IMCI
INTEGRATED MANAGEMENT OF CHILDHOOD ILLNESS

DISTANCE LEARNING COURSE

Module 9

CARE OF THE WELL CHILD

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This module includes the following sections of information. It follows a different flow compared to the other IMCI modules and process.

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Lulu Muhe of the WHO Department of Maternal, Newborn, Child and Adolescent Health (MCA) led the development of the materials with contributions to the content from WHO staff: Rajiv Bahl, Wilson Were, Samira Aboubaker, Mike Zangenberg, José Martines, Olivier Fontaine, Shamim Qazi, Nigel Rollins, Cathy Wolfheim, Bernadette Daelmans, Elizabeth Mason, Sandy Gove, from WHO/Geneva as well as Teshome Desta, Sirak Hailu, Iriya Nemes and Theopista John from the African Region of WHO.

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9.1 MODULE OVERVIEW

In this course, you have learned how to assess, classify, and treat the sick child. You have learned about giving treatments, and counselling on treatment at home. You have learned about follow-up visits, and how to teach a caregiver about signs of illness.

This module is a little different from your previous study of the sick child. In this module, you are going to learn how to care for a well child.

WHAT IS A WELL CHILD?

This is a child coming to the health facility seeking preventive health services such as immunizations, feeding advice, growth and developmental monitoring.

HOW DOES IMCI FOR THE SICK CHILD RELATE TO WELL CHILD CARE?

Throughout this course, you have learned how to care for a sick child coming to your health facility. You will use some of the same skills that you have already practiced when assessing and treating a sick child. Despite the fact that you may feel you have a lot of children to attend to, and that these are well children, it is important to take time to assess a well child properly.

For example, when caring for a well child, you will use the IMCI counselling and communication skills you have learned. You will ask the mother questions to determine how she is caring for her child. You will then listen carefully to the mother’s answers so that you can make your advice relevant to her. You will praise the mother for appropriate practices such as bringing her child for important interventions such as immunizations, and advise her about any practices that need to be changed. You will use simple language that the mother understands. Finally, you will ask checking questions to ensure that the mother knows how to care for her well child.

WHAT IS CARE FOR CHILD DEVELOPMENT AND WHY IS IT SO IMPORTANT?

There are over 200 million children under age 5 who are not developing to their full potential because they did not get simple and essential interventions to promote their development. Care that children receive has powerful effects on their survival, growth, and development. The key risk factors for development include issues like stunting, iron deficiency, iodine deficiency, frequent illness and difficulty learning new skills, understanding the world around them, solving problems and communicating with others.

This module is a small introduction to care for child development. The WHO has a full course called Care for Child Development: improving the care for young children (2012) if you would like further information.
WHAT TYPES OF CARE ARE DESCRIBED IN THIS MODULE?

You are going to learn about several new topics, including infant and young child feeding, care for the child’s healthy growth and development, and prevention measures. In caring a well child, it is important for you to learn on different preventive measures. These include preventing accidents, poisoning, abuse, and neglect of children, in an effort to resolve this universal problem.

Why these topics? As you have already learned, immunizations, good nutrition, and healthy growth and development are essential for a child’s wellness and to realize his or her full potential. In addition, you will learn about injuries and abuse. This is because injuries in children have become a major problem worldwide, including in developing countries. There is also clear evidence that child abuse is a global problem, but that the patterns of child abuse are not very clear, so the issue requires individual attention with families. This module has a special focus on prevention.

MODULE LEARNING OBJECTIVES

This module will describe and allow you to practice the following tasks:

- Optimal infant and young child feeding
- Care for child’s healthy growth and development
- Immunization and related interventions
- Prevention of childhood accidents

YOUR RECORDING FORM

Look at your IMCI recording form for the sick child. This section deals with this module:

<table>
<thead>
<tr>
<th>CHECK THE CHILD’S IMMUNIZATION STATUS (Circle immunizations needed today)</th>
<th>Return for next immunization on:</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCG</td>
<td>DPT+HIB-1</td>
</tr>
<tr>
<td>OPV-0</td>
<td>OPV-1</td>
</tr>
<tr>
<td>Hep B0</td>
<td>Hep B1</td>
</tr>
<tr>
<td>RTV-1</td>
<td>RTV-2</td>
</tr>
<tr>
<td>Pneumo-1</td>
<td>Pneumo-2</td>
</tr>
<tr>
<td>ASSESS FEEDING if the child is less then 2 years old, has MODERATE ACUTE MALNUTRITION, ANAEMIA, or is HIV exposed or infected</td>
<td>FEEDING PROBLEMS</td>
</tr>
<tr>
<td>- Does you breastfeed your child? Yes ___ No ___</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- o If yes, how many times in 24 hours? ____ times. Do you breastfeed during the night? Yes ___ No ___</td>
</tr>
<tr>
<td></td>
<td>- o If yes, what food or fluids?</td>
</tr>
<tr>
<td></td>
<td>- o How many times per day? ____ times. What do you use to feed the child?</td>
</tr>
<tr>
<td></td>
<td>- o If MODERATE ACUTE MALNUTRITION: How large are servings?</td>
</tr>
<tr>
<td></td>
<td>- o Does the child receive his own serving? ____ Who feeds the child and how?</td>
</tr>
<tr>
<td></td>
<td>- During this illness, has the child’s feeding changed? Yes ___ No ___</td>
</tr>
<tr>
<td></td>
<td>- o If Yes, how?</td>
</tr>
<tr>
<td>ASSESS OTHER PROBLEMS:</td>
<td>Ask about mother’s own health</td>
</tr>
</tbody>
</table>
BEFORE YOU BEGIN

What do you know about caring for a well child?

Before you begin this module, quickly practice your knowledge with these questions.

Circle the most correct answer for each question:

1. Sami is 8 months old, and his mother is not infected with HIV. What would you recommend for his feeding?
   a. Exclusive breastfeeding
   b. Four meals a day of porridge and vegetables, and no breastfeeding
   c. Breastfeeding as often as he will have, and three meals a day of cereals, mashed fruits and vegetables, and sources of protein

2. What is child development?
   a. Is an increase in physical size, composition and distribution of tissues
   b. Is the increase in the complexity of structures and of their functions (what a child can do)
   c. Is the same as child growth

3. Interaction of mother and child involve
   a. Bonding only
   b. Attachment only
   c. Bonding and attachment

4. What is the interval for administering Pneumococcal vaccine in children?
   a. 4 weeks
   b. 6 weeks
   c. 8 weeks

5. At what age do we begin giving Vitamin A to children?
   a. 12 months
   b. 9 months
   c. 6 months

6. Why is it important to deworm (giving antihelminths medicines) children?
   a. Soil-transmitted helminthes (intestinal worms) is a serious worldwide health problem
   b. Worm infestations are associated with a significant loss of micronutrients and contribute to anemia, growth failure and malnutrition
   c. Worm infestation is common in young infants

7. Regarding childhood injuries:
   a. Burns and falls are rare
   b. Are not a significant problem in developing countries
   c. Can be prevented through family and community sensitization and awareness raising

After finishing the module, you will answer the same questions. This will demonstrate to you what you have learned during the course of the module!
9.2 INTRODUCING GROWTH AND CARE FOR CHILD DEVELOPMENT

In this section, you are going to learn about growth and development of a child. This will enable you to monitor children’s progress, to identify abnormalities in development, and to counsel parents.

WHAT IS CHILD GROWTH?

Child growth is defined as an increase in physical size, composition, and distribution of tissues. It is associated with changes in a child’s proportions, shape, and function – and includes among other things like a child’s weight, height, and length. You will learn more about child growth later in this module. For now, we will focus on child development.

WHAT IS CHILD DEVELOPMENT?

Child development is the gradual unfolding of capacities. Children become more and more capable, and learn to talk, walk, run, solve problems, receive affection and express emotions. Healthy child development is an interaction between biology and genes, a child’s experiences of the world around him/her and their environment. In other words, children need good physical and mental health and nutrition, opportunities to explore the world, and a safe and nurturing caregiving environment.

WHAT ARE THE SKILLS THAT A CHILD IS DEVELOPING?

You have read that child development is defined as, in simple terms, what a child can do. Child development especially focuses on four areas of skills development. These areas are motor, cognitive, social, and affective skills.

1. MOTOR SKILLS

Motor skills are particularly physical, like reaching and grabbing. The goal of motor skills is to organize planned eye and hand movement, and control and strengthen muscles.

2. COGNITIVE SKILLS

Cognitive skills focus on the ability to explore and learn, like seeing, hearing, moving, and touching. Cognitive skills help a child to recognize people, things, and sounds. They help to compare sizes and shapes. They also stimulate exploring and learning.

3. SOCIAL SKILLS

Social skills help a child communicate interests and needs. Social skills develop to help someone express self through verbal and non-verbal skills.

4. AFFECTIVE/EMOTIONAL SKILLS

Affective skills help a child to receive and express appropriate emotions and affection. Good affective skills help a person have appropriate emotional reactions to his or her own efforts, and to other people.
WHY SHOULD CHILD GROWTH AND DEVELOPMENT BE A FOCUS FOR HEALTH WORKERS?

Health care workers need to understand growth and development in order to monitor children’s progress, to identify delays or abnormalities in development, to counsel caregivers, and to prescribe treatment.

There are evidence-based strategies to help health workers focus on improving growth and development. One strategy is growth promotion and monitoring (GPM), which you will learn about below. This strategy helps health workers identify and target risk factors for poor growth and development.

It also requires health workers to think about the caregiver-child relationship and interactions within the family. A child’s growth and development may also reflect larger social or economic issues, like the issues of inequity that you discussed during the first face-to-face meeting. Some examples of these issues were poverty, poor education in the family, and access to nutritious diets, safe water, and health services.

In the next section, you will learn about important interactions between a child and caregiver, and how this impacts a child’s development.

SELF-ASSESSMENT EXERCISE A

Practice child development skills that you read about on the previous page: motor, cognitive, social, and affective skills. Which skill type is the activity describing?

<table>
<thead>
<tr>
<th>Tick the best answer for the skill type it is demonstrating.</th>
<th>Which skill type?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Child sees ball rolling and tries to take and hold it</td>
<td>M C S A</td>
</tr>
<tr>
<td>2. Child cries and reaches for the ball when it rolls away</td>
<td>M C S A</td>
</tr>
<tr>
<td>3. Child examines ball’s shape and size</td>
<td>M C S A</td>
</tr>
<tr>
<td>4. Child smiles at mother when she begins speaking to him about the ball</td>
<td>M C S A</td>
</tr>
</tbody>
</table>
9.3  **GROWTH MONITORING**

You will remember that we started this module by defining child *growth* and *development*. Until this point you have been focusing on child development. You also learned how to monitor a child’s development. Similarly, now you will read more about growth and growth monitoring.

**REFRESH: WHAT IS CHILD GROWTH?**

Let us begin by refreshing on the definition of child growth: Child growth is defined as an increase in physical size, composition, and distribution of tissues. It is associated with changes in a child’s proportions, shape, and function – and includes among other things both weight and height.

**WHAT CAUSES POOR GROWTH?**

There are many reasons a child’s growth is poor. It is important to examine a child’s history and current living and nutrition situations to better understand how to address poor growth. Caretakers will need to be counselled on these issues as well.

1. **ACUTE OR CHRONIC ILLNESS**: you learned about these in the previous IMCI modules
2. **ACUTE MALNUTRITION**: you learned about this in MODULE 6
3. **FEEDING PROBLEMS**: which you will learn about in a later section

**WHY IS IT IMPORTANT TO CONDUCT GROWTH MONITORING AND PROMOTION?**

As you read above, one strategy for children is growth and development monitoring and promotion (GMP). GMP is a strategy that helps health workers detect growth delays in a child early and in a timely way, in order to prevent further growth delays.

**GMP does not only focus on measuring a child’s physical growth, like weight and height.** It also emphasizes using that information to counsel caregivers on how to take actions in the home that could improve growth and health status.

**Here are some important benefits of growth monitoring and promotion:**

✔ It helps health workers to analyze the causes of a child’s poor growth.
✔ It uses a growth chart that helps demonstrate the child’s condition to the caregiver.
✔ It involves caregivers in thinking through what actions can be done in the home to address causes of poor growth.
✔ It involves caregivers in taking preventative or early corrective actions with a child.
✔ It can help a health worker connect families to important community and nutrition interventions.
✔ It can help keep a child or family in regular contact with your clinic, or with other community interventions.

The actions that can be taken to improve a child’s status are broadly called ‘child care development’.
HOW DO YOU MEASURE CHILD GROWTH?
Measuring and monitoring child growth means comparing certain indicators of the child across the averages of many other children. There are three recommended indicators for growth monitoring children below the age of 5 years.

1. WEIGHT-FOR-AGE
2. LENGTH/HEIGHT-FOR-AGE
3. WEIGHT-FOR-LENGTH/HEIGHT

Now let us explore each of these indicators a bit more.

WEIGHT FOR AGE (WFH)
LOW WFH = UNDERWEIGHT
The relative change of weight for age is more rapid than height and is much more sensitive to any deterioration or improvement in the health of the child. Significant changes can be observed over period of few days making the measurements easy, so a high level of accuracy is possible. It is for these reasons that weight for age is the measurement employed in growth monitoring, particularly in infants and young children.

HEIGHT FOR AGE
LOW HFA = STUNTING
Stunting refers to a child that is short for his/her age and is also known as chronic malnutrition. The levels are very high in many developing countries and it is a result of long-term poor nutrition. You will learn more about infant and young child feeding practices that have a great impact of stunting levels.

WEIGHT FOR LENGTH/HEIGHT
LOW WFH/L = WASTING
By relating the weight of the child to its height or length, the child’s degree of thinness can be obtained. Wasting is a measurement of acute malnutrition. You have learned about this in module 6.

WHAT IS THE DIFFERENCE BETWEEN LENGTH AND HEIGHT?
There is an important difference between height and length for you to remember. They are measured differently for certain age groups.

- LENGTH is measured when the child is lying down. Length is measured for children below 2 years of age.
- HEIGHT is measured when the child is standing upright. Children 2 years and older are measured in height.
What happens if you do not use the recommend method for the child’s age?

If you measure a child other than with the method recommended, you must make corrections to the measurement. The height of a child is 0.7 cm shorter than length.

- If you measure a child below 2 years in standing position (height), instead of the recommended length, you must add 0.7 cm to give you his/her correct length.
- If you measure a child 2 years and above while they are laying down (length), instead of height, you must subtract 0.7 cm to give you his/her correct height.

**HOW FREQUENTLY SHOULD CHILDREN UNDER 5 BE MONITORED FOR GROWTH?**

The current international recommendations are the following for growth monitoring:

<table>
<thead>
<tr>
<th>BIRTH TO 2 YEARS</th>
<th>2 TO 5 YEARS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MONTHLY MONITORING</td>
<td>MONITORING EVERY 3 MONTHS</td>
</tr>
<tr>
<td>• Weight: measured monthly</td>
<td>Weight, length, height on every attendance</td>
</tr>
<tr>
<td>• Length/height: every 3 months</td>
<td></td>
</tr>
</tbody>
</table>

**WHERE CAN GROWTH MONITORING OCCUR?**

Growth monitoring can occur both in the health facility and in the community during outreach services. There are different requirements for both settings.

**HEALTH FACILITY:** The clinic should be **spacious**.

✔ There should be **chairs** or **benches** for caregivers and children to sit while waiting.

✔ There should be a **strong table** and a **wall** to hold the measuring board.

**COMMUNITY:** Community leaders should be informed to prepare a strong table for growth monitoring.

**No matter the location,** it is important for you to use the opportunity of growth monitoring to provide other services and interventions to a child. These can include child assessment, treatment, vaccination, Vitamin A supplementation, deworming and psychosocial support.

**WHAT ARE TOOLS USED TO MONITOR GROWTH?**

These are several tools you require to effectively do growth monitoring. We will review these tools now.

1. **CHILD GROWTH AND MONITORING BOOKLET**

✔ **Why is this tool useful?** It provides growth charts to record child’s indicators at each visit. At the time of the visit, it helps you determine if the child is growing poorly. In the long-term, it also helps you chart the child’s growth. It also includes various service schedules, for example vaccinations, vitamin A, and deworming.
✔️ **Important tips**: this booklet is different for **male child** and **female child**. It should NOT be used interchangeably.

- Male child book is blue in colour, with picture of male child
- Female child book is pink in colour, with picture of a female child

You will learn more about the importance of these books in the following pages.

2. **WEIGHING SCALE**

✔️ **What scale is best?** There are two important qualities for the acceptable scale:

- It should be a **solar scale**.
- It should be a **taring scale**, which means the standing type with the ability to erase the mother/care taker’s weight.

✔️ **What if these scales are not immediately available?** Salter scales can be used temporarily while a recommended scale is being procured.

3. **LENGTH AND HEIGHT BOARD**

✔️ **What kind of board should be used?** A wooden length board is preferred. The board should have two or three pieces. If the child is tall, the pieces can be joined.

**HOW WILL YOU MEASURE A CHILD’S LENGTH?**

Remember that length is used for children under 2 years, or those too weak to stand. One assistant should hold the child’s head over the ears and with straight arms. The measurer hold one hand on the child’s knees keeping the legs straight and the other on the foot-place to read the length. The child should lie flat on the board.
Once you have measured the child’s length, you will use the weight and length to calculate a child’s Z-score.

