Building the competence and confidence of nurse and midwife educators.

ICAP
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COLUMBIA UNIVERSITY
Mailman School of Public Health

Campus to Clinic

Mentoring Guide for Facilitators

Developed under the Global Nurse Capacity Building Program

PEPFAR
U.S. President's Emergency Plan for AIDS Relief

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Abbreviations and Acronyms

3TC	Lamivudine
ABC	Abacavir
AFB	Acid-fast bacteria
ALT	Alaninaminotransferase, a liver enzyme
ANC	Antenatal care
ART	Antiretroviral therapy
ARV	Antiretroviral
AST	Aspartate transaminase or aspartate aminotransferase, a liver enzyme
AZT	Zidovudine
BCG	Bacille Calmette-Guérin
CD4	T-lymphocyte CD4 cell count
COCs	Combined oral contraceptive pills
CTX	Cotrimoxazole
d4T	Stavudine
DOTS	Directly Observed Treatment Strategy
ECPs	Emergency contraceptive pills
EFV	Efavirenz
ELISA	Enzyme-linked immunosorbent assay
EPI	Expanded Programme on Immunization
FBC	Full blood count
FTC	Emtricitabine
HIV	Human immunodeficiency virus
HIV VL	HIV viral load
IMAI	Integrated Management of Adolescent and Adult Illness
IMCI	Integrated Management of Childhood Illness
INH	Isoniazid
IPT	Isoniazid preventive therapy
IRIS	Immune reconstitution inflammatory syndrome
IUD	Intra-uterine device
LAM	Lactational amenorrhea method
LFT	Liver function test
LPV/r	Ritonavir boosted lopinavir
MTCT	Mother-to-child transmission (of HIV)
NNRTI	Non-nucleoside reverse transcriptase inhibitor
NRTI	Nucleoside reverse transcriptase inhibitor
NVP	Nevirapine
OIs	Opportunistic infections
PLHIV	Person living with HIV
PI	Protease inhibitor
PITC	Provider-initiated HIV testing and counselling
PMTCT	Prevention of mother-to-child transmission (of HIV)
PCP	Pneumocystis pneumonia
PCR	Polymerase chain reaction
POPs	Progestin-only oral contraceptive pills
PPD	Purified protein derivative
PTB	Pulmonary tuberculosis

RFT	Renal function test
sdNVP	Single-dose nevirapine
SRH	Sexual and reproductive health
STI	Sexually transmitted infection
TB	Tuberculosis
TDF	Tenofovir
TST	Tuberculin skin test
UNAIDS	Joint United Nations Programme on HIV/AIDS
VL	Viral load
WB	Western Blot
WHO	World Health Organization

Introduction

As an important partner in the global effort to expand access to quality HIV prevention, care, and treatment services to all people living with HIV (PLHIV) and their families, ICAP at Columbia University supports the design, development, and implementation of a diverse range of HIV-related clinical and systems strengthening activities in 13 countries. As part of its multidisciplinary approach and commitment to improving services for PLHIV, the ICAP Nurse Capacity Initiative (INCI), funded by HRSA in April 2009, is an innovative multi-country program designed to build models that empower nurses and midwives to provide HIV-related care that they are positioned to deliver, with increased knowledge, clinical skills, and team leadership, and to support transformative nursing education through building models with targeted interventions at nursing schools that can be replicated and sustained. INCI has proudly launched the Campus-to-Clinic (CTC) Initiative in South Africa in 2011. CTC is a pilot program to mentor nurse educators in sub-Saharan Africa and to adequately prepare graduating nurses for the demands of clinical work in the provision of HIV care and treatment services.

