li><li>A newborn physical exam always includes observation of the baby and mother while you are taking the history.</li><li>In addition to examination of the baby's body, it can include laboratory tests or other exams.</li><li>Explain the difference between a complete and a focused physical exam.</li></ul>	Copies of the Reference Manual pages 6– 11 for trainers and participants
	The examination of Baby Cara is an example of a focused exam.	
	<ul> <li>Step 3: Explain and discuss the difference between unmet needs and problems. Every newborn has needs for routine care. If these needs are not met, the baby may develop a problem.</li> <li>Explain and discuss how to identify problems when there are abnormal physical findings or history. After training, participants will use the charts in chapter 6 of the Reference Manual to identify problems.</li> <li>All findings (history, physical, needs and problems) should be written in the baby's record.</li> </ul>	
	<b>Step 4:</b> Explain how the health worker will decide on a plan of care by referring to the problem charts in chapter 6. Explain and discuss the actions that are included in a plan of care: education, counseling, medical treatment, referral and follow-up. The plan of care should be written in the baby's record.	
	<b>Step 5:</b> Explain and discuss how to schedule follow-up visits according to the baby's particular problems or needs. Explain that the decision-making approach starts over again by taking a focused history at the follow-up visit.	
Summary of the	<ul> <li>Discussion:</li> <li>Ask one or more participants to summarize the decision-making approach.</li> </ul>	
decision-making approach	<ul> <li>Ask the participants questions to make sure that their understanding is correct.</li> <li>Ask them if they have any questions.</li> </ul>	
	<ul><li>Ask them if they have any questions.</li><li>Answer their questions.</li></ul>	

# CASE STUDY

# Case Study 1.1: The Story of Joseph - How Do We Solve Problems in Everyday Life?

# **Participant Directions**

# Purpose

This case study is to help you learn the decision-making approach by thinking about an example in everyday life.

# Directions

Read "The Story of Joseph" below. In the story, look at the steps of decision-making that Joseph's mother goes through.

# The Story of Joseph

- Four-year-old Joseph runs into the house. He is crying and holding his head. Joseph's mother asks: "What happened to you?"
- Joseph answers: "Some big boys dropped a rock on my head from up in the tree."
- The mother looks at her child's head, examines the wound, and feels around his skull.
- She sees that he has a small, shallow cut, but the rest of his head is not injured. There is no swelling or bleeding.
- The mother decides that Joseph is not bleeding and does not have a serious injury.
- The mother washes the cut and covers it.
- She tells Joseph to rest and stay away from the bigger boys.

Step 5 of the Decision-making approach, Follow-up, starts the decision-making approach again. What steps of the decision-making approach is Joseph's mother using in the sentences below?

- The next day she asks Joseph "Does your head still hurt?" He says, "No, I feel fine."
- She also looks at the wound to see if it is healing.
- The mother sees that the wound is not swollen and there is no drainage or redness.
- She decides the wound is healing and that Joseph is well.

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# **OVERVIEW: ESSENTIAL CARE FOR EVERY NEWBORN**

# **Trainer Preparation**

(From Care of the Newborn Reference Manual):

- Read Chapter 2: Essential Care for Every Newborn (pages 23–57).
- Review Chapter 3: Successful Breastfeeding (pages 59-92).
- Review the Infant Immunization Schedule (page 156).
- Review How to Give an Injection to a Newborn (pages 213-215).
- Review Appendix E: Communication and Counseling (pages 217-221).

# **General Objectives**

At the end of the module, participants will be able to:

- 1) Prepare for a baby's birth
- 2) Give immediate care to a newborn at birth
- 3) Assess and care for a newborn during the first day
- 4) Do the first newborn physical exam
- 5) Use the decision-making steps to detect problems, seek appropriate additional care, and give routine care to newborns during the first 28 days
- 6) Teach and counsel the mother and family about care of the newborn and danger signs

# **Specific Objectives**

### Session 1: Immediate Care of the Newborn at Birth

- 1) Discuss essential newborn care
- 2) Demonstrate and explain preparation for a birth
- 3) Demonstrate and explain the seven steps for immediate care of the newborn

# Session 2: Newborn Physical Exam and Care During the First Day

- 1) Demonstrate care of the newborn during the first day
- 2) Explain how to prepare for the newborn physical exam
- 3) Demonstrate the newborn physical exam
- 4) Use the decision-making steps to care for the newborn
- 5) Discuss normal and abnormal findings on the physical exam

# Session 3: Newborn Care During the First 28 Days

1) Demonstrate follow-up assessment and care of the newborn using the decision-making steps

# Session 4: Teaching Families Newborn Care

1) Teach and counsel the mother and family about care of the newborn and danger signs

# Materials Needed for Training

- Flip charts and markers, or whiteboard and markers, or chalkboard and chalk
- Clean water, soap and towels
- Non-sterile gloves
- Newborn dolls or manikins (1 for each group of 4 participants)
- Baby scale
- Waste container
- Two blankets or cloths (for each group of 4 participants)

- Clothing, including a hat, for baby (for each group of 4 participants)
- Scissors or razor blade and cord ties (for each group of 4 participants)
- Gauze squares (for each group of 4 participants)
- Thermometer (1 for each group of 4 participants)
- Baby's record (1 for each group of 4 participants)
- A watch or clock with second hand (1 for each group of 4 participants)
- Small syringes and needles, alcohol swabs, medicine vial (simulated) (for each group)
- Eye ointment or drops (simulated) (for each group of 4 participants)
- Sample vitamin A capsules
- Optional: Breastfeeding video
- 2 copies of Module 2 Pre-test/Post-test for each participant
- Copies of Module 2 Pre-test/Post-test Key for all trainers

# LESSON PLANS

Session 1:	Immediate	Care of the	Newborn	at Birth
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<b>OBJECTIVES AND CONTENT</b>	TEACHING METHOD	Materials Needed
Determine participants' knowledge baseline	Administer Module 2 Pre-test; collect test papers.	Copies of Module 2 Pre-test for all participants
<ul> <li>Introduction and review of objectives At the end of the session, participants will be able to: <ol> <li>Discuss essential newborn care</li> <li>Demonstrate and explain preparation for a birth</li> <li>Demonstrate and explain the seven steps for immediate care of the newborn:</li> <li>Dry, stimulate, and wrap</li> <li>Assess breathing and color</li> <li>Decide if resuscitation is needed</li> <li>Tie and cut the cord</li> <li>Place the baby in skin-to-skin contact with the mother and cover both with blanket if desired by mother</li> <li>Assist the mother to start breastfeeding</li> <li>Give eye care</li> </ol></li></ul>	<ul> <li>Ask participants to read the objectives on the flip chart and discuss them.</li> <li>Ask participants who have experience caring for babies or who have had a baby to raise their hands.</li> <li>Ask five of those who raised their hands to each share one care action the baby received at birth.</li> </ul>	Session objectives written on a flip chart
<ol> <li>Discuss essential newborn care.</li> <li>What is included (see page 25 of the Reference Manual)</li> <li>Explain the purpose: to keep every baby healthy</li> <li>Where essential newborn care takes place</li> </ol>	<ul> <li>Ask participants what the purpose of newborn care is. Help them articulate the purpose, if necessary.</li> <li>Ask them what it includes. Record their answers on the flip chart. Complete or correct the list if needed.</li> <li>Review the components of newborn care and ask participants to identify what can be done in both a health facility and in the community.</li> </ul>	Flip chart and markers
<ul> <li>2. Demonstrate and explain preparation for a birth.</li> <li>Infection prevention preparation</li> <li>Environment</li> <li>Equipment, supplies and medications</li> <li>Records</li> </ul>	<ul> <li>Demonstrate and explain preparations for a clean and safe birth. (Have participants refer to pages 25–29 of the Reference Manual.)</li> <li>Ask two participants to return the demonstration, while the group gives help and feedback.</li> </ul>	Copies of the Care of the Newborn Reference Manual for all participants and trainers

OBJECTIVES AND CONTENT	TEACHING METHOD	Materials Needed
3. Demonstrate and explain the seven steps for immediate care of the newborn.	<ul> <li>Explain and demonstrate each step, following the Skills Learning Checklist. Have one participant play the role of the mother who has just given birth.</li> <li>Ask participants questions while demonstrating.</li> <li>Have participants refer to the Skills Learning Checklist and to pages 28-32 of the Reference Manual.</li> </ul>	Copies of Skills Learning Checklist 2.1 and the Reference Manual for all trainers and participants Doll (manikin), hat, cloths, blankets
Step 1: Dry, stimulate and wrap the baby	• Explain and demonstrate.	Doll (manikin), hat, cloths, blankets
Step 2: Assess breathing and color	<ul><li>Ask participants to describe normal color and breathing.</li><li>Explain and demonstrate.</li></ul>	Doll (manikin), hat, cloths, blankets
Step 3: Decide if resuscitation is needed If yes, quickly tie and cut cord and call for help.	<ul> <li>Explain and demonstrate how to recognize if baby DOES NOT need resuscitation.</li> <li>Explain and demonstrate how to recognize if the baby DOES need resuscitation.</li> </ul>	Doll (manikin), hat, cloths, blankets
Step 4: Tie and cut the cord	<ul><li>Explain and demonstrate.</li><li>Ask a participant to return the demonstration.</li></ul>	Doll (manikin), hat, cloths, blankets, scissors or razor blade, simulated cord, cord ties
Step 5: Place the baby in skin-to skin contact with the mother and cover both with a blanket, if that is her preference	<ul> <li>Explain how babies lose heat.</li> <li>Ask participants to name actions to prevent heat loss.</li> <li>Demonstrate actions to keep the baby warm.</li> <li>Demonstrate skin-to-skin contact.</li> <li>Review advantages of skin-to-skin contact (page 31 of the Reference Manual).</li> </ul>	Doll (manikin), hat, cloths, blankets, participant playing the role of the mother
Step 6: Help the mother start breastfeeding	<ul> <li>Explain and demonstrate.</li> <li><u>Optional activity</u>: Show an immediate breastfeeding video (if available).</li> <li>After the video: 1) ask if anyone has a question or comment, and 2) ask "what are the important messages?" and discuss as time permits.</li> </ul>	Doll (manikin), participant playing the role of mother <u>Optional:</u> Immediate Breastfeeding video (if available) Videocassette player
Step 7: Give eye care	• Explain and demonstrate.	Newborn doll or manikin, eye ointment or drops (simulated)

<b>OBJECTIVES AND CONTENT</b>	TEACHING METHOD	MATERIALS NEEDED
4. Do a skills practice session on immediate newborn care	<ul> <li>Demonstrate doing the seven steps of immediate care as participants will do them during the practice.</li> <li>Divide participants into groups of four.</li> <li>Ask each group to practice the seven steps for immediate newborn care.</li> <li>Trainers should monitor the groups' practice: ideally one trainer for each group of four participants.</li> </ul>	Skills learning checklist: 2.1: Immediate Care of the Newborn at birth Each group needs: Gloves, doll (manikin), Blankets, towels or cloths, hat, scissors, gauze squares, cord ties, eye ointment, clock/watch with second hand
<ul> <li>Summary</li> <li>Purpose and components of essential newborn care</li> <li>Preparation for a birth</li> <li>Steps of immediate newborn care</li> </ul>	Discussion Question and answer	

# Session 2: Newborn Physical Exam and Care during the First Day

OBJECTIVES	TEACHING METHOD	Materials Needed
<ul> <li>Introduction and review of objectives At the end of the session, participants will be able to:</li> <li>Demonstrate care of the newborn during the first day</li> <li>Explain how to prepare for the newborn physical exam</li> <li>Demonstrate the physical exam</li> <li>Use the decision-making steps to care for the newborn</li> <li>Discuss normal and abnormal findings on the physical exam</li> </ul>	<ul> <li>Read the session title.</li> <li>Ask a participant to read the session objectives on the flipchart and discuss.</li> <li>Ask participants to recall the seven steps of immediate newborn care.</li> <li>Explain that this session will continue newborn care during the first day.</li> </ul>	Session objectives written on flip chart
<ol> <li>Demonstrate care of the newborn during the first day.</li> <li>Keep the baby and mother together</li> <li>Assess the baby to make sure it is warm, breathing, has normal color, and is not bleeding from the cord</li> <li>Give vitamin K, if it is policy, and the first immunizations: OPV, BCG, Hepatitis B. Explain:         <ul> <li>Contraindications</li> <li>What to check before giving a vaccine</li> <li>Safe injection technique</li> <li>What to tell the mother</li> </ul> </li> </ol>	<ul> <li>Explain and demonstrate keeping mother and baby together and assessing the baby.</li> <li>Have participants refer to pages 32-33, and chart 2.9 on page 49 in the Reference Manual.</li> <li>Demonstrate correct technique for giving injections to newborns. Have participants refer to pages 213-215 of the Reference Manual.</li> <li>Have participants practice injection technique (simulation) in pairs.</li> <li>Role Play 2.1: Keeping the Baby Warm.</li> </ul>	Copies of the Care of the Newborn Reference Manual for all participants and trainers Clean water, soap, and towels Small syringes and needles, alcohol swabs, and medicine vial (simulated) Copies of Role Play 2.1: Keeping the Baby Warm for all trainers and participants
<ol> <li>Explain how to prepare for the newborn physical exam and take the history.</li> <li>When to do the exam.</li> <li>Where to do the exam</li> <li>Preparations for the exam.</li> <li>Explain to the mother what you will do</li> <li>Ask the mother the history of her health during pregnancy and birth</li> </ol>	<ul> <li>Explain and demonstrate the preparations for the newborn exam and history-following the steps (1-9) of the Skills Learning Checklist (SLC) 2.2.</li> <li>Ask participants "Why" questions about what you are doing.</li> <li>Participants return demonstration and practice in pairs, using the Skills Learning Checklist (SLC). One trainer monitors 4 participants.</li> <li>Refer participants to pages 33-35 of the Reference Manual.</li> </ul>	Copies of Skills Learning Checklist 2.2: Newborn Physical Exam for all trainers and participants Equipment for newborn physical exam, clean water, soap, and towels
3. Demonstrate the newborn physical examination.	<ul> <li>Explain and demonstrate the newborn exam following steps (10-28) of SLC 2.2.</li> <li>Ask participants "Why" questions about what you are doing.</li> <li>Participants return demonstration and practice using SLC 2.2 in pairs.</li> <li>Trainers monitor the practice.</li> </ul>	Copies of SLC 2.2: Newborn Physical Exam for all trainers and participants

OBJECTIVES	TEACHING METHOD	Materials Needed
4. Use the decision-making steps to care for the newborn. How to use findings from the history and physical examination	• Explain and discuss how to interpret findings, make a plan of care, record care using the decision-making steps (29-35) of SLC 2.2.	Copies of SLC 2.2: Newborn Physical Exam
5. Discuss normal and abnormal findings on the physical exam.	<ul> <li>Have participants take turns reading the list of normal findings on Chart 2.5 (on pages 36-37 of the Reference Manual).</li> <li>Have participants take turns reading the list of abnormal findings on Chart 2.6 (on pages 38-41 of the Reference Manual).</li> <li>Question participants on their understanding of the abnormal findings, and clarify how to recognize these findings.</li> <li>Assign case studies to small groups.</li> <li>Allow time for work on case studies.</li> <li>Facilitate discussion of case studies.</li> </ul>	Copies of the Reference Manual for all trainers and participants Case Study 2.1: Newborn Physical Exam Findings for Baby Adam Case Study 2.2: Newborn Physical Exam Findings for Baby Miriam Case Study 2.3: Newborn Physical Exam Findings for Baby Malcolm
<ul> <li>Summary</li> <li>Care during the first day</li> <li>Newborn physical exam</li> <li>Using decision-making steps</li> <li>Normal and abnormal physical findings</li> </ul>	<ul> <li>Ask participants to summarize what they have learned in this session.</li> <li>Discussion.</li> <li>Question and answer.</li> </ul>	

# Session 3: Newborn Care During the First 28 Days

<b>OBJECTIVES AND CONTENT</b>	TEACHING METHOD	Materials Needed
<ul> <li>Introduction and review of objective At the end of the session, participants will be able to:</li> <li>1. Demonstrate follow-up assessment and care of the newborn using the decision-making steps.</li> </ul>	<ul> <li>Ask one participant to summarize what was learned about follow-up baby visits in the previous session.</li> <li>Explain that this session will cover the health worker's role for newborn follow-up visits and immunizations.</li> <li>Explain the objective for this session written on the flip chart.</li> </ul>	Session objective written on a flip chart
<ol> <li>Demonstrate follow-up assessment and care of the baby using the decision-making steps.</li> <li>Preparing for follow-up care:         <ul> <li>Equipment and supplies</li> <li>Place of care</li> </ul> </li> <li>Steps of newborn follow-up care using the decision-making steps:         <ul> <li>Step 1: History</li> <li>Step 2: Examination</li> <li>Step 3: Deciding what the problems/needs are</li> <li>Step 4: Making the plan of care</li> <li>Step 5: Follow-up</li> </ul> </li> </ol>	<ul> <li>Show participants the equipment and supplies needed for follow-up newborn care; refer them to the list on page 43 of the Reference Manual.</li> <li>Explain and demonstrate each step of follow-up newborn care using the Skills Learning Checklist and the Chart 2.8: Care of the Newborn During the First 28 Days, Decision-Making Chart (on pages 46-48 of the Reference Manual).</li> <li>Skills practice session:</li> <li>Participants practice follow-up assessment and care in pairs using Skills Learning Checklist 2.3.</li> <li>Have one trainer monitor four participants.</li> </ul>	Newborn dolls (manikins), baby scales, a watch or clock with a second hand, and axillary thermometer, clean water, soap and towels, syringes, needles, swabs, gauze, vitamin K, BCG, OPV and hepatitis B vaccines, vitamin A capsules (for mothers) and newborn records Copies of the Reference Manual for all participants and trainers Copies of SLC 2.3: Follow-up Newborn Care: 1 Day to 28 Days After Birth
<ul> <li>Focus of visit: day 1 (12-24 hours)</li> <li>Needs of baby adapting to life outside womb: Breathing, temperature, breastfeeding, urine and stool</li> </ul>	<ul> <li>Presentation/discussion.</li> <li>Have participants refer to Chart 2.7: Special focus of each follow-up visit (on pages 44- 45 of the Reference Manual).</li> </ul>	Copies of the Reference Manual for all participants and trainers
<ul> <li>Focus of visit: day 2-3</li> <li>Special needs</li> <li>Physiologic jaundice, timing</li> <li>Breastfeeding and engorgement</li> <li>Skin color, breastfeeding, signs of infection</li> </ul>	<ul> <li>Presentation/discussion.</li> <li>Have participants refer to Chart 2.7: Special focus of each follow-up visit (on pages 44- 45 of the Reference Manual).</li> </ul>	Copies of the Reference Manual for all participants and trainers
<ul> <li>Focus of visit: day 7</li> <li>Breastfeeding</li> <li>Check for abnormal jaundice</li> <li>Check for infections</li> </ul>	<ul> <li>Presentation/discussion.</li> <li>Have participants refer to Chart 2.7: Special focus of each follow-up visit (on pages 44- 45 of the Reference Manual).</li> </ul>	Copies of the Reference Manual for all participants and trainers

OBJECTIVES AND CONTENT	TEACHING METHOD	Materials Needed
<ul> <li>Focus of visit at 28 days</li> <li>Weight gain</li> <li>Signs of infection</li> <li>Remind parents of next immunizations</li> <li>Family planning decisions</li> </ul>	<ul> <li>Presentation/discussion.</li> <li>Have participants refer to Chart 2.7: Special focus of each follow-up visit (on pages 44- 45 of the Reference Manual).</li> </ul>	Copies of the Reference Manual for all participants and trainers
<ul> <li>Summary</li> <li>Equipment and preparation</li> <li>Content of follow-up newborn care visits</li> <li>Focus of visits at day 1, day 2-3, day 7, 28 days</li> </ul>	<ul> <li>Ask participants to summarize</li> <li>Discussion</li> <li>Question and answer</li> </ul>	

<b>OBJECTIVES AND CONTENT</b>	TEACHING METHOD	Materials Needed
<ul> <li>Introduction and review of objectives At the end of the session, participants will be able to:</li> <li>1. Teach and counsel the mother and family about care for the newborn and danger signs.</li> </ul>	<ul> <li>Display title of session where participants can see it.</li> <li>Ask participants to raise their hands if they have given birth.</li> <li>Ask a few who raised their hands to share how they learned to care for their first baby.</li> <li>Write what they say on the flip chart.</li> <li>Ask: "How confident did you feel in caring for your first baby? "</li> <li>Explain the objective for this session written on the flipchart.</li> </ul>	Session objective written on a flip chart Flip charts and markers
<ol> <li>Counsel the mother and family on baby care.</li> <li>Teach what to do and why.</li> <li>Counseling behavior: ask questions, listen without interrupting or judging, encourage the client to ask questions, etc</li> </ol>	<ul> <li>Ask participants why counseling mothers on baby care is important.</li> <li>Ask participants to describe good counseling and communication skills. Write their answers on a flip chart, completing the list, if needed, by referring to Appendix E: Counseling on pages 218- 221 of the Reference Manual.</li> </ul>	Copies of the Reference Manual for all participants and trainers
<ul> <li>Keeping the baby warm (why and how)</li> <li>Explain why and how to keep the baby warm</li> </ul>	<ul> <li>Presentation/discussion.</li> <li>Have participants refer to Chart 2.10: How the Family Should Keep the Newborn Warm.</li> </ul>	Copies of the Reference Manual for all participants and trainers
<ul> <li>Sleep (for mother and baby)</li> <li>Normal sleep patterns</li> <li>How the mother can recognize abnormal sleep</li> </ul>	<ul> <li>Ask participants what they know about newborns' sleep patterns.</li> <li>Explain normal sleep.</li> <li>Ask participants to suggest how a new mother can get enough sleep.</li> </ul>	
<ul> <li>Loving care</li> <li>Explain why babies need love</li> <li>Ways mothers show love to their babies</li> </ul>	<ul> <li>Presentation/discussion.</li> <li>Ask participants to tell or demonstrate how they would show love to a newborn.</li> </ul>	
<ul> <li>Protection from infections</li> <li>Explain why babies need protection from infection</li> </ul>	<ul> <li>Ask participants to identify ways to protect the baby from infection. Write their answers on a flip chart.</li> <li>Complete the list, referring to Chart 2.11: How the Family Should Protect the Newborn from Infection (on page 51 of the Reference Manual).</li> </ul>	Copies of the Reference Manual for all participants and trainers

# Session 4: Teaching Families Newborn Care

<b>OBJECTIVES AND CONTENT</b>	TEACHING METHOD	Materials Needed
<ul> <li>Bathing the newborn</li> <li>Keeping the baby warm during a bath</li> <li>Protecting the baby from infection during the bath</li> </ul>	<ul> <li>Explain how to keep the baby warm during a bath. (Refer to Chart 2.12: Keep the Newborn Warm During a Bath on page 52).</li> <li>Explain how to protect the baby from infection during the bath (refer to Chart 2.13: Bathing recommendations, on page 52).</li> <li>Demonstrate a baby bath.</li> <li>Do Role Play 2.2.</li> </ul>	Copies of the Reference Manual for all participants and trainers Doll (manikin) Equipment for bath and clean clothing Role Play 2.2: Teaching a mother how to bathe a baby
<ul> <li>Cord Care</li> <li>How to keep the cord stump or umbilicus clean and dry</li> <li>What to do if cord gets soiled</li> </ul>	<ul> <li>Ask participants to identify traditional practices that may lead to cord infection.</li> <li>Discuss how to talk about harmful practices with mothers.</li> <li>Explain how to keep the cord stump or umbilicus clean and dry (refer to Chart 2.14 Cord Care).</li> <li>Show what to do if the cord is soiled.</li> <li>Do Role Play 2.3.</li> </ul>	Copies of the Reference Manual for all participants and trainers Doll (manikin), Equipment for washing and dressing doll Copies of Role Play 2.3 Teaching Cord Care
<ul> <li>Immunizations</li> <li>Information mothers need about immunizations</li> <li>Timing of immunizations</li> <li>Contraindications for immunizations</li> </ul>	• Explain and discuss what mothers and families need to know about immunization (refer to the Infant Immunization Schedule on page 156 of the Reference Manual).	Copies of the Reference Manual for all participants and trainers
<ul> <li>Breastfeeding</li> <li>Benefits of breastfeeding</li> <li>Exclusive breastfeeding</li> <li>Starting and continuing breastfeeding</li> </ul>	• Ask participants to recall the most important points about breastfeeding to teach mothers. (This will be covered in much more detail in module 3.)	
<ul> <li>Vitamin A</li> <li>Why babies need vitamin A</li> <li>How babies get vitamin A</li> <li>When mothers should receive vitamin A capsule</li> </ul>	<ul><li>Explain and discuss:</li><li>The importance of vitamin A for mothers and babies.</li><li>Breastfeeding and vitamin A.</li></ul>	Sample vitamin A capsules
<ul><li>Safety and security</li><li>Explain how to keep the baby safe</li></ul>	<ul> <li>Ask participants to tell how to keep a baby safe and what the mother/family should be taught.</li> <li>Write their responses on a flipchart.</li> </ul>	Flip chart and markers

<b>OBJECTIVES AND CONTENT</b>	TEACHING METHOD	Materials Needed
<ul> <li>Teach the mother and family about newborn danger signs:</li> <li>List of newborn danger signs</li> <li>Why parents need to recognize danger signs</li> <li>What parents need to know about danger signs</li> </ul>	<ul> <li>Presentation of newborn danger signs (Chart 2.15: Newborn Danger Signs on page 55 of the Reference manual).</li> <li>Discuss the danger signs one by one, writing them on a flip chart.</li> <li>Ask participants by turn to explain the danger signs in language a mother will understand.</li> <li>Ask participants to say what parents need to know about danger signs. (Answer: to recognize them, to react quickly, and to seek medical care for the baby immediately.)</li> </ul>	Copies of the Reference Manual for all participants and trainers Flip chart and markers
<ul> <li>Follow-up visits</li> <li>Timing of visits for a healthy baby: Day 1, day 2-3, day 7, 28 days and how these correspond with the recommended postpartum visits for mothers</li> <li>Tell the mother about the importance of family planning for newborn survival</li> </ul>	<ul> <li>Discuss the local policy for follow-up visits for babies (and mothers)—when and where visits are made.</li> <li>Ask participants to explain where, when, and why the mother should be referred for Family Planning.</li> </ul>	
<ul> <li>Summary</li> <li>Counseling on baby care</li> <li>Newborn danger signs</li> </ul>	<ul> <li>Presentation of signs that the newborn is doing well (refer to Chart 2.9: Checklist: The Newborn is Healthy and Safe If on page 49 of the Reference Manual).</li> <li>Role Play 2.4: Assign 2 participants to act out the Role Play 2.4. The other participants should read the role play, observe, and participate in the discussion afterwards.</li> <li>Ask participants to recall the list of newborn danger signs.</li> <li>Go back to the flip chart where the list of danger signs is written.</li> <li>Discuss, if necessary.</li> <li>Instruct participants to memorize the list of danger signs.</li> </ul>	Copies of the Reference Manual for all participants and trainers Role Play 2.4: Teach and counsel a mother and family about newborn care Flip chart where the list of danger signs is written
Assess participants' learning in Module 2	Administer Module 2 Post-test; collect test papers.	Copies of Module 2 Post- test for all participants

# **ROLE PLAYS**

# Role Play 2.1: Keeping the Baby Warm Participant Directions

### Purpose

The purpose of this role play is to help you practice counseling skills for teaching families to keep their newborns warm.

# Preparation

Read pages 28-29 and 50 and 52 of the Care of the Newborn Reference Manual.

# **Role Playing and Observation**

Everyone will participate either by playing a role or by observing. During the role play, observers should think about what they see and prepare to participate in the discussion.

### Discussion of the Role Play

After the role play, the group will discuss what happened. Think about how you would answer the discussion questions for this role play.

### **Participant Roles**

**Health worker:** The health worker is experienced in the care of newborn babies and has good interpersonal communication skills.

**Mother:** The mother, 30-year-old Mrs. A, just gave birth to her fifth child, a healthy full-term boy, at the district health center.

### Situation

The baby has been placed in skin-to-skin contact with Mrs. A. and covered with a blanket. He is not soiled with blood or meconium. It is now 30 minutes after birth and Mrs. A wants to know why her baby has not yet been bathed. She says that her other babies were bathed within 10 minutes after birth and that she would like her new baby to be bathed immediately.

### **Discussion Questions**

- 1. How did the health worker explain to Mrs. A why it is important to wait to bathe her baby?
- 2. How did the health worker reassure Mr. A that her baby did not need a bath immediately?
- 3. What key messages did the health worker discuss with Mrs. A?

# Role Play 2.1: Keeping the Baby Warm *Trainer Directions*

Ask one participant to read the roles and the situation aloud. Then ask two others to act out the situation while the rest of the group observes them. Allow about ten minutes for the role play. Afterwards, thank the actors, and then lead a discussion using the Discussion Questions as a guide. Suggested answers are given below, but the participants will probably have other good answers and observations.

While skin–to-skin is optimal, can we also discuss how to keep the baby warm if Mom doesn't want to do skin-to-skin – i.e. the baby should be wrapped, not too tight, with the head covered, then placed beside the mother. Advise on keeping the baby warm beyond the immediate period after delivery.

# 1. How did the health worker show good counseling skills when explaining to Mrs. A the importance of waiting to bathe her baby?

- By speaking in a calm reassuring manner
- By using words that Mrs. A understood
- By using the same reassuring manner to answer Mrs. A's questions
- By encouraging Mrs. A. to ask questions and express her concerns
- 2. How did the health worker reassure Mrs. A that her baby did not need a bath immediately? The health worker explained that:
  - Bathing her baby so soon may cause dangerous heat loss (i.e., the baby may develop hypothermia or become cold). The new baby needs time to adjust to regulating its own temperature.
  - It is good to wait until at least 24 hours of life for the first bath, but if it is important to her to bathe her baby early, she should wait until the baby is warm and at least 6 hours after birth.

### 3. What key messages did the health worker discuss with Mrs. A?

The key messages stressed by the health worker should include the following:

- All newborns lose heat quickly after birth, and this can be dangerous.
- Skin-to-skin contact with the mother is the best way to keep the baby warm.
- Skin-to-skin contact helps maternal-infant attachment and early breast-feeding.

# Role Play 2.2: Teaching a Mother How to Bathe her Baby *Participant Directions*

# Purpose

The purpose of this role play is to help you practice demonstration and counseling skills for teaching a mother how to bathe her baby.

# Preparation

Read page 52 of the Care of the Newborn Reference Manual.

# **Role Playing and Observation**

Everyone will participate either by playing a role or by observing. During the role play, observers should think about what they see and prepare to participate in the discussion.

# Discussion of the Role Play

After the role play, the group will discuss what happened. Think about how you would answer the discussion questions for this role play.

# **Participant Roles**

Health wor	ker:	The health worker is experienced in the care of newborn babies and has good
Mother:		interpersonal communication skills. from a small community where she and her family are farmers. She is 18 years l this is her first baby.

# Situation

Tara gave birth to a healthy term baby three days ago in the hospital. The baby is nursing well and is warm. The baby has passed stool and urine. Tara feels well. Now the health worker teaches Tara how to give her baby a bath. The umbilical cord has not yet fallen off.

# **Discussion Questions**

- 1. What key health messages did the health worker explain and demonstrate to Tara?
- 2. What did the health worker do to check that Tara understood how to bathe the baby?

# Role Play 2.2: Teaching a Mother How to Bathe her Baby Trainer Directions

Ask one participant to read the roles and the situation aloud. Then ask two others to act out the situation while the rest of the group observes them. Allow about ten minutes for the role play. Afterward, thank the actors, and then lead a discussion using the Discussion Questions as a guide. Suggested answers are given below, but the participants will probably have other good answers and observations. Equipment needed: a newborn doll or manikin, a warm draft-free room, clean warm water, soap, a washcloth, towels, clean diaper and clean baby clothes.

# 1. What key health messages did the health worker explain and demonstrate to Tara?

- When a bath is needed.
- To give only sponge baths until after the cord has separated and the umbilicus is healed; after that it is all right to give full baths.
- To use warm water and give the bath in a warm, draft-free room.
- To assemble everything and to test the water temperature before starting.
- To not use soap on the face, only clean water.
- To gently wipe each eye clean with the corner of a clean cloth, using a new corner for each eye, starting near the nose and wiping outward.
- To wash the face first and the hair last.
- Not to clean inside the ears.
- To bathe the baby quickly, uncovering only one part of the body at a time, and drying each part thoroughly after washing it—especially the hair.
- To separate the skin folds to look for any rashes.
- To thoroughly dry inside the skin folds.
- To look for signs of eye or umbilical infection.
- To wash the baby's bottom from front to back.
- Not to use powder on the baby's skin.
- Skin-to-skin contact and a clean dry hat for the baby after the bath or wrap well and keep close to the mother and breastfeed.

# 2. What did the health worker do to check that Tara understood how to bathe the baby?

- The health worker explained to Tara how to do the bath.
- The health worker asked questions to be sure the mother understood.
- The health worker had Tara do the bath while the health worker gave encouragement and guidance.
- The health worker encouraged Tara to ask questions, and answered her questions clearly and patiently.