**HOW WILL YOU MEASURE A CHILD’S HEIGHT?**

Remember that height is used for children 2 years and older. The assistant should hold the child’s knees to keep the legs straight with one hand, and the other hand on the shins to keep the heels against the back and base of the board. The measurer should hold one hand the child’s chin and the other on the head-piece to read the height. The child’s eyes should be in horizontal level and the body flat against the board.

Once you have measured the child’s height, you will use the weight and height to calculate a child’s Z-score.
HOW DO YOU CALCULATE A CHILD’S Z-SCORE?
You should remember this calculation from the MALNUTRITION module. Let us quickly review how to plot weight and height on the chart, and find the Z-score.

Once you have the child’s weight and height/length, you will calculate their Z-score. This is basically a score comparing the weight-for-height/length of children across the world. Children with low Z-scores have low weight-for-height/length. The Z-score does not require any math. You will use an easy chart, which you can refer to your IMCI Chart Booklet.

1. THERE ARE SEPARATE CHARTS FOR HEIGHT (2 to 5 years) and LENGTH (birth to 2 years)
2. DETERMINE WHICH CHART TO USE BASED ON THE CHILD’S SEX
   It is important to note that there are two separate charts for females and males. They cannot be used interchangeably.
3. MARK THE INTERSECTION OF THE CHILD’S WEIGHT AND HEIGHT
   Next you will find the intersection of the weight and height. The numbers for weight (kg) run up the chart, and guiding lines run across the chart. The numbers for height (cm) are along the bottom of the chart, and the guiding lines run up the chart.
   Let us review an example. Ben is 10.5 kg and 82 cm. See how we find the intersection:
4. USE THE INTERSECTION POINT TO FIND THE Z-SCORE

Think about the Z-scores like zones between two lines. Look at the figure below. You should be most worried about any weight-for-height intersection points that fall:

✔ Between the -2Z and -3Z lines, like the circle below. This is moderate malnutrition.
✔ Below the -3Z line, like the star below. This is severe malnutrition.

CASE STUDY – SAMSON

Practice measuring length and height

Samson is 6 months old boy. His mother has brought him to the clinic today for growth and development monitoring, and for vitamin A supplementation. His weight is 8 kg and his length is 64 cm.

Review your chart – what is Samson’s Z score? Once you have your answer, read on.

The growth-monitoring chart from the CHILD HEALTH BOOK for boys shows that he is between median and -2, Z-score. This indicates that Samson child is doing well.

SELF-ASSESSMENT EXERCISE B

Practice measuring length and height

1. How often should children under 2 years be monitored for growth?

2. How often should children between 2 and 5 years be monitored?

3. What equipment is important for growth monitoring?

WHERE WILL YOU RECORD INFORMATION ABOUT THE CHILD’S GROWTH?

You have just read about three important tools for growth monitoring: the growth monitoring chart in the child health book, a weighing scale, and a length board. Once you have measured a child’s growth, where you will record and track this information? **You will use the child health book available in your country.**
Every child should receive a **growth and monitoring book** as soon as possible after birth. You should explain the book to the caregivers.

Caregivers should be encouraged to bring the book with the child whenever coming to the health facility. It has important child records, including services given.

**HOW SHOULD YOU INVOLVE CAREGIVERS IN GROWTH MONITORING?**

You have an important job in explaining to caregivers why regular growth monitoring is critical for their child’s health. Even if they think their child is healthy and growing (for example, as compared to other children in the house) it is important to track.

**Here are some helpful tips about what to explain to caregivers:**

✔ Explain why child growth is important
✔ Explain what the child health book is used for monitoring growth
✔ Use the growth monitoring chart to show caregivers how the child is growing
✔ Use the chart to help caregivers understand the child’s growth pattern
✔ Show feeding recommendations (if available) from the book
✔ Show other schedules (if available) from the book, including vaccinations
✔ Remind caregivers about the different interventions expected during the visit
✔ Remind caregivers to always carry the child health book to the facility, because it has important child records

**Remember!**

*Health of the mother is an important factor in the health of the child.*

*Assess the mother about pregnancy through post delivery history and record.*
SELF-ASSESSMENT EXERCISE C

This is practice for what you have learned about monitoring growth and development.

1. Review the children below. Tick if their growth or development is normal, or not. If you decide that the growth or development is not normal, make a note with your reasons.

<table>
<thead>
<tr>
<th>If the child:</th>
<th>Growth/development is:</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Edward is 6 months. He does not have neck control</td>
<td>Normal</td>
</tr>
<tr>
<td>b. Maria, girl, 24 months. She weighs 13 kg, height is 85 cm</td>
<td>Not normal</td>
</tr>
<tr>
<td>c. Asha is 30 months old. She says few words with meaning.</td>
<td></td>
</tr>
<tr>
<td>She can hop on one foot and can walk backwards.</td>
<td></td>
</tr>
<tr>
<td>d. Hamisi, 17 months, is only able to walk with support.</td>
<td></td>
</tr>
<tr>
<td>e. Amiri is 4 years old. He is not able to say a single word</td>
<td></td>
</tr>
<tr>
<td>f. Alice can dress herself and is toilet trained. She is 4½ years.</td>
<td></td>
</tr>
<tr>
<td>g. Kemilembe is 3 years old. She is not able to tell a short story. She does</td>
<td></td>
</tr>
<tr>
<td>not know her sex.</td>
<td></td>
</tr>
<tr>
<td>h. Alex is 4 years, 10 months. He weighs 22 kg, and his height is 113 cm.</td>
<td></td>
</tr>
<tr>
<td>He has started kindergarten/nursery school.</td>
<td></td>
</tr>
</tbody>
</table>

2. Jandika is 19 months old boy. His mother brought him to the clinic for growth monitoring. He weighs 8 kg and his length is 71 cm. What are you going to do for Jandika during this visit? What advice do you need to give Jandika’s mother? Write reasons for your answers.

_________________________________________________________________________
_________________________________________________________________________
_________________________________________________________________________
_________________________________________________________________________
9.4 CAREGIVER-CHILD INTERACTION: BONDING AND ATTACHMENT

This section describes an important piece of child development, the bonding and attachment between a caregiver and child. We will begin by defining these concepts.

WHAT IS ‘BONDING’?
Bonding is the process of a mother forming a relationship with her new infant. It begins during the first few hours after birth. The connection is mother-to-child.

WHAT IMPACTS BONDING?
It is important to remember that bonding occurs early in the child’s life, and can have a lasting impact on his or her development. Bonding is a process that happens very quickly after birth. Therefore, some actions might affect the bonding between a mother and child. For example:

✔ Mother is separated from infant for a long period after birth, like many days or even weeks
✔ Mother has poor health
✔ Mother is depressed after delivery, which happens to many women. This depression often goes undetected and many mothers do not seek help.
✔ The mother or someone else is abusing or neglecting the child
✔ The infant is ill

WHAT IS ‘ATTACHMENT’?
Attaching is primarily a process of the infant forming a relationship with his or her mother or the primary caregiver, and reinforced by the responses. It occurs during the first two years of life, but especially between 2 and 7 months of age. During attachment, the child develops a personal communication system with the primary caregiver. The connection is child-to-caregiver.

WHAT ARE CONSEQUENCES OF POOR ATTACHMENT?
Poor attachment between a child and caregiver can have very serious impact on development. Some of the known complications of poor attachment include:

✔ Child might have difficulty trusting others in their life.
✔ Child can experience increasing depression or rage.
✔ Child fails to thrive as a child that is physically and emotionally healthy, curious about the world around him/her, active, and happy.
✔ Child can have difficulty adapting to change.
✔ As child grows older, he or she will have more behavioral problems and worse peer relations compared to their peers.
✔ Older children may also have poor problem-solving abilities, and low self-esteem.
WHAT IS IMPORTANT FOR STRONG INTERACTIONS BETWEEN A CAREGIVER AND CHILD?

There are two important concepts to understand about strong interactions between a caregiver and a child. These concepts are sensitivity and responsiveness.

SENSITIVITY

Is the ability of the caregiver to be aware of the infant. This includes the infant’s acts and vocalizations that communicate the infant’s needs and wants. If the caregiver is sensitive, this means the caregiver:

✔ Is aware of the infant’s signals, and interprets them accurately
✔ Accepts the child’s interests
✔ Regards the child as an individual, separate person
✔ Sees things from the child’s point of view

What are some examples of sensitivity?

RESPONSIVENESS

Is the ability of the caregiver to respond appropriately to the infant’s signals. The response is triggered by the child’s signal. It happens quickly after the signal, and is the appropriate level of response.

A caregiver must be sensitive in order to be responsive. That means that the caregiver must be aware of the infant’s signals in order to appropriately respond to them. A caregiver would for example be able to see the child’s signs of discomfort, recognize that the child is hungry, and feed the child.

What are some examples of responsiveness?

WHY IS IT IMPORTANT THAT A CAREGIVER BE SENSITIVE AND RESPONSIVE?

There are two primary reasons why it is critical for a caregiver to be sensitive and responsive. First, it helps a caregiver be more effective in giving care to a young child. Second, it creates attachment with the child, which helps development. Let us review these two in more detail:

1. To be effective in caring for a young child:
   — Providing feeds on demand
   — Protect a child from any potential harm
   — Recognize when the child is sick, and seek care
   — See cause and effect in the environment and in social relationships
   — Learn to talk to the child to resolve problem

2. To develop a secure attachment with a young child. This is the basis for health growth, and a child’s intellectual, social, and emotional development.
LET US REVIEW THE CONNECTIONS BETWEEN WHAT YOU HAVE LEARNED SO FAR

INTERACTIONS

ACTIVITIES

SENTIMENT

Provide ways for your child to see, hear, feel, and more. Give child clean and safe items to hold, drop, and bang.

Look into your child’s eyes. Smile. Respond to your child’s sounds and interests.

IMPROVES:
✓ Affect
✓ Bonding (mother-to-child)
✓ Attachment (child-to-caregiver)
SELF-ASSESSMENT EXERCISE D

Practice concepts of bonding and attachment.

1. How would you describe bonding to a mother?

2. How would you describe attachment to a caregiver?

3. Are the following actions examples of a caregiver’s sensitivity or responsiveness? Tick your answer.

<table>
<thead>
<tr>
<th>A mother, Sara, takes the following actions with her son John:</th>
<th>S</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Sara hears John crying</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Sara picks up John to soothe his crying</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Sara is giving John a bath and notices a rash on his leg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Sara sees John watching the tree’s branches blowing in the wind</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Sara asks John, “Do you see the wind blowing? The leaves are blowing!”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. Sara notices that John is not feeding as much as usual</td>
<td></td>
<td></td>
</tr>
<tr>
<td>g. Sara offers John a food he likes to see if he will eat</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. Sara’s grandmother told her that it’s important John be left alone so he’ll become a strong and independent man, instead of emotional and weak. How would you address this concern of Sara’s? How should she discuss with her grandmother?
9.5 INTERVENTIONS FOR CHILD DEVELOPMENT

WHAT ARE THE INTERVENTIONS THAT HELP CHILD CARE DEVELOPMENT?

Care for child care development begins with improving the skills of health workers and others who work with families. Many people are not very trained in this area. This is why you are studying this module on well child care.

Next, there are tools for health workers to use while counselling families on play and communication activities with their child. One such tool is the child care development chart on the next page. This chart includes recommended activities for children and caregivers for specific age groups.

WHAT DO THESE ACTIVITIES DO?

These activities help to:

✔ Stimulate the child’s learning
✔ Improve routine care practices, including newborn and child feeding
✔ Improve a caregiver’s care-giving skills, especially to prevent and solve any problems in care
✔ Improve the interaction between caregivers and their children

Review the chart on the next page to see examples of these activities.

Watch “Care for Child Development” (on Care for Child Development CD)
This video clip reviews all steps child development through case stories
# Recommendations for Care for Child Development

<table>
<thead>
<tr>
<th>NEWBORN, BIRTH UP TO 1 WEEK</th>
<th>1 WEEK UP TO 6 MONTHS</th>
<th>6 MONTHS UP TO 9 MONTHS</th>
<th>9 MONTHS UP TO 12 MONTHS</th>
<th>12 MONTHS UP TO 2 YEARS</th>
<th>2 YEARS AND OLDER</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Your baby learns from birth</strong>&lt;br&gt;PLAY Provide ways for your baby to see, hear, move arms and legs freely, and touch you. Gently soothe, stroke and hold your child. Skin to skin is good.</td>
<td><strong>PLAY Provide ways for your child to see, hear, feel, move freely, and touch you. Slowly move colourful things for your child to see and reach for. Sample toys: shaker rattle, big ring on a string.</strong></td>
<td><strong>PLAY Give your child clean, safe household things to handle, bang, and drop. Sample toys: containers with lids, metal pot and spoon.</strong></td>
<td><strong>PLAY Hide a child’s favourite toy under a cloth or box. See if the child can find it. Play peek-a-boo.</strong></td>
<td><strong>PLAY Give your child things to stack up, and to put into containers and take out. Sample toys: Nesting and stacking objects, container and clothes clips.</strong></td>
<td><strong>PLAY Help your child count, name and compare things. Make simple toys for your child. Sample toys: Objects of different colours and shapes to sort, stick or chalk board, puzzle.</strong></td>
</tr>
<tr>
<td><strong>COMMUNICATE Look into baby’s eyes and talk to your baby. When you are breastfeeding is a good time. Even a newborn baby sees your face and hears your voice.</strong></td>
<td><strong>COMMUNICATE Smile and laugh with your child. Talk to your child. Get a conversation going by copying your child’s sounds or gestures.</strong></td>
<td><strong>COMMUNICATE Respond to your child’s sounds and interests. Call the child’s name, and see your child respond.</strong></td>
<td><strong>COMMUNICATE Tell your child the names of things and people. Show your child how to say things with hands, like “bye bye”. Sample toy: doll with face.</strong></td>
<td><strong>COMMUNICATE Ask your child simple questions. Respond to your child’s attempts to talk. Show and talk about nature, pictures and things.</strong></td>
<td><strong>COMMUNICATE Encourage your child to talk and answer your child’s questions. Teach your child stories, songs and games. Talk about pictures or books. Sample toy: book with pictures</strong></td>
</tr>
</tbody>
</table>

- Give your child affection and show your love
- Be aware of your child’s interests and respond to them
- Praise your child for trying to learn new skills
WHY ARE TOYS IMPORTANT?

When you review the important play activities on the Care for Development chart, you see many involve toys. It is very important that caregivers understand that play materials can be made using simple, available materials at home. It is not necessary to buy toys from the store. Mothers might be discouraged by the price of toys. As a health worker, it is important to explain that homemade toy items help a child develop.

WHAT ARE GOOD TOYS TO MAKE AT HOME?

Here is a list of great toys for children. It is recommended that you make these toys and have them at your clinic to show caregivers. You can demonstrate how easy it was to make, and also show how the child can play with it.

<table>
<thead>
<tr>
<th>SAMPLE TOY ITEMS</th>
<th>MATERIALS NEEDED</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Newborn</strong></td>
<td></td>
</tr>
<tr>
<td>Sponge (rough and smooth)</td>
<td>Sponges</td>
</tr>
<tr>
<td><strong>1 week up to 6 months</strong></td>
<td></td>
</tr>
<tr>
<td>Shaker rattle</td>
<td>Small plastic jars with lids and small stones, strips of plastic, or other items to make noise inside</td>
</tr>
<tr>
<td>Rings on a string</td>
<td>Rings (e.g. rubber bands or spools) on a piece of colourful yarn</td>
</tr>
<tr>
<td><strong>6 to 9 months</strong></td>
<td></td>
</tr>
<tr>
<td>Containers with lids</td>
<td>Plastic containers with lids small enough for child to take on and off</td>
</tr>
<tr>
<td>Metal objects to bang and drop</td>
<td>Metal pots, lids, bowls, plates, cups, and wooden spoons</td>
</tr>
<tr>
<td><strong>9 to 12 months</strong></td>
<td></td>
</tr>
<tr>
<td>Peek-a-boo cloths</td>
<td>Clean cotton cloth to hide things and face</td>
</tr>
<tr>
<td>Homemade doll with face</td>
<td>Cloth, thread, needle, scissors</td>
</tr>
<tr>
<td><strong>12 months up to 2 years</strong></td>
<td></td>
</tr>
<tr>
<td>Stacking cups, plastic or metal with handles</td>
<td>Stacking cups, plastic or metal with handles (different sizes and shapes, at least three to a set)</td>
</tr>
<tr>
<td>Empty boxes, bowls, other containers with small, safe objects like clothes clips</td>
<td>Boxes, bowls, or other containers to put things in and take them out, clothes clips, stones</td>
</tr>
<tr>
<td>Nesting objects (bowls, cups, boxes)</td>
<td>Plastic or metal bowls and cups and other nesting objects to stack</td>
</tr>
<tr>
<td><strong>2 years and older</strong></td>
<td></td>
</tr>
<tr>
<td>Pictures</td>
<td>Magazine pictures or marker to draw on paper</td>
</tr>
<tr>
<td>Face puzzles</td>
<td>Magazine picture or drawn face, on cardboard, cut in 3-5 pieces</td>
</tr>
<tr>
<td>Coloured circles, squares, triangles to sort by colour and shape</td>
<td>Cardboard or magazine covers, glue, scissors, bowls or other containers for sorting shapes</td>
</tr>
<tr>
<td>Ball</td>
<td>Small, soft ball</td>
</tr>
<tr>
<td>Chalk and flat stone for writing</td>
<td>Chalk and flat stone</td>
</tr>
<tr>
<td>Book</td>
<td>Pages with pictures and words, punched and tied together</td>
</tr>
</tbody>
</table>
Other helpful supplies for making toys:
- Scissors
- Coloured paper or cardboard
- Box cardboard
- Marking pens
- Punch
- Glue
- Dish soap for cleaning toys
- Plastic boxes and bags to hold supplies and toys

**SELF-ASSESSMENT EXERCISE E**

**Check that a caregiver understands after you explain.**

The following questions are not good checking questions, because they can be answered “yes” or “no”. Rewrite the questions as good checking questions.