The CTC Initiative focuses on bridging the gap between pre-service and in-service training and building the competence and confidence of nurse educators and mentors in HIV and TB care and treatment. Governments across sub-Saharan Africa reacted initially to the HIV pandemic by mobilizing healthcare workers to give care to those in dire need. With the frontline of most healthcare systems being nurses, they were called upon to have increased competencies required to provide comprehensive HIV care. Additionally, Ministries of Health are increasingly developing broader strategies for scaling-up the healthcare workforce. This shift focuses on the educational institutions that prepare students for clinical realities. In particular, it became apparent that nursing educators and mentors need expanded knowledge, clinical skills, and new teaching methodologies that prepare nursing students for their extensive role at the clinical level. Ultimately, nurses who are competent to care for their communities will improve health outcomes and remain in their jobs.

INCI offers its CTC Curriculum to empower nursing educators and mentors with a new area of expertise. It opens the door to teach in new ways with confidence. It can be adapted to different communities, cultures, and countries.

Purpose of Trainer Manual

The training manual is designed for use as part of the comprehensive Campus-to-Clinic (CTC) training package for nurse mentors.

The entire training is primarily classroom-based and content-focused, but is designed to actively involve participants in the learning process.

Each of the 9 modules provides the trainer with technical content along with guidance on how to teach that content. In addition, this Introduction to the Trainer Manual includes some "Trainer Tips" and advice on training preparation to help trainers develop their facilitation skills and to maximise opportunities for interactive learning.

Note: Blocks of text in the Trainer Manual surrounded by a *dashed border* do NOT appear in the Participant Manual.

Icon Key

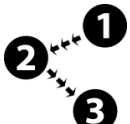
The Trainer Manual includes the following symbols (icons):

Trainer instructions: Guidance for the trainer.

Make these points: Key concepts to emphasize.

Total session/module time: Estimated time needed for each module or session. All times listed are suggested and subject to change depending on participant learning needs.

Advance preparation: Planning and preparation for a session or exercise that should be undertaken in advance.



Methodologies: Training methods used in the module, for example, large group discussion, or role play.

Materials needed: Material needed to teach the module, for example, flip chart and markers.

References and resources: The list of guidelines, books, journals and other documents that contributed to the content of the module. These may be useful to trainers or trainees who want more information on a particular topic or issue.

Key points: A summary of the material presented in the module. The key points for each module should be reviewed with participants at the end of the module.

Components of this Training Package

Trainer Manual

Each of the modules in the Trainer Manual includes technical content as well as Learning Objectives, Trainer Instructions — including session and module times, Make These Points, Advance Preparation, Methodologies, Materials Needed, References and Resources, Key Points. Each session and exercise lists the estimated amount of time estimated required for that activity.

Suggestions for use

Before facilitating the training, you should read through each of the modules, study the technical content — including the appendices — to ensure you understand it, review the exercises closely, take note of exercises that require advance preparation and anticipate participant questions.

- "Trainer's Instructions" and "Make These Points" refer to the content immediately following the instructions box and preceding the next instructions box.
- Suggested questions are often provided to help you engage and draw responses from participants. These questions are bulleted and in italics.
- The exercises in each module include large group discussion, case studies, small group work, games, and role plays. Instructions, including recommended time frames, for each exercise can be found in the exercise instructions.
- Each module contains a section with independent learning activities, with suggested "extension" or supplemental work for participants to complete individually or in small groups, if needed.
- The training modules can be used independently of each other, if needed.
- The modules can also be lengthened or shortened depending on the level of training and expertise of the participants.
- **Advance preparation and practise will help keep sessions to the recommended time and increase confidence**.

Participant Manual

The Participant Manual contains the same technical content as the Trainer Manual. But the Participant Manual does not include the detailed instruction for each exercise (instead, it includes abbreviated instructions for each), nor does it include the Methodologies, Materials Needed, References and Resources, Advance Preparation, Modules/Session Time, Trainer Instructions or Make These Points boxes.

Course Schedule

The CTC curriculum was developed as a 9-week comprehensive training course. Training modules were designed to be half-days or approximately 4.5 hours, in order to accommodate participants' busy schedules. Ideally, 1 module should be offered to participants each week, for 9 consecutive weeks or can be stretched over several weeks or months. *Appendix 1A: Sample Training Agenda* in Module 1 includes a suggested training agenda.

