FACILITATOR GUIDE
FOR
MODULES

World Health Organization and UNICEF
2007
Integrated Management of Childhood Illness Complementary course on HIV/AIDS was prepared by the World Health Organization's Division for Child and Adolescent Health.
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INTRODUCTION TO THIS FACILITATOR GUIDE

What is the purpose of this IMCI Complementary course on HIV/AIDS, and how does it fit in with the standard IMCI case management training course?

Background:
According to the annual *AIDS Epidemic Update*, published by UNAIDS/WHO in December 2006, the number of people living with HIV globally continues to grow as does the number of deaths due to AIDS. A total of 39.5 million people were estimated to be living with HIV in 2006, and almost three million people died of AIDS-related illnesses; of these, more than 500,000 were children. Globally, there are 2.3 million children living with HIV/AIDS, with children constituting 6% of people living with HIV worldwide, 13 percent of new HIV/AIDS infections and 17 percent of total HIV/AIDS deaths. More than 50% of children with HIV/AIDS die before the age of 2 years as a result of opportunistic infections and intercurrent common diseases such as pneumonia, diarrhoea, malnutrition and malaria – all of which are conditions targeted by IMCI.

Even though children living with HIV/AIDS respond very well to treatment with antiretroviral therapy (ART), to date few children living with HIV/AIDS have access to ART mostly due to a lack of cheap feasible diagnostic tests for infants, lack of affordable child-friendly ARV drugs and lack of trained health personnel.

This course aims to address the issue of lack of trained personnel. With an ever increasing burden of HIV and a high percentage of children infected, health workers urgently require accurate, up to date training and information on assessment and management of HIV in children. The IMCI complementary course on HIV is designed to assist health workers to identify HIV cases early enough, provide appropriate case management, support, care and anti-retroviral therapy (ART) to symptomatic children, identify the role of family and community in caring for the child with HIV/AIDS and also to enhance counselling of caretakers on HIV/AIDS.

This IMCI complementary course on HIV is designed, as the title suggests, to build upon and complement the existing 11-day IMCI case management course, which does not include assessment or management of HIV. The course should not replace the standard IMCI case management course; instead it aims to bridge a gap that might
exist amongst health workers working in settings that have a high HIV burden.

The course has been developed for nurses, clinical officers, clinical assistants and general doctors who:
- are based at fixed clinics, mobile clinics, health posts and health centres (not referral hospitals) and
- have previous training in IMCI and
- are responsible for managing children and
- have or have not been trained in integrated management of adolescent and adult illness (IMAI)

**Structure and objectives of the IMCI complementary course on HIV**

The course is presented in four modules:

**Module 1:** Focuses on exercises to recap participants’ knowledge of IMCI. Recent technical updates to IMCI are also introduced in this module

**Module 2:** Focuses on assessing and classifying a child for HIV infection and treating and preventing illness in children born to HIV positive women

**Module 3:** Focuses on counselling HIV positive women

**Module 4:** Focuses on chronic care and follow-up of children born to HIV positive women

**Objectives:**

This IMCI Complementary Course on HIV specifically aims to increase participants’ knowledge on:

- assessing and classifying young infants (aged up to 2 months) and children aged 2 months up to 5 years) for HIV-infection
- assessing, classifying and managing common illnesses and opportunistic infections in young infants and children with HIV classifications including POSSIBLE HIV INFECTION / HIV-EXPOSED, SUSPECTED SYMPTOMATIC HIV INFECTION or CONFIRMED HIV INFECTION
- preventing illnesses in young infants and children born to an HIV positive mother
- communication skills and counselling the HIV positive other around infant feeding options
- follow-up of HIV exposed infants and children, including chronic care, clinical staging and initiation of antiretroviral therapy
The figure on the next page illustrates where and how this IMCI complementary course on HIV fits in with the standard IMCI case management course and also indicates how the course can be used:

- As an add-on to an IMCI-course that has not been adapted at all to include HIV OR has been adapted but does not include all aspects of HIV chronic care
- As a stand-alone course to update health workers, who have been trained in IMCI during previous years
- As an add-on to the Integrated Management of Adolescent and Adult Illness (IMAI) course (see below)

How does this complementary course fit with the Integrated Management of Adolescent and Adult Illness (IMAI) training course?

IMAI guidelines and training materials were developed by WHO to support the delivery of anti-retroviral therapy (ART) within the context of primary health care (based at first-level health facilities or in district outpatient clinics). The 4 IMAI training modules are as follows:

1) chronic HIV care including ART
2) acute care (including the management of opportunistic infections and when to suspect HIV, linking to testing and counselling)
3) palliative care (symptom management at home), and
4) general principles of good chronic care (to support the health system transition from acute to chronic care)

The IMAI training course is a 6 day course, primarily designed as a basic ART clinical training course focused on adolescents and adults but also includes a chapter entitled ‘Special considerations in children’. During this chapter, participants learn how to:

- Describe the key differences in chronic HIV care between adults and children
- Diagnose HIV infection in children and do clinical staging
- Describe initiation and monitoring of ART in children
- Understand important opportunistic infections in children
- Describe the nutritional and psychosocial needs to support children with HIV/AIDS
- Effectively communicate with children and their caregivers

Where possible, this HIV/AIDS complementary course should be given directly following the IMAI course. In this case, participants would not need to complete
Module 4 of the HIV complementary course, since the essential elements of this module will already have been covered in the IMAI course.

**Standard IMCI case management course**
- Gold standard for managing sick children at first level health facilities
- Countries should continue to adapt IMCI to include aspects of HIV, as far as is feasible, including when to test for HIV and how to manage well and acutely ill children born to HIV positive women

**3 scenarios**

**Scenario A**
Country has not yet completed IMCI adaptation to include HIV or has not undertaken IMCI adaptation to include HIV at all

**Scenario B**
Country has adapted IMCI to include HIV but previously trained health workers need updating on HIV aspects of child health

**Scenario C**
Country has completed IMCI adaptation for HIV, but has not managed to include all the issues relating to chronic HIV care due to time constraints

**IMCI Complementary Course on HIV**
This course will fill the gap and increase the knowledge and skills of IMCI-trained health workers at first level health facilities so that they can appropriately manage HIV exposed and HIV infected children. This includes chronic care and when to refer to 2nd level

1. as an add-on to an IMCI
2. as a stand-alone to update health workers previously trained in IMCI
3. as an add-on to an IMAI course
What are the principles of facilitation of this training course?

It is suggested that in order that facilitators give enough attention to each participant, a ratio of one facilitator to 3 to 6 participants is desirable.

- This course complements the IMCI case management course and is very similar to the IMCI CMC course in many respects.
- Each facilitator will need to be an IMCI facilitator, and therefore to have undergone the 5-day IMCI facilitator training course, before s/he can become a facilitator for this IMCI Complementary course on HIV.
- The principles of facilitation, as outlined in the IMCI Facilitator guide for modules also apply to this course.
- As you learned when you participated in the IMCI facilitators course, you should not present the course material by lecture format. Instead, use interactive and participatory adult learning methods. Each participant should use his chart booklet and the individual module booklets to learn about long-term care for young infants and children born to HIV-positive women. Information is also provided through exercises, photographs, videotapes and demonstrations (during the clinical instruction sessions).
- Each participant should work within a small group to encourage learning through group discussion and sharing.
- However, each participant should also work at his own speed to ensure that he learns with understanding and not by rote.
- Each participant should discuss any problems or questions with a facilitator, and should receive prompt feedback from the facilitator on completed exercises. (Feedback includes telling the participant how well he has completed the exercise and what improvements could be made).

The IMCI Facilitator guide provides detailed information on the following topics:

- What is a facilitator?
- What does a facilitator do?
- How does a facilitator do these things?
- What should a facilitator not do?

This information is still relevant for facilitation on the IMCI Complementary Course on HIV, therefore will not be repeated in the current guide, as it is assumed that you have already been through the IMCI Facilitator guide.
**Generic Agenda**

It will be important to try to follow the suggested timings as closely as possible if you are to get through the course in the recommended time-frame. While you should not rush participants through their work just to complete a schedule, you should aim for good time management. It will be important to monitor participants’ daily progress carefully so you can prepare to lead group discussions, drills, and demonstrations at the right times.

<table>
<thead>
<tr>
<th>Day 1</th>
<th>Time</th>
<th>Activities</th>
<th>Remarks</th>
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<tbody>
<tr>
<td></td>
<td>8:00 - 9:30</td>
<td>Registration&lt;br&gt;Welcoming address&lt;br&gt;Pre-test</td>
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<td></td>
<td>9:30-10:00</td>
<td>Break</td>
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<td></td>
<td>10:00-10:30</td>
<td>Introduction&lt;br&gt;Objectives of the course&lt;br&gt;Learning/teaching approach&lt;br&gt;Glossary</td>
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<td></td>
<td>10:30 -12:30</td>
<td>Module 1&lt;br&gt;Review IMCI algorithm on wall chart&lt;br&gt;Do 4 case studies&lt;br&gt;Video “Martha”</td>
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<td>12:30-13:30</td>
<td>Lunch</td>
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<td></td>
<td>13:30-15:30</td>
<td>Introduce technical updates and drill on each section&lt;br&gt;Short answer exercise A and B</td>
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<td>15:30 -16:00</td>
<td>Break</td>
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<td></td>
<td>1600 - 17:30</td>
<td>Module 2&lt;br&gt;Basic information about HIV&lt;br&gt;How children become infected with HIV&lt;br&gt;Assess and classify the child with HIV&lt;br&gt;Video&lt;br&gt;Written exercise A and B</td>
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<td>Day</td>
<td>Time</td>
<td>Activities</td>
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<tr>
<td>Day 2</td>
<td>8:00-9:30</td>
<td>Module 2/ continued</td>
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<td>Identify treatment, Treat the young infant and child classified with HIV</td>
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<td>Assess, Classify, and Treat acute common illnesses</td>
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<td>Assess, Classify, and Treat opportunistic infections</td>
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<td>Clinical practice</td>
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<td>9:30-12:30</td>
<td>Lunch</td>
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<td></td>
<td>12:30-13:30</td>
<td>Module 2-continued</td>
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<td></td>
<td>13:30-14:30</td>
<td>Prevention of illnesses</td>
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<td>Module 3</td>
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<td>Section 3.0 communication skills</td>
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<td>Section 4. Feeding options</td>
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<td>14:30-15:30</td>
<td>Break</td>
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<td>15:30-16:00</td>
<td>Section 5-7 feeding recommendations</td>
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<td>Written exercise A and B</td>
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<td></td>
<td>16:00-17:30</td>
<td>Feeding orphans</td>
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<td></td>
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<td>Counsel mother about her own health</td>
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<td>Day</td>
<td>Time</td>
<td>Activities</td>
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<tr>
<td>Day 3</td>
<td>8:00-9:30</td>
<td>Module 4</td>
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<td>Follow-up of children born to HIV infected women</td>
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<td></td>
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<td>Follow-up of HIV infected children</td>
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<td>Principles of chronic care</td>
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<td>WHO paediatric clinical staging</td>
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<td>10:00-10:30</td>
<td>Break</td>
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<td></td>
<td>10:30-12:30</td>
<td>Clinical practice</td>
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<td></td>
<td>12:30-13:30</td>
<td>Lunch</td>
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<td></td>
<td>13:30-15:30</td>
<td>Module 4-continued</td>
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<td>Introduction to ART</td>
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<td>Counselling for adherence</td>
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<td>Side effects of ART</td>
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<td>Good management of ART side effects</td>
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<td></td>
<td>15:30-16:00</td>
<td>Break</td>
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<td></td>
<td>16:00-17:00</td>
<td>Module 4 - continued</td>
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<td>Pain management</td>
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<td>The 4 case studies</td>
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<td>Recording and reporting</td>
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<td></td>
<td></td>
<td>Summary of module</td>
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<td></td>
<td>17:00 - 18:00</td>
<td>Post-test evaluation</td>
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<td>Evaluation of course</td>
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<td>Closing ceremony</td>
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</table>
What materials / items are needed for this course?

<table>
<thead>
<tr>
<th>ITEM NEEDED</th>
<th>NUMBER NEEDED</th>
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<tbody>
<tr>
<td>IMCI Facilitator Guide for Modules</td>
<td>1 for each facilitator</td>
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<tr>
<td>Facilitator Guide for Clinical Practice</td>
<td>1 for each facilitator</td>
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<tr>
<td>Technical Updates of the Guidelines on the Integrated Management of Childhood Illness (IMCI) : Evidence and recommendations for further adaptations (WHO, 2005)</td>
<td>1 for each facilitator</td>
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<tr>
<td>Introduction to the IMCI Complementary course on HIV</td>
<td>1 set for each facilitator and 1 set for each participant</td>
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<tr>
<td>Set of 4 modules for IMCI Complementary course</td>
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<tr>
<td>IMCI chart booklet (titled Integrated Management of Childhood Illness for high HIV settings),</td>
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<td>Photograph booklet for IMCI</td>
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<td>Photograph booklet for IMAI</td>
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<tr>
<td>Inpatient guide for facilitators / clinical instructors</td>
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<td>Inpatient guide for participants</td>
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<tr>
<td>Mother's Card</td>
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<tr>
<td>Videotapes:</td>
<td>(The Course Director will inform you where your small group will view the video)</td>
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<tr>
<td>WHO Generic IMCI video and IMCI HIV video</td>
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<tr>
<td>Video recorder and TV monitor</td>
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<tr>
<td>Set of 4 WHO/UNICEF IMCI Case Management Charts</td>
<td>2 sets for each small group</td>
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<tr>
<td>(Large version -- to display on the wall)</td>
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<tr>
<td>Sick child recording forms (for exercises in modules 1-4)</td>
<td>5 for each participant plus some extras</td>
</tr>
<tr>
<td>Young Infant Recording Forms (for exercises in modules 1-4)</td>
<td>5 for each participant plus some extras</td>
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</table>
A checklist of the specific materials required (taken from the above list) is provided at the beginning of each module. Before you begin each day’s module, make sure you prepare all materials and information you need for leading the discussions, drills and demonstrations.

You will also need to use the checklist of supplies, as outlined in the IMCI Facilitators Guide. This list is repeated below, to remind you of its contents.

**CHECKLIST OF SUPPLIES NEEDED FOR WORK ON MODULES**

Supplies needed for each person include:

* name tag and holder  
* paper  
* ball point pen  
* eraser  
* felt tip pen  
* highlighter pen  
* 2 pencils  
* folder or large envelope to collect answer sheets

Supplies needed for each group include:

* paper clips  
* pencil sharpener  
* stapler and staples  
* extra pencils and erasers  
* flipchart pad and markers OR blackboard and chalk  
* 2 rolls transparent tape  
* rubber bands  
* 1 roll masking tape  
* scissors
FACILITATOR GUIDELINES FOR

INTRODUCTION
This module provides basic information about the general objectives of this course, how it relates to IMCI and IMAI and the methods that will be used in the course.

The table below lists the procedures that you should follow when facilitating the Introduction module.

<table>
<thead>
<tr>
<th>PROCEDURES</th>
<th>FEEDBACK</th>
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<tbody>
<tr>
<td>1. Introduce yourself and ask participants to briefly introduce each other (see suggested ice-breaker on next page). Hand out name cards.</td>
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<tr>
<td>2. Ask participants to state where they work and to describe briefly their responsibility for care of sick children.</td>
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<tr>
<td>3. Perform any necessary administrative tasks and distribute the Introduction module and the chart booklet.</td>
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<tr>
<td>4. Introduce the course and modules</td>
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<tr>
<td>5. Explain your role as facilitator.</td>
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<tr>
<td>6. Ask participants to read through the Introduction. Explain that the Introduction also contains a glossary of terms and definitions used in IMCI and in this course. Participants should refer to this glossary when they have difficulty understanding a term used in this course.</td>
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<tr>
<td>7. Answer participants’ questions</td>
<td>Group</td>
</tr>
</tbody>
</table>
1. INTRODUCTION OF YOURSELF AND PARTICIPANTS

If participants do not know you or do not know each other, introduce yourself and other facilitators as facilitators of this course and write your names on the blackboard or flipchart.

Next, as an ice-breaker, invite the group to come up with ideas about what they would like to know about someone when they meet them for the first time. Write their responses on the flip chart, e.g., name, age, where they come from, what they do, marital status, do they have children, what they like to do in their free time.

Tell participants that they will have the task of introducing each other to the rest of the group. Ask participants to turn to the person on their right and spend the next 3 minutes talking with each other, and finding out what they want to know when they meet for the first time.

Give the first pair a box of wooden matches. Standing up, they will introduce their partner in the time it takes for the match to burn, selecting what they think is especially important or interesting about their partner. The participants continue in this way around the room until each participant has introduced their partner.

In addition to the introductions, give each participant a piece of card. Ask them to fold it in half lengthwise and write their name on the card. They should then place the card on the desk in front of them so that other participants (and facilitators) can see their name.

2. ADMINISTRATIVE TASKS

There may be some administrative tasks or announcements that you should address. For example, you may need to explain the arrangements that have been made for lunches, the daily transportation of participants from their lodging to the course, or payment of per diem.

3. INTRODUCTION TO THIS COURSE AND TO THE MODULE

Distribute a copy of the Introduction module to each participant. Explain that this introductory module is short, with the aim of briefly describing how this course fits in with IMCI and IMAI and of outlining the course objectives, methods and materials. Tell them that before they read through the introductory module, you will run through the purpose and the objectives of the course, and where the course fits in with the standard IMCI case management course.
Explain that this course is presented in four modules:

Module 1: Focuses on exercises to recap participants’ knowledge of IMCI. Recent technical updates to IMCI are also introduced in this module.

Module 2: Focuses on assessing and classifying a child for HIV infection and treating and preventing illness in children born to HIV positive women.

Module 3: Focuses on counselling HIV positive women.

Module 4: Focuses on chronic care and follow-up of children born to HIV positive women.

**Explain the purpose of this course:**

Explain to participants that this course is for doctors, clinical officers, nurses and other health workers who see sick children and infants at a first level facility such as a clinic or health centre or outpatient department of a hospital. The course uses ‘clinic’ throughout to mean any such setting.

The course has been designed to build upon and complement the existing IMCI case management course and assumes that participants will have already completed the IMCI course. Participants will learn how to assess, classify and manage HIV exposed and infected children according to the case management charts included in their chart booklets. They will already be familiar with the basic IMCI chart booklets, but through this course will learn the specific HIV adaptations.

Outline the objectives of the course:

The IMCI Complementary Course on HIV specifically aims to increase participants’ knowledge on:

- assessing and classifying young infants (aged up to 2 months) and children (aged 2 months up to 5 years) for HIV-infection
- assessing, classifying and managing common illnesses and opportunistic infections in young infants and children with HIV classifications including POSSIBLE HIV INFECTION / HIV-EXPOSED, SUSPECTED SYMPTOMATIC HIV INFECTION or CONFIRMED HIV INFECTION
- preventing illnesses in young infants and children born to an HIV positive mother
- communication skills and counselling the HIV positive mother around infant feeding options
- follow-up of HIV exposed infants and children, including chronic care, clinical staging and initiation of antiretroviral therapy
IMPORTANT NOTE: Ensure that the participants understand the following:

Whilst the principles of IMCI are based on children under 5, much of the principles around assessment, treatment, counselling and follow-up of pneumonia, diarrhoea, malaria, measles and malnutrition and HIV are also applicable to older children. Much of the information on assessment of HIV infection and treatment for opportunistic infections is the same except for dosages. The principles of counselling are similar but the content, for example, on infant feeding will vary by age. The principles of chronic HIV care, antiretroviral drugs, their side effects and management of side effects are also similar. There are, however, notable exceptions, including:

- The cut-off rates for determining fast breathing would be different, because normal breathing rates are slower in older children
- Drug dosing tables for ARVs and other medicines only apply for children up to 5 years of age

**Explain how the course is structured:**

Distribute copies of the IMCI for High HIV Settings Chart Booklet, the course module booklets and photo booklet. Tell participants that this course adopts a participatory and interactive approach, built around the information contained in the chart booklets and the module booklets. Explain that these booklets, are theirs to keep. As they read, they can highlight important points or write notes on the pages if they wish.

Participants will learn through a combination individual reading, group discussion, written exercises, short answer exercises, facilitator-led drills, video exercises and demonstrations within clinical instruction sessions.

Tell participants that the course draws upon information presented in the IMCI case management course and the IMAI course. Ask them to have the following materials available for cross-reference throughout the course:

- The IMCI chart booklet
- The IMCI photograph booklet
- The IMCI guide for clinical practice in the inpatient ward
- The IMAI participants manual on acute care
- The IMAI photograph booklet
Explain that the modules use three symbols to indicate the different types of exercise:

- **Written exercise**

- **Video or photograph exercise**

Tell participants that they will meet 4 children at different time points as they go through the course: Mishu, aged 3 months, Dan, aged 9 months, Ebai, aged 2 weeks and Henri aged 3 weeks. These children will help them to learn how to assess, classify and follow-up HIV exposed infants and children.

Finally, explain that once participants have completed this course, they will receive a follow-up visit and regular supervision, as for IMCI. The person who does the supervisory visits for this course is likely to be the person who is already doing the IMCI supervisory visits. These visits are intended to be supportive and to help participants with any difficulties that they face with implementing what they have learnt when they return to their clinics.
4. **EXPLANATION OF YOUR ROLE AS FACILITATOR**

Explain to participants that, as facilitator (and along with your co-facilitator, if you have one), your role throughout this course will be to:

* guide them through the course activities
* answer questions as they arise
* clarify any information that they may find confusing
* give individual feedback on exercises where indicated
* lead group discussions, drills, video exercises and role plays
* prepare them for each clinical session (explain what they will do and what to take)
* demonstrate tasks during outpatient sessions
* observe and help them as needed during their practice in outpatient sessions

Explain that participants should work both individually and in small groups to encourage learning through sharing of experiences. Answers to exercises and results of small group discussions will also be discussed in plenary sessions with the whole group.

5. **BRIEF DESCRIPTION OF PARTICIPANTS’ RESPONSIBILITY FOR CARE OF SICK CHILDREN**

If you do not already know the participants, explain to them that you would like to learn more about their responsibilities for caring for sick children. This will help you understand their situations and be a better facilitator for them. For now, you will ask each of them to describe where they work and what their job is. During the course you will further discuss what they do in their clinic.

Begin with the first person listed on the flipchart and ask the two questions below. Note the answers on the flipchart.

* What is the name of the clinic where you work?
* What is your training or position?

Note: Ask the questions and have each participant answer you, as in a conversation. It is very important at this point that the participant feels relaxed and not intimidated or
put on the spot. Do not, for example, ask the participants to stand up when they give their answers. Though it may be interesting to you to ask the participant more questions about his responsibilities, do not do that now. You will find out more about each participant during the rest of the course.

6. ASK PARTICIPANTS TO READ THROUGH THE MODULE

Now ask the participants to read the first few pages of the Introduction module, which provide some background on the magnitude of HIV/AIDS in children and reiterates the learning objectives and the structure of the course. Tell them that they should stop reading when they reach the glossary, explaining that this provides a glossary of terms, including definitions that are used during this IMCI Complementary course on HIV.

Note: Do not review the Glossary or discuss any questions about definitions in the Glossary at this point. Tell the participants that if they need help understanding a word when it is used in a module, they should refer to the Glossary. They can also ask a facilitator for explanation if needed.

7. ANSWER ANY QUESTIONS

Once participants have read through the Introduction module, initiate a short discussion, and allow time to answer any participants’ questions.

When there are no more questions, tell participants that they are ready to begin the first module: Recap and technical updates of IMCI.
MODULE 1: RECAP AND TECHNICAL UPDATES ON IMCI
FACILITATOR GUIDELINES

RECAP AND TECHNICAL UPDATES ON IMCI

<table>
<thead>
<tr>
<th>PROCEDURES</th>
<th>FEEDBACK</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Prepare to facilitate Module 1. Ensure that all items required are</td>
<td>--------------</td>
</tr>
<tr>
<td>ready (see next page for full description):</td>
<td></td>
</tr>
<tr>
<td>2. Introduce the module, then participants read the</td>
<td>--------------</td>
</tr>
<tr>
<td>Introduction and Learning Objectives</td>
<td></td>
</tr>
<tr>
<td>3. Participants review the IMCI algorithm</td>
<td>Group</td>
</tr>
<tr>
<td>4. Participants do all the exercises in section 3:</td>
<td>Individual and</td>
</tr>
<tr>
<td>• Written exercise A</td>
<td>group</td>
</tr>
<tr>
<td>• Video Exercise A</td>
<td></td>
</tr>
<tr>
<td>5. Guide participants through section 4: a further recap on IMCI and</td>
<td>Individual and</td>
</tr>
<tr>
<td>technical updates. Take them through a drill on each sub-section.</td>
<td>group</td>
</tr>
<tr>
<td>6. Participants do the following exercises:</td>
<td>Individual and</td>
</tr>
<tr>
<td>• Short answer exercise A: Treat the child and counsel the mother</td>
<td>group</td>
</tr>
<tr>
<td>• Short answer exercise B: Follow-up</td>
<td></td>
</tr>
<tr>
<td>7. Summary of module, questions and close</td>
<td>Individual and</td>
</tr>
<tr>
<td></td>
<td>group</td>
</tr>
</tbody>
</table>
1. PREPARE TO FACILITATE MODULE ONE

Module 1 recaps on IMCI and provides participants with information about IMCI technical updates. As this course is mainly about assessing, treating, counselling and following up children born to HIV-infected mothers, you should complete module 1 during the first morning of the course so that you have enough time for the other modules.