1. Do you understand how to improve skills of other people at home who take care of the child?

2. Did the nurse explain to you how to stimulate play and communication to your child?

**SELF-ASSESSMENT EXERCISE F**

**Practice using the care for child development chart.**

The following children are in your clinic for a well child visit. What activities would you recommend to their caregivers for play and communication? Take quick notes on the activities below.

<table>
<thead>
<tr>
<th></th>
<th>PLAY?</th>
<th>COMMUNICATION?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Jyothi, 2 months</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Linus, 11 months</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Julie, 7 months</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Nathan, 4 days</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Frank, 17 months</td>
<td></td>
</tr>
</tbody>
</table>
HOW WILL YOU USE THIS CHART IN YOUR CLINICAL CARE?

The figure below shows the important steps you will take when using the care development chart in your clinic. First, you will determine the child’s age and the age-appropriate activities. You will show these to the caregiver and explain how the chart works.

You will use your 3 basic teaching steps to teach the caregiver how to use these activities. First, you will explain how to play and communicate with the child. Second, you will demonstrate. Third, you will watch as the caregiver practices and give feedback. Once the caregiver is practicing well, you will explain how to use the chart activities regularly at home. As you explain, remember to use checking questions to check her understanding.

Next, you will complete a self-assessment exercise.
SELF-ASSESSMENT EXERCISE E

Practice concepts of child development.

1. Rakim and his mother Beta have come for their immunizations, and you would like to do a well child assessment. How would you explain ‘child development’ to Beta?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

2. Beta does not seem very interested. What would you explain to her about child development is important for Rakim’s health?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

3. Describe to Beta how she can play and communicate with Rakim. He is 4 months old.

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

4. Beta insists that he is too little to understand how to communicate or play. How will you address this concern?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
9.6 MONITORING A CHILD’S DEVELOPMENT

In the previous sections, you have learned important information about child development. You have read about the importance of bonding and attachment between a child and a caregiver. You have also learned about counselling a caregiver on age-appropriate activities and interactions with a child.

In this section, you will learn about how to assess a child’s development.

WHY SHOULD YOU MONITOR CHILD DEVELOPMENT?

You should monitor growth and development of all children. A growing child passes through several stages of development. Each of these development stages has milestones. These milestones are important actions or skills that the child should develop at a particular stage.

REMINDER: what are the types of skills that children are developing?

Quickly refresh yourself on the skill sets you have read about:

✔ Motor (physical) ✔ Adaptive (emotional)
✔ Social (communication) ✔ Cognitive (exploratory)

You will use these milestones to monitor a child’s development. Health workers should also educate caregivers on these simple milestones so that they can help you identify children early who might have developmental delays.

WHAT TOOLS ARE AVAILABLE TO MONITOR CHILD DEVELOPMENT?

There are many different charts that explain milestone development for certain age groups. These milestones are usually described for particular skills, like motor or speech.

Review the milestone chart on the next page.
**REVIEW THE MILESTONE DEVELOPMENT CHART FOR CHILDREN AGED 6 WEEKS TO 5 YEARS**

This chart can be used to identify children who are delayed in reaching their milestones. Children with delayed developmental milestones should be referred for further management. As a health worker, you can also use this chart to counsel the mother on ways to stimulate the child’s mental and motor development.

<table>
<thead>
<tr>
<th>AGE</th>
<th>GROSS MOTOR</th>
<th>FINE MOTOR</th>
<th>SPEECH AND LANGUAGE</th>
<th>ADAPTIVE AND SOCIAL SKILLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 weeks</td>
<td>Prone-lifts chin intermittently</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 months</td>
<td>Prone-arms extended forward</td>
<td>Pulls at clothes</td>
<td>Coos</td>
<td></td>
</tr>
<tr>
<td>4 months</td>
<td>Prone-raises head and chest, rolls over front to back, no head lag</td>
<td>Reach and grasp, objects to mouth</td>
<td>Responds to voice</td>
<td></td>
</tr>
<tr>
<td>6 months</td>
<td>Prone-weight on hands, tripod sit</td>
<td>Ulnar grasp</td>
<td>Begins to babble, responds to name</td>
<td>Stranger anxiety</td>
</tr>
<tr>
<td>9 months</td>
<td>Pulls to stand</td>
<td>Finger-thumb grasp</td>
<td>Mama, dada, imitates one word</td>
<td>Plays games, separation anxiety</td>
</tr>
<tr>
<td>12 months</td>
<td>Walks with support, “cruises”</td>
<td>Pincer grasp, throws</td>
<td>2 words with meaning besides mama or dada</td>
<td>Plays peek-a-boo, drinks with cup</td>
</tr>
<tr>
<td>15 months</td>
<td>Walks without support</td>
<td>Draws a line</td>
<td>Jargon</td>
<td>Points to needs</td>
</tr>
<tr>
<td>18 months</td>
<td>Up steps with help</td>
<td>Tower of 3 cubes, scribbling</td>
<td>10 words, follows simple commands</td>
<td>Uses spoon, points to body parts</td>
</tr>
<tr>
<td>24 months</td>
<td>Up 2 feet per step, runs, kicks ball</td>
<td>Tower of 6 cubes, undresses</td>
<td>2–3 word phrases, uses I, me, you, 25% intelligible</td>
<td>Parallel play, helps to undress</td>
</tr>
<tr>
<td>3 years</td>
<td>Tricycle, up 1 foot per step, down 2 feet per step, stands on one foot, jumps</td>
<td>Copies a circle and a cross, puts on shoes</td>
<td>Prepositions, plurals, 75% intelligible, knows sex, age</td>
<td>Dress and undress fully except buttons, counts to 10</td>
</tr>
<tr>
<td>4 years</td>
<td>Hops on 1 foot, down 1 foot per step</td>
<td>Copies a square, uses scissors</td>
<td>Tells story, normal dysfluency, speech intelligible</td>
<td>Cooperative play, toilet trained, buttons clothes</td>
</tr>
<tr>
<td>5 years</td>
<td>Skips, rides bicycle</td>
<td>Copies a triangle, prints name, ties shoelaces</td>
<td>Fluent speech, future tense, alphabet</td>
<td>Knows four colours</td>
</tr>
</tbody>
</table>

**SELF-ASSESSMENT EXERCISE F**

**Practice using the milestone development chart.**

1. What type of fine motor skills should a child aged 2 years have?

2. Which sounds or words should a child at 9 months be able to speak?

3. What social and adaptive skills should a child aged 3 years have?
### HOW ARE YOU GOING TO ASSESS DEVELOPMENTAL MILESTONES IN CHILDREN?

Using the development milestone chart on the previous page as a starting point, you will now learn how to assess milestones in children.

#### 2 TO 4 MONTHS

<table>
<thead>
<tr>
<th>What the child should be able to do at this age:</th>
<th>How you will conduct your assessment:</th>
<th>Is the child meeting these development milestone criteria?</th>
<th>What actions will you take?</th>
</tr>
</thead>
<tbody>
<tr>
<td>A child holds the head erect and lifts his head. Turns head from side to front. A child is able to recognize faces and follows objects through a visual field. Becomes alert in response to voice, and can smile spontaneously.</td>
<td>1. Lay the child down face up (supine position). 2. Hold both her hands and pull to a sitting position. 3. Play with an object like keys to make a noise. 4. Ask the caregiver to play with the child by making a joyful sound.</td>
<td>The child must be able to do these things: ✔ Hold her head in erect ✔ Turn her head sideways ✔ Become responsive to voice ✔ Smile at the mother/caregiver</td>
<td>If a child is not meeting these milestones, how will you advise the caregiver? Record your notes here:</td>
</tr>
<tr>
<td>A child is able to recognize faces and follows objects through a visual field. Becomes alert in response to voice, and can smile spontaneously.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### 5 TO 7 MONTHS

<table>
<thead>
<tr>
<th>What the child should be able to do at this age:</th>
<th>How you will conduct your assessment:</th>
<th>Is the child meeting these development milestone criteria?</th>
<th>What actions will you take?</th>
</tr>
</thead>
<tbody>
<tr>
<td>A child can sit without using hands or being supported. The head is straight up for at least 10 seconds. Usually the lower limb is flexed at the knee joint. A child reaches for and brings objects to mouth.</td>
<td>1. Look and smile at the child. 2. Make the child sit on a safe and flat surface. 3. Offer the child a toy to hold so as not to support the body with hands. 4. Place a clean safe object within a child’s reach.</td>
<td>The child must be able to do these things: ✔ The child must have a neck control. ✔ The child does not use hands to support the body while sitting. ✔ The child is able to maintain that posture for at least 10 seconds.</td>
<td>How will you advise the caregiver if child is not meeting? Record notes:</td>
</tr>
<tr>
<td>A child can sit without using hands or being supported. The head is straight up for at least 10 seconds. Usually the lower limb is flexed at the knee joint. A child reaches for and brings objects to mouth.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### 8 TO 11 MONTHS

<table>
<thead>
<tr>
<th>What the child should be able to do at this age:</th>
<th>How you will conduct your assessment:</th>
<th>Is the child meeting these development milestone criteria?</th>
<th>What actions will you take? How will you advise the caregiver if child is not meeting? Record notes:</th>
</tr>
</thead>
<tbody>
<tr>
<td>At this age group, a child starts standing up with support before being able to stand up alone by 11 months of age. This is an important stage for a child to be able to stand up before beginning to move forward. A child is able to withstand his/her weight by either being supported or supporting himself. In this stage a child also crawls by being able to moves to and fro using upper and lower limbs. The abdomen may or may not be in contact with the floor. Then, a child is able to stand still for a period of time. The lower limbs are straight without flexion at the knees. A child imitates “bye bye”, passes object from hand to hand in midline, and obeys simple command like “no, stop, shh”. A child also rolls from back to stomach.</td>
<td>1. Look at the child. Let the mother or caregiver stand the child upright. 2. Observe closely if the lower limbs are able to support the child’s weight. Make sure the child’s body is not in contact with the supporting object. 3. Ensure that child’s weight is supported by his/her lower limbs. The height of the table or the supporting object should be parallel to the child’s abdomen. 4. Put the child upright then leave him standing slowly and carefully. Observe if the child is able to stand on his own for at least 10 seconds. 5. Place a child in a prone position on a flat and safe surface. Stand in front of the child at a distance of at least 120 to 150cm. If the child does not crawl, encourage him/her by showing a toy or an attractive object. Ask the mother or caregiver to help you to encourage the child to crawl.</td>
<td>✓ The child must be able to do these things:  ✓ A child is able to stand up.  ✓ A child holds on to a table or any other object without leaning to it.  ✓ The child’s body is not in contact with the object he is holding on.  ✓ The lower limbs are able to support the weight of the child.  ✓ The child is able to stand with support for at least 10 seconds.  ✓ Hands and knees move to and fro in exchange  ✓ A child moves to and fro at least three times consecutively.  ✓ A child is able to stand on his two feet and not on his toes with his back upright.  ✓ The lower limbs are able to support the child’s weight.  ✓ A child is able to stand still without being supported for at least 10 seconds.</td>
<td></td>
</tr>
</tbody>
</table>
### 12 TO 18 MONTHS

<table>
<thead>
<tr>
<th>What the child should be able to do at this age:</th>
<th>How you will conduct your assessment:</th>
<th>Is the child meeting these development milestone criteria?</th>
<th>What actions will you take?</th>
</tr>
</thead>
<tbody>
<tr>
<td>At this age group, a child is able to stand up with the back upright. A child is able to move sideways or forwards with support of one or both hands.</td>
<td>1. Place the child upright. 2. The child should be at a distance but able to reach for a supporting object with either one or both hands. 3. Encourage the child to move by showing him a toy or an attractive object. Ask the mother or caregiver to help you to encourage the child. Ensure that the supporting object is at the same height as the child’s abdomen. 4. Let the child stand in a safe place. Stand in front of the child at a distance of around 120 to 150 cm. 5. Encourage the child to walk towards you by showing him a toy or an attractive object. Ask the mother or caregiver to help you encourage the child to walk towards you.</td>
<td>✔ The child must be able to do these things: ✔ A child is able to stand up with the back upright. ✔ A child is able to move forwards or sideways with support of one or both hands. ✔ One lower limb moves while the other supports the weight of the child. ✔ A child is able to walk at least five steps consecutively. ✔ The child is able to stand with a straight back. ✔ The child is able to move one limb forward while the other being supports the child’s weight. ✔ While walking a child is not in contact with a person or being supported by an object. ✔ A child is able to move at least five steps.</td>
<td>How will you advise the caregiver if child is not meeting? Record notes:</td>
</tr>
<tr>
<td>In this stage a child is able to walk on his own at least five steps with confidence. The child is able to stand up on his own and moves forward without being supported. One leg moves forwards while the other supports the weight of the child without being held or supported. This stage is more than the early stages when a child is learning how to walk by moving one to two steps alone then waits for support. A child is able to climb stairs with help and throws a ball. Says 4-20 words with meaning, Drinks with cup.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### 19 TO 24 MONTHS

<table>
<thead>
<tr>
<th>What the child should be able to do at this age:</th>
<th>How you will conduct your assessment:</th>
<th>Is the child meeting these development milestone criteria?</th>
<th>What actions will you take? How will you advise the caregiver if child is not meeting?</th>
<th>Record notes:</th>
</tr>
</thead>
<tbody>
<tr>
<td>A child speak short phrases, 2 words or more, kicks ball on request, dresses and undresses with help, and verbalizes toilet needs. A child is also able to jump off floor with both feet, and turns pages of book singly. Points to named objects or pictures.</td>
<td>1. Ask or ask the mother/caregiver to ask the child simple question(s) requiring short answer. 2. Ask the child to stand and offer a ball to kick. 3. Give pictures or objects such as common toys and ask the child to name them.</td>
<td>✔ The child must be able to do these things: ✔ A child is able to speak short sentences with meaning (in baby tongue/language) ✔ While standing, a child kicks a ball upon request ✔ The child names objects or pictures correctly ✔ A child indicates when wants to go toilet</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 30 TO 36 MONTHS

<table>
<thead>
<tr>
<th>What the child should be able to do at this age:</th>
<th>How you will conduct your assessment:</th>
<th>Is the child meeting these development milestone criteria?</th>
<th>What actions will you take? How will you advise the caregiver if child is not meeting?</th>
<th>Record notes:</th>
</tr>
</thead>
<tbody>
<tr>
<td>The child is able to walk backwards, and hop on one foot. Refers to self as I, and gives first and last name. Child knows sex (gender). A child is able to put on shoes, and can dress/undress with supervision full except buttons.</td>
<td>1. Ask or ask the mother to ask the child to walk backwards, or to hop on one foot from a standing position. 2. Speak or ask the mother to speak to the child to get the name of the child. 3. Ask the child to remove then put on shoes and remove a shirt if the child is wearing one.</td>
<td>✔ The child must be able to do these things: ✔ From standing position, a child can walk backwards while facing front ✔ From standing position a child can hop on one foot at least 3 steps ✔ While speaking, a child refers himself as I, and can give first and last name accurately when asked ✔ A child is able to put on clothes or remove them with supervision</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### 3 TO 4 YEARS

<table>
<thead>
<tr>
<th>What the child should be able to do at this age:</th>
<th>How you will conduct your assessment:</th>
<th>Is the child meeting these development milestone criteria?</th>
<th>What actions will you take?</th>
</tr>
</thead>
<tbody>
<tr>
<td>At this age group children can climb stairs with alternating feet. Begins to button and unbutton. Is able to feed himself/herself. Knows own sex and gives full name. A child can tell a short story, engage in cooperative play, and is toilet trained.</td>
<td>1. Ask child to button or unbutton his/her shirt. 2. Ask the child if s/he is a girl or a boy, or to tell a short story.</td>
<td>✔ The child must be able to do these things: ✔ From standing position, a child climbs stairs alone with alternating feet ✔ A child puts on or takes off shirt or jacket and is able to button and unbutton ✔ When asked, a child is able to tell if is a boy or a girl ✔ A child can tell a short story</td>
<td>How will you advise the caregiver if child is not meeting? Record notes:</td>
</tr>
</tbody>
</table>

### 4 TO 5 YEARS

<table>
<thead>
<tr>
<th>What the child should be able to do at this age:</th>
<th>How you will conduct your assessment:</th>
<th>Is the child meeting these development milestone criteria?</th>
<th>What actions will you take?</th>
</tr>
</thead>
<tbody>
<tr>
<td>At this age, child runs and turns while maintaining balance. A child also can do self-care at toilet (although may need care with wiping). Child has fluent speech, knows future tense, and knows at least 3 colors. Child of this age also copies and in imitation.</td>
<td>1. Ask the child to run and then make a turn while run. 2. Show 3 different types of primary colours for a child to identify.</td>
<td>✔ The child must be able to do these things: ✔ While running, a child is able to turn without losing balance ✔ A child goes to toilet when wants to relieve him/herself ✔ A child is fluent in speech and use future tense ✔ Child recognizes at least 3 different types of primary colours</td>
<td>How will you advise the caregiver if child is not meeting? Record notes:</td>
</tr>
</tbody>
</table>
SELF-ASSESSMENT EXERCISE G

Practice using child development charts

1. Mariamu has brought her daughter Manka to your health facility. She says Manka was born 5 months ago at term with birth weight of 3.1 kg. Manka attained neck control at 5 months. Mariamu is worried that Manka is not able to sit without support. How are you going to advice Mariamu?