Other Information for Trainers

Trainer tips

Trainers should always keep the following "dos and don'ts" in mind.

DOs

- Do maintain good eye contact.
- Do prepare in advance.
- Do involve participants.
- Do use visual aids.
- Do speak clearly.
- Do speak loud enough.
- Do encourage questions.
- Do recap at the end of each session.
- Do bridge one topic to the next.
- Do encourage participation.
- Do write clearly and boldly.
- Do summarize.
- Do use logical sequencing of topics.
- Do use good time management.
- Do K.I.S. (Keep It Simple).
- Do give feedback.
- Do position visuals so everyone can see them.
- Do avoid distracting mannerisms and distractions in the room.
- Do be aware of the participants' body language.
- Do keep the group focused on the task.
- Do provide clear instructions.
- Do check to see if your instructions are understood.
- Do evaluate as you go.
- Do be patient.

DON'Ts

- Don't talk to the flip chart.
- Don't block the visual aids.
- Don't stand in one spot—move around the room.
- Don't ignore the participants' comments and feedback (verbal and non-verbal).
- Don't read from the curriculum.
- Don't shout at the participants.

- Don't assume everyone has the same level of baseline knowledge.
- Don't assume everyone can read and write at the same level.

Note: *The Dos and Don'ts of training were adapted from: Colton, T., Dillow, A., Hainsworth, G., Israel, E. & Kane, M. (2006). Community home-based care for people and communities affected by HIV/AIDS: A comprehensive training course for community health workers. Watertown, MA: Pathfinder International.*

Trainer preparation checklist

Table 1: Trainer checklist

✓	Complete the following before starting each module
	Read manual objectives, technical content, and teaching exercises.
	Prepare for each of the exercises according to Trainer Instructions.
	Obtain and organise the materials needed.
	Read the content and suggestions for facilitating group discussion. Add your own questions or tips that will help you engage participants and ensure key messages are discussed.
	Practise! It is not always easy to explain group exercises or to draw responses from an audience. Be prepared by thinking ahead about developing strategies. For complicated exercises or discussions, consider co-facilitation with another experienced trainer.
	Have a plan for monitoring time and keeping on schedule.
	Have a plan for coping with a difficult or disruptive participant.
	Choose a technique for creating small groups. If this is done multiple times during the day, choose different methods for each instance unless specified that groups should remain the same.
	Learn what you can about participants before the training (for example, their worksite, skills, and experience). This effort should continue throughout the training.

Ways to manage time

1. Know the content to be taught. Well in advance of the training, study the content to ensure you understand it. If you need help, seek support from an expert.
2. Find out how the content can be shortened or lengthened depending on participant learning needs. Consider how the timetable can be adjusted to create time if needed. For example:
   - Shorten breaks or lunch
   - Lengthen the day (for example, start 30 minutes earlier or end 15 minutes later)
   - Shorten or skip presentations or activities in an area that participants know well
3. Practise before the training. Practise exercise introductions, general content and instructions out loud, using material that will be used for the actual presentation.
4. Be flexible, but use and follow the agenda. The agenda will let participants know how long activities are expected to last. Reiterate time expectations during exercises and activities every few minutes.

5. Keep time. Place a clock or watch where you can see it but where it will not distract participants. Use signs (5 minutes, 1 minute and stop) that tell presenters how much time they have left:
6. Keep the training focused on the objectives.
7. Use the "parking lot" for discussions that take too much time or are related to, but not critical to, the topic under discussion (see box below).

Parking Lot

The "parking lot" is a sheet of flip chart paper posted on the wall. The purpose is to provide a place to put important, but currently tangential, topics. When the discussion strays too far from the objective, or runs over time, the trainer can record the topic or question on the flip chart. The topic or question will remain in the "parking lot" until an agreed time to revisit it, for example, at the end of the training, during a break or during an upcoming module (which is relevant to the topic).