# Role Play 2.3: Teaching Cord Care Participant Directions

# Purpose

The purpose of this role play is to help you practice counseling skills for teaching a mother how to care for her baby's umbilical cord.

# Preparation

Read the cord care information and Chart 2.14 on page 53 of the Care of the Newborn Reference Manual.

# **Role Playing and Observation**

Everyone will participate either by playing a role or by observing. During the role play, observers should think about what they see and prepare to participate in the discussion.

# Discussion of the Role Play

After the role play, the group will discuss what happened. Think about how you would answer the discussion questions for this role play.

# **Participant Roles**

Health wor	<b>ser:</b> The health worker is experienced in newborn care, but needs some
	improvement in communication skills.
Mother:	Femi lives in a large town. She is 22 years old and this is her second baby.

# Situation

Femi gave birth to a healthy term baby yesterday at home. The newborn is nursing well and is warm. The baby has passed stool and urine. Femi feels well. The health worker visits today to do the physical exam, and finds the newborn to be normal. Femi wants to know how to care for the cord because her last baby developed a cord infection.

# **Discussion Questions**

- 1. How did the health worker show respect and kindness during her time with Femi?
- 2. In what ways could the health worker have improved her interaction during her time with Femi?
- 3. What key health messages did the health worker explain and demonstrate to Femi?
- 4. What did the health worker do to check that Femi understood how to care for the baby's cord?

# Role Play 2.3: Teaching Cord Care Trainer Directions

Ask one participant to read the roles and the situation aloud. Then ask two others to act out the situation while the rest of the group observes them. Allow about ten minutes for the role play. Afterwards, thank the actors, and then lead a discussion using the Discussion Questions as a guide. Suggested answers are given below, but the participants will probably have other good answers and observations. Equipment needed: a newborn doll or manikin, clean warm water, soap, a washcloth, towels, clean diaper and clean baby clothes.

- 1. How did the health worker show respect and kindness during her time with Femi?
- 2. In what ways could the health worker have improved her interaction during her time with Femi?

•The responses for numbers 1 and 2 will vary depending on how the participants acted out the interpersonal communication, which in this situation, needs some improvement.

- 3. What key health messages did the health worker discuss with Femi? CORD STUMP CARE
  - Do not put anything on the cord stump.
  - Keep the cord stump exposed above and outside the diaper under clean top clothes.
  - If the cord becomes soiled from the diaper, wash your hands before washing the cord with clean water and soap. Use a clean cloth. Dry the cord with a clean cloth and place it carefully outside the clean diaper to avoid more contact with stool and urine.
  - The cord normally falls off about 5-7 days after birth. This leaves the umbilicus to heal.

### **UMBILICUS CARE**

- Keep the umbilicus clean and dry.
- Do not put anything on the umbilicus.
- Give baby a sponge bath until cord stump and umbilicus are healed.
- Look at the cord and/or umbilicus for signs of infection every day until it is dry and healed. Signs of infection are: redness of the skin around the umbilicus, pus discharge from the umbilicus, foul smell and delay in separation.
- Get medical help right away if you see any of these signs.
- 4. What did the health worker do to check that Femi understood how to care for the baby's cord?
  - During the demonstration, the health worker asked Femi to tell her what she had understood about the information provided.
  - Had Femi do the cord care while the health worker gave encouragement and guidance during the procedure.

# Role Play 2.4: Teaching and Counseling a Mother and Family About Newborn Care *Participant Directions*

# Purpose

The purpose of this role play is to help you practice counseling and teaching skills and to review the information families need to know about newborn care.

# Preparation

Review pages 50-55 of the Care of the Newborn Reference Manual.

# **Role Playing and Observation**

Everyone will participate either by playing a role or by observing. During the role play, observers should think about what they see and prepare to participate in the discussion.

# Discussion of the Role Play

After the role play, the group will discuss what happened. Think about how you would answer the discussion questions for this role play.

# **Participant Roles**

Health wo	rker: The health worker is experienced in newborn care and has good
	communication skills.
Mother:	Neena is from a small village, where she and her husband run a small store. She is 20
	years old and this is her first baby.
Father:	Neena's husband, Bo, is with her.

# Situation

Neena gave birth to a healthy full-term baby yesterday at home. The baby is nursing well and is warm. The baby has passed stool and urine. Neena feels well. The health worker visits on day 2 to do the physical examination. All the findings are normal. Now the health worker advises Neena about how to care for her baby.

# **Discussion Questions**

- 1. How did the health worker show respect and kindness to Neena and Bo?
- 2. What key health messages did the health worker discuss with Neena and Bo?
- 3. What did the health worker do to check that Neena and Bo understood the health messages?

# Role Play 2.4: Teaching and Counseling a Mother and Family About Newborn Care

# Trainer Directions

Ask one participant to read the roles and the situation aloud. Then ask three others to act out the situation while the rest of the group observes them. Allow about ten minutes for the role play. Afterwards, thank the actors, and then lead a discussion using the Discussion Questions as a guide. Suggested answers are given below, but the participants will probably have other good answers and observations.

# 1. How did the health worker show respect and kindness to Neena and Bo?

- Spoke in a calm reassuring manner, using language that Neena and Bo understood.
- Listened to what they said and answered their questions in the same reassuring manner.
- Showed supportive nonverbal behaviors, such as nodding and smiling, to let Neena and Bo know that they were being listened to and understood.
- Encouraged Neena and Bo to ask questions and express their concerns.

# 2. What key health messages did the health worker discuss with Neena and Bo?

- Breastfeed the baby exclusively, on demand.
- Do not give supplements to the baby between breast feedings.
- Keep the baby warm. He should be dressed/wrapped loosely in several layers of clean, light clothing/cloth and the room in which he is kept should be warm and smoke-free. A baby should be dressed in 1-2 more layers than an adult.
- Wash your hands before and after handling him; keep your fingernails short.
- Keep the cord dry and exposed to air.
- Handle the baby gently and lovingly. If he cries, it means he needs something, so go see what the matter is.
- Keep the baby safe:
  - Do not leave him alone on a bed or table from which he could fall.
  - Do not hold him upside down by the feet.
  - o Breastfeeding mothers should not smoke or drink alcohol or use drugs.
  - Breastfeeding mothers should practice safe sex (condom use, abstinence, or monogamous sex with an HIV negative partner).
- Learn the danger signs. Seek medical help immediately if the baby develops:
  - Feeding difficulties or not sucking
  - Breathing problems
  - Convulsions/fits
  - Fever or feels cold
  - Red, swollen eyelids with pus discharge
  - Redness, swelling, foul odor, or discharge around the cord
  - Jaundice
- Both mother and baby need plenty of sleep; however if the baby is hard to waken after about 3 hours of sleep, he may be sick.
- Bring the baby to the health facility for a routine check at 7 and 28 days of age, and at six weeks for the next immunization.

• The baby's chance of survival will be increased if Neena and Bo use family planning to postpone Neena's next pregnancy for 3-5 years.

# 3. What did the health worker do to check that Neena and Bo understood the health messages?

- During the discussion, the health worker watched their body language and facial expressions for clues that showed whether they understood. (Did they smile or frown? Nod or shake their heads? Did they look worried, tense, confused, or confident and relaxed? etc.)
- The health worker asked Neena and Bo questions to assess what they understood about the information provided.

### **SKILLS LEARNING CHECKLISTS**

### Skills Learning Checklist 2.1: Immediate Care of the Newborn at Birth

### Instructions

<u>Participants</u> can use this skills learning checklist to guide their learning. Two participants should work together. One participant practices the skill (either with another participant and a doll or manikin, or with a real mother and her baby) while the other one observes and scores the performance on the checklist. After discussing the results, the two participants switch roles.

<u>Trainers or evaluators</u> can use the checklist to assess mastery of the skill, either in a real or in a simulated situation. A training evaluation might include an assessment before training, an assessment at the end of training, and later, an on-the-job assessment.

<u>The Observer (or Evaluator)</u> should write the participant's name on each page of the checklist. Then read the case situation and instructions to the participant, while observing and scoring each step of his performance in the correct column of the checklist. When he finishes, thank him and tell him he is done. Add up the total points at the end of the checklist and enter the score. Sign and date the assessment.

**Scoring:** There are a total of 20 steps to be observed. Competency is defined as receiving a score of 1 on every item. Score the participant's performance of each step using the following scale:

**0** = Needs Improvement: The step or task was omitted, or was done incorrectly, or was done out of sequence, or required coaching, or was done hesitantly (needing practice). Clearly not acceptable.

**1 = Performed Competently:** The step or task was done correctly in the proper sequence, comfortably, without reminding or coaching.

Note: Steps should be done in sequence as they appear in the checklist, except where noted otherwise.

### Equipment needed to do this skill assessment

- •Clean water, soap, towels
- •A watch or clock with a second hand
- •Eye ointment or drops (simulated)
- •Scissors or razor blade
- •3 small clean cloths or cotton swabs
- •Trash container
- •A newborn baby or manikin or doll
- •A mother or another person playing the role of a mother
- •A thermometer
- •Baby scale
- •Baby record
- •Non-sterile gloves
- •2 cord ties
- •Clothing or wrapper for the baby

### Skills Learning Checklist 2.1 Immediate Care of the Newborn at Birth

PARTICIPANT'S NAME:

#### Evaluator: Read the following case situation and instructions to the participant:

"You are attending a birth. You have made sure the birth room is clean, warm, light and private. You have washed your hands thoroughly with soap and water and dried them with a clean, dry cloth (or air-dry). You put on gloves. Your supplies are at hand. The baby is born and now you do the immediate care. Please demonstrate and explain the first two steps of immediate newborn care."

	STEPS	SCORES (0 OR 1)				
1	Step 1: Dries and stimulates: Dries baby from head to toe with a cloth or blanket. Removes wet cloth used to dry the baby. Keeps baby covered, including head.					
2	Step 2: Assesses breathing and color while drying the baby.					
	<b>Evaluator:</b> Now say to the participant: "The baby is pink and is breathing 40 breaths per minute. Does this baby need resuscitation?"					
3	Step 3: Decides if the baby needs resuscitation.					
	ator: Now say to the participant: continue and demonstrate the rest of the steps of immediate newborn care. Explain to the moth	er what you are doing and why."				
4	Step 4: Ties two cord ties tightly around the cord, one at two fingers from the baby's abdomen, milks the cord away from baby and places the second tie at two fingers from the first tie.					
5	Cuts between the two ties with a new razor blade or sterile scissors. Covers the cord while cutting to prevent blood splashes. Takes care to prevent injuries to the baby with scissors or razor.					
6	Explains to mother not to put anything on cord stump.					
7	Step 5: Keeps the baby warm by putting the baby skin-to-skin with the mother, putting a cap on the baby's head and covering mother and baby together with a blanket.					
8	Step 6: Helps mother and baby to start breastfeeding before separating them to give any other newborn care (such as eye care or weighing).					
9	Helps mother and baby get into a good position for breastfeeding.					
10	Checks to make sure baby attaches well to the breast, helps the mother if necessary.					
11	Allows unrestricted time for the feeding.					
12	Step 7: Wipes baby's eyes from inner corner outward before giving eye care.					
13	Ointment: Applies a small amount of Tetracycline 1% ointment to inside of the lower lid, from the inside corner out, OR Solution: Drops one drop of Silver nitrate 1% OR Povidone-iodine 2.5% solution into the eye.					

	Skills Learning Checklist 2.1 Immediate Care of the Newborn at Birth					
PART	TICIPANT'S NAME:					
14	Does not let the tip of the ointment tube or dropper touch the eye or anything else.					
15	Weighs the baby.					
16	Washes hands with soap and water, dries them with a clean dry cloth or air-dries them.					
17	Records all care given on the birth record.					
'Please	ator: Now say to the participant: explain while you demonstrate what you will assess in the baby every 30-60 minutes during the can be done in any order.)	first 6 ho	urs." (N	<i>lote</i> . Th	ese thre	ee
18	Breathing: Counts breathing and checks for in-drawing of the chest and grunting.					
19	Warmth: Feels baby's abdomen/chest or back.					
20	Bleeding: Looks for bleeding from the cord.					
	TOTAL POINTS (OUT OF 20 POSSIBLE)					
	Date and signature of the person who scored the performance					

### Skills Learning Checklist 2.2: Newborn Exam

### Instructions

<u>Participants</u> can use this skills learning checklist to guide their learning. Two participants should work together. One participant practices the skill (either with another participant and a doll or manikin, or with a real mother and her baby) while the other one observes and scores the performance on the checklist. After discussing the results, the two participants switch roles.

<u>Trainers or evaluators</u> can use the checklist to assess mastery of the skill, either in a real or in a simulated situation. A training evaluation might include an assessment before training, an assessment at the end of training, and later, an on-the-job assessment.

<u>The Observer (or Evaluator)</u> should write the participant's name on each page of the checklist. Then read the case situation and instructions to the participant, while observing and scoring each step of his performance in the correct column of the checklist. When he finishes, thank him and tell him he is done. Add up the total points at the end of the checklist and enter the score. Sign and date the assessment.

**Scoring:** There are a total of 30 steps to be observed. Competency is defined as receiving a score of 1 on every item. Score the participant's performance of each step using the following scale:

**0** = Needs Improvement: The step or task was omitted, or was done incorrectly, or was done out of sequence, or required coaching, or was done hesitantly (needing practice). Clearly not acceptable.

**1 = Performed Competently:** The step or task was done correctly in the proper sequence, comfortably, without reminding or coaching.

Note: Steps should be done in sequence as they appear in the checklist, except where noted otherwise.

### Equipment needed to do this skill assessment

- •Clean water, soap, towels
- •A mother or another person playing the role of a mother
- •A newborn baby or manikin or doll
- •Clothing or wrapper for the baby
- •A thermometer
- •Baby scale
- •A watch or clock with a second hand
- •Baby record
- •Non-sterile gloves
- •Clean water, soap, and hand towel

	Skills Learning Checklist 2.2 Newborn Exam					
PAR	TICIPANT'S NAME:					
	<b>Lator: Read the following instructions to the participant:</b> <i>te list the equipment you will need to prepare to do an newborn examination. Then demonstrate</i>	home	ou mill +	mat ana t	o do the	»»»»»»»»»»»»»»»»»»»»»»»»»»»»»»»»»»»»»»
1 100	e use the equipment you will need to prepare to do an newborn examination. Then demonstrate STEPS	now y		RE (0		.xum.
	Lists the equipment that is needed:		300			1
1	Clean surface, thermometer (if available), watch or clock with a second hand, scale for weighing, clean clothes.					
2	Washes hands thoroughly with soap and water and dries them with a clean cloth or air-dries them. Puts on clean gloves, if available.					
Eval	uator: Read the following case situation and instructions to the participant	•		1		
"You birth d	are caring for a mother and baby four hours after a normal birth. The baby breastfed and recein and is now warm. You are ready to do a newborn exam. Please demonstrate how you would find ord and asking the mother questions." ( <b>Note:</b> The order of questions may be varied.)	ed eye				
3	Asks the mother and looks at her antenatal care record to find out if she has a history of syphilis, tuberculosis, HIV/AIDS or any illness or problem affecting her pregnancy, labor or birth					
4	Asks the mother and looks at her delivery record to find out if she had fever during labor, or if her bag of water broke more than 18 hours before the birth.					
5	Asks the mother what she has observed about the baby.					
6	Asks if the baby has passed meconium stool or urine.					
7	Listens to the mother attentively and encourages her to ask questions or express her concerns.					
"Non	<b>pator:</b> Now say to the participant: please demonstrate how you would examine the baby. Explain to the mother what you are doi e: The order of the steps may be varied slightly.)	ng as <sub>.</sub> y	ou do th	e exami	nation."	
8	Throughout the exam, the participant tells the mother what he/she is doing, explains findings, and answers questions.					
9	Throughout the exam, participant handles the baby gently.					
10	Looks at the color of the skin.					
11	Looks at the chest. Assesses the breathing movements of the chest and abdomen.					
12	Counts the breaths in 1 minute.					
13	Counts the heart rate with a stethoscope, if available.					
14	Looks at and feels the abdomen.					
15	Looks at the umbilical cord stump for bleeding or loose cord tie or signs of infection.					
16	Looks at the baby's posture, tone, activity, and movements.					
17	Feels the back or chest for warmth or takes axillary temperature.					
18	Looks at and feels the head for swelling or abnormalities and feels the anterior fontanelle.					
19	Looks into the mouth (tongue, mucous membranes).					

	Skills Learning Checklist 2.2 Newborn Exam					
PAR	TICIPANT'S NAME:					
20	When baby cries, puts one gloved finger into the mouth and feels the palate (roof of the mouth) for any opening, and assesses the strength of the baby's sucking.					
21	Looks at the back and feels the spine.					
22	Looks at the anus. Does not insert instrument or finger to test the anus.					
23	Looks at the external genital organs: Girls: Gently separates the legs Boys: Looks at the penis for the opening of the urethra. Feels the scrotum for testes					
24	Weighs the baby.					
25	Dresses or places the baby in skin-to-skin contact with the mother or asks her to do this.					
26	Removes gloves. Washes hands thoroughly with soap and water and dries them with a clean cloth or air-dries them.					
"Non	<b>uator: Now say to the participant:</b> please explain how you will decide if the baby has a problem, and what you will do with your f by has no problem."	indings	if the ba	by has a	problem	or if
27	Decides if all exam findings are normal (by comparing them with the normal findings listed in chart 2.5 if necessary).			_		
28	Decides if the mother has any health problem that may affect the baby.					
29	If all is normal, tells the mother her baby is healthy and normal, plans for routine baby care (including first day immunizations and vitamin K as appropriate) If anything is not normal, determines the baby's problem (by looking at chart 2.6 if necessary), makes a plan of care as appropriate, and explains to the mother what the findings may mean and what action is needed.					
30	Records the findings of the examination and the plan of care.					
	TOTAL POINTS (OUT OF 30 POSSIBLE)					
	Date and signature of person who scored the performance					

### Skills Learning Checklist 2.3: Follow-Up Newborn Care: 1 Day to 28 Days After Birth

### Instructions

<u>Participants</u> can use this skills learning checklist to guide their learning. Two participants should work together. One participant practices the skill (either with another participant and a doll or manikin, or with a real mother and her baby) while the other one observes and scores the performance on the checklist. After discussing the results, the two participants switch roles.

<u>Trainers or evaluators</u> can use the checklist to assess mastery of the skill, either in a real or in a simulated situation. A training evaluation might include an assessment before training, an assessment at the end of training, and later, an on-the-job assessment.

<u>The Observer (or Evaluator)</u> should write the participant's name on each page of the checklist. Then read the case situation and instructions to the participant, while observing and scoring each step of his performance in the correct column of the checklist. When he finishes, thank him and tell him he is done. Add up the total points at the end of the checklist and enter the score. Sign and date the assessment.

**Scoring:** There are a total of 35 steps to be observed. Competency is defined as receiving a score of 1 on every item. Score the participant's performance of each step using the following scale:

**0** = Needs Improvement: The step or task was omitted, or was done incorrectly, or was done out of sequence, or required coaching, or was done hesitantly (needing practice). Clearly not acceptable.

**1 = Performed Competently:** The step or task was done correctly in the proper sequence, comfortably, without reminding or coaching.

Note: Steps should be done in sequence as they appear in the checklist, except where noted otherwise.

### Equipment needed to do this skill assessment

- •Clean water, soap, towels
- •A mother or another person playing the role of a mother
- •A newborn baby or manikin or doll
- •Clothing or wrapper for the baby
- •A thermometer
- •Baby scale
- •A watch or clock with a second hand
- •Baby record

### Skills Learning Checklist 2.3 Follow-Up Newborn Care: 1 Day to 28 Days After Birth

### PARTICIPANT'S NAME:

### Evaluator: Read the following case situation and instructions to the participant:

"You are visiting a mother and baby 24 hours after a normal birth. The baby is full term and vigorous. He cried at birth and did not need resuscitation. The mother had no complications of birth. The baby breastfed during the first hour after birth. You are ready to do the day 1 baby care visit."

"Imagine that I am the mother of the baby. Please demonstrate how you will ask questions to take a history from the mother." (**Note**: The order of questions can be varied.)

	STEPS	SCO	ORE (	0 OR	1)
1	Asks what the mother has noticed about the baby and if she has any concerns.				
2	Asks about the baby's feeding; quality of sucking, how often, how long, and if the baby wakes up for feeds, any problems. Breastfeeding exclusively?				
3	Asks about the baby's urine and stool, behavior, sleeping and alertness.				
4	Asks about the baby's immunization status and whether he received eye medication at birth.				
5	Asks about the mother's diet, liquid intake and rest.				
6	Asks the mother if she has taken vitamin A.				
7	Throughout the history-taking: uses good communication skills. Listens to the mother. Shows respect.				
	uator: Now say to the participant: v please demonstrate what you will do to prepare yourself to do the examination."				
8	Washes and dries hands.				
"Nor	<b>uator: Now say to the participant:</b> v please demonstrate how you will examine the newborn. Explain what normal findings you expeci ination."	t while you	demonstra	te each ste	b of the
9	Throughout the examination: handles the baby gently.				
10					
	Observes the baby and mother together before touching the baby. Explains that it is normal for mother to make eye contact with her baby, and to use her full hand (not just the fingertips) when touching her baby.				
11	<ul> <li>Explains that it is normal for mother to make eye contact with her baby, and to use her full hand (not just the fingertips) when touching her baby.</li> <li>Observes the breastfeeding before starting or at the end of the exam.</li> <li>Explains good position for the baby at the breast (head and body are in a straight line; baby's face is facing the breast; mother holds the baby</li> </ul>				
11 12	Explains that it is normal for mother to make eye contact with her baby, and to use her full hand (not just the fingertips) when touching her baby. Observes the breastfeeding before starting or at the end of the exam. Explains good position for the baby at the breast (head and body are in				
	<ul> <li>Explains that it is normal for mother to make eye contact with her baby, and to use her full hand (not just the fingertips) when touching her baby.</li> <li>Observes the breastfeeding before starting or at the end of the exam.</li> <li>Explains good position for the baby at the breast (head and body are in a straight line; baby's face is facing the breast; mother holds the baby close).</li> <li>Explains signs that the baby is attached well to the breast (lower lip is</li> </ul>				
12	<ul> <li>Explains that it is normal for mother to make eye contact with her baby, and to use her full hand (not just the fingertips) when touching her baby.</li> <li>Observes the breastfeeding before starting or at the end of the exam.</li> <li>Explains good position for the baby at the breast (head and body are in a straight line; baby's face is facing the breast; mother holds the baby close).</li> <li>Explains signs that the baby is attached well to the breast (lower lip is rolled out, most of the areola is in the mouth).</li> <li>Explains signs that the baby is sucking well (slow deep sucking and swallowing sounds with some pauses, the baby's jaw moves and the</li> </ul>				

	Skills Learning Checklist 2.3 Follow-Up Newborn Care: 1 Day to 28 Days	Afte	r Bir	th		
PAR	ficipant's Name:					
16	Looks at breathing movement of the chest and abdomen; explains that there should be no indrawing of the chest.					
17	Looks at the skin: explains that chest, face, lips and mucous membranes should be pink, with no rashes or pustules.					
18	Looks at the cord stump or umbilicus: explains that there should be no bleeding, discharge, swelling, foul odor or redness of the surrounding skin.					
19	Feels the baby for warmth: explains that the back or chest should not feel hot or cool compared to a healthy person. Takes axillary temperature, if a thermometer is available. Explains that normal is 36–37 °C.					
20	Shows the mother how to look at the baby's breathing, color, and cord, and to feel the temperature. Has the mother do a return demonstration, gives feedback.					
21	Looks at the eyes: explains that there should be no discharge.					
22	Looks inside the mouth: explains that it should be smooth and pink in color (no white patches).					
23	Weighs the baby. Explains normal newborn weight gain: Back to birth weight by 7–10 days, then gains 1 ounce (30 grams) per day up to 4 months.					
24	Asks the mother to dress or cover the baby.					
25	Washes hands with soap and water and dries them with a clean, dry cloth (or air dries them).					
	nator: Now say to the participant: please explain how you will decide if the baby has any problems, and what you will do if the bal	by does h	have a pr	oblem. "		
26	Explains: look at Examination Findings charts in Reference Manual. The baby has a problem if any finding is not normal, or if any of the baby's needs are not being met.					
27	Explains: make a plan of care, answer all of parents' questions, record findings and plan of care, provide any care needed, including immunizations, if available.					
	<b>pator:</b> Now say to the participant: please explain how you will advise the mother to continue to care for the baby." (Note: This a	advice	can be g	given in	any ord	ler.)
28	Explains how to keep the baby warm and safe.					
29	Explains how to keep the cord/umbilicus dry and clean.					
30	Advises breastfeeding the baby on demand and exclusively.					
31	Reviews the danger signs to watch for and what to do. (Danger signs: breathing problems; feeding difficulty or not sucking; feels cold; fever; extremely lethargic or unconscious; red, swollen eyes with pus discharge; redness, swelling, pus or foul odor around the cord or umbilicus; convulsions/fits; or jaundice.)					
32	Explains the need to get immunizations on schedule and when to get next immunization. (day 1-3 and 6 weeks).					
33	Explains the time for the next follow-up visit (according to recommended schedule: day1, day 2-3, day 7, day 28).					

Skills Learning Checklist 2.3 Follow-Up Newborn Care: 1 Day to 28 Days After Birth					
PAR'	TICIPANT'S NAME:				
34	Explains that the mother should be referred for family planning services to space pregnancies, if she desires to.				
	nator: If the participant has not mentioned record keeping yet, now ask hir t is the last thing you will do to complete this visit?"	n:			
35	Records exam findings and plan of care in the baby's record.				
	TOTAL POINTS (OUT OF 35 POSSIBLE)				
	Date and Signature of the person who scored the performance				

### **CASE STUDIES**

### Case Studies 2.1, 2.2, 2.3 *Trainer Directions*

- 1. Divide participants into 3 groups.
- 2. Explain that each group will analyse a case study and then report on it to the class.
- 3. Have a participant read the Participant Directions aloud.
- 4. Distribute copies of all case studies to each group.
- 5. Tell each group which case study they should analyse:
  - Group 1 = Case Study 2.1
  - Group 2 = Case Study 2.2
  - Group 3 = Case Study 2.3
- 6. Give the groups 15 minutes to prepare their case studies.
- 7. When the time is up, allow each group 10 minutes to report on their answers to their case study questions.
- 8. Ask the class if they agree with the answers and why.
- 9. Give your comments on their answers and discussions. Refer to the Case Study Keys.

## Case Studies 2.1, 2.2, 2.3 *Participant Directions*

### Purpose

The following case studies are to help you decide if newborn physical exam findings are normal or abnormal and to decide what action to take.

### Instructions

- 1. Read and think about the decision-making steps for the case study given to your group.
- 2. Review the following pages in the Reference Manual to help with details of the newborn exam and findings:
  - Pages 33-35: Overview of newborn history and physical examination
  - Pages 36-37: Chart 2.5---Newborn Physical Exam: Normal Findings
  - Pages 38-41: Chart 2.6—Newborn Physical Exam: Abnormal Findings
- 3. Ask one group member to write down and present the group's findings to the class.
- 4. When all groups have finished answering their questions, each group will present their case study with answers.

### Case Study 2.1: Newborn Physical Exam Findings for Baby Adam

Baby Adam was full-term at birth and weighed 3.0 kg. His mother had no health problems during pregnancy, labor or birth. Adam breathed well at birth. During the physical exam, one hour later, you find that Adam's overall skin color is blue and his rate of breathing is 78 per minute. His anterior fontanelle is flat.

### **Discussion Questions**

- 1. Are findings normal or abnormal? If any finding is abnormal, state which one (s) and why.
- 2. What action is needed? Be specific.
- 3. What are the key messages you will communicate to the family?

## Case Study 2.1: Newborn Physical Exam Finding for Baby Adam (ANSWER KEY)

# 1. Are the findings normal or abnormal? If any finding is abnormal, state which one(s) and why.

There are two abnormal findings: blue skin color and the breathing rate of 78 per minute. It is normal for hands and feet to be bluish in color during the first 1-2 days after birth, but not the whole body.

The normal respiratory rate for newborns is 30-60 breaths per minute. This baby is breathing fast, and is having difficulty getting enough oxygen.

### 2. What action is needed? Be specific.

Give this baby oxygen at a moderate flow rate immediately (if available) and continue during transport if possible. Refer this baby immediately to a higher level of care. Follow referral guidelines (page 129, Reference Manual).

#### 3. What are the key messages you will communicate to the family?

Explain quickly and carefully that the baby is having problems breathing, the reason for the treatment, and for referral, and why it is important to act quickly.

Even though the mother has just delivered, it will be best (for both her and the baby) for her to accompany the baby. If for some reason that is not possible, (maternal complications or illness, for example) help the family arrange for a way to feed the baby expressed breast milk, or find a wet nurse.

### Case Study 2.2: Newborn Physical Exam Findings for Baby Miriam

Miriam was born at 37 weeks and weighed 2.6 kg at birth. Miriam's mother had no health problems during the pregnancy, labor or birth. Miriam breathed well at birth and breastfed within one hour. During the physical exam six hours later, you find that Miriam's hands and feet are blue, her tongue and lips are pink and her breathing is 52 breaths per minute. Her abdomen is rounded and soft with a protruding umbilicus. You also notice that there is some swelling of Miriam's breast tissue and a small amount of whitish vaginal discharge. Her axillary temperature is 36.8 °C.

### **Discussion Questions**

- 1. Are the findings normal or abnormal? If any finding is abnormal, state which one(s) and why.
- 2. What action is needed? Be specific.
- 3. What are the key messages you will communicate to the family?

## Case Study 2.2: Newborn Physical Exam Findings for Baby Miriam (ANSWER KEY)

- 1. Are the findings normal or abnormal? If any finding is abnormal, state which one(s) and why The findings from baby Miriam's physical exam are all normal
- 2. What action is needed? Be specific. Baby Miriam needs normal newborn care. (See pages 50-55 of the Reference Manual.)
- 3. What are the key messages you will communicate to the family? As with all babies, you will teach and counsel this family on normal newborn care, including danger signs.

## Case Study 2.3: Newborn Physical Exam Findings for Baby Malcolm

Baby Malcolm was born at 39 weeks and weighed 3 kg. His mother had anemia during pregnancy and no problems during labor. At birth, the amniotic fluid was meconium-stained, but the midwife suctioned his nose and mouth thoroughly and Malcolm breathed well after the delivery. You have just explained to the mother that you will be doing Malcolm's physical exam. The following are your findings as you proceed: Malcolm has tiny white bumps on his face, his breathing is 40 in one minute with no nasal flaring. His heart rate is 120 beats per minute. When you examine the genitals, you notice that the scrotum is empty.

### **Discussion Questions**

- 1. Are the findings normal or abnormal? If any finding is abnormal, state which one(s) and why.
- 2. What action is needed? Be specific.
- 3. What are the key messages you will communicate to the family?

## Case Study 2.3: Newborn Physical Exam Findings for Baby Malcolm

### (ANSWER KEY)

1. Are the findings normal or abnormal? If any finding is abnormal, state which one(s) and why All the findings are normal except the empty scrotum. However, this is not a danger sign and not life-threatening.

### 2. What action is needed? Be specific.

No action is needed for the empty scrotum at this time. The testes should descend by 6 months. If not, refer the baby to a pediatrician or higher level of care at that time. Otherwise, Baby Malcolm needs normal newborn care. (See pages 50-55 of the Reference Manual.)

#### 3. What are the key messages you will communicate to the family?

The family needs teaching and counselling on care of the normal newborn. Explain to them that sometimes there is a delay in the testes descending, but that it will need to be re-evaluated in 6 months. Referral is only needed if the testes have not descended by that time. They should be sure to bring the baby regularly for follow-up visits.

### **PRE-TEST/POST-TEST**

Participant Name:\_\_\_\_\_ Date:\_\_\_\_\_

#### Instructions:

- Circle **PRE-test** or **POST-test**
- Fill in your name and the date
- Circle the letter of the single **BEST** answer to each question.
- Each question is 10 points.
- 1. Baby Sam has just been born. What is the first action the health worker should do for the newborn?
  - a) Dry the baby and remove the wet cloth and wrap in a clean, dry cloth or blanket.
  - b) Tie and cut the cord.
  - c) Put an antimicrobial drug into both eyes.
- 2. The health worker decides Baby Sam is well and does not need resuscitation. What is the best way to keep Baby Sam warm?
  - a) Put a hat on him and wrap him well, then place him near a heat source.
  - b) Place him skin-to-skin on his mother's chest and cover them both with a dry cloth.
  - c) Wrap him with two dry cloths and place him in a baby cot.
- 3. The health worker tied the cord and cut it with high-level disinfected scissors. How should the health worker care for the cord?
  - a) Put antibiotic ointment on the cord.
  - b) Paint the cord with antiseptic and put a dressing on.
  - c) Leave the cord with nothing on it.
- 4. During Baby Sam's first six hours, the health worker should monitor him every 30 minutes to one hour to assess his:
  - a) Breathing, warmth and cord (to look for bleeding).
  - b) Sleep, axillary temperature and posture.
  - c) Activity, skin color and heart rate during one minute.
- 5. When should the health worker do Baby Sam's first physical examination?
  - a) By one hour of age, as soon as the immediate care is finished.
  - b) When Baby Sam is more than one hour old and he is warm.
  - c) At four weeks of age.