2. Ikupa is 36 months old. She has been brought to the clinic by her grandmother for growth and development monitoring. When you assess Ikupa, she can stand, move sideways or forwards with support of one or both hands of which she moves at least five steps in that state. Ikupa says about 10 words with meaning and drinks with cup. So far this is what Ikupa can do. What advice would you give to Ikupa’s grandmother and why?
9.7 COUNSELLING ABOUT FEEDING PROBLEMS

What are good practices in counselling about feeding?

When you have identified the feeding problems, you will be able to give advice that is most relevant to the mother.

✔ BEFORE GIVING ADVICE, BUILD CONFIDENCE

If the feeding recommendations are being followed, praise the mother for her good feeding practices. Encourage her to keep feeding the child the same way during illness and health. Avoid using words that are judgmental.

✔ COUNSEL ACCORDING TO THE CHILD’S AGE

If the child is entering a new age group with different feeding recommendations, explain these new recommendations to the mother. For example, if the child is almost 6 months old, explain the value of good complementary foods and when to start them.

✔ EXPLAIN RECOMMENDATIONS IF THEY ARE NOT BEING FOLLOWED

If the feeding recommendations for the child’s age are not being followed, explain those recommendations and make suggestions.

WHAT ARE COMMON FEEDING PROBLEMS THAT YOU MAY HAVE TO COUNSEL?

There are many reasons that a child might have a feeding problem. You should refer to the counselling tools you have available in your country about counselling on feeding recommendations and issues. Below are some common problems that you might hear from caretakers about feeding.

Mother reports difficulty with breastfeeding

Refer to MODULE 2 – SICK YOUNG INFANT. You learned to check and improve positioning and attachment.

If the mother has a breast problem, such as engorgement, sore nipples, or a breast infection, she may need referral to a specially trained breastfeeding counselor. This could be a health worker who has taken Breastfeeding Counseling: A Training Course or someone experienced in managing breastfeeding problems.

Child under 6 months old is taking other milk or foods

All children should be exclusively breastfed until the age of 6 months. If a child under 6 months old is receiving food or fluids other than breastmilk, the goal is to gradually change back to more or exclusive breastfeeding.

Suggest giving more frequent, longer breastfeeds, day and night. As breastfeeding increases, the mother should gradually reduce other milk or food. Since this is an important change in the child’s feeding, be sure to ask the mother to return for follow-up in 5 days.
If the mother has started to give complementary feeds under the age of 6 months, encourage her to try and reduce these feeds and give breastmilk (or other milk if she is not breastfeeding) 8 times a day before complementary feeds.

All mothers should be strongly encouraged to breastfeed their children for 6 months. In some cases this might not be impossible. For example, if the mother passed away, if she must be away from her child for long periods, or if she will not breastfeed for personal reasons. Explain to her how to correctly prepare breastmilk substitutes and use the feed within one hour to avoid spoilage.

### Mother is using a bottle to feed the child

**Recommend the use of a cup** rather than a bottle, and show the mother how to use a cup to feed her child. A cup is easier to keep clean and does not interfere with breastfeeding.

### If the child is not being actively fed (when older)

The mother should sit with the child and encourage him to eat. He should have his own serving and not have to compete with siblings for food. If all the children are eating from the same plate, the younger children will often not eat enough.

### If the child has a poor appetite or is not feeding well during illness

Even though children may lose their appetite during illness, they should be encouraged to eat the types of food recommended for their age, as often as recommended.

If possible, children should be breastfed more frequently and for longer. Soft, nutritious foods which the child likes should be offered. Offer small feeds frequently. After illness, good feeding helps make up for any weight loss and prevent malnutrition.

Sometimes the poor appetite is due to snacks or juices that satisfy the appetite for a short time, but are not sufficiently nutritious. This practice needs to be discouraged. Also look at the recommendations for the child with a poor appetite in the Chart Booklet.

**How can families encourage a young child to eat?**

✔ Offer small amounts at times when the child is alert and happy;
✔ Offer more food if the child shows interest;
✔ Give foods of a suitable consistency, not too thick or dry;
✔ Give physical assistance – a spoon of a suitable size, food within reach of the child, young child sitting on caregiver’s lap while eating;
✔ Offer verbal encouragement (e.g. “open for tasty beans”), smiles, songs, and other positive facial gestures. If a child receives more attention for refusing food than for eating it, the child may eat less in order to get the attention.
Careful attention needs to be given to the feeding of the HIV-infected child. Belonging to an HIV-affected family may affect a young child’s nutrition in a number of ways:

- As time goes on, the child’s mother may become sicker with HIV-related illnesses.
- Her illness may result in the child getting less care, increasing risk of malnutrition.
- The mother may soon be pregnant again, or have another young baby. This can also affect the feeding of the young child.
- Illness and death in a household can reduce the availability of food, through lack of money or inability to work the land fully, to go to the shop, or to prepare food.
- An older child may be responsible for caring for young children.
- The child may be at increased risk of illness, if not breastfeeding, or if infected with HIV, and need extra care.
- Active feeding is needed to help with catch-up growth after an illness – but less care may be available.

These need to be addressed carefully as disease progression can be slowed down considerably if the nutritional state is optimal. You will learn more about feeding recommendations for HIV-exposed or infected children and infants in the HIV MODULE.

**HOW WILL YOU PROVIDE FOLLOW-UP CARE FOR A FEEDING PROBLEM?**

Caregiver should be instructed to return with the child for follow-up in 5 days. When a caregiver and child return for a feeding problem:

✔ **Reassess the child’s feeding** by asking the questions in the top box on the COUNSEL THE MOTHER chart. Refer to the child’s chart or follow-up note for a description of any feeding problems found at the initial visit and previous recommendations.

✔ **Ask the mother how she has been carrying out the recommendations.** For example, if on the last visit more active feeding was recommended, ask the mother to describe how and by whom the child is fed at each meal.

✔ **Counsel the mother about any new or continuing feeding problems.** If she encountered problems when trying to feed the child, discuss ways to solve them. For example, if the mother is having difficulty changing to more active feeding because it requires more time with the child, discuss some ways to reorganize the meal time.

✔ **If the child is very low weight for age,** ask the mother to return 30 days after the initial visit. At that visit a health worker will measure the child’s weight gain to determine if the changes in feeding are helping the child.
CONSIDER AN EXAMPLE SITUATION FOR FOLLOW-UP:

On the initial visit the mother of a 3-month-old infant said that she was giving the infant 2 or 3 bottles of milk and breastfeeding several times each day. The health worker advised the mother to give more frequent, longer breastfeeds and gradually reduce other milk or foods.

At the follow-up visit, the health worker asks the mother questions to find out how often she is giving the other feeds and how often and for how long she is breastfeeding. The mother says that she now gives the infant only 1 bottle of milk each day and breastfeeds 6 or more times in 24 hours. The health worker tells the mother that she is doing well.

The health worker then asks the mother to completely stop the other milk and breastfeed 8 or more times in 24 hours. Since this is a significant change in feeding, the health worker also asks the mother to come back again. At that visit the health worker will check that the infant is feeding frequently enough and encourage the mother.
9.8 FEEDING RECOMMENDATIONS

This section of the module will explain the feeding recommendations on the COUNSEL chart. The recommendations are listed in columns for different age groups.

HOW WILL YOU DETERMINE WHAT RECOMMENDATIONS ARE REQUIRED?

You need to understand all of the feeding recommendations. However when you are counselling a caregiver, you will only need to explain the recommendations specific to the child’s age group.

✔ FIRST, ASK QUESTIONS to find out how her child is already being fed.
✔ SECOND, GIVE SPECIFIC ADVICE that is needed for the child’s age and situation. You may need to give different feeding advice if the mother is HIV positive.

WHEN WILL YOU USE THESE FEEDING RECOMMENDATIONS?

These feeding recommendations are appropriate both when the child is sick and when the child is healthy. Sick children visits are a good opportunity to counsel the mother (or other caregiver) on how to feed the child both during illness and when the child is well.

During illness, children may not want to eat much. However, they should be offered the types of food recommended for their age, as often as recommended, even though they may not take much at each feed.

After a child has been ill, good nutrition helps make up for weight loss and helps to build up the resistance. In this way good feeding helps prevent future illness.

Children up to 6 months

The best way to feed a child from birth to 6 months of age is to breastfeed exclusively. Breastfeeding advantages are described in the SICK YOUNG INFANT module.

Exclusive breastfeeding means that the child takes only breastmilk and no additional food, water, or other fluids. The only exception is medicines and vitamins, if needed.

How often should children breastfeed? Children at this age should be breastfed as often as they want, day and night. This will be at least 8 times in 24 hours.

REVIEW IMPORTANT RECOMMENDATIONS FOR THIS AGE GROUP

- Breastfeed as often as the child wants, day and night, at least 8 times in 24 hours
- Do not give other foods or fluids
Children 6 months up to 12 months

**Milk is still the most important source of food.** The mother should continue to breastfeed the baby during the day and night. However, after 6 months of age, breastmilk cannot meet all of the baby’s energy needs, so you will read below about beginning complementary foods. If the baby is not breastfed, give formula or three cups of full cream cow’s milk (only from 9 months of age). If the baby gets no milk, give five nutritionally adequate complementary feeds per day.

**Begin giving nutritious complementary foods.** If the child is breastfed, she should also take 3 meals a day plus snacks. If the child is not breastfeeding, she should take 5 meals a day. Always give breastmilk first before giving other foods. Start giving 2–3 teaspoons of soft porridge or mashed food, and begin to introduce vegetables and fruit. Gradually increase the amount and frequency of feeds. Children between 6 and 8 months of age should have two meals a day, by 12 months this should have increased to 5 meals per day. Give a variety of locally available food.

**Important to include all food groups**

- Cereals, roots, and tubers: rice, wheat, maize, millet, sorghum, cassava, yams, potatoes
- **Foods of animal original and legumes**: meats, chicken, fishes, eggs, milk products (milk, cheese and yoghurt), chickpeas, lentils, beans, cowpeas
- **Green leafy and orange-fleshed vegetables**: carrots, pumpkins, avocados, leafy greens
- **Fruits**: mangoes, oranges, bananas, all locally available fruits, given mashed
- **Oils, fats, sugar, and honey**: Diets need adequate fat content, including oils (preferably seed oils like groundnuts, cashew, pumpkin, and sunflower), margarine, butter, or lard

**Do not recommend pre-cooked, bottled complementary foods.** Some mothers may be using them. These have the advantage of being quick and easy to prepare, and clean when first opened. They are not recommended because they are expensive, cost much more than other healthy foods, supply can be unreliable, and many products also lack important nutrients. Many mothers give them before 6 months, because of advertising and confusing instructions on the labels. Fruit juices, tea, and sugary drinks should be avoided.

**Vegetables and fruit provide essential vitamins and micro-nutrients.** The child should have 2 servings a day. For example, squeeze the juice of an orange and give it between meals. Mashed or grated can be given with meals. Use fortified complementary foods or vitamin-mineral supplements for the infant, as needed.

**Clean, safe preparation and feeding of complementary foods is essential** to reduce the risk of contamination. It is important to observe that hands, utensils, water and food are clean. Drinking water and milk should be boiled and kept in clean covered containers. Food should be well-cooked and kept in clean covered containers as well.
REVIEW IMPORTANT RECOMMENDATIONS FOR THIS AGE GROUP
✔ Breastfeed as often as the child wants
✔ Give adequate servings of complementary foods
  a. If the child is breastfeeding, give 3 meals plus healthy snacks every day
  b. If the child is not breastfeeding, give 5 meals a day

Children 12 months up to 2 years

During this period the mother should continue to breastfeed as often as the child wants and also give nutritious complementary foods.

THE VARIETY AND QUANTITY OF FOOD SHOULD BE INCREASED. Give nutritious complementary foods or family foods five times a day. Give locally available protein at least once a day. Give food from all the food groups mentioned above. Give fresh fruit or vegetables twice every day. Family foods should become an important part of the child’s diet. Family foods should be chopped or mashed, so that they are easy for the child to eat. If the child is not getting breastmilk, she should receive full cream milk every day.

THE CHILD SHOULD BE RECEIVING FOODS RICH IN VITAMINS. Important vitamins include iron, zinc, Vitamin A, and Vitamin C. As you have read in previously modules, iron and zinc are important to prevent anaemia and strengthen the immune system.

<table>
<thead>
<tr>
<th>IMPORTANT VITAMINS AND RECOMMENDED FOODS</th>
</tr>
</thead>
<tbody>
<tr>
<td>IRON</td>
</tr>
<tr>
<td>ZINC</td>
</tr>
<tr>
<td>VITAMIN A</td>
</tr>
<tr>
<td>VITAMIN C</td>
</tr>
<tr>
<td>B VITAMINS: RIBOFLAVIN</td>
</tr>
<tr>
<td>B VITAMINS: VITAMIN B6</td>
</tr>
<tr>
<td>B VITAMINS: FOLATE</td>
</tr>
</tbody>
</table>

IT IS IMPORTANT TO ACTIVELY FEED THE CHILD. Active feeding means encouraging the child to eat. The child should not have to compete with older brothers and sisters for food from a common plate. He should have his own serving. Feed infants directly and assist older children when they feed themselves, being sensitive to their hunger and satiety cues.

Feed slowly and patiently, and encourage children to eat, but do not force them. If children refuse many foods, experiment with different food combinations, tastes, textures and methods of encouragement. Minimize distractions during meals if the child loses interest easily.
Remember that feeding times are periods of learning and love. They are times to talk to children, with eye-to-eye contact. An “adequate serving” means that the child does not want any more after active feeding.

**REVIEW IMPORTANT RECOMMENDATIONS FOR THIS AGE GROUP**

✔ Breastfeed as often as the child wants
✔ Give adequate servings of complementary foods, 3 to 4 times a day plus snacks
✔ Encourage active feeding

**Children above 2 years**

**GIVE A VARIETY OF FAMILY FOODS AS 3 MEALS PER DAY.** The child should also be given 2 extra feedings per day. These may be family foods or other nutritious foods, which are convenient to give between meals. Examples are bread with peanut butter, fresh fruit or full cream milk.

**CONTINUE ACTIVE FEEDING.** If a new food is refused, offer ‘tastes’ several times. Show that you like the food. Continue to ensure that the child receives foods rich in iron and vitamins.

**REVIEW IMPORTANT RECOMMENDATIONS FOR THIS AGE GROUP**

✔ Give 3 meals a day of family foods
✔ Give 2 snacks a day in between meals

**Recommendations for children of HIV-positive mothers (above 2 years)**

*Children whose mothers are known to be HIV positive may need special feeding.* HIV can be passed from the mother to the baby through breastmilk. At the same time, breastmilk is very important for these infants to prevent other infections. The importance of breastmilk is discussed in the SICK YOUNG INFANT module.

*Feeding recommendations for HIV-exposed or infected children are in the HIV/AIDS module.*
SELF-ASSESSMENT EXERCISE J

Answer the questions for each feeding assessment in the following case studies.

In the cases below, identify correct and incorrect feeding practices. Write the feeding problem in the classification box. Identify possible reasons for the feeding problem. Then write down your feeding advice.