Prepare the materials required:

For the video exercises: Depending on arrangements made by your course director, you will either show the video in the same room where the participants work on their modules or take the participants to another room at a scheduled time. To conduct video exercises, make sure the following supplies and information are available:

* a copy of the videotape / DVD
* videotape/DVD player
* video monitor (a television set with wires to connect it to the videotape player)
* instructions for operating the videotape player including how to turn the player on and off and how to rewind or fast forward the videotape to specific exercises/locations.
* location of electrical sockets
* extension cable/ adaptor plug if necessary
* any particular time during the work period when power may not be available

For exercises: Each participant will require:

* at least 2 RECORDING FORMS for management of the sick child aged 2 months up to 5 years (updated forms that include HIV assessment)
* at least 2 RECORDING FORMS for management of the sick young infant.

You will need to provide individual and group feedback for each exercise. Try and provide feedback as soon as a participant has finished an exercise or part of an exercise to make sure that he understands what he is doing before he proceeds to the next exercise. Make sure that you read through all the answers to the exercises and that you understand all the answers before you facilitate the module.

For demonstrations: Demonstrations will be used to illustrate technical updates on IMCI; hence each facilitator should have a copy of the ‘Technical Updates of the Guidelines on the Integrated Management of Childhood Illness (IMCI): Evidence and recommendations for further adaptations’ (WHO, 2005).

Additionally, you will need to provide enlargements of the following:

* the PNEUMONIA section of page 2 (cough and difficulty breathing) of the
IMCI chart booklet
* the treatment sections of the DIARRHOEA page of the IMCI chart booklet
* the cough and difficulty breathing section of the RECORDING FORM for the sick child aged 2 months up to 5 years

You will put the enlargements up on the wall of the teaching room as a means of focusing participants' attention on the technical updates that you will introduce to them.

NOTE: within this course you will not conduct demonstrations on the IMCI case management process, since this is fully covered in the IMCI case management course.

If you are using laminated Facilitator Aids, you will also need:
* a special pen for writing on laminated enlargements
* a cloth or other material for erasing your writing after you have completed a demonstration

For drills: To lead drills, use the information provided in these guidelines. When the drills are conducted, participants may use their chart booklets or the wall charts.

* Participants will require weight for age charts (found on the back cover of the chart booklet) in order to complete the last drill in this module.

For photograph exercises:
* Make sure you have enough copies of the IMCI photograph booklets and photograph booklets on skin and mouth conditions to give one to each participant or small group.

For chart booklets to use in clinical sessions: All participants should receive an IMCI chart booklet for high HIV settings. They will refer to this chart booklet throughout this course, during classroom sessions and during the clinical practice.

* Make sure you have enough chart booklets on Day 1

Finally, plan how to organise participants:

This module would be easiest to conduct if the class is divided into small groups, each with 4-5 participants. Try to ensure that each group comprises participants with different levels of skill or who have been trained in IMCI at different times.
Guidelines for leading the module RECAP AND TECHNICAL UPDATES ON IMCI begin below.

2. INTRODUCE THE MODULE

Orientate the participants to Module one:

- Explain that the first two sections of Module 1 are the Introduction and Learning Objectives. Participants should read through these 2 sections individually or in small groups.

- Section 3 comprises four written exercises (case studies) and a video exercise, each of which should be completed individually before discussing in plenary with the rest of the group. These exercises will help participants to recap the principles of IMCI.

- Section 4 is comprised of a further recap on IMCI and an opportunity to provide technical updates based on a recent WHO review. The section includes the practice of drills and two short answer exercises which should be done in small groups. These exercises will help participants to further recap the principles of IMCI and ensure that they have fully understood the technical updates presented to them.

Next:

ASK PARTICIPANTS TO READ THROUGH THE INTRODUCTION AND LEARNING OBJECTIVES

Do not allow more than 10 minutes for this.
Once participants have completed reading these sections answer any questions.

Learning Objectives:

By the end of the module, participants should have:

- Recapped the full IMCI case management process and be able to describe how to:
  - Assess sick young infants (aged up to 2 months) and children (aged 2 months up to 5 years)
  - Classify their illness
  - Treat the child, and refer if necessary
  - Counsel the mother
  - Plan for follow-up
  - Accurately complete recording forms
• Correctly use the IMCI chart booklet

• Understood the latest IMCI technical updates and be able to describe them, including updates around:
  – Treatment of pneumonia, with or without wheezing
  – ORS and zinc for dehydration
  – Home treatment of diarrhoea
  – Treatment for dysentery
  – Treatment of fever / malaria
  – Treatment of chronic ear infection
  – Vitamin A for treatment of malnutrition
  – New algorithm for the sick young infant

3. PARTICIPANTS WORK THROUGH WRITTEN EXERCISE A AND VIDEO EXERCISE A TO RECAP THE PRINCIPLES OF IMCI

Section 3 comprises a written exercise and a video exercise designed to help participants recap the principles of IMCI.

Explain to participants that before starting Written Exercise A, you would like to review the IMCI algorithm with them. Ask participants to assemble around the wall chart and run through the algorithm together.

WRITTEN EXERCISE A

Introduce written exercise A. In this exercise, participants will meet the four children mentioned in the introductory section – Mishu, Dan, Ebai and Henri – for the first time. Ask participants to read through the four case studies and to go through a process of assessment, classification, treatment, counselling and follow-up for each of the children, recording the process on the recording forms.

Distribute at least 2 sick child RECORDING FORMS and at least 2 SICK YOUNG INFANT RECORDING FORMS to each participant, explaining that they will use these for written exercise A.

Before starting the exercise, ask participants to look at the forms and to take note of the fact that these Recording Forms differ from the original IMCI Recording Forms, as they have been adapted to include assessment of HIV. The SICK CHILD recording form has a section entitled ‘Check for HIV infection’ and the SICK YOUNG INFANT form has a question regarding the mother’s HIV status. Tell participants
that these sections of the recording forms will not be used in this module, but we will go on to look at them in Module 2.

Next, explain that participants should attempt each exercise individually. Once they have completed each case, they may discuss the answers with other members of their small group, or with a facilitator, before proceeding to the next case.

While participants are doing the exercises, facilitators should circulate and provide explanations, assistance and individual feedback to participants.

Once participants have completed all the written exercises, go through each case providing the classifications and highlighting the common mistakes that you noticed while you were providing individual feedback.

Tell participants to keep the recording forms and classifications for each child in a safe place because they will be needed again for written exercise B in Module 2.

The answers to the written exercises are provided on the following pages.
**MANAGEMENT OF THE SICK CHILD AGE 2 MONTHS UP TO 5 YEARS**

**Name:** Mabel  
**Age:** 2 months  
**Weight:** 5.5 kg  
**Temperature:** 38°C  
**AD: What are the child's problems?** diarrhoea, fever

**ASSESS (Circle all signs present):**

<table>
<thead>
<tr>
<th>SIGN</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DOES THE CHILD HAVE COLD OR DIFFICULT BREATHING?</strong></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>For how long?</td>
<td>Days</td>
<td></td>
</tr>
<tr>
<td><em>Look for shallow breathing.</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Look for difficult breathing.</em></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SIGN</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DOES THE CHILD HAVE DIARRHOEA?</strong></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>For how long?</td>
<td>Days</td>
<td></td>
</tr>
<tr>
<td><em>Look for fever.</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Look for increased bowel movements.</em></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SIGN</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DOES THE CHILD HAVE FEVER?</strong></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>For how long?</td>
<td>Days</td>
<td></td>
</tr>
<tr>
<td><em>Look for increased body temperature.</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Look for increased sweating.</em></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SIGN</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DOES THE CHILD HAVE AN EAR PROBLEM?</strong></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>For how long?</td>
<td>Days</td>
<td></td>
</tr>
<tr>
<td><em>Look for redness.</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Look for pain.</em></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SIGN</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CHECK FOR MALNUTRITION AND ANEMIA</strong></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td><em>Look for anemia.</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Look for malnutrition.</em></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**CHECK FOR HIV INFECTION**

- HIV tested before: (unknown)  
  - Positive:  
  - Negative:  
  - Unknown:  

- If HIV test or blood result is unknown, keep the child on HIV prophylaxis until result is known.

**CHECK THE CHILD'S FEEDING STATUS**

- Return for feed: immunization on:  
  - 4 weeks  
  - 6 months  
  - 12 months  
  - 24 months  
  - 36 months  

<table>
<thead>
<tr>
<th>SIGN</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DOES CHILD FEED MIXED OR VERY LOW WEIGHT</strong></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>For how long?</td>
<td>Days</td>
<td></td>
</tr>
<tr>
<td><em>Look for anorexia.</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Look for reduced appetite.</em></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**ASK OTHER PROBLEMS:**

- Ask about mothers own health: Time:
# Management of the Sick Child Age 2 Months up to 3 Years

**Name:** [Blank]

**Age:** [Blank] months

**Weight:** 5.5 kg

**Temperature:** 39.3°C

**ASK:** What are the child's problems? [Check all that apply]

- [ ] Difficulty breathing
- [ ] Diarrhea
- [ ] Fever
- [ ] Vomiting

**ASSESS** (Circle all signs present)

- Difficulty breathing
- Diarrhea
- Fever
- Vomiting

**CLASSE**

- [ ] Pneumonia
- [ ] Some dehydration
- [ ] Severe paralytic disease
- [ ] Malaria

**CHECK FOR GENERAL DANGER SIGNS**

| Yes | No | Remember to add design age + 2
day sickness classification |
|-----|----|---------------------------|

**DOES THE CHILD HAVE COUGH OR DIFFICULT BREATHING?**

- [ ] Yes
- [ ] No

**DOES THE CHILD HAVE DIARRHEA?**

- [ ] Yes
- [ ] No

**DOES THE CHILD HAVE FEVER?**

- [ ] Yes
- [ ] No

**THEN CHECK FOR MALNUTRITION AND ANEMIA**

- [ ] Yes
- [ ] No

**CHECK FOR INFECTION**

<table>
<thead>
<tr>
<th>Present</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ]</td>
<td></td>
</tr>
</tbody>
</table>

**CHECK THE CHILD'S IMMUNIZATION STATUS**

<table>
<thead>
<tr>
<th>Date</th>
<th>Vaccine</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ]</td>
<td></td>
</tr>
</tbody>
</table>

**ASSESS CHILD'S FEEDING if child has ANOREXIA OR VERY LOW WEIGHT OR is less than 2 years old**

- [ ] Yes
- [ ] No

**ASSESS OTHER PROBLEMS**

- [ ] Enquiry about mothers own health: [Blank]
**MANAGEMENT OF THE SICK YOUNG INFANT AGE 1 WEEK TO 2 MONTHS**

<table>
<thead>
<tr>
<th>CHECK FOR POSSIBLE BACTERIAL INFECTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Has the infant had convulsions? <strong>No</strong></td>
</tr>
<tr>
<td>- Count the breaths in one minute. <strong>32</strong> breaths per minute. Repeat if elevated.  Fast breathing?</td>
</tr>
<tr>
<td>- Look for severe chest inreaasing.</td>
</tr>
<tr>
<td>- Look for nasal flaring.</td>
</tr>
<tr>
<td>- Look and listen for grunting.</td>
</tr>
<tr>
<td>- Look and feel for bulging fontanelle.</td>
</tr>
<tr>
<td>- Look for pus draining from the ear.</td>
</tr>
<tr>
<td>- Look at the umbilicus. Is it red or draining?</td>
</tr>
<tr>
<td>- Does the redness extend to the skin?</td>
</tr>
<tr>
<td>- Fever: (temperature 37.5°C or above or feels hot or low body temperature (below 35.5°C or feels cool?))</td>
</tr>
<tr>
<td>- Look for skin pustules. Are there many or severe pustules?</td>
</tr>
<tr>
<td>- See if the young infant is lethargic or unconscious.</td>
</tr>
<tr>
<td>- Look at young infant’s movements. Less than normal?</td>
</tr>
</tbody>
</table>

**LOCAL BACTERIAL INFECTION**

<table>
<thead>
<tr>
<th>DOES THE YOUNG INFANT HAVE DIARRHOEA?</th>
</tr>
</thead>
<tbody>
<tr>
<td>- For how long? <strong>3</strong> Days</td>
</tr>
<tr>
<td>- Is there blood in the stool?</td>
</tr>
<tr>
<td>- Look at the infant’s general condition. Is the infant:</td>
</tr>
<tr>
<td>- Lethargic or unconscious?</td>
</tr>
<tr>
<td>- Restless and irritable?</td>
</tr>
<tr>
<td>- Look at the mouth:</td>
</tr>
<tr>
<td>- Look for swarthy eyes.</td>
</tr>
<tr>
<td>- Pick the skin of the abdomen. Does it go back:</td>
</tr>
<tr>
<td>- Very slowly longer than 2 seconds?</td>
</tr>
<tr>
<td>- Slowly?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>THEN CHECK FOR FEEDING PROBLEM OR LOW WEIGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Is there any difficulty feeding? <strong>Yes</strong> No</td>
</tr>
<tr>
<td>- Is the infant breastfed? <strong>Yes</strong> No</td>
</tr>
<tr>
<td>- If Yes, how many times in 24 hours? <strong>3</strong> Times</td>
</tr>
<tr>
<td>- Does the infant usually receive any other foods or drinks? <strong>Yes</strong> No</td>
</tr>
<tr>
<td>- If Yes, how often?</td>
</tr>
<tr>
<td>- What do you use to feed the child?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Feeding Problem and Low Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>If the infant has any difficulty feeding, <strong>feeding less than 8 times</strong> in 24 hours, is taking any other food or drinks, or is <strong>low weight for age</strong> and has no indications to refer urgently to hospital</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ASSESS BREASTFEEDING</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Has the infant breastfed in the previous hour?</td>
</tr>
<tr>
<td>- If infant has not fed in the previous hour, ask the mother to put her infant to the breast. Observe the breastfeeding for 4 minutes.</td>
</tr>
<tr>
<td>- Is the infant able to attach? To check attachment, look for:</td>
</tr>
<tr>
<td>- Chin touching breast <strong>Yes</strong> No</td>
</tr>
<tr>
<td>- Mouth wide open <strong>Yes</strong> No</td>
</tr>
<tr>
<td>- Lower lip turned outward <strong>Yes</strong> No</td>
</tr>
<tr>
<td>- More area above than below the mouth <strong>Yes</strong> No</td>
</tr>
<tr>
<td>- Look for attachment to breast</td>
</tr>
<tr>
<td>- no attachment at all not well attached <strong>good attachment</strong></td>
</tr>
<tr>
<td>- Is the infant suckling effectively that is, slow deep sucks, sometimes pausing?</td>
</tr>
<tr>
<td>- not suckling at all not sucking effectively <strong>suckling effectively</strong></td>
</tr>
<tr>
<td>- Look for blisters or white patches in the mouth (thrush).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CHECK THE YOUNG INFANT’S IMMUNIZATION STATUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Close immunizations needed today.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DTP</th>
<th>DPT 1</th>
<th>DPT 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>ASSESS OTHER PROBLEMS:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Return for next immobilization at 6 weeks of age.</td>
</tr>
</tbody>
</table>

(Date)
**MANAGEMENT OF THE SICK YOUNG INFANT AGE 1 WEEK UP TO 2 MONTHS**

Name: **Henri**  
Age: **3 weeks**  
Weight: **3.6 kg**  
Temperature: **36.5°C**

ASK: What are the infant’s problems?  
- **Difficulty breathing**  

**ASSESS (Circle all signs present)**

<table>
<thead>
<tr>
<th>CHECK FOR POSSIBLE BACTERIAL INFECTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Has the infant had convulsions?</td>
</tr>
<tr>
<td>- Count the breaths in one minute. <strong>24</strong> breaths per minute. Repeat if elevated.</td>
</tr>
<tr>
<td>- Look for severe chest indrawing.</td>
</tr>
<tr>
<td>- Look for fetal breathing.</td>
</tr>
<tr>
<td>- Look and listen for grunting.</td>
</tr>
<tr>
<td>- Look and feel for bulging fontanelle.</td>
</tr>
<tr>
<td>- Look for pus draining from the ear.</td>
</tr>
<tr>
<td>- Look at the umbilicus. Is it red or draining pus?</td>
</tr>
<tr>
<td>- Does the redness extend to the skin?</td>
</tr>
<tr>
<td>- Fever temperature 37.5°C or above or feels hot or low body temperature below 36.5°C or feels cold?</td>
</tr>
<tr>
<td>- Look for skin pustules. Are there many or severe pustules?</td>
</tr>
<tr>
<td>- See if the young infant is lethargic or unconscious.</td>
</tr>
<tr>
<td>- Look at young infant’s movements. Less than normal?</td>
</tr>
</tbody>
</table>

**CLASSIFY**  
- **Possible Serious Bacterial Infection**

**DOES THE YOUNG INFANT HAVE DIARRHOEA?**  
- For how long? **8 days**  
- Is there blood in the stool?  
- Look at the infant’s general condition. Is the infant: Lethargic or unconscious? 
- Restless and irritable? 
- Look for sunken eyes. 
- Pinch the skin of the abdomen. Does it go back: Very slowly longer than 2 seconds? 

**YES**  

**NO**

**SLOWLY**

**THEN CHECK FOR FEEDING PROBLEM OR LOW WEIGHT**

- Is there any difficulty feeding? **Yes**  
- Is the infant breastfed? **Yes**  
- If yes, how many times in 24 hours? **8 times**  
- Does the infant usually receive any other foods or drinks? **Yes**  
- If yes, how often?  
- What do you use to feed the child?  

**Determine weight for age.**  
- **Low**  
- **Not low**

**RETURN TO FEEDING PROBLEM**

If the infant has any difficulty feeding, is feeding less than 8 times in 24 hours, is taking any other food or drinks, or is low weight for age AND has no indications to refer urgently to hospital.

**ASSESS BREASTFEEDING:**

- Has the infant breastfed in the previous hour?  
- If infant has not fed in the previous hour, ask the mother to put her infant to the breast. Observe the breastfeed for 4 minutes.

**Is the infant able to attach?**

- Chin touching breast: **Yes**  
- Mouth wide open: **Yes**  
- Lower lip turned outward: **Yes**  
- More areola above than below the mouth: **Yes**  

**no attachment at all**  
**not well attached**  
**good attachment**

- Is the infant sucking effectively (that is, slow deep sucks, sometimes pausing)?  
- not sucking at all  
- not sucking effectively  
- sucking effectively

- Look for ulcers or white patches in the mouth (thrush).

**CHECK THE YOUNG INFANT’S IMMUNIZATION STATUS**  
Circle immunizations needed today.

- **BCG**  
- **DPT 1**  
- **DPT 2**  
- **OPV 0**  
- **OPV 1**  
- **OPV 2**

**Return for next immunization**

- at weeks  
- at age

**ASSESS OTHER PROBLEMS:**
VIDEO EXERCISE A

Once participants have completed the written case studies, ask them to work individually through a video exercise, ‘Martha’ which demonstrates the whole IMCI algorithm. Ask them to record Martha’s signs, classifications and management on a Recording Form. Once they have completed the task individually they will discuss it in a plenary with the whole group.

Exercise T (WHO IMCI video/DVD): “Martha”

The answers are provided on the following page.

NOTE: This exercise assumes that participants have already completed an IMCI training course. If they have not had previous IMCI experience, you might need to give them additional video exercises in such areas such as assessing fast breathing, chest indrawing and signs of dehydration in diarrhoea.
**MANAGEMENT OF THE SICK CHILD AGE 2 MONTHS UP TO 5 YEARS**

**Child's Name:** Martha  
**Age:** 4 years  
**Weight:** 15 kg  
**Temperature:** 38°C

**ASK:** What are the child's problems?  
**Cold cough**

**Initial weight/vital signs read:**  

**CHECK FOR GENERAL DANGER SIGNS**  
**COLD Cough: NOT ABLE TO DRINK OR BREASTFEED, VOMITS EVERYTHING**

**LETHARGIC OR UNCONSCIOUS**

**General danger signs present? Yes ☒ No**  
**Remarks on rule danger signs when assessing classifications**

**DOES THE CHILD HAVE COUGH OR DIFFICULT BREATHING?**

- **Yes ☒ No**
  - **Cough:** the breaths in one minute  
  - **Troubled breathing:**  
  - **Look for chest:** breathing per minute  
  - **Look for cyanosis:**  
  - **Look and listen for:***

**DOES THE CHILD HAVE DIARRHOEA?**

- **Yes ☒ No**
  - **Look at the child’s general condition:**  
  - **Is the child lethargic or unconscious?**  
  - **Faint and cyanosed:**  
  - **Look for:***
  - **Other cases fluid:** Is the child not able to drink or drinking poorly?  
  - **Coughing:** yes/no  
  - **Push the arm of the abdomen. Does it go back?**  
  - **Keep it:**

**DOES THE CHILD HAVE FEVER?**

- **Yes ☒ No**
  - **Malaria:**
  - **Measles:**
  - **Small child:**
  - **Large child:**
  - **Vomiting:**
  - **Look for:***

**DOES THE CHILD HAVE AN EAR PROBLEM?**

- **Yes ☒ No**
  - **Look for:***
  - **Examining the ear:**
  - **Feel for:***

**THEN CHECK FOR MALNUTRITION AND ANAEMIA**

- **Look for:***
  - **Anemia:**
  - **Low weight:**
  - **Low weight:**

---

**CHECK THE CHILD'S IMMUNIZATION STATUS**

**Return for next immunization visit:**

**ASSESS CHILD’S FEEDING**

- **Low weight:**
  - **Is the child:**
  - **Crying:**
  - **Vomits:**
  - **Have you breastfed your child?**
  - **How long:**
  - **Has the child:**
  - **Fed:**

**ASSESS OTHER PROBLEMS:**

---

**35**
4. GUIDE PARTICIPANTS THROUGH FURTHER RECAP OF IMCI INCLUDING TECHNICAL UPDATES

In this section, you will guide the participants through a review of the IMCI algorithm using the wall chart and the chart booklet. The wall chart should have the technical updates included. Any areas of weakness identified, based on the previous written exercises, will be discussed and clarifications made. As you progress through each sub-section, orientate the participants to the technical updates outlined below, based upon a recent WHO review of evidence.

At the end of each sub-section, take participants through a drill, in order to practice recalling the information that they need to use when assessing and classifying sick children, and to help them to digest the new changes.

Allow time for questions and discussion as you proceed through the section.

Guideline on how to conduct a drill (using the example of general danger signs):

1. Tell participants that you will now conduct a drill.

2. Explain the procedures for doing the drill. Tell participants:
   - This is not a test. The drill is an opportunity for participants to practice recalling the information that a health worker needs to use when assessing and classifying sick children.
   - You will call on individual participants one at a time to answer the questions. You will usually call on them in order, going around the table. If a participant cannot answer, go to the next person and ask the question again.
   - Participants should wait to be called upon and should be prepared to answer as quickly as they can. This will help keep the drill lively.

3. Ask if participants have any questions about how to do the drill.

4. Allow participants to review the assessment steps for a few minutes before the drill begins. Participants should look on the chart and review the steps for, for example, checking for general danger signs

   Tell the participants that they may refer to the chart during the drill, but they should try to answer the question without looking at or reading from the chart.

5. Start the drill by asking the first question. Call on a particular participant to
provide the answer. He should answer as quickly as he can. Then ask the next question and call on another participant to answer. If a participant gives an incorrect answer, ask the next participant if he can answer.

6. Keep the drill moving at a rapid pace. Repeat the list of questions or make up additional questions if you think participants need extra practice.

The drill ends when all the participants have had an opportunity to answer and when you feel the participants are answering with confidence.

4.1 DANGER SIGNS

Ask participants to read through the short paragraph on danger signs and then take them through the following drill:

<table>
<thead>
<tr>
<th>QUESTIONS</th>
<th>ANSWERS</th>
</tr>
</thead>
</table>
| A child is aged 2 months up to 5 years. What are the 4 steps for checking for general danger signs? | - Ask if the child is able to drink or breastfeed  
- Ask if the child vomits everything  
- Ask if the child has had convulsions  
- Look to see if the child is lethargic or unconscious  
- Look to see if the child is convulsing now? |
| How do you decide if the child:  
--Is not able to drink or breastfeed? | The child is not able to drink at all. The child may be too weak to drink when offered fluids or not able to suck or swallow when offered a drink or breast milk. |
| --Vomits everything? | The child is not able to keep anything down at all. What goes down comes back up. |
| --Has had convulsions? | The mother reports that the child has had "fits" or "spasms." She may use another word for convulsions or say that the child had uncontrolled jerky movements with loss of consciousness. |
-- Is convulsing now?  
Mother may be holding a child convulsing now with abnormal movements "fits" or "spasms, not responding to questions and commands.

--Is lethargic?  
The lethargic child is sleepy when he should be awake. The child may stare blankly and appear not to see what is going on around him.

--Is unconscious?  
The unconscious child does not waken at all. He does not respond to touch or to loud noises.

### 4.2 COUGH OR DIFFICULT BREATHING

Orientate participants to the technical updates for wheezing and pneumonia.