- 6. The health worker begins Baby Sam's physical examination by looking at his color. The normal color for a newborn is:
  - a) Purple face and pale chest and hands.
  - b) Pink face and gums. Hands and feet may be light blue.
  - c) Yellow face, eyes and chest.
- 7. Bathing the newborn baby immediately after birth increases his risk of:
  - a) Losing body heat.
  - b) Getting jaundice.
  - c) Having an eye infection.
- 8. On day 2 the health worker gives Baby Sam his first immunizations: OPV, BCG and Hepatitis B. What should the health worker tell Baby Sam's mother about when Sam should have his next immunizations (OPV, HB, DPT)?
  - a) The next immunizations can be given any time.
  - b) The next immunizations should be given at six weeks of age.
  - c) The next immunizations should be given at 10 months of age.
- 9. The health worker teaches Baby Sam's mother and family about "newborn danger signs". What do they need to know about the newborn danger signs?
  - a) How to recognize a newborn danger sign.
  - b) What to do when they recognize a newborn danger sign.
  - c) Both **a and b** are correct.
- 10. Baby Sam and his mother return to the clinic for a postnatal check-up. Sam is now seven days old and weighs 3250 grams. At birth he weighed 3325 grams. What should the health worker say to his mother about his weight loss?
  - a) The health workers should say nothing as this is normal. Schedule the baby to return in three weeks and encourage the mother to watch for danger signs.
  - b) The health worker should suggest more frequent feedings and one supplementary bottle feed per day. Loss of weight in just one week could be a danger sign.
  - c) The health worker should explain that it is normal for a baby to lose weight during this time, ask about how the breastfeeding is going, and encourage the mother to continue exclusive breastfeeding on demand. Schedule the baby to return for re-weighing in one week to make sure he starts to gain weight.

## PRE-TEST/POST-TEST (ANSWER KEY)

Trainer: Score each correct answer 10 points. The maximum possible score is 100. Add up each participant's score and express it as a percentage.

QUESTION NUMBER	CORRECT ANSWER
1	Α
2	В
3	С
4	Α
5	В
6	В
7	Α
8	В
9	С
10	С

## MODULE 3: SUCCESSFUL BREASTFEEDING

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### **OVERVIEW: SUCCESSFUL BREASTFEEDING**

### **Trainer Preparation**

- Read Chapter 3 (Successful Breastfeeding) of the Care of the Newborn Reference Manual.
- Review Chapter 2 (Immediate Care of the Newborn).
- Review pages 5-12 (An Introduction to the Decision-Making Approach).
- Review Appendix E (Counseling).

### **General Objectives**

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

- Counsel and advise a mother and her family on breastfeeding
- Help a mother breastfeed the first time
- Counsel/advise an HIV-positive mother on newborn feeding
- Recognize and care for women with breastfeeding problems
- Teach a mother to express breast milk and cup feed

### **Specific Objectives**

### Session 1: Breastfeeding Basics

- 1. Discuss the benefits of breastfeeding for the baby and mother
- 2. Explain the risks to newborns who are fed food or liquids other than breast milk
- 3. List at least three reasons a mother should start breastfeeding within the first hour after birth
- 4. Explain how to help a mother succeed with the first breastfeeding
- 5. Explain how to recognize if the baby is breastfeeding well
- 6. Describe the advice a mother needs about successful breastfeeding

### Session 2: Breastfeeding When the Mother is HIV Positive

- 1. Discuss the benefits and risks of breastfeeding for the HIV-positive mother
- 2. Explain how the HIV-positive mother can decrease the risk of passing HIV during breastfeeding
- 3. Discuss the role of the health worker in counseling an HIV-positive mother about feeding her baby

### Session 3: Breastfeeding Problems

- 1. Explain how to recognize and care for a mother with breast problems:
  - Sore red nipples
  - Not enough milk
  - Engorgement
  - Plugged milk duct
  - Mastitis
- 2. List three reasons for a mother to express breast milk and cup feed
- 3. Explain and demonstrate how to express breast milk and cup feed

### Materials Needed for Training

- Flip charts and markers (or chalkboard and chalk, or whiteboard and markers)
- Objectives for each session written on flip charts
- Examining gloves
- A small cup
- A small glass container with a wide mouth and a lid
- A clean cooking pot with a lid

- A stove or cooking fire
- Breast model (manikin)
- Cloths
- Newborn baby dolls or manikins
- Delivery record
- Pillow or rolled blanket to support baby
- Blanket or other cloth covering
- Copies of the list of topics for advice to breastfeeding mothers, so participants can read and refer to them
- Clean water, soap and towel for handwashing
- An experienced (multiparous) breastfeeding mother with her baby less than 28 days old
- Reference manuals for all participants and trainers
- Copies of role plays 3.1 and 3.2
- Copies of Case Studies 3.1, 3.2, 3.3, 3.4, 3.5
- Copies of Keys for Case Studies 3.1, 3.2, 3.3, 3.4, 3.5
- Copies of Skills Learning Checklists 3.1, 3.2, 3.3
- 2 Copies of Module 3 Pre-test/Post-test for each participant
- Copies of Module 3 Pre-test/Post-test Key for all trainers

## LESSON PLANS

## Session 1: Breastfeeding Basics

	Dicasticcuing Dasies	
<b>OBJECTIVES AND CONTENT</b>	TEACHING METHOD	Materials Needed
Determine participants' knowledge baseline.	•Administer Module 3 Pre-test; collect test papers.	Copies of Module 3 Pre- test for all participants
<ul> <li>Introduction of objectives At the end of the session participants will be able to: <ul> <li>1. Discuss the benefits of breastfeeding for the baby and mother.</li> <li>2. Explain the risks to newborns who are fed food or liquids other than breast milk.</li> <li>3. List at least three reasons a mother should start breastfeeding within the first hour after birth.</li> <li>4. Explain how to help a mother succeed with the first breastfeeding.</li> <li>5. Explain how to recognize if the baby is breastfeeding well.</li> <li>6. Describe the advice a mother needs about successful breastfeeding. </li> </ul></li></ul>	<ul> <li>Explain the objectives of this session using the list of objectives written on the flip chart (or board).</li> <li>Discussion if any participants do not understand the objectives.</li> </ul>	List of session objectives written on flip chart (or chalkboard or whiteboard)
<ol> <li>Discuss the benefits of breastfeeding for the baby and mother.</li> <li>Exclusive breastfeeding on demand provides all the nutrition needed in the first six months.</li> <li>Breast milk contains vitamin A, which helps prevent many problems, including poor appetite, eye problems, and infections.</li> <li>Breast milk is a clean source of food.</li> <li>Breast milk strengthens the baby's immune system.</li> <li>Breastfeeding helps prevent allergies.</li> <li>If the baby gets sick, breast milk helps him recover faster.</li> <li>Breast milk promotes optimal growth and development.</li> <li>Breast milk is best for low birth weight babies, especially prematures:         <ul> <li>It is the easiest food to digest.</li> <li>It provides nutrients ideally suited for growth and development.</li> <li>It helps prevent necrotizing enterocolitis.</li> <li>It helps stabilize the baby's temperature.</li> </ul> </li> <li>Breastfeeding helps the baby's mouth, teeth and jaw develop properly.</li> <li>Milk from the breast is always delivered at the right temperature.</li> <li>Breastfeeding helps the placenta separate promptly from the mother's uterus.</li> <li>Breastfeeding helps the uterus return quickly to its</li> </ol>	<ul> <li>Brainstorm.</li> <li>Ask participants what benefits for the baby they know of and write their answers on the flip chart or board.</li> <li>Ask participants what benefits for the mother they know of and write their answers on the flip chart or board.</li> <li>Discuss and add to complete the list if necessary.</li> <li>Emphasize that exclusive breastfeeding is associated with the highest chance of newborn survival and good health.</li> </ul>	Flip chart and markers (or board)

<b>OBJECTIVES AND CONTENT</b>	TEACHING METHOD	Materials Needed
<ul> <li>normal size.</li> <li>Breastfeeding helps prevent maternal anemia because the resumption of menses is delayed.</li> <li>Exclusive breastfeeding helps delay another pregnancy (by delaying ovulation). When pregnancies are spaced 3-5 years apart, women are healthier and child survival is increased.</li> <li>Breastfeeding strengthens the relationship between a mother and her baby.</li> <li>Breastfeeding saves money.</li> </ul> 2.Explain the risks to newborns who are fed food or liquids other than breast milk. <ul> <li>Define exclusive breastfeeding: Nothing but breast milk for the form the method.</li> </ul>	Ask a participant to define exclusive breastfeeding. Correct the definition, if necessary, and write it on the flip chart or	Flip chart and markers (or board)
<ul> <li>milk for the first six months of life. (NO OTHER foods or liquids, not even water.)</li> <li>Explain what can happen when babies are fed other things before the age of six months: <ul> <li>Sucking at the breast is reduced, which causes decreased milk production and may lead to lactation failure.</li> <li>The baby may lose the ability to suck effectively on the breast, which can cause sore nipples, poor milk let-down, refusal of the breast, lactation failure, and/or malnutrition.</li> <li>Nutrients in breast milk are less well absorbed by the baby who receives other foods or liquids: vitamins and minerals can be lost.</li> <li>Babies who receive other foods or liquids stop breastfeeding earlier.</li> <li>They get sick more often, and more severely, and have higher mortality.</li> <li>They are more likely to become malnourished.</li> <li>They are more likely to develop allergies.</li> </ul> </li> <li>Explain why babies do not need extra water: <ul> <li>Breast milk (even colostrum) is almost all water and contains plenty of fluid for the baby's needs.</li> <li>Explain how a mother can make sure her baby is getting plenty of fluid in hot weather:</li> </ul> </li> </ul>	<ul> <li>necessary, and write it on the flip chart or board.</li> <li>Ask participants to give reasons why it is bad for newborns to be given anything except breastfeeding. Write their answers on the flip chart and complete the list if necessary.</li> <li>Ask participants how giving other liquids or foods is harmful to breastfeeding. Write their answers on the flip chart and complete the list if necessary.</li> <li>Ask participants whether babies need to be given supplemental water in hot weather, or before the mother's milk comes in.</li> <li>Explain why giving water is bad for the baby and for breastfeeding.</li> <li>Group discussion of contents to make sure that all participants are convinced.</li> <li>Role Play 3.1</li> </ul>	board) Role Play 3.1: Support for Exclusive Breastfeeding

<b>Objectives and Content</b>	TEACHING METHOD	Materials Needed
<ul> <li>Breastfeed exclusively on demand.</li> <li>Do not separate mother and baby.</li> <li>The mother should drink more liquids herself to increase her milk production.</li> </ul>		
<ol> <li>List at least 3 reasons a mother should start breastfeeding within the first hour after birth.</li> <li>Most newborns have a strong suck reflex and are alert and ready to suck in the hour after birth.</li> <li>The newborn's immediate sucking at the breast stimulates milk production to begin.</li> <li>The newborn will begin immediately to get the benefits of colostrum:         <ul> <li>It is high in vitamin A and antibodies to prevent infection.</li> <li>It helps expel meconium and prevent jaundice.</li> <li>It is very concentrated and helps prevent low blood sugar in the first hours of life.</li> </ul> </li> <li>The mother will bleed less.</li> <li>The baby's temperature will stabilize better.</li> <li>Mother and baby will develop a stronger relationship.</li> </ol>	<ul> <li>Ask participants what benefits for the baby they know of and write their answers on the flip chart or board.</li> <li>Ask participants what benefits for the mother they know of and write their answers on the flip chart or board.</li> <li>Discuss and add to complete the list if necessary.</li> </ul>	Flip charts and markers (or board)
<ul> <li>4. Explain and demonstrate how to help a mother succeed with the first breastfeeding.</li> <li>Content in the Skills Learning Checklist 3.1: Helping a Mother Start Breastfeeding: <ul> <li>Mother's position</li> <li>Baby's position</li> <li>Baby's attachment</li> <li>Baby's suck</li> <li>Duration of each breastfeeding</li> <li>How to support and advise the new mother</li> </ul> </li> </ul>	<ul> <li>Explain each step of the Skills Learning Checklist 3.1.</li> <li>Demonstrate with a model or volunteer participant how to help the mother position herself and her baby.</li> <li>Point out what the areola is on the breast model.</li> <li>Explain the importance of patience and support for the new mother. She should not be rushed.</li> <li>Classroom practice using Skills Learning Checklist 3.1. (One partner pretends to be the mother who has just given birth.)</li> <li>Clinical demonstration and practice with Skills Learning Checklist 3.1 with a just delivered mother, if possible.</li> </ul>	Skills Learning Checklist 3.1: Helping a Mother Start Breastfeeding Baby dolls (manikins) Breast model (manikin) Pillow or rolled blanket to support baby A just delivered mother and her baby (less than one hour old)—if possible
<ul> <li>5. Explain how to recognize if the baby is breastfeeding well.</li> <li>Observe that: <ul> <li>Both baby and mother are comfortably positioned, baby's body is in a straight line.</li> </ul> </li> </ul>	<ul> <li>Explain how to determine if the positioning, attachment, and sucking are good.</li> <li>Discussion.</li> </ul>	Skills Learning Checklist 3.1: Helping a Mother Start Breastfeeding A breastfeeding mother and baby

<b>OBJECTIVES AND CONTENT</b>	TEACHING METHOD	Materials Needed
<ul> <li>Baby's nose (breathing) is not blocked by breast tissue.</li> <li>Baby's chin is touching the breast.</li> <li>Baby's mouth is wide open.</li> <li>Lower lip is turned outward.</li> <li>More of the areola is visible above the mouth than below it.</li> <li>There are slow deep sucks and swallowing with some pauses.</li> <li>The mother's breasts and nipples are comfortable.</li> </ul>	<ul> <li>Explain that if the positioning, attachment, or sucking are not good, the mother should gently detach the baby (by inserting a finger into the mouth to break the suction), get more comfortable and try again.</li> <li>Demonstrate with a breastfeeding mother.</li> </ul>	
<ul> <li>6. Describe the advice a mother needs about successful breastfeeding.</li> <li>Breastfeed exclusively on demand, day and night.</li> <li>Use both breasts, emptying the first breast before offering the second breast at each feed. Alternate which breast is given first.</li> <li>Use different positions: cradle hold, cross-cradle hold, under-arm hold, side-lying.</li> <li>Care for the mother: get plenty of rest, food, fluids, and vitamin A.</li> <li>The baby is getting enough if: <ul> <li>He passes urine at least 6 times in 24 hours.</li> <li>You can hear swallowing when feeding.</li> <li>The mother's breasts feel softer after a feeding.</li> <li>The baby gains weight over time.</li> <li>The baby seems contented after feeding.</li> </ul> </li> <li>Continue to breastfeed a sick baby frequently during illness.</li> <li>Babies go through growth spurts when they need to feed more often: at about 10–14 days, 5-6 weeks, and at about 3 months.</li> <li>For the mother of twins: <ul> <li>A woman's body can make plenty of milk to feed more than one baby adequately.</li> <li>At first, feed just one baby at a time; later you can save time by feeding two at once.</li> <li>Alternate sides (do not give one baby the same breast all the time).</li> <li>Make sure to eat extra food that is rich in protein, vitamins, and minerals every day.</li> </ul> </li> </ul>	<ul> <li>Explain the advice topics briefly.</li> <li>Explain that mothers do not need all this information at the first breastfeed. It can be given during follow-up visits.</li> <li>Have individual participants present each point to the class, as they would advise a mother.</li> <li>Have a participant give advice for a mother who has just given birth to twins.</li> <li>Ask the group members to give feedback to the presenters: <ul> <li>Was the information presented correctly?</li> <li>Was it clear and easy for a mother to understand?</li> </ul> </li> </ul>	List of topics for advice to mothers, so participants can read and refer to them

<b>OBJECTIVES AND CONTENT</b>	TEACHING METHOD	Materials Needed
<ul> <li>Summary</li> <li>Benefits of breastfeeding for babies and mothers</li> <li>Risks of giving other foods or liquids to newborns</li> <li>Reasons to start breastfeeding in the first hour</li> <li>How to help a mother start breastfeeding</li> <li>How to tell if a baby is breastfeeding well</li> <li>Advice to help a mother continue breastfeeding successfully</li> </ul>	<ul> <li>Ask one or more participants to summarize the content of the session.</li> <li>Ask if participants have questions, if there are things they did not understand or points that need further clarification.</li> <li>Answer participants' questions.</li> </ul>	Flip charts which have been used in this session Skills Learning Checklist 3.1 List of breastfeeding advice topics

## Session 2: Breastfeeding When the Mother is HIV Positive

<b>OBJECTIVES AND CONTENT</b>	TEACHING METHOD	MATERIALS NEEDED
<ul> <li>Introduction of objectives At the end of the session participants will be able to: <ol> <li>Discuss the benefits and risks of breastfeeding for the HIV-positive mother.</li> <li>Explain how the HIV-positive mother can decrease the risk of passing HIV during breastfeeding.</li> <li>Discuss the role of the health worker in counseling an HIV-positive mother about feeding her baby. </li> </ol></li></ul>	<ul> <li>Explain the objectives of this session using the list of objectives written on the flip chart (or board).</li> <li>Discussion if any participants do not understand the objectives.</li> </ul>	List of session objectives written on flip chart (or chalkboard or whiteboard)
<ul> <li>Discuss the benefits and risks of breastfeeding for the HIV-positive mother.</li> <li>Risks: <ul> <li>The baby has a 1 in 7 (15%) chance of getting HIV from breastfeeding.</li> <li>Babies who do get HIV usually die early.</li> <li>Risk of transmission is less as long as the baby is exclusively breastfed.</li> <li>Risk is less as long as the mother does not have cracked nipples or breast infection and the baby does not have thrush or another mouth lesion.</li> <li>Risk is less if the baby is breastfed for only a few months; it increases the longer the baby breastfeeds.</li> <li>Risk is greater if the mother becomes infected while breastfeeding, or if the mother has AIDS.</li> </ul> </li> <li>&gt; Benefits: <ul> <li>Babies who receive breast milk are much less likely to die from other infections in the first two months of life than infants who do not get breast milk.</li> <li>Breastfed babies receive all the benefits of breast milk discussed in Session 1 (immune properties, nutritional value, digestibility, hypoallergenicity, immediate stabilization of temperature and blood sugar, etc.).</li> <li>Breastfed babies avoid the dangers of unsanitary feeding bottles.</li> <li>The family avoids the cost of another feeding methods.</li> <li>The mother avoids possible stigmatization (if her HIV status were to be revealed).</li> </ul> </li> </ul>	<ul> <li>Divide participants into two brainstorming groups. Ask one group to come up with hisks, the other to come up with benefits of breastfeeding when the mother is HIV positive.</li> <li>Have each group write their ideas on a flip chart.</li> <li>Discuss the lists, correcting and completing them.</li> </ul>	Flip charts and markers (or boards)

<b>OBJECTIVES AND CONTENT</b>	TEACHING METHOD	MATERIALS NEEDED
<ul> <li>Explain how the HIV-positive mother can decrease the risk of passing HIV during breastfeeding.</li> <li>She can reduce the risk of transmission by: <ul> <li>Exclusive breastfeeding</li> <li>Early weaning</li> <li>Preventing nipple trauma and infections that increase risk</li> <li>Antiretroviral drugs for mother and baby</li> </ul> </li> </ul>	<ul> <li>Make a flip chart list, explain and discuss:</li> <li>Exclusive breastfeeding (nothing but breast milk given to the baby)</li> <li>Weaning early (by six months)</li> <li>Preventing nipple trauma (making sure baby attaches properly to the breast to suck, using a finger to break the suction when detaching baby from the breast, air-drying the nipples after feeding, avoiding use of astringent soap on the breasts)</li> <li>Preventing infections that increase risk (mastitis, thrush)</li> <li>Use of antiretroviral drugs for mother and baby (consult WHO websites for current recommended protocols)</li> </ul>	Flip chart and markers (or board)
<ul> <li>Discuss the role of the health worker in counselling an HIV positive mother about feeding her baby.</li> <li>WHO, UNAIDS and UNICEF recommend that: "Health workers should give a woman with HIV all the information on the risks and benefits of the different feeding options and then support the woman's feeding choice."</li> <li>Health workers will find the latest information and recommendations on the WHO websites listed under "Internet Resources" on page 92 of the Reference Manual.</li> </ul>	<ul> <li>Have a participant write the WHO/UNAIDS/UNICEF recommendation on the board or flip chart while you read it aloud slowly.</li> <li>Ask someone in the group to explain this recommendation. Discuss what it means.</li> <li>Ask participants how they will know what information to give women about the risks and benefits of different feeding options. (<i>Answer:</i> Consult the websites listed under "Internet Resources" on page 92 of the Reference Manual.)</li> <li>Divide participants into small groups to practice Role Play 3.2. Call on one group to present their role play. Give feedback.</li> </ul>	Flip chart and markers Role Play 3.2: Support for the HIV-Positive Mother
Summary Risks and benefits of breastfeeding when the mother is HIV positive How to decrease the risk of passing HIV during breastfeeding Role of the health worker in counseling the HIV-positive mother about infant feeding	<ul> <li>Ask one or more participants to summarize the content of the session.</li> <li>Ask if participants have questions.</li> <li>Answer participants' questions.</li> <li>Clarify any points that are not clear.</li> </ul>	

## LESSON PLAN

## Session 3: Breastfeeding Problems

	TELOUNIC METHOD	
<b>OBJECTIVES AND CONTENT</b>	<b>TEACHING METHOD</b>	MATERIALS NEEDED
<ol> <li>Introduction of objectives         At the end of the session participants will be able to:         Explain how to recognize and care for a mother with breast problems:         <ul> <li>Sore red nipples</li> <li>Not enough milk</li> <li>Engorgement</li> <li>Plugged milk duct</li> <li>Mastitis</li> </ul> </li> <li>List three reasons for a mother to express breast milk and cup feed.</li> <li>Explain and demonstrate how to express breast milk and cup feed.</li> </ol>	<ul> <li>Explain the objectives of this session using the list of objectives written on the flip chart (or board).</li> <li>Discussion if any participants do not understand the objectives.</li> </ul>	List of session objectives written on flip chart (or chalkboard or whiteboard)
Explain how to recognize and care for a mother with breast problems: Sore red nipples Not enough milk Engorgement Plugged milk duct Mastitis For technical content on these problems, refer to pages 74-85 of the Reference Manual.	<ul> <li>Direct students to look at pages 74-85 of their Reference Manuals for technical information on breastfeeding problems.</li> <li>For each problem: <ul> <li>Explain what it is, the cause, any prevention.</li> <li>Ask participants what history and exam they will do.</li> <li>Explain how to identify the problem.</li> <li>Have a participant read the plan of care aloud.</li> <li>Explain the plan of care, answer questions.</li> <li>Ask participants what follow up should be done.</li> <li>Answer participants' questions.</li> </ul> </li> <li>Divide participants into five small groups and assign a case study to each group. Allow 15 minutes for the groups to work on their case studies.</li> <li>Ask a representative of each group to present their case study findings to the plenary group.</li> <li>Discuss each group's findings, making corrections if necessary (refer to the Case Studies Keys).</li> <li>Distribute copies of the Case Studies Keys to all participants.</li> </ul>	Copies of the Decision- Making Charts in the Reference Manual: Sore or Cracked Nipples (pp 76-77) Not Enough Milk (pp 78- 79) Engorgement (pp 80-81) Plugged Milk Ducts (pp 82- 83) Mastitis (pp 84-85) ( <i>Note: Each trainer and</i> <i>participant can find these in his</i> or her copy of the <i>Reference Manual.</i> ) Copies of these Case Studies to distribute to all trainers and participants: 3.1: Sore Red Nipples 3.2: Not Enough Milk 3.3: Engorged Breasts 3.4: Plugged Milk Duct 3.5: Mastitis Copies of the Case Studies Keys for all trainers and participants

<b>OBJECTIVES AND CONTENT</b>	TEACHING METHOD	MATERIALS NEEDED
	Answer any questions.	
<ul> <li>List three reasons for a mother to express breast milk and cup feed.</li> <li>A mother may express and cup feed breast milk because: <ul> <li>She is unable to breastfeed because she is sick.</li> <li>She must be away from her baby.</li> <li>The baby is too premature or small to suck yet.</li> <li>The baby has a severe mouth problem which prevents him from sucking at the breast.</li> <li>Her breasts become so engorged that the baby cannot grasp the nipple.</li> <li>She wants to stimulate her body to produce more milk.</li> </ul> </li> </ul>	<ul> <li>Ask participants to give reasons for expressing breast milk. Write their reasons on the flip chart or board.</li> <li>Correct or complete the list if necessary.</li> </ul>	Flip chart and markers, or board
Explain and demonstrate how to express breast milk and cup feed. Content is detailed in Skills Learning Checklist 3.2: Expressing Breast Milk and Skill Learning Checklist 3.3: Cup Feeding.	<ul> <li>Introduce and thank the lactating woman who, with her baby, are to be your "clients" for this demonstration.</li> <li>Explain and demonstrate each step of Skills Learning Checklist 3.2 (Expressing Breast Milk). Demonstrate teaching the woman how to do it.</li> <li>Explain and demonstrate each step of Skills Learning Checklist 3.3 (Cup Feeding). Demonstrate teaching the woman how to cup feed her baby.</li> <li>Thank the woman graciously for her help, and tell her she can go now.</li> <li>Ask participants if they have questions about the demonstrations. Answer their questions.</li> <li>Participants divide into small groups for simulated practice.</li> </ul>	An experienced (multiparous) lactating woman with her young infant (less than 28 days old) Skill Learning Checklist 3.2: Expressing Breast Milk Skills Learning Checklist 3.3: Cup Feeding Clean water, soap, and towel for hand washing Hot water and cloths Clean (and previously boiled) cups or wide- mouthed containers Cold water Baby dolls or manikins

<b>OBJECTIVES AND CONTENT</b>	TEACHING METHOD	MATERIALS NEEDED
<ul> <li>Summary</li> <li>Recognizing and caring for women with breast problems: Sore or cracked nipples Not enough milk Engorgement Plugged milk duct Mastitis</li> <li>Reasons for expressing and cup feeding breast milk</li> <li>How to express and cup feed breast milk</li> </ul>	<ul> <li>Ask one or more participants to summarize the content of the session.</li> <li>Ask if participants have questions.</li> <li>Answer participants' questions.</li> <li>Clarify any points that are not clear.</li> </ul>	
Assess participants' learning in Module 3	Administer Module 3 Post-test; collect test papers.	Copies of Module 3 Post- test for all participants

*Note*: Participants will need an opportunity to practice expression of breast milk and cup feeding in the clinical setting.

### **ROLE PLAYS**

### Role Play 3.1: Support For Exclusive Breastfeeding Participant Directions

### Purpose

This role play is to help you practice counseling skills to support breastfeeding.

### Preparation

Read pages 59-73 of the Care of the Newborn Reference Manual.

### **Role Playing and Observation**

Everyone will participate either by playing a role or by observing. During the role play, observers should think about what they see and prepare to participate in the discussion.

### Discussion of the Role Play

After each role play, the group will discuss what happened. Think about how you would answer the discussion questions for the role play.

### **Participant Roles**

Health worker:	The health worker is experienced in the care of newborns and has good
Mother (Mrs. H):	interpersonal communication skills. The mother gave birth to a healthy full-term baby 12 days ago. Mrs. H is 22 years old, married, and has one other living child.

### Situation

Mrs. H has come to the clinic because she feels her baby is not breastfeeding as well as she thinks he should be. On talking with Mrs. H, the health worker learns she has been breastfeeding on a strict four-hour schedule. She says this is how she fed her first baby and it worked well, but her new baby cries between breastfeedings. Mrs. H bottle-feeds him formula when he cries. Now he sucks for only a short time at the breast.

### **Discussion Questions**

- 1. How did the health worker show respect and kindness during her time with Mrs. H?
- 2. What else should or could the health worker have done to show respect and kindness?
- 3. What important breastfeeding advice did the health worker discuss with Mrs H? What other advice should the health worker have given?3. What did the health worker do to check that Mrs. H understood the advice?

## Role Play 3.1 *Trainer Directions*

Ask one participant to read the two roles and the situation aloud. Then ask two others to act out the situation while the rest of the group observes them. Allow about ten minutes for the role play. Afterwards, thank the actors, and then lead a discussion using the Discussion Questions as a guide. Suggested answers are given below, but the participants will probably have other good answers and observations.

# 1. How did the health worker show respect and kindness during her time with Mrs. H? What else should or could the health worker have done to show respect and kindness?

- The health worker should have:
- Spoken in a calm reassuring manner, using words that Mrs. H understood.
- Listened to what Mrs. H had to say and answered her questions using the same reassuring manner.
- Used supportive nonverbal behaviors, such as nodding and smiling, to let Mrs. H know that she was being listened to and understood.
- Not expressed judgment about Mrs. H's feeding practices; the health worker should instead have shown interest, concern and friendliness.
- Encouraged Mrs. H. to ask questions or express her concerns at anytime during the session
- 2. What important breastfeeding advice did the health worker discuss with Mrs H? What other advice should the health worker have given?
  - Exclusive breastfeeding on demand is best.
  - Breastfeed as often as the baby wants, but at least 8 times in 24 hours.
  - When the baby empties the first breast, he should be offered the second, but if he refuses it or takes only a small amount, that breast should be offered first at the next feeding.
  - No other milk feeds, water or solids should be given to the baby, as he may feed less often at the breast and for shorter periods.
  - The more often the baby is put to the breast to suck, the more milk will be produced.
  - It may take a few days to build up a good milk supply; Mrs. H should drink lots of liquids (water).
  - The nutritional benefits of breast milk should also be emphasized.

#### 3. What did the health worker do to check that Mrs. H understood the advice?

During the discussion, the health worker asked Mrs H several times to tell her what she understood about the information given, using a friendly, encouraging tone of voice.

# Role Play 3.2: Support for the HIV-Positive Mother *Participant Directions*

#### Purpose

This role play is to help you practice communication skills to help an HIV-positive mother understand the options for feeding her newborn.

#### Preparation

Read pages 59-73 of the Care of the Newborn Reference Manual.

#### **Role Playing and Observation**

Everyone will participate either by playing a role or by observing. During the role play, observers should think about what they see and prepare to participate in the discussion.

#### Discussion of the Role Play

After each role play, the group will discuss what happened. Think about how you would answer the discussion questions for the role play.

#### **Participant Roles**

Health worker: The health worker provides health care in a health station in the community. The health worker is experienced and has good interpersonal communication skills.Anna: Anna is poor. Her home is rural. The house has no electricity or running water. Anna's husband is sick and requires her care. Anna is well.

#### Situation

Anna is pregnant. She is HIV positive and she has heard that she may pass HIV to her baby through her breast milk. She asks the health worker: "What should I do about feeding my baby?" The health worker counsels Anna.

#### **Discussion Questions**

1. How did the health worker show kindness and respect to Anna?

2.Did the health worker give information to Anna in a way she would understand?

3.Did the health worker give Anna correct and complete information?

- What are HIV and AIDS?
- How is HIV spread?
- When is HIV passed to the baby?
- What is the risk of passing HIV to the newborn by breastfeeding?
- What are the options for breastfeeding the newborn and decreasing the risk?
- What are benefits of breastfeeding the baby when the mother is HIV positive?

4. How did the health worker assess Anna's understanding and support her ability to make a decision?

# Role Play 3.2: Support for the HIV-Positive Mother **Trainer Directions**

Ask one participant to read the two roles and the situation aloud. Then ask two others to act out the situation while the rest of the group observes them. Allow about ten minutes for the role play. Afterwards, thank the actors, and then lead a discussion using the Discussion Questions as a guide. Suggested answers are given below, but the participants will probably have other good answers and observations.

#### 1. How did the health worker show kindness and respect to Anna?

The health worker spoke in a kind and friendly way, using language Anna understands. The health worker listened to Anna, using supportive nonverbal behaviors such as nodding and smiling to let Anna know she was being heard. The health worker did not express judgment, and periodically encouraged Anna to ask questions and express her understanding of the information she was providing

2. Did the health worker give information to Anna in a way she would understand? Discuss use of language and ideas that are appropriate to the client.

#### 3. Did the health worker give correct and complete information?

What are HIV and AIDS? An infectious disease that kills the infection-fighting cells of the body. How is HIV spread? By sexual contact, contact with blood or any body fluids including breast milk. When is HIV passed to the baby? HIV may be passed from an infected mother to her baby during pregnancy, birth or breastfeeding. What is the risk of passing HIV to the newborn by breastfeeding? Only about 1 out of 7 HIV positive mothers who breastfeed will infect their babies through breastfeeding, 6 out of 7 will not pass the infection to their babies. What are the options for breastfeeding the newborn and decreasing the risk? Exclusive breastfeeding with early weaning, expressing breast milk, heat-treating and feeding it to the baby by cup, wet nursing. What are the benefits of breastfeeding the baby when the mother is HIV positive? Benefits: protection from other infections such as diarrhea, better growth and health. The risks of feeding the infant with formula include illness or death from infections and poor growth.