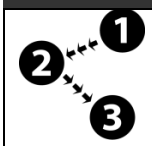
Module 1 Course Overview and Introduction to Nurse Mentoring and Adult Learning

Total Module Time: 245 minutes (4 hours and 5 minutes)

Learning Objectives

After completing this module, participants will be able to:

- Know more about the trainers and other training participants.
- Explain the importance of a training that is specific to nurse mentors and educators, as well as HIV care and treatment.
- Understand the training objectives and agenda and set training "ground rules".
- Complete the training pre-test.
- Describe the basic principles of adult learning.
- Practice basic communication skills required for teaching and nurse mentoring.
- Describe the importance of case-based learning for nurses.
- Create a background for an evolving case study.

Methodologies	
	• Interactive trainer presentation • Individual reflection • Large group discussion • Large group exercise • Pre-test • Small group work • Role play

Materials Needed	
	• Flip chart and markers • Nametags • Attendance sheet • Tape or Bostik • A4 paper for Introduction Activity (Exercise 1) • Bowl to be used as Anonymous Question Bowl • 1 large envelope to collect "How did it Go?" papers • One copy of the Participant Manual for each participant • One notebook for each participant • One pen for each participant

References and Resources	

	• WHO recommendations for clinical mentoring to support scale-up of HIV care, antiretroviral therapy and prevention in resource-constrained areas:
	  ◦ *Planning Consultation on Clinical Mentoring: Approaches and Tools to Support Scaling-up of Antiretroviral Therapy and HIV Care in Low-resource Settings*, Geneva, Switzerland, 7-8 March 2005.
	  ◦ *Working Meeting on Clinical Mentoring: Approaches and Tools to Support the Scaling-up of Antiretroviral Therapy and HIV Care in Low-resource Settings,* Kampala, Uganda, 16-18 June 2005.
	• International Training and Education Center on HIV (I-TECH), *Basics of Clinical Mentoring: Facilitator Guide.*

Advance Preparation	
	• Prepare the training room in advance. In order to maximise interaction among participants and trainers, participants should ideally sit in a semi-circle, instead of in rows. • Make sure you have all of the materials listed in "Materials Needed" section. In particular, make sure there are enough copies of the Participant Manual, so that each participant can have their own, which they will take home after the training. • Finalise the training agenda using *Appendix 1A: Sample Training Agenda* as a guide; make enough copies of the final agenda for each participant. • Prepare an attendance sheet in advance and ask participants to sign in are they arrive on the first day of training. • Exercise 2 and 3 requires advance preparation by the trainer. Please review these exercises ahead of time. • Invite a guest speaker to open the training course (optional).

Session 1.1: Welcome and Introductory Activity

Activity/Method	Time
Welcome and registration	5 minutes
Exercise 1: Getting to Know Each Other: Large group discussion and individual reflection	30 minutes
Total Session Time	35 minutes

Session 1.2: Training Objectives, Agenda, and Ground Rules

Activity/Method	Time
Interactive trainer presentation and large group discussion	10 minutes
Exercise 2: Setting Ground Rules and Introducing Daily Activities: Large group discussion	20 minutes
Questions and answers	5 minutes
Total Session Time	35 minutes

Session 1.3: Training Pre-Test

Activity/Method	Time
Pre-test	30 minutes
Total Session Time	30 minutes

Session 1.4: Basic Principles of Adult Learning and Nurse Mentoring

Activity/Method	Time
Interactive trainer presentation and large group discussion	30 minutes
Exercise 3: Basic Listening and Learning Skills for Nurse Mentors and Educators: Role play in small groups and large group discussion	60 minutes
Questions and answers	5 minutes
Total Session Time	95 minutes

Session 1.5: Creating an Evolving Case Study

Activity/Method	Time
Interactive trainer presentation and large group discussion	15 minutes
Exercise 4: Creating an Evolving Case Study: Large group exercise	30 minutes
Questions and answers	5 minutes
Total Session Time	50 minutes

Session 1.1 Welcome and Introductory Activity

Total Session Time: 35 minutes

Trainer Instructions

Step 1: Introduce yourself and the other trainers and welcome participants to the Campus to Clinic (CTC) in-service training for nurse mentors and educators. Officially open the training course (or ask an invited guest to do so). If a guest speaker is invited, meet with this person before the training so that you can brief her or him about the overall training, including the goals, objectives and participant expectations.