1. **THULI** is 3 months old and weighs 5.5 kg today. She is classified as cough or cold and not underweight. Her mother stopped breastfeeding at 6 weeks because she had to go back to work. The grandmother looks after her during the day and the mother comes home at night. Her mother makes up three bottles of 125 ml formula a day. Thuli drinks 2 bottles during the day, and 1 at night. She also gets 1 bottle of thin porridge a day.

   a. Use the chart to note feeding problems:

   **ASSESS FEEDING if the child is less then 2 years old, has MODERATE ACUTE MALNUTRITION, ANAEMIA, or is HIV exposed or infected**

<table>
<thead>
<tr>
<th>FEEDING PROBLEMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you breastfeed your child? Yes ___ No ___</td>
</tr>
<tr>
<td>If yes, how many times in 24 hours? ___ times. Do you breastfeed during the night? Yes ___ No ___</td>
</tr>
<tr>
<td>Does the child take any other foods or fluids? Yes ___ No ___</td>
</tr>
<tr>
<td>If Yes, what food or fluids?</td>
</tr>
<tr>
<td>How many times per day? ___ times. What do you use to feed the child?</td>
</tr>
<tr>
<td>If MODERATE ACUTE MALNUTRITION: How large are servings?</td>
</tr>
<tr>
<td>Does the child receive his own serving? ___ Who feeds the child and how?</td>
</tr>
<tr>
<td>During this illness, has the child’s feeding changed? Yes ___ No ___</td>
</tr>
<tr>
<td>If Yes, how?</td>
</tr>
</tbody>
</table>

   b. Possible reasons for feeding problems:

   ______________________________________

   c. Feeding advice, including praise for what is being done correctly:

   ______________________________________

2. **BONGI** is 5 months old. She weighs 6.8kg. She is classified as ACUTE EAR INFECTION. She is GROWING WELL. She is breastfed on demand during the day and night. She started formula and porridge with milk twice a day at 3 months of age, because the mother felt she did not have enough milk. Sometimes Bongi also gets water or tea with a cup and spoon on hot days. Due to her illness during the last few days she has only wanted to breastfeed.

   a. Use the chart to note feeding problems:

   **ASSESS FEEDING if the child is less then 2 years old, has MODERATE ACUTE MALNUTRITION, ANAEMIA, or is HIV exposed or infected**

<table>
<thead>
<tr>
<th>FEEDING PROBLEMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you breastfeed your child? Yes ___ No ___</td>
</tr>
<tr>
<td>If yes, how many times in 24 hours? ___ times. Do you breastfeed during the night? Yes ___ No ___</td>
</tr>
<tr>
<td>Does the child take any other foods or fluids? Yes ___ No ___</td>
</tr>
<tr>
<td>If Yes, what food or fluids?</td>
</tr>
<tr>
<td>How many times per day? ___ times. What do you use to feed the child?</td>
</tr>
<tr>
<td>If MODERATE ACUTE MALNUTRITION: How large are servings?</td>
</tr>
<tr>
<td>Does the child receive his own serving? ___ Who feeds the child and how?</td>
</tr>
<tr>
<td>During this illness, has the child’s feeding changed? Yes ___ No ___</td>
</tr>
<tr>
<td>If Yes, how?</td>
</tr>
</tbody>
</table>
b. Possible reasons for feeding problems:


c. Feeding advice, including praise for what is being done correctly:


3. **PIET** is 10 months old and weighs 7 kg. He is classified as **COUGH OR COLD, LOW WEIGHT FOR AGE (UNDERWEIGHT)**, and has been exposed to HIV. He lives with his grandmother, as his mother went to the city to look for work. He does not get milk every day. He has porridge three times a day, occasionally with yogurt for breakfast, usually plain porridge for lunch and porridge with gravy for dinner. Occasionally the grandmother adds meat and vegetables to the soup or stew at night. His feeding has not changed with this illness. The only source of family income is the grandmother's pension.

a. Use the chart to note feeding problems:

<table>
<thead>
<tr>
<th>ASSESS FEEDING if the child is less then 2 years old, has MODERATE ACUTE MALNUTRITION, ANAEMIA, or is HIV exposed or infected</th>
<th>FEEDING PROBLEMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you breastfeed your child? Yes ___ No ___</td>
<td></td>
</tr>
<tr>
<td>o If yes, how many times in 24 hours? times. Do you breastfeed during the night? Yes ___ No ___</td>
<td></td>
</tr>
<tr>
<td>Does the child take any other foods or fluids? Yes ___ No ___</td>
<td></td>
</tr>
<tr>
<td>o If yes, what food or fluids?</td>
<td></td>
</tr>
<tr>
<td>o How many times per day? times. What do you use to feed the child?</td>
<td></td>
</tr>
<tr>
<td>o IF MODERATE ACUTE MALNUTRITION: How large are servings?</td>
<td></td>
</tr>
<tr>
<td>o Does the child receive his own serving? Who feeds the child and how?</td>
<td></td>
</tr>
<tr>
<td>During this illness, has the child's feeding changed? Yes ___ No ___</td>
<td></td>
</tr>
<tr>
<td>o If yes, how?</td>
<td></td>
</tr>
</tbody>
</table>

b. Possible reasons for feeding problems:


c. Feeding advice, including praise for what is being done correctly:


4. **DUMISANI** is 20 months old. He weighs 8 kg. He is classified as **PNEUMONIA and LOW WEIGHT FOR AGE (UNDERWEIGHT)**. He is exposed to HIV. He is still breastfed a few times a day. He gets family foods three times a day. This is usually plain porridge for breakfast and lunch, and porridge with relish or vegetables once a day. The family has avocado, banana, and orange trees in the garden. The family sells the fruit on the road. If they cannot sell fruit the family consumes it. Dumisani does not have his own serving and is not actively fed. There are 6 older siblings at home. They have a few chickens and sometimes have eggs and meat.
a. Use the chart to note feeding problems:

<table>
<thead>
<tr>
<th>ASSESS FEEDING if the child is less than 2 years old, has MODERATE ACUTE MALNUTRITION, ANAEMIA, or is HIV exposed or infected</th>
<th>FEEDING PROBLEMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Do you breastfeed your child? Yes ___ No ___</td>
<td></td>
</tr>
<tr>
<td>o If yes, how many times in 24 hours? ____ times. Do you breastfeed during the night? Yes ___ No ___</td>
<td></td>
</tr>
<tr>
<td>• Does the child take any other foods or fluids? Yes ___ No ___</td>
<td></td>
</tr>
<tr>
<td>o If yes, what food or fluids?</td>
<td></td>
</tr>
<tr>
<td>o How many times per day? ____ times. What do you use to feed the child?</td>
<td></td>
</tr>
<tr>
<td>o If MODERATE ACUTE MALNUTRITION: How large are servings?</td>
<td></td>
</tr>
<tr>
<td>o Does the child receive his own serving? ____ Who feeds the child and how?</td>
<td></td>
</tr>
<tr>
<td>• During this illness, has the child's feeding changed? Yes ___ No ___</td>
<td></td>
</tr>
<tr>
<td>o If Yes, how?</td>
<td></td>
</tr>
</tbody>
</table>

b. Possible reasons for feeding problems:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

C. Feeding advice, including praise for what is being done correctly:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

5. **LEFUNO** is 3 years old and weighs 12 kg. She has had diarrhoea for 3 days. She
is classified as NO VISIBLE DEHYDRATION, NOT GROWING WELL and HIV
INFECTION UNLIKELY. She is not breast-fed. She has milk with sugar and
porridge for breakfast and eats some family food, but often leaves her bowl
untouched. Her mother says Lefuno has a poor appetite and will not eat. This
has become worse with this illness. The mother buys her chips and sweets, as
this is often all she will eat. Lefuno does not like fruit or vegetables.

a. Use the chart to note feeding problems:

<table>
<thead>
<tr>
<th>ASSESS FEEDING if the child is less than 2 years old, has MODERATE ACUTE MALNUTRITION, ANAEMIA, or is HIV exposed or infected</th>
<th>FEEDING PROBLEMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Do you breastfeed your child? Yes ___ No ___</td>
<td></td>
</tr>
<tr>
<td>o If yes, how many times in 24 hours? ____ times. Do you breastfeed during the night? Yes ___ No ___</td>
<td></td>
</tr>
<tr>
<td>• Does the child take any other foods or fluids? Yes ___ No ___</td>
<td></td>
</tr>
<tr>
<td>o If yes, what food or fluids?</td>
<td></td>
</tr>
<tr>
<td>o How many times per day? ____ times. What do you use to feed the child?</td>
<td></td>
</tr>
<tr>
<td>o If MODERATE ACUTE MALNUTRITION: How large are servings?</td>
<td></td>
</tr>
<tr>
<td>o Does the child receive his own serving? ____ Who feeds the child and how?</td>
<td></td>
</tr>
<tr>
<td>• During this illness, has the child's feeding changed? Yes ___ No ___</td>
<td></td>
</tr>
<tr>
<td>o If Yes, how?</td>
<td></td>
</tr>
</tbody>
</table>

b. Possible reasons for feeding problems:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

c. Feeding advice, including praise for what is being done correctly:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
SELF-ASSESSMENT EXERCISE K

Answer questions about counselling on feeding recommendations.

1. How could you restate the following advice in simpler words? Give foods that are high in energy and nutrient content in relation to volume.

2. The mother of an 8-month-old girl says that her child usually takes infant formula by cup about 5 times a day and plain cereal 3 times per day. The mother stopped breastfeeding about 1 month ago when she had to return to work, which requires that she be away from the child for 10 hours each work day. The child has taken the same amount of food during the illness. Which of the following comments are appropriate when counselling this mother? (Tick appropriate comments.)

   a. You should still be breastfeeding this child.
   b. It is good that your child is still eating as usual during the illness.
   c. It is good that you are using a cup instead of a feeding bottle.
   d. Your child needs food more often. Try to increase the number of times you give the cereal gruel to 5 times a day.
   e. The cereal is good for your child. Add a little oil and some mashed vegetables or peas, or bits of meat to the cereal gruel. Then it will be even better for your child.

3. A health worker has just counselled the mother of a 5-month-old about starting complementary foods. The first and second columns below show the health worker’s first checking questions and the mother’s responses. In the third column, write another checking question to make sure that the mother knows how to feed the child correctly.

<table>
<thead>
<tr>
<th>First Checking Question</th>
<th>Mother’s Response</th>
<th>Second Checking Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>What are some good foods to give when your baby is ready?</td>
<td>Thick foods with nutrition</td>
<td></td>
</tr>
<tr>
<td>When will you begin giving these foods?</td>
<td>When he is ready</td>
<td></td>
</tr>
</tbody>
</table>

4. Greg is 10 months old and is still breastfed. He gets porridge once a day and mashed fruit or vegetables twice a day. Greg’s mother often uses baby food jars of fruit and vegetables for convenience. Greg eats a jar at each meal.

   a. Comment on his diet.

   b. How would you increase the energy density of Greg’s diet?
c. List alternate ways the mother could spend this money to feed the baby and the family.

5. Fatima is 14 months old. You have classified her as having PNEUMONIA and ANAEMIA. The mother says that he often gets chest infections.
   a. Which micronutrients are important for Fatima?

   b. Which foods contain these micronutrients?

6. The mother of three month old Joyce is still exclusively breastfeeding her baby, but her mother-in-law says she does not have enough milk and must start giving the baby porridge.
   a. Why is it important to continue exclusive breastfeeding until 6 months?

   b. The mother also gives Joyce water. What do you think of this?

7. Xoli is 15 months old. He still breastfeeds but also takes a variety of other foods including rice, bits of meat, vegetables, fruit and yoghurt.
   a. How many times should Xoli be given these foods?

   b. How can the mother judge whether she is giving an adequate serving to Xoli?
9.9 WATER, SANITATION, & HYGIENE

WHY IS WATER, SANITATION, AND HYGIENE IMPORTANT FOR CHILD HEALTH?

Over 1.6 million children die every year from diarrhoeal diseases. About 9 out of 10 diarrhoeal disease cases is caused by unsafe water supply or poor sanitation and hygiene. Unsafe drinking water and poor sanitation and hygiene also lead to other infections like pneumonia or intestinal parasites that contribute to anaemia. These diseases are very serious risks to a child’s health and development.

At the same time, there are important and inexpensive interventions that health workers can advise families on in order to prevent childhood illness from poor water, sanitation, and hygiene.

WHAT ARE IMPORTANT INTERVENTIONS TO PREVENT ILLNESS?

Some of the most important interventions to discuss with families include:

- Access to safe drinking water
- Washing hands
- Improving sanitation in the home and community, including use of toilets

WHY IS HAND WASHING IMPORTANT?

Hand washing is a simple practice that can make a significant difference in reducing diarrhoeal disease. Washing hands at important times can reduce the number of diarrhoeal cases by more than one-third.

As a health worker, you have an opportunity to talk to caregivers about their own hand washing, which is important for their own health but also the contact they have with their children. You can also support families to teach their children how to wash their hands and prevent illness.

WHEN IS HAND WASHING IMPORTANT?

There are important times for hand washing:

✔ Before preparing food
✔ Before eating
✔ Before feeding a child
✔ After using the toilet
✔ After cleaning up a child who has used the toilet
✔ After coughing, sneezing, or blowing your nose
✔ Before and after cleaning a child’s face, mouth, or nose
✔ After handling animals, animal waste, or garbage

WHAT ARE GOOD PRACTICES IN HAND WASHING?

There are some important messages about good practice in hand washing. They are also demonstrated in the picture.
✔ Use soap
✔ Rub hands together – including between fingers and under fingernails – for 20 seconds
✔ Pour water over the hands (instead of dipping hands into water, which then contaminates that water)

**WHAT ARE THE STEPS FOR HAND WASHING?**

Washing your hands properly takes about as long as singing “Happy Birthday” twice, using these steps.

![Hand Washing Steps Diagram](image_url)
HOW CAN YOU SUPPORT A FAMILY IN HAND WASHING?
During a well child visit with a caregiver, ASK:
✔ Where do you wash your hands?
✔ Is there soap?
✔ When do you wash your hands?
If necessary, help the caregiver identify how they can prepare a convenient place to wash their hands. This should include access to water and soap.

Review when to wash hands.
Demonstrate how to wash hands, using the steps above.
Let the caregiver practice.

WHY SHOULD A FAMILY KEEP THE ENVIRONMENT CLEAN AND SAFE?
Young babies explore their environment by taking objects to their mouth. Therefore, we have to make sure the environment is clean and safe with no harmful objects.

It is important to discuss this with a caregiver. You can start by asking:
• Where does the child rest and play?
• How does your child explore the environment?

Here are some key messages for the caregiver:
• Keep the environment clean and safe, with no harmful objects. This includes:
  — Small objects that the child might put into his/her mouth
  — Items that might be sharp, like glass or stones
  — Sources of heat, like cooking/warming fires, outlets for electricity, heaters, or lamps
• One idea might be to lay a blanket or mat on the floor for the child to play on. Shake or clean this regularly to remove any harmful objects.
9.10 IMMUNIZATION

In this section, you will learn about the types of vaccines routinely given, and the schedule for each. You will also learn how to check a child’s vaccination status, and when it is necessary to provide a child with a vaccine on the same day of the visit.

You should be aware that the terms ‘immunization’ and ‘vaccination’ could be used interchangeably. You will see both terms used in this study session.

WHY IS IMMUNIZING CHILDREN IMPORTANT?

Several diseases that affect children are vaccine-preventable. Given this, immunization is the single most cost-effective strategy to decrease childhood morbidity and mortality. The objective of immunization programmes is to reduce and control the illness, death, and disability caused by vaccine-preventable diseases.

As you will remember from studying the IMCI process, ‘check immunizations’ is an important step after you have assessed and classified main symptoms, malnutrition, and anaemia.

WHY SHOULD YOU CHECK CHILDREN FOR IMMUNIZATIONS?

Ideally, every child must complete vaccination before celebrating his/her first birthday. Therefore, you must assess every child at the health facility. You need to check whether they have been vaccinated up to the appropriate schedule, and if not, you should give any missed vaccinations on the day of the visit.

The recommended vaccine should be given when the child reaches the appropriate age for each dose. If vaccination is administered too early, protection may not be adequate. If there is any delay in giving the appropriate vaccine, this will increase the risk of the child developing the disease.

WHAT DISEASES DO IMMUNIZATIONS PROTECT CHILDREN FROM?

Currently, immunization programmes deliver twelve vaccine antigens to protect children against the following serious illnesses: tuberculosis, poliomyelitis, diphtheria, pertussis, tetanus, Hemophilus influenzae-B (Hib) infections, hepatitis-B, and measles. There are additional vaccinations to protect against pneumococcal infections, rotavirus diarrhea, and Human papilloma virus (HPV) infections.

WHAT IS THE RECOMMENDED SCHEDULE FOR IMMUNIZATIONS?

Review the table below. This shows the recommended vaccination schedule, and how you will give the doses of each childhood vaccine. The immunization schedule is also available in your IMCI chart booklet, at the very end of the ASSESS and CLASSIFY charts.

Most vaccines (except BCG and measles) require administration of repeated doses for about 3 times. For these vaccines: after the first dose, give the remaining doses at least 4 weeks apart.
If you see a child who has not been immunized at the recommended age, you should give the necessary immunizations as soon as possible.

<table>
<thead>
<tr>
<th>AGE</th>
<th>VACCINATION</th>
<th>DOSE</th>
<th>HOW TO GIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>At birth</td>
<td>BCG</td>
<td>0.1 ml</td>
<td>Upper arm of right intradermal</td>
</tr>
<tr>
<td></td>
<td>OPV-0</td>
<td>2 drops</td>
<td>Oral</td>
</tr>
<tr>
<td>6 weeks</td>
<td>DPT1-HepB1-Hib1</td>
<td>0.5 ml</td>
<td>Front outer side of the left thigh muscle</td>
</tr>
<tr>
<td></td>
<td>Pneumococcal 1</td>
<td></td>
<td>Deep IM to the right thigh</td>
</tr>
<tr>
<td></td>
<td>Rota 1</td>
<td></td>
<td>Oral</td>
</tr>
<tr>
<td></td>
<td>OPV-1</td>
<td>2 drops</td>
<td>Oral</td>
</tr>
<tr>
<td>10 weeks</td>
<td>DPT2-HepB2-Hib2</td>
<td>0.5 ml</td>
<td>Front outer side of the left thigh muscle</td>
</tr>
<tr>
<td></td>
<td>OPV-2</td>
<td>2 drops</td>
<td>Oral</td>
</tr>
<tr>
<td></td>
<td>Pneumococcal 2</td>
<td></td>
<td>Deep IM to the right thigh</td>
</tr>
<tr>
<td></td>
<td>Rota 2</td>
<td></td>
<td>Oral</td>
</tr>
<tr>
<td>14 weeks</td>
<td>DPT3-HepB3-Hib3</td>
<td>0.5 ml</td>
<td>Front outer side of the left thigh muscle</td>
</tr>
<tr>
<td></td>
<td>OPV-3</td>
<td>2 drops</td>
<td>Oral</td>
</tr>
<tr>
<td></td>
<td>Pneumococcal 3</td>
<td></td>
<td>Deep IM to the right thigh</td>
</tr>
<tr>
<td></td>
<td>Rota 3</td>
<td></td>
<td>Oral</td>
</tr>
<tr>
<td>9 month</td>
<td>MEASLES</td>
<td>0.5 ml</td>
<td>Outer side of the right thigh</td>
</tr>
</tbody>
</table>

**SPECIAL CASES FOR OPV**

You should not give OPV-0 (Oral Polio Vaccine-0) to an infant who is more than 14 days old. Therefore, if an infant has not received OPV-0 by the time s/he is 15 days old, you should wait until he is 6 weeks old to give him his first OPV (OPV-1), therefore the child should receive OPV-1 and DPT1-HepB1-Hib1 at this encounter.