Ask participants to open their IMCI chart booklet to the page on cough and difficulty breathing. Ask them to remind themselves of the cut-offs for fast breathing for all age groups:

<table>
<thead>
<tr>
<th>Cut-offs for fast breathing</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>If the child is:</td>
<td>Fast breathing is:</td>
</tr>
<tr>
<td>Up to 2 months</td>
<td>60 breaths per minute and repeated twice</td>
</tr>
<tr>
<td>2 months up to 12 months</td>
<td>50 breaths per minute or more</td>
</tr>
<tr>
<td>12 months up to 5 years</td>
<td>40 breaths per minute or more</td>
</tr>
</tbody>
</table>

Now conduct a demonstration by asking participants to come to the wall chart on cough and difficulty breathing.

Point out that the WHO recommended duration of treatment for PNEUMONIA has been changed to 3 days (from 5 days) in countries with low HIV prevalence after a review of evidence. In countries with high HIV prevalence, recommended duration of treatment remains 5 days.
Also point out that the WHO recommends the addition of wheezing into the cough or difficult breathing page. Thus there is a new chart that classifies for wheezing:

| Any general danger sign - | Give first dose of an appropriate antibiotic IM |
| Chest indrawing or Stridor in calm child | Assess for HIV infection |
| SEVERE PNEUMONIA OR VERY SEVERE DISEASE | If wheezing give a trial of rapid acting inhaled bronchodilator up to 3 cycles before classifying severe pneumonia |
| Refer URGENTLY to hospital |

| Fast breathing | PNEUMONIA |
| Give oral antibiotic for 5 days |
| If wheezing give a trial of rapid acting bronchodilator for up to 3 cycles before classifying pneumonia. If wheezing give an inhaled bronchodilator for 5 days* |
| If recurrent wheezing refer for an assessment |
| Soothe the throat and relieve the cough with a safe remedy |
| Check for HIV infection |
| If coughing for more than 30 days refer for possible TB or asthma |
| Advise the mother when to return immediately |
| Follow-up in 2 days |

| No signs of pneumonia or very severe disease | COUGH OR COLD |
| If wheezing give an inhaled bronchodilator for 5 days* |
| If recurrent wheezing refer for an assessment |
| Soothe the throat and relieve cough |
| If coughing for more than 30 days, refer for possible TB or asthma |
| Advise the mother when to return immediately |
| Follow-up in 5 days if not improving |

* In settings where inhaler is not available, oral salbutamol may be the second choice

NOTE: Tell participants that all children classified as having pneumonia should be checked for, SUSPECTED SYMPTOMATIC HIV INFECTION. Explain that they will learn more about this in Module 2.

Answer any questions. Thank participants and ask them to return to their seats, then take them through the following drills on fast breathing and technical updates on wheezing and pneumonia:
### DRILL: Fast breathing

<table>
<thead>
<tr>
<th>QUESTIONS</th>
<th>ANSWER</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ASK:</strong> What is fast breathing in a child who is:</td>
<td></td>
</tr>
<tr>
<td>4 months old</td>
<td>50 breaths per minute or more</td>
</tr>
<tr>
<td>18 months old</td>
<td>40 breaths per minute or more</td>
</tr>
<tr>
<td>36 months old</td>
<td>40 breaths per minute or more</td>
</tr>
<tr>
<td>6 months old</td>
<td>50 breaths per minute or more</td>
</tr>
<tr>
<td>11 months old</td>
<td>50 breaths per minute or more</td>
</tr>
<tr>
<td>3 weeks old</td>
<td>60 breaths per minute or more and repeated twice</td>
</tr>
<tr>
<td>12 months old</td>
<td>40 breaths per minute or more</td>
</tr>
<tr>
<td>10 days old</td>
<td>60 breaths per minute or more and repeated twice</td>
</tr>
<tr>
<td>2 months old</td>
<td>50 breaths per minute or more</td>
</tr>
</tbody>
</table>

### DRILL: Technical update for pneumonia and wheezing

<table>
<thead>
<tr>
<th>QUESTIONS</th>
<th>ANSWERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Which signs indicate that a child should be classified as SEVERE PNEUMONIA OR VERY SEVERE DISEASE?</td>
<td>Any general danger sign or chest indrawing or stridor in a calm child</td>
</tr>
<tr>
<td>A child aged 12 months has PNEUMONIA. What should be the duration of antibiotic treatment?</td>
<td>5 days</td>
</tr>
<tr>
<td>A child aged 2 months up to 5 years has a general danger sign and wheeze. What is her classification?</td>
<td>SEVERE PNEUMONIA OR VERY SEVERE DISEASE</td>
</tr>
<tr>
<td>For how many cycles should one give a rapid acting inhaled bronchodilator before classifying the child with wheeze as having PNEUMONIA?</td>
<td>3 cycles</td>
</tr>
</tbody>
</table>
For each of the following children, what is their classification?

<table>
<thead>
<tr>
<th>Description</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>A child aged 9 months has received a trial of rapid-acting inhaled bronchodilator. He is now breathing at 55 breaths per minute and has no wheeze.</td>
<td>PNEUMONIA</td>
</tr>
<tr>
<td>A child aged 15 months has received a trial of rapid-acting inhaled bronchodilator. She is now breathing at 45 breaths per minute and has a wheeze.</td>
<td>PNEUMONIA</td>
</tr>
<tr>
<td>A child aged 11 months has received a trial of rapid-acting inhaled bronchodilator. He is now breathing at 44 breaths per minute and has no wheeze.</td>
<td>COUGH OR COLD</td>
</tr>
<tr>
<td>A child aged 36 months has received a trial of rapid-acting inhaled bronchodilator. She is now breathing at 32 breaths per minute and has a wheeze.</td>
<td>COUGH OR COLD</td>
</tr>
<tr>
<td>A 15 month old child has chest indrawing and a wheeze.</td>
<td>SEvere pneumonia or very severe disease</td>
</tr>
<tr>
<td>A 44 months old child has stridor when calm and a wheeze.</td>
<td>SEvere pneumonia or very severe disease</td>
</tr>
<tr>
<td>How would you treat a 13 month old child with a classification: SEvere pneumonia or very severe disease?</td>
<td>Give first dose of an appropriate antibiotic. Give a trial of rapid acting inhaled bronchodilator up to 3 times before classified as pneumonia. Refer URGENTLY to hospital.</td>
</tr>
<tr>
<td>How would you treat a 23 month old with PNEUMONIA?</td>
<td>Give an appropriate antibiotic for 3 days. Give an inhaled or oral bronchodilator for 5 days. Soothe the throat and relieve the cough with a safe remedy. Advise the mother when to return immediately. If recurrent wheezing refer for assessment if not done. Follow-up in 2 days.</td>
</tr>
<tr>
<td>How would you treat a 9 month old child with COUGH OR COLD?</td>
<td>If wheezing give an inhaled bronchodilator for 5 days. If recurrent wheezing refer for assessment. Soothe the throat and relieve cough. If coughing for more than 30 days refer for possible TB or asthma. Advise the mother when to return immediately. Follow-up in 5 days if not improving.</td>
</tr>
</tbody>
</table>
4.3 DIARRHOEA

Orientate participants to the technical updates on diarrhoea:

Ask participants to open their IMCI chart booklet to the chart on diarrhoea. Tell them to note that, after a WHO review, the ORS that should be used for treating dehydration should be low osmolarity ORS. Furthermore the treatment for SOME DEHYDRATION and NO DEHYDRATION has changed to include zinc.

Ask a participant to read out the treatment box of the diarrhoea chart on SOME DEHYDRATION and NO DEHYDRATION so that everyone takes note of the change in treatment.

<table>
<thead>
<tr>
<th>SOME DEHYDRATION</th>
<th>NO DEHYDRATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>➢ Give fluid, zinc and food for some dehydration (Plan B).</td>
<td>➢ Give fluid, zinc and food to treat diarrhoea at home (Plan A)</td>
</tr>
<tr>
<td>➢ If the child also has a severe classification, refer URGENTLY with the mother giving frequent sips of ORS on the way. Advise mother to continue breastfeeding.</td>
<td>➢ Advise mother when to return immediately</td>
</tr>
<tr>
<td>➢ Advise mother when to return immediately</td>
<td>➢ Advise mother when to return immediately</td>
</tr>
</tbody>
</table>

Ask participants to turn to page 16 of the chart booklet (Plan A and B).

Ask participants to note that there are now 4, not 3, rules for home treatment of diarrhoea. Read through these rules:

1. Give extra fluid
2. Give zinc
3. Continue feeding
4. When to return

Ask participants to read through the box entitled “GIVE ZINC”, which provides guidance on how much zinc to give a child with diarrhoea. Answer participants’ questions on zinc and diarrhoea.
Next, explain to participants that all children classified as having PERSISTENT DIARRHOEA should be checked for SUSPECTED SYMPTOMATIC HIV INFECTION. Tell them that they will learn more about this in Module 2: Assess, Classify and manage the child for HIV/AIDS.

Draw to their attention an important point – that persistent diarrhoea is commonly mismanaged by healthy workers. Therefore the management of a child with persistent diarrhoea should be revised in greater detail:

Explain that after a child is classified for dehydration, the child should be classified for persistent diarrhoea if the child has had diarrhoea for 14 days or more. Explain that there are two classifications for persistent diarrhoea.

- SEVERE PERSISTENT DIARRHOEA
- PERSISTENT DIARRHOEA

The treatment guidelines for each of these classifications should be followed.

Tell participants that following the WHO review, the treatment of PERSISTENT DIARRHOEA has been modified and take them through the box below:

**GIVE ZINC**

- **Tell the mother how much zinc to give:**
  - Up to 6 months: ½ tablet per day for 14 days
  - 6 months or more: 1 tablet per day for 14 days

- **Show the mother how to give zinc:**
  - Infants: dissolve the tablet in a small amount of expressed breast milk, ORS or clean water, in a small cup or spoon
  - Older children: tablets can be chewed or dissolved in a small amount of clean water in a cup or spoon

- **Remind the mother to give zinc for the full 14 days**
Run through the feeding advice for a child with PERSISTENT DIARRHOEA:

- If still breastfeeding, give more frequent, longer breastfeeds, day and night.
- If taking other milk:
  - replace with increased breastfeeding OR
  - replace with fermented milk products, such as yoghurt OR
  - replace half the milk with nutrient-rich semisolid food.
- For other foods, follow feeding recommendations for the child’s age.

Explain that the child with persistent diarrhoea should receive a FOLLOW-UP visit in 5 days. Tell participants to read through the follow-up box in their chart booklet.

Now explain to participants that the treatment for dysentery / blood in the stool has also changed and conduct a demonstration by asking participants to come to the wall to look at the chart on dysentery. Point out that dysentery should now be treated with 3 days of ciprofloxacin.

Next, take the participants through the drill on technical updates for diarrhoea.
### DRILL: Technical update for diarrhoea

<table>
<thead>
<tr>
<th>QUESTIONS</th>
<th>ANSWERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>How many signs are needed to classify a child as having <strong>SOME DEHYDRATION</strong>?</td>
<td>Any two of the following signs: Restless or irritable, Sunken eyes, Drinks eagerly, thirsty, Skin pinch goes back slowly</td>
</tr>
<tr>
<td>Give two signs that may indicate that a child has <strong>SEVERE DEHYDRATION</strong></td>
<td>Any two of the following signs: Lethargic or unconscious, Sunken eyes, Not able to drink or drinking poorly, Skin pinch goes back very slowly</td>
</tr>
<tr>
<td>What type of ORS should be used to treat dehydration?</td>
<td>Low osmolarity ORS</td>
</tr>
<tr>
<td>Which children need zinc?</td>
<td>Children with diarrhoea and who have been classified as <strong>SOME DEHYDRATION or NO DEHYDRATION</strong></td>
</tr>
<tr>
<td>How will you give zinc to a 4 month old infant with <strong>SOME DEHYDRATION</strong>?</td>
<td>½ tablet per day for 14 days. Dissolve the tablet in a small amount of breast milk, ORS or clean water, in a small cup or spoon</td>
</tr>
<tr>
<td>How will you give zinc to a 37 month old child with <strong>NO DEHYDRATION</strong>?</td>
<td>1 tablet per day for 14 days. Tablets can be chewed or dissolved in a small amount of clean water in a cup or spoon</td>
</tr>
<tr>
<td>How would you treat a 9 month old with a classification of <strong>DYSENTERY</strong>?</td>
<td>- Treat for 3 days with ciprofloxacin  - Treat dehydration  - Give zinc  - Follow-up in 2 days</td>
</tr>
<tr>
<td>How would you treat a 36 month old with a classification of <strong>DYSENTERY</strong>?</td>
<td>- Treat for 3 days with ciprofloxacin  - Treat dehydration  - Give zinc  - Follow-up in 2 days</td>
</tr>
</tbody>
</table>
4.4 FEVER

Orientate participants to technical updates around fever:

Malaria is a common cause of fever amongst children under 5 in malaria endemic countries. In previous years, chloroquine and Sulfadoxine-pyrimethamine (SP) were the first-line and second-line antimalarial drugs recommended in the IMCI guidelines of many countries. More recently, malaria case management has been greatly affected by the emergence and spread of firstly chloroquine and, increasingly, SP resistance. WHO now recommends the use of artemisinin-based combination therapies (ACT), which have been shown to improve treatment efficacy. The advantages of ACT relate to the unique properties and mode of action of the artemisinin component, which include rapid substantial reduction of the parasite biomass and rapid resolution of clinical symptoms.

Based on available safety and efficacy data, the following therapeutic options are available now and have potential for deployment (in prioritized order) if costs are not an issue:

- artemether-lumefantrine (Coartem™)
- artesunate (3 days) plus amodiaquine
- artesunate (3 days) plus SP in areas where SP efficacy remains high
- SP plus amodiaquine in areas where efficacy of both amodiaquine and SP remain high (this is mainly limited to countries in West Africa).

Participants should note that the antimalarials to be used for treatment of malaria will depend on the national policy guidelines.

<table>
<thead>
<tr>
<th>QUESTIONS</th>
<th>ANSWERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Should all children be classified for fever?</td>
<td>No: Children with fever by history or who feel hot or with temperature 37.5°C or above should be classified for fever</td>
</tr>
<tr>
<td>What signs of measles should you look for?</td>
<td>Generalized rash and One of these: cough, runny nose, or red eyes.</td>
</tr>
<tr>
<td>Which signs indicate that a child has SEVERE COMPLICATED MEASLES?</td>
<td>Children with fever by history, or who feel hot or with temperature 37.5°C or above Child has measles now or within the last 3 months Any general danger sign or Clouding of the cornea or Deep or extensive mouth ulcers</td>
</tr>
</tbody>
</table>
Which signs indicate that a child has VERY SEVERE FEBRILE DISEASE?

Children with fever by history, or who feel hot or with temperature 37.5°C or above, Any general danger sign or stiff neck

What are the fever classifications in a high malaria risk area?

VERY SEVERE FEBRILE DISEASE or MALARIA.

What are the fever classifications in a low malaria risk area?

VERY SEVERE FEBRILE DISEASE or MALARIA or FEVER – MALARIA UNLIKELY

In a high malaria risk area, which children should be classified as having malaria?

Children with fever by history or who feel hot or with temperature 37.5°C (and not classified as VERY SEVERE FEBRILE DISEASE - general danger signs or stiff neck)

How would you treat a child with VERY SEVERE FEBRILE DISEASE?

Give quinine for severe malaria (first dose) unless no malaria risk.
- Give first dose of an appropriate antibiotic.
- Treat the child to prevent low blood sugar.
- Give one dose of paracetamol in clinic for high fever (38.5°C or above).
- Refer URGENTLY to hospital

** These temperatures are based on axillary temperature. Rectal temperature readings are approximately 0.5°C higher

Next, orientate participants to the technical updates on antimalarial treatment according to national guidelines. Also refer to the dosage table on co-artemether on page 12 of the chart booklet.

4.5 EAR PROBLEM

Oriente participants to the technical update on CHRONIC EAR INFECTION.

Ask participants to turn to their chart on ear problem (page 5 of the chart booklet).

Point out that following the WHO review, oral amoxicillin is found to be a better choice for the management of acute ear infection in countries where antimicrobial resistance to co-trimoxazole is high. In addition, chronic ear infection should be treated with topical quinolone ear drops for at least two weeks in addition to dry ear-wicking.

Ask participants if they are familiar with different quinolone ear drops? [Quinolone ear drops may be that of norfloxacin, ciprofloxacin or ofloxacin given as a drop once daily for 14 days].
Explain that ALL children with ear discharge should be checked for SUSPECTED SYMPTOMATIC HIV INFECTION. Tell participants that they will learn more about this in Module 2.

Conduct the following drill:

<table>
<thead>
<tr>
<th>QUESTIONS</th>
<th>ANSWERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Which signs indicate that a child should be classified as having CHRONIC EAR INFECTION?</td>
<td>• Pus is seen draining from the ear and discharge is reported for 14 days or more</td>
</tr>
</tbody>
</table>
| How would you treat a child with CHRONIC EAR INFECTION? | • Dry the ear by wicking.  
• Treat with topical quinolone ear drops for 2 weeks  
• Check for HIV Infection  
• Follow-up in 5 days. |
| Which signs indicate that a child has MASTOIDITIS? | • Tender swelling behind the ear |
| Which signs indicate that a child should be classified as having ACUTE EAR INFECTION? | • Pus is seen draining from the ear and discharge is reported for less than 14 days, or  
• Ear pain |

4.6 MALNUTRITION AND ANAEMIA

Orientate participants to the technical update on MALNUTRITION:

Ask participants to turn to the chart on malnutrition and anaemia (page 6 of the chart booklet).

Tell participants that ALL children with malnutrition should be checked for SUSPECTED SYMPTOMATIC HIV INFECTION. Tell them that they will learn more about this in Module 2.
Run through the following technical updates with participants:

**Identification of severely malnourished children with mid-upper arm circumference (MUAC) less than 110 mm**

In the initial guidelines, IMCI recommended to identify severe malnutrition by looking for severe visible wasting. However, using severe visible wasting to identify life threatening malnutrition has the disadvantage of being a subjective assessment which is difficult to standardize.

The new recommendations are as follows:

- In children less than 6 months, check for visible severe wasting. Children with severe visible wasting should be classified with "severe malnutrition."
- In children aged 6-59 months, check for MUAC. Children with a MUAC less than 110 mm should be classified with "severe malnutrition".

**Deciding which severely malnourished children should be referred to hospital**

In the initial IMCI guidelines, it is advised to refer urgently to hospital all severely malnourished children. This was the standard WHO recommendation until the recent development of programmes of community based management of severe malnutrition.

- In case of severe malnutrition, if the child has severe oedema, anorexia or is less than 6 months, refer urgently to hospital.
- In case of uncomplicated severe malnutrition, i.e. if the child is alert and has good appetite, it is preferable to treat the child in the community

**Managing uncomplicated cases of severe malnutrition at the community level**

- Uncomplicated cases of severe malnutrition should receive amoxicillin, mebendazole and folic acid
- Children with uncomplicated forms of severe acute malnutrition should be given 200 kcal/kg/day of ready to use therapeutic food (RUTF)
Conduct the following drill:

<table>
<thead>
<tr>
<th><strong>DRILL: malnutrition</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>QUESTIONS</strong></td>
</tr>
<tr>
<td>Should all children be classified for malnutrition?</td>
</tr>
<tr>
<td>Should all children be classified for anaemia?</td>
</tr>
</tbody>
</table>
| When assessing and classifying for nutrition, which signs should one look for? | • Visible severe wasting  
• Oedema  
• MUAC |
| When assessing and classifying for severe malnutrition, which signs should one look for:  
a) in children less than 6 months?  
b) in children aged 6 – 59 months? | • Visible severe wasting  
• MUAC  
• Oedema in all |
| When should a child with severe malnutrition be referred to hospital? | • Poor appetite or complications |
| If a child with severe malnutrition is alert and with good appetite, should they be referred to hospital? | • Unless age is below 6 months |
| What treatment should be given to cases of uncomplicated severe malnutrition? | • RUTF |
| What treatment should be given to children with complicated forms of severe malnutrition? | • Refer URGENTLY |

### 4.7 SICK YOUNG INFANT

Explain to participants that the identification and treatment of young infants with serious problems is unsatisfactory in most low resource settings because of lack of training and experience. Consequently, the Department of Child and Adolescent Health, in collaboration with the WHO regional offices and other collaborators has been working to improve the IMCI algorithm for the management of sick young infants.

A 'Multicentre study of clinical signs predicting severe illness in young infants' was conducted in Bangladesh, Bolivia, Ghana, India, Pakistan and South Africa. The objective of the study was to determine whether the IMCI algorithm based on a combination of signs and symptoms identified by a health worker at a first-level
health facility, can predict illness among young infants, which is severe enough to require management at a referral facility.

Explain that as a result of the study, the 7-59 days young infant component of the IMCI guidelines has been simplified and the first week of life has now been included in the guidelines. This revised IMCI component addresses the recognition and management of serious problems in young infants with an acceptable sensitivity and specificity.

Point out that a further technical update to the young infant algorithm is the addition of a check for jaundice:

<table>
<thead>
<tr>
<th>Classify</th>
<th>Treat</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEVERE JAUNDICE</td>
<td>- Treat to prevent low blood sugar</td>
</tr>
<tr>
<td></td>
<td>- Refer URGENTLY to hospital</td>
</tr>
<tr>
<td></td>
<td>- Advise mother how to keep</td>
</tr>
<tr>
<td>JAUNDICE</td>
<td>- Advise mother to give home care for the young infant</td>
</tr>
<tr>
<td></td>
<td>- Advise mother to return immediately if palms and soles appear yellow</td>
</tr>
<tr>
<td></td>
<td>- Follow-up in 1 day</td>
</tr>
<tr>
<td>NO JAUNDICE</td>
<td>- Advise mother to give home care for the infant</td>
</tr>
</tbody>
</table>

Finally review the IMCI algorithm for the young infant with participants, either using the wall chart or the chart booklet, before taking them through the following drill:

**DRILL: sick young infant: Assess, classify and treat illness**

<table>
<thead>
<tr>
<th>QUESTIONS</th>
<th>ANSWERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>An infant aged 6 weeks has umbilical redness extending to the skin. What is his classification?</td>
<td>SEVERE DISEASE</td>
</tr>
<tr>
<td>A 3 week old infant has slight chest indrawing and localised skin pustules. What is the classification?</td>
<td>LOCAL BACTERIAL INFECTION</td>
</tr>
<tr>
<td>How would you treat a 4 week old infant with VERY SEVERE DISEASE?</td>
<td>Give first dose of intramuscular antibiotic</td>
</tr>
<tr>
<td></td>
<td>• Treat to prevent low blood sugar</td>
</tr>
<tr>
<td></td>
<td>• Refer URGENTLY to hospital</td>
</tr>
<tr>
<td></td>
<td>• Advise mother to keep the infant warm</td>
</tr>
<tr>
<td></td>
<td>on the way to the hospital</td>
</tr>
</tbody>
</table>
A 2 day old infant has CONVULSIONS. How would you treat the child?

- Refer URGENTLY to hospital as the infant has VERY SEVERE DISEASE

What antibiotic would you use to treat a 4 week old infant with LOCAL BACTERIAL INFECTION?

Give an appropriate oral antibiotic

After how many days would you follow-up an infant with LOCAL BACTERIAL INFECTION?

2 days

A 2 day old infant has jaundice including yellow palms and soles. What is the classification?

SEVERE JAUNDICE

Thank participants and tell them that you have now completed the drills. Ask if there are any questions or any problem areas. Ensure that all questions are answered before moving on to the final two short answer exercises:

5. PARTICIPANTS DO SHORT ANSWER EXERCISES A AND B (OPTIONAL)

SHORT ANSWER GROUP EXERCISE A: TREAT THE CHILD AND COUNSEL THE MOTHER

Ask participants to complete the following exercise in their small groups and to discuss the answers with their facilitator:

1. How should you manage a child aged 5 months with cough and difficulty breathing, wheezing and a general danger sign?

- Give first dose of an appropriate antibiotic IM.
- Assess for HIV infection
- If wheezing give a trial of rapid acting bronchodilator for up to three cycles before classifying severe pneumonia
2. How do you manage a 5 month old with SOME DEHYDRATION and DYSENTERY?

- Give fluid, Zinc and food for some dehydration (Plan B)
- If child also has a severe classification:
  - Refer URGENTLY to hospital with mother giving frequent sips of ORS on the way. Advise the mother to continue breastfeeding.
- Advise mother when to return immediately
- Treat for 3 days with ciprofloxacin (for the dysentery)
- Follow-up in 2 days

3. How should you manage a 7 month old child with SEVERE DEHYDRATION?

   If child has no other severe classification: Give fluid for severe dehydration (Plan C).

   OR

   If child also has another severe classification: Refer URGENTLY to hospital with mother giving frequent sips of ORS on the way. Advise the mother to continue breastfeeding.

   If child is 2 years or older and there is cholera in your area, give antibiotic for cholera.
4. How should you manage a 15 month old child with VERY SEVERE FEBRILE DISEASE living in a high risk malaria area?

- Give quinine for severe malaria (first dose).
- Give first dose of an appropriate antibiotic.
- Treat the child to prevent low blood sugar.
- Give one dose of paracetamol in clinic for high fever (38.5°C or above).
- Refer URGENTLY to hospital.