#### 4. How did the health worker assess Anna's understanding and support her ability to make a decision?

- During the discussion the health worker frequently asked Anna, in an encouraging tone of voice, to tell what she had understood about the information.
- The health worker did not express judgment or put pressure on Anna to make a quick decision or to change her mind.
- The health worker suggested that Anna should think about her choices, discuss them with her husband, and return to talk it over again in one week.

### **SKILLS LEARNING CHECKLISTS**

### Skills Learning Checklist 3.1: Helping a Mother Start Breastfeeding

#### **Instructions:**

<u>Participants</u> can use this skills learning checklist to guide their learning. Two participants should work together. One participant pretends (using a baby doll or manikin) to be a mother who has just given birth for the first time; the other participant practices advising and helping the new mother start breastfeeding for the first time. At the same time, the first participant reads out the cues from the checklist, observes and scores his partner's performance on the checklist. After discussing the results, the participants switch roles.

<u>Trainers or evaluators</u> can use the checklist to assess mastery of the skill of helping a mother start breastfeeding, either in a real or a simulated situation. A training evaluation might include an assessment before training, an assessment at the end of training, and later, an on-the-job assessment.

<u>The Observer (or Evaluator)</u> should write the participant's name on each page of the checklist. Then read the case situation and instructions to the participant, while observing and scoring each step of his performance in the correct column of the checklist. When he finishes, thank him and tell him he is done. Add up the total points at the end of the checklist and enter the score. Sign and date the assessment.

**Scoring:** There are a total of 25 steps to be observed. Competency is defined as receiving a score of 1 on every item. Score the participant's performance of each step using the following scale:

**0** = Needs Improvement: The step or task was omitted, or was done incorrectly or incompletely, or was done out of sequence, or required coaching, or was done hesitantly (needing practice). Clearly not acceptable.

**1 = Performed Competently:** The step or task was done correctly in the proper sequence, comfortably, without reminding or coaching.

Note: Steps should be done in sequence as they appear in the checklist, except where noted otherwise.

#### Equipment needed to do this skill assessment:

- •Newborn doll (manikin) or a just-delivered mother and her brand new baby
- •Blanket or other covering
- •Pillow
- •Delivery record and pen

### Skills Learning Checklist 3.1: Helping a Mother Start Breastfeeding

#### **PARTICIPANT'S NAME:**

#### Evaluator: Read the following case situation and instructions to the participant:

"Imagine that I am a mother who has just had a normal birth. My baby is full term and vigorous. He cried at birth and did not need resuscitation. The baby is warm. There were no complications at the birth. You are ready to help me start breastfeeding." "Please demonstrate how you would tell the mother (and family) why it is important to breastfeed soon after birth." (**Note**: These explanations can be given in any order.)

	Steps	SCORES (0 OR 1)				
1	Greets the mother appropriately and puts her at ease.					
2	<ul> <li>Explains <i>(in any order)</i> that:</li> <li>Babies are usually awake and ready to suck in the first hour of life.</li> <li>Sucking will stimulate the mother to make breast milk.</li> <li>Early milk (colostrum) helps protect babies from infection.</li> <li>Early breastfeeding reduces postpartum bleeding in the mother.</li> <li>Early breastfeeding helps the mother and baby form a close relationship and breastfeed successfully.</li> </ul>					
	uator: Now say to the participant: plain as you demonstrate how you will help the mother and baby start breastfeeding."					
3	Washes hands thoroughly with soap and water and dries them with a clean, dry cloth or air-dries them.					
4	Helps the mother into a comfortable position she chooses.					
5	Gives the baby to the mother to hold and covers them together with a warm blanket.					
6	Makes sure the baby's head and body are in a straight line, fully supported, facing the breast with his nose opposite the nipple. If the baby is too low, puts a pillow or folded blanket under him to raise him to the level of the breast.					
7	Shows the mother how to hold her breast in a "C-hold" (thumb on top and other fingers below the breast), with fingers away from the areola.					
8	Instructs the mother to touch the baby's lips gently with the nipple and wait for the mouth to open wide before moving the baby onto the breast.					
9	Explains that the mother should move the baby onto the breast, instead of leaning over to bring the breast to the baby, and that she should move the baby's entire body close to her, not just the head.					
10	Looks at how the baby is attached.					
11	<ul> <li>Explains <i>(in any order)</i> that the baby is well attached if:</li> <li>a) The chin is touching the breast.</li> <li>b) The mouth is wide open.</li> <li>c) The lower lip is turned outward.</li> <li>d) More areola is seen above than below the mouth.</li> <li>e) The baby's nose is not blocked by breast tissue.</li> <li>f) The mother's breast and nipples are comfortable.</li> </ul>					
	Evaluator: Now say to the participant: "Please explain and demonstrate what you will do if the baby is not attached well to the breast."					

	Skills Learning Checklist 3.1:						
	Helping a Mother Start Breastfeed	ing					
PAF	PARTICIPANT'S NAME:						
12	Shows the mother how to break the suction to take the baby off the breast and try again.						
13	Encourages the mother so she does not get discouraged.						
	uator: Now say to the participant:	J	1				
-1N02	v the baby is well attached. Please explain and demonstrate what you will do next."	1	1	1	-	1	
14	Looks to see if the baby is sucking well. Explains that there should be slow deep sucking movements with some pauses to rest and swallow.						
15	Advises the mother to let the baby suck as long as he wants, until he releases the breast.						
16	When the baby releases the breast, shows the mother how to help him bring up wind.						
17	Repeats the steps above to help the mother and baby switch to the other breast.						
"Plea	<b>uator:</b> Now say to the participant: use explain what information and advice you will give to the mother to help her continue to breat in in any order.)	astfeed." (	Note:	This ac	lvice ca	an be	
18	<ul> <li>Advises the mother to: <ul> <li>Give only breast milk for the first six months of life.</li> <li>Feed the baby on demand (whenever he wants to).</li> <li>Use both breasts at each feed.</li> <li>Use different comfortable positions.</li> <li>Keep breastfeeding the baby even if he gets sick.</li> <li>Feed the baby more frequently to increase her milk supply during growth spurts, which are common at around 10-14 days, 5-6 weeks, and 3 months of age.</li> </ul></li></ul>						
19	<ul> <li>Advises the mother how to take care of herself:</li> <li>Get enough rest.</li> <li>Drink something with every feeding.</li> <li>Eat one extra meal every day.</li> </ul>						
20	Recommends local foods high in vitamin A, and to take one vitamin A capsule before the baby reaches 6 weeks of age.						
21	<ul> <li>Informs the mother of signs that the baby is getting enough milk:</li> <li>Baby passes urine at least six times/24 hours.</li> <li>Baby's swallowing can be heard during breastfeeding.</li> <li>Breasts feel softer after a feed.</li> <li>Baby gains weight over time (after the first week).</li> <li>Baby seems contented after feeding.</li> </ul>						
22	Informs the mother that babies spaced 3–5 years apart have the best chance of survival. Explains that exclusive breastfeeding on demand can help prevent another pregnancy during the first six months, as long as her menstrual period has not resumed. Explains that after the first six months, another method is needed to prevent a new pregnancy.						
23	Asks if the mother has any questions, answers her questions.						
	<b>Luator: Now say to the participant:</b> use demonstrate what you will do after you have finished helping the mother."						
24	Washes hands thoroughly with soap and water and dries them.						

	Skills Learning Checklist 3.1: Helping a Mother Start Breastfeeding					
PA	PARTICIPANT'S NAME:					
25	Records the first breastfeeding in the baby's chart.					
	TOTAL POINTS (OUT OF 25 POSSIBLE)					
	Date and signature of the person who scored the performance					

### Skills Learning Checklist 3.2: Expressing Breast Milk

#### **Instructions:**

<u>Participants</u> can use this skills learning checklist to guide their learning. Two participants should work together. One participant practices teaching a mother how to express breast milk. The other participant reads out the cues from the checklist, observes and scores his partner's performance on the checklist. After discussing the results, the participants switch roles.

<u>Trainers or evaluators</u> can use the checklist to assess mastery of the skill of teaching a mother how to express breast milk, in either a real or a simulated situation. A training evaluation might include an assessment before training, an assessment at the end of training, and later, an on-the-job assessment.

<u>The Observer (or Evaluator)</u> should write the participant's name on each page of the checklist. Then read the case situation and instructions to the participant, while observing and scoring each step of his performance in the correct column of the checklist. When he finishes, thank him and tell him he is done. Add up the total points at the end of the checklist and enter the score. Sign and date the assessment.

**Scoring:** There are a total of 20 steps to be observed. Competency is defined as receiving a score of 1 on every item. Score the participant's performance of each step using the following scale:

**0** = Needs Improvement: The step or task was omitted, or was done incorrectly, or was done out of sequence, or required coaching, or was done hesitantly (needing practice). Clearly not acceptable.

**1 = Performed Competently:** The step or task was done correctly in the proper sequence, comfortably, without reminding or coaching.

Note: Steps should be done in sequence as they appear in the checklist, except where noted otherwise.

#### Equipment needed to do this skill assessment:

- •A cup
- •A wide-mouthed lidded glass container
- •A cooking pot with a lid
- •Clean water, soap and towel
- •A cooking stove or fire
- •Hot water and clean cloths
- •A lactating woman (if possible)

### Skills Learning Checklist 3.2: Expressing Breast Milk

### **PARTICIPANT'S NAME:**

#### Evaluator: Read the following case situation and instructions to the participant:

"You are caring for a mother and baby three days after a normal birth. The baby is full term and vigorous. The mother is HIV positive and chooses to express her breast milk and heat-treat it for feeding the baby. You are ready to teach the mother to express her breast milk." "Please explain the steps to the mother while you demonstrate how to prepare the equipment for expressing breast milk."

	Steps		RES			
			R 1)			
1	Thoroughly washes a cup and a wide-mouthed lidded container with soap and water and rinses them.					
2	Puts the washed cup, container, and lid into the pot and fills the pot with water so it covers the three items.					
3	Heats the water on the stove or fire until it boils, and covers the pot with its lid.					
4	Boils the pot and its contents for 10 minutes.					
5	Pours the water out of the pot without touching the cup, container, or lid which are in the pot.					
6	Leaves the cup, container, and lid in the pot until needed, keeping the pot covered.					
	luator: Now say to the participant: ase demonstrate and explain each step to the mother as you teach her how	to exr	ress b	reast n	nilk."	
7	Washes hands thoroughly with soap and water and dries them with a clean cloth or air-dries them. Has the mother wash her hands also.					
8	Finds a private place where the mother can relax undisturbed near her baby. Helps the mother get seated comfortably. Places the boiled cup or container within the woman's reach.					
9	Puts clean hot wet cloths on the breasts for 5 minutes.					
10	Has the woman massage her breasts gently from the outside down towards the nipple to help bring the milk down.					
11	Teaches the woman how to hold her breast with one hand in a "C-hold" (thumb on top and other fingers below the breast), with fingers away from the areola.					
12	Teaches the woman to lean slightly forward so the milk will flow into the cup or container, which she should hold in her other hand.					
13	Teaches the woman correct expressing motions: Holding the breast in a "C-hold," press thumb and fingers in towards her body; then squeeze thumb and fingers gently together to compress the breast tissue behind the areola.					
14	Teaches the woman to press and release repeatedly, using the same rhythm as the baby sucking.					
15	Teaches the mother to move her hand around the breast so that milk is expressed from all areas of the breast.					
16	Teaches the mother to express one breast for at least 3–5 minutes until the flow slows, then to express from the other breast, then to repeat both breasts.					
17	Encourages the woman to be patient and to relax, even if no milk comes out at first. Explains that expressing milk can take 20 to 30 minutes or more in the					

	Skills Learning Checklist 3.2: Expressing Breast Milk				
РА	PARTICIPANT'S NAME:				
	beginning. Explains to the mother that it will get easier to express milk over time. Her body will get used to it.				
18	When the mother finishes expressing, teaches her that she should either heat-treat and use the milk immediately, or store it in the covered container, in a refrigerator if possible.				
19	Praises the mother for what she has learned to do, even if only a few drops of milk have been collected. Asks the mother if she has any questions about how to express milk and answers her questions.				
20	When done, washes hands thoroughly with soap and water and dries them.				
	TOTAL POINTS (OUT OF 20 POSSIBLE)				
	Date and signature of the person who scored the performance				

### Skills Learning Checklist 3.3: Cup Feeding

#### Instructions:

<u>Participants</u> can use this skills learning checklist to guide their learning. Two participants should work together. One participant practices teaching a mother how to cup feed a newborn. The other participant reads out the cues from the checklist, observes and scores his partner's performance on the checklist. After discussing the results, the participants switch roles.

<u>Trainers or evaluators</u> can use the checklist to assess mastery of the skill of teaching a mother how to cup feed, in either a real or a simulated situation. A training evaluation might include an assessment before training, an assessment at the end of training, and later, an on-the-job assessment.

<u>The Observer (or Evaluator)</u> should write the participant's name on each page of the checklist. Then read the case situation and instructions to the participant, while observing and scoring each step of his performance in the correct column of the checklist. When he finishes, thank him and tell him he is done. Add up the total points at the end of the checklist and enter the score. Sign and date the assessment

**Scoring:** There are a total of 12 steps to be observed. Competency is defined as receiving a score of 1 on every item. Score the participant's performance of each step using the following scale:

**0** = Needs Improvement: The step or task was omitted, or was done incorrectly, or was done out of sequence, or required coaching, or was done hesitantly (needing practice). Clearly not acceptable.

**1 = Performed Competently:** The step or task was done correctly in the proper sequence, comfortably, without reminding or coaching.

Note: Steps should be done in sequence as they appear in the checklist, except where noted otherwise.

#### Equipment needed to do this skill assessment:

- •A small cup that has been boiled for 10 minutes
- •A small container of breast milk or infant formula
- •Clean water, soap and towel
- •A newborn baby (less than 28 days old), or a baby doll or manikin

### Skills Learning Checklist 3.3: **Cup Feeding**

#### **PARTICIPANT'S NAME:**

#### Evaluator: Read the following case situation and instructions to the participant:

"You are caring for the newborn baby of an HIV-positive mother who has decided to feed her baby with heat-treated breast milk. You will teach the mother how to cup feed her baby." "Please explain while you demonstrate how to prepare for cup feeding."

	STEPS		ORE: DR 1)		
1	Washes hands thoroughly with soap and water and dries them with a clean, dry cloth or air-dries them.				
2	<ul> <li>Explains and assembles the necessary equipment and supplies for cup feeding within reach:</li> <li>A small cup that has been washed and boiled for 10 minutes</li> <li>A container of breast milk or infant formula.</li> </ul>				
3	Pours milk or formula into the small cup until it is half-filled.				
	uator: Now say to the participant: blain while you demonstrate how to cup feed a baby."			 	
4	Awakens the baby if necessary.				
5	Positions the baby: Holds the baby sitting upright or semi-upright in his or her lap. Supports the baby's shoulders and neck with one hand, controlling the baby's head.				
6	Holds the cup of milk so that it rests lightly on the baby's lower lip and the edges of the cup touch the outer parts of the baby's upper lip.				
7	Tips the cup so the milk just reaches the baby's lips and holds it there.				
8	Does not pour milk into the baby's mouth.				
9	Keeps the cup at the baby's lips patiently, letting the baby take the milk at his own pace.				
10	Continues feeding until the baby closes his mouth and refuses to take more. Refills the cup as needed.				
11	Holds the baby to his or her shoulder and rubs his back to help him burp (bring up wind.)				
12	Washes hands and dries them on a clean towel or air-dries them.				
	TOTAL POINTS (OUT OF 12 POSSIBLE)				
	Date and signature of the person who scored the performance				

### **CASE STUDIES**

# Case Studies 3.1, 3.2, 3.3, 3.4, and 3.5 *Trainer Directions*

- 1. Divide participants into five groups.
- 2. Explain that each group will analyse a case study and then report on it to the class.
- 3. Have a participant read the Participant Directions aloud.
- 4. Distribute copies of all case studies to each group.
- 5. Tell each group which case study they should analyse:
  - Group 1 = Case Study 3.1
  - Group 2 = Case Study 3.2
  - Group 3 = Case Study 3.3
  - Group 4 = Case Study 3.4
  - Group 5 = Case Study 3.5
- 6. Give the groups 15 minutes to prepare their case studies.
- 7. When the time is up, allow each group 10 minutes to report on their answers to their case study questions.
- 8. Ask the class if they agree with the answers and why.
- 9. Give your comments on their answers and discussions. Refer to the Case Study Keys.

# Case Studies 3.1, 3.2, 3.3, 3.4 and 3.5 Participant Directions

#### Purpose

The purpose of these case studies is to help you: 1) practice using the information on breastfeeding problems, and 2) practice using the decision-making steps.

#### Instructions

- 1) Read and think about the case study and questions given to your group.
- 2) Work as a group to answer the questions.
- 3) Use the decision-making charts for breastfeeding problems (pages 74-85) in the Reference Manual to find the information you need to answer the questions.
- 4) Choose one group member to present the group's findings to the class.
- 5) When all groups have finished answering their questions, each group will present their case study and their answers to their questions.
- 6) Be prepared to listen to and comment on other groups' case study presentations.

### Case Study 3.1: Breastfeeding and Sore Red Nipples

**The case:** Leila is 18 years old and gave birth to her first baby at home 10 days ago. She had no problems with her pregnancy, labor and birth. You visited Leila at home the second day after the birth, and found the mother and baby both normal at that time. When you weighed the baby on Day 2, he weighed 2600 grams. Leila was breastfeeding exclusively on demand and her milk was just starting to come in.

Leila is now 10 days postpartum. She comes to the clinic today because her nipples are extremely sore and red. As you talk with Leila, you see her wince with pain while breastfeeding. You also observe that the baby's mouth is not open very wide and that most of the areola is visible outside his mouth while he is feeding. He sucks vigorously.

#### **Discussion Questions**

- 1. Based on these findings, what is Leila's problem and why did it happen?
- 2. What other questions would you ask?
- 3. What else should you examine?
- 4. Based on the problems/needs you identified, what is your plan of care for Leila?
- 5. When should Leila come back for a follow-up visit?

### Case Study 3.1: Breastfeeding and Sore Red Nipples (ANSWER KEY)

**The case:** Leila is 18 years old and gave birth to her first baby at home 10 days ago. She had no problems with her pregnancy, labor and birth. You visited Leila at home the second day after the birth, and found the mother and baby both normal at that time. When you weighed the baby on Day 2, he weighed 2600 grams. Leila was breastfeeding exclusively on demand and her milk was just starting to come in.

Leila is now 10 days postpartum. She comes to the clinic today because her nipples are extremely sore and red. As you talk with Leila, you see her wince with pain while breastfeeding. You also observe that the baby's mouth is not open very wide and that most of the areola is visible outside his mouth while he is feeding. He sucks vigorously.

#### **Discussion Questions**

- 1. Based on these findings, what is Leila's problem and why did it happen?
  - Leila has sore, red nipples, probably caused by poor attachment of the baby when breastfeeding.

#### 2. What other questions would you ask?

- Ask her what, if anything, she has put on her nipples, and if she has taken anything for the pain.
- Ask her if her nipples have bled at all.
- Ask her whether she leaks milk between feeds, and whether her breasts are softer after breastfeeding.
- Ask her how often the baby feeds, and whether he is fussy between feedings.

#### 3. What else should you examine?

- As the baby breastfeeds, look to see if his lower lip is turned out, and whether his chin is touching Leila's breast. As he feeds, also observe his sucking (Are there slow deep sucks with occasional pauses?) and positioning (Are his head and body straight, his face facing the breast with his nose opposite the nipple? Is his body close to Leila's body and well supported? Look at Leila's nipples for cracks or bleeding.
- Look at and feel her breasts for swelling, lumps, redness, or heat.
- Take her temperature.
- Look in the baby's mouth for signs of thrush (white patches adhering to the mucous membranes).
- Weigh and examine the baby (as for routine follow-up newborn care).

#### 4. Based on the problems/needs you identified, what is your plan of care for Leila?

- Leila should be praised and encouraged to continue practicing exclusive breastfeeding on demand.
- Have Leila take the baby off the breast (using her finger to break the suction first) and show her how to help the baby attach better. She should touch the corner of the baby's mouth with her nipple, wait for the mouth to open wide, and then move the baby onto the breast making sure that his lower lip is turned out and below the nipple and that his mouth grasps a large part of the areola.
- Advise Leila to use different positions while breastfeeding: side-lying, cradle hold, cross-cradle hold, under-arm hold.

- Advise Leila to start feeding with the side that is less sore.
- Give Leila Paracetomol for pain (500 mg tablet every 4–6 hours) if needed. She can take it 30 minutes before breastfeeding.
- Advise Leila to apply breast milk to her nipples after a feed or bath, then to air-dry them. She should keep her nipples clean and dry, but not use soap on them.
- Advise her to expose her breasts to sun for 10 minutes 2–3 times a day.
- DO NOT STOP BREASTFEEDING.
- If Leila is HIV positive, she should not breastfeed her baby on a bleeding nipple. She should express and discard the milk from that breast until the nipple is healed.

#### 5. When should Leila come back for a follow-up visit?

- Ask Leila to return to the clinic in 2-3 days if the problem has not fully resolved.
- She should also return for follow-up six weeks postpartum, or sooner, if she has questions or concerns or if she or the baby experiences any danger signs.

### Case Study 3.2: Breastfeeding and Not Enough Milk

**The Case:** Cara brings her two-week-old baby to the clinic. She asks for a tin of infant formula, saying: "I don't have enough milk. My baby is hungry."

The health worker takes a history from Cara, and learns that she is feeling extremely tired. Her maternity record shows that she gained only six kilos during her pregnancy, and that she bled heavily after the birth. When asked about her daily food intake, Cara explains that she takes tea and a piece of bread in the morning, and a bowl of rice with beans at night; sometimes she has a banana in the middle of the day. As for liquids, she drinks a few cups of water and some tea every day.

Cara reports that she breastfeeds the baby every 3-4 hours, and has not given the infant anything else. Her breasts are a bit full before and soft and empty after feeding. The baby sleeps a bit but wakes up often to breastfeed. He is fussy much of the time between feeds. At birth the child weighed 3200 grams. The health worker observes the baby breastfeeding while Cara is talking, and sees that the baby's attachment and suck are good.

The health worker examines the mother and baby. Everything is normal except that the mother is very thin and the baby has not gained weight since birth.

#### **Discussion Questions:**

- 1. Based on these findings, what is Cara's problem?
- 2. How will you reassure Cara?
- 3. What plan of care will you advise for Cara?
- 4. When should Cara have follow-up?

### Case Study 3.2: Breastfeeding and Not Enough Milk (ANSWER KEY)

**The Case:** Cara brings her 2-week-old baby to the clinic. She asks for a tin of infant formula, saying: "I don't have enough milk. My baby is hungry."

The health worker takes a history from Cara, and learns that she is feeling extremely tired. Her maternity record shows that she gained only 6 kilos during her pregnancy, and that she bled heavily after the birth. When asked about her daily food intake, Cara explains that she takes tea and a piece of bread in the morning, and a bowl of rice with beans at night; sometimes she has a banana in the middle of the day. As for liquids, she drinks a few cups of water and some tea every day.

Cara reports that she breastfeeds the baby every 3-4 hours, and has not given the infant anything else. Her breasts are a bit full before and soft and empty after feeding. The baby sleeps a bit but wakes up often to breastfeed. He is fussy much of the time between feeds. At birth the child weighed 3200 grams. The health worker observes the baby breastfeeding while Cara is talking, and sees that the baby's attachment and suck are good.

The health worker examines the mother and baby. Everything is normal except that the mother is very thin and the baby has not gained weight since birth. The baby has no signs of dehydration.

#### **Discussion Questions**

#### 1. Based on these findings, what is Cara's problem?

- Not enough milk.
- Cara is thin, tired and not eating or drinking enough liquids, according to her history.

#### 2. How will you reassure Cara?

• Reassure Cara that she can make lots of milk to satisfy her baby if she follows your advice. It usually only takes 24–48 hours to increase breast milk production.

#### 3. What plan of care will you advise for Cara?

- Cara should rest as much as possible and keep the baby with her so she can breastfeed very frequently during the time while she is trying to increase her milk supply. Help Cara to identify more ways she can rest.
- She should feed the baby at least every 2–3 hours, more often if the baby wants to eat.
- Let the baby feed for as long as possible on each breast.
- Continue to give ONLY breast milk. Giving formula would make matters worse.
- Cara needs to eat and drink more (with every meal and every breastfeeding). Help Cara to think of healthy foods that are available to her and ways to eat more frequently if possible.
- If Cara continues to feel very tired, she should be checked for anemia.

#### 4. When should Cara have follow-up?

- In 3 days to learn if the problem is resolved or sooner if she or the baby has any danger signs
- Weigh the baby once a week until you see him gaining weight steadily.

### Case Study 3.3: Breastfeeding and Engorged Breasts

**The Case:** 21-year-old Dora gave birth to her first baby 3 days ago, but she does not smile when you greet her. You ask her what is wrong, and she tells you that her breasts are both swollen, hot and very painful. When you examine her breasts, you find that they are both very swollen and hot, but that there is no redness or lump. (*She bites her lip and a tear falls from her eye while you are examining the breasts.*) Milk is dripping freely from both nipples. You take her temperature, and find that it is 37.7 °C.

You examine Dora's baby, a girl of 2550 grams. The baby has lost 100 grams since birth but appears to be well. You ask Dora to breastfeed so that you can observe the baby, and you see the child having trouble grasping the very swollen areola. When the baby finally latches on, she does not seem to suck very vigorously; yet Dora's breast milk pours into her mouth faster than she can swallow it.

#### **Discussion Questions**

- 1. How will you decide if Dora has engorgement, mastitis or a plugged milk duct?
- 2. What advice and care will you give to Dora?
- 3. When should Dora have follow-up care?

### Case Study 3.3: Breastfeeding and Engorged Breasts (ANSWER KEY)

**The Case:** 21-year-old Dora gave birth to her first baby 3 days ago, but she does not smile when you greet her. You ask her what is wrong, and she tells you that her breasts are both swollen, hot and very painful. When you examine her breasts, you find that they are both very swollen and hot, but that there is no redness or lump. (*She bites her lip and a tear falls from her eye while you are examining the breasts.*) Milk is dripping freely from both nipples. You take her temperature, and find that it is 37.7 °C.

You examine Dora's baby, a girl of 2550 grams. The baby has lost 100 grams since birth but appears to be well. You ask Dora to breastfeed so that you can observe the baby, and you see the child having trouble grasping the very swollen areola. When the baby finally latches on, she does not seem to suck very vigorously; yet Dora's breast milk pours into her mouth faster than she can swallow it.

#### **Discussion Questions**

1. How will you decide if Dora has engorgement, mastitis or a plugged milk duct?

•Breast Engorgement: Both breasts are hot, swollen, and painful. It often happens on day 2 or 3 after birth.

•Mastitis: Usually starts 10 days or more after birth. The mother has fever, one area of redness and heat. Usually only one breast is affected.

•Plugged milk duct: No fever, the mother feels well except for the lump in her breast.

•Dora has breast engorgement.

#### 2. What advice and care will you give to Dora?

- Put hot wet clean cloths on the breasts for 5–10 minutes before each breastfeeding.
- Express a small amount of breast milk by hand before putting the baby to the breast.
- Breastfeed often, at least every 2–3 hours. If the baby is not able to suck, express milk every 2–3 hours. (*Note*: Engorged breasts that are not emptied can become infected.)
- Breastfeed well on each breast (until breasts are soft).
- Massage the firmness in the breast from the outside of the breast in to the nipple while feeding the baby.
- If the breasts still feel full after breastfeeding encourage the baby to feed longer or express breast milk for a few minutes (until the breasts feel softer).
- After breastfeeding, to make the breasts more comfortable, either put a cold cloth on both breasts for 5-10 minutes, or put cabbage leaves on the breasts:
  - 1. Wash and dry fresh cabbage leaves with clean water.
  - 2. Chill the leaves before using, if possible.
  - 3. Crumple the leaves to crush their veins before using them.
  - 4. Apply enough leaves to completely cover the breasts (including under the arm).
  - 5. Wear a bra or cloth to hold leaves in place.
  - 6. Wear the leaves until they become soft (wilt).
- Explain the signs of breast infection, and to see a health care provider if they happen: Pain, redness, heat, lump in breast with fever and chills

#### 3. When should Dora have follow-up care?

•Dora needs follow-up only if the problem continues or gets worse (or if she notices any danger sign in her or the baby). Engorgement is a natural process that usually resolves in a few days.

### Case Study 3.4: Breastfeeding and Plugged Milk Duct

**The Case:** Emma has a healthy 2-week-old baby. She is breastfeeding the baby exclusively and the baby has begun gaining weight. Nevertheless, she comes to you today with a worried look on her face, and tells you that she has a lump in her right breast which is sore to touch.

You take a history and examine Emma. The lump is in the lower outer quadrant of her right breast. It is about 3 cm in diameter and hurts her when you palpate it. Emma has no fever, and her breast is not red and does not feel hot. You decide Emma has a plugged milk duct.

#### **Discussion Questions**

- 1. What findings from the history and examination helped you decide Emma has a plugged milk duct?
- 2. What other problems did you rule out, and why?
- 3. What plan of care will you advise for Emma?
- 4. What danger signs for breast infection will you teach Emma?
- 5. When should Emma have a follow-up visit?

### Case Study 3.4: Breastfeeding and Plugged Milk Duct (ANSWER KEY)

**The Case:** Emma has a healthy 2-week-old baby. She is breastfeeding the baby exclusively and the baby has begun gaining weight. Nevertheless, she comes to you today with a worried look on her face, and tells you that she has a lump in her right breast which is sore to touch.

You take a history and examine Emma. The lump is in the lower outer quadrant of her right breast. It is about 3 cm in diameter and hurts her when you palpate it. Emma has no fever, and her breast is not red and does not feel hot. You decide Emma has a plugged milk duct.

#### **Discussion Questions**

# 1. What findings from the history and examination helped you decide Emma has a plugged milk duct?

- The lump is sore to touch.
- The baby is 2 weeks old.
- Lump is present without redness or heat.
- No fever.

#### •2. What other problems did you rule out and why?

• Engorgement: Starts 2-3 days after birth, no fever, no one area of redness and heat, both breasts affected

• Mastitis: Starts 10 days or more after birth, fever, one area of redness and heat, only one breast affected

#### 3. What plan of care will you advise for Emma?

- Before breastfeeding: Put hot wet clean cloths on the breasts for 5–10 minutes.
- Gently massage the breast that has the plugged milk duct. Move the hand that is doing the massage from the outside of the breast toward the nipple.
- Breastfeed from the breast that has the plugged milk duct first.
- Encourage the baby to feed longer from the breast that has a plugged milk duct.
- Vary the baby's feeding positions. Since the plugged milk duct is in the outer breast, use the under-arm hold position. This draws more milk from the outer breast.
- Do not wear a tight bra or cloths around the breasts.

#### 4. What danger signs for breast infection will you teach Emma?

•Explain the signs of a breast infection, and to see a health care provider if they happen: Pain, redness, heat, lump in breast with fever and chills

#### 5. When should Emma have a follow-up visit?

•Emma needs follow-up only if the symptoms continue or if she develops signs of infection. Remind Emma to also seek care for any maternal or newborn danger sign.

### Case Study 3.5: Breastfeeding and Mastitis

**The Case:** Freda is 22 and gave birth to her third baby at the district hospital. Her pregnancy, labor and birth were uncomplicated. One week after delivery, Freda returned to the clinic for an early postpartum visit. At that time, according to the notes in her record, her physical exam was normal, and she was breastfeeding exclusively on demand without problems. The newborn had regained her birth weight and was given her first immunizations. Freda was given a vitamin A capsule and iron tablets.

Today, two weeks after delivering, Freda has returned to the clinic because of body aches, high fever and chills which all started yesterday. The health worker questions Freda and learns that she has severe pain in one area of her left breast. She denies having any abdominal pain or dysuria. He takes Freda's temperature and finds it to be 39.2 °C. Physical exam is normal except for Freda's fever and shivering, and a very painful, hot reddened area (about 3cm x 4 cm) in the upper outer quadrant of her left breast. A poultice of locally grown herbs has been applied to the inflamed area of the breast.

The health worker takes a blood smear and sends it to the lab to check for malaria parasites. He also observes the newborn breastfeeding, apparently without problem. Freda states that she is still breastfeeding exclusively on demand.

#### **Discussion Questions**

- 1. What findings from the history and examination indicate that Freda has mastitis?
- 2. What plan of care does she need?
- 3. What advice should she be given?
- 4. Freda comes back for a follow-up visit 3 days after starting on the plan of care. She now <u>still</u> has fever and pain in her breast. What plan of care does Freda need now and why?