Step 2: If participants did not sign in as they entered the training room, circulate an attendance sheet for the initial training session (Module 1) for participants to sign. Explain that there will be an attendance sheet for each of the 9 training session.

Give each participant a notebook, pen, and a copy of the Participant Manual. Explain that the Participant Manual includes all of the key information that will be discussed in the training sessions, as well as guidance on the training exercises. Participants will be expected to follow along in their manuals and take notes during the training sessions. Encourage participants to use their manuals as reference after the training.

Step 3: Begin by reviewing the Module 1 learning objectives and the session objective, listed below.

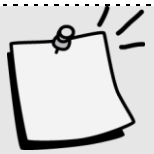
Session Objective

After completing this session, participants will:

- Know more about the trainers and other training participants and have discussed expectations for the training.

Trainer Instructions

Step 4: Facilitate Exercise 1 to start the process of creating an open and comfortable learning environment and to help participants get to know one another better.



Make These Points

- As we will be together for the next several weeks or so, it makes sense to start the training course with an exercise that gives participants an opportunity to get to know each other. The more comfortable participants feel, the more they will get out of this training.

Exercise 1: Getting to Know Each Other: Large group discussion and individual reflection	
Purpose	• To provide an opportunity to get to know one another a bit better • To create a comfortable learning environment • To discuss participants' expectations for the training, personal and professional strengths, and any concerns about eventually mentoring, teaching, and educating other nurses
Duration	30 minutes
Advance Preparation	• None
Introduction	This is an activity that will help us get to know one another better. It will also give us a chance to talk about our expectations for the training, any worries we might have about nurse mentoring and educating student nurses, as well as our personal and professional strengths.
Activities	**Introductions** 1. Ask participants to take a piece of paper and write their name vertically down the left side. Next, they should choose a word that starts with each letter of their name. Each word should describe something about them. Ask participants to write those words horizontally across the paper, using the letters of their name as the first letter of each descriptive word. Then ask participants to introduce themselves, state where they work, and share their personal descriptions. **Individual Reflection** 2. Distribute one card or sheet of paper to each participant. Explain that they will not be collected. 3. Ask participants to spend a few minutes thinking about the following questions, and then to write their responses on their card or paper. • **Concerns:** What concerns or worries do you have about mentoring, educating, and teaching other nurses to care for people living with HIV?

	• **Expectations:** What do you hope to learn from this training course and how do you think it might help you in your professional practice? • **Strengths:** What is a personal strength or talent that you think helps, or will help you mentor, educate, and teach other nurses effectively? 4. While participants complete their answers, write the words "Concerns," "Expectations," and "Strengths" each on separate pieces of flip chart and tape it to the wall (or use Bostik). **Large Group Discussion** 5. Lead a group discussion. Begin with "Concerns." Start the discussion by giving an example of a concern you have had — for example, *"I am worried that I won't have all the answers when student nurses ask me questions."* Ask for responses and write each on the flip chart. Allow for some discussion while writing down each of the concerns mentioned. 6. Ask participants what they hope to learn — their "Expectations" for the training. Explain that although the training has many objectives, it is important that the facilitators learn what particular issues and topic areas participants want information about. Write these on the flip chart. Tell the group that you will keep their expectations visible during the entire training and try to ensure they are met when possible. 7. Ask the group for the "Strengths" they each bring to their work as nurse mentors and educators. Give examples such as "supervisory experience" or "sense of humour" to get the discussion started. Discuss participants' strengths and the role that they play in the care they provide to clients and as educators.

Session 1.2 Training Objectives, Agenda, and Ground Rules

Total Session Time: 35 minutes

Trainer Instructions

Step 1: Review the session objectives with participants.