5. How should a child with PERSISTENT DIARRHOEA be managed?

- Check for HIV infection
- Advise the mother on feeding a child who has PERSISTENT DIARRHOEA
- Give multivitamins and Zinc for 14 days
- Follow-up in 5 days

6. What feeding advice would you give to the mother of a 5 month old child? The child has NO PNEUMONIA: COUGH OR COLD and does not have diarrhoea, fever or ear problem. The child has been classified as NO ANAEMIA AND NOT VERY LOW WEIGHT. The mother and child do not know their HIV status.

- Breastfeed as often as the child wants, day and night, at least 8 times in 24 hours. (Note current recommendation is up to 6 months)
- Do not give other foods or fluids.

7. What feeding advice would you give to the mother of an 8 month old child? The child has NO PNEUMONIA: COUGH OR COLD and diarrhoea with NO DEHYDRATION. The child does not fever or ear problem. The child has been classified as NO ANAEMIA AND NOT VERY LOW WEIGHT. The mother and child do not know their HIV status.

- Breastfeed as often as the child wants.
- Give adequate servings of:
  - ___________________________
  - ___________________________
  - ___________________________
  - 3 times per day if breastfed;
SHORT ANSWER GROUP EXERCISE B: FOLLOW-UP  
(OPTIONAL)

Ask participants to write a "T" by the statements that are True. Write an "F" by the statements that are False.

<table>
<thead>
<tr>
<th></th>
<th>True or false (T / F)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>T</td>
<td>A child with PNEUMONIA should be followed up in 2 days</td>
</tr>
<tr>
<td>b</td>
<td>T</td>
<td>A child with NO PNEUMONIA: COUGH OR COLD should be followed up in 5 days</td>
</tr>
<tr>
<td>c</td>
<td>F</td>
<td>A child with diarrhoea and NO DEHYDRATION should be followed up in 2 days even if the child is improving</td>
</tr>
<tr>
<td>d</td>
<td>T</td>
<td>A child with PERSISTENT DIARRHOEA should be followed up in 5 days.</td>
</tr>
<tr>
<td>e</td>
<td>F</td>
<td>A child with DYSENTERY should be followed up in 5 days.</td>
</tr>
<tr>
<td>f</td>
<td>T</td>
<td>A child with VERY LOW WEIGHT should be followed up in 5 days if they have a feeding problem</td>
</tr>
<tr>
<td>g</td>
<td>T</td>
<td>A child with ANAEMIA and no feeding problem should be followed up in 14 days</td>
</tr>
<tr>
<td>h</td>
<td>T</td>
<td>A child with VERY LOW WEIGHT FOR AGE and no ANAEMIA and no feeding problem should be followed up in 30 days</td>
</tr>
</tbody>
</table>
6.0 SUMMARY OF MODULE AND CLOSING

Ask participants to briefly summarize what topics have been covered by Module 1. Participants should call out what this module has taught them and the facilitator will list their responses on a flipchart.

Ask participants to look back to the learning objectives for the module and provide feedback as to whether they feel that these objectives have been met.

Participants should highlight any difficult areas, where they need further clarification and ask final questions.

Once you feel satisfied that all questions have been answered, tell participants that they have successfully completed a recap of IMCI and a review of recent technical updates. They are now ready to proceed to Module 2, where they will learn how to assess, classify and manage the child for HIV/AIDS.
FACILITATOR GUIDELINES FOR

MODULE 2:
ASSESS, CLASSIFY AND
MANAGE THE CHILD FOR
HIV/AIDS
# FACILITATOR GUIDELINES

## ASSESS, CLASSIFY AND MANAGE THE CHILD FOR HIV/AIDS

<table>
<thead>
<tr>
<th>PROCEDURES</th>
<th>FEEDBACK</th>
</tr>
</thead>
<tbody>
<tr>
<td>− Prepare to facilitate Module 2</td>
<td>−</td>
</tr>
<tr>
<td>− Introduce the module</td>
<td>−</td>
</tr>
<tr>
<td>− Participants read the Introduction and Learning Objectives individually</td>
<td>−</td>
</tr>
<tr>
<td>− Participants and facilitators read through section 3.0 - basic information about HIV, and do group exercise A. Answer any questions</td>
<td></td>
</tr>
<tr>
<td>− Participants and facilitators read through section 3.1 – how children become infected with HIV and do group exercise B followed by discussion on risks of mother-to-child transmission of HIV</td>
<td></td>
</tr>
<tr>
<td>− Participants and facilitators read through section 4.0 and 4.1 on HIV testing then participants do short answer exercise A on HIV testing and group exercise C on early testing</td>
<td></td>
</tr>
<tr>
<td>− Participants read through section 4.2: assess, and classify the sick child aged 2 months to 5 years</td>
<td></td>
</tr>
<tr>
<td>− Participants do the exercises:</td>
<td></td>
</tr>
<tr>
<td>o video exercise A,</td>
<td></td>
</tr>
<tr>
<td>o short answer exercises B and C and</td>
<td></td>
</tr>
<tr>
<td>o written exercise A</td>
<td></td>
</tr>
<tr>
<td>− Participants read section 4.3: Assess and classify the sick young infant for HIV then do written exercise B: Assess and classify each child for HIV</td>
<td></td>
</tr>
<tr>
<td>− Participants read through section 5.0: identify treatment for the child classified for HIV then participants do short answer exercise D</td>
<td></td>
</tr>
<tr>
<td>− Participants read through sections 6.0 (assess, classify and treat for acute common illnesses) and 7.0 (assess, classify and treat for opportunistic infections) then attempt short answer exercise E and facilitator leads the drill on mouth and skin infections</td>
<td></td>
</tr>
<tr>
<td>− Participants read through section 8.0 (prevention of illness)</td>
<td></td>
</tr>
<tr>
<td>− Participants do written exercise C</td>
<td></td>
</tr>
<tr>
<td>− Final discussion and answer participants questions in plenary</td>
<td></td>
</tr>
</tbody>
</table>

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Final discussion and answer participants questions in plenary
PREPARE TO FACILITATE MODULE TWO

Children with suspected or confirmed HIV infection have special needs, and therefore need to be cared for differently from children with negative HIV status.

To enhance participants’ understanding of issues relating to managing suspected or confirmed HIV-infected children, this module first provides basic information about HIV and the risks of mother-to-child transmission of HIV. It then teaches them how to assess, classify and manage acute conditions in young infants and children with suspected or confirmed HIV infection. It also teaches how to prevent illness in these children.

Module 2 includes many group exercises, written and short answer exercises and one video exercise.

For the video exercises: Depending on arrangements made by your course director, you will either show the video in the same room where the participants work on their modules or take the participants to another room at a scheduled time. To conduct video exercises, make sure the following supplies and information are available:

- a copy of the videotape
- videotape player
- video monitor (a television set with wires to connect it to the videotape player)
- instructions for operating the videotape player including how to turn the player on and off and how to rewind or fast forward the videotape to specific locations
- location of electrical sockets
- extension cable/ adaptor plug if necessary
- any particular time during the work period when power may not be available.

For exercises: Each participant will need:

- the recording forms for Ebai, Henri, Mishu and Dan that they filled in during Module 1. If they do not have these recording forms, provide them with new recording forms and ask them to classify Ebai, Henri, Mishu and Dan from the information given in written exercise A of Module 1.

You will need to provide individual and group feedback for each exercise. Try and provide feedback as soon as a participant has finished an exercise or part of an exercise to make sure that he understands what he is doing before he proceeds to the next exercise. Make sure that you read through all the answers to the exercises and that you understand all the answers before you facilitate the module.
For demonstrations: Demonstrations will be used to illustrate the HIV algorithm, hence you will need to provide an enlargement of:

- the HIV chart from the IMCI chart booklet.

If you are using laminated Facilitator Aids, you will also need:

- a special pen for writing on laminated enlargements
- a cloth or other material for erasing your writing after the facilitator aids have been used for a demonstration.

For photograph exercises:

- Make sure you have enough copies of the IMCI Complementary course on HIV/AIDS Photo booklet to give one to each participant or small group.

For chart booklets to use in clinical sessions: All participants should receive an IMCI chart booklet on Day 1. They will refer to this chart booklet throughout this course, during classroom sessions and during the clinical practice. Make sure you have enough chart booklets on Day 1.

This module would be easiest to conduct if the class is divided into small groups, each with 4-5 participants. Try to ensure that each group comprises participants with different levels of skill or who have been trained in IMCI at different times.

Guidelines for leading the module ASSESS, CLASSIFY, AND MANAGE THE CHILD FOR HIV/AIDS begins below.

**1.0 INTRODUCE THE MODULE**

Orientate participants to Module 2:

- Explain that the first two sections of Module 2 are the Introduction and Learning Objectives. Participants should read through these 2 sections individually or in small groups.

- Section 3 provides important basic information about HIV and how children become infected with HIV

- Section 4 teaches participants how to assess and classify infants and children for HIV and section 5 teaches how to identify treatment for young infants and children classified for HIV

- Sections 6 and 7 teach how to assess, classify and treat for acute common illnesses and opportunistic infections
2.0 PARTICIPANTS READ THROUGH THE INTRODUCTION AND LEARNING OBJECTIVES, INDIVIDUALLY

Do not allow more than 10 minutes for this. Once participants have completed reading these sections answer any questions.

By the end of this module, participants should be able to:

- Explain briefly and in basic terms what HIV is and how it is transmitted to infants and children
- Describe how to assess and classify a child for HIV
- Describe how to assess, classify and treat acute common illnesses in young infants and children classified for HIV
- Describe how to assess, classify and treat common opportunistic infections in infants and young children classified for HIV, with a focus on skin and mouth conditions
- Describe how to prevent common illnesses in infants and young children classified for HIV, through:
  - co-trimoxazole prophylaxis
  - immunization
  - Vitamin A supplementation

3.0 BASIC INFORMATION ABOUT HIV

Ask participants to read through Section 3.1: HIV and the human body. Explain that this section provides basic information about the body’s defence system and how HIV infects the body. Explain that it is important that they understand the information included in the section. Tell them that if they are not clear on anything, they should ask the facilitator, or discuss within their small groups.

Next, run through Figure 2.1 and the text that follows, allowing time for participants to ask questions if anything is not clear. Then go through Figure 2.2 together.

When they have reached the end of figure 2.2: How HIV attacks our health, move on to group exercise A: Using the blank flip chart, ask participants to define the following terms: CD4 cell, immune system, opportunistic infection.

Answers:

A CD4 cell is a special type of white blood cell in the body that helps to fight against
infection. The CD4 cell has a special receptor on its surface called the CD4 receptor. The HIV virus attaches to this receptor to enter the white blood cell.

The immune system is the body’s defence system to fight infection. White blood cells form part of the human immune system.

An opportunistic infection is an infection that causes disease only in people whose immune system is not functioning well. Thus an opportunistic infection will not cause illness and disease in healthy people. Oral thrush and tuberculosis are examples of opportunistic infections.

After completing group exercise A, answer any participants’ questions.

3.1 HOW CHILDREN BECOME INFECTED WITH HIV

Ask participants how children become infected with HIV and write their answers on the flipchart. Explain that vertical transmission, or mother-to-child transmission of HIV (MTCT) is the main way that children are infected with HIV. Ask participants to read through section 3.1: How children become infected with HIV, and to discuss the risks of HIV transmission in group exercise B:

GROUP EXERCISE B
In small groups, for 1-2 minutes discuss what you think is the risk of HIV transmission during pregnancy, labour and delivery and postnatally?
Do all children who are breastfed by HIV positive women transmit HIV to their children through breastfeeding?

The answers to the group exercise are contained in the module. Explain to participants that most health workers believe that all HIV positive mothers who breastfeed will transmit HIV to their children. This is not true. HIV transmission through breastfeeding depends on the duration and pattern of breastfeeding and it is very important that participants understand this.

Take the participants through the diagram showing risk of HIV transmission from mother to child. Explain that the overall risk of mother-to-child transmission is approximately one-third, of which there is a 20% risk (approximately) of HIV transmission through pregnancy and delivery and a 15% risk of HIV transmission postnatally.

Ensure that participants understand the concept of risk. Tell participants that Module 3 contains more information on breastfeeding and HIV. Ask participants if they have any questions, before moving on to section 4.0.
4.0 ASSESS AND CLASSIFY THE CHILD FOR HIV

Introduce section 4.0. Explain that the section includes three short answer exercises, two written exercises and a video, all designed to help participants to learn how to assess and classify young infants and children for HIV. In this section, participants will revisit the four case studies that they met in Module 1. Explain that exercises should be done individually, unless otherwise stated. If a participant is having difficulty, he can consult with other group members or with a facilitator.

Explain that different tests are available to diagnose HIV infection and before assessing and classifying an infant or child for HIV infection it is very important to understand the difference between serological (antibody) and virological tests and how to interpret the test results. The section provides a table summarizing the differences between tests and then goes on to describe how to assess and classify infants and children for HIV.

4.1 TESTING FOR HIV INFECTION

Ask participants to read through section 4.1 and to individually attempt short answer exercise A. Ensure that participants understand a main point to remember – a negative virological or antibody test in a breastfeeding child of any age should be repeated 6 weeks after breastfeeding stops in order to confirm HIV status.

Provide individual feedback as necessary and discuss the answers briefly in plenary:

SHORT ANSWER EXERCISE A: HIV TESTING

1. A 20 month old baby has a positive virological test. Is the child confirmed HIV positive? **YES** – Viral particles have been detected in this baby’s blood.

2. A 2 month old baby has a positive virological test. Is the child confirmed HIV positive? **YES** – Viral particles have been detected in this baby’s blood.

3. A 2 month old breastfeeding baby has a positive virological test. Is the child confirmed HIV positive? **YES** – Viral particles have been detected in this baby’s blood.

4. A 2 month old breastfeeding baby has a positive antibody test. Is the child confirmed HIV positive? **NO** – the antibodies may have come from the mother. The antibody test will have to be repeated after 18 months and at least 6 weeks after breastfeeding stops. If it is still positive at this stage, then the baby is positive. A virological test can be done at least 6 weeks after breastfeeding stops.
and at any age. If this virological test (done at least 6 weeks after breastfeeding stops) is positive then the baby is confirmed HIV positive.

5. An 18 month old breastfeeding child has a positive HIV rapid antibody test. Is the child confirmed HIV positive? **YES** – maternal antibodies should have disappeared by the age of 18 months; hence the antibody test at age 18 months is measuring antibodies developed by the child and this means that he is HIV infected.

6. A 9 month old breastfeeding baby has a negative virological test. Is the child confirmed HIV negative? **NO** – as the baby is still breastfeeding there is a chance that he might still acquire HIV from his mother. The test should be repeated 6 weeks after breastfeeding stops to determine whether the child is truly HIV negative.

7. A 9 month old non-breastfeeding baby has a negative virological test. The baby last breastfed 3 months ago. Is the child confirmed HIV negative? **YES** – the virological tests did not measure any viral particles in the blood of the baby and the baby was not exposed to virus during the previous 3 months; hence there is no chance that he is still developing an infection.

8. An 18 month old child has a negative antibody test. The baby last breastfed one week ago. Is the child confirmed HIV negative? **NO** – although the antibody test did not detect antibodies to HIV the child was last exposed to HIV infection one week ago and may still have acquired an infection during that time. The antibody test will have to be repeated in 5 weeks time (i.e. 6 weeks after breastfeeding stops) to determine whether the child is truly HIV uninfected.

**GROUP EXERCISE C**

Ask participants to discuss in small groups, for 1-2 minutes why early testing of young infants and children born to HIV positive women is beneficial. Ask them to call out their answers and write them onto a flipchart. Ensure that all of the following reasons have been covered:

Early confirmation or exclusion of HIV infection in infants is beneficial for many reasons. It would:

- guide infant feeding choices for the mother-child pair
- help to differentiate symptomatic HIV or AIDS from diseases and conditions (such as tuberculosis, malnutrition and recurrent bacterial infections) that also occur in HIV-uninfected infants
- guide decisions relating to when to initiate and stop regular co-trimoxazole prophylaxis and / or antiretroviral therapy
help alleviate the stress of the unknown as the family can take steps to deal with the HIV status, instead of wondering what it is. Furthermore, in some instances the child may be the entry point for diagnosis of HIV within the family; hence early testing may provide the opportunity for mother, father and/or carer/s to access HIV care.

4.2 ASSESS AND CLASSIFY THE CHILD AGED 2 MONTHS UP TO 5 YEARS FOR HIV

Ask participants to read through section 4.2: Assess and classify the child aged 2 months up to 5 years for HIV. Stress that if the mother is known to be HIV positive or the child has one of the following signs or symptoms NOW - pneumonia, persistent diarrhoea, ear discharge, or very low weight - that they must be checked for suspected HIV infection.

After participants have read through section 4.2, ask them to come to the wall chart on HIV. Point out the different classifications for HIV and how the combination of symptoms or signs or features and test results are used to classify for HIV in children. Ask if there are any questions.

PARTICIPANTS DO VIDEO EXERCISE A, SHORT ANSWER EXERCISES B AND C AND WRITTEN EXERCISE A

Tell participants that they will now work individually through video exercise A, short answer exercises B and C and written exercise A. Explain that you will provide individual and group feedback for these exercises and they should ask questions whenever they need help:

65
VIDEO EXERCISE A

Ask participants to watch an IMCI video training series on common manifestations of HIV/AIDS in children to demonstrate how to classify suspected symptomatic HIV infection.

Where a video is not available, it is advised that participants see cases with parotid enlargement, oral thrush and persistent generalised lymphadenopathy during the clinical practices of session one or two.

SHORT ANSWER EXERCISE B

1. Which children aged 2 months up to 5 years should be checked for symptomatic HIV infection?
   
   Any child with any one of the following classifications / features:
   
   - PNEUMONIA or SEVERE PNEUMONIA OR VERY SEVERE DISEASE
   - PERSISTENT DIARRHOEA or SEVERE PERSISTENT DIARRHOEA
   - ACUTE EAR INFECTION with discharge, or CHRONIC EAR INFECTION
   - VERY LOW WEIGHT or SEVERE MALNUTRITION
   - OR
   - if the mother or child is known to be HIV positive:

2. What is the difference between an HIV virological test and an antibody test?

   An antibody test measures the body’s reaction to an infection. It measures antibodies made by immune cells. It does not measure virus particles. Antibodies can travel across the placenta to the baby and may only disappear after 18 months; therefore a positive antibody test in a baby under the age of 18 months may be measuring the mother’s antibodies. It does not mean that the baby is HIV infected and is making antibodies to the infection.
A PCR test (virological test) measures actual viral particles in the blood and not the body’s reaction to an infection. A positive virological test means that the person is definitely HIV positive.

3. Which test – virological or HIV antibody - would you use to confirm HIV infection in a child under the age of 18 months?

The only way of confirming HIV infection in a child under 18 months is through a virological test.

4. What is meant by “generalized persistent lymphadenopathy” in the context of an HIV infected child?

Generalized persistent lymphadenopathy means the development of persistent, non-inguinal lymphadenopathy in early infancy, consisting of enlarged lymph nodes (>0.5 cm) in two or more of the following sites: neck, axilla, groin without any apparent underlying cause.

5. What is meant by “parotid enlargement” in the context of an HIV infected child?

Parotid enlargement in the context of HIV is defined as one-sided or bilateral parotid swelling (just in front of the ear) with or without pain and fever and persisting for more than 2 weeks.

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**SHORT ANSWER EXERCISE C: ASSESS AND CLASSIFY FOR HIV**

Write a "T" by the statements that are True. Write an "F" by the statements that are False.

<table>
<thead>
<tr>
<th>True or false (T / F)</th>
<th>Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>A T</td>
<td>A child with PNEUMONIA should be assessed for HIV infection</td>
</tr>
<tr>
<td>B T</td>
<td>A 9 week old child born to an HIV positive mother should be classified as “POSSIBLE HIV INFECTION or HIV EXPOSED”</td>
</tr>
<tr>
<td>C F</td>
<td>A 19 month old child with a negative antibody test and oral thrush, pneumonia and ear discharge should be classified as “POSSIBLE HIV INFECTION or HIV EXPOSED”</td>
</tr>
<tr>
<td>D</td>
<td>T</td>
</tr>
<tr>
<td>---</td>
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</tr>
<tr>
<td>E</td>
<td>T</td>
</tr>
<tr>
<td>F</td>
<td>F</td>
</tr>
<tr>
<td>G</td>
<td>T</td>
</tr>
</tbody>
</table>
WRITTEN EXERCISE A

Classify the following children:

1. 3 month old with PNEUMONIA, ear discharge and enlarged lymph glands. Mother is HIV positive.
   
   SUSPECTED SYMPTOMATIC HIV INFECTION

2. 5 month old with PERSISTENT DIARRHOEA, VERY LOW WEIGHT and oral thrush. Mother is of unknown HIV status.
   
   SUSPECTED SYMPTOMATIC HIV INFECTION

3. 7 month old with PNEUMONIA, ear discharge and parotid enlargement. Child tested HIV positive using virological test.
   
   CONFIRMED SYMPTOMATIC HIV INFECTION

   
   SUSPECTED SYMPTOMATIC HIV INFECTION

5. 12 month old with PNEUMONIA, ear discharge and parotid enlargement. Child is breastfeeding
   
   SUSPECTED SYMPTOMATIC HIV INFECTION

6. 21 month old with PNEUMONIA, parotid enlargement and a positive HIV antibody test.
   
   CONFIRMED SYMPTOMATIC HIV INFECTION

Remember to ask participants whether they have any questions and answer all questions before moving onto the next section.
4.3 ASSESS AND CLASSIFY THE SICK YOUNG INFANT FOR HIV

Explain that the classification of the sick young infant for HIV differs from the classification for an older child. Tell participants that it is important for them to note that it is not possible to classify the sick young infant for symptomatic HIV infection as there are currently no studies that have validated an algorithm for this classification. Classification of the sick young infant for HIV can therefore only be one of three options:

- CONFIRMED HIV INFECTION
- POSSIBLE HIV INFECTION / HIV EXPOSED
- HIV INFECTION UNLIKELY

and will be based upon the HIV test result of the mother and/or infant.

Ask participants to read through section 4.3: Assess and classify the sick young infant for HIV. Ensure that once they have read this, that participants understand the difference between assessing the young infant and assessing the child aged 2 months to 5 years (the young infant can only be classified as CONFIRMED HIV INFECTION, POSSIBLE HIV INFECTION/HIV EXPOSED or HIV INFECTION UNLIKELY).

Explain that they will learn how to treat, counsel and follow-up for HIV as they progress through the course.

Next, ask participants to take out the recording forms that they filled out in Module 1, written exercise A. They will need these forms for written exercise B.
WRITTEN EXERCISE B: ASSESS AND CLASSIFY EACH CHILD FOR HIV

Mishu:
Mishu’s mother was tested for HIV and she is positive. However Mishu has not had an HIV test (neither virological nor antibody). Mishu is still breastfeeding.

*Mishu was originally classified as:*
- NO DEHYDRATION
- DYSENTERY
- MALARIA
- NO ANAEMIA AND NOT VERY LOW WEIGHT

*Mishu’s HIV classification is:*
- POSSIBLE HIV INFECTION OR HIV EXPOSED

Dan:
Neither Dan nor his mother has ever been tested for HIV. In addition to his previous classifications, Dan also has parotid enlargement but does not have oral thrush or lymphadenopathy.

*Dan’s original classifications were:*
- PNEUMONIA
- SOME DEHYDRATION
- DYSENTERY
- SEVERE PERSISTENT DIARRHOEA
- MALARIA
- CHRONIC EAR INFECTION
- SEVERE COMPLICATED MALNUTRITION

*Dan’s HIV classification is SUSPECTED SYMPTOMATIC HIV INFECTION*

Remember that a young infant is only classified for HIV based on the test result and not on the symptoms.
Ebai:
Ebai’s mother has been tested for HIV infection and is HIV positive.

*Ebai’s original classifications were:*
LOCAL BACTERIAL INFECTION
FEEDING PROBLEM AND LOW WEIGHT

*Ebai can be classified as POSSIBLE HIV INFECTION OR HIV EXPOSED*

Henri
Henri’s mother has been tested for HIV infection and is HIV positive. Henri had an antibody test and the result was positive.

*Henri’s original classifications were:*
VERY SEVERE DISEASE
NO FEEDING PROBLEM

*Henri can be classified as POSSIBLE HIV INFECTION OR HIV EXPOSED*

After completing this exercise, answer participants’ questions.
5.0 IDENTIFY TREATMENT FOR THE YOUNG INFANT AND CHILD CLASSIFIED FOR HIV

Introduce section 5.0. Explain that certain groups of children, classified as SUSPECTED SYMPTOMATIC HIV INFECTION, CONFIRMED HIV INFECTION or POSSIBLE HIV INFECTION / HIV EXPOSED will need to be referred for assessment of their eligibility for antiretroviral therapy (ART). Participants will learn more about this in Module 4 which focuses on chronic care and follow-up of children with HIV.

Before starting antiretroviral therapy, a child must first be stabilized. Any acute common illnesses and opportunistic infections must be treated and followed up in order to improve the child’s condition.

Take participants through sections 5.0, 5.1 and 5.2 which teach them how to treat children and young infants with an HIV classification. Run through the algorithms with them and allow time for questions.

Answer any final questions before asking them to complete short answer exercise D individually.