### Case Study 3.5: Breastfeeding and Mastitis (ANSWER KEY)

**The Case:** Freda is 22 and gave birth to her third baby at the district hospital. Her pregnancy, labor and birth were uncomplicated. One week after delivery, Freda returned to the clinic for an early postpartum visit. At that time, according to the notes in her record, her physical exam was normal, and she was breastfeeding exclusively on demand without problems. The newborn had regained her birth weight and was given her first immunizations. Freda was given a vitamin A capsule and iron tablets.

Today, two weeks after delivering, Freda has returned to the clinic because of body aches, high fever and chills which all started yesterday. The health worker questions Freda and learns that she has severe pain in one area of her left breast. She denies having any abdominal pain or dysuria. He takes Freda's temperature and finds it to be 39.2 °C. Physical exam is normal except for Freda's fever and shivering, and a very painful, hot reddened area (about 3cm x 4 cm) in the upper outer quadrant of her left breast. A poultice of locally grown herbs has been applied to the inflamed area of the breast.

The health worker takes a blood smear and sends it to the lab to check for malaria parasites. He also observes the newborn breastfeeding, apparently without problem. Freda states that she is still breastfeeding exclusively on demand.

#### **Discussion Questions**

- 1. What findings from the history and examination indicate that Freda has mastitis?
  - A hot, red, painful area or lump in one breast.
  - Symptoms in only one breast.
  - Sudden onset of high fever and chills with the above symptoms.
  - Onset of the problem 2 weeks after delivery.

#### 2. What plan of care does she need?

- Give Freda an antibiotic for 10 days, following your clinical guidelines.
- First choice, if available, is <u>Cloxacillin</u>, 500 mg every 6 hours. Other choices include: Erythromycin, 250 mg every 8 hours <u>Or</u> Amoxicillin, 500 mg every 8 hours <u>Or</u> Ampicillin, 500 mg every 6 hours.

#### 3. What advice should she be given?

- Put hot wet clean cloths over the infected area for 5–10 minutes before breastfeeding.
- Gently massage the infected breast from the outside in toward the nipple, over the infected area before breastfeeding.
- Breastfeed often (every 2 hours) starting with the infected breast.
- Feed the baby longer from the infected breast.
- Since the infection is in the outer breast, use the under-arm hold while feeding. This draws more milk from the outer breast.
- Stay in bed and keep the baby with you (to feed often).
- Drink lots of liquids (12 glasses a day).
- Take Paracetomol for pain (500 mg tablet every 4–6 hours).
- Explain danger signs: If there is a hard painful lump in the breast that does not go away, or if the infection does not get better after 2 days of antibiotics, go to a higher-level health facility right away.

- 4. Freda comes back for a follow-up visit 3 days after starting on the plan of care. She now <u>still</u> has fever and pain in her breast. What plan of care does Freda need now and why?
  - She needs to go immediately to a higher level health facility because she may develop a breast abscess if the infection is not resolved.
  - She should continue breastfeeding.

### **PRE-TEST/POST-TEST**

Name:

Date:

#### Instructions:

#### • Circle **PRE-test** or **POST-test**

- Fill in your name and the date
- Circle the letter of the single **BEST** answer to each question.
- Each question is 10 points.
- 1. These three babies are full-term and healthy. Which baby has the best chance of NOT getting sick with diarrhea?
  - a) Baby Ann is breastfed and is never given other liquids.
  - b) Baby Bertha is fed infant formula by bottle exclusively.
  - c) Baby Christine is breastfed and also takes drinks of herbal tea from a cup.
- 2. When the climate is very hot and dry the baby should be given:
  - a) Tea by bottle in addition to breastfeeding.
  - b) Additional breast feedings only.
  - c) Water by cup in addition to breastfeeding.
- 3. The baby needs colostrum, the first milk that comes from the breast, because:
  - a) It contains infection fighting antibodies.
  - b) It contains vitamin A
  - c) Both a and b are true.
- 4. After the baby is born, when should the mother start breastfeeding?
  - a) In 2-3 hours after the mother has rested.
  - b) Within the first 24 hours after birth.
  - c) Within 1 hour after birth.
- 5. Emma has just delivered a full-term healthy newborn. What will the health worker do to help Emma to start breastfeeding?
  - a) Bathe the baby so he will be clean before breastfeeding.
  - b) Help Emma position herself and the baby and attach the baby to the breast.
  - c) Undress the baby so he will be awake to suck.
- 6. How long should Emma breastfeed her baby each time?
  - a) There is no limit to how long a baby can suck.

- b) Just a few minutes so the nipple will not get sore.
- c) Just long enough to empty one breast.
- 7. The health worker visits Fiona who is breastfeeding her baby. Fiona says: "The baby feeds about 10 times each day, nursing every 2 to 3 hours on both breasts." What is the health worker's assessment?
  - a) The baby is breastfeeding too often. He may be sick.
  - b) The baby is not breastfeeding enough. He may not gain weight.
  - c) The baby is breastfeeding normally.
- 8. Fiona asks if she will have enough milk for her baby. What can the health worker tell Fiona to reassure her?
  - a) The more the baby sucks, the more milk the mother makes.
  - b) I can give you drugs to increase the milk.
  - c) Both **a** and **b** are good responses.
- 9. Baby Irene is a newborn. Her mother died 1 day after delivery. How should the health worker teach baby Irene's caretaker to feed the baby with a cup?
  - a) Hold the baby upright and put the cup of milk to the baby's lips.
  - b) Lay the baby on her back and put milk into her mouth with a spoon.
  - c) Hold the baby upright and pour milk into her mouth.
- 10. If an HIV-positive mother chooses to breastfeed, she should:
  - a) Alternate breastfeedings with infant formula feedings.
  - b) Breastfeed exclusively until weaning by 6 months.
  - c) Express breast milk into a cup and feed the baby the freshly expressed milk.

# PRE-TEST/POST-TEST (Answer Key)

Trainer: Score each correct answer 10 points. The maximum score possible is 100. Add up each participant's score and express it as a percentage.

QUESTION NUMBER	CORRECT ANSWER
1	С
2	В
3	С
4	С
5	В
6	Α
7	С
8	Α
9	Α
10	В

# MODULE 4: NEWBORN RESUSCITATION

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### **OVERVIEW: NEWBORN RESUSCITATION**

#### **Trainer Preparation**

- Read Chapter 4 (Newborn Resuscitation) of the Care of the Newborn Reference Manual.
- Review Chapter 2 (Immediate Care of the Newborn) and Appendix C (Infection Prevention).

#### **General Objective**

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

1) Demonstrate resuscitation of a newborn.

#### **Specific Objectives**

- 1) Explain asphyxia.
- 2) Explain how to recognize fetal hypoxia during labor and what to do.
- 3) Prepare a place and equipment for newborn resuscitation.
- 4) Demonstrate immediate assessment of a newborn at birth.
- 5) Explain how to decide if a newborn needs resuscitation.
- 6) Demonstrate newborn resuscitation.
- 7) Demonstrate care after resuscitation:
  - a. Follow-up of successful resuscitation
  - b. Care when a baby needs referral after resuscitation
  - c. Care of the parents when resuscitation fails and a newborn dies
- 8) Demonstrate cleaning and disinfection of resuscitation equipment and supplies.

#### Materials Needed for the Whole Group

- Flip charts and markers (or chalkboard and chalk, or whiteboard and markers)
- Objectives written on flip chart
- Fetal stethoscope
- Watch with a sweep second hand

#### Materials Needed for Each Group of Four Participants:

- Gauze squares
- Trash container
- Newborn size manikin or doll
- Newborn cap (hat)
- Bulb syringe *or* De Lee suction catheter with trap
- Newborn size self-inflating bag (Ambu bag) with newborn and premature size face masks
- 3 towels or pieces of cloth
- 1 bottle of chlorine bleach
- 3 plastic pails
- Soap, water, and clean hand towels
- Scrub brush
- Scissors
- Heavy-duty household (cleaning) gloves

- 2 Copies of Module 4 Pre-test/Post-test for each participant
- Copies of Module 4 Pre-test/Post-test Key for all trainers

# LESSON PLAN

<b>OBJECTIVES AND CONTENT</b>	TEACHING METHOD	Materials Needed
Determine participants' knowledge baseline.	Administer Module 4 Pre-test; collect test papers.	Copies of Module 4 Pre- test for all participants.
<ul> <li>Introduction of objectives At the end of the session participants will be able to: <ol> <li>Explain asphyxia.</li> <li>Explain how to recognize fetal hypoxia during labor and what to do.</li> <li>Prepare a place and equipment for newborn resuscitation.</li> <li>Demonstrate immediate assessment of a newborn at birth.</li> <li>Explain how to decide if a newborn needs resuscitation.</li> <li>Demonstrate newborn resuscitation.</li> <li>Demonstrate care after resuscitation.</li> <li>Follow-up of successful resuscitation</li> <li>Care when a baby needs referral after resuscitation</li> <li>Care of the parents when resuscitation fails and a newborn dies</li> </ol></li></ul>	be prepared to do resuscitation at <b>every</b> birth. Explain the objectives of this session using the list of objectives written on the flip chart (or board).	List of session objectives written on flip chart (or chalkboard or whiteboard)
<ol> <li>Explain asphyxia.</li> <li>Define asphyxia.</li> <li>Review signs of newborn asphyxia.</li> <li>Explain when newborn asphyxia happens.</li> </ol>	Presentation/discussion of: a. Definition of asphyxia b. Signs of asphyxia c. Causes of asphyxia (fetal hypoxia and its causes)	
2. Explain how to recognize fetal hypoxia during labor and what to do. How to know a fetus has hypoxia How to prevent hypoxia How to identify and treat hypoxia in labor	<ul> <li>Ask participants: How do you tell a fetus is having a problem during labor?</li> <li>Explain abnormal fetal heart rate is below 120 or above 160.</li> <li>Ask participants: <ul> <li>How do you listen to and count the fetal heart rate? Ask a participant to demonstrate proper technique with a fetal stethoscope and a watch with a sweep second hand.</li> <li>How often should you listen to the fetal heart rate? (Every half hour during active labor, every 15 minutes during second stage.)</li> <li>How do you prevent hypoxia during labor? (Hydration, have the woman avoid lying on her back, use of partograph for labor management etc.)</li> </ul> </li> <li>Ask participants: What do you do when the fetal heart rate is abnormal? (Change the</li> </ul>	Fetal stethoscope and watch with a sweep second hand

<b>OBJECTIVES AND CONTENT</b>	TEACHING METHOD	Materials Needed
	<ul> <li>woman's position, hydrate her, administer oxygen, stop oxytocin drip if one is running, deliver rapidly if dilatation is complete.)</li> <li>Emphasize: Be ready to do resuscitation at every birth.</li> </ul>	
<ul> <li>3. Prepare place and equipment for resuscitation.</li> <li>Explain the need for a warm room and flat surface.</li> <li>Explain what equipment is needed and why.</li> </ul>	<ul> <li>Explain the importance of keeping the baby warm during resuscitation.</li> <li>Explain the need for a firm flat surface.</li> <li>Show the equipment needed.</li> <li>Questions and answers: <ul> <li>Ask participants if they know the purpose for each piece of equipment. Give them a chance to explain.</li> </ul> </li> <li>Demonstrate setting up for resuscitation.</li> </ul>	For each group of 4 participants: Table top or other firm surface 3 towels or cloths 1 bulb syringe or De Lee suction catheter 1 newborn Ambu bag with face masks (sizes 1, 0) Gauze squares
<ul> <li>4. Demonstrate immediate assessment of the newborn.</li> <li>Dry and stimulate the baby.</li> <li>Discard the wet cloth and wrap the baby quickly in another warm, dry cloth to keep him warm.</li> <li>Look at the baby to see if he is breathing or crying.</li> </ul>	Explain and demonstrate drying, stimulating, assessing, and wrapping the baby to show that the actions are done quickly. Discuss the above and answer any questions. Have participants practice in small groups of 4. Monitor each group's practice (ideally, have 1 trainer per small group).	For each group of 4 participants: Newborn manikin or doll 2 towels or cloths Table top or other firm surface covered with a clean cloth
<ul> <li>5. Explain how to decide if the newborn needs resuscitation.</li> <li>Review how to assess a newborn's breathing: Normal breathing: if 30-60 breaths per minute or crying, no resuscitation is needed.</li> <li>Abnormal breathing: if less than 30 breaths per minute, gasping, irregular or no breathing, then begin resuscitation immediately.</li> </ul>	<ul> <li>Demonstrate how to observe the baby's breathing.</li> <li>Review the criteria to use to assess if a baby needs resuscitation.</li> <li>Give the examples below and ask participants to tell you if the baby needs resuscitation.</li> <li>Example 1: Breathing—None</li> <li>Example 2: Breathing—Irregular, gasping</li> <li>Example 3: Breathing—40 breaths per minute</li> </ul>	Newborn manikin or doll
6. Demonstrate newborn resuscitation.	Demonstrate and explain each step of newborn resuscitation, following the steps in the Newborn Resuscitation skills learning checklist. Demonstrate both mouth-to-mouth and bag-and-mask ventilation. ( <i>See</i> : "Special points to mention during demonstration" at the end of this session.) Have participants practice both kinds of newborn resuscitation in groups of 4 participants, using the Newborn Resuscitation	Copies of the Newborn Resuscitation skills learning checklist for all trainers and participants. For each group of 4 participants: 1 newborn manikin or doll Hat or cap for baby Table top or other firm

OBJECTIVES AND CONTENT	TEACHING METHOD	Materials Needed
	skills learning checklist as a guide. Group members should be encouraged to give one another feedback to improve their performance. Trainers should monitor the participants' practice, correcting errors whenever necessary.	surface covered with a clean cloth 3 towels or cloths 1 bulb syringe or De Lee suction catheter 1 newborn Ambu bag with face masks (sizes 1, 0) Gauze squares
<ul> <li>7. Demonstrate care after resuscitation. Follow-up care after successful resuscitation.</li> <li>Care when a baby needs referral after resuscitation. The criteria for referring a baby to higher facility include breathing &lt;30 or &gt;60 per minute,</li> <li>indrawing of chest,</li> <li>gasping,</li> <li>body color pale or blue.</li> <li>Care of the parents when resuscitation fails and a newborn dies.</li> <li>Recording resuscitation and care afterwards.</li> </ul>	<ul> <li>Presentation/discussion.</li> <li>Assign role plays to 2 groups of participants: Group 1 (2 participants): Role Play 4.1: Parent Education and Support After Newborn Resuscitation</li> <li>Group 2: Role Play 4.2: Parent Education and Support When Resuscitation Is Not Successful</li> </ul>	Copies of the Newborn Resuscitation skills learning checklist for all trainers and participants. Role Play 4.1: Parent Education and Support After Newborn Resuscitation Role Play 4.2: Parent Education and Support When Resuscitation Is Not Successful
<ul> <li>8. Demonstrate cleaning and/or disposal of resuscitation equipment and supplies: Disposable items (gauze, gloves) Reusable items Cloths Table used for resuscitation Scissors</li> </ul>	Ask participants to tell how each item should be cleaned or disposed of after use. Discuss and demonstrate infection prevention steps for each item. Have participants return the demonstration.	Copies of Appendix B: Infection Prevention Principles and Procedures for all trainers and participants. Table top or other firm surface Towels or cloths Bulb syringe or De Lee suction catheter Ambu bag with face masks Gauze squares Trash container with lid 3 buckets Soap and water Chlorine decontamination solution
Summary	Ask one or more participants to summarize. Discussion. Questions and answers to complete their understanding.	
Assess participants' learning in Module 4	Administer Module 4 post-test; collect test papers	Copies of Module 4 post- test for all participants

# SPECIAL POINTS TO MENTION DURING DEMONSTRATION

- 1. Always have the newborn resuscitation area set up before birth with suction, three dry towels or cloths, and Ambu bag and masks (if available).
- 2. It is dangerous to expose the newborn to cold. If exposed, he must use energy to stay warm and then may not have enough energy for breathing.
- 3. Dry and wrap the newborn **quickly** so that resuscitation can start as soon as possible.
- 4. If there is **meconium** in the amniotic fluid:
  - a. Suction the baby's mouth and nose as soon as the head is born and *before* delivery of the body.
  - b. After delivery:
    - If the newborn is vigorous: NO SPECIAL SUCTIONING of baby is needed.
    - If the baby with meconium staining is NOT vigorous: Do not stimulate the baby to breathe until *after* suctioning. Quickly suction the baby's mouth then nose. Then stimulate breathing.
- 5. **Do not breathe too much air into the newborn** when doing mouth-to-mouth ventilation. Use only the breath in your mouth.
- 6. When **doing mouth-to-mouth ventilation** for the newborn, *cover baby's mouth and nose* with your mouth.

### **ROLE PLAYS**

## Role Play 4.1: Parent Education and Support after Newborn Resuscitation *Participant Directions*

#### Purpose

These role plays are to help you practice:

1) counseling and communication skills, and

2) giving support and advice to parents of newborns who needed resuscitation.

#### Preparation

Read the "Care After Resuscitation" section on pages 104–107 of the Care of the Newborn Reference Manual.

#### **Role Playing and Observation**

Everyone will participate either by playing a role or by observing. During the role play, observers should think about what they see and prepare to participate in the discussion.

#### Discussion of the Role Play

After the role play, the group will discuss what happened. Think about how you would answer the discussion questions for each role play.

#### **Participant Roles**

Health worker:	The health worker is experienced in the care of newborn babies and has good interpersonal communication skills.
Mother:	Carol is a 22-year-old woman who has just given birth to her second child at home with the assistance of a trained birth attendant. The baby did not breathe spontaneously at birth and was resuscitated successfully.

#### Situation

Three hours after the birth of Carol's baby, the health worker comes to visit the mother and child at home. Carol's newborn breastfed within one hour of birth. The baby has no breathing problems now. His temperature is normal, and he has a normal cry. Carol is still anxious about his condition and is reluctant to breastfeed him. She says: "I am afraid he will have trouble breathing."

#### **Discussion Questions**

- 1. How did the health worker show respect and kindness during her time with Carol? What else should or could the health worker have done to show respect and kindness?
- 2. How did the health worker give emotional support and reassurance to Carol? What else should or could the health worker have done to give emotional support and reassurance?
- 3. What advice did the health worker discuss with Carol? What other advice should the health worker have given?

## Role Play 4.1: Parent Education and Support After Newborn Resuscitation *Trainer Directions*

Ask one participant to read the two roles and the situation aloud. Then ask two others to act out the situation while the rest of the group observes them. Allow about ten minutes for the role play. Afterwards, thank the actors and then lead a discussion using the Discussion Questions as a guide. Suggested answers are given below, but the participants will probably have other good answers and observations.

# 1. How did the health worker show respect and kindness during her time with Carol? What else should or could the health worker have done to show respect and kindness?

- The health worker listened to the mother's concerns without interrupting her.
- The health worker respected the cultural practices of Carol and her family.
- The health worker spoke in a calm and reassuring manner, using language that Carol understood.
- The health worker used the same reassuring manner to answer all of Carol's questions.
- The health worker helped Carol understand that her baby is doing well.
- 2. How did the health worker give emotional support and reassurance to Carol? How else should or could the health worker have given emotional support and reassurance?
  - While the mother watched, the health worker examined the baby to make sure that the baby really did not have a problem.
  - The health worker helped Carol breastfeed her baby successfully by showing her how to position the baby so he can attach properly to the breast.
  - The health worker sat with Carol during the entire breastfeeding session to observe the baby and to help her feel safe.
  - The health worker gave positive feedback and encouragement for Carol's efforts.
  - The health worker described the baby's feeding behavior as normal.
  - The health worker demonstrated patience during the session by not rushing her and encouraged Carol to ask questions and demonstrate her understanding the of the teaching.

# 3. What advice did the health worker discuss with Carol? What other advice should the health worker have given?

- The health worker explained that the baby has no breathing problems now and that his risk of further problems is small.
- The health worker advised Carol to give normal care to her baby: exclusive breastfeeding on demand, keeping the baby warm, using good hygiene to prevent infections, and bringing the baby regularly for checkups and immunizations.
- The health worker reviewed danger signs to watch for and the importance of seeking health care if any danger signs are seen.
- The health worker advised Carol to bring the baby for a follow-up visit on day 2 or day 3.

### Role Play 4.2: Parent Education and Support When Resuscitation Is Not Successful

#### Purpose

These role plays are to help you practice:

1) counseling and communication skills, and

2) giving support and advice to parents of newborns who needed resuscitation.

#### Preparation

Read the "Care After Resuscitation" section on pages 104–107 of the Care of the Newborn Reference Manual.

#### **Role Playing and Observation**

Everyone will participate either by playing a role or by observing. During the role play, observers should think about what they see and prepare to participate in the discussion.

#### Discussion of the Role Play

After the role play, the group will discuss what happened. Think about how you would answer the discussion questions for each role play.

#### **Participant Roles**

Health worker: The health worker is experienced in the care of newborn babies and has good interpersonal communication skills.Mother: Nancy lives in the town where the hospital is located. She is 25 and this is her third baby.

**Father:** Nancy's husband is waiting outside for news of the delivery.

Mother-in-law: Nancy's mother-in-law has been at her bedside during the birth and the resuscitation.

#### Situation

Nancy's baby did not breathe spontaneously at birth. The baby was limp and very pale. The health worker quickly dried and assessed the baby, cut the cord, and started resuscitation immediately, but the baby still did not start to breathe. After 20 minutes the baby still did not breathe or show any sign of life, so the health worker stopped the resuscitation. After seeing that the placenta is safely delivered and that Nancy is not bleeding, the health worker now asks the husband to come in so that they can all discuss what happened together.

#### **Discussion Questions**

- 1. How did the health worker give emotional support to Nancy and her family? What else could or should the health worker have done to give emotional support?
- 2. What advice did the health worker discuss with Nancy and her family? What other advice could or should the health worker have given?
- 3. What documentation of this resuscitation is needed?

### Role Play 4.2: Parent Education and Support When Resuscitation Is Not Successful

### Trainer Directions

Ask one participant to read the four roles and the situation aloud. Then ask four participants to act out the situation while the rest of the group observes. Allow about 15 minutes for the role play. Afterwards, thank the actors and lead a discussion using the Discussion Questions as a guide. Suggested answers are given below, but the participants will probably have other good answers and observations.

# 1. How did the health worker give emotional support to Nancy and her family? What else could or should the health worker have done to give emotional support?

- The health worker spoke slowly in a calm and reassuring manner, using language that Nancy and her family understood.
- The health worker used the same reassuring manner to answer all of the family's questions.
- The health worker respected the family's grief and was patient with them.
- The health worker explained about the baby's problem, the resuscitation, and all that was done to try to help the baby breathe.
- The health worker did not rush the family (took enough time).
- The health worker explained that the baby's death was no one's fault.
- The health worker encouraged the family members to support one another.
- The health worker gave culturally appropriate care to the family, allowing them to behave as they wished.
- The health worker let the family decide how to care for the baby's body.

# 2. What advice did the health worker discuss with Nancy and her family? What other advice could or should the health worker have given?

- The mother needs rest, support, and a good diet at home.
- It is important that the mother not return to a full workload too early.
- The mother's breasts will fill with milk in two or three days. She should not express the milk or stimulate her breasts. She should bind her breasts tightly or wear a tight bra.
- Because of the loss of the baby, the mother will probably feel very depressed (very sad, worried, or irritable). Encourage the mother and/or family to speak with a health worker if they wish to talk more about the loss. Talking can help her get over it.
- The mother should return for a postnatal visit within three weeks.

#### 3. What documentation of this resuscitation is needed?

- The government has a system for recording and notifying the authorities about a baby's birth and death. The health worker should do the required recording and notification.
- The health worker should also complete the regular mother and baby records noting:
  - The newborn's condition at birth
  - What was done during the resuscitation
  - o The duration and result of the resuscitation

### **SKILLS LEARNING CHECKLIST**

### Skills Learning Checklist 4.1: Newborn Resuscitation

#### Instructions:

<u>Participants</u> can use this skills learning checklist to guide their learning. Two participants should work together. One participant practices resuscitation on a newborn manikin while the other one observes and scores the performance on the checklist. After discussing the results, the two participants switch roles.

<u>Trainers or evaluators</u> can use the checklist to assess mastery of newborn resuscitation skills, either in a real resuscitation or in a simulated situation with a newborn manikin. A training evaluation might include an assessment before training, an assessment at the end of training, and later, an on-the-job assessment.

<u>The Observer (or Evaluator)</u> should write the participant's name on each page of the checklist. Then read the case situation and instructions to the participant, while observing and scoring each step of his performance in the correct column of the checklist. When he finishes, thank him and tell him he is done. Add up the total points at the end of the checklist and enter the score. Sign and date the assessment.

**Scoring:** There are a total of 40 steps to be observed. Competency is defined as receiving a score of 1 on every item. Score the participant's performance of each step using the following scale:

**0** = Needs Improvement: The step or task was omitted, was done incorrectly, was done out of sequence, required coaching, or was done hesitantly (needing practice). Clearly not acceptable.

**1 = Performed Competently:** The step or task was done correctly in the proper sequence, comfortably, without reminding or coaching.

Note: Steps should be done in sequence as they appear in the checklist, except where noted otherwise.

#### Equipment needed to do this skill assessment

- A heating lamp (if available)
- A firm, flat surface such as a table top
- 3 towels or pieces of cloth
- Gauze squares
- A clock or watch with a second hand
- A De Lee suction catheter or a bulb syringe
- A newborn size, self-inflating ventilation bag (Ambu) with face masks (if available): newborn (size #1) and premature (size #0)
- Gloves (if available)
- Oxygen (if available)

### Skills Learning Checklist 4.1: Newborn Resuscitation

#### **PARTICIPANT'S NAME:**

#### Evaluator: Read the following case situation and instructions to the participant:

"You are attending a birth. The baby's heart rate was good during the whole labor until the last 15 minutes before the birth, when it dropped. Please list the equipment and supplies needed for newborn resuscitation; explain and demonstrate how you will prepare in case resuscitation is needed."

	STEPS	sco	ORE	S (0 C	OR 1)	
	<ul> <li>Lists necessary equipment and supplies (in any order):</li> <li>Warm room</li> <li>Clean, dry, well-lit flat surface covered with a warm cloth</li> <li>3 towels or pieces of cloth</li> </ul>					
1	<ul> <li>Gauze squares</li> <li>A clock or watch with a second hand</li> <li>A De Lee suction catheter or bulb syringe</li> <li>And if available: <ul> <li>Newborn size, self-inflating ventilation bag (Ambu) with newborn (size #1) and premature (size #) face masks</li> <li>Gloves</li> </ul> </li> </ul>					
2	- Oxygen - Heating lamp					
2 3	Warms room; turns on heating lamp, if available. Washes and dries hands, puts on gloves (if available).					
Eval "Whe	uator: Now say to the participant: on the baby is born, you see that the umbilical cord is wrapped tightly around the neck. You quickly emonstrate what you will do to decide if resuscitation is needed."	deliver	the ba	by. E:	xplain 1	vhile
4	Dries and stimulates the baby by rubbing him from head to toe with a cloth or towel, especially up and down the spine.					
5	Discards the wet cloth used to dry the baby and quickly wraps him loosely with a dry cloth.					
6	Looks at the baby to see if he is breathing or crying.					
	uator: Now say to the participant: baby is breathing only 10 breaths per minute and his skin color is blue. Please explain and demon.	strate n	hat yoi	ı will d	0."	
7	Decides that the baby needs resuscitation.					
8	Calls for help.					
9	Tells the mother briefly that the baby needs special care to start breathing.					
10	Acts fast. Begins resuscitation immediately.					
11	Clamps (or ties) and cuts the cord quickly, leaving a cord stump at least 10 cm long.					
12	Notes the time.					
13	Position: Places the baby on his back on a firm, flat surface.					
14	Places a small folded cloth under the baby's shoulders so that the head is slightly extended.					
15	Keeps the baby's lower body and scalp covered during the resuscitation. Quickly puts a cap on the baby (if available).					
						1

	Skills Learning Checklist 4.1: Newborn Resuscitation						
PAR	TICIPANT'S NAME:						
17	Using a bulb syringe or De Lee suction catheter, suctions first the baby's mouth, then the nose.						
18	Suctions only while pulling out the ca	atheter or bulb syringe.					
19	Suctions no deeper than 5 cm in the 1	nouth or 3 cm in the nose.					
	uator: Now say to the participant: the would you do differently if there was meconium	stained ammintic fluid?"	1	1			
20	Explains: In case of meconium-stai	ned amniotic fluid, suction the baby	1				
	after birth of the head, before birth of the head, before birth of uator: Now say to the participant:	of the body.					
	se continue to explain and demonstrate what you r						
21	Looks at the baby's breathing to rea gasping, breathing less than 30 brea breathing.						
	uator: Now say to the participant:			I	I		I
		continue to explain and demonstrate what you will 30 breaths per minute, acts quickly to	' do."	i	1	i	1
22	begin ventilation.	so breaths per fillinge, acts quickly to					
	Use either bag-and-mask OR more	uth-to-mouth ventilation					
	Bag-and-mask ventilation:	Mouth-to-mouth ventilation:					
23	Covers the nose and mouth with the proper size mask for the baby's	Places a piece of dry gauze over the					
	size.	baby's nose and mouth before					
		covering them with own mouth.					
24	Uses one hand to hold the mask firmly to the face with the neck slightly extended.	Keeps the baby's neck slightly extended.					
	Uses the other hand to squeeze the	Breathes a mouthful of air into the					
25	bag.	baby. Uses only air from the mouth					
	For both mouth-to-mouth and bag-a	and not from the lungs.					
26	Ventilates with one breath, watching						
	uator: Now say to the participant:						
"Pleas		e chest does not rise when you give the first breath."	, 	1		1	1
27	If the chest does not rise with one bre repositions mouth or mask, and tries	• -					
	getting the chest to rise with each bre						
28	28   Ventilates the baby 40 times in one minute.						
	uator: Now say to the participant: lain and demonstrate how long you will continue t	ventilating."					
20	Explains and demonstrates how and when to reassess breathing: After one						
29	Ø       minute of ventilation, stops and watches to see if baby starts to breathe         adequately on his own.						
30	Explains how to continue as needed:	Continue ventilating and observing					
	until the baby's breathing is normal.	nu attempt to breather atom					
31	Explains: If the baby has not made an resuscitation effort after 20 minutes.	ly allempt to breame, stop					
32	Washes hands with soap and water an	d dries them on a clean towel, or air-			1		
	dries them.						

## Skills Learning Checklist 4.1: Newborn Resuscitation

#### **PARTICIPANT'S NAME:**

PA	RTICIPANT'S NAME:					
33	Explains: Talk to the parents about the baby's problem and the					
	resuscitation. Listen to them and answer their questions.					
	luator: Now say to the participant:					
''Plec	se explain and demonstrate what you will do after resuscitating a newborn."		-	-		
	Explains how to encourage maternal care to help stabilize the baby after					
34						
	breastfeeding as soon as possible.					
35	Explains: Keep the baby warm and dry. Defer the first bath for at least 6					
	hours after the baby is stable.					
36	Explains how to continue to observe breathing and color frequently for 4					
	hours after resuscitation.					
25	Lists signs of breathing problems (in any order): Grunting, indrawing of					
37	the chest, flaring nostrils, rapid or slow breathing (more than 60 or less than					
	30 breaths per minute), blue or pale color.					
	Explains and demonstrates what to do if breathing difficulty is detected:					
38	- Gives oxygen, if available					
	- Stimulates the baby to continue breathing by rubbing hand up and down the spine					
	Explains what to do if the baby's condition deteriorates: Transfer rapidly to					
39	hospital for medical care.					
	Explains what information to write in the baby's record:					
	- The baby's condition at birth					
	- What was done during the resuscitation					
40	- How long the resuscitation took					
	- Result of the resuscitation					
	- Monitoring and care given after the resuscitation					
	TOTAL POINTS (OUT OF 40 POSSIBLE)					
	Date and signature of the person who scored the performance					

### Drill

## Newborn Resuscitation Participant Directions

#### Purpose

The purpose of a clinical drill is to help you to practice responding to clinical situations that require immediate action.

#### Preparation

Study the Skills Learning Checklists: 4.1 NEWBORN RESUSCITATION and 2.1 IMMEDIATE CARE OF THE NEWBORN to learn the steps of care. Use the checklists to practice the steps with another participant.

#### Directions

- During each class session, three participants will be assigned to be the "on-call" team. This team will respond to simulated clinical situations. A simulated clinical situation may be announced at any time. Supplies and equipment will be available in the classroom.
- When the drill is announced the "on-call" team will go into action.

#### Directions for "on-call" team members

- Review your skills learning checklists for immediate care of the newborn (2.1) and newborn resuscitation (4.1).
- Decide who will take the roles of:
- The health worker who cares for the baby
- The mother who responds to care of her baby
- The helper who assists the health worker and supports the mother
- Do the drill as a role play, following the steps in the skills learning checklists.
- After the drill, listen to feedback from the observers and trainers.

#### Directions for drill observers

- Watch the drill and compare the actions with the steps of the skills learning checklists 2.1 and 4.1.
- At the end of the drill: Give feedback to the "on-call" team. Praise the team for correct actions. Discuss what actions were omitted or done incorrectly.

## Newborn Resuscitation Trainer Directions

#### Purpose

The purpose of a clinical drill is to help participants practice responding to clinical situations that require immediate action.