If child has diarrhoea: Children with diarrhoea who are due for OPV should still receive a dose of OPV during this visit. However, you should not count this dose as it may be passed through the body. You should tell the mother to return with the child in 4 weeks’ time so that you can give the child an extra dose of OPV.

**HOW WILL YOU CHECK FOR VACCINATION STATUS AND DETERMINE WHAT NEEDS TO BE GIVEN?**

You must check the vaccination status of all the children who visit your health facility. You can use your IMCI Chart Booklet or a child health book, if available, to locate the recommended immunization schedule.

**ASK: the caregiver if she has the child health book, and if she brought it with her today:**

If the mother answers YES, ask her if she has brought the book with her today. If she has brought the book with her, ask to see it.

1. Compare the child’s vaccination record (and the dates) with the recommended schedule.
2. Decide if the child has had all vaccinations recommended for his/her age.
3. Identify any vaccination the child needs today. These will be any vaccines the child should have already received but has not or if the child is due for vaccine today.

4. Unless the child is being referred, the mother needs to be advised that the child should receive vaccination(s) today.

5. Give the required immunizations and record the immunization and date on the child’s book.

**EXAMPLE:** a 9 week old infant has not yet been vaccinated with DPT-HB-Hib1 and OPV-1, which she should have received at 6 weeks old. You should give the child these vaccines while she is at the clinic. On the immunization page of the child’s health book, record the date of vaccination.

If the mother says that she **does NOT have a CHILD HEALTH BOOK** with her

1. Ask her to tell you what vaccinations the child has received.

2. Use your judgment to decide if the mother has given a reliable report. If you have any doubt, vaccinate the child.

3. Give the child vaccines according to the child’s age.

4. Give MOTHER the CHILD HEALTH BOOK and ask her to bring it with her each time she brings the child to the health facility.

**WHERE WILL YOU RECORD THE CHILD’S IMMUNIZATION STATUS?**

To review what you read just above, after giving the correct dose of vaccines for the child’s age, you should record the date for when each specific vaccine was administered. This is recorded in the appropriate place in the child health book.

If the child needs to return for vaccination, write the date when they should return. There is usually space for this on the immunization page of the health book.

**SELF-ASSESSMENT EXERCISE L**

Practice what you have learned about immunizations.

1. Why is it important to check the vaccination status of all children under 12 months old?

2. How would you decide if a child needs vaccination today?
3. What dose of OVP would you give to a 6 week old baby who did not receive OVP at birth? What are the reasons for your answer?

So far, you have gone through the twelve recommended vaccines and their schedule of administration. You also learned how to check immunization status of children. Now you will learn about adverse events following immunization and contraindications for vaccination.

**WHAT IS AN ‘ADVERSE EVENT’ FOLLOWING IMMUNIZATION?**

After receiving immunization a child may develop an adverse event. Adverse event following immunization (AEFI) is an unwanted or unexpected event occurring following administration of vaccine(s). Such an event may be caused by the vaccine(s), or it might have occurred by chance (it would have occurred despite vaccination).

*The majority of vaccines cause minor adverse events, and therefore these should be explained to the caregivers.* These minor events include low-grade fever, or pain or redness at the injection site.

*These common adverse events do not require any case from health providers.* However, if the adverse events are significant, they should be reported to the health providers. Common adverse events also not contraindicate subsequent vaccination (you will read more about contraindication below).

**WHAT ARE COMMON ADVERSE EVENTS?**

Please review some of the common adverse events below.

<table>
<thead>
<tr>
<th>Vaccine(s)</th>
<th>Common event, should not last long</th>
<th>Uncommon, return to facility</th>
</tr>
</thead>
<tbody>
<tr>
<td>DTP-HepB-Hib</td>
<td>✔ Swelling at injection site</td>
<td>Extensive swelling of limb, not just injection site</td>
</tr>
<tr>
<td></td>
<td>✔ Redness, soreness at injection site</td>
<td></td>
</tr>
<tr>
<td></td>
<td>✔ Low-grade fever</td>
<td></td>
</tr>
<tr>
<td></td>
<td>✔ Crying and irritability (in infants)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>✔ Injection site nodules are not as common, but do not require treatment</td>
<td></td>
</tr>
<tr>
<td>Oral rotavirus</td>
<td>✔ Mild fever</td>
<td></td>
</tr>
<tr>
<td></td>
<td>✔ Diarrhoea</td>
<td></td>
</tr>
</tbody>
</table>

**HOW DO YOU MANAGE FEVER FOLLOWING VACCINATION?**

If a child develops fever of over 38.5 °C **following vaccination**, give oral paracetamol at a dose of 15 mg/kg/dose in 6 divided doses. This can be given for up to 2 days if child is still with high fever.

**DO NOT GIVE PARACETAMOL AT THE TIME OF VACCINATION, THIS IS NO LONGER RECOMMENDED.**
WHY COUNSEL CAREGIVERS ON COMMON ADVERSE EVENTS?
During the consent process, advise caregivers on what common adverse events are to be expected, and what should be done. Common adverse events should be expected after vaccination. If parents/caregivers are not well counseled, the events can be upsetting.

It is important to understand these events, because they may cause a mother not to bring the child for subsequent immunizations, or they may create fear in other mothers and might not to bring their children for immunization.

WHAT IS A CONTRAINDICATION TO VACCINE?
A contraindication is a condition when the vaccine is not advised due to some potential and serious adverse effects.

First, it is important to note that common illnesses are not a contraindication to vaccination. Therefore no sick child, including the malnourished child, should miss vaccination. A child should only miss the vaccination if there is a clear contraindication.

There are only three situations that are contraindications to vaccination. These are important to remember:

✔ Do not give BCG to a child known to have AIDS.
✔ Do not give DTP-HepB-Hib2 and DTP-HepB-Hib3 to a child who has had convulsions or shock within 3 days of the last dose of the vaccine.
✔ Do not give DTP-HepB-Hib to a child with recurrent convulsions or another active neurological disease of the central nervous system.

HOW WILL YOU HANDLE IMMUNIZATIONS IN A SICK CHILD?
There are two good rules to remember:

1. If a sick child is well enough to go home, there are no contraindications to vaccination.

2. If you are referring a child, you do not need to give him a vaccine before referral. The health care worker at the referral site should make the decision about vaccinating the child when the child is admitted. This will avoid delaying referral.

Remember what you learned about managing a child with diarrhoea who is due for OPV. They receive their dose of OPV during this visit, but the dose should not be counted. You should tell the mother to return with the child in 4 weeks for an extra dose of OPV.

IMPORTANT TIP: Also advise the mother to get other children in family vaccinated.
SELF-ASSESSMENT EXERCISE M

Complete the questions about this case study of Salma.

CASE STUDY: Salma is a 4 month old girl. She has come for immunization, growth and development monitoring today on 20/4/2012. Her vaccination record on the CHILD HEALTH BOOK shows that she has received BCG and OPV0 on 02/1/2012 when she was 1 day old; OPV1, DTP-HepB-Hib1, Pneumococcal 1 and Rota 1 on 17/2/2012 and OPV2, DTP-HepB-Hib2, Pneumococcal 2 and Rota 2 on 18/3/2012. You can see this below on her immunization schedule.

<table>
<thead>
<tr>
<th>Age</th>
<th>Type of Vaccine</th>
<th>Date</th>
<th>Site of administration</th>
</tr>
</thead>
<tbody>
<tr>
<td>At birth</td>
<td>BCG</td>
<td>02/1/2012</td>
<td>Right shoulder</td>
</tr>
<tr>
<td></td>
<td>OPV0</td>
<td>02/1/2012</td>
<td>Oral Drops</td>
</tr>
<tr>
<td>6 weeks</td>
<td>OPV1</td>
<td>17/2/2012</td>
<td>Oral Drops</td>
</tr>
<tr>
<td></td>
<td>DTP-HepB-Hib1</td>
<td>17/2/2012</td>
<td>Left Thigh</td>
</tr>
<tr>
<td></td>
<td>Pneumococcal 1</td>
<td>17/2/2012</td>
<td>Right Thigh</td>
</tr>
<tr>
<td></td>
<td>Rota 1</td>
<td>17/2/2012</td>
<td>Oral Drops</td>
</tr>
<tr>
<td>10 weeks</td>
<td>OPV2</td>
<td>18/3/2012</td>
<td>Oral Drops</td>
</tr>
<tr>
<td></td>
<td>DTP-HepB-Hib2</td>
<td>18/3/2012</td>
<td>Left Thigh</td>
</tr>
<tr>
<td></td>
<td>Pneumococcal 2</td>
<td>18/3/2012</td>
<td>Right Thigh</td>
</tr>
<tr>
<td></td>
<td>Rota 2</td>
<td>18/3/2012</td>
<td>Oral Drops</td>
</tr>
<tr>
<td>14 weeks</td>
<td>OPV3</td>
<td>Oral Drops</td>
<td></td>
</tr>
<tr>
<td></td>
<td>DTP-HepB-Hib3</td>
<td>Left Thigh</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pneumococcal 3</td>
<td>Right Thigh</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rota 3</td>
<td>Oral Drops</td>
<td></td>
</tr>
<tr>
<td>At 9 months</td>
<td>Measles Vaccine</td>
<td>Right Thigh</td>
<td></td>
</tr>
</tbody>
</table>

1. Will you give any immunizations today? Which ones?

2. What date should Salma return to the clinic next? Which immunizations will be given?

3. What advice would you give Salma’s mother about Salma’s vaccinations?
SELF-ASSESSMENT EXERCISE N

Complete the questions about immunizations.

1. In the scenarios below, decide if a contraindication is present, and if you will vaccinate today or not. If you decide that the child should not be vaccinated, make a note giving your reasons.

<table>
<thead>
<tr>
<th>IF THE CHILD:</th>
<th>Vaccinate today (if due)</th>
<th>Do not vaccinate today</th>
<th>Reasons:</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Will be treated at home with antibiotics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Has a local skin infection</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Had convulsion immediately after DPT1-HepB1-Hib1, Pneumococcal 1, Rota 1 and needs DPT2-HepB2-Hib2, Pneumococcal 2 OPV 2 and Rota 2 today</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Has diarrhoea</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Older brother had convulsion last year</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. Is VERY LOW WEIGHT</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>g. Is known to have AIDS and has not received any immunizations at all</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>h. Has NO PNEUMONIA: COUGH OR COLD</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. Samuel is 6 months old boy. He has NO GENERAL DANGER SIGNS. He is classified as having NO PNEUMONIA: COUGH OR COLD and NO ANAEMIA AND NOT VERY LOW WEIGHT FOR his AGE. Vaccination history of Samuel: BCG, OPV 0 received at birth; OPV 1, OPV 2, DPT-HepB-Hib1, Pneumococcal 1 and Rota 1 given at 8 weeks. OPV 2, DPT-HepB-Hib2, Pneumococcal 2 and Rota 2 were given 6 weeks ago.

What vaccinations, if any, does Samuel need today? Give reasons for your answer.
9.11 ROUTINE VITAMIN A AND DEWORMING

This section focuses on two other important routine interventions: vitamin A and deworming. Vitamin A deficiency (VAD) and worm infestation are common in developing countries. Both have serious health effects for a growing child. Therefore, preventive therapy should be given routinely for both.

WHAT IS VITAMIN A AND VITAMIN A DEFICIENCY?

Vitamin A helps maintain surface tissue of the eyes and respiratory, intestinal, and urinary tracts. It also helps the immune system to resist severe infections.

Vitamin A deficiency (VAD) is a public health problem in many countries. It is the leading cause of preventable blindness in children. It also increases the risk of disease and death from severe infections particularly measles, diarrhea, and pneumonia. Improving vitamin A status of children aged 6–59 months can reduce measles mortality rates by 50%, and diarrhoea mortality rates by 33%. It can decrease overall under-five mortality by 23%. As you can see, vitamin A is a very important regular intervention for child health.

WHAT IS ROUTINE VITAMIN A DOSAGE?

Routine supplementation of vitamin A every 6 months is recommended for all children aged 6–59 months. The first dose is usually given at 6 months of age and it should be given every 6 months up to 5 years. If a child in your clinic has not received a dose in the last 6 months, you should give one dose.

These dosages are also included in your IMCI Chart Booklet in the TREAT charts.

<table>
<thead>
<tr>
<th>AGE</th>
<th>VITAMIN A CAPSULES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>200 000 IU</td>
</tr>
<tr>
<td>6 months up to 12 months</td>
<td>1 capsule</td>
</tr>
<tr>
<td>12 months up to 5 years</td>
<td>1 capsule</td>
</tr>
</tbody>
</table>

HOW WILL YOU GIVE VITAMIN A TO A CHILD?

As you see in the dosage chart, Vitamin A is given in various capsule strengths. To give vitamin A, first cut across the nipple of the Vitamin A capsule with a clean instrument. This could be a surgical blade, razor blade, scissors or sharp knife). If the Vitamin A capsule does not have a nipple, pierce the capsule with a clean unused needle. Then pour contents into the child’s mouth.

HOW WILL YOU RECORD VITAMIN A?

In the child’s health book, remember to record the date each time you give Vitamin A to a child. This is important.

If you give repeated doses of Vitamin A in a period of less than 6 months, there is danger of an overdose and toxicity.
WHY IS DEWORMING IMPORTANT?
Intestinal worms (helminthes) that are transmitted through soil are a serious public health problem wherever the climate is tropical, and there are conditions of inadequate sanitation and hygiene.

Worm infestations are associated with a significant loss of micronutrients in a child. Infestations negatively affect a child’s physical fitness and appetite. This contributes to anemia, poor growth, and malnutrition.

Three types of worms are most prevalent and have the most damaging effect on the health of children. These are roundworms (*Ascaris lumbricoides*), hookworms (*Ancylostoma duodenale* and *Necator americanus*), and whipworms (*Trichuris trichiura*).

WHAT DOSAGES ARE PROVIDED FOR ROUTINE DEWORMING?
All children aged 12 months or older need to be given Mebendazole or Albendazole every 6 months to treat intestinal parasites, especially hookworm and whipworm infections. These dosages are also included in your IMCI Chart Booklet in the TREAT charts.

<table>
<thead>
<tr>
<th>Medicine</th>
<th>Give as a single dose every 6 months</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0–1 year</td>
</tr>
<tr>
<td>Albendazole (400 mg tablets)</td>
<td>None</td>
</tr>
<tr>
<td>Mebendazole (500 mg tablet)</td>
<td>None</td>
</tr>
</tbody>
</table>

For children under 5 years of age, it is preferable to give deworming tablets that are chewable and taste good. For children under 3 years of age, tablet(s) should be broken and crushed between two spoons, then water added to help give the tablet(s).

WHEN WILL YOU GIVE CHILDREN DOSES FOR DEWORMING?
**Every time** you attend a child aged 12 months or older, you should check whether the child has been given a dose of Mebendazole or Albendazole in the previous 6 months. If not, give the child Mebendazole or Albendazole as indicated above.

A QUICK REVIEW OF IMMUNIZATIONS, VITAMIN A, AND DEWORMING
These three interventions are important, time-sensitive measures that help reduce illness and mortality in children. Let us review what you have learned.

✔ You will provide 12 vaccines to protect children against: tuberculosis, poliomyelitis, diphtheria, pertussis, tetanus, Hemophilus influenzae-B (Hib) infections, hepatitis-B, measles, pneumococcal infections and rotavirus diarrhoea

✔ Most vaccines (except BCG and Measles) require repeated doses, usually 3 times.

✔ Ideally, every child must complete full vaccination before celebrating a first birthday.

✔ You must check the vaccination status of all the children who visit your health facility. ASK, does the child have a vaccination card? If the mother answers NO, ask her to tell you what vaccination has the child received, and use your
judgment to decide if the mother has given a reliable report. If you have any doubt, immunize the child.

✔ Common illnesses are not contraindications for immunization. If the sick child is well enough to go home s/he should be vaccinated.

✔ Vitamin A deficiency and worm infections are common and both have serious health effects for a growing child and therefore preventive therapy should be given routinely for both conditions.