SHORT ANSWER EXERCISE D: IDENTIFY TREATMENT AND TREAT

1. How would you treat children with the classifications POSSIBLE HIV INFECTION and PNEUMONIA (no wheeze present)?
   
   - Give oral antibiotic for 5 days
   - Give co-trimoxazole prophylaxis
   - Give Vitamin A supplements from 6 months of age every 6 months
   - Soothe the throat and relieve the cough with a safe remedy
   - Assess child’s feeding and counsel as necessary
   - Arrange counselling and testing for HIV infection as soon as possible using the best available test
   - If coughing for more than 30 days refer for possible TB or asthma
   - Advise the mother on home care
   - Advise the mother when to return immediately
   - Follow-up in 2 days for the pneumonia. For the possible HIV infection follow-up in 14 days, then monthly for 3 months and then every 3
2. How would you treat children with POSSIBLE HIV INFECTION and SEVERE PNEUMONIA (wheeze present)?
   - Give first dose of an appropriate antibiotic IM.
   - Give a trial of rapid acting bronchodilator for three cycles before classifying pneumonia
   - Refer URGENTLY to hospital.

3. When should you follow-up children classified as PERSISTENT DIARRHOEA AND POSSIBLE HIV INFECTION?
   5 days time

4. How would you treat a child with the classifications: PNEUMONIA (wheeze present) and SUSPECTED SYMPTOMATIC HIV INFECTION?
   - Give oral antibiotic for 5 days
   - Give co-trimoxazole prophylaxis
   - Give Vitamin A supplements from 6 months of age every 6 months
   - Give a trial of rapid acting bronchodilator for three cycles before classifying pneumonia
   - Give an inhaled bronchodilator for five days
   - Soothe the throat and relieve the cough with a safe remedy
   - If recurrent wheezing refer for an assessment
   - If coughing for more than 30 days refer for possible TB or asthma
   - Test to confirm HIV infection
   - Refer for further assessment including HIV care/ART
   - Advise mother on home care
   - Advise the mother when to return immediately
   - Follow-up in 2 days for the pneumonia. For the suspected symptomatic HIV infection follow-up in 14 days, then monthly for 3 months and then every 3 months or as per immunization schedule

5. How would you treat a child with the classifications: PERSISTENT DIARRHOEA and CONFIRMED HIV INFECTION?
   - Advise the mother on feeding a child who has PERSISTENT DIARRHOEA
   - Give co-trimoxazole prophylaxis
   - Check immunization status
   - Give Vitamin A supplements from 6 months of age every 6 months

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• Give multivitamin and Zinc for 14 days
• Assess child’s feeding and provide appropriate counselling to the mother
• Refer for further assessment including HIV care/ART
• Advise the mother on home care
• Follow-up in 5 days for the persistent diarrhoea. For the confirmed HIV infection, follow-up in 14 days, then monthly for 3 months and then every 3 months or as per immunization schedule

6. How would you treat a child with the classifications: PNEUMONIA (no wheeze present), PERSISTENT DIARRHOEA, DYSENTRY, CHRONIC EAR INFECTION, VERY LOW WEIGHT and CONFIRMED HIV INFECTION?

• Give oral antibiotic for 5 days
• Soothe the throat and relieve the cough with a safe remedy
• Treat for 3 days with ciprofloxacin
• Give co-trimoxazole prophylaxis
• Check immunization status
• Dry the ear by wicking
• Treat with topical quinolone eardrops for 2 weeks
• Give mebendazole if child is 1 year or older and has not had a dose in the previous six months
• If coughing for more than 30 days refer for possible TB or asthma
• Assess the child’s feeding and counsel the mother on feeding according to the food box on the COUNSEL THE MOTHER chart
• Advise the mother on feeding the child – follow guidelines for PERSISTENT DIARRHOEA:
  i. If still breastfeeding, give more frequent, longer breastfeeds, day and night
  ii. If taking other milk:
    1. replace with increased breastfeeding OR
    2. replace with fermented milk products, such as yoghurt OR
    3. replace half the milk with nutrient-rich semisolid food
• Refer for further assessment including HIV care/ART
• Counsel the mother about her own HIV status and arrange counselling and testing if necessary
• Give routine Vitamin A supplement from 6 months of age every 6 months
• Advise mother on home care and when to return immediately
• Follow-up in 2 days for dysentery, 5 days for diarrhoea and chronic ear infection. For the confirmed HIV infection, follow-up in 14 days, then monthly for 3 months and then every 3 months or as per
6.0 ASSESS, CLASSIFY AND TREAT FOR ACUTE COMMON ILLNESS

Explain the importance of treating acute common illness and opportunistic infections in children with an HIV classification. Ask participants to read through section 6.0, which outlines treatment of acute common illnesses at the primary health care level.

7.0 ASSESS, CLASSIFY AND TREAT FOR OPPORTUNISTIC INFECTIONS

Explain that certain opportunistic infections present as severe conditions such as pneumonia and severe febrile illness. Such severe cases will have to be referred to hospital. The less serious opportunistic infections, including skin and mouth problems can be managed at the primary level.

Ask participants to read through section 7.0 which teaches them about treatment of opportunistic infections including skin and mouth conditions. Ask participants to also open the corresponding pages on the chart booklet (pages 44-49) and the Photo booklet.

Note: The classification of skin problems in children has not yet been validated and full algorithms have not yet been developed.

Facilitators should circulate amongst the small groups and answer questions as necessary whilst participants read through the sections.

Skin and mouth conditions

Use the Photo booklet to facilitate understanding of skin and mouth conditions by participants. Note that static pictures may not be as good as findings on patients and therefore facilitators may find that participants do not necessarily recognize all skin and mouth lesions on the photographs.

Explain that the Photo booklet contains a series of conditions for demonstrations (sections 1-5) and a separate series of photos (section 6) for practice.

- Section 1 gives examples of itching skin lesions.
- Section 2 gives examples of skin conditions with blisters, vesicles or pustules.
- Section 3 gives examples of skin conditions that do NOT cause itching or pain.
- Section 4 gives examples of mouth and oesophageal conditions
- Section 5 gives examples of drug reactions

When participants have finished reading through sections 6.0 and 7.0, have completed reading the photographs, and you have answered their questions, ask them to complete short answer exercise E.
SHORT ANSWER EXERCISE E:

1. How would you treat a child with the classification: POSSIBLE HIV INFECTION, VERY LOW WEIGHT and GUM / MOUTH ULCERS?
   - Give mebendazole if child is 1 year or older and has not had a dose in the previous six months
   - Give co-trimoxazole
   - Give routine Vitamin A supplement from 6 months of age every 6 months
   - Assess child’s feeding and counsel for feeding problems
   - Follow-up in 5 days if feeding problem or in 7 days if no feeding problem.
   - If child also classified as MEASLES WITH MOUTH OR EYE COMPLICATIONS, follow the treatment for MEASLES WITH MOUTH OR EYE COMPLICATIONS on the fever page
   - Show mother how to clean the ulcers with saline or peroxide or sodium bicarbonate
   - If lips or anterior gums involved, give acyclovir, if possible. If not possible, refer
   - If child receiving co-trimoxazole or antiretroviral drugs or INH prophylaxis within the last month, this may be a drug rash, especially if the child also has a skin rash, so refer
   - Provide pain relief
   - Confirm HIV status of child as soon as possible using the best available test
   - Advise mother when to return immediately
   - Follow-up in 14 days, then monthly for 3 months and every 3 months or according to immunization schedule

2. How would you treat a child with the classifications: IMPETIGO, NOT VERY LOW WEIGHT and POSSIBLE HIV INFECTION?
   - Refer URGENTLY if child has fever and is systemically unwell and if infection extends to the muscle
   - Clean sores with antiseptic
   - Drain pus if fluctuance
• Start cloxacillin if size >4cm or red streaks or tender nodes or multiple abscesses
• Give co-trimoxazole prophylaxis
• Give routine Vitamin A supplement from 6 months of age every 6 months
• Confirm HIV status of child as soon as possible using the best available test
• Assess child’s feeding and provide appropriate counselling to the mother
• Confirm HIV status of child as soon as possible using the best available test
• Follow-up in 14 days, then monthly for 3 months and every 3 months or according to immunization schedule

3. How would you treat a child with ORAL THRUSH?

• Counsel the mother on home care for oral thrush. The mother should:
  i. Wash her hands
  ii. Wash the young infant / child’s mouth with a soft clean cloth wrapped around her finger or a spoon/spatula and wet with salt water
  iii. Instill 1ml nystatin four times per day or paint the mouth with half strength gentian violet for 7 days
  iv. Wash her hands after providing treatment for the young infant or child
  v. Avoid feeding for 20 minutes after medication
• If breastfed, check mother’s breasts for thrush. If present (dry, shiny scales on nipple and areola), treat with nystatin or GV
• Advise the mother to wash breasts after feeds. If bottle fed, advise to change to cup and spoon
• If severe, recurrent or pharangeal thrush, consider symptomatic HIV
• Give paracetamol if needed for pain

4. How would you treat a child with HERPES ZOSTER?

• Keep lesions clean and dry. Use local antiseptic
• If eye involved give acyclovir
• Give pain relief
• Follow-up in 7 days if sores not fully healed
• Ask mother to come back immediately if child gets sicker
Next, take the participants through a drill to revise the new information on skin and mouth conditions:

**Drill: assessing and treating skin and mouth infections**

<table>
<thead>
<tr>
<th>QUESTIONS</th>
<th>ANSWERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>The presence of which drug-related rashes are an indication for referral</td>
<td>• Steven’s Johnson syndrome (SJJ) with target lesions/bullae/skin sloughing, involves mucosal surfaces</td>
</tr>
<tr>
<td>What are the signs of Herpes Simplex?</td>
<td>• The child will have vesicular lesion or sores, also involving lips and / or mouth</td>
</tr>
<tr>
<td>What are the signs of Herpes zoster?</td>
<td>• Vesicles in one area on one side of body with intense pain or scars plus shooting pain</td>
</tr>
<tr>
<td>How will you recognise a drug reaction?</td>
<td>• The child will have a generalised red rash which is, widespread with small bumps or blisters; or one or more dark skin areas</td>
</tr>
<tr>
<td>How would you recognise molluscum contagiosum?</td>
<td>• The child with have skin coloured pearly white papules with a central umbilication. It is most commonly seen on the face and trunk in children</td>
</tr>
<tr>
<td>How would you treat molluscum contagiosum?</td>
<td>• Can be treated by various modalities:</td>
</tr>
<tr>
<td></td>
<td>− Leave alone unless superinfected</td>
</tr>
<tr>
<td></td>
<td>− Use of phenol</td>
</tr>
<tr>
<td></td>
<td>− Electrodesiccation</td>
</tr>
<tr>
<td></td>
<td>− Liquid nitrogen application</td>
</tr>
<tr>
<td></td>
<td>− Curettage</td>
</tr>
<tr>
<td>How would you recognise seborrhoea?</td>
<td>The child will have greasy scales and redness on central face and body folds,</td>
</tr>
<tr>
<td>How would you treat warts?</td>
<td>• Topical salicylic acid preparations</td>
</tr>
<tr>
<td></td>
<td>• Liquid nitrogen cryotherapy</td>
</tr>
<tr>
<td></td>
<td>• Electrocautery</td>
</tr>
</tbody>
</table>
**Drill: continued:**

<table>
<thead>
<tr>
<th>How would you recognise oesophageal thrush and what treatment would you give?</th>
</tr>
</thead>
<tbody>
<tr>
<td>➢ The child will have pain or difficulty in swallowing</td>
</tr>
<tr>
<td>➢ Give fluconazole</td>
</tr>
<tr>
<td>➢ Give oral care to young infant or child.</td>
</tr>
<tr>
<td>➢ If mother is breastfeeding check and treat the mother for breast thrush</td>
</tr>
<tr>
<td>➢ Follow-up in 2 days</td>
</tr>
<tr>
<td>➢ Tell the mother when to come back immediately</td>
</tr>
</tbody>
</table>

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### 8.0 PREVENTION OF ILLNESS

Explain that infants and children with suspected or confirmed HIV infection have weakened immune systems and it is therefore extremely important to take measures to prevent illness in these children. Tell participants that this section provides them with information on how to prevent illness in HIV infected children through:

- Co-trimoxazole prophylaxis
- Immunisation
- Vitamin A supplementation

Ask participants to read through section 8.1, to discuss in their small groups and to ask questions as necessary.

**Drill: Co-trimoxazole**

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1. Which children should receive co-trimoxazole prophylaxis?

- All young infants classified as POSSIBLE HIV INFECTION / HIV EXPOSED.
- All children with confirmed HIV infection and aged less than 12 months.
- Any child aged 2 months up to 5 years classified as SUSPECTED SYMPTOMATIC HIV INFECTION.
- All children age 12 months up to 5 years with confirmed HIV infection and WHO stage 2 / 3/ 4 or CD4<25% (regardless of whether child is on ART or not).

2. At what age can co-trimoxazole prophylaxis be started?

At 4-6 weeks of age

3. What are the serious side effects of co-trimoxazole prophylaxis?

Steven Johnson syndrome or exfoliative dermatitis or severe pallor.

**Drill on co-trimoxazole dosage:**

List the dosages applicable to the following children:

<table>
<thead>
<tr>
<th>Child's age</th>
<th>Daily dose</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 6 weeks old</td>
<td>2.5 ml syrup or ¼ adult tablet or 1 paediatric tablet</td>
</tr>
<tr>
<td>2. 4 years old</td>
<td>5 ml syrup or ½ adult tablet or 2 paediatric tablet</td>
</tr>
<tr>
<td>3. 6 months old</td>
<td>5 ml of syrup or 1/2 adult tablet or 2 paediatric tablet</td>
</tr>
<tr>
<td>4. 12 months old</td>
<td>5 ml syrup or ½ adult tablet or 2 paediatric tablet</td>
</tr>
<tr>
<td>5. 15 months old</td>
<td>5 ml of syrup or 1/2 adult tablet or 2 paediatric tablet</td>
</tr>
<tr>
<td>6. 5 years old</td>
<td>5 ml of syrup or 1/2 adult tablet or 2 paediatric tablet</td>
</tr>
</tbody>
</table>

Ask participants to read through section 8.2 (immunization) and section 8.3 (vitamin A supplementation), to discuss in their small groups and to ask questions as necessary.
PARTICIPANTS COMPLETE WRITTEN EXERCISE C

Ask participants to take out the recording forms that they used in Written Exercises A (Module 1) and B (Module 2). They should now write down the additional treatment needed for Mishu, Dan, Ebai and Henri based upon the HIV classifications that they recorded in Written Exercise B.

Mishu

Mishu’s original classifications were:
NO DEHYDRATION
DYSENTERY
MALARIA
NO ANAEMIA AND NOT VERY LOW WEIGHT
POSSIBLE HIV INFECTION OR HIV EXPOSED

The additional treatment needed is:
- Give co-trimoxazole prophylaxis
- Give Vitamin A supplements from 6 months of age every 6 months
- Confirm HIV infection status of child as soon as possible using the best available test
- Assess child’s feeding and provide appropriate counselling to the mother
- For dysentery follow-up in 2 days, for possible HIV infection, follow-up in 14 days, then monthly for 3 months and then every 3 months or as per immunization schedule

Dan

Dan’s classifications are:
PNEUMONIA
SOME DEHYDRATION
SEVERE PERSISTENT DIARRHOEA
MALARIA
CHRONIC EAR INFECTION
SEVERE COMPLICATED MALNUTRITION
SUSPECTED SYMPTOMATIC HIV INFECTION

Dan’s additional treatment is:
- Start or continue co-trimoxazole prophylaxis
- Arrange counselling and testing for HIV infection
- Refer for further assessment including HIV care/ART
- Assess child’s feeding and counsel as necessary
- Advise the mother on home care
- Follow-up in 2 days (for the PNEUMONIA), for suspected symptomatic HIV
Ebai

Ebai’s mother has been tested for HIV infection and is HIV positive. Ebai is classified as:

- LOCAL BACTERIAL INFECTION
- FEEDING PROBLEM AND LOW WEIGHT
- POSSIBLE HIV INFECTION OR HIV EXPOSED
  - Give co-trimoxazole prophylaxis at age 4-6 weeks
  - Assessment the child’s feeding and give appropriate feeding advice
  - Refer/ do PCR to confirm infant’s HIV status at least 6 weeks after breastfeeding has stopped
  - Consider presumptive severe HIV disease

Henri

Henri’s mother has been tested for HIV infection and is HIV positive. Henri had an antibody test and the result was positive. Henri’s original classifications were:

- VERY SEVERE DISEASE
- NO FEEDING PROBLEM
- POSSIBLE HIV INFECTION OR HIV EXPOSED

- Henri should be referred to hospital as he has VERY SEVERE DISEASE
- Document in the referral note that Ebai needs the following additional treatment
  - Give co-trimoxazole prophylaxis at age 4-6 weeks
  - Refer/ do PCR to confirm infant’s HIV status at least 6 weeks after breastfeeding has stopped
  - Consider presumptive severe HIV disease
9.0 SUMMARY OF THE MODULE AND ANSWER PARTICIPANTS QUESTIONS

Briefly summarize what topics have been covered by Module 2, by asking participants to call out what this module has taught them. List them on a flipchart.

Ask participants to look back to the learning objectives for the module and provide their feedback as to whether they feel that these objectives have been met.

Participants should highlight any difficult areas, where they need further clarification and ask final questions.

Thank the participants for their good participation and tell them that we will now move on to Module 3: Counselling HIV positive women.
FACILITATOR GUIDELINES FOR

MODULE 3:
COUNSEL THE
HIV POSITIVE MOTHER
## FACILITATOR GUIDELINES

### COUNSEL THE HIV POSITIVE MOTHER

<table>
<thead>
<tr>
<th>PROCEDURES</th>
<th>FEEDBACK</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Prepare to facilitate Module 3</td>
<td>------</td>
</tr>
<tr>
<td>2. Distribute and introduce Module 3 of the IMCI Complementary course on HIV</td>
<td>Group reading and discussion</td>
</tr>
<tr>
<td>3. Participants read the introduction and learning objectives</td>
<td>Individual and group</td>
</tr>
<tr>
<td>4. Participants read through section 3.0: Communication Skills and 3.1: Communication with children</td>
<td>Group reading and discussion to make sure participants understand</td>
</tr>
<tr>
<td>5. Introduce section 4.0: Feeding options for HIV positive women (HIV exposed infant 0 - 6 months) and discuss in small groups</td>
<td>Individual and group</td>
</tr>
<tr>
<td>6. Guide participants through section 5.0: Feeding recommendations for HIV exposed children up to 2 years of age</td>
<td>Individual and group</td>
</tr>
<tr>
<td>7. Facilitate role play on infant feeding options</td>
<td>Individual and group</td>
</tr>
<tr>
<td>8. Participants read through section 6.0 in small groups after which a short discussion is facilitated</td>
<td>Individual and group</td>
</tr>
<tr>
<td>9. Participants do written exercises A and B</td>
<td>Group reading and discussion to make sure participants understand</td>
</tr>
<tr>
<td>10. Participants read through sections 7.0 – 9.0</td>
<td>Group / individual feedback</td>
</tr>
<tr>
<td>11. Facilitate final role play on counselling a mother about HIV test</td>
<td>Group</td>
</tr>
<tr>
<td>12. Summary of module, answer participants questions and closing</td>
<td></td>
</tr>
</tbody>
</table>

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PREPARE TO FACILITATE THE MODULE

HIV positive mothers will require special counselling and support around infant feeding and their own health. Module 3 provides a broad overview of counselling the mother around infant feeding options.

It would be best if most of this module is conducted in small groups of 4-5 participants. Each facilitator should join a small group to assist with facilitation and to help with clarification and explanations. This will ensure that participants understand the content of this module.

Before you start to facilitate the module ask four participants to volunteer to help you with the two role plays – for the first role play allocate the role of Lungile and the role of health worker to one participant each. For the second role play allocate the role of a health worker to one participant and that of the mother to another participant.

Explain to the pair participating in the first role play that the health worker should counsel Lungile on infant feeding options. Provide the participant taking the role of Lungile with information about her circumstances. Do not provide this information to the health worker.

In the second role play, the health worker should counsel the mother that there are signs that her child, Sandile, may have HIV infection and that he needs a test. Tell her that you are not sure that he is suffering from HIV infection but that you think it is important he has a test, so that he gets the treatment he needs.

Explain that the mother should try to behave as a real mother might behave. She may be confused or distressed or she may not understand.

1.0 INTRODUCE THE MODULE

Orientate participants to Module 3:

Explain that the HIV positive mothers will require special counselling and support around infant feeding and their own health. This module assumes that they have already completed the Counsel the Mother module of the IMCI case management course. Tell participants that counselling on infant feeding options requires a lot of skill and practice and that this module alone is not designed to equip them with all the skills necessary. It will instead provide them with the knowledge they will need to give HIV-positive mothers basic information about safer infant feeding, in the absence of a health worker fully trained in HIV and infant feeding counselling. It does not provide them with all the skills necessary to counsel pregnant or newly-delivered
HIV-positive women on infant feeding options.

If they are in a position where they will need to counsel HIV positive women on infant feeding options, they should attend one or more of the courses on HIV and infant feeding counselling – for example the WHO/UNICEF Infant and Young Child Feeding Counselling: An Integrated Course.

Tell participants that the module provides a broad overview of counselling the mother, with sections covering the following:

The first two sections are the introduction and learning objectives. Participants should read through these individually and discuss in small groups.

Section 3.0 builds upon the communication skills learnt in the standard IMCI case management course. These skills are very important when counselling the mother.

Section 4.0 teaches participants about the feeding options available to HIV positive mothers of HIV exposed infants and the advantages and disadvantages associated with each option.

Section 5.0 teaches feeding recommendations for HIV exposed children up to 5 years of age.

Section 6.0 outlines the feeding recommendations for children as confirmed HIV infection.

Section 7.0 describes how to counsel the mother about her own health.

Section 8.0 outlines the use of the mother’s card and HIV and infant feeding counselling cards.

Section 9.0 describes how to counsel the mother of an HIV exposed child about an HIV test.

2.0 PARTICIPANTS READ THE INTRODUCTION AND LEARNING OBJECTIVES

Ask participants to read through the introduction and learning objectives and to discuss in their small groups. Do not allow more than 10 minutes for this. Once participants have completed reading these sections, answer any questions.

By the end of the module, participants should be able to:
• Describe how to effectively communicate with the HIV positive mother
• Describe different feeding options for HIV exposed children and children with confirmed HIV and the processes involved in counselling the HIV positive mother about feeding, including:
  o explaining the advantages and disadvantages of each option
• Describe how to counsel the mother of an HIV exposed child:
  o about her own health
  o about taking her child for an HIV test

3.0 COMMUNICATION SKILLS

This section builds upon the communication skills that participants learnt in the IMCI case management module. It reinforces how to ASK AND LISTEN, PRAISE, ADVISE AND CHECK UNDERSTANDING when counselling a mother and lists the skills that are helpful when counselling.

Tell participants that these skills are expanded on in the WHO/UNICEF: Breastfeeding Counselling: A Training Course. Ask participants to read through this section carefully and discuss in small groups.

4.0 FEEDING OPTIONS FOR HIV POSITIVE WOMEN (HIV EXPOSED INFANT 0-6 MONTHS)

Remind participants that in Module 2 they learnt about the risks of mother-to-child transmission during pregnancy, labour and delivery and through breastfeeding. As part of antenatal and postnatal care, all HIV positive women should receive counselling on infant feeding options, in order to minimize the risk of transmission of HIV to their child in their breast milk.

Ask participants to read through the section paying attention to AFASS criteria, the infant feeding options recommended and the disadvantages and advantages associated with each. Highlight the point that for the purposes of this part of the manual, HIV-exposed infants are assumed to be HIV-negative unless they have been confirmed to be HIV-infected (see section 6.0). If a child is confirmed HIV infected the HIV positive mother should follow the feeding recommendations for HIV negative women or women of unknown HIV status i.e. exclusive breastfeeding for the first 6 months with continued breastfeeding thereafter and the addition of complementary foods at about 6 months.

Participants should discuss these advantages and disadvantages in their small groups. Answer any questions and have a short discussion in plenary.
5.0 FEEDING RECOMMENDATIONS FOR HIV EXPOSED CHILDREN UP TO 2 YEARS OF AGE

Ask participants to read through the table and supplementary information summarizing the feeding recommendations for children aged:

- 0-6 months
- 6-12 months
- 12-24 months

and which also includes the recommendations for the safe transition from exclusive breastfeeding to replacement feeding, which, if AFASS, should be adopted some time between 4 to 6 months.

Facilitators can either join a group or circulate amongst the groups, answering questions. Ensure that participants read through and discuss the supplementary information relating to the table, provided in sections 5.1 to 5.3. Ask them to discuss the need for stopping breastfeeding.

Hold a short discussion in plenary and answer any questions on this section.

Refer participants to the corresponding sections on the chart booklet (pages 25, 27, 38-40).

ROLE PLAY
Infant feeding options

Ask participants to read through the role play on infant feeding options:

Lungile Dludlu is 26 years old. She is 37 weeks pregnant. She has just found out that she is HIV positive. Lungile lives in a tin shack in the centre of the city. She gets water from the tap in the street 200 metres from her home. She lives alone. Her partner works on another city and comes home at weekends. Her mother lives on the farm. Lungile visits her mother during Christmas. Lungile is working – she has temporary jobs.