#### Preparation

Have the following supplies and equipment available in the classroom:

- Handwashing supplies
- A firm flat surface such as a table top, covered with a clean cloth
- 1 newborn doll (newborn resuscitation manikin, if available)
- 3 blankets or pieces of cloth (1 to put under the baby's neck, 1 to dry the baby, 1 to warm the baby after drying)
- Gauze squares
- 1 De Lee, bulb or mechanical suction apparatus
- 1 newborn size self-inflating (Ambu) bag with newborn and premature size face masks
- 1 watch or clock with a second hand
- Gloves (if available)
- Skills Learning Checklists: 2.1 Immediate Care of the Newborn and 4.1 Newborn Resuscitation

#### Directions to give to the participants:

At the time when you teach the participants about newborn resuscitation, explain that they are expected to be able to do immediate care of the newborn, including resuscitation, at unexpected times, just as birth may occur at unexpected times. Assign three participants to be the "on-call" team during each class session. This team will respond to simulated clinical situations that happen while they are on call. Explain how the simulated clinical situation will be announced (with a bell or whistle) and where the supplies are located. Explain the participant roles.

#### Directions to give to "on-call" team members:

- Review your skills learning checklists for immediate care of the newborn (2.1) and newborn resuscitation (4.1).
- Decide who will take the roles of:
- The health worker who cares for the baby,
- The mother who responds to care of her baby, and
- The helper who assists the health worker and supports the mother.
- Do the drill as a role play, following the steps of the skills learning checklists.
- After the drill, listen to feedback from the observers and trainers.

#### Directions to give to drill observers:

- Watch the drill and compare the actions with the steps of the skills learning checklists.
- At the end of the drill, give feedback to the "on-call" team. Praise the team for correct actions.
- Discuss what actions were omitted or done incorrectly

#### Doing the Drill:

- 1. Announce the drill with the chosen signal (bell or whistle). Tell the team that you will supply findings when assessments are done.
- 2. Read the following situation:

"You are attending a birth. You have made sure the birth room is clean, warm, light and private. Your equipment is at hand. The baby is born and does not cry. He gasps a few times. Please demonstrate how you will care for the newborn."

3. When the team has dried and stimulated the baby and looked at him to assess his breathing, read the following findings for the team to respond to:

"The baby is gasping. He does not cry. Please continue to care for the newborn."

- 4. After the baby has been positioned and his airway has been cleared, read the next finding: "The baby is still gasping and not crying."
- 5. After ventilation has been demonstrated correctly, read the next finding:

"The baby is now breathing normally."

#### After the Drill:

Ask for feedback from the team and the observers. Give feedback (and have observers give feedback) based on the steps in the skills learning checklists.

- What actions were done correctly?
- Were any steps omitted or not done correctly?
- What did the team learn from doing the drill?

## **PRE-TEST/POST-TEST**

Name:\_\_\_\_\_ Date:\_\_\_\_

#### Instructions:

- Circle **PRE-test** or **POST-test**
- Fill in your name and the date
- Circle the letter of the single **BEST** answer to each question.
- Each question is 10 points.
- 1. Isabel is 9 months pregnant and she is in labor. She has no health problems. The fetal heart rate is normal. The health worker gathers and prepares the equipment for newborn resuscitation. Why is the health worker preparing the resuscitation equipment?
  - a) Isabel's baby is at higher risk for asphyxia.
  - b) Any baby can have asphyxia and need immediate resuscitation.
  - c) The health worker does not know how to predict asphysia.
- 2. The health worker counts Baby Jane's breaths. The baby breathes 10 times in 1 minute. Baby Jane makes a noise with each breath. What is Baby Jane's assessment?
  - a) Baby Jane is normal, she does not need resuscitation.
  - b) Baby Jane has asphyxia, she needs resuscitation.
  - c) There is not enough information to decide on a or b.
- 3. Sofia is in labor. When her water breaks the amniotic fluid is thick and green. How should the health worker clear Sofia's baby's airway? The health worker should:
  - a) Suction the baby's mouth and nose as soon as the head is born and before the rest of the body is delivered.
  - b) Suction the baby's throat deeply after the baby is delivered if he is not breathing
  - c) Wipe the baby's mouth out with a cloth after he is born.
- 4. Baby Charles has just been born. He does not breathe. The health worker quickly dries the newborn and discards the wet cloth. The health worker puts a hat on the newborn. The health worker wraps Baby Charles in a warm cloth, keeping face and upper chest uncovered. Why does the health worker take these actions?
  - a) To give the baby time to start breathing.
  - b) To keep the baby warm during the resuscitation.
  - c) To reassure the mother that the baby is normal.
- 5. Baby Charles has just been born. He needs resuscitation. What should the health worker say to the mother?

- a) Your baby is dying and I do not know if he will live.
- b) Your baby needs some help with breathing and I will give that help.
- c) Your baby is fine; he will breathe in a few minutes.
- 6. The mouth and nose of Baby Charles are blocked with thick mucus. What should the health worker do?
  - a) Suction the mouth and then the nose.
  - b) Suction the nose and then the mouth.
  - c) Place the baby head down to drain the mucus out.
- 7. How should the health worker stimulate a newborn who is not breathing? The health worker should:
  - a) Slap the baby's back.
  - b) Rub her hand up and down the baby's spine.
  - c) Swing the baby head down and then head up.
- 8. The health worker did bag-and-mask resuscitation for Baby Charles. Baby Charles is now breathing normally alone. He is warm and pink in color. What should the health worker do?
  - a) Keep the baby at the resuscitation place to monitor his breathing and color.
  - b) Give the baby to the mother for warmth, stimulation, and breastfeeding.
  - c) Bathe the baby.
- 9. Baby Maria had asphyxia at birth. The health worker did mouth-to-mouth breathing for the baby. The baby is now breathing alone. The baby breathes 60 times in a minute and makes a noise with each breath. There is indrawing of the chest. What should the health worker do?
  - a) Repeat the mouth-to-mouth breathing.
  - b) Try bag-and-mask ventilation.
  - c) Refer the newborn to a higher-level health facility.
- 10. Mother Rachel's baby did not breathe at birth. The health worker did the correct resuscitation steps. The baby did not start breathing and resuscitation was stopped. What should the health worker do?
  - a) Explain to the mother that her baby died and offer her care that is appropriate in her culture.
  - b) Inform the family and ask them to tell the mother the baby died.
  - c) Take the dead baby away so the mother will not see it and become upset.

## PRE-TEST/POST-TEST (ANSWER KEY)

Trainer: Score each correct answer 10 points. The maximum score possible is 100. Add up each participant's score and express it as a percentage.

QUESTION NUMBER	CORRECT ANSWER
1	В
2	В
3	Α
4	В
5	В
6	Α
7	В
8	В
9	С
10	В

## MODULE 5: CARE OF LOW BIRTH WEIGHT BABIES

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## **OVERVIEW: CARE OF LOW BIRTH WEIGHT BABIES**

#### **Trainer Preparation**

- Read Chapter 5 (Care of Low Birth Weight Babies) of the Care of the Newborn Reference Manual.
- Read (or review) pages 126-129 (Newborn Danger Signs, and Stabilization and Emergency Referral of Newborns).
- Review Chapter 2 (Immediate Care of the Newborn).
- Review pages 5-12 (An Introduction to the Decision-Making Approach).
- Review Appendix E (Counseling).

#### **General Objectives**

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

- 1) Recognize low birth weight (LBW) babies.
- 2) Describe the common problems of LBW babies.
- 3) Counsel and advise mothers and families about the care of LBW babies.
- 4) Counsel and advise mothers and families about the feeding of LBW babies.
- 5) Help mothers start skin-to-skin care.

#### **Specific Objectives**

#### Session 1: Low Birth Weight Babies and Their Problems

- 1) Identify a low birth weight baby.
- 2) List factors associated with low birth weight and actions that may help prevent it.
- 3) Describe the problems LBW babies have.
- 4) Identify and manage LBW newborns that need referral.

#### Session 2: Advice, Counseling, and Care for LBW Babies

- 1) Describe the care of a LBW baby.
- 2) Describe Kangaroo Mother Care.
- 3) Explain and demonstrate how to help a mother start skin-to-skin care to keep her LBW baby warm.
- 4) Explain and demonstrate how to help a mother breastfeed a LBW baby.

#### Materials Needed for Training

- Session objectives written on flip charts
- Flip charts and markers (or chalkboard and chalk, or whiteboard and markers)
- Newborn baby dolls or manikins
- Long (2–3 m) pieces of cloth
- Small cups
- Clean water, soap, towels
- Copies of the Care of the Newborn Reference Manual for all trainers and participants
- Copies of Role Play 5.1 for all trainers and participants
- Copies of Skills Learning Checklist 5.1 for all trainers and participants
- Copies of the Module 5 Pre-test/Post-test for all participants (2 copies per participant)
- Copies of the Module 5 Pre-test/Post-test Key for all trainers
- Optional: Kangaroo Mother Care video

- 2 Copies of Module 5 Pre-test/Post-test for each participant
- Copies of Module 5 Pre-test/Post-test Key for all trainers

## **LESSON PLANS**

## Session 1: Low Birth Weight Babies and Their Problems

OBJECTIVES AND CONTENT	TEACHING METHOD	Materials Needed
Determine participants' knowledge baseline.	Administer Module 5 Pre-test; collect test papers.	Copies of Module 5 Pre-test for all participants.
<ul> <li>Introduction and review of objectives At the end of the session, participants will be able to: <ol> <li>Identify a LBW baby.</li> <li>List factors associated with low birth weight and actions that may help prevent it.</li> <li>Describe the problems that LBW babies have.</li> <li>Identify LBW newborns that need referral.</li> </ol></li></ul>	<ul> <li>Ask participants to raise their hands if they have experience caring for a LBW baby.</li> <li>Ask several who raised their hands to describe the LBW baby problems they have seen.</li> <li>List these on a flip chart</li> <li>Explain the objectives for this session.</li> </ul>	Flip chart and markers Session objectives written on a flip chart
<ol> <li>Identify a LBW baby.</li> <li>Low birth weight means less than 2500 grams at birth; very LBW means less than 1500 grams.</li> <li>Different reasons for LBW: preterm birth (birth before the 37<sup>th</sup> week of pregnancy, also called prematurity; poor fetal growth during pregnancy (also called "small for gestational age" or SGA).</li> <li>LBW babies are thin and have very little fat under the skin.</li> <li>Premature babies also show signs of immaturity: reddened skin, lanugo (fine hair covering the body), poorly flexed or floppy limbs, head which appears large in proportion to the body, immature genitals (small or empty scrotum for males; large clitoris and labia minora for females), creases in only the anterior third of the soles of the feet.</li> </ol>	<ul> <li>Ask a few participants to describe the appearance of LBW babies they have cared for.</li> <li>Present/discuss definition, causes, and signs of LBW babies.</li> <li>Explain that all LBW babies, whether premature or SGA, can be managed at the primary care level.</li> </ul>	
<ul> <li>2. List factors associated with low birth weight and actions that may help prevent it.</li> <li>Content for this objective is on pages 110 – 111 of the Care of the Newborn Reference Manual.</li> </ul>	<ul> <li>Present/discuss Chart 5.1: Factors Associated With Low Birth Weight (on page 111 of the Reference Manual).</li> <li>Brainstorm about how participants might implement the recommended health actions in their communities.</li> </ul>	Copies of the Care of the Newborn Reference Manual for all trainers and participants
<ul> <li><b>3. Describe the problems LBW babies have.</b></li> <li>Describe the common low birth weight baby problems:</li> </ul>	<ul> <li>Presentation/discussion</li> <li>For each problem:</li> <li>Briefly explain the reason.</li> <li>Describe how to recognize the</li> </ul>	Copies of the Care of the Newborn Reference Manual for all trainers and participants

OBJECTIVES AND CONTENT	TEACHING METHOD	Materials Needed
<ul> <li>Breathing problems</li> <li>Low body temperature</li> <li>Low blood sugar</li> <li>Feeding problems</li> <li>Infections</li> <li>Jaundice</li> <li>Bleeding problems</li> </ul>	<ul> <li>problem.</li> <li>Describe in general how to care for the LBW baby to prevent the problem. Refer to Chart 5.2: Low Birth Weight Baby Problems (on page 113 of the Reference Manual).</li> <li>Explain that LBW babies should be seen weekly until they weigh 2500 grams.</li> </ul>	
<ul> <li>4. Identify and manage LBW newborns that need referral.</li> <li>The health worker should stabilize and quickly refer: Any baby with very low birth weight Any LBW baby with a danger sign, especially: blue tongue and lips, breathing problems, or not feeding or sucking well</li> <li>In stabilizing and referring the LBW newborn: Make sure the baby is warm and has breastfed or taken breast milk by cup.</li> <li>Keep the baby in continuous skin-to-skin contact with the mother.</li> <li>Give the baby vitamin K IM (1 mg for LBW, 0.5mg for very LBW).</li> <li>In case of breathing problem, give oxygen during transfer, if available.</li> <li>If very low birth weight or if infection is suspected, give a first dose of antibiotics: ampicillin 50 mg/kg IM <u>and</u> gentamicin 4 mg/kg IM.</li> <li>Arrange for rapid transfer to a facility that can provide higher level care for LBW babies.</li> </ul>	Presentation/discussion Refer to: Chart 5.3: Low Birth Weight Baby— Care at Birth: Decision-Making Chart (Pages 114-115 of the Reference Manual) Chart 6.1: Newborn Danger Signs (page 127 of the Reference Manual) Chart 6.3: Newborn Referral Guidelines (page 129 of the Reference Manual)	Copies of the Care of the Newborn Reference Manual for all trainers and participants
Summary	<ul> <li>Ask 1 or more participants to summarize.</li> <li>Discussion.</li> <li>Questions and answers to complete their understanding.</li> </ul>	

<b>OBJECTIVES AND CONTENT</b>	TEACHING METHOD	Materials Needed
<ul> <li>Introduction and review of objectives At the end of the session, participants will be able to: <ol> <li>Describe the care of a LBW baby</li> <li>Describe Kangaroo Mother Care (KMC)</li> <li>Explain and demonstrate how to help a mother start skin-to-skin care to keep her LBW baby warm</li> <li>Explain and demonstrate how to help a mother breastfeed a LBW baby</li> </ol></li></ul>	<ul> <li>Review: Ask 1 or 2 participants to summarize the key points of the previous session: problems and needs of LBW babies.</li> <li>Emphasize that all LBW babies are at high risk.</li> <li>Explain the objectives for this session.</li> </ul>	Session objectives written on flip chart.
<ol> <li>Describe the care of a LBW baby.</li> <li>What care the LBW baby needs:         <ul> <li>Chart 5.3: Low Birth Weight Baby—Care at Birth: Decision-Making Chart (pages 114-115 in the Reference Manual)</li> </ul> </li> <li>What follow-up the LBW baby needs:         <ul> <li>Chart 5.4: Low Birth Weight Baby—Weekly Follow-Up Care: Decision-Making Chart (pages 116-117 in the Reference Manual)</li> </ul> </li> </ol>	<ul> <li>Presentation and discussion.</li> <li>Explain the routine care of a LBW baby from birth (referring to Chart 5.3).</li> <li>Explain the routine follow-up care of a low birth weight baby (referring to Chart 5.4).</li> </ul>	Copies of the Care of the Newborn Reference Manual for all trainers and participants
<ul> <li>2. Describe KMC.</li> <li>KMC has 3 components: <ul> <li>Continuous skin-to-skin contact between mother and baby day and night</li> <li>Exclusive breastfeeding</li> <li>Support for mother and baby, to not separate them</li> </ul> </li> <li>Benefits of KMC for LBW baby and mother: <ul> <li><u>Baby benefits</u>: breathing becomes regular and stable; temperature stabilizes at normal; improved immunity; fewer infections; better breastfeeding and faster weight gain</li> <li><u>Mother benefits</u>: better emotional attachment to baby; increased feeling of competence in caring for fragile LBW baby</li> </ul> </li> </ul>	<ul> <li>Presentation and discussion of KMC (the three components).</li> <li>Ask participants if they are aware of the benefits of KMC.</li> <li>List their responses on a flip chart or board. Complete their list if necessary.</li> <li>Ask participants to name challenges to carrying out KMC in a health care facility, or in a home setting.</li> </ul>	Flip chart and markers.
<ul> <li>3. Explain and demonstrate how to help a mother start skin-to-skin care to keep her LBW baby warm.</li> <li>Demonstrate how to help the mother start skin-to-skin care.</li> <li>Explain each step for helping a mother start skin-to-skin care. (Refer to Skills Learning Checklist 5.1: Skin-to-skin Care of a LBW Baby)</li> </ul>	<ul> <li>Explain and demonstrate helping a mother start skin-to-skin care following the steps of Skills Learning Checklist 5.1: Skin-to- Skin Care of a LBW Baby.</li> <li>Practice and return demonstration.</li> <li>Divide participants into groups of 4.</li> <li>Ask participants to return demonstration and practice using Skills Learning Checklist.</li> <li>Have 1 trainer monitor 4 participants.</li> <li><u>Optional activity</u>: Show the video, <i>Kangaroo Mother Care</i>, if</li> </ul>	Copies of Skills Learning Checklist 5.1: Skin-to-Skin Care of a LBW Baby for all trainers and participants Clean water, soap, towels Newborn baby dolls or manikins (one for each group of 4 participants) Long pieces of cloth or wrappers (one for each group of 4 participants) <u>Optional Video</u> :

OBJECTIVES AND CONTENT	TEACHING METHOD	Materials Needed
	<ul> <li>available and lead a discussion after the video.</li> <li>Ask participants to explain the important messages in the video: <ol> <li>Skin-to-skin contact helps the baby keep a good temperature and improves the baby's breathing.</li> <li>The mother and baby should NOT be separated.</li> <li>Breastfeeding is an important part of KMC. It is easy for a baby to breastfeed any time with KMC.</li> <li>KMC helps strengthen the love and bonding between a mother and her fragile baby.</li> </ol> </li> <li>Ask participants to brainstorm how to implement KMC in the cultural context of their own work settings.</li> </ul>	<i>Kangaroo Mother Care</i> (if available)
<ul> <li>4. Explain and demonstrate how to help a mother breastfeed a LBW baby.</li> <li>Explain why LBW babies are at risk of not getting enough nourishment: Small size of stomach means the LBW baby can only take a small volume at one feeding and therefore, needs very frequent feeds (every 2-2½ hours). LBW babies tire easily and may not have enough energy to suck for long. Sucking reflex may be absent or weak at first in very small and premature babies.</li> <li>Explain how a mother can help her low birth weight baby breastfeed. Content is in Chart 5.6: Tips to Help a Mother Breastfeed Her Low Birth Weight Baby (page 121 of the Reference Manual).</li> </ul>	<ul> <li>Ask participants to list reasons why low birth weight babies are at risk of not getting enough nourishment.</li> <li>Write their answers on a flip chart or board. Complete their list as needed.</li> <li>Ask participants to brainstorm ways to help the mother breastfeed the LBW baby.</li> <li>Review and discuss Chart 5.6: Tips to Help a Mother Breastfeed Her Low Birth Weight Baby (page 121 in the Reference Manual) with the participants.</li> <li>Have two participants act out Role Play 5.1: Breastfeeding the Low Birth Weight Baby while others observe.</li> <li>Lead a discussion of the role play using the discussion questions.</li> <li>Distribute copies of the Role Play 5.1 Trainer Directions to all participants.</li> </ul>	Flip chart and markers Copies of the Care of the Newborn Reference Manual for all trainers and participants Copies of Role Play 5.1: Breastfeeding the Low Birth Weight Baby Participant Directions for all trainers and participants. Copies of the Role Play 5.1 Trainer Directions for all trainers and participants.
<ul> <li>Summary</li> <li>Routine care of low birth weight babies</li> <li>Kangaroo Mother Care</li> <li>Breastfeeding the low birth weight baby</li> </ul>	Ask 1 or more participants to summarize. Discussion. Questions and answers to complete their understanding.	

<b>OBJECTIVES AND CONTENT</b>	TEACHING METHOD	Materials Needed	
Assess participants' learning in Module 5	Administer Module 5 Post-test; collect test papers	Copies of Module 5 Post-test for all participants	

### **ROLE PLAY**

## Role Play 5.1: Breastfeeding the Low Birth Weight Baby Participant Directions

#### Purpose

This role play is to help participants practice counseling skills to help a mother breastfeed and care for her low birth weight baby.

#### Preparation

Read pages 118-121 of the Care of the Newborn Reference Manual.

#### **Role Playing and Observation**

Everyone will participate either by playing a role or by observing. During the role play, observers should think about what they see and prepare to participate in the discussion.

#### Discussion of the Role Play

After the role play, the group will discuss what happened. Think about how you would answer the discussion questions for each role play.

#### **Participant Roles**

Health worker:	The health worker is experienced in the care of newborn babies and has good
Mother:	interpersonal communication skills. Sarita is a mother from the town where the health center is located. She is 17 years old and this is her first baby.

#### Situation

Sarita gave birth to a low birth weight baby four days ago at home and was assisted by a skilled attendant who helped her start Kangaroo Mother Care. Her family is supporting and helping her to do this. The health worker visits Sarita at home today. Sarita says: "The baby is not strong enough to breastfeed well. Should I give the baby a bottle?"

#### **Discussion Questions**

- 1. How did the health worker show respect and kindness to this family?
- 2. What key health messages did the health worker give?
- 3. What actions did the health worker take to help Sarita?
- 4. How often should the health worker see Sarita's baby for follow-up?

## Role Play 5.1 *Trainer Directions*

Ask one participant to read the two roles and the situation aloud. Then ask two others to act out the situation while the rest of the group observes them. Allow about ten minutes for the role play. Afterwards, thank the actors, and then lead a discussion using the Discussion Questions as a guide. Suggested answers are given below, but the participants will probably have other good answers and observations.

#### 1. How did the health worker demonstrate respect and kindness to this family?

- By speaking in a calm reassuring manner and using words that Sarita understood.
- By listening to what Sarita and her family said and answering their questions using the same reassuring manner.
- By praising Sarita and her family for the extra care they are giving the low birth weight baby.

#### 2. What key health messages did the health worker give?

- Low birth weight babies tire easily and have small stomachs so they cannot feed for long periods of time. The low birth weight baby needs to nurse very often.
- The mother's breast milk is best for the low birth weight baby:
  - It has more protein so the baby can grow.
  - 0 It protects the low birth weight baby from infection.
- Giving a bottle increases the baby's risk of getting an infection or diarrhea.

#### 3. What actions did the health worker take to help Sarita?

- The health worker should watch Sarita breastfeed.
- The health worker can give some tips for Sarita to try:
  - Express a few drops of milk onto the nipple first.
  - Give the baby short rest periods during breastfeeding.
  - Find a quiet place to breastfeed.
  - If the milk comes too fast for the small baby and the baby gags or spits, take the baby off the breast; hold the baby upright for a few minutes; put the baby back on the breast after the letdown of milk has stopped.
  - It the baby does not have a strong suck or energy to suck, Sarita can learn to express her milk and feed with a cup.

#### 4. How often should the health worker see Sarita's baby for follow up?

The health worker should see Sarita every week until the baby weighs 2500 grams.

### SKILLS LEARNING CHECKLIST

### Skills Learning Checklist 5.1: Skin-to-Skin Care of a Low Birth Weight Baby

#### Instructions:

<u>Participants</u> can use this skills learning checklist to guide their learning. Two participants should work together. One participant practices the skill (either with another participant and a doll or manikin, or with a real mother and her low birth weight baby) while the other one observes and scores the performance on the checklist. After discussing the results, the two participants switch roles.

<u>Trainers or evaluators</u> can use the checklist to assess mastery of the skill, either in a real or in a simulated situation. A training evaluation might include an assessment before training, an assessment at the end of training, and later, an on-the-job assessment.

<u>The Observer (or Evaluator)</u> should write the participant's name on each page of the checklist. Then read the case situation and instructions to the participant, while observing and scoring each step of his performance in the correct column of the checklist. When he finishes, thank him and tell him he is done. Add up the total points at the end of the checklist and enter the score. Sign and date the assessment.

**Scoring:** There are a total of 20 steps to be observed. Competency is defined as receiving a score of 1 on every item. Score the participant's performance of each step using the following scale:

**0** = Needs Improvement: The step or task was omitted, or was done incorrectly, or was done out of sequence, or required coaching, or was done hesitantly (needing practice). Clearly not acceptable.

**1 = Performed Competently:** The step or task was done correctly in the proper sequence, comfortably, without reminding or coaching.

Note: Steps should be done in sequence as they appear in the checklist, except where noted otherwise.

#### Equipment needed to do this skill assessment

- Clean water, soap, towels
- A mother or another person playing the role of a mother
- A newborn (preferably low birth weight) baby or manikin or doll
- A long piece (2–3 m) of cloth or a wrapper

### Skills Learning Checklist 5.1 Skin-to-Skin Care of a Low Birth Weight Baby

#### PARTICIPANT'S NAME:

#### Evaluator: Read the following case situation and instructions to the participant:

"You are caring for a mother and her low birth weight baby 4 hours after a normal birth. The baby cried at birth and did not need resuscitation. The mother had no complications of birth. The baby breastfed and received eye care and vitamin K during the first hour after birth. You are ready to help the mother start skin-to-skin care for the low birth weight newborn.

"Please explain the information you will give the mother and family about the reasons for skin-to skin care for a low birth weight baby." (**Note:** This information may be given in any order.)

Steps			Scores (0 or 1)			
1	Explains that skin-to-skin is the best way to care for low birth weight babies, starting as soon as possible after birth.					
	Explains that skin-to-skin care:					
	<ul> <li>Helps stabilize the baby's temperature</li> </ul>					
	• Keeps the baby near the mother's breasts for frequent small feeds, which he needs					
2	<ul> <li>Promotes the mother's milk let-down reflex and helps breastfeeding succeed</li> </ul>					
	Promotes faster newborn weight gain					
	• Protects the baby from injury and infection					
	Reduces newborn mortality					
	Explains that the mother is the best person to provide skin-to-skin care					
3	because her breast milk helps the baby resist infections they are exposed to.					
	No one else can give the baby this specific protection from infections.					
	uator: Now say to the participant:					
"Ple	ase demonstrate teaching the mother to give skin-to-skin care to her low birth weight	ght bal	oy."	1 1		
4	Explains that he or she will teach the mother how to give skin-to-skin care so					
	that she can do it herself.					
5	Washes hands and dries them on a clean towel, or air-dries them. Explains to					
5	the mother that she should also wash her hands before handling the baby; has her wash her hands.					
	Explains that the baby should be naked except for a diaper and a hat.					
6	Undresses the baby except for a diaper and hat.					
	Explains that the baby will be carried next to the mother's skin, inside her					
7	warm clothing.					
0	Helps the mother position the baby upright between her breasts, feet below			1		
8	her breasts and hands above.					
9	Helps the mother position the baby so that they are chest-to-chest with the					
2	baby's head turned to one side.					
	Shows the mother how to snugly wrap the baby to her body:					
10	Places the center of a long cloth or wrapper over the back of the baby on the					
	mother's chest. Crosses the ends of the cloth behind the mother's back, brings					
	them back around, and ties them in the front underneath the baby.					
11	Shows the mother how to tie the cloth or wrapper tightly enough to maintain					
11	skin-to-skin contact, loose enough so the baby can breathe easily. (Note: The					
	baby should not slip out when the mother stands up or moves around). Shows the mother how to support the baby's head by pulling the cloth or					
12	shows the mother how to support the baby's head by pulling the cloth or wrapper up to just under his outside ear.					
	wrapper up to just under his outside ear.					

	Skills Learning Checklist 5.1 Skin-to-Skin Care of a Low Birth Weight Baby					
PAI	PARTICIPANT'S NAME:					
13	Helps the mother put on her own clothing (a loose dress or blouse) over the baby. It should be open enough to allow easy breastfeeding and the baby's face should not be covered.					
14	Washes hands and dries them on a clean cloth or air-dries them.					
"Plea	<b>Evaluator:</b> Now say to the participant: "Please explain what other information about skin-to skin care you will give to the mother and family." (Note: This information can be given in any order.)				n can	
15	Advises the mother to go about her normal activities with the baby attached to her body in this way.					
16	Advises the mother to maintain an upright or partly upright position and sleep with the top half of her body somewhat raised to keep the baby in a head-up position.					
17	Advises the mother to loosen the cloth or wrapper to breastfeed on demand, at least every 2-2 <sup>1</sup> / <sub>2</sub> hours.					
18	Explains that other family members should supply whatever the mother and baby need without separating them, when possible. Explains that the mother will need a lot of support.					
19	Explains that another family member may replace the mother briefly to provide skin-to-skin care when needed					
20	Explains that the mother and family should provide skin-to-skin care continuously 24 hours a day (day and night) until the baby weighs at least 2500 grams. After that, he can be gradually weaned from skin-to-skin care, spending increasing amounts of time unattached, for as long as he can tolerate.					
	TOTAL POINTS (out of 20 possible)					
	Date and signature of the person who scored the performance					

### **PRE-TEST/POST-TEST**

Name:\_\_\_\_\_ Date:\_\_\_\_\_

#### Instructions:

- Circle **PRE-test** or **POST-test**
- Fill in your name and the date
- Circle the letter of the single **BEST** answer to each question.
- Each question is 10 points.
- 1. Baby Carl is born and weighs 2100 grams. Baby Carl is:
  - a) Normal weight for a newborn
  - b) Low birth weight
  - c) Very low birth weight
- 2. What does the health worker know about Baby Carl's chance of survival?
  - a) His chance for survival is the same as all babies born in his community.
  - b) He has a lower chance of survival than babies who weigh at least 2.5 kg.
  - c) He has a better chance of survival than most babies born in his community.

3. Baby Ava was born at home. Her birth weight is 1400 grams. She breathes spontaneously. The health worker gives immediate care and places the baby in skin-to-skin contact with her mother. What plan of care should the health worker make?

- a) Stabilize and refer to a higher level health facility.
- b) Observe for 24 hours and then refer if the newborn has any problems.
- c) Monitor for several hours and teach the family to care for the newborn.
- 4. Baby Isaac is low birth weight. He is likely to have a problem with:
  - a) Low blood sugar
  - b) Passing stools
  - c) Both a and b
- 5. Baby Ruth has just been born. She weighs 1800 grams. The health worker knows that Baby Ruth may have problems with:
  - a) Bleeding
  - b) Jaundice
  - c) Both a and b
- 6. The health worker knows that LBW babies do not have enough fat to keep themselves warm. What will the health worker do to keep Baby Ruth warm?

- a) Wrap the baby tightly and place her in a warm cot.
- b) Encourage the mother to keep the baby in skin-to-skin contact with her all the time.
- c) Bathe the baby in warm water and wrap her tightly.
- 7. Baby Ruth has a suck reflex, but it is not vigorous. To make sure the baby gets enough nourishment the health worker will teach Baby Ruth's mother to:
  - a) Bottle-feed expressed breast milk.
  - b) Breastfeed often and give the baby frequent rests during a feeding.
  - c) Give infant formula by cup.
- 8. If Baby Ruth does not have enough energy to suck, the health worker should teach the mother to:
  - a) Express breast milk and feed it to Baby Ruth by cup.
  - b) Let Baby Ruth sleep 3-4 hours so she will have more energy.
  - c) Keep stimulating Baby Ruth so she can suck more.
- 9. The health worker will follow-up Baby Ruth more frequently than a full-term baby because low birth weight babies are:
  - a) At greater risk for infection and serious jaundice
  - b) At greater risk for high blood sugar.
  - c) There is not enough information to determine the frequency of follow-up visits for this baby
- 10. Baby Paul weighs 2000 grams at birth. He breathes without problems. He needs:
  - a) Breastfeeding as soon as possible and every 2 hours.
  - b) A sponge bath soon after birth.
  - c) Antibiotics by injection.

## PRE-TEST/POST-TEST (ANSWER KEY)

Trainer: Score each correct answer 10 points. The maximum score possible is 100. Add up each participant's score and express it as a percentage.

QUESTION NUMBER	CORRECT ANSWER
1	В
2	В
3	Α
4	Α
5	С
6	В
7	В
8	Α
9	С
10	Α

## MODULE 6: COMMON NEWBORN PROBLEMS

OVERVIEW: COMMON NEWBORN PROBLEMS
Trainer Preparation, Objectives, Materials Needed
LESSON PLANS
Session 1: Newborn Danger Signs and Referral
Session 2: Newborn Breathing Problems and Infections
Session 3: Temperature Regulation, Jaundice, Bleeding, and Problems From Pregnancy or Labor
ROLE PLAY14
Role Play 6.1: Emergency Referral
CASE STUDIES14
Case Study 6.1: Cord Infection
Case Study 6.2: Skin Infection
Case Study 6.3: Eye Infection
PRE-TEST/POST-TEST152

## **OVERVIEW: COMMON NEWBORN PROBLEMS**

#### **Trainer Preparation**

Read Chapter 6 (Common Newborn Problems) of the Care of the Newborn Reference Manual. Review "An Introduction to the Decision-Making Approach" (pages 5–12 of the Reference Manual). Review "Newborn History and Physical Examination" (pages 33–41 of the Reference Manual).