✔ Supplementation every 6 months is recommended for vitamin A (all children aged 6–59 months) and deworming (all children 12–59 months of age). The following tables demonstrates a schedule for both vitamin A supplementation and deworming:

<table>
<thead>
<tr>
<th>AGE</th>
<th>VITAMIN A DATE</th>
<th>DEWORMING DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birth</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 months</td>
<td>Begins at 6 months of age.</td>
<td></td>
</tr>
<tr>
<td>1 year</td>
<td></td>
<td>Begins at 1 year of age.</td>
</tr>
<tr>
<td>1 ½ years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 ½ years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 ½ years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 ½ years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 years</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SELF-ASSESSMENT EXERCISE 0

Answer the questions about immunizations, vitamin A, and deworming for a well child.

1. Khadija is 3 months old. She has been brought to the clinic by her grandmother for vaccination. Her grandmother says Khadija is well and you see that the child looks healthy. Vaccination history: BCG, OPV 0, OPV 1, DPT-HepB-Hib1, Pneumococcal 1 and Rota 1 were given 5 weeks ago.

   a. What immunizations, if any, would you give Khadija today?

   ____________________________________________________________

   ____________________________________________________________

   ____________________________________________________________

b. What advice would you give to Khadija’s grandmother and why?

   ____________________________________________________________

   ____________________________________________________________

   ____________________________________________________________
2. **Thabit** is 15 months old boy. He has completed his full immunization, and had received a dose of vitamin A at 6 months and mebendazole at 1 year of age.

a. What are you going to do for Thabit during this visit?

b. What advice will you give to Thabit’s mother? Write reasons for your answers.

3. **Sabrina**, 8 months, has not received vitamin A or deworming. Circle your answers.

<table>
<thead>
<tr>
<th>CIRCLE:</th>
<th>IF FALSE, WHY?</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. She requires Vitamin A today.</td>
<td>TRUE FALSE</td>
</tr>
<tr>
<td>b. She requires a Vitamin A dose (100 000 IU) of 2 capsules.</td>
<td>TRUE FALSE</td>
</tr>
<tr>
<td>c. She requires mebendazole today.</td>
<td>TRUE FALSE</td>
</tr>
</tbody>
</table>

4. **Angie**, 12 months, received Vitamin A six months ago. Circle your answers.

<table>
<thead>
<tr>
<th>CIRCLE:</th>
<th>IF FALSE, WHY?</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. She requires mebendazole today.</td>
<td>TRUE FALSE</td>
</tr>
<tr>
<td>b. She requires mebendazole dose (200 mg).</td>
<td>TRUE FALSE</td>
</tr>
<tr>
<td>c. She requires Vitamin A in 6 months.</td>
<td>TRUE FALSE</td>
</tr>
</tbody>
</table>

5. **Jot**, 26 months, received Vitamin A four months ago. He received mebendazole 8 months ago during an outreach programme. Circle your answers.

<table>
<thead>
<tr>
<th>CIRCLE:</th>
<th>IF FALSE, WHY?</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. He requires Vitamin A (1 capsule) today.</td>
<td>TRUE FALSE</td>
</tr>
<tr>
<td>b. He does not require mebendazole today.</td>
<td>TRUE FALSE</td>
</tr>
<tr>
<td>c. He requires 500 mg of mebendazole today.</td>
<td>TRUE FALSE</td>
</tr>
</tbody>
</table>
9.12 PREVENTION OF CHILDHOOD ACCIDENTS

In this section, you will learn about the problems of childhood accidents. The major causes include road accidents, burns, falls, poisoning, and drowning. Most importantly, you will learn about how you can help prevent them as a health worker.

HOW BIG IS THE PROBLEM OF CHILDHOOD INJURIES?

Childhood injuries are a global concern. They are becoming a major health problem in developing countries.

In 2002 WHO reported 14% of fatal injuries occur in children less than 15 years old. The report showed 712,000 children die every year due to injury worldwide. This accounts for 10% of the burden of disease in children.

Nearly all of these injuries (93%) are unintentional injuries (accidents). Accidents are the leading cause of fatal injuries. Accidents include road traffic collisions, burns, falls, drowning, and poisoning. The morbidity due to unintentional injuries is also very high. For each death that occurs from an accident, there are several thousand children that survive but are left with permanent disabilities.

Nearly all of the childhood unintentional injuries around the world (98%) occur in low and middle-income countries. The hardest hit areas are Africa, South East Asia, and Western Pacific. Together these areas account for 77% of all unintentional injuries.

Now you will learn about some of the specific types of unintentional injuries.

HOW BIG IS THE PROBLEM OF ROAD TRAFFIC ACCIDENTS?

The leading cause of death by injury is road traffic accidents. It is also the 10th leading cause of all deaths globally. An estimated 1.2 million people are killed in road crashes each year, and as many as 50 million are injured.

Everyday 720 children die from road traffic injuries worldwide. Road traffic injuries are one of the primary causes of disability in children.

AS HEALTH WORKERS, HOW CAN WE PREVENT ROAD TRAFFIC INJURIES?

You can counsel caregivers on several important prevention measures. You might begin by discussing where the house is located (like if it is near a busy road), and where the child frequently plays. You can also discuss how the child travels locally. The caregiver’s answers will help you give the appropriate counselling.

Here are some actions to discuss with caregivers:

✔ Child should not play near the road; caregiver should watch where child plays to monitor this.

✔ If child rides on a motorcycle or on a bicycle, they should wear helmets all the time.
✔ If child rides in a vehicle, child must always wear a seatbelt or sit in a child safety seat.

✔ Child should be under supervision; child-child caretaking should be discouraged for children that are preschool aged.

Besides your interactions with caregivers, there are other measures that the larger community can take in preventing accidents. You and others can be involved in these efforts.

✔ Developing sidewalks away from the main traffic so people can walk safely.

✔ Establishing safe play grounds for children away from traffic.

✔ Establishing speed reduction zones particularly around residential areas, schools, and children playgrounds.

WHAT IS THE RISK OF CHILDREN DROWNING?

In 2002 the WHO reported 40% of all drowning occur in children. Children less than 5 years of age have the highest risk of drowning. 480 children drown everyday worldwide.

Most of the child drownings (98%) occurs in low and middle income countries. In these countries, drowning mostly occurs in open bodies of water. These include toilet pits, wells, ponds, streams, rivers, lakes, and oceans. However children even have a risk for drowning in small amounts of water, like buckets or drums used to store water.

AS HEALTH WORKERS, HOW CAN YOU ADVISE ON PREVENTION OF DROWNING?

You can counsel caregivers on several important prevention measures. You might begin by speaking to caregivers about any open bodies of water in their living area, or some nearby that the child might visit. You might also speak to them about how they store water in the home, or how activities like baths are done in the home.

Some topics to discuss with the caregivers can include:

✔ All hazardous water bodies in the residential areas should be removed or covered properly. This includes toilet pits, wells, and ponds.

✔ Everyone in the home should follow the safety instructions on water vessels like buckets or water drums.

✔ When children are around bodies of water, adults must supervise them closely. This includes even small amounts, like the bathtub.

✔ If children are in water, like for swimming, they should wear personal flotation devices at all times.
WHY ARE BURNS SUCH A SERIOUS PROBLEM FOR CHILDREN?
The WHO reports **260 fatal child burns** occur every day worldwide. Infants have the greatest risk of fatal child burns. Low and middle-income countries have a death rate from burns 11 times higher than developed countries. Most non-fatal burns (75%) are scalds from hot liquids. Burns leave many children with disability or disfigurement for life.

AS HEALTH WORKERS, HOW CAN YOU ADVISE ON PREVENTION OF BURNS?
Burn morbidity and mortality can be reduced if families and community are sensitized on preventive measures. It is very important to speak with the caregiver about these measures to be taken in the home. You can also make your counseling more specific if you ask about practices in the house like cooking, heating, and lighting.

Prevention measures to discuss in the community include:

✔ Children should never be allowed to play with fire or around fireplaces.
✔ Cooking areas should be raised and protected. Children should not be allowed cooking areas. They might try to reach and grab onto surfaces or items like hot pots. Ensure that pot handles are out of reach.
✔ When cooking, do not hold the infant as you are near a fire source.
✔ Children sitting by the fire (during cold weather or in cold areas) must be supervised.
✔ Never leave children alone at home, especially at night. Never lock children inside the house.
✔ Never leave candles or kerosene lamps lit while sleeping.

WHAT IS THE RISK OF INJURY BY FALLING?
Worldwide **130 children** fall to their death every day. Falls commonly occur from trees, windows, beds, or rooftops. They can also occur during sport and play. Injury due to falls is among the leading cause of emergency attendance at outpatient clinics. Many children are left with permanent disability due to falls.

AS HEALTH WORKERS, HOW CAN YOU ADVISE ON PREVENTION OF FALLS?
Several measures can be taken at the community level to reduce mortality and morbidity due to falls.

These measures, among others, include:

✔ Building safety guards where children might flight and fall, like beds, stairs, windows, and rooftops.
✔ Community sensitization on closely supervising children at their playgrounds.
WHAT IS THE RISK OF INJURY BY POISONING?

Globally, poisoning is a significant public health concern. Children less than one year are at greatest risk of dying from poisoning than older children. Worldwide 125 children die from poisoning everyday.

The rate of fatal poisoning is 4 times higher in low and middle-income countries than in high-income countries. In low and middle-income countries, most poisoning is the result of kerosene/paraffin or household products. Children consume these accidentally, or think they are something safe to eat or drink.

AS HEALTH WORKERS, HOW CAN YOU ADVISE ON PREVENTION OF POISONING?

The first point is that poisonous agents should not be kept in the home. This advocacy should be done with caregivers and also the larger community.

In case there are products in the home that could cause poisoning, the following measures can be used at home and at the community to reduce morbidity and mortality:

✔ Never leave a poisonous agent/material unattended, even for a second!
✔ All medicines or poisons in the home should be packaged in child-resistant packs/bottles.
✔ All medicines should be kept out of reach of children. Children should not be asked to fetch medicines for someone else’s use. Children should not be given medicines with instructions to give to another person in the household.
✔ All medicines should be packaged in small quantities so they are not lethal.
✔ If poisonous agents or petroleum distillates (such as kerosene) are in the house, they should never be stored in containers, tins, or bottles that were previously used to keep drinks or food. They should never be kept in soda or mineral water bottles.
✔ Keep products in their original labeled containers.
✔ Use poison stickers and teach your children to recognize them.
✔ Be careful of what you store in your bedside table and other cupboards that are lower than your shoulder height.
9.13 REVIEW QUESTIONS

WHAT DO YOU KNOW NOW ABOUT WELL CHILD CARE?

Now that you have finished the module, answer the same questions you tested before you started studying. This will help demonstrate what you have learned!

Circle the most correct answer for each question:

1. Sami is 8 months old, and his mother is not infected with HIV. What would you recommend for his feeding?
   a. Exclusive breastfeeding
   b. Four meals a day of porridge and vegetables, and no breastfeeding
   c. Breastfeeding as often as he will have, and three meals a day of cereals, mashed fruits and vegetables, and sources of protein

2. What is child development?
   a. Is an increase in physical size, composition and distribution of tissues
   b. Is the increase in the complexity of structures and of their functions (what a child can do)
   c. Is the same as child growth

3. Interaction of mother and child involve
   a. Bonding only
   b. Attachment only
   c. Bonding and attachment

4. What is the interval for administering Pneumococcal vaccine in children?
   a. 4 weeks
   b. 6 weeks
   c. 8 weeks

5. At what age do we begin giving Vitamin A to children?
   a. 12 months
   b. 9 months
   c. 6 months

6. Why is it important to deworm (giving antihelminths medicines) children?
   a. Soil-transmitted helminthes (intestinal worms) is a serious worldwide health problem
   b. Worm infestations are associated with a significant loss of micronutrients and contribute to anemia, growth failure and malnutrition
   c. Worm infestation is common in young infants

7. Regarding childhood injuries:
   a. Burns and falls are rare
   b. Are not a significant problem in developing countries
   c. Can be prevented through family and community sensitization and awareness raising
Check your answers on the next page. How did you do? ............... complete out of 7.
Did you miss questions?
Turn back to the section to re-read and practice the exercises.
9.14 ANSWER KEY

REVIEW QUESTIONS

<table>
<thead>
<tr>
<th>QUESTION</th>
<th>ANSWER</th>
<th>Did you miss the question? Return to this section to read and practice:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>GROWTH AND DEVELOPMENT</td>
</tr>
<tr>
<td>3</td>
<td>C</td>
<td>CAREGIVER-CHILD INTERACTION</td>
</tr>
<tr>
<td>4</td>
<td>A</td>
<td>IMMUNIZATION</td>
</tr>
<tr>
<td>5</td>
<td>C</td>
<td>VITAMIN A SUPPLEMENTATION</td>
</tr>
<tr>
<td>6</td>
<td>B</td>
<td>DEWORMING</td>
</tr>
<tr>
<td>7</td>
<td>C</td>
<td>CHILDHOOD ACCIDENTS</td>
</tr>
</tbody>
</table>

EXERCISE A (DESCRIBING ACTIVITY)

<table>
<thead>
<tr>
<th>Which skill type?</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
</tr>
<tr>
<td>-------</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

1. Child sees ball rolling and tries to take and hold it
   - X
2. Child cries and reaches for the ball when it rolls away
   - X
3. Child examines ball’s shape and size
   - X
4. Child smiles at mother when she begins speaking to him about the ball
   - X

EXERCISE B (MEASURING LENGTH AND HEIGHT)

✔ 1. Every month
✔ 2. Every 3 months
✔ 3. Weight, length and heightboards

EXERCISE C (GROWTH AND DEVELOPMENT)

1. Answers below:

<table>
<thead>
<tr>
<th>If the child:</th>
<th>Growth/development is:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Normal</td>
</tr>
</tbody>
</table>
| a. Edward is 6 months. He does not have neck control | ✔
| b. Maria, girl, 24 months. She weighs 13 kg, height is 85 cm | ✔
| c. Asha is 30 months old. She says few words with meaning. She can hop on one foot and can walk backwards. | ✔
| d. Hamisi, 17 months, is only able to walk with support. | ✔
| e. Amiri is 4 years old. He is not able to say a single word | ✔
| f. Alice can dress herself and is toilet trained. She is 4½ years. | ✔
| g. Kemilembe is 3 years old. She is not able to tell a short story. She does not know her sex. | ✔
| h. Alex is 4 years, 10 months. He weighs 22 kg, and his height is 113 cm. He has started kindergarten/nursery school. | ✔
2. In Jandika’s case, you should go back to your growth monitoring charts on boy’s CHILD HEALTH. First you assess Jandika on weight for length, which lies between 0 and -1 Z score, this is normal. However, when you assess Jandika on length for age, he falls below -3 Z score which is severe stunting. You should refer Jandika to hospital for further assessment regarding stunting. This is a non-urgent referral but advice Jandika’s mother not to delay going to hospital. This is important so as to identify risk factors and reasons for stunting inorder to treat and prevent it.

EXERCISE D (BONDING AND ATTACHMENT)

1. Bonding is a mother-to-child connection. Bonding is the process of a mother forming a relationship with her new infant. It begins during the first few hours after birth. Bonding is a process that happens very quickly after birth. It is important to remember that bonding occurs early in the child’s life, and can have a lasting impact on his or her development. Therefore, some actions might affect the bonding between a mother and child. These situations can include, for example:

✔ Mother is separated from infant for a long period after birth, sometimes many days or even weeks
✔ Mother has poor health
✔ Mother is depressed after delivery, which happens to many women. This depression often goes undetected and many mothers do not seek help.
✔ The mother or someone else is abusing or neglecting the child
✔ The infant is a low weight baby and therefore need even more attention and care
✔ The infant is ill

2. Attaching is primarily a process of the infant forming a relationship with his or her mother or the primary caregiver, and reinforced by the responses. It occurs during the first two years of life, but especially between 2 and 7 months of age. During attachment, the child develops a personal communication system with the primary caregiver. The connection is child-to-caregiver. Poor attachment between a child and caregiver can have very serious impact on a child’s development. Some of the known complications of poor attachment include:

✔ Child might have difficulty trusting others in their life
✔ Child can experience increasing depression or rage
✔ Child fails to thrive: Physically and emotionally healthy, curious about the world around them, active and happy.
✔ In situations of neglect, e.g. no primary caregiver or if there is poor institutional care a child attaches to things, environment, routines, etc. As a result, child has difficulty adapting to change.
✔ As child grows older, he or she will have more behavioral problems and worse peer relations compared to their peers. They may also have poor problem-solving abilities, and low self-esteem.

3. Answers below:

<table>
<thead>
<tr>
<th>A mother, Sara, takes the following actions with her son John:</th>
<th>S</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Sara hears John crying</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>b. Sara picks up John to soothe his crying</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>c. Sara is giving John a bath and notices a rash on his leg</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>d. Sara sees John watching the tree’s branches blowing in the wind</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>e. Sara asks John, “Do you see the wind blowing? The leaves are blowing!”</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>f. Sara notices that John is not feeding as much as usual</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>g. Sara offers John a food he likes to see if he will eat</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>
4. You need to explain to Sara (and give her tips for speaking to her grandmother) the benefits of bonding and attachment during childhood, and the positive impacts this has on the child’s growth and development of skills. It is helpful to provide very clear examples of each concept that she can share with her grandmother.

**EXERCISE E (CAREGIVER UNDERSTANDING)**

1. Answers could vary, some examples:
   - How will you work with your husband at home to improve his skills with the child?
   - What skills can your husband improve upon? How will you suggest that he improve the way he interacts with the child to improve the child’s development?