After the baby is born she does not know whether she will go back to work. Maybe she will go back to the farm for a while before she returns to work. When she returns to the city her mother will look after her baby. Neither her mother nor her partner knows that she is HIV infected. She wants to tell her partner but she is scared as maybe he will get angry with her and he will not give her any money for this baby.
Ask the person playing the HEALTH WORKER to counsel Lungile on how she should feed her baby once he or she is born.

Ask the person playing LUNGILE to try to behave as Lungile would in a real situation.

The rest of the group should watch the role play and note anything that may be important in the discussion that will follow after the role play.

**DISCUSSION**

After the role-play, lead a group discussion about the issues around counselling on infant feeding options.

Ensure that participants understand that counselling on infant feeding options requires lots of skill and practice. Reinforce the point that if they are in a situation where they would need to counsel pregnant women on infant feeding options it is critical that they attend one or more of the courses on HIV and infant feeding counselling.

Ask if participants have any further questions before moving on to the next section.

### 6.0 FEEDING CHILDREN CLASSIFIED AS CONFIRMED HIV INFECTION

Explain that there are special considerations for children who are classified as confirmed HIV infection or suspected symptomatic infection. Breastfeeding, for example can be maintained since the child is already positive, but HIV infected children may experience a number of feeding problems. Ask them to read through section 6.0 which outlines the feeding recommendations for this group.

Draw participants’ attention to the table outlining clinical situations when the nutrition of an HIV-infected child is affected.

Ask participants to discuss the additional action that should be taken for these children.

**PARTICIPANTS DO WRITTEN EXERCISES A AND B**
Tell participants that they will now do two written exercises to practice what they have learnt about feeding recommendations. The first is a true or false exercise and in the second exercise they will meet the 4 children they first met in Module 1 and be asked to provide feeding advice and counselling to the mother.

**WRITTEN EXERCISE A**

1. **Write a "T" by the statements that are True. Write an "F" by the statements that are False.**
   
   a. **F** It is advisable to give children fewer feeds during illness.
   
   b. **T** It is best for a 3-month-old HIV positive child to be exclusively breastfed

   c. **T** It is recommended that a 2-week-old child of unknown HIV status, born to an HIV positive mother is never breastfed.

   d. **F** It is advisable that a breastfeeding child born to an HIV positive woman continues breastfeeding for as long as the mother wants to breastfeed.

   e. **T** It is recommended that a 5-month-old child whose mother is HIV negative breastfeeds as often as he wants, day and night.

   f. **T** A 9-month-old child who is HIV positive on virological tests can continue breastfeeding.

   g. **F** All breastfeeding HIV positive women transmit HIV to their infants.

   h. **F** It is advisable that a child born to a mother with unknown HIV status is given formula.

2. **When should complementary foods be added to the diet of a child born to an**
HIV-positive mother? What foods should be added and what quantity?

At about 6 months:
- Give 3 adequate servings of nutritious complementary foods plus one snack each day, to include protein, mashed fruit and vegetables.
- Each meal should be ¾ cup. If possible give an additional animal-source food, such as liver or meat {Add here the local protein sources}
- If breastfed, give adequate servings 3 times per day plus snacks
- If an infant is not breastfeeding, give about 1-2 cups (500 ml) of full cream milk or infant formula per day
- If no milk is available, give 4-5 feeds per day

3. What is meant by stopping breastfeeding early? When should it be practiced? By whom?
   - Stopping breastfeeding early means completely stopping breastfeeding, including suckling at the breast at or before the child is 6 months of age.
   - It should be practised by HIV positive women who are breastfeeding and whose children are of unknown HIV status or confirmed HIV negative.
   - It should be practised as soon as it is AFASS to stop breastfeeding.

4. An HIV positive mother lives in an urban environment. She has access to piped water, a flush toilet and a refrigerator with a constant power supply. She also has a stove. She and her partner have a stable income. She lives with her partner and her mother. They both know that she is HIV positive. They are keen to help her and are very supportive. What feeding advice and support would you provide?

See chart on next page.
The circumstances of this mother indicate that replacement feeding would be AFASS. Explain the importance of avoiding all breastfeeding.

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
<th>No, or irregular power supply</th>
</tr>
</thead>
<tbody>
<tr>
<td>Where do you get your drinking water?</td>
<td>River, stream, pond, or well</td>
<td>Piped water at home or can buy clean water</td>
<td></td>
</tr>
<tr>
<td>Latrine/toilet</td>
<td>None or pit latrine</td>
<td>Waterborne latrine or flush toilet</td>
<td></td>
</tr>
<tr>
<td>How much money could you afford for formula each month?*</td>
<td>Less than ___* available for formula each month</td>
<td>___* available for formula each month</td>
<td></td>
</tr>
<tr>
<td>Do you have money for transportation to get formula when you run out?</td>
<td>No</td>
<td>Always (unless expressing and heat-treating breast milk) YES</td>
<td></td>
</tr>
<tr>
<td>Do you have a refrigerator with reliable power?</td>
<td>No</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Can you prepare each feed with boiled water and clean utensils?</td>
<td>No</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>How would you arrange night feeds?</td>
<td>Preparation of milk feeds at night difficult</td>
<td>Preparation of milk feeds at night possible Yes</td>
<td></td>
</tr>
<tr>
<td>Does your family know you are HIV-positive?</td>
<td>No</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Is your family supportive of milk feeding and are they willing to help?</td>
<td>Family not supportive and not willing to help, or don't know - can't discuss</td>
<td>Family supportive and willing to help Yes</td>
<td></td>
</tr>
</tbody>
</table>

*The circumstances of this mother indicate that replacement feeding would be AFASS. Explain the importance of avoiding all breastfeeding.
5. An HIV positive mother lives alone in an informal settlement. She has access to piped water, but only has a pit latrine and no toilet. She does not have a regular power supply / fuel and no stove. She does not have a stable source of income. No-one else knows that she is HIV positive. What feeding advice and support would you provide for this mother?

(Refer to chart on the next page): The circumstances of this mother indicate that it would be best for her to breastfeed her baby and stop breastfeeding as soon as her circumstances change and replacement feeding is AFASS. Discuss the importance of disclosure and the importance of exclusive breastfeeding.
<table>
<thead>
<tr>
<th>Question</th>
<th>Alternative 1</th>
<th>Alternative 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Where do you get your drinking water?</td>
<td>River, stream, pond, or well</td>
<td>Piped water at home or can buy clean water</td>
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<tr>
<td>latrine/toilet</td>
<td>None or pit latrine</td>
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<td>How much money could you afford for formula each month?*</td>
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<td>___* available for formula each month</td>
</tr>
<tr>
<td>Do you have money for transportation to get formula when you run out?</td>
<td>NO</td>
<td>Always (unless expressing and heat-treating breast milk)</td>
</tr>
<tr>
<td>Do you have a refrigerator with reliable power?</td>
<td>No, or irregular power supply</td>
<td></td>
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<tr>
<td>Can you prepare each feed with boiled water and clean utensils?</td>
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<tr>
<td>Is your family supportive of milk feeding and are they willing to help?</td>
<td>No</td>
<td>Family supportive and willing to help</td>
</tr>
</tbody>
</table>

*If answers to the questions are mostly in this column: Breastfeeding/wet-nursing is recommended

*If answers to the questions are mostly in this column: Replacement feeding (which is usually commercial infant formula) is recommended
WRITTEN EXERCISE B

Ask participants to think back to Modules 1 and 2, where they met 4 children (Ebai, Henri, Mishu, and Dan) and assessed and classified them for HIV.

Participants should go back to the recording forms that they used in Written Exercise A of Module 1 and Written Exercise B of Module 2 and look at their classifications for each child, including the classifications for HIV.

Based on these classifications, ask participants to write down the feeding advice and counselling that they would give to each mother.

They should attempt the exercise individually but if necessary discuss with other members of their group. Once they have completed the exercise, they should discuss their answers with the facilitator.

**Mishu**

*Mishu was classified as:*

- NO DEHYDRATION
- DYSENTERY
- MALARIA
- NO ANAEMIA NOT VERY LOW WEIGHT
- POSSIBLE HIV INFECTION OR HIV EXPOSED

*Mishu is under the age of 6 months. Mishu’s mother should exclusively breastfeed her, day and night and at least 8 times in 24 hours. Mishu should not receive any other foods or fluids, including commercial infant formula.*

*As soon as it is acceptable, feasible, affordable, sustainable and safe for Mishu’s mother to stop breastfeeding and switch to replacement milk she should do this. Mishu’s mother should be counselled and Mishu tested for HIV infection as soon as possible using the best available test.*

*The mother should look after herself and go to the clinic for regular check-ups and to discuss contraception.*
Dan
Dan’s classifications are:
PNEUMONIA
SOME DEHYDRATION
DYSENTERY
SEVERE PERSISTENT DIARRHOEA
CHRONIC EAR INFECTION
SEVERE COMPLICATED MALNUTRITION
SUSPECTED SYMPTOMATIC HIV INFECTION

Dan’s feeding advice:
- Dan is severely malnourished and needs urgent referral therefore the mother does not need detailed feeding counselling at this stage, but she should be advised to continue breastfeeding Dan as often as he wants.

Ebai
Ebai’s classifications are:
LOCAL BACTERIAL INFECTION
FEEDING PROBLEM AND LOW WEIGHT

Ebai’s mother has been tested for HIV infection and is HIV positive. Ebai can be classified as POSSIBLE HIV INFECTION OR HIV EXPOSED

Ebai is under the age of 6 months. Ebai’s mother should continue exclusively breastfeed him, day and night and at least 8 times in 24 hours. Ebai should not receive any other foods or fluids.

As soon as it is acceptable, feasible, affordable, sustainable and safe for Ebai’s mother to stop breastfeeding and switch to replacement milk she should do this. Ebai’s mother should be counseled and Ebai tested for HIV infection as soon as possible using the best available test.

The mother should look after herself and go to the clinic for regular check-ups and to discuss contraception

Henri
Henri’s classifications are:
VERY SEVERE DISEASE
Henri can be classified as POSSIBLE HIV INFECTION OR HIV EXPOSED

Henri is under the age of 6 months. Henri’s mother should exclusively breastfeed him, day and night and at least 8 times in 24 hours. Henri should not receive any other foods or fluids, including commercial infant formula.
As soon as it is acceptable, feasible, affordable, sustainable and safe for Henri’s mother to stop breastfeeding and switch to replacement milk she should do this. Henri should be tested for counseled and testing for HIV infection as soon as possible using the best available test.

The mother should look after herself and go to the clinic for regular check-ups and to discuss contraception.

7.0 **COUNSEL THE HIV POSITIVE MOTHER ABOUT HER OWN HEALTH**

8.0 **USE OF A MOTHER’S CARD / THE HIV AND INFANT FEEDING COUNSELLING CARDS**

9.0 **COUNSEL THE MOTHER OF AN HIV-EXPOSED CHILD ABOUT AN HIV TEST**

Facilitators should join each small group or circulate amongst the groups, answering questions on each of three remaining sections:

- Section 7.0: counsel the HIV positive mother about her own health
- Section 8.0: use of a mothers card / HIV and Infant feeding counselling cards
- Section 9.0: counsel the mother of an HIV exposed child about an HIV test

Encourage groups to discuss each section amongst themselves.

When they have finished reading through section 9.0, ask participants prepare for the role play on Counselling a mother about an HIV test:
ROLE PLAY

Ask participants to read through the role play on Counselling a mother about an HIV test:

Sandile is an 18-month-old boy with cough and fever. He is classified as PNEUMONIA and NOT GROWING WELL. The health worker considers his HIV status and symptoms. Neither the mother nor the child has had an HIV test. Sandile is low weight for age, and has unsatisfactory weight gain. On examination the health worker finds that Sandile has oral thrush and enlarged glands in the neck and groin. The health worker classifies Sandile as SUSPECTED SYMPTOMATIC HIV.

Ask the person playing the HEALTH WORKER to: Counsel the mother that there are signs that Sandile may have HIV infection and that he needs a test. Tell her that you are not sure that he is suffering from HIV infection but that you think it is important he has a test, so that he gets the treatment he needs.

Ask the person playing the MOTHER to: Try to behave as a real mother might behave. She may be confused or distressed or she may not understand.

The rest of the group should watch the role play and note anything that may be important in the discussion.

DISCUSSION

After the role-play, lead a group discussion about the issues of informing a mother that her child may be HIV infected.

Does the group feel that they will be able to do this at their own clinic?
Why is it important that it should be done?

Discuss strategies that could be used to make it easier for health workers to discuss the topic of HIV infection with their clients.

10. FINAL SUMMARY OF THE MODULE AND ANSWER PARTICIPANTS QUESTIONS
Briefly summarize what topics have been covered by Module 3, by asking participants to call out what this module has taught them. List their responses on a flipchart. Ensure that all sections of module 3 have been listed.

Ask them to look back to the learning objectives for the module and to provide their feedback as to whether they feel that these objectives have been met.

Ask them to highlight any difficult areas, where they may need further clarification and answer any final questions.

Thank the participants for their good participation and tell them that we will now move on to Module 4: Follow-up and chronic care of HIV exposed and infected children.
<table>
<thead>
<tr>
<th>PROCEDURES</th>
<th>FEEDBACK</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Prepare to facilitate Module 4</td>
<td>Individual and group</td>
</tr>
<tr>
<td>2. Distribute and introduce Module 4. Participants read the introduction and learning objectives individually and discuss in small groups</td>
<td>Individual and group</td>
</tr>
<tr>
<td>3. Introduce section 3.0: follow-up of children born to HIV positive women, explaining the difference between follow-up of children with possible HIV infection and those with confirmed HIV infection</td>
<td>Individual and group</td>
</tr>
<tr>
<td>4. Participants conduct role play on follow-up care for an HIV positive child</td>
<td>Individual and group</td>
</tr>
<tr>
<td>5. Participants read through section 4.0: principles of good chronic care and then have a group discussion around the differences between acute and chronic care, providing examples of their work</td>
<td>Individual and group</td>
</tr>
<tr>
<td>6. Participants read through section 5.0: Antiretroviral therapy and then have a group discussion around the need for use of 3 combination drugs</td>
<td>Individual and group</td>
</tr>
<tr>
<td>7. Guide participants through section 6.0: WHO paediatric clinical staging for assessing eligibility for ARVs, then participants do written exercise A</td>
<td>Individual and group</td>
</tr>
<tr>
<td>8. Participants read through section 7.0: counselling for adherence to ART, followed by a role play and group discussion C</td>
<td>Individual and group</td>
</tr>
<tr>
<td>9. Participants read through section 8.0 – 8.2 and do written exercise B.</td>
<td>Individual and group</td>
</tr>
<tr>
<td>10. Participants read section 8.3: side effects of ART and do written exercise C</td>
<td>Individual and group</td>
</tr>
<tr>
<td>11. Guide participants through section 8.3.1: good management of side effects and answer any questions</td>
<td>Individual and group</td>
</tr>
<tr>
<td>12. Participants read through section 9.0: pain relief, followed by group discussion</td>
<td>Individual and group</td>
</tr>
<tr>
<td>13. Participants read through written exercise D and do the 4 case studies, individually before a short discussion in plenary</td>
<td>Individual and group</td>
</tr>
<tr>
<td>14. Participants read through recording and reporting</td>
<td>Individual</td>
</tr>
<tr>
<td>15. Summary of module and course and closing</td>
<td>Individual</td>
</tr>
</tbody>
</table>
PREPARE TO FACILITATE MODULE FOUR

Module 4 focuses on follow-up and chronic care of children born to HIV positive women. It does not go into great detail as the module assumes that IMCI-trained health workers will not be the ones to provide specialised follow-up of children on antiretrovirals. The module is therefore designed simply to provide a basic overview of follow-up and chronic care, including information about antiretroviral therapy and about when to refer the child for further assessment.

Prepare the materials required:

For exercises:

You will need to provide individual and group feedback for each exercise. Try and provide feedback as soon as a participant has finished an exercise or part of an exercise to make sure that he understands what he is doing before he proceeds to the next exercise. Make sure that you read through all the answers to the exercises and that you understand all the answers before you facilitate the module.

For demonstrations: Prepare enlargements of the following:

- Principles of good chronic care
- Clinical staging
- 5As
- Follow-up of HIV exposed children
- Follow-up of symptomatic HIV infection/confirmed cases

Plan how to organise participants:

It would be best if most of this module were conducted in small groups of 4-5 participants. Each facilitator should join a small group to assist with facilitation and to help with clarification and explanations. This will ensure that participants understand the content of this module.
1.0 INTRODUCTION

Distribute Module 4 and orientate participants to the module. Explain that with the module focuses on follow-up of children born to HIV positive women. They will learn about the importance of regular follow-up and re-assessment of children classified as possible HIV infection / HIV exposed and chronic care and long term follow-up of all children with symptomatic HIV infection or confirmed HIV infection. The module will teach them the principles of good chronic care in children, ART in children (including clinical staging) and the possible side effects associated with antiretroviral drugs.

Ensure that you explain to participants that this module assumes that IMCI-trained health workers will not be the ones to provide specialised follow-up of children on antiretrovirals (since this will usually be the responsibility of a first level referral facility). The module is therefore designed to provide a basic overview of follow-up and chronic care, including information about antiretroviral therapy and about when to refer the child for further assessment.

More detailed information can be obtained during the IMAI training course, which is specifically targeted at health workers who are more involved with HIV care. It is strongly recommended that health workers take the IMAI course if they need more information about chronic care of HIV-infected children. Conversely, participants who have already undergone the IMAI training will not need to participate in Module 4, or may simply read through as a brief revision.

Ask participants to read through and discuss the introduction and learning objectives (below) in small groups, with specific attention to the special considerations in children.

LEARNING OBJECTIVES

By the end of this module, participants should be able to:

- Describe how to follow-up children born to HIV positive women, and be able to differentiate between:
  - Follow-up of children classified as HIV EXPOSED/POSSIBLE HIV INFECTION
  - Chronic care for children with SUSPECTED SYMPTOMATIC HIV or CONFIRMED HIV INFECTION
- Understand the principles of good chronic care
- Describe the WHO paediatric clinical staging process
- Describe how to counsel the mother/caregiver for adherence to ART and co-trimoxazole prophylaxis
- Describe the recommended ARV regimens for children, the possible side effects of ARV drugs and the management of possible side effects
• Describe the principles of pain management

2.0 FOLLOW-UP OF CHILDREN BORN TO HIV POSITIVE WOMEN

Introduce participants to the section, explaining that all children born to HIV positive women should be followed up regularly. In doing so, this provides a continuum of care for women who received PMTCT services before and/or during delivery and allows regular reassessment of the child in order to determine their HIV status.

Stress the following points:

- Children classified as CONFIRMED HIV NEGATIVE will require regular routine follow-up as per the IMCI guidelines
- Children classified as POSSIBLE HIV INFECTION / HIV EXPOSED / SUSPECTED SYMPTOMATIC HIV INFECTION will require regular follow-up
- Children who, with follow-up are then reclassified as SYMPTOMATIC HIV INFECTION / CONFIRMED HIV INFECTION will need to be enrolled into a life-long treatment plan – referred to here as ‘Chronic HIV care’

Ask participants to read through section 3.0, with specific attention to conditions needing urgent referral, conditions needing non urgent referral and follow-up of children classified as POSSIBLE HIV / HIV EXPOSED and CONFIRMED SYMPTOMATIC HIV / CONFIRMED HIV INFECTION.

Advise them to discuss the section in their small groups and to ask facilitators for help if necessary.

Refer participants to the follow-up recommendations on page 22 of the chart booklet.

Point out that HIV is a rapidly changing field and they should ensure that they are using the most up-to-date follow-up information to provide follow-up care.

After the participants have finished reading and discussing section 3.0, ask them to read through the role play on follow-up care for the HIV infected child:
ROLE PLAY
Follow-up care for the HIV infected child

Explain the role-play to the two volunteers allocated to this role-play:

Lungi is 19 months old and was seen one week ago suffering from recurrent episodes of diarrhoea. She also had severe thrush and enlarged lymph nodes in her armpits and groin. You saw her and classified her as NO DEHYDRATION, NO ANAEMIA, and SUSPECTED SYMPTOMATIC HIV. She was then tested for HIV and found to be positive.

Ask the participant playing the HEALTH WORKER to discuss the child’s health status with the mother, including the results. She should make a plan with the mother detailing how she will follow-up this child. Remember to give her time to ask any questions and to tell her that there is a lot that can be done to keep her child healthy.

Ask the participant playing the MOTHER to behave as a real mother would in this situation; imagine how it would feel to find out that your child is possibly infected with HIV. Ask the questions you think a mother would ask in this situation.

The rest of the class should watch the role play and comment on the advice given, follow-up recommended and the difficulties faced by both the mother and the health worker.

After the role play conduct a discussion:
- Ask the health worker how she felt
- Ask the mother how she felt
- Ask the rest of the class (the observers) how they felt about the health worker – mother interaction

Next, lead a discussion on the problems of providing ongoing follow-up care for HIV infected children and how these problems could be overcome in participants’ clinics.
4.0 PRINCIPLES OF GOOD CHRONIC CARE

Introduce the principles of chronic care by explaining that chronic care is very different from acute care which is dealt with in IMCI. In the management of children with HIV/AIDS, it is important to be able to provide both good acute and good chronic care at health facilities and to link in with home-based care.

Ask participants to read through section 4.0, including Box 2.0: Principles of Good Chronic care and the more detailed descriptions of five of these principles in small groups. Ask participants to discuss these principles as they read through them.

GROUP DISCUSSION A

Once they have read through the section and had small group discussions, tell them that you would now like to have a discussion with the whole group around the differences between acute and chronic care.

The facilitator should encourage participants to provide examples from their own work situation as to how they can apply the principles of good chronic care.

5.0 ANTIRETROVIRAL THERAPY: GENERAL INFORMATION ABOUT ARVs

Explain that this section builds on what participants learnt in Module 2 about how the HIV virus replicates. This section introduces some background to antiretroviral drugs, lists the commonly used antiretroviral drugs and describes how they interfere with the life cycle of the HIV virus, thus preventing it from replication. Stress the point that ART does NOT cure HIV but, through preventing damage to the immune system, improves quality of life.

Ask participants to read through section 5.0 individually but to discuss in their small groups or with a facilitator if they have any questions.
GROUP DISCUSSION B

Having read through the section, participants should discuss the reasons for the need for 3 drugs when treating HIV positive adults and children. Note: The information is already provided in section 5.0 (see below) but the discussion is to ensure that they have understood the issues.

Tell them that they should refer to section 3.0 of Module 2: Basic information about HIV if they need to recap any information.

Provide any individual feedback as necessary to the small groups and hold a final short discussion in plenary.

Discussion: Combination therapy makes sense for lots of reasons. Here are the most important ones:

- **It takes a lot of force to stop HIV.** HIV makes new copies of itself very rapidly. Every day, many new copies of HIV are made. Every day, many infected cells die. One drug, by itself, can slow down this fast rate of infection of cells. Two drugs can slow it down more, and three drugs together have a very powerful effect.

- **Antiretroviral drugs from different drug groups attack the virus in different ways.** You learnt earlier that different anti-HIV drugs attack HIV at different steps of the process of making copies of itself (first when entering the cell centre, and then when new copies want to leave the cell). Hitting two targets increases the chance of stopping HIV and protecting new cells from infection.

- **Combinations of anti-HIV drugs may overcome or delay resistance.** Resistance is the ability of HIV to change its structure in ways that make drugs less effective. HIV has to make only a single, small change to resist the effects of some drugs. For other drugs, HIV has to make several changes. When one drug is given by itself, sooner or later HIV makes the necessary changes to resist that drug. But if two drugs are given together, it takes longer for HIV to make the changes necessary for resistance. When three drugs are given together, it takes even longer.
6.0 WHO PAEDIATRIC CLINICAL STAGING FOR ASSESSING ELIGIBILITY FOR ART

Once a child’s HIV status has been confirmed as being positive it is important to perform a task called CLINICAL STAGING in order to estimate the degree of immune deficiency the infant or child has. This will allow a decision to be made as to whether the child needs to be put onto ART. Explain that starting ART is not an emergency. Before starting ART, the child needs to be stabilized from any acute illness and opportunistic infections should be treated.

Ask participants to read through the section 6.0 in small groups. They should pay careful attention to understanding the role of staging.

As participants read through this section, ensure that all their questions have been answered. Refer them also to page 9 of the chart booklet.

Photograph practice:

When participants have finished reading the clinical staging table, ask them to open the Photo booklet (section 6). Run through the photographs together, asking participants to call out answers for what they think each condition is. For each condition, ask them which WHO clinical stage is appropriate. (They can refer to the clinical staging table and also to pages 44-47 of the chart booklet.

Answers to photograph exercises:

6a Parotid enlargement Stage 2
6b Chelitis Stage 2
6c Molluscum extensive Stage 2
6d Herpes zoster Stage 2
6e Mouth ulcerations Stage 2
6f Prurigo Stage 2
6g Verruca plana Stage 2
6h Verruca plana Stage 2
6i Verruca plana Stage 2
6j Verruca plana Stage 2
6k Hairy leucoplakia Stage 2
6l Oral thrush Stage 3
6m Oesophageal thrush Stage 4
6n Severe malnutrition Stage 4
6o Kaposi sarcoma Stage 4
6p Lymphoma Stage 4

When you are satisfied that they have understood clinical staging, ask them to complete written exercise A individually.
WRITTEN EXERCISE A

Using the revised WHO paediatric clinical staging, in which clinical stage do these HIV infected children with the following presentation but no other signs belong?