#### **General Objectives**

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

- 1. Counsel mothers about newborn danger signs and what to do.
- 2. Describe how to make an emergency referral.
- 3. Counsel the mother and family on prevention, recognition, and management of common newborn problems.
- 4. Describe the care of a newborn with a problem using the Decision-Making steps.
- 5. Counsel the mother and family about treatment the baby needs for problems from pregnancy and labor.

#### **Specific Objectives**

#### Session 1: Newborn Danger Signs and Referral

- 1. List danger signs in the newborn.
- 2. Explain what mothers and families need to know about danger signs.
- 3. Describe how to stabilize and refer a sick newborn.

#### Session 2: Newborn Breathing Problems and Infections

- 1. Outline advice and care for a newborn with:
  - a) Breathing problems
  - b) Sepsis or general infection
  - c) Cord or umbilicus infection
  - d) Skin infection
  - e) Eye infection
  - f) Thrush

#### Session 3: Temperature Regulation, Jaundice, Bleeding, and Problems From Pregnancy or Labor

- 1. Outline the advice and care for a newborn with:
  - a) Low temperature/Hypothermia
  - b) Fever or Hyperthermia
  - c) Jaundice
  - d) Bleeding from the umbilical cord

#### 2 Explain the newborn care advice to give a mother who has:

- a) Syphilis
- b) Tuberculosis
- c) HIV
- d) Maternal infection during labor

#### Materials Needed for Training

- Session objectives on written on flip chart
- Flip charts and markers (or whiteboard and markers, or chalkboard and chalk)

- Copies of the Care of the Newborn Reference Manual for all participants and trainers
- A newborn doll or manikin
- Copies of Role Play 6.1 Participant Directions for all participants and trainers
- Copies of Role Play 6.1 Trainer Directions for all participants and trainers
- Copies of Case Studies 6.1, 6.2, and 6.3 Participant Directions for all participants and trainers
- Copies of Case Studies 6.1, 6.2, and 6.3 Trainer Directions for all trainers
- Copies of Case Studies 6.1, 6.2, and 6.3 and Keys for all participants and trainers
- 2 Copies of Module 6 Pre-test/Post-test for each participant
- Copies of Module 6 Pre-test/Post-test Key for all trainers

## LESSON PLANS

## Session 1: Newborn Danger Signs and Referral

OBJECTIVES AND CONTENT	TEACHING METHOD	MATERIALS NEEDED
Determine participants' knowledge baseline.	Administer Module 6 Pre-test; collect test papers.	Copies of Module 6 Pre-test for all participants.
<ul> <li>Introduction and review of objectives At the end of the session, participants will be able to: <ol> <li>List danger signs in the newborn.</li> <li>Explain what mothers and families need to know about danger signs.</li> <li>Describe how to stabilize and refer a sick newborn.</li> </ol></li></ul>	<ul> <li>Ask participants if they have had experience with sick newborns. Allow them to describe their experiences very briefly.</li> <li>Explain that this module is all about newborn problems and how to handle them.</li> <li>Present session 1 objectives. Briefly explain what else will be covered in sessions 2 and 3.</li> </ul>	Session objectives written on a flip chart
<ul> <li>1. List danger signs in the newborn:</li> <li>Breathing problems</li> <li>Feeding difficulties or not sucking</li> <li>Feels cold</li> <li>Fever</li> <li>Red, swollen eyelids and pus discharge from the eyes</li> <li>Redness, swelling, pus, or foul odor around the cord or umbilicus</li> <li>Convulsions/fits</li> <li>Jaundice/yellow skin</li> </ul>	<ul> <li>Ask participants to recall the danger signs they learned in Module 2. Write the danger signs they remember on a flip chart. Praise them for each danger sign which they remember correctly.</li> <li>If they have forgotten some, ask them to look at Chart 6.1 (on page 127 of the Reference Manual) to complete the list.</li> <li>Ask and discuss how to remember and recognize danger signs.</li> </ul>	Flip chart and markers Copies of the Care of the Newborn Reference Manual for all trainers and participants
<ol> <li>Explain what mothers and families need to know about danger signs.</li> <li>The list of newborn danger signs.</li> <li>A newborn's condition can deteriorate very fast, so it is very important to react quickly.</li> <li>If a danger sign is seen: seek help from a health worker fast. Plan ahead where and how to go.</li> <li>Know how to teach this information to mothers and families</li> </ol>	<ul> <li>Present and discuss content of this objective.</li> <li>Refer to Chart 6.2 (Teaching Mothers, Families and Communities to Respond to Newborn Danger Signs) on page 128 of the Reference Manual.</li> <li>Ask one participant to demonstrate giving a health talk on newborn danger signs to families. The rest of the participants pretend to be family/community members.</li> <li>Discussion of health talk.</li> </ul>	Copies of the Care of the Newborn Reference Manual for all trainers and participants

<b>OBJECTIVES AND CONTENT</b>	TEACHING METHOD	Materials Needed
<ul> <li>3. Describe how to stabilize and refer a sick newborn.</li> <li>Stabilize the newborn with immediate care at birth (see chapter 2), resuscitate if needed, breastfeed, and warm with skin-to-skin care.</li> <li>See newborn referral guidelines described in Chart 6.3 (on page 129 of the Reference Manual): Preparations, transport, documentation, care during transport.</li> <li>Know what to do if referral is delayed, impossible, or refused by parents.</li> </ul>	<ul> <li>Present and discuss how to stabilize the newborn.</li> <li>Present and discuss how to refer a sick newborn. Discuss Chart 6.3: Newborn Referral Guidelines (on page 129 of the Reference Manual).</li> <li>Have five participants act out Role Play 6.1: while others observe.</li> <li>Lead a discussion of the role play using the Discussion Questions.</li> <li>After the discussion, distribute copies of the Role Play 6.1 Trainer's Directions to all participants.</li> </ul>	Copies of the Care of the Newborn Reference Manual for all trainers and participants Copies of Role Play 6.1: Emergency Referral Participant Directions and Trainer's Directions for all trainers and participants A newborn doll or manikin
<ul> <li>Summary</li> <li>Newborn danger signs.</li> <li>Teaching families about newborn danger signs and what to do.</li> <li>How to stabilize and refer a sick newborn.</li> </ul>	Ask 1 or more participants to summarize. Discussion. Questions and answers to complete their understanding.	

## Session 2: Newborn Breathing Problems and Infections

<b>OBJECTIVES AND CONTENT</b>	TEACHING METHOD	Materials Needed
<ul> <li>Introduction and review of objectives</li> <li>At the end of the session, participants will be able to:</li> <li>1. Outline advice and care for a newborn with: <ul> <li>a) Breathing problems</li> <li>b) Sepsis or general infection</li> <li>c) Cord or umbilicus infection</li> <li>d) Skin infection</li> <li>e) Eye infection</li> <li>f) Thrush</li> </ul> </li> </ul>	<ul> <li>Briefly review contents of session 1: newborn danger signs, stabilization and referral of a sick newborn.</li> <li>Presentation/Discussion of session 2 objectives</li> <li>Briefly mention what topics will be covered in session 3.</li> </ul>	Session 2 objectives written on a flip chart
<ul> <li>For each newborn problem, health workers need to know:</li> <li>How to recognize the problem</li> <li>How to teach families to prevent the problem</li> <li>How to give appropriate care for the problem</li> </ul>	<ul> <li>Brainstorm on the roles of mothers, families, and health workers in improving newborn survival.</li> <li>Write down the key points on a flip chart.</li> <li>Explain what health workers need to know about each problem (see content at left).</li> </ul>	Flip chart and markers
<ul> <li>Outline the advice and care for a newborn with breathing problems:</li> <li>How to recognize breathing problems</li> <li>How to prevent breathing problems or death from breathing problems</li> <li>What care the baby needs</li> </ul>	<ul> <li>Presentation/discussion of newborn breathing problems.</li> <li>Have participants refer to Chart 6.4: Breathing Problems Decision-Making Chart on page 132 in the Reference Manual and to breathing problems information on page 130.</li> </ul>	Copies of the Care of the Newborn Reference Manual for all trainers and participants
<ul> <li>a) Outline the advice and care for a newborn with sepsis or infection:</li> <li>How to recognize sepsis</li> <li>How to prevent sepsis or death from sepsis</li> <li>What care the baby needs</li> </ul>	<ul> <li>Presentation/discussion of newborn sepsis.</li> <li>Have participants refer to Chart 6.5: Newborn Sepsis Decision-Making Chart on page 133 in the Reference Manual and to Generalized Infection: Newborn Sepsis information on page 130.</li> </ul>	Copies of the Care of the Newborn Reference Manual for all trainers and participants
<ul> <li>b) Outline the advice and care for a newborn with cord or umbilical infection:</li> <li>How to recognize cord or umbilical infection</li> <li>How to prevent cord or umbilical infection or death from the problem</li> <li>What care the baby needs</li> <li>What follow-up the baby needs</li> </ul>	<ul> <li>Presentation/discussion of umbilical cord infection.</li> <li>Have participants refer to Chart 6.6: Umbilical Cord Infection Decision-Making Chart on pages 134-135 of the Reference Manual and to Umbilical Cord Infection information on pages 130-131.</li> <li>Case study 6.1 (Follow Trainers' Directions)</li> </ul>	Copies of the Care of the Newborn Reference Manual for all trainers and participants Copies of Case study 6.1: Cord Infection and Key and Directions for all participants and trainers

OBJECTIVES AND CONTENT	TEACHING METHOD	Materials Needed
<ul> <li>c) Outline the advice and care for a newborn with skin infection:</li> <li>How to recognize skin infection</li> <li>How to prevent skin infection or death from the problem</li> <li>What care the baby needs</li> <li>What follow-up the baby needs</li> </ul>	<ul> <li>Presentation/discussion of skin infection.</li> <li>Have participants refer to Chart 6.7: Skin Infection Decision-Making Chart on pages 136- 137 of the Reference Manual and to Skin Infection information on page 131.</li> <li>Case study 6.2 (Follow Trainers' Directions)</li> </ul>	Copies of the Care of the Newborn Reference Manual for all trainers and participants Copies of Case Study 6.2: Skin Infection and Key and Directions for all participants and trainers.
<ul> <li>d) Outline the advice and care for a newborn with eye infection:</li> <li>How to recognize eye infection</li> <li>How to prevent eye infection</li> <li>What care the baby needs</li> <li>What follow-up the baby needs</li> </ul>	<ul> <li>Presentation/discussion of eye infection.</li> <li>Have participants refer to Chart 6.9: Eye Infection Decision-Making Chart on page 139 of the Reference Manual and to Eye Infection information on page 138.</li> <li>Case study 6.3 (Follow Trainers' Directions)</li> </ul>	Copies of the Care of the Newborn Reference Manual for all trainers and participants Copies of Case Study 6.3: Eye Infection and Key and Directions for all trainers and participants
<ul> <li>e) Outline the advice and care for a newborn with thrush:</li> <li>How to recognize oral thrush</li> <li>How to prevent thrush</li> <li>What care the baby needs</li> <li>What care the mother needs</li> <li>What follow-up the baby and mother need</li> </ul>	<ul> <li>Presentation/discussion of thrush.</li> <li>Have participants refer to Chart 6.9: Oral Thrush Decision-Making chart on pages 140- 141 of the Reference Manual and to Oral Thrush information on page 138.</li> </ul>	Copies of the Care of the Newborn Reference Manual for all trainers and participants
Summary Advice and care for a newborn with: a) Breathing problems b) Sepsis or general infection c) Cord or umbilicus infection d) Skin infection e) Eye infection f) Thrush	Ask 1 or more participants to summarize. Discussion. Questions and answers to complete their understanding.	

# Session 3: Temperature Regulation, Jaundice, Bleeding, and Problems from Pregnancy or Labor

<b>OBJECTIVES AND CONTENT</b>	TEACHING METHOD	Materials Needed
<ul> <li>Introduction and review of objectives</li> <li>At the end of the session, participants will be able to:</li> <li>1. Outline the advice and care for a newborn with: <ul> <li>a) Low temperature/Hypothermia</li> <li>b) Fever or Hyperthermia</li> <li>c) Jaundice</li> <li>d) Bleeding from the umbilical cord</li> </ul> </li> <li>Explain the newborn care advice to give a mother who has: <ul> <li>a) Syphilis</li> <li>b) Tuberculosis</li> <li>c) HIV</li> <li>d) Maternal infection during labor</li> </ul> </li> </ul>	<ul> <li>Briefly review contents of sessions 1 and 2: Newborn danger signs, stabilization and referral of a sick newborn; newborn breathing problems and infections.</li> <li>Presentation/Discussion of session 3 objectives.</li> <li>Ask participants to recall the role of the mother and family in improving newborn survival. Write down key points.</li> </ul>	Session 1 and 2 objectives written on flip charts (from prior sessions) Session 3 objectives written on a flip chart Flip chart and markers
<ul> <li>a) Outline the advice and care for a newborn with hypothermia.</li> <li>How to recognize hypothermia</li> <li>How to prevent hypothermia or death from hypothermia</li> <li>What care the baby needs</li> <li>What follow-up the baby needs</li> </ul>	<ul> <li>Presentation/discussion of hypothermia.</li> <li>Have participants refer to Chart 6.10: Hypothermia/Low Temperature Decision- Making chart on page 143 of the Reference Manual and to the hypothermia information on page 142.</li> </ul>	Copies of the Care of the Newborn Reference Manual for all trainers and participants
<ul> <li>b) Outline the advice and care for a newborn with fever or hyperthermia.</li> <li>How to recognize hyperthermia</li> <li>How to prevent hyperthermia or death from hyperthermia</li> <li>What care the baby needs</li> <li>What follow-up the baby needs</li> </ul>	<ul> <li>Presentation/discussion of hyperthermia/high temperature.</li> <li>Have participants refer to Chart 6.11: Hyperthermia/High Temperature Decision-Making chart on pages 144-145 and to the hyperthermia information on page 142.</li> </ul>	Copies of the Care of the Newborn Reference Manual for all trainers and participants
<ul> <li>c) Outline the advice and care for a newborn with jaundice.</li> <li>How to recognize jaundice</li> <li>How to prevent jaundice or death from jaundice</li> <li>What care the baby needs</li> <li>What follow-up the baby needs</li> </ul>	<ul> <li>Presentation/discussion of jaundice.</li> <li>Have participants refer to Chart 6.12: Jaundice Decision-Making chart on pages 148-149 and to the jaundice information on page 146.</li> </ul>	Copies of the Care of the Newborn Reference Manual for all trainers and participants
<ul> <li>d) Outline the advice and care for a newborn with bleeding from the umbilical cord.</li> <li>What care the baby needs</li> <li>What follow-up the baby needs</li> </ul>	<ul> <li>Presentation/discussion on bleeding from the umbilical cord.</li> <li>Have participants refer to Chart 6.13: Bleeding from the Umbilical Cord Decision-Making chart on page 150 and to the Bleeding from the umbilical cord information on page 146.</li> </ul>	Copies of the Care of the Newborn Reference Manual for all trainers and participants
<ul><li>Explain the advice to give a mother who has:</li><li>Syphilis</li></ul>	• Presentation/discussion on maternal problems which affect newborns.	Copies of the Care of the Newborn Reference Manual for

<b>OBJECTIVES AND CONTENT</b>	TEACHING METHOD	Materials Needed
<ul> <li>Tuberculosis</li> <li>HIV</li> <li>Maternal infection during labor</li> </ul>	<ul> <li>Have participants refer to the section on Problems from the mother's pregnancy and labor on pages 146-147.</li> <li>Ask 4 participants to role play giving advice to mothers with: Syphilis Tuberculosis HIV Maternal infection during labor Feedback from the group afterwards.</li> </ul>	all trainers and participants
<b>Summary</b> Newborn temperature regulation, jaundice, bleeding, and problems from pregnancy or labor	Ask 1 or more participants to summarize. Discussion. Questions and answers to complete their understanding.	
Assess participants' learning in Module 6	Administer Module 6 Post-test; collect test papers afterwards.	Copies of Module 6 Post-test for all participants

# **ROLE PLAY**

# Role Play 6.1: Emergency Referral *Participant Directions*

# Purpose

The purpose of this role play is to help you practice counseling skills while preparing a baby and the parents for emergency referral.

# Preparation

Read pages 128-129 of the Care of the Newborn Reference Manual.

# **Role Playing and Observation**

Everyone will participate either by playing a role or by observing. During the role play, observers should think about what they see and prepare to participate in the discussion.

# Discussion of the Role Play

After the role play, the group will discuss what happened. Think about how you would answer the discussion questions for each role play.

# **Participant Roles**

Health worker:	The health worker is experienced in the care of newborn babies and has good	
	interpersonal communication skills.	
Mother:	The mother, Binta, is from a nearby village. She is 22 years old and this is her second	
	baby.	
Father:	Binta's husband, Mamadou, a poor farmer.	
Brother:	Binta's 3-year-old child, Haroun.	
Grandmother:	Binta's mother, Halima.	

# Situation

Binta gave birth to a newborn weighing 2300 grams four days ago at home. Now she has brought her baby to the clinic because he has had a convulsion (fit) and will not suck at the breast. Binta is accompanied by her husband, her mother, and her first child, aged 3 years.

# **Discussion Questions**

- 1. How did the health worker show respect and kindness to this family?
- 2. What key health care actions and advice did the health worker give?

# Role Play 6.1: Emergency Referral Trainer Directions

Ask one participant to read the roles and the situation aloud. Then ask five others to act out the situation while the rest of the group observes them. Allow about ten minutes for the role play. Afterwards, thank the actors, and then lead a discussion using the Discussion Questions as a guide. Suggested answers are given below, but the participants will probably have other good answers and observations.

# 1. How did the health worker show respect and kindness to this family?

- By speaking in a calm reassuring manner, using words that the family understood.
- By listening to what Binta and her family had to say and answering their questions using the same reassuring manner.
- By keeping in mind that the mother and family are upset and worried, treating Binta and her family with gentleness and giving repeated explanations.

# 2. What key health care actions and advice did the health worker give?

- The health worker stabilized the newborn by making sure he was warm and by having the mother try to breastfeed the baby.
- The health worker explained the reason for referral, arranged transport and notified the referral center, if possible.
- The health worker gave any emergency treatment needed.
- The health worker gave vitamin K (if trained to give it) following country specific guidelines.
- The health worker instructed the mother to keep the baby warm in skin-to-skin contact during transport.
- The health worker advised the mother to try to breastfeed the baby during transport.
- The health worker sent the baby's records of labor and deliver and any care given since birth with the baby to the referral center.
- The health worker arranged for a family member to go with the mother and baby.
- The health worker asked the family who would care for the other child.
- The health worker recorded all the findings and treatments.

# **CASE STUDIES**

# Case Studies 6.1, 6.2, and 6.3 *Trainer Directions*

- 1. Divide participants into three groups.
- 2. Explain that each group will analyse a case study and then report on it to the class.
- 3. Have a participant read the Participant Directions aloud.
- 4. Distribute copies of all case studies to each group.
- 5. Tell each group which case study they should analyse:
  - Group 1 = Case Study 6.1
  - Group 2 = Case Study 6.2
  - Group 3 = Case Study 6.3
- 6. Give the groups 15 minutes to prepare their case studies.
- 7. When the time is up, allow each group 10 minutes to report on their answers to their case study questions.
- 8. Ask the class if they agree with the answers and why.
- 9. Give your comments on their answers and discussions. Refer to the Case Study Keys.

# Case Studies 6.1, 6.2 and 6.3 Participant Directions

# Purpose

This case study is to help you: 1) practice using the information on newborn problems, and 2) practice using the decision-making steps.

- 1. Read and think about the case study and questions given to your group.
- 2. Work as a group to answer the questions.
- 3. Use the decision-making charts for newborn infections (pages 134-139) in the Reference Manual to find the information you need to answer the questions.
- 4. Choose one group member to present the group's findings to class.
- 5. When all groups have finished answering their questions, each group will present their case study and their answers to their questions.
- 6. Be prepared to listen to and comment on the other groups' case study presentations.

# Case Study 6.1: Cord Infection

**The Case:** Amina is 30 years old and gave birth to her third baby at home five days ago. Her pregnancy, labor, and birth were uncomplicated. Amina noticed yesterday that her baby's cord had an offensive smell. She has brought the baby to the health center today because she is concerned that the cord may be infected.

The health worker observes that the baby has normal color, normal breathing, and that he is breastfeeding well. His abdomen is tightly wrapped with a soiled cloth.

#### **Discussion Questions:**

1. What should the health worker say to Amina, and what questions should the health worker ask?

**The Case Continued:** The health worker unwraps the soiled cloth from the abdomen and looks at the umbilical cord. The cord is moist and has a foul smell. There is no drainage or bleeding. The skin around the umbilicus is not red or inflamed. The health worker feels the baby's body and determines that the temperature is normal.

#### **Discussion Questions Continued:**

- 2. Based on these findings, what is the baby's problem?
- 3. Based on the problem/need you identified, what is your plan of care for Amina's baby?
- 4. When should Amina bring the baby back for a follow-up visit?
- 5. What should the health worker do at the follow-up visit?

# Case Study 6.1: Cord Infection (ANSWER KEY)

**The Case:** Amina is 30 years old and gave birth to her third baby at home five days ago. Her pregnancy, labor, and birth were uncomplicated. Amina noticed yesterday that her baby's cord had an offensive smell. She has brought the baby to the health center today because she is concerned that the cord may be infected.

The health worker observes that the baby has normal color, normal breathing, and that he is breastfeeding well. His abdomen is tightly wrapped with a soiled cloth.

# Answers to Discussion Questions:

# 1. What should the health worker say to Amina, and what questions should the health worker ask?

- Amina should be greeted respectfully and with kindness.
- Ask questions to assess the baby (as for routine follow-up newborn care):
  - Ask about the baby's behavior, sleeping, waking for feeds.
  - Ask how the baby breastfeeds, how often, and how often he passes urine.
  - Ask whether the baby has had any other danger sign.
- Ask Amina whether she received tetanus immunization during pregnancy.
- Ask Amina what was used to cut the cord.
- Ask Amina if any substance was put on the cord at birth or in the days since the birth.
- Ask Amina to describe how she takes care of the cord (to find out about possible cause of a problem with the cord).

**The Case Continued:** The health worker unwraps the soiled cloth from the abdomen and looks at the umbilical cord. The cord is moist and has a foul smell. There is no drainage or bleeding. The skin around the umbilicus is not red or inflamed. The health worker feels the baby's body and determines that the temperature is normal.

# Answers to Discussion Questions Continued:

# 2. Based on these findings, what is the baby's problem?

- The baby has a localized cord infection. He has a moist cord with an offensive odor.
- The problem may be caused by the cord being covered tightly with cloth.
- The baby does not have a serious cord infection because the skin around the umbilicus is *not red or inflamed, there is no drainage, and the baby has no signs of sepsis.*

# 3. Based on the problem/need you identified, what is your plan of care for Amina's baby?

- Show Amina how to treat the cord, as follows:
  - Prepare boiled water and allow it to cool.
  - Wash your hands with clean water and soap and dry them on a clean towel.
  - Wash the cord stump and umbilical area gently with the cooled, boiled water, soap (or an antiseptic, if available), and a clean cloth.
  - Dry the cord stump and umbilicus with a clean cloth.
  - Apply 0.5% gentian violet to the cord stump and umbilicus.
  - Wash your hands again thoroughly.
- Instruct Amina to carry out this treatment four times a day for three days.
- Remind Amina to wash her hands carefully before and after caring for the baby.

- Instruct Amina to not apply any other substances to the cord stump (with the exception of gentian violet, as indicated above).
- Instruct Amina to leave the cord exposed to the air and to keep it dry and clean.
- Advise Amina that gentian violet will stain clothes and skin.
- Advise Amina to bring the baby back immediately if he shows any danger sign, if the area around the cord becomes red, swollen or hardened, or if the baby's abdomen becomes distended.
- Advise Amina that the cord usually falls off within about 5-10 days after birth.
- Encourage Amina to ask questions and respond in a kind, reassuring manner.

# 4. When should Amina bring the baby back for a follow-up visit?

• She should bring the baby back in two days for follow-up.

# 5. What should the health worker do at the follow-up visit?

- Repeat the history and examination as above.
- If the baby is well, continue the treatment for a total of three days.
- If there are signs of infection, or if the baby is not better after three days, refer the baby to a higher level of care.

# Case Study 6.2: Skin Infection

**The Case:** Gita gave birth 12 days ago in her family's small hut about 5 km from the health center. They live about 15 minutes walk away from the river where they draw their water. Gita had five antenatal care check-ups, and her pregnancy and birth were uncomplicated. Two days ago Gita noticed that her baby had developed a rash in the diaper area. She brings the baby to the health center today because she is worried about the rash.

The health worker greets her and asks questions to learn more about the situation. Gita explains that the baby breastfeeds well, with a strong suck, every 2-3 hours, sleeps between feedings and wakes to feed. She passes urine frequently and has normal stools and does not have any other problem. When the rash first appeared, Gita started putting Vaseline on it, but it has not gotten better. In fact, Gita thinks it may be spreading.

#### **Discussion Questions:**

- 1. What examinations should the health worker do?
- 2. What findings will help the health worker decide whether the baby has a mild, localized skin infection or a serious skin infection?
- 3. After examining Gita's baby, the health worker decides that the skin infection is a mild, localized one. What should the plan of care be for this baby?
- 4. When should the baby be seen for a follow-up visit?
- 5. What should the health worker do at the follow-up visit?

# Case Study 6.2: Skin Infection (ANSWER KEY)

**The Case:** Gita gave birth 12 days ago in her family's small hut about 5 km from the health center. They live about 15 minutes walk away from the river where they draw their water. Gita had five antenatal care check-ups, and her pregnancy and birth were uncomplicated. Two days ago Gita noticed that her baby had developed a rash in the diaper area. She brings the baby to the health center today because she is worried about the rash.

The health worker greets her and asks questions to learn more about the situation. Gita explains that the baby breastfeeds well, with a strong suck, every 2-3 hours, sleeps between feedings and wakes to feed. She passes urine frequently and has normal stools and does not have any other problem. When the rash first appeared, Gita started putting Vaseline on it, but it has not gotten better. In fact, Gita thinks it may be spreading.

# Answers to Discussion Questions:

#### 1.What examinations should the health worker do?

- Weigh the baby.
- Watch the baby breastfeed.
- Look at the baby's skin. Uncover all of the baby to be able to see the whole body and to count how many pustules are on the skin. Separate skin folds and creases to look at the skin.
- Look at the baby's breathing.
- Look at the eyes for discharge.
- Look at the mouth, gums, tongue for thrush.
- Look at the umbilicus for signs of infection.
- Take the baby's temperature or feel the body to assess the temperature.
- 2. What findings will help the health worker decide whether the baby has a mild, localized skin infection or a serious skin infection?
  - It is a **localized skin infection** if:
    - a) the baby has fewer than 10 pustules, or the pustules cover less than half of the body,
    - b) there are no danger signs or other abnormal findings, and
    - c) there are no signs of sepsis.
  - It is a serious skin infection if:
    - a) the baby has many pustules, or the pustules cover more than half of the body, or
    - b) there is any danger sign, especially any sign of sepsis.

# 3. After examining Gita's baby, the health worker decides that the skin infection is a mild, localized one. What should the plan of care be for this baby?

- Show Gita how to treat the skin pustules, as follows:
  - Prepare boiled water and allow it to cool.
  - Gather clean cloths, soap, and gentian violet 0.5% solution.
  - Wash your hands with clean water and soap and dry them on a clean towel.
  - Gently clean the pustules with the boiled, cooled water and soap (or antiseptic if available), washing off any pus or dry crusts.
  - Dry the skin with a clean cloth.
  - Apply gentian violet to the pustules.

- Wash your hands again thoroughly after the treatment.
- Instruct Gita to do this treatment four times a day for 5 days, using clean cloths each time.
- Remind Gita to wash her hands carefully before and after caring for the baby.
- Advise Gita to apply only gentian violet to the baby's skin.
- Advise Gita to seek medical care immediately if:
  - The baby has any of the danger signs
  - The pustules spread or increase in number
- Encourage Gita to ask questions and respond in a kind, reassuring manner.

# 4. When should the baby be seen for a follow-up visit?

• Gita should bring the baby back in 2 days for follow-up.

# 5. What should the health worker do at the follow-up visit?

Repeat the history and examination as above.

If the baby is well and the pustules are less, continue the treatment for a total of 5 days. If there are more pustules or any signs of sepsis, refer the baby to a higher level of care.

# Case Study 6.3: Eye Infection

# The Case

Baby Musa was born at home five days ago, a healthy, full-term baby. Musa's mother is 30 years old. She did not have antenatal care and she did not have a skilled birth attendant. Musa's mother brings the baby to the health center today because she is concerned that his eyes may be infected.

# **Discussion Questions**

1. What additional questions should the health worker ask Musa's mother?

# The Case Continued

The health worker examines Musa and finds that:

- Musa's eyelids are very swollen and red.
- There is drainage of pus from both eyes.
- Musa does not have a fever.
- Musa is breastfeeding well. His breathing and color are normal.

# **Discussion Questions Continued**

2. Based on these findings, what is the baby's problem?

- 3. Based on the problem/need you identified, what should the plan of care be for Musa?
- 4. When should Musa be seen for a follow-up visit?

# Case Study 6.3: Eye Infection (ANSWER KEY)

# The Case

Baby Musa was born at home five days ago, a healthy, full-term baby. Musa's mother is 30 years old. She did not have antenatal care and she did not have a skilled birth attendant. Musa's mother brings the baby to the health center today because she is concerned that his eyes may be infected.

# Answers to Discussion Questions

# 1. What additional questions should the health worker ask Musa's mother?

- Musa's mother should be greeted respectfully and with kindness.
- Ask Musa's mother when the problem started and whether it has gotten worse.
- Ask questions to assess the baby (as for routine follow-up newborn care).
- Ask about the baby's behavior, sleeping, waking for feeds.
- Ask how the baby breastfeeds, how often, and how often he passes urine.
- Ask Musa's mother if the baby received eye treatment at birth.
- Ask Musa's mother whether she has done anything to try and treat Musa's eye problem.

# The Case Continued

The health worker examines Musa and finds that his eyelids are very swollen and red. There is drainage of pus from both eyes. Musa does not have a fever. His breathing and color are normal. The health worker observes that Musa is breastfeeding well.

# Answers to Discussion Questions Continued

# 2. Based on these findings, what is the baby's problem?

- The baby has a serious eye infection because there is pus draining from the eyes.
- This problem may be caused by germs that cause sexually transmitted infections. These infections can cause blindness if not treated.

# 3. Based on the problem/need you identified, what should the plan of care be for Musa?

- Refer Musa immediately to a higher level health facility for antibiotic treatment.
- Give the first dose of antibiotics before the baby is referred (ceftriaxone 50mg/kg IM—do not give more than 125 mg). Record what you have given in the referral note which the mother will bring with her to the referral center.
- Encourage Musa's mother to ask questions and respond in a kind, reassuring manner.
- Refer Musa's mother for STI screening and treatment for her and her partner.

# 4. When should Musa be seen for a follow-up visit?

- Musa has been referred to a higher level health facility for further care for this problem.
- Follow-up at the next routinely planned visit.

# **PRE-TEST/POST-TEST**

Name:\_\_\_\_\_ Date:\_\_\_\_\_

# Instructions:

- Circle **PRE-test** or **POST-test**
- Fill in your name and the date
- Circle the letter of the single **BEST** answer to each question.
- Each question is 10 points.
- 1. Baby Maya is 3 days old. Maya does not wake up to breastfeed. The mother tries to wake the newborn every 2-3 hours as she has been advised, but Maya only sucks weakly for a very short time and goes to sleep again. What advice should the health worker give Maya's mother?
  - a) "Maya's behavior is normal for a 3-day-old baby."
  - b) "Maya will be more alert when your milk comes in."
  - c) "Maya has a newborn danger sign and needs referral to hospital."
- 2. Baby Kofi is 2 days old. He feels hot and is limp. The health worker recognizes that Kofi has a newborn danger sign. To help the parents understand why the baby needs referral to the hospital the health worker should:
  - a) Explain the reason for referral and what treatment the baby needs.
  - b) Talk to the parents kindly and answer their questions.
  - c) Both a and b are correct and important.
- 3. The health worker arranged transport to the hospital for Baby Kofi. What should the health worker advise the mother to do during transport?
  - a) Do not give Kofi anything by mouth.
  - b) Keep Kofi skin-to-skin and covered to keep him warm.
  - c) Both a and b are correct.
- 4. Baby Nava is 3 days old. She is breathing 80 times in a minute. The health worker explains to the parents that Nava has a breathing problem and needs rapid referral to hospital because breathing problems:
  - a) Can lead to death.
  - b) Can be a sign of heart disease, low blood sugar, or other illnesses.
  - c) Both a and b are correct.
- 5. Baby Ahmed's mother tells the health worker that the baby's activity has changed. Ahmed is not feeding as well as yesterday and he seems very sleepy. It is difficult to arouse him for breastfeeding. His axillary temperature is 36.2 °C. He breathes 36 times in a minute without making any noise. What newborn danger signs does Ahmed have?