2. Answers could vary:
   - What activities can you do with your child to play?
   - What are important things to keep in mind when communicating with your child?

**EXERCISE F (CHILD DEVELOPMENT CONCEPTS)**

<table>
<thead>
<tr>
<th>PLAY?</th>
<th>COMMUNICATION?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Jyothi, 2 months</td>
<td>• Allow child to see, hear, feel, move freely, and touch you</td>
</tr>
<tr>
<td></td>
<td>• Move colourful things for your child to see and reach for.</td>
</tr>
<tr>
<td></td>
<td>• Make toys like a shaker rattle or a big ring on a string.</td>
</tr>
<tr>
<td>2. Linus, 11 months</td>
<td>• Hide a child’s toy and see if they can find it</td>
</tr>
<tr>
<td></td>
<td>• Play peek-a-boo</td>
</tr>
<tr>
<td></td>
<td>• Make toys like a doll with a face</td>
</tr>
<tr>
<td>3. Julie, 7 months</td>
<td>• Give child household items to handle and bang, make sure they are clean and safe</td>
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<tr>
<td></td>
<td>• Give toys like containers with lids, metal pot and spoon</td>
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<tr>
<td>4. Nathan, 4 days</td>
<td>• Allow child to see, hear, feel, move arms and legs freely, and touch you</td>
</tr>
<tr>
<td></td>
<td>• Skin to skin contact is very good</td>
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<tr>
<td></td>
<td>• Gently soothe and stroke child</td>
</tr>
<tr>
<td></td>
<td>• Hold your child</td>
</tr>
<tr>
<td>5. Frank, 17 months</td>
<td>• Give child things to stack up or put into containers</td>
</tr>
<tr>
<td></td>
<td>• Give household objects like containers and small items</td>
</tr>
<tr>
<td></td>
<td>• Ask child simple questions</td>
</tr>
<tr>
<td></td>
<td>• Respond to child’s attempts to talk</td>
</tr>
<tr>
<td></td>
<td>• Show child things around them (nature, pictures, people) and talk to them</td>
</tr>
</tbody>
</table>

*These activities are good during breastfeeding.*
EXERCISE G (CHILD DEVELOPMENT CONCEPTS)
1. Answers will vary, but should be in simple terms with clear Child development is the skills that a child gains as they grow, like the abilities to move, communicate, solve problems, and interact socially and with emotion. To develop well, children need good physical and mental health, nutrition, opportunities to explore and learn about the world, and be supported in a safe and nurturing environment.

2. Answers will vary, but should stress how development has strong impacts on a child's long-term health and abilities. Child development has strong effects on a child's physical development, interactions and connections to caregivers, and abilities to develop skills for solving problems, learning, interacting with others, communicating, etc.

3. Answers will vary, but should outline the play and communication activities for his age group. It should tailor the discussion to toys and products they have in their home.

4. Answers will vary, but should emphasize that child development begins at birth, and even in the earliest hours of a child’s life he is making connections with others around him, and his environment. Play and communication with a child is absolutely critical for development. You can demonstrate with Beta how Rakim is communicating and playing now (e.g. following voices, pointing, reaching).

EXERCISE H (MILESTONES)
1. Undresses him/herself, can tower 6 cubes
2. Basic (one or two syllable) words like ‘mama’ or ‘dada’, begins to mimic other words
3. Dress/undress fully except buttons, can count to 10

EXERCISE I (USING CHARTS)
1. This question was asking you to decide how you going to advice Mariamu regarding Manka. You should remember the normal developmental milestone for an infant. An infant aged 5–7 months is able to sit without support. Since Manka is only 5 months old which is the lower age limit of the normal for sitting without support, you should advice Mariamu that this is normal, and that Manka will be able to sit without support in a few months’ time. You should tell Mariamu that she needs to continue attending clinic for growth and development monitoring of her child, and for other interventions.

2. This question was asking on the advice you would give Ikupa's grandmother, and to give reasons for your answers. You should remember normal developmental milestone for children. Ikupa can only walk with support and say 4–20 words with meaning even though she is 3 years old. This milestone is for children between 8–11 months old. Therefore Ikupa has delayed milestone development. At her age, Ikupa was supposed to be able to run backwards and forwards with confidence and hop on one foot. You should refer Ikupa for further assessment on why she has delayed milestone development. This is a non-urgent referral but advice the grandmother that it is important to go to hospital within few days so as to manage the problem inorder to optimizing growth and development.
EXERCISE J (FEEDING ASSESSMENT)

1. THULI
   a. Possibly correct preparation of the feeds
   b. Feeding Problems:

   **ASSESS FEEDING if the child is less than 2 years old, has MODERATE ACUTE MALNUTRITION, ANAEMIA, or is HIV exposed or infected**
   - Do you breastfeed your child? Yes ___ No X
   - Does the child take any other foods or fluids? Yes X No ___
     - If yes, what food or fluids? Formula feeding
     - How many times per day? ___ times. What do you use to feed the child? A bottle
   - If MODERATE ACUTE MALNUTRITION: How large are servings?
   - Does the child receive his own serving? ___ Who feeds the child and how?
   - During this illness, has the child's feeding changed? Yes ___ No ___
     - If Yes, how?

   **c. Possible reasons for feeding problems:**
   - Lack of appropriate information
   - Common belief that early introduction of semisolids is essential
   - Mother returned to work

   **d. Feeding advice:**
   - Try to reintroduce exclusive breastfeeding and find solutions for this
   - Increase the number of feeds
   - Replace porridge feed with formula
   - Ensure that the preparation of formula is correct
   - Change from bottle to cup
   - Follow-up in 5 days

2. BONGI
   a. Possibly correct preparation of the feeds
   - Bongi is breastfed as often as she wants, day and night as recommended.
   - Bongi is given other fluids or foods with a spoon and cup which.
   b. Feeding Problems:

   **ASSESS FEEDING if the child is less than 2 years old, has MODERATE ACUTE MALNUTRITION, ANAEMIA, or is HIV exposed or infected**
   - Do you breastfeed your child? Yes X No ___
   - Does the child take any other foods or fluids? Yes X No ___
     - If yes, how many times in 24 hours? ___ times. Do you breastfeed during the night? Yes ___ No ___
   - If, what food or fluids? Formula feeding
     - How many times per day? ___ times. What do you use to feed the child? A bottle
   - If MODERATE ACUTE MALNUTRITION: How large are servings?
   - Does the child receive his own serving? ___ Who feeds the child and how?
   - During this illness, has the child's feeding changed? Yes X No ___
     - If Yes, how? Only breastfeeding

   **c. Possible reasons for feeding problems:**
   - Lack of appropriate information
   - Common belief that early introduction of semisolids and other fluids are essential

   **d. Feeding advice:**
   - Congratulate mother for using a cup and spoon and not a bottle
   - Breastfeed more frequently and for longer at each feed, day and night
   - Ensure that Bongi is fed at least 8 times in 24 hours
   - Possibly suggest to reduce other milk and fluids gradually until 6 months old
   - Tea is not recommended for smaller children
3. **PIET**

   a. Giving milk, yogurt, meat and vegetables are good practice

   b. Feeding Problems:

   ![Rules](image)

   c. Possible reasons for feeding problems:
      - There is inadequate food available in the house
      - Lack of appropriate information re: Piet’s dietary needs, how to meet these needs and how to obtain local support

   d. Feeding advice:
      - Piet needs 3 servings of nutritious complementary foods per day. (6 servings if he does not get 3 cups of full cream milk per day)
      - Piet needs food from all 6 food groups.
      - Give the grandmother local recipes for enriched (energy dense) porridge e.g. always mix fat, oil, peanut butter etc with porridge
      - Each day he must have some protein e.g. eggs, beans, locally available protein etc
      - Each day he must have mashed fruit and vegetables
      - Advise the grandmother on how to go about obtaining local food support, including government schemes or local organizations
      - If the clinic has a vegetable garden, give her vegetables from it. Teach her how to plant her own Food Garden or put her in contact with someone who can
      - Follow-up in 5 days

4. **DUMISANI**

   a. Still breastfed and receives family foods

   b. Feeding Problems:

   ![Rules](image)

   c. Possible reasons for feeding problems:
      - Family is struggling financially
      - Mother too busy to feed and breastfeed Dumisani more frequently as there are at least 7 children at home

   d. Feeding advice:
      - Breastfeed as often as Dumisani wants
      - Give at least 5 adequate nutritious meals per day of increased variety and quantity
      - Mix fat, oil, peanut butter etc. with porridge
      - Give fruit (from garden) and vegetables at least twice every day
• Give some protein to Dumisani every day: e.g. eggs from their chickens, locally available protein etc.
• Feed actively with own serving
• Encourage feeding during illness. Suggest an extra meal a day for a week after getting better
• Follow-up in 5 days
• Encourage family planning

5. LEFUNO

Given family food, given milk

a. Feeding Problems:

b. Possible reasons for feeding problems:
   • Lack of appropriate information regarding the nutritional needs of a 3 year old child
   • Poor appetite (and possibly diarrhoea) due to eating too many sweet things and non-nutritious foods
   • Bad eating habits
   • Manipulation by Lefuno as she knows that she will get sweet things etc. if she does not eat her food
   • Not fed actively

c. Feeding advice:
   • Avoid sweet foods and drinks (this will help to stop the diarrhoea)
   • Stop giving Lefuno sweets and chips as well as adding sugar to her milk etc. Only put 1 teaspoon of sugar (if you must) on her porridge and in her tea etc
   • Educate the rest of the family and friends that they are NOT to give Lefuno sweets etc. as this is making her ill and causing her not to grow well. They must rather give her fresh fruit or vegetables, but first consult with her caregiver in this regard
   • Educate that Lefuno is not to get "samples" of food or a drink (even water) before a meal as it will decrease her appetite
   • Give Lefuno her own servings of family foods three times a day and feed her actively at the time when the family eats (if feasible). Educate the family regarding correct eating habits so that they are good examples for Lefuno to follow as children learn by imitating what the family does
   • In addition, Lefuno is to be given 2 nutritious snacks such as bread with peanut butter, full cream milk or fresh fruit between meals
   • Continue to feed Lefuno actively
   • Follow-up in 5 days
EXERCISE K (FEEDING RECOMMENDATIONS)

1. ANSWERS WILL VARY: Give foods that are filled with energy and nutrients, some examples are....

2. The mother of an 8-month-old girl
   X  b. It is good that your child is still eating as usual during the illness.
   X  c. It is good that you are using a cup instead of a feeding bottle.
   X  e. The cereal is good for your child. Add a little oil and some mashed vegetables or peas, or bits of meat to the cereal gruel. Then it will be even better for your child.

3. ANSWERS WILL VARY:

<table>
<thead>
<tr>
<th>First Checking Question</th>
<th>Mother’s Response</th>
<th>Second Checking Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>What are some good foods to give when your baby is ready?</td>
<td>Thick foods with nutrition</td>
<td>Which of these foods are in your home?</td>
</tr>
<tr>
<td>When will you begin giving these foods?</td>
<td>When he is ready</td>
<td>When will you know that he is ready?</td>
</tr>
</tbody>
</table>

4. Greg
   • Greg should receive 4–5 servings of nutritious food per day.
   • Add margarine, fat, oil, peanut butter or groundnuts to the porridge.
   • She could buy eggs, fresh fruit and vegetables, peanut butter, etc.

5. Fatima
   • Iron and Vitamin A.
   • Iron: Liver, kidney, meat chicken, fish, legumes. Dark green leafy vegetables if eaten together with food rich in vitamin C (e.g. pumpkin, if not overcooked). Vitamin A: Vegetable oil, liver, mangoes, pawpaw, sweet potato, dark green leafy vegetables and legumes.

6. Joyce
   • Breastmilk is the perfect food for infants: nutrients and micronutrients are well absorbed. Breastmilk prevents infections.
   • There is no need to give water as the breastmilk provides all the fluids that the infant needs.

7. Xoli
   • Xoli should be given these feeds 5 times a day.
   • An ‘adequate serving’ means that Xoli does not want any more food after active feeding.

EXERCISE L (IMMUNIZATIONS)

1. Vaccination is the most effective strategy to decreasing childhood morbidity and mortality; it can reduce and control illness, disability or death caused by vaccine preventable diseases.

2. You are now going to look in more detail what you should do step by step. To decide if the child needs vaccination today, look at the child’s age on the clinical record. If you do not have the child’s age on the clinical record, ask about the child’s age.

3. You would give OVP1. OVP-0 should not be given to an infant who is more than 14 days old. You would also give the 6 weeks old infant her DPT1-HepB1-Hib1 vaccination.
EXERCISE M (IMMUNIZATIONS)

1. Yes, 4 are required: OPV3, DTP-HepB-Hib3, Pneumococcal 3, and Rota 3.

2. At 9 months for measles, or before if the child has any issues with health or feeding.

3. There are several things you could talk to the mother about, for example the correct age to bring Salma for vaccination (i.e. at 9 months), and that she should bring the child’s health book with her each time she comes to the health facility. You would also need to tell the mother that she must return for her child to receive Measles vaccine when Salma reaches 9 months old, which will be on 01/9/2012. You should also tell her that it is important that all children in the family are vaccinated. Lastly, explain the potential side effects of the vaccines.

EXERCISE N (CONTRAINDICATIONS)

1. Answers in the table below:

<table>
<thead>
<tr>
<th>IF THE CHILD:</th>
<th>Immunize this child today</th>
<th>Do not immunize today</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Will be treated at home with antibiotics</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>b. Has a local skin infection</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>c. Had convulsion immediately after DPT1-HepB1-Hib1, Pneumococcal 1, Rota 1 and needs DPT2-HepB2-Hib2, Pneumococcal 2 OPV 2 and Rota 2 today</td>
<td>Give OPV 2 but --&gt;</td>
<td>Do not give DPT2-HepB2-Hib2</td>
</tr>
<tr>
<td>d. Has diarrhoea</td>
<td>Give dose of OPV during, but the dose should not be counted. You should tell the mother to return with the child in 4 weeks for an extra dose of OPV</td>
<td></td>
</tr>
<tr>
<td>e. Older brother had convulsion last year</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>f. Is VERY LOW WEIGHT</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>g. Is known to have AIDS and has not received any immunizations at all</td>
<td>Give OPV, DPT-HepB-Hib, Pneumococcal, Rota &amp; measles but --&gt;</td>
<td>Do not give BCG</td>
</tr>
<tr>
<td>h. Has NO PNEUMONIA: COUGH OR COLD</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

3. This question was asking you to decide whether Samuel needed any immediate immunizations or not, and to give reasons for your answers. From the information on the recording form you can see that Samuel’s vaccinations are not up-to-date. This means that he needs DPT-HepB-Hib3, Pneumococcal 3, Rota 3 and OPV 3 today. You should advise the mother that it is important that she ensures Samuel is brought for his future vaccinations at the right age. You should tell her that he needs to return to the health facility at 9 months of age for his measles vaccination.
EXERCISE O (VITAMIN A AND DEWORMING)

1. Khadija case:
   a. What immunizations, if any, would you give Khadija today? This question was asking you to decide whether Khadija needed any immediate immunizations or not, and to give reasons for your answers. You should also have identified that her vaccinations are not up-to-date. This means that she needs OPV 2, DPT-HepB-Hib2, Pneumococcal 2 and Rota 2 today. However, do not record OPV 2 since today she has diarrhea, but the OPV 2 needs to be repeated during the next vaccination visit.
   b. What advice would you give to Khadija’s grandmother and why? You should advise the grandmother that it is important that she ensures Khadija is brought for her future vaccinations at the right age. You should tell her that she needs to return to the health facility after 4 weeks (at 4 months of age) to receive DPT-HepB-Hib3, Pneumococcal 3, Rota 3 and repeat OPV 2 immunizations.

2. Thabit case:
   a. What are you going to do for Thabit during this visit? In Thabit’s case, you should have identified that he has completed his vaccination schedule and does not need additional vaccines. However, he received a dose of vitamin A at 6 months and Mebendazole 1 year of age. You should give appropriate dose of Vitamin A because Thabit was supposed to receive the dose at 1 year together with mebendazole. Thabit does not need a dose of mebendazole today because he received the dose at 1 year (i.e. at 12 months of age). The interval for mebendazole is 6 months apart, of which Thabit has not fulfilled today because he got mebendazole only 3 months ago.
   b. What advice will you give to Thabit’s mother? You should advise the mother that it is important that she ensures Thabit is brought for his next doses of Vitamin A after 6 months and Mebendazole after 3 months. You should tell her that she needs to return to the health facility for Thabit to get these treatments till he is 5 years old. Remind the mother that the interval between specific doses is 6 months.

3. Sabrina, 8 months, has not received vitamin A or deworming. Circle your answers.
   a. TRUE
   b. FALSE: that is dose for child 12 months to 5 years. She needs 1 capsule of 100 000 IU.
   c. FALSE: deworming starts only after the child is 12 months

4. Angie, 12 months, received Vitamin A six months ago. Circle your answers.
   a. TRUE
   b. TRUE
   c. FALSE: it has been 6 months, so she requires another supplementation today

5. Jot, 26 months, received Vitamin A four months ago. He received mebendazole 8 months ago during an outreach programme. Circle your answers.
   a. FALSE: received last supplementation less than 6 months ago. Providing another dose within 6 months is dangerous.
   b. FALSE: it has been more than 6 months, so he requires today
   c. TRUE