1) 4 years old with many lymph nodes more than 0.5 cm in diameter in the axilla, groin and neck without underlying cause
   Stage 1

2) 6 months old confirmed HIV with PCR not feeding well and severe weight loss
   Stage 4

3) 9 months old with persistent diarrhoea and herpes zoster lesions
   Stage 3

4) 3 years old with persistent lymphadenopathy and recurrent severe pneumonia
   Stage 3

5) 9 years old with Kaposi's sarcoma, otherwise well.
   Stage 4

6) 12 month old baby doing very well but whose mother is HIV positive
   *It will be necessary to perform an HIV test to confirm HIV status before doing clinical staging*
7.0 COUNSELLING FOR ADHERENCE TO ART

Certain groups of children classified as SUSPECTED SYMPTOMATIC HIV INFECTION or CONFIRMED HIV INFECTION or POSSIBLE HIV INFECTION / HIV EXPOSED will be placed on antiretroviral therapy, according to their clinical staging. Health workers need to provide counselling and support so that these children adhere to their treatment continuously.

Explain that this section describes the common problems which affect adherence in children and teaches participants how to involve the child’s mother or caretaker in preparing and supporting adherence through several counselling sessions. The section teaches how to use the 5As to prepare patients for ART adherence.

Ask participants to read through the section and to discuss it in small groups as they do so. Tell them that that after reading through, they will do a role play and then have a group discussion on preparation for adherence to ART. Provide any individual feedback to the small groups during their discussions.

Once they have finished reading through the section, tell participants that you would like two volunteers for a role play, one to play the role of the mother of a 2 year old with confirmed symptomatic HIV infection and the other to play the role of the health worker:

ROLE PLAY: PREPARATION FOR ADHERENCE TO ART

Mary is 2 years old. At the age of 18 months Mary had an HIV antibody test which was positive and she has been classified as SYMPTOMATIC HIV INFECTION.

She was brought to the clinic today for a follow-up and was classified as having: Oral thrush, and VERY LOW WEIGHT. The health clinical team has decided that she needs ART

Ask the health worker to counsel the mother on preparation for adherence to ART, using the 5 As.

The mother should try to behave as a real mother would in this situation. The rest of the group should watch the role play and comment on the advice given and any difficulties faced by both the mother and the health worker during the consultation.

Finally, initiate a group discussion on counselling for adherence to ART:
GROUP DISCUSSION C:  
PREPARATION FOR ADHERENCE TO ART

1. Participants provide examples of reasons why adherence to ART can be difficult in children.

2. The facilitator will write all examples on the flipchart.

3. The facilitator helps participants to decide which of the examples provided could be solved by the 5As.

8.0 ARV OPTIONS FOR CHILDREN

Introduce the section by telling participants that a number of recommended ARV regimens for children exist but there are significant issues around the preparations of ARVs that are available for paediatric use. Many drugs are not available in solid formulation and the liquid formulations available are often unpalatable to children and may be bulky and impractical to store.

Ask participants to read through the section and to discuss some of the issues in their small groups.

After they have finished reading through to section 8.3, ask them to attempt written exercise B individually and to discuss within their small groups if necessary.
WRITTEN EXERCISE B

Ask participants to read through the following example:

10 kg child on d4T.
Look at the table for dose per kg.

For a child weighing less than 30 kg, the dose is:
1 mg/kg/dose twice daily.
Total dose is 1 mg x 10 Kg = 10 mg of d4T twice daily.

What are the available preparations?
Oral solution: 1 mg/ml
1 mg/ml means 1 x 10 mg = 10 ml of solution.

Next ask participants to practice the dosages for all first-line ARVs and a fixed combination of d4T/3TC/NVP for the following weight groups:

1) 12 month old 10 kg child

Explain that you have two options: calculating by weight/surface area or using the ARV drug dosage table.

d4T – 1mg/kg x 10 = 10mg bd. The oral solution contains 1mg/ml. This means that this child will need 10ml d4T.

3TC – 4mg/kg x 10 = 40mg bd. The oral suspension contains 10mg per ml so this child needs 2ml twice daily.

AZT – Assuming normal height, 10kg = 0.45m^2. According to the surface area table this means that the child needs 0.45 x 180 mg/m^2 = 81mg bd. The syrup contains 10mg per ml. Thus this child needs 8ml twice daily.

NVP – 4mg/kg = 4 x 10 = 40mg daily for the first 14 days. At 10mg per ml the child needs 4ml once daily and then twice daily from day 15 onwards.

EFV – not given at this age or weight.
2) 10 month old 8 kg child

d4T – 1mg/kg x 8 = 8mg bd. The oral solution contains 1mg/ml. This means that this child will need 8ml d4T.

3TC – 4mg/kg x 8 = 32mg bd. The oral suspension contains 10mg per ml so this child needs 3.2ml twice daily.

AZT – Assuming normal height, 10kg = 0.4m$^2$. According to the surface area table this means that the child needs 0.4 x 180 mg/m$^2$ = 72mgbd. The syrup contains 10mg per ml. Thus this child needs 8ml twice daily.

NVP – 4mg/kg = 4 x 8 = 32mg daily for the first 14 days. At 10mg per ml the child needs 3.2ml once daily and then twice daily from day 15 onwards.

EFV – not given at this age or weight.

3) 13 month old 12 kg child

d4T – 1mg/kg x 12 = 12mg bd. The oral solution contains 1mg/ml. This means that this child will need 12ml d4T.

3TC – 4mg/kg x 12 = 48mg bd. The oral suspension contains 10mg per ml so this child needs 2.4ml twice daily.

AZT – Assuming normal height, 10kg = 0.5m$^2$. According to the surface area table this means that the child needs 0.5 x 180 mg/m$^2$ = 90mgbd. The syrup contains 10mg per ml. Thus this child needs 8ml twice daily.

NVP – 4mg/kg = 4 x 12 = 48mg daily for the first 14 days. At 10mg per ml the child needs 4.8ml once daily and then twice daily from day 15 onwards.

EFV – not given at this age or weight.

4) 2 year old 10 kg child

d4T – 1mg/kg x 10 = 10mg bd. The oral solution contains 1mg/ml. This means that this child will need 10ml d4T.

3TC – 4mg/kg x 10 = 40mg bd. The oral suspension contains 10mg per ml so this child needs 2ml twice daily.

AZT – Assuming normal height, 10kg = 0.45m$^2$. According to the surface area table this means that the child needs 0.45 x 180 mg/m$^2$ = 81mgbd. The syrup contains 10mg per ml. Thus this child needs 8ml twice daily.

NVP – 4mg/kg = 4 x 10 = 40mg daily for the first 14 days. At 10mg per ml the
child needs 4ml once daily and then twice daily from day 15 onwards.

**EFV** – not given at this age or weight.

5) **3 year old 15 kg child**
   
   **d4T** – 1mg/kg x 15 = 15mg bd. The oral solution contains 1mg/ml. This means that this child will need 15ml d4T.
   
   **3TC** – 4mg/kg x 15 = 50mg bd. The oral suspension contains 10mg per ml so this child needs 3ml twice daily.
   
   **AZT** – Assuming normal height, 15kg = 0.6m^2. According to the surface area table this means that the child needs 0.6 x 180 mg/m^2 = 108mg bd. The syrup contains 10mg per ml. Thus this child needs 8ml twice daily.
   
   **NVP** – 4mg/kg x 4 x 15 = 60mg daily for the first 14 days. At 10mg per ml the child needs 6ml once daily and then twice daily from day 15 onwards.
   
   **EFV** – 200mg

### 8.3 SIDE EFFECTS OF ART

Most drugs have side-effects of some sort, although in the majority of cases they are mild, and not all people taking drugs will experience the same effects and to the same extent. Less than 5% of patients taking ART will have serious clinical side effects.

Ask participants to read through the section on ART side effects, with specific attention to those side effects that require action.

As they work through the section they should attempt written exercise C individually but discuss in their small groups or with a facilitator if necessary.
The table below lists common and potentially serious side effects to common ARV drugs. For each side effect listed, ask participants to fill in the name of the drug, or drugs which cause it:

<table>
<thead>
<tr>
<th>Side effect</th>
<th>Type of side effect ( * requires urgent care)</th>
<th>Drug which causes the side effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Changes in fat</td>
<td>Major - occurs with long term treatment</td>
<td>d4T</td>
</tr>
<tr>
<td>Severe abdominal pain</td>
<td>*Major - patient should seek care urgently and needs urgent referral - potentially serious, because could be pancreatitis</td>
<td>d4T</td>
</tr>
<tr>
<td>Tingling or numbness in feet or hands</td>
<td>Major - this is neuropathy, should seek advice soon</td>
<td>d4T</td>
</tr>
<tr>
<td>Yellow eyes</td>
<td>*Major - patient should seek care urgently and needs urgent referral - this is likely liver toxicity</td>
<td>NVP or EFV</td>
</tr>
<tr>
<td>Skin rash</td>
<td>*Major - patient needs to seek care urgently - It could be a severe reaction to the drug and may require urgent referral.</td>
<td>NVP or EFV</td>
</tr>
<tr>
<td>Nausea, diarrhoea</td>
<td>Minor - patients will need to be prepared to cope with these side effects</td>
<td>All</td>
</tr>
</tbody>
</table>
9.0 PAIN RELIEF

Explain the importance of pain relief in HIV infected children. Tell participants that this section will teach them the signs suggesting pain in children and how they should respond to this pain – in terms of both non-drug methods and use of drug management of pain.

Ask participants to read through section 9.0 and to discuss within their small groups. If they have any questions they should ask the facilitators. When they have finished reading through the section, lead a group discussion.

GROUP DISCUSSION D

Having read through the section, participants should discuss the following questions:

1. How do children manifest pain?

   They should mention - below the age of 4 years, children may not localize where pain is on the body; however they become irritable and cry a lot.

2. How can you assess the level of pain in children?

   Some signs include: brief pain - crying and distressed facial expression / persistent pain - persistent cry with profuse sweating; not being quietened; refusal to eat at all, irritability, lack of interest etc.

3. What methods can you use to relieve pain in children?

   Record their answers on a flipchart and refer them to section 9.2: pain management.

12. FINAL REVISION EXERCISE OF THE VARIOUS
COMPONENTS OF THE COMPLEMENTARY COURSE ON HIV/AIDS

WRITTEN EXERCISE D

Tell participants that they will now meet the 4 children, Mishu, Dan, Ebai, and Henri again for the last time. Some time has passed since they first met them.

Tell participants that in order to complete this exercise, they will need to use the HIV test results from the ‘assess and classify each child for HIV’ that they were given in Module 1. Tell them that the results are listed below to remind them of the details:

Mishu
Mishu’s mother was tested for HIV and she is positive. However Mishu had not had an HIV test (neither virological nor antibody).

Dan
Neither Dan nor his mother has ever been tested for HIV. In addition to his previous classifications, Dan also has parotid enlargement but does not have oral thrush or lymphadenopathy.

Ebai
Ebai’s mother has been tested for HIV infection and is HIV positive.

Henri
Henri’s mother has been tested for HIV infection and is HIV positive. Henri had an antibody test and the result was positive.

Ask participants to read the four case studies that follow and determine how they would assess, classify, treat, counsel and follow-up each child. Ask them to first attempt each case study individually and then discuss them in small groups.

For each case study, ask participants to record the child's signs, classification, treatment, follow-up plan and the counselling that you will provide on the Recording form. Tell them that they should refer to the IMCI chart booklet as you do the
exercise. If they have difficulty with an exercise, they may seek help from a fellow participant or from their facilitator before moving on to the next case study.

**Mishu**

When you last met Mishu she was classified as:
- DYSENTERY
- NO DEHYDRATION
- MALARIA
- NO ANAEMIA AND NOT VERY LOW WEIGHT
- POSSIBLE HIV INFECTION OR HIV EXPOSED

Mishu is now 8 months old. She is well and has no illnesses. She is not classified as VERY LOW WEIGHT on this visit. She has recently been tested negative for HIV by a virological test. She has been on co-trimoxazole. Mishu’s mother stopped breastfeeding her 3 weeks ago.

How would you manage Mishu?

- *Mishu is still classified as HIV EXPOSED/POSSIBLE HIV as her HIV test results does not reflect her HIV status because she was breastfed until 3 weeks ago.*
- Continue co-trimoxazole prophylaxis
- Give routine Vitamin A every 6 months
- Arrange counselling and testing for HIV infection 6 weeks after breastfeeding has stopped – i.e. in 3 weeks time
- Assess Mishu’s feeding and counsel as necessary - Support mother to continue avoiding breast milk

**Dan**

When you last met Dan he was 9 months old.

Dan’s classifications were:
- PNEUMONIA
- SOME DEHYDRATION
- SEVERE PERSISTENT DIARRHOEA
- CHRONIC EAR INFECTION
- MALARIA
- SEVERE COMPLICATED MALNUTRITION
- SUSPECTED SYMPTOMATIC HIV INFECTION

Dan has had an HIV virological test and it was positive. On this visit Dan is classified as PNEUMONIA, PERSISTENT DIARRHOEA and VERY LOW WEIGHT. He also has oral thrush. Dan has been coughing for 2 months.
His mother is well and is breastfeeding him.

How would you manage Dan?

Dan can now be classified as CONFIRMED HIV INFECTION. Continue co-trimoxazole prophylaxis. Discuss adherence preparation for ART with Dan’s mother or refer him to a centre where he can be prepared for ART. Treat Dan for PNEUMONIA, PERSISTENT DIARRHOEA AND VERY LOW WEIGHT.

- Give oral antibiotic for 5 days
- Soothe the throat and relieve the cough with a safe remedy
- The mother should continue breastfeeding Dan. She should give frequent, longer breastfeeds, day and night.
- Dan is also taking other foods and fluids as he is 9 months old. The mother can also
  - increase the quantity of fermented milk products, such as yoghurt OR
  - replace half the milk with nutrient-rich semisolid food.
- For other foods, follow feeding recommendations for the child’s age.

Give Vitamin A according to schedule
Make sure that Dan’s immunizations are up to date
Provide pain relief if necessary.
Refer non-urgently for possible TB or asthma
Advise the mother when to return immediately
Follow-up in 2 days

Ebai:
Ebai was classified as HIV EXPOSED/POSSIBLE HIV INFECTION.

Ebai is now 6 months old. His mother stopped breastfeeding him 10 weeks ago. He tested HIV negative on a virological test done 2 weeks ago.

How would you manage Ebai?

Ebai is truly HIV negative.
Stop co-trimoxazole prophylaxis.
Support mother for exclusive replacement feeding.
Make sure that Ebai’s immunizations are all up to date.
Provide regular Vitamin A according to protocol.
And follow IMCI for assessment and treatment.
Henri is now 9 months old. His mother is still breastfeeding him. Henri has had an antibody test and the result was positive. He is well today. There is no feeding problem. His main reason for coming to the clinic was cough. He is classified as COUGH OR COLD: NO PNEUMONIA and NOT VERY LOW WEIGHT. He does not have a wheeze. He has been coughing for 2 weeks.

How would you manage Henri?

- Henri is still classified as HIV EXPOSED/POSSIBLE HIV as his positive antibody test may still reflect maternal antibody.
- Continue co-trimoxazole prophylaxis
- Soothe the throat and relieve cough
- Assess and counsel on feeding – support mother to stop breastfeeding as soon as this is AFASS.
- Give routine Vitamin A every 6 months
- Advise mother when to return immediately
- Follow-up in 2 days if not improving
- Repeat HIV test 6 weeks after breastfeeding has stopped using the best test available. If the repeat test done 6 weeks after breastfeeding has stopped is an antibody test and it is still positive then it should be repeated after age 18 months. If the repeat antibody test done 6 weeks after breastfeeding has stopped is negative then Henri is not HIV infected. If the repeat test done 6 weeks after breastfeeding has stopped is a virological test and it is positive then Henri is HIV infected. If this virological test is negative then Henri is not HIV infected.

11.0 RECORDING AND REPORTING

Explain the importance of accurate recording and reporting. Ask participants to read through section 11.0 and show examples of recording and reporting forms / registers.

12.0 SUMMARY OF MODULE, SUMMARY OF COURSE AND CLOSING

Briefly summarize what topics have been covered by Module 4, by asking participants to call out what this module has taught them. List their responses on a flipchart. Ensure that all sections of Module 4 have been listed.

Ask them to look back to the learning objectives for the module and to provide their feedback as to whether they feel that these objectives have been met.

Ask them to highlight any difficult areas, where they may need further clarification.
and answer any final questions.

Next, ask participants to run through the same procedure for the course as a whole. What have they learnt in each module? Have the overall learning objectives been met? Are there any remaining areas where they feel that they require further clarification or further training?

Thank the participants for their good participation and congratulate them on completing the IMCI Complementary Course on HIV/AIDS.
ANNEX A: GUIDE FOR CLINICAL PRACTICE

1.0 PLANNING CLINICAL PRACTICE

Clinical practice is an essential part of the Integrated Management of Childhood Illness course and of the IMCI Complementary Course on HIV. This course has one clinical session at the end of the course. This clinical session complements the clinical inpatient and outpatient sessions that are conducted during the IMCI case management course.

The clinical practice could be done either in the outpatient department of a hospital or at the health centre or ART centre or even the inpatient ward - whichever has an adequate number of cases.

There is a need to identify the clinical sites ahead of the course, ensure that there is an adequate number of patients and adequate space. Arrange the visit times, and details of the contact person in the clinical site. Arrange transport to clinic. Label the minibus of each group and let the drivers know which group and where they are taking. On arrival greet the focal person; introduce the purpose of the visit very briefly to participants and demonstrate a case.

If the number of patients is not adequate to allow one patient per participant, pair participants and preferably mix those who speak the local language with those who do not. Distribute recording forms.

There will be 6 hours of clinical practice. One way of dividing this is to have two clinical sessions: the first on day 2 and the second on day 3 of the course.

In the clinical session you should aim for the following:

**Session one:**

- Allow participants to assess, classify and identify treatment in infants and children who are HIV-exposed or HIV-infected – these children may or may not be truly HIV-exposed or infected.
- Demonstrate how to check for parotid enlargement, mouth thrush and persistent lymphadenopathy.

**Session two:**

- Demonstrate counselling the mother on infant feeding
- Demonstrate signs or features of HIV infection in infants and young children towards assessing eligibility for ART such as skin and mouth conditions.
- Allow participants to familiarize themselves with signs of drug side effects.
At the end of each clinical session you should:

- Ask participants to present the children that they have assessed, classified and identified treatments for, and
- Lead a brief discussion on these children, taking into consideration the difficulties that participants are having.

### 2.0 ROLE OF FACILITATOR DURING OUTPATIENT SESSIONS

The role of the facilitator during outpatient sessions is to:

1. **Do all necessary preparations** for carrying out the outpatient sessions.
2. **Explain** the session objectives and make sure the participants know what to do during each outpatient session.
3. **Demonstrate** the case management skills described on the charts. Demonstrate the skills exactly as participants should do them when they return to their own clinics.
4. **Observe** the participants' progress throughout the outpatient sessions and provide feedback and guidance as needed.
5. **Be available** to answer questions during the outpatient sessions.
6. **Lead discussions** to summarize and monitor the participants' performance.
7. **Complete the Checklist for Monitoring Outpatient Sessions** to record participants' performance and the cases managed.

* * *

(There should be 1 to 2 facilitators for every group of 2 to 6 participants.)
3.0 GENERAL PROCEDURES: CONDUCTING THE OUTPATIENT SESSION

1. Gather the participants together. Explain what will happen during the session. Describe the skills they will practice and answer any questions they might have. Be sure participants have their chart booklets and pencils with them.

2. Distribute sufficient copies of the appropriate Recording Form (either for children aged 2 months up to 5 years or for young infants aged up to 2 months). Tell participants they will use the Recording Form to record information about the cases they see. Tell them they should assume that all the children they work with during the outpatient sessions have come for an initial visit. Also explain that they will need to keep their Recording Forms from each session to use later in the classroom. They will use them to complete a Group Checklist of Clinical Signs.

3. Before participants practice a clinical skill for the first time, they should watch a demonstration of the skill. To conduct a demonstration:

   -- Review the case management steps that will be practiced in today's session. Show where the steps are located on the chart.

   -- Describe how to do the steps and review any special techniques to be practiced today such as doing a skin pinch, identifying a child's treatment, or counselling a mother about food, fluids and when to return.

   -- As you demonstrate the case management steps, do them exactly as you want the participants to practice them. Describe aloud what you are doing, especially how you decide that a sign is present and how to classify the illness.

   -- At the end of your demonstration, give participants an opportunity to ask any questions before they begin practicing with patients.

4. Assign patients to participants. Participants should practice doing the steps relevant to each session's objectives with as many children and young infants as possible.

   It is best if participants work individually. If necessary, participants can work in pairs. When working in pairs, they can take turns so that one participant assesses a case while the other observes. After one participant goes through the steps, the other participant also does them.
When participants work in pairs, you are responsible for making sure that every participant, and not just each pair of participants, practices assessing, classifying, and treating sick children and young infants correctly. Every participant should also practice counseling mothers.

5. Steps such as identifying chest indrawing can be difficult for participants at first. The first time a participant does a new step, supervise him carefully to make sure he can do it correctly. Provide guidance as needed.

6. Observe each participant working with his assigned patient. Make sure he is practicing the clinical skills correctly. Also check the participant's Recording Form to see if he is recording information correctly. Provide feedback as needed. Remark on things that are done well in addition to providing guidance about how to make improvements.

7. When you have not been able to observe the participant's work directly, take note of the patient's condition yourself. Then:

   * Ask the participant to present the case to you. He should refer to his recording Form and tell you the child's main symptoms, signs, and classifications. Later in the course, the participant should also summarize his treatment plan.

   * If time is very limited, look at the participant's Recording Form. Compare your observation of the child's condition with the participant's findings. Ask clarifying questions as necessary, to be sure the participant understands how to identify particular signs and classify them correctly.

Discuss the case with the participant and verify the assessment and classification of the case. If treatment has been specified, verify that it is correct. In some clinics, the participant will be allowed to treat the child.

8. Provide specific feedback and guidance as often as necessary. Provide feedback for each case that the participant sees. Mention the steps that the participant does well and give additional guidance when improvement is needed.

   Note: If any children requiring urgent referral are identified during the session, assist in transport if this is feasible. Make sure all urgent pre-referral treatment has been given.

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1At the end of the session, you will complete a monitoring checklist to record each participant's performance during the outpatient session. Detailed instructions for using the Checklist for Monitoring Outpatient Sessions are in the next section.
9. When a participant finishes a case, assign him to another patient. If no new patient is available, ask the participant to observe management of other patients. As soon as another patient is available, assign a participant to that patient. **Your emphasis should be on having participants see as many children as possible during the session.** For this reason, do not let participants become involved in lengthy discussions of cases or wander off after managing just one or two patients.

10. If a child has symptoms and signs which the participants are not yet prepared to assess and classify, return the child to regular clinic staff for continuation of assessment and treatment.

11. If the child is returned to the regular clinic staff for treatment, you may need to write a brief note on the findings and likely diagnosis or briefly discuss the case with the clinician in charge to make sure the child receives correct and prompt care. **It is important that the mother receives appropriate treatment for her child before leaving the clinic.**

12. If, at any time during any session, a child or young infant presents with a sign which is seen infrequently, or with a particularly good or interesting example of a sign being emphasized that day, call all the participants together to see the sign in this child or young infant. Because the signs listed below are seldom seen, any opportunity to see them must be taken. Note, however that it is very important to ensure that you handle the situation with sensitivity towards the child and the mother. It is important not to frighten the child or make them feel worried or intimidated.

### 4.0 GENERAL PROCEDURES: AT THE END OF THE SESSION

1. Lead a discussion to summarize the session.

   Gather participants together and discuss the cases seen and specific skills practiced that day. If problems occurred, discuss what happened and how the problem was corrected. Encourage the participants to discuss their observations about the day's cases. Answer any questions and discuss any concerns that participants may have about the case management skills or cases seen that day.

2. Reinforce the use of good communication skills. Discuss words that mothers understand for terms used on the charts.

   Local terms which are well understood for cough, diarrhoea, fever and signs for when to return are usually identified before the course and included on the
Mother's Card. They may also be on the adapted charts. Briefly discuss with participants the new terms used in the session with participants and obtain their feedback on whether these are the words they would normally use to talk with mothers and whether they are well understood.

3. At the end of each session, you should do two steps for monitoring of the participants’ performance in the outpatient sessions.

   -- Complete the Checklist for Monitoring Outpatient Sessions.

   -- Remind participants to keep their Recording Forms to use when they return to the classroom. They will monitor their own clinical experiences by using a Group Checklist of Clinical Signs.

   Detailed instructions for carrying out these two monitoring activities begin on the next page.
5.0 MONITORING OUTPATIENT SESSIONS

Checklist for Monitoring Outpatient Sessions

You should use a Checklist for Monitoring Outpatient Sessions to monitor each participant's progress in learning the case management process. Refer to the checklists which follow these instructions as you read about how to use them.