Session Objectives

After completing this session, participants will be able to:

- Explain the importance of a training that is specific to nurse mentors and educators, as well as HIV care and treatment.
- Understand the training objectives and agenda and set training "ground rules".

Trainer Instructions

Step 2: Write the words "NURSE MENTORING" on a flip chart. Ask participants to turn to the person next to them and briefly discuss their role and responsibilities as nurse mentors and educators. Ask participants to briefly share their responses, record key points on the flip chart, and fill in using content below.

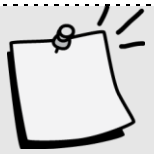
Continue by asking participants the following questions to facilitate discussion:

- *Why do you think a training that is specific to nurse mentors and educators and HIV care and treatment is important?*
- *What impact on services do you think this type of training might have in the long-term?*

Ask participants to raise their hand if they have completed training in HIV care and treatment.

Remind participants that this training course draws from the knowledge and skills learned in the national nursing training curriculum, and that participants should have already completed a pre-service training before attending this training.

Step 3: Review with participants the learning objectives for the other training sessions.



Make These Points

- Nurse mentoring involves relationship building, identifying areas for improvement, coaching, building capacity, and modelling clinical skills and appropriate attitudes with other nurses.
- Nurse mentors and educators are experienced teachers and educators who provide case review, problem solving, quality assurance, and continuing education to other nurses, in the classroom and clinic settings.
- Nurse mentors and educators can ease the transition from the classroom environment to the work environment, by assisting their mentees with problem solving, clinical skills, and handling the emotional impact of the work.
- Nurse mentors and educators provide "hands-on" HIV care and treatment training for their mentees in health facilities.
- A nurse mentor and educator's ultimate goal is to help each of their mentees to do the best job possible and to help maximize the number of positive outcomes for PLHIVs.
- This course will provide nurse mentors and educators with important information and skills that will help them build their teaching capacity as well as their own competencies on HIV care and treatment.
- Few countries have a continuing education system for nurses, so there is little follow-up with trainees after initial training. Therefore, nurse mentoring is an opportunity for nurses to build and refine their skills in the clinic setting.
- Nurse mentors and educators can strengthen health care systems by providing continuing education to nurses, identifying needs, barriers, and opportunities for change, and therefore working towards creating more efficient clinical settings.
- This training course complements any national nursing HIV care and treatment training, which most participants should have already attended.

Definition of Nurse Mentoring[1]

There are a variety of definitions for nurse mentoring. The most important components are:

- Nurse mentoring involves relationship building, identifying areas for improvement, coaching, building capacity, and modelling clinical skills and appropriate attitudes with mentees.
- Nurse mentors and educators are experienced teachers and educators who provide case review, problem solving, quality assurance, and continuing education to nurses, in the classroom and clinic settings.

- Nurse mentors and educators can ease the transition from the classroom environment to the work environment, by assisting their mentees with problem solving, clinical skills, and handling the emotional impact of the work.
- Nurse mentors and educators provide "hands-on" HIV care and treatment training for their mentees in health facilities.
- Nurse mentors and educators acts as role models, resources, and consultants to the mentee, mutually sharing observations and discussing strategies to help other nurses resolve personal and professional problems as they arise.
- Nurse mentors and educators provide a critical link between mentees and supervisors, improving the supervisor's knowledge and understanding of the employee's strengths and weaknesses and helping to ensure that problems are addressed early on.
- A nurse mentor and educator's ultimate goal is to help each of their mentees to do the best job possible and to help maximize the number of positive outcomes for PLHIVs.

This course will provide nurse mentors and educators with important information and skills that will help them build their teaching capacity as well as their own competencies on HIV care and treatment. A training specific to nurse mentors and educators and HIV care and treatment is important because:

- Nurse mentors and educators need advanced knowledge, skills, and ongoing training to meet the specific needs of HIV-infected clients.
- Few countries have a continuing education system for nurses, so there is little follow-up with trainees after initial training.
- Nurse mentors and educators can strengthen health care systems by providing continuing education to nurses and working towards creating more efficient clinical settings.