- a) Feeding difficulty and lethargy.
- b) Convulsions and low temperature.
- c) Fever and breathing problems.
- 6. Baby Leo is 7 days old. He did not have eye treatment at birth. Leo has swollen, red eyelids and pus drains from both eyes. The health worker should:
  - a) Refer the newborn for antibiotic injection to treat serious eye infection.
  - b) Teach the mother to clean the eyelids each day and go to the hospital if there is no improvement in 3 days.
  - c) Give newborn eye treatment now.
- 7. Baby Mei-Li is 24 hours old. The health worker feels the baby's abdomen and back. They feel cold. The health worker knows that low temperature (hypothermia) is:
  - a) Normal for all newborns.
  - b) A serious problem that may lead to death.
  - c) Cannot be prevented in newborns
- 8. Baby Meena is 3 days old. Today her face and chest are yellow, though they were pink for the first two days. She has no other abnormal findings. She is breastfeeding well and passing urine and stool. The health worker knows that Meena's yellow skin is:
  - a) A common finding at 3 days and not serious.
  - b) Serious jaundice because the chest is yellow.
  - c) Very serious jaundice because it started at 3 days.
- 9. The health worker also looks carefully at three-day-old Meena's abdomen and cord. If Baby Meena has a serious infection of the cord the health worker will see:
  - a) Redness and swelling of the abdomen around the cord.
  - b) Bleeding from the end of the cord.
  - c) Dryness of the cord.
- 10. Baby Pedro is a healthy one-day-old baby. The health worker advises his mother to wash her hands before and after caring for Pedro and to breastfeed him exclusively. These actions will help to prevent:
  - a) Infections.
  - b) Breathing problems.
  - c) Thrush.

# PRE-TEST/POST-TEST (ANSWER KEY)

Trainer: Score each correct answer 10 points. The maximum score possible is 100. Add up each participant's score and express it as a percentage.

QUESTION NUMBER	CORRECT ANSWER
1	С
2	С
3	В
4	С
5	Α
6	Α
7	В
8	Α
9	Α
10	Α

# APPENDIX A: Administrative Documents

# **TRAINING GUIDE**

# **APPENDIX A: ADMINISTRATIVE DOCUMENTS**

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# ESSENTIAL NEWBORN CARE TRAINING

GOAL: To help health workers learn or update essential newborn care knowledge and skills so they can give competent care to newborns, their mothers, and their families.

# Objectives

At the end of the ENC Clinical Training, participants will be able to:

- 1. Use the decision-making steps to care for newborns.
- 2. Advise and counsel pregnant women and their families on ways to improve newborn outcomes.
- 3. Give immediate care to newborns at birth.
- 4. Care for newborns from birth to 28 days, including counseling mothers and families.
- 5. Competently perform the skills of:
- 6. Newborn resuscitation
- 7. Newborn physical examination
- 8. Care of low birth weight babies (kangaroo mother care)
- 9. Help a mother and her family with early breastfeeding:
- 10. Help a mother start breastfeeding within one hour of birth
- 11. Advise a mother on how to continue to breastfeed
- 12. Teach a mother to express breastmilk and cup feed.
- 13. Recognize and care for women with breastfeeding problems.
- 14. Counsel mothers about newborn danger signs and what to do.
- 15. Demonstrate how to make an emergency referral of a sick newborn.
- 16. Counsel the mother and family on prevention and management of common newborn problems, including low birth weight.
- 17. Demonstrate care of babies with common newborn problems.
- 18. Give health messages to communities to help prevent problems and death in babies from birth to 28 days.

# **SCHEDULING CONSIDERATIONS**

# Determining the length of the training

The length of the training program should depend on the learning needs of the participants. It may not be necessary to address each subject in the Reference Manual. If time is limited, trainers should select the highest priority topics and adjust their training schedule as needed, depending on the:

- Level of providers being trained
- Previous knowledge/skills of the participants
- Scope of practice and legal practice standards for the trainees
- Realities of the trainees' work situations
- Topics previously or currently taught in Safe Motherhood training programs

The time allotted for each module will depend on several factors such as which topics are selected for training, the number and cadre of participants, and their learning needs. Consider the various learning activities in the modules you will teach, and plan accordingly.

In competency-based training, each participant needs adequate time to practice and learn the steps of each skill. To make the best use of limited teaching time, try to have enough trainers present to provide guidance for each team of 2 or 3 participants practicing skills together. If this is not possible, or if there is not enough equipment for all participants to practice at once, assign other learning activities (e.g., case studies, role plays) to those not working on skill practice. The groups will later switch, so that everyone gets a chance to practice each skill. Participants may also use evening hours for extra practice.

Learning new skills is a very individual thing. In competency-based training, it is not possible to determine a minimum number of times a skill must be practiced before competency is achieved. However, we recommend that participants demonstrate competence in a particular skill on a model (manikin) before attempting to practice that skill in the clinical area. This will make practice on actual newborns much quicker, easier, and safer.

# Scheduling Clinical Experiences

Though demonstrations and practice on manikins are helpful, there is no substitute for experience with real mothers and babies. The training course must include supervised time in appropriate clinical sites where trainees can observe and practice clinical skills with live patients.

Arranging for adequate clinical experience is often difficult. Facilitators must find sites with large numbers of newborns. They must deal with the institutions' administrative formalities and, sometimes, with other trainees competing for experience. They must obtain permission from mothers/families in most instances. Consider these factors when selecting clinical sites:

• Number of births

You will need to estimate the number of mothers and newborns available. Divide the number of births per year by 50 to determine the approximate number of deliveries per week. For example, if a site averages about 2500 deliveries per year, there will be roughly 50 deliveries per week. This could be the minimum number required for 8 participants.

• Length of stay for postpartum mothers

Because the first few hours and days after birth form the basis of newborn care, it is essential that learners have the opportunity for interaction with mothers/families and their newborns at birth and in the hours just after birth. If mothers and normal newborns are routinely discharged within 12-24 hours after birth, it is best to schedule trainees for long clinical shifts (8–12 hours), otherwise they will see few newborns.

- Importance of night shifts in the clinical area Remember that most births occur at night: trainees are more likely to get practice in immediate newborn care and newborn resuscitation if they are in the clinical site at night. Trainers and trainees (especially young women) on night shifts need a safe place to sleep when there is nothing happening.
- Number of trainers to cover the clinical area Keep in mind that the trainees must always be supervised in the clinical area, and that trainers can not work 24 hours per day. Clinical trainers who take the night shift can not do classroom teaching during the daytime hours. They need to sleep. One trainer can not supervise more than 3 or 4 trainees at once. A trainer can not be in two places at once.
- Availability of out-patient clinical sites (e.g., antenatal or postnatal clinics) These provide good opportunities for participants to practice counseling skills as well as newborn exams and management of common newborn problems.
- Competition for clinical experiences
  - Trainers may need to collaborate with trainers or clinical tutors from other programs to ensure that all learners have adequate opportunity for clinical experiences and observation. Institutional policies on student practice Check to see if there are policies about trainees in the clinical areas. To ensure safe patient care, many facilities have guidelines or policies regarding student activities. For example, there may be rules about the supervision of trainees.

# Lessons learned from field-testing experiences

- Selected topics of ENC training can be successfully integrated into existing training programs (for example, Child Survival, Safe Motherhood, or pre-service programs).
  - Each training program faces a different situation and should develop a training schedule to meet their trainees' learning needs. The schedule may even vary within a program. For example, different providers may require more or fewer days and different combinations of ENC topics. Once the training materials have been adapted, a field test will help to determine what works best. The training team can then revise the content, if necessary, and modify the proposed training schedule (including practice and clinical time) as needed.
  - Times for clinical practice vary widely. The training may even be on-site (on-the-job), so that participants learn at their place of employment with the resources they have available. Several factors influence the amount of time needed for clinical practice, including the distance between classroom and clinical site(s) and the volume of births at each site. If the classroom is located very near the delivery room, the attending midwife can call a trainer and trainees to come whenever a birth is about to happen, so that they will have a chance to practice immediate care and perhaps even observe or participate in a real resuscitation.

- An alternative to going to the clinical site for practice is to bring clients to the classroom. This has worked very well for practicing skills such as counseling/health education and newborn exams. With the help of clinical staff, you may be able to enlist outpatient antenatal and postnatal mothers to participate if they understand that experienced trainers will be supervising the care they receive. You may offer them lunch, transport home, or perhaps a gift for the baby as a token of thanks. (Never offer baby formula or baby food as a gift!) Postpartum mothers can also be recruited from nearby communities.
- Ratio of trainers to learners: Ideally, there should be not less than one trainer per four participants for classroom skill practice. For clinical practice, one facilitator per two trainees is recommended. More trainers help facilitate participants being in different clinical areas at the same time, thereby making the most of limited clinical time.
- At the beginning of the training, have participants divide into teams of two. The partners will assist each other in practice and in achieving competency by using the team system when practicing new skills. How does this work?
  - The partners take turns being the person who "performs" a skill or the one who observes and "assists". This system helps participants learn more from all clinical experiences, whether they are performing or observing the skills.
  - Using the skills learning checklists, team members help each other learn by supplying information or correction when one forgets something or does not remember how to do it correctly.
  - Responsibilities of the team member who assists with a skill:
    - Review the skills learning checklist before assisting.
    - Observe the other partner practicing the skill and help (by reminding or prompting) if any step is forgotten or done wrong.
    - Evaluate your partner's performance using the skills learning checklist.
    - Have an informal discussion with your partner to talk about how the skill was performed using the skills learning checklist.
  - Responsibilities of the team member who performs a skill:
    - Review the skills learning checklist before practicing the skill.
    - Practice the skill while your partner observes.
    - Evaluate your own performance before discussing it with your partner.
    - Have an informal discussion with your partner about how you did using the skills learning

# NUMBER OF CLINICAL EXPERIENCES BY PARTICIPANTS (Wall Chart)

		PARTICIPANTS' NAMES
CHAPTER	Skill	
2	Immediate Newborn Care	
2	Newborn Physical Examination	
2	Counsel Family About Newborn Care	
2	Give Care Up to 28 Days	
3	Assistance with First Breastfeeding	
3	Breastfeeding Counseling	
3	Expressing Breastmilk	
3	Cup Feeding	
4	Newborn Resuscitation	
5	Kangaroo Mother Care (KMC)	
6	Manage Newborn Problems	

This is an example of a chart that may be used to record the number of clinical experiences, by skill, each participant has had. In the column under a participant's name, put a tally mark next to the corresponding skill each time the person performs that skill. Once a participant has achieved competence in a skill, put a large "C" in the appropriate box. This helps trainers see who needs more help or practice, and with what skills.

# This type of chart can also be used to determine when participants have had enough classroom skill practice (with manikins) and are ready to practice their new skills in the clinical area.

# FINAL EVALUATION FORM

Please evaluate the following by ticking how you feel about each statement. Feel free to write any additional comments below and use the back of the page if needed.

	Statement	Strongly Agree	Agree	Not Decided	Disagree	Strongly Disagree
1.	For the work I do, the training was appropriate.					
2.	For the work I do, the training was helpful.					
3.	The training facilities and arrangements were satisfactory.					
4.	The Reference Manual and other reading materials were easy to understand.					
5.	The Reference Manual and other reading materials helped me to learn.					
6.	Teaching aids were useful (films, charts, models).					
7.	The methods used for teaching were helpful (case studies, role plays, simulations, clinical practice).					
8.	The trainers were knowledgeable and skilled.					
9.	The trainers were fair and friendly.					
10.	The trainers communicated clearly and simply.					
11.	The objectives of the training were met.					

- 1. What three topics were most useful to you?
- 2. What three topics were not useful to you?
- 3. What three things would you change about the training?
- 4. Other comments (please use back of paper if needed):

# SUPPORTIVE SUPERVISION

# What is supervision?

According to WHO, "The purpose of supervision is to promote continuing improvement in the performance of health workers." (From: The Supervision of Health Personnel at District Level, page 3.)

Supervision should guide, motivate, and help health workers improve the quality of care they give. To be effective, supervision visits should be conducted on a regular basis: monthly, or at least quarterly. Supervision visits should:

- Reinforce knowledge and skills and provide on-the-job in-service training
- Help workers solve problems
- Address concerns and grievances
- Help maintain and improve confidence and motivation of health workers
- Monitor the performance of health workers
- Monitor the routine use of protocols or standards
- Assure the safety of services given
- Assure that adequate equipment, supplies, and medications are in stock
- Collect data/reports on the health of the population and on services given

# Supervision to help trainees improve the quality of newborn care

The goal of newborn care training is to improve health workers' performance so they can save newborn lives. Research has shown that training alone has a limited effect. Trained workers need support and supervision to help them integrate new skills into their job activities.

It is never easy to make changes in work routines, especially when the changes involve more than one person. Trainers are the ideal people to help trainees make changes to improve the quality of newborn care. They can provide motivation and leadership, answer technical questions, help solve problems, and negotiate with the people in charge. It is ideal when newborn trainers can make regular supervisory visits dedicated exclusively to newborn care. This ensures that trainees retain their new knowledge, master their new skills, and apply them on the job.

Trainers' supervisory visits also help them identify training needs. A trainer supervisor can quickly see whether trained workers have learned what they need to know, modify the training curriculum as needed for future trainings, and design continuing education activities to meet the ongoing needs of those already trained. This information gathering does not take the place of the 6 months post-training evaluation (see Appendix B), but complements it.

# Integrated multi-purpose supervision

In the real world, trainers cannot go on forever making exclusive newborn care supervisory visits. Sooner or later, the job of support and supervision must be turned over to the health system. In most health systems, a supervisor must oversee many or all aspects of a health facility's services during one visit. The supervision of newborn care services must be integrated into a broad range of responsibilities. Therefore, the newborn care training coordinator will need to work with the health authorities to:

• Identify who will supervise the health workers who have been trained in essential newborn care. Ideally, supervisors should be broadly trained and experienced clinicians with good

interpersonal and leadership skills.

- Provide training in essential newborn care to the supervisors so they have the knowledge and skills to do their job.
- Either provide them with a newborn care supervision form or help them adapt their present supervision form to include essential newborn care content.

An example of a newborn care supervision form is included on the next two pages.

#### Worker-initiated supervision

In some countries, health care funding is so meager that there is no budget at all for making regular supervisory visits. If that is the case, the initiative for supervision must come from the workers themselves. There are many possible strategies, for example:

- Health workers can come in to the district health office or central headquarters to get supervision when they come to town for some other reason.
- Workers can use tools such as the decision-making charts in the Reference Manual, the skills checklists, and the supervision form on the next two pages to review and analyze their own work, always with an eye to improving quality of care.
- Workers can meet together with co-workers in a peer review supervision group to discuss clinical problems and issues and to seek ways to improve care.
- Facility-based managers or other internal leadership staff (such as matrons, ward in-charges, or senior clinical staff) can act as supervisors to help evaluate performance of their colleagues. For example, the midwife in charge of the post-natal ward could help assess the performance of the staff in labor-delivery area and vice-versa.

# **NEWBORN CARE SUPERVISION FORM**

Name of site visited: Name(s) of worker(s) supervised:	_ Date://
Review of notes from previous supervision visit or	/(date):
Areas of Excellence:	Areas Needing Improvement:

#### Staff Assessment

# A. Discussions with Staff:

2. If any of these skills are not being used, what is the reason?

3. What newborn problems have you seen since the last supervision visit?

- 4. What did you do for these problems?
- 5. What additional knowledge or skills practice do you need?
- 6. When was your most recent training or technical update on newborn care? Which topics were included in the training?

# **B.** Skills Assessments:

A summary of the information from the skills checklists can be inserted or attached here.

C. Summary:	
Areas of Excellence at this visit:	Areas Needing Improvement at this visit:
<b>Discussed these findings with staff?</b> yesno <b>Comments and requests from Staff:</b>	
Supervisor's additional comments:	
Next visit planned for// Name of supervisor	_Signature
FACILITY ASSESSMENT	
A. Review of records for the period/_/	to// Number of low birth
weight babies Number of live births	Number of newborns
resuscitated Number of stillbirths	Number of postnatal
baby visits	
Number of newborn immunizations Number of neonatal deaths (birth–28 Number of newborns referred to a hi	days)
B. Observations: Antenatal	
Antenatal tetanus vaccine in stock and refrigera	
Antenatal malaria prophylaxis in stock? <u>yes</u> Antenatal iron, folic acid, vitamin A, (iodine) su	
Antenatal screening for syphilis, HIV, and othe	
Antenatal screening for anemia and hookworm	-
Labor and Delivery	
Partographs in use?yesno	
Fetoscope available in labor ward? <u>yes</u> no	
Resuscitation equipment and supplies ready for	•
Sterile (or HLD) instruments or new razor blad Sufficient gloves available for all births?y	
Postpartum	

# C. Summary:

Areas of Excellence at this visit:	Areas Needing Improvement at this visit:

Discussed these findings with management staff? \_\_\_\_yes \_\_\_\_no Name(s) of staff interviewed: \_\_\_\_\_ Comments and requests from management staff:

Supervisor's additional comments:

Next visit planned for/	
Name of supervisor	Signature

# SUPPORTIVE SUPERVISION FORM

# **General Supervisor**

Name of Person or Facilit	y Providing EN	C:	
Location:	_Hospital	Clinic	Home
Date:	-		
From Previous Supervision	n Visit:		
Areas of Excellence:	Areas Neo Improven	eding nent:	Areas improved since last visit:

# A. Discussions with Staff:

1. What essential newborn care skills are being used?

<ul> <li>warm and dry baby</li> <li>initiate breastfeeding in the first hour</li> <li>cord care for baby</li> </ul>	<pre> eye care for baby  newborn examination  immunizations  resuscitate baby</pre>	<ul> <li>care of low birth</li> <li>weight baby</li> <li>counseling mother and</li> <li>family about:</li> <li>newborn danger signs</li> <li>prevent infection</li> </ul>
---	---	---

2. What newborn problems have you seen since the last support and supervision visit?

What did you do?

What additional knowledge or skills practice do you need?

# **B.** Observations:

1. Labor and delivery

Is all resuscitation equipment and supplies ready for immediate use? yes	0
Are sterile delivery packs available for births?yes no	
Are sufficient gloves available for all births?yes no	
Is there a light source? yes no	
Is there sterilization equipment available?yesno	

2. Postpartum

Are all normal, healthy babies with their mothers? \_\_\_\_yes \_\_\_\_no Do all of the babies have covered heads?

# 3. General Observations

- 1. Are references or guidelines/protocols for essential newborn care available to staff? \_\_\_\_\_yes \_\_\_\_ no
- 2. Are antibiotics (oral and IM) available for baby? \_\_\_\_yes \_\_\_\_no
- 3. Is eye antibiotic ointment available (use country guidelines or ENC manual)? \_\_\_\_\_yes \_\_\_\_no

- 4. Is an infant weighing scale in working order available? \_\_\_\_yes \_\_\_\_no
- 5. Are services offered at the health facility 24 hours a day? \_\_\_\_\_yes \_\_\_\_no

# Areas of Excellence at this visit:\_\_\_\_\_\_

Areas Needing Improvement at this visit:\_\_\_\_\_

Discuss and share finding of support and supervision visit	yes	no
--	-----	----

**Requests from Staff:** 

Additional comments:

Signature of person being visited	
Next visit planned for	
Name and signature of supervisor	

# **APPENDIX B:**

# CARE OF THE NEWBORN TRAINING EVALUATION

# APPENDIX B: CARE OF THE NEWBORN TRAINING EVALUATION

TRAINING EVALUATION FRAMEWORK	18
PRE- AND POST-TESTS OF KNOWLEDGE AND/OR SKILLS	19
ASSESSING BEHAVIOR CHANGE	23
ASSESSMENT TEST SCORES FOR TRAINEES IN GROUP A	25

# **TRAINING EVALUATION FRAMEWORK**

# The Kirkpatrick Model for Training Evaluation

The best known framework for training evaluation is the Kirkpatrick Model<sup>1</sup>, which contains four levels of evaluation.

#### Level 1: Trainee Reaction (What did the trainees think about their training?)

A written evaluation form for trainees to fill out at the end of the training is a common type of level 1 evaluation. Trainee reactions can be to the venue, materials, individual presenters, or the content of the course.

#### Level 2: Learning (What did trainees learn in their training?)

Learning is often measured by written tests and/or skill assessments done at the start and end of the training (pre- and post-tests of knowledge and/or skills). Assessments may also be done again later to help measure retention of learning.

# Level 3: Behavior change of trainees (What impact did the training have on trainees' job performance?)

Workplace performance assessments done at 6 months and later after the trainers evaluate trainees' use of their learning on-the-job. These assessments also help identify the need for refresher training.

# Level 4: Results and Ultimate Impact (What impact did the training have on newborn care, health and survival?)

Level 4 assessments measure whether a training program has contributed to reduction in mortality and morbidity. Results and impact are commonly measured through community-based surveys of mothers' knowledge and newborn care practices and facility-based service statistics.

The Care of the Newborn Training Guide includes instruments for Level 2 evaluation (learning); the checklists can also be used for Level 3 (behavior change) assessments. The package does not include instruments to measure trainee reaction (Level 1) or results (Level 4), which should be part of a comprehensive program evaluation.

<sup>&</sup>lt;sup>1</sup> Philips, Jack J. 1997. *Handbook of Training Evaluation*. Houston, Texas: Gulf Publishing Company, p. 38.

# Assessing What Trainees Learned: Pre- and Post-Tests of Knowledge and/or Skills

The Care of the Newborn Training Modules each include a written knowledge test; some modules also include skills learning checklists. These instruments can be used to assess learning and retention of the modules' content both immediately after training and later (e.g., after six months).

# The Knowledge Pre/Post-Tests

The knowledge pre- and post-tests each consist of 10 multiple-choice questions covering the content in a module. If all six modules will be included in a training course, some or all of the 60 questions can be combined to make one general test. The questions are designed to assess recall, understanding, and application of the training content. The pre- and post-tests are the same, though the order of responses can be changed to avoid bias due to memorization, if deemed necessary.

The knowledge tests need to be pre-tested in any country where they will be used. When translation is required, local experts should back-translate all items to check for accuracy of translation as well as clarity of meaning in the local language.

# Administering the Knowledge Pre/Post-test

Explain the purpose of the pre-test: it is not a pass/fail test but is used to identify learning needs and to help the trainer decide how to teach a topic. The word "assessment" may be substituted for "test" in order to help emphasize this point.

Trainees should be instructed to write their names on each page of the test, and to circle the best response to each question. The test papers, on which they have circled their responses, should be collected after the pre- or post-test administration.

Post-tests, administered at the end of each module, or after the entire training workshop, assess knowledge of the module or course content. Generally the post-test is given after both knowledge and skills training is done.

# Scoring Knowledge Pre/Post-tests

Trainers should score and analyze the results of the pre-tests as soon as possible, so that teaching of that module can be adapted, if necessary, to meet the learning needs of that particular group of trainees.

On the post-tests, a passing or satisfactory score is 70% correct responses.

Knowledge pre/post-test results can also help to validate test questions. They will help to identify:

- Questions that are not clear: Any post-test question missed by over 80% of the group should be examined carefully with feedback from the trainees. By asking the trainees for feedback about each missed question, trainers can identify unclear questions.
- Questions that are too easy: By examining the items that all trainees answered correctly, especially on the pre-test, one can find the questions that "give away" the answer, or are too simple.

• Questions that test content that was not presented to trainees: In this case, the question needs to be modified or deleted.

# The Skills Learning Checklists

During the Care of the Newborn training courses, trainees use skills learning checklists to guide them as they master new skills. A skills learning checklist breaks down a complex skill into a sequence of discrete, small, clearly-observable steps.

A trainer can use the same skills learning checklist to objectively observe and assess how a trainee performs a skill. Trainers can use the skills learning checklists to:

- Assess competency on key skills before training
- Monitor trainees' progress during training
- Measure mastery of skills at the end of training (by comparing performances before and after training)
- Assess retention and behavior change later (at some time after the completion of training)

# Preparing to Administer Skills Pre- and Post-Tests

Not all programs will do pre-testing of skills. Training coordinators should decide what is most appropriate for the program.

#### 1. Select the skills to be tested.

#### **Pre-test:**

- Not all skills can or should be included in the skills pre-test. This would take too long, given the number of skills and the number of trainees.
- The ideal is to select two or three skills that are most important. Many SNL programs pre-test only on two skills: newborn resuscitation and immediate care at birth.
- Do not waste time pre-testing on skills that are completely new to the trainees.

#### Post-test at the completion of training:

• At the end of each module, or when they are ready, trainees are tested on all skills in that module.

#### Post-test later (during evaluation after 6-12 months, or during on-the-job supervision):

• Select no more than two critical skills. As for the skills pre-test, we recommend assessing the critical skills of newborn resuscitation and immediate care at birth.

#### 2. Assign one trainer to evaluate each skill.

- If possible, it is best for one trainer to do all the evaluations of one skill. This ensures that: 1) all the tests of a skill are scored in the same way, and, 2) the trainer can identify common problems the trainees have performing the skill.
- If a trainer knows which skill she/he will be evaluating, she can prepare herself well by reading about and practicing that skill beforehand.

#### 3. Ensure that all trainers score the skills in the same way.

- If there are too many trainees for one trainer to assess on a skill, it is important that all trainers score the skills test in the same way. The standardized skills learning checklists help ensure this.
- Each step of the skill is scored by the evaluator by writing the points obtained in one of the columns on the right of the chart, depending on when the testing is done. The scoring is explained in the instructions page at the beginning of each checklist.

- Before the training, trainers can discuss and agree upon the details of each checklist according to local practice standards/protocols, and adjust accordingly.
- 4. Select private test locations and a separate area for waiting trainees.
  - Trainees have the right to be tested in private. Use different rooms or a large room; two or three tests can go on in one room if there is enough space between the testing locations.
  - Arrange a separate waiting area so that people waiting do not disturb or observe the testing.
- 5. Make sure all the necessary equipment, supplies, table and chairs are available for the skill tests.
  - Each skill test will need different equipment and supplies; these are listed in the instructions for that skills learning checklist. The trainer needs to review the list and check that the necessary equipment and supplies are available.
  - Make sure that there are adequate quantities of consumable supplies (such as soap, clean water, and towels) for the number of trainees to be tested.
  - Make sure that there are enough skills learning checklists for the number of trainees to be assessed.
  - Do not forget chairs for the trainer and the trainee, a surface on which the trainee can work on the baby (doll or manikin), and a table for the trainer to use while scoring the skill checklist.

# Administering Skills Pre-tests

As with the knowledge assessment, it is important to help participants feel as comfortable as possible. Therefore, trainers should:

- Acknowledge that trainees have not yet been taught the skill. Ask that they demonstrate how they have done the skill or how they have seen it done.
- Emphasize the purposes of the assessment:
  - o To identify individual and group learning needs and strengths
  - To help trainers decide the best way to teach each topic based on the group's knowledge and skill level
  - o Later, when compared with post-test results, to see how much the trainees have learned
- Be sure the trainees know:
  - o Which skills will be assessed and where each skill assessment will be done
  - o How the skills learning checklist will be used
  - How much time each trainee has to do one assessment
  - Where trainees will wait while others are being assessed

Write the trainee's name on each page of his checklist.

Write the points earned for each step in the appropriate column.

# Administering Skills Post-tests

Skills post-tests are given at the completion of a module. Skills post-tests should be done in the environment in which trainees have learned and practiced the skill, if possible. The skills post-tests

are administered to each trainee individually. A trainer observes each trainee's performance and scores each step.

Write the trainee's name on each page of his checklist.

Write the points earned for each step in the appropriate column.

# Scoring Skills Tests

After a skills test the trainer adds up the score. A passing or satisfactory grade (minimal competency) is achieved when there is a score of "1" for each step. Therefore, the number of steps for each skill will equal the number of points required to achieve competency. The trainer then signs and dates the assessment on completion.

# **Assessing Behavior Change**

# (Use of learning on the job)

# **Behavior Change**

Behavior change occurs when trainees use what they learned in training to improve their practice on the job.

Behavior change is not easy. It takes more than just new knowledge. It takes motivation, and it also requires *an enabling environment*:

- Co-workers and clients who accept the changed behavior
- Supervisors who support the changed behavior
- Institutional routines which can accommodate the changed behavior
- Equipment and supplies available to do the changed behavior
- Space in the worksite to do the changed behavior
- Time in the trainee's workday schedule to do the changed behavior
- Sometimes: changes in the way records are kept in the institution.

#### When to Assess Behavior Change

A newly trained health worker may need time to accomplish on-the-job behavior change—time to think about what he was taught; time to explain and negotiate with co-workers, clients, and supervisors; time to get equipment and supplies; time to reorganize his work space; and time to rearrange his schedule.

For this reason, wait at least six months after the end of training before trying to assess behavior change in the workplace. Hopefully six months will give trainees enough time to apply what they have learned.

Some trainees may be in jobs which offer no opportunity to use their new knowledge and skills. For those people, measuring behavior change is not relevant. Nevertheless, it is appropriate to measure their retention of new knowledge and skills at least six months after the end of the training.

Trainee assessments for the purpose of program evaluation should be done at least six months after the end of the course. The results can be used to document program successes and failures, identify further training needs, and to plan refresher training.

# Tools to Evaluate On-the-Job Performance

#### **Skills Learning Checklists**

The same skills learning checklists used for the pre- and post-tests during the training are used to assess on-the-job performance. This allows a clear comparison of a person's skills before training, immediately after training, and six months later.

#### Knowledge Pre/Post-tests

The questions for the pre/post-tests are the same. Again, the order of responses may be changed to avoid bias due to memorization of the test.

# Who Conducts the On-the-Job Post-Tests

It is ideal for trainers to conduct the on-the-job post-tests. Trainers have in-depth knowledge about: 1) the newborn care training program content, and 2) the level of the trainees at the end of the training. Sometimes, however, trainers have too many responsibilities to do this activity. Whoever does the on-the-job post-tests must be trained in newborn care and skilled in support and supervision.

# Process

**On-the-Job:** Inform the trainees and their superiors ahead of time that they will be observed and assessed at their worksites. Use the knowledge tests and skills learning checklists as described earlier, with only the equipment and supplies actually available at the worksite, in order to assess whether it is possible for the health workers to perform the skills correctly in the actual work environment. When a step of the skill is not done as taught because of lack of optimal equipment or supplies, this step should be marked "not applicable", and thus not scored. Note the reason why the trainee was unable to perform the skill properly. This information will be useful.

At a Central Site: Conducting post-tests at the trainees' worksites is best, but there may be times when it is not possible to visit each trainee's location. In that case, a group of trainees can be called in to the training center, or to another location, at the same time. Administer the knowledge post-test to the group all at once. The skills post-tests can be given in the training center's clinical area or at skill stations set up by the trainers.

# Analysis and Reporting of Evaluation Results

Trainers can use a chart similar to the one that follows to record the scores of each trainee in a training group. Each trainee should have been tested three times (before training, at the end of training, and six months later) on the knowledge test and on two skills tests. After completing all the assessments for members of a group, calculate the percentage of trainees who achieve a passing score on each test and enter it in the correct box in the last row. Remember that 70% correct responses is a passing score for knowledge tests. Since there are only 2 possible scores for the skills test (Competent or Not Competent), the passing score would be "competent", which can be indicated by a "C" in the appropriate box. Since this is competency-based training, it is expected that there will be a high number of passing scores on the post-tests for skills.

# Assessment Test Scores for Trainees in Group A

	KNOWLEDGE SCORES			SKILL SCORES: NEWBORN RESUSCITATION			SKILL SCORES: IMMEDIATE CARE AT BIRTH		
Trainee Name	<b>Pretest</b> (BEFORE TRAINING)	Posttest 1 (end of training)	Posttest 2 (6 Months After Training)	<b>Pretest</b> (BEFORE TRAINING)	Posttest 1 (end of training)	Posttest 2 (6 Months After Training)	Pretest (before training)	Posttest 1 (end of training)	POSTTEST 2 (6 MONTHS AFTER TRAINING)
1.									
2.									
3.									
Percent of trainees with a passing score									

A chart like the one below could be kept for each group of trainees. The groups can then be compared by looking at the percent with passing scores on the various tests (the last row on each group's chart). To easily compare groups, take the percent of passing scores for each group and enter them into another chart, like the one below, designed to compare groups.

# **GROUPS' TEST SCORES**

	KNOWLEDGE SCORES		SKILL SCORES: NEWBORN RESUSCITATION			SKILL SCORES: IMMEDIATE CARE AT BIRTH			
Training Group	Pretest (before training)	Posttest 1 (end of training)	Posttest 2 (6 Months After Training)	Pretest (before training)	Posttest 1 (end of training)	Posttest 2 (6 Months After Training)	Pretest (before training)	Posttest 1 (end of training)	POSTTEST 2 (6 MONTHS AFTER TRAINING)
1. Group A									
2. Group B									
3. Group C									

In this Care of the Newborn training program, minimal competency is defined as performing each step satisfactorily. To evaluate the ability of the training program to increase the number of health workers competent in Newborn Care, count the number of health workers who achieve at least the stated scores (indicated by a "C" on the chart above). You could also calculate what percentage of the people who were trained achieved competency, if desired, and compare percentages of those who achieved competency in different training groups.