There is one checklist to use in sessions with sick children (aged 2 months up to 5 years) and second checklist to use in sessions with young infants (aged up to 2 months). Each checklist is arranged so you can record results for 3 participants who manage up to 6 patients each without turning the page. If there are more than 6 patients managed by a participant in a morning, use a second checklist.

Do not spend all your time in the outpatient session completing the checklist. Concentrate on actually observing participants and giving feedback. You can complete the checklist for each child from memory after the case is completed since you only need to record the child's age, classifications and treatments or counselling given.

To use the checklist:

1. Tick (✓) each classification the child actually has (according to your assessment). Tick the actual classifications, not the ones assigned by a participant if he is in error.

2. If there is an error in the participant's classification, circle the tick that you have entered by the correct classification. The participant's error could be in the assessment or could be misclassification based on correct assessment. Even if the classification is correct, if there was an error in the assessment, circle the tick and annotate the assessment problem.

3. For the step "Identify Treatment Needed" tick if the participant performed this step and wrote the correct treatment on the Recording Form. If he made an error, circle the tick mark. (Common errors are skipping treatments, not crossing off treatments that are not needed, or recording treatments that are not needed because the conditional "if" was ignored).

4. For the rows:
   - COUNSEL WHEN TO RETURN
   - TREAT (oral drugs, Plan A, Plan B and treating local infections
   - COUNSEL FEEDING

   tick if the participant actually performed the step.
Note: Giving the treatment means teaching the mother how to give it and administering the first dose or the initial treatment.

If there is any error in the treatment or counselling, circle the relevant tick. There could be an error in the treatment (either the dosage or explanation to the mother) or counselling.

5. For each circled tick, note the problem in the space at the bottom of the checklist. Note the problems very briefly. You can use letters or numbers next to the circles to annotate the problems. These notes will help you when you discuss the participants' performance at the facilitator meeting. These notes will also help you keep track of the skills that need further practice.

6. If you did not see the participant manage the case, take note of the child's condition yourself. Then ask the participant to present the case or refer to the participant's Recording Form. Tick the checklist as described above.

7. When you complete the checklist and record information about the case:
   -- If the child does not have a main symptom, do not tick that section. There is no classification to record.
   -- If the participant has not yet learned the steps related to certain rows of the checklist, leave these rows blank. If there was no time for the treatment or counselling, leave these rows blank.
   -- Draw a line under the row for the last step that the group practiced.

6.0 METHODS FOR INPATIENT SESSIONS

The inpatient Sessions will take place on an inpatient ward for two hours. Once again participants should conduct the sessions in small groups.

You should use the first half hour to demonstrate any new clinical signs such as how to check for parotid enlargement, lymphadenopathy, and oral thrush.

Use the next hour to allow participants to assess, classify and identify treatment in the infants and children that you have set-up for them.

Use the last half hour to discuss these children with participants and discuss their difficulties and concerns.

7.0 CONFIDENTIALITY DURING THE
INPATIENT SESSION

As HIV may still be a very sensitive issue you may not be able to speak openly about HIV in the ward. Furthermore, because of confidentiality you will not be able to openly state and discuss the HIV status of mothers or children. You, the facilitators and the participants will have to work around this: one suggestion is that you can see the patients and discuss the clinical features or signs present in the ward, but only discuss the child’s classification in a private closed room. Another suggestion is that you can use alternate term to refer to HIV.
### ANNEX B  CHECKLIST FOR MONITORING OUTPATIENT SESSIONS

**SICK CHILD - AGED 2 MONTHS UP TO 5 YEARS**

<table>
<thead>
<tr>
<th>Participant name</th>
<th>Date</th>
<th>OPD Site</th>
<th>Group</th>
<th>Facilitator</th>
<th>Tick correct classifications. Circle if any assessment or classification problem. Annotate below.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
<td><strong>SICK child age (month)</strong></td>
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<td></td>
<td>Yes/No</td>
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</tr>
<tr>
<td>TREATMENT</td>
<td>TREAT PLAN A</td>
<td>PLAN B</td>
<td>COUNSEL FEEDING</td>
<td>COUNSEL ABOUT OWN HEALTH</td>
<td>COUNSEL WHEN TO RETURN</td>
</tr>
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<td>------------------------</td>
</tr>
<tr>
<td>ORAL DRUGS</td>
<td></td>
<td></td>
<td>Feeding problems identified</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LOCAL INFECTION</td>
<td></td>
<td></td>
<td>Gives advice on feeding problems</td>
<td></td>
<td></td>
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<tr>
<td>Vitamin A / Mebendazole</td>
<td></td>
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<tr>
<td>PLAN A</td>
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<tr>
<td>PLAN B</td>
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<tr>
<td>Follow-up care:</td>
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<td></td>
</tr>
<tr>
<td>Pneumonia</td>
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<tr>
<td>Diarrhoea</td>
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<tr>
<td>Dysentery</td>
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<tr>
<td>Malaria</td>
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<td></td>
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<tr>
<td>Measles</td>
<td></td>
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</tr>
</tbody>
</table>

**PROBLEMS:**

**IDENTIFY TREATMENTS NEEDED**

Tick treatment or counselling actually given. Circle if any problem. Annotate below.
CHECKLIST FOR MONITORING OUTPATIENT SESSIONS

SICK YOUNG INFANT AGED UP TO 2 MONTHS

Date ___________________  Group ___________________  OPD Site ___________________  Facilitator ___________________

Tick correct classifications. Circle if any assessment or classification problem. Annotate below.

Participant name

<table>
<thead>
<tr>
<th>SEVERE DISEASE /BACTERIAL</th>
<th>Sick Young Infant (weeks)</th>
<th>Very severe disease</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Local bacterial infection</td>
<td></td>
</tr>
<tr>
<td>JAUNDICE</td>
<td>Severe jaundice</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Jaundice</td>
<td></td>
</tr>
<tr>
<td></td>
<td>No Jaundice</td>
<td></td>
</tr>
</tbody>
</table>

| DIARRHOEA:                 | Severe dehydration            |                    |
|                            | Some dehydration               |                    |
|                            | No dehydration                 |                    |

| ASSESS FOR HIV INFECTION   | Confirmed HIV infection        |                    |
|                            | Possible HIV infection/ HIV exposed |                |
|                            | HIV infection unlikely         |                    |

| FEEDING                    | Feeding problem or low weight  |                    |
|                            | No feeding problem             |                    |

| IDENTIFY TREATMENT NEEDED  | Breastfeeding attachment and sucking assessed | |

Tick treatments or counselling actually given. Circle if any problem. Annotate below.

TREAT AND COUNSEL

| Oral/ IM drugs              | Diarrhoea                      | |
|----------------------------|--------------------------------| |
| Keep infant warm            |                               | |
| Treat local infection       |                               | |
| Counsel to express milk     |                               | |
| Teach correct positioning and attachment | | |
| Counsel mother who is not breastfeeding | | |
| Teach to feed by cup        |                               | |
| Teach to prepare formula    |                               | |

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**Follow up care:**
- Jaundice
- Home care / when to return
- Local bacterial infection
- Thrush
- Feeding problem
- HIV Exposed
- Low weight for age

**PROBLEMS:**
**MANAGEMENT OF THE SICK CHILD AGED 2 MONTHS UP TO 5 YEARS**

**Name:** ___________________________________________      **Age:** _____________   **Weight:** __________ kg    **Temperature:** ________°C

**ASK:** What are the child’s problems? ____________________________  **Initial visit?** __   **Follow-up Visit?** ___

---

### ASSESS (Circle all signs present)

#### CLASSIFY

**CHECK FOR GENERAL DANGER SIGNS**

<table>
<thead>
<tr>
<th>Not able to drink or breastfeed</th>
<th>Lethargic or unconscious</th>
<th>Convulsions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes____ No____</td>
<td>Yes____ No____</td>
<td>Yes____ No____</td>
</tr>
</tbody>
</table>

- **DOS THE CHILD HAVE COUGH OR DIFFICULT BREATHING?**
  - For how long? ____ Days
  - Count the breaths in one minute.
  - ___ breaths per minute. Fast breathing?
  - Look for chest indrawing.
  - Look and listen for stridor/wheeze.
- **DOS THE CHILD HAVE DIARRHOEA?**
  - For how long? ____ Days
  - Look at the child’s general condition. Is the child:
    - Lethargic or unconscious?
    - Restless or irritable?
    - One of these: cough, runny nose, or red eyes.
- **DOS THE CHILD HAVE AN EAR PROBLEM?**
  - For how long? ____ Days
  - Look for pus draining from the ear.
  - Feel for tender swelling behind the ear.

---

**CHECK FOR MALNUTRITION AND ANAEMIA**

- For children < 6 months, look for visible severe wasting.
- Severe palmar pallor? Some palmar pallor?
- Determine weight for age.
  - Very Low ___   Not Very Low ___

**CHECK FOR HIV INFECTION**

- HIV tested before (confidential): Mother: __ positive ___ negative ___ unknown ___
  - Child: __ positive ___ negative ___ unknown ___
  - Pneumonia __
  - Parotid enlargement __
  - Very low weight for age __
  - Oral thrush __
  - Ear discharge __
  - Generalized persistent lymphadenopathy __
  - Persistent diarrhea __

- If mother is HIV infected, and child less than 24 months old, decide on infant feeding counseling needs

**CHECK THE CHILD’S IMMUNIZATION STATUS**

<table>
<thead>
<tr>
<th>BCG</th>
<th>DPT1</th>
<th>DPT2</th>
<th>DPT3</th>
<th>OPV 0</th>
<th>OPV 1</th>
<th>OPV 2</th>
<th>OPV 3</th>
<th>Measles</th>
<th>(Date)</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
</table>

**RETURN FOR NEXT IMMUNIZATION ON:** ____________________(Date)

---

**ASSESS CHILD’S FEEDING**

**IF CHILD HAS ANAEMIA OR VERY LOW WEIGHT OR IS LESS THAN 2 YEARS OLD.**

- Do you breastfeed your child? Yes____ No____
  - If Yes, how many times in 24 hours? ___ times. Do you breastfeed during the night? Yes____ No____
- Does the child take any other food or fluids? Yes____ No____
  - If Yes, what food or fluids?
  - How many times per day? ___ times. What do you use to feed the child?
  - If very low weight for age: How large are servings?
  - During the illness, has the child’s feeding changed? Yes____ No____ If Yes, how?

---

**ASSESS OTHER PROBLEMS**

Ask about mother’s own health  Time taken
**MANAGEMENT OF THE SICK YOUNG INFANT AGED UP TO 2 MONTHS**

**Name_________________________  Age: _________  Weight:  ________  Temperature: ______**

**ASK: What are the baby’s problems?_____________________________  Initial visit? ________  Follow-up visit?_____*

**ASSESS**  **CLASSIFY**

**CHECK FOR VERY SEVERE DISEASE AND LOCAL INFECTION**
- Is the infant having difficulty feeding?
- Has convulsions
- Fast breathing: breaths per minute: ______  Repeat if required:______
- Grunting
- Severe chest indrawing
- Umbilical draining pus or redness
- Fever (37.5 or above) or low temperature (below 35.5 or feels cold)
- Skin pustules
- Does the infant move only when stimulated?
- Does the infant not move even when stimulated?

**CHECK FOR JAUNDICE**
- *Look for jaundice (yellow eyes or skin)  Look at the young infant’s palms and soles. Are they yellow?*

**CHECK FOR EYE INFECTIONS**
- Look at the young infant’s eyes.  Are eyes swollen?  Are eyes draining pus?

**DOES THE YOUNG INFANT HAVE DIARRHOEA?**
- Yes  No
- Does the infant move only when stimulated?
- Does the infant not move even when stimulated?
- Restless and irritable
- Sunken eyes
- Pinched skin goes back slowly: ______  Goes back very slowly (> 2 secs)

**CHECK FOR HIV INFECTION**
- Has the mother or infant had an HIV test?  What was the result?

**THEN CHECK FOR FEEDING PROBLEM OR LOW WEIGHT**
- in breastfed infants (infants receiving breast milk)

**Breastfeeding:**
- Yes  No  ______ times in 24 hours

**Receiving other food or drinks:**
- Yes  No  ______ times in 24 hours

- If yes what do you use to feed the baby?
- Plot weight for age:  Low weight  Not low weight  Poor weight gain

**Assess breastfeeding:**
- Breastfed in previous hour?  Yes  No
- If the infant has not fed in the previous hour, ask the mother to put the child to the breast
- Observe the breastfeeding for four minutes, check attachment:
  - Chin touching breast  Yes  No
  - Mouth wide open  Yes  No
  - Lower lip turned out  Yes  No
  - More areola above than below the mouth  Yes  No
  - Not attached  Not well attached  Good attachment

- Is the young infant suckling effectively (that is, slow deep sucks, sometimes pausing)?
- Not suckling at all  Not suckling effectively  Suckling effectively

**THEN CHECK FOR FEEDING PROBLEM OR LOW WEIGHT**
- in infants receiving no breast milk

**Difficulty feeding?**
- Yes  No

**What made you decide not to breastfeed?**

**Which breast-milk substitute?**

**Is enough milk being given in 24 hrs?**
- Yes  No

**Correct feed preparation?**
- Yes  No

**Any food or fluids other than milk?**
- Yes  No

**Feeding utensils:**
- Cup  Bottle

**Utensils cleaned adequately?**
- Yes  No

**Thrush present?**
- Yes  No

**Plot weight for age:  Low weight  Not low weight  Poor weight gain**

**ARE THERE ANY SPECIAL RISK FACTORS PRESENT?**
- Yes  No
  - Premature or low birthweight
  - Young adolescent mother
  - Birth asphyxia
  - Not breast fed
  - Severe socioeconomic deprivation
  - Mother known to be HIV positive
  - Other______________________

**CHECK THE YOUNG INFANTS IMMUNIZATION STATUS**
- Mark immunizations needed today

<table>
<thead>
<tr>
<th>Birth</th>
<th>BCG</th>
<th>DPT+HIB</th>
<th>HepB</th>
<th>OPV</th>
</tr>
</thead>
<tbody>
<tr>
<td>6weeks</td>
<td></td>
<td></td>
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<tr>
<td>10weeks</td>
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</tbody>
</table>

Return for next immunization on:  ____ (Date)
ANNEX C:
IMCI COMPLEMENTARY COURSE ON HIV/AIDS

Pre and Post-Course Test

Please answer questions by circling the correct answer/s. Please note that more than one correct answer is possible for each question.

1. In IMCI, the sick young infant refers to:
   a) First month after birth  
   b) aged up to 2 months 
   c) birth up to 3 months 
   d) First 7 days after birth

2. Of the following signs, which ones are general danger signs
   a) fast breathing 
   b) chest in drawing 
   c) convulsions 
   d) neck stiffness 
   e) vomiting everything 
   f) severe wasting

3. A 2 month old infant is said to have fast breathing if:
   a) Only if breathing is 40 per minute or more 
   b) Only if breathing is 50 per minute or more 
   c) Only if breathing is 50 per minute and repeated the same 
   d) Only if breathing is 60 per minute

4. A 6 month old classified as SEVERE PNEUMONIA or VERY SEVERE DISEASE:
   a) should be assessed for HIV 
   b) may have severe pneumonia or may not 
   c) needs to be given first dose of antibiotic before urgent referral 
   d) may have stridor or chest in drawing or any general danger sign
5. A 12 month old with diarrhoea for 14 days or more can be classified as having SEVERE PERSISTENT DIARRHOEA
   a) if child had very low weight for age or visible severe wasting
   b) if child had blood in stool
   c) if child was lethargic even though no other sign of dehydration
   d) if child had at least two signs of dehydration

6. A 2 year old with signs of measles may be classified as having SEVERE COMPLICATED MEASLES if
   a) child has convulsion
   b) child is unable to drink
   c) child has clouding of the cornea
   d) child has deep or extensive mouth ulcers

7. A child with ear problem can be classified as having ACUTE EAR INFECTION if
   a) if problem was for 14 days or more
   b) if child has pus draining from the ear
   c) if child has ear pain
   d) if child has pus draining from ear and for less than 14 days

8. To check for malnutrition
   a) look for visible severe wasting
   b) feel for oedema of both feet
   c) look for palmar pallor
   d) determine weight for age

9. In a young infant with VERY SEVERE DISEASE, the following signs are possible:
   a) convulsion
   b) fast breathing
   c) severe chest indrawing
   d) grunting
   e) fever
   f) less than normal movements
10. An infant has good attachment if
   a) chin touching breast
   b) Mouth wide open
   c) lower lip turned outward
   d) more areola visible below than above the mouth

11. An infant may not suckle effectively if
   a) there is blocked nose
   b) if not well attached
   c) if classified having possible serious bacterial infection
   d) if lower lip is turned outward

12. An infant may be said to have feeding problem if
   a) not well attached
   b) not suckling effectively
   c) having less than 8 breastfeeds in 24 hours
   d) receives other foods or drinks
   e) low weight for age
   f) has mouth ulcers

13. HIV:
   a) Attacks red blood cells
   b) Attacks white blood cells (CD4)
   c) Attacks the liver

14. What is an opportunistic infection?
   a) An infection that takes advantage of the weakness of the immune system to cause disease.
   b) An infection that takes advantage of an open lesion in a person’s body to cause disease.
   c) A disease for which home care is the only treatment
15. In advising an HIV+ woman to prevent mother-to-child transmission of HIV, you educate her on all the modes of transmission (circle all true):

a) Pregnancy  
b) After birth, through kissing her child  
c) At the time of delivery  
d) After birth, through breastfeeding  
e) After birth, through hugging or holding her child.

16. The chance of transmission of HIV virus from mother to child is

a) about 1/2  
b) about 1/3  
c) about 1/4  
d) about 1/5

17. If 20 mothers known to be HIV infected get pregnant and deliver 20 babies:

a) about 7 of them will be HIV infected if mother continues to breastfeed  
b) about half of them will be HIV infected if mother does not breast feed at all  
c) about two-third of them will be HIV infected if mother stops breastfeeding at 6 months  
d) about 13 of them will not be HIV infected even if mother continues to breast feeding including mixed feeding

18. There are certain methods (such as ART, replacement feeding) which reduce the risk of mother-to-child transmission.

a) True  
b) False

19. If an HIV positive person does not understand what HIV is and doesn’t understand the treatment, this could cause a problem with adherence to the long term treatment.

a) True  
b) False

20. In advising about HIV care, you should tell the caretaker and/or the child (circle all true):

a) Drugs can be taken anytime during the day.  
b) Drugs must be taken everyday for life at the exact same time.  
c) Drug doses can be doubled if he/she forgets to take it one day.  
d) Always carry some tablets as they go to work or on a journey.
21. A child with HIV infection may usually present with:
   a) pneumonia  
   b) persistent diarrhoea  
   c) very low weight for age  
   d) enlargement of the lymph nodes in at least two sites or parotid gland  enlargement  
   e) oral thrush

22. In a HIV seropositive infant born to an HIV infected mother, a rapid antibody test can surely confirm infection when done at or after the age of:
   a) 6 months  
   b) 9 months  
   c) 15 months  
   d) 18 months

23. If you have a 2 month infant who is HIV seropositive (has tested positive by an HIV antibody test) and has signs and symptoms for HIV infection, the appropriate action is:
   a) Start co-trimoxazole prophylaxis  
   b) arrange for counselling for feeding  
   c) advise caretaker on home care  
   d) Do PCR test if available (at least 6 weeks after breastfeeding has stopped) otherwise repeat the antibody test at 18 months

24. Co-trimoxazole prophylaxis has been effective in reducing mortality of HIV infected children:
   a) not true  
   b) by 2-5 %  
   c) by 5-10%  
   d) by up to 40%

25. Co-trimoxazole prophylaxis should be started for which clinical conditions in a child (circle all true):
   a) All infants born to HIV infected mothers  
   b) Any child suspected of symptomatic HIV infection  
   c) Any child aged less than 12 months with confirmed HIV infection  
   d) Any child with symptomatic HIV infection.
26. Co-trimoxazole prophylaxis for HIV+ children in Africa helps to reduce the risk of getting (circle all true):
   a) pneumonia caused by S. pneumoniae
   b) pneumonia caused by pneumocystis carinii
   c) pneumonia due to mycobacterium tuberculosis
   d) Herpes Zoster
   e) Toxoplasma brain abscess
   f) Certain types of diarrhoea caused by organisms such as Isospora Belli
   g) Certain types of mouth sores caused by Herpes Simplex
   h) Other common bacterial infections
   i) Malaria

27. Side effects such as nausea, headache, dizziness, diarrhoea, feeling tired, and muscle pain are common with ART. They usually occur at the beginning of treatment and then improve within 2-4 weeks.
   a) True
   b) False

28. Antiretroviral therapy (ART) is a lifelong drug.
   a) True
   b) False

29. ART will cure HIV after 2 years.
   a) True
   b) False

30. For a child with HIV infection, starting ART is urgent
   a) True
   b) False
31. The principles of good chronic care can be applied using the 5A’s systematically. The 5A’s should be used in the order (Re-arrange the order)

- Advise a) __________________
- Agree b) __________________
- Assess c) __________________
- Arrange d) __________________
- Assist e) __________________

32. The follow-up of an infant aged below 18 months with the classification HIV EXPOSED/POSSIBLE HIV INFECTION (following an antibody test) is important to ensure that:

a) opportunistic infections are promptly and aggressively managed
b) Co-trimoxazole prophylaxis is given until HIV is definitively ruled out
c) Options for feeding are given for the mother in good time
d) the baby is assessed for the WHO paediatric clinical staging

33. The following are a potentially serious side effect of ARV's:

a) nausea
b) vomiting
c) diarrhoea
d) yellow eyes

34. A child on ARV regimen containing AZT may be expected to develop:

a) anaemia
b) psychosis
c) tingling sensation of the limbs
d) maldistribution of the fat on the body

35. Which of the following drugs cause severe skin reaction that could be fatal:

a) Co-trimoxazole
b) NVP
c) EFV
d) d4T
e) AZT
## Answers to Pre-Post Test

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<table>
<thead>
<tr>
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<tbody>
<tr>
<td>1</td>
<td>b</td>
<td>21</td>
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<td>c, e</td>
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<td>20</td>
<td>b, d</td>
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ANNEX D:
IMCI COMPLEMENTARY COURSE ON HIV/AIDS

Evaluation by participants

You have just completed a field test of the IMCI Complementary Course on HIV/AIDS. Please tick (✓) or answer the following questions thoughtfully and completely. Thank you.

1. In what clinic or health centre do you work? ______________________________

2. a) What was good about the course?

   b) What was not good and should be improved or left out for future courses?

3. Are there any skills that you need in managing HIV infected children that you think should be added to the course? What are they?
4. Are the skills acquired in this course adequate to:
   
a) identify sick children with possible/suspected HIV infection
b) advise sick children on co-trimoxazole prophylaxis
c) advise on infant feeding of the HIV exposed/infected child
d) Prepare the caretaker and child for long term care

5. For each activity listed below:
   
a. Tick the box that best describes the usefulness of each teaching activity for helping you to learn how to provide paediatric HIV care. You may look at your module to help you remember.

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>VERY USEFUL</th>
<th>USEFUL</th>
<th>SOMEWHAT USEFUL</th>
<th>NOT USEFUL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MODULE 1</strong></td>
<td></td>
<td></td>
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<tr>
<td>Written Exercises: IMCI recap</td>
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<tr>
<td>Short answer exercises: IMCI recap</td>
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<tr>
<td>Video: IMCI recap</td>
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<tr>
<td>Assess and classify for HIV</td>
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<tr>
<td>Assess and classify for skin conditions</td>
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<tr>
<td>Assess and classify for mouth ulcers</td>
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<td>Outpatient Sessions</td>
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<td>SOMEWHA USEFUL</td>
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<td><strong>MODULE 2</strong></td>
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<td>Basic information on HIV</td>
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<td>How children get infected with HIV - exercise A</td>
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<td>Co-trimoxazole prophylaxis</td>
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<td>Treating skin and mouth problems</td>
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<td>Video session</td>
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<td>Exercises: End of Module Discussions</td>
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<td><strong>MODULE 3</strong></td>
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<td>Feeding options for HIV infected women</td>
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<td>Feeding children 0-6 months</td>
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<td>Feeding other children</td>
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<td><strong>MODULE 4</strong></td>
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<td>Principles of good chronic care</td>
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<td>Follow-up of children born to HIV infected women</td>
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<td>Introduction to ARV's</td>
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<td>Referring for assessment of eligibility for ART</td>
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<td>Exercises and end of module discussion</td>
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b. Did you want **more** time for any of the above activities (that is, were you too rushed)? If so, circle any activity listed in the left column that should have more time.
6. Tick the box to indicate how easy or difficult it was for you to learn aspects of paediatric HIV care skills.

<table>
<thead>
<tr>
<th>Skills in IMCI: IMCI recap</th>
<th>Easy</th>
<th>Moderate</th>
<th>Difficult</th>
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<tbody>
<tr>
<td>Assessing for HIV - IMCI algorithm for HIV</td>
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<td>Assessing for new signs of HIV: PGL, parotid enlargement, liver and spleen enlargement</td>
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<td>Discussing feeding options for HIV exposed infant</td>
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<td>Assessing HIV infected child for common infections</td>
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<td>Assessing HIV infected child on ART for referral for side effects of ARV</td>
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Your comments are very important to us. Please write any additional comments or observations that you have about the training, including suggestions for improvements, on the bottom of this page and on the back.

Thank you.