Campus-to-Clinic (CTC) Training Objectives

By the end of this training course, participants will:

- Explain how the principles of adult learning theory apply to mentoring.
- Demonstrate basic communication and mentoring skills.
- Discuss the prevalence and impacts of HIV globally, in sub-Saharan Africa, and in their own country setting.
- Review the definitions of and differences between HIV and AIDS.
- Review key components of HIV transmission, testing, counseling, and prevention protocols.
- Review the key information for the clinical care package of HIV care and treatment services for PLHIV.
- Review key features of HIV disease progression.
- Review laboratory tests used to diagnose HIV in infants, children, and adults.
- Apply the WHO clinical staging system for HIV-infected children and adults.

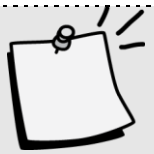
- Review routine care and treatment procedures for pregnant HIV-infected women.
- Describe procedures for safe infant feeding practices.
- Review clinical manifestations, diagnosis, prevention, and treatment of tuberculosis (TB).
- Discuss challenges one may encounter when simultaneously using ART and anti-TB drugs to treat co-infected individuals.
- Reflect on their own attitudes, values, and beliefs on sexuality and discuss how these may affect their work with clients.
- Identify prevention strategies used successfully in preventing STI/HIV transmission.
- Review childbearing choices and contraceptive options for women living with HIV.
- Practice how to educate clients on issues of sexuality, positive prevention, discordance, and sexual health.
- Review basic principles of clinical decision-making.

Trainer Instructions

Step 4: Review the training course syllabus and agenda with the participants. A sample training agenda is included in *Appendix 1A,* but this should be adapted, based on time available, participant learning needs, etc.

Take a moment to stress the following points:

- Stress the importance of group interaction and participation.
- Remind participants to bring their Participant Manual to each session, and to be prepared to use it throughout the course.
- Emphasize the logistics of the course, such as session start times, end times, and any breaks, if applicable.



Make These Points

- The training course consists of 9 half-day modules in total. Each module is approximately 4.5 hours in length. The modules may be taught over the course of several weeks or months.
- The training includes both classroom sessions and independent learning activities.
- Countries can adapt and tailor this curriculum to meet their specific needs.

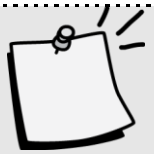
Training Syllabus and Agenda

The training includes 9 half-day modules, each with its own learning objectives. Each module is approximately 4 hours and is divided into a number of sessions:

- Module 1: Course Overview and Introduction to Nurse Mentoring and Adult Learning
- Module 2: HIV Transmission, Counselling, and Testing
- Module 3: Clinical Care for People Living with HIV
- Module 4: The Progression of HIV
- Module 5: Preventing Mother-to-Child Transmission of HIV
- Module 6: Paediatric HIV
- Module 7: Tuberculosis and HIV
- Module 8: Sexual and Reproductive Health Services for People Living with HIV
- Module 9: Review of Clinical Decision-Making, Course Evaluation, and Closure

Trainer Instructions

Step 5: Facilitate Exercise 2 to set ground rules for the course and to introduce the daily activities.



Make These Points

- Ground rules are guidelines for trainers and participants to observe throughout the course. These standards for group interaction will help participants meet their expectations and accomplish course objectives.
- Establishing ground rules offers an opportunity to discuss previous training experiences and to share examples of effective approaches to training.
- All participants should feel comfortable asking any question they have, whether in the large group or anonymously through the Question Bowl.
- All participants should feel comfortable saying things that did and did not go well after each training day. Changes can only be made if you voice your opinions and suggestions!

Exercise 2: Setting Ground Rules and Introducing Daily Activities: Large group discussion	
Purpose	• To develop and agree on a set of ground rules that will create an environment that facilitates learning • To introduce the Anonymous Question Bowl as a safe space for asking questions • To introduce the "Rounds" as a way to start off each day of the training on the right foot

	• To introduce the Daily Evaluation Activity as a way to give feedback to the trainers and to make adjustments DURING the training course
Duration	20 minutes
Advance Preparation	• Have a large envelope or bowl that can be used as the Anonymous Question Basket • Have 1 large envelope labelled "How did it Go?" for the "How did it Go" daily evaluation
Introduction	We want to be productive and have fun during this training, but we also want to create a safe space for learning and create a quality environment for everyone. To do that, we need to agree on some ground rules for the training.
Activities	**Develop and Agree on the Ground Rules** 1. Ask participants what rules will help make them feel comfortable speaking during group discussions. 2. If the group is slow to offer suggestions, consider giving the following examples: • Be respectful of others, including in what we say and our tone of voice. • Speak one at a time and avoid side conversations. • Always start on time. • Turn off mobile phones. • Ensure that the training room is a confidential space--"What is said here, stays here" 3. As participants contribute ground rules, write the suggestions on flip chart. 4. Post the ground rules on the wall when the group has finished. **Introduce the Anonymous Question Bowl** 5. Tell participants about the Question Bowl, show them where it is, and invite them to submit questions about any topic addressed in the training at any time. 6. Explain that the questions may include concerns they may have about themselves, their families, co-workers, or clients. Tell participants that the Question Bowl will be checked daily, and that all questions will be answered. 7. Trainers should review all questions in the Question Bowl after training ends each day and then provide responses the next morning. Technical questions can be read to the group and answered. Take care to ensure the questioner remains anonymous. Respond to more personal questions as appropriate, for example, by embedding the response into the

	presentation or a case study, by facilitating discussion on the topic, or by asking someone who has expertise in that area to respond based on their experience. Again, take care to ensure the questioner remains anonymous. **Introduce the "Rounds"** 8. Tell participants that at the beginning of each training session, we will briefly check in with each other, recap and answer any questions from the previous session, and review the agenda for the day. 9. We are all under pressures at work and at home, so it is important to start each training session as "fresh" as possible. Participants should feel comfortable discussing any distractions or events that are on their minds. **Introduce the Daily Evaluation** 10. Tell participants that at the end of each training session, the group will debrief using the Daily Evaluation Activity called "How Did It Go?" 11. At the end of each training session, participants will be asked to anonymously write one good thing about the day and one thing that they would like to improve or that they found challenging about the day. 12. Each participant will be given 2 small sheets of paper. On one of the pieces they should draw a smiley face (☺) and write one thing that was good about the day. On the other piece they should draw a sad face (☹) and write one thing they did not like about the day. 13. Participants should not put their names on the sheets of paper. **14.** Participants should put the papers in the labelled "How did it Go?" envelope before they leave the training each day. The trainers will review participants' comments and suggestions each session and make improvements during subsequent days.
Debriefing	• Remind participants that a comfortable and open environment will facilitate the group learning experience. • Encourage participants to speak to one of the trainers if they have any questions or concerns.

Trainer Instructions

Step 6: Allow 5 minutes for questions and answers on this session and be sure to answer any questions about logistics participants may have.

Session 1.3 Pre-Test

Total Session Time: 30 minutes

Trainer Instructions

Step 1: Review the session objective listed below.

Session Objective

After completing this session, participants will be able to:

- Complete the training pre-test.

Trainer Instructions

Step 2: Tell participants that they will now be taking the training pre-test. Inform them that they do not need to write their names on the pre-test. Instead, they should write a number at the top — any number, for example a favourite number or their birth date. But they should remember this number, as they will need to record the exact same number at the top of their post-test. Suggest that they write this number on the inside front cover of their Participant Manuals, so that they will not forget it.

The objective of the pre-test is to find out what the group, as a whole, knows about HIV care and treatment and basic mentoring skills. The group's result on the pre-test will guide the amount of time spent on specific modules and highlight learning needs.

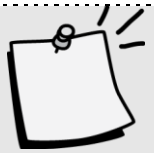
This same test will be re-administered at the end of the training, at which point it will be called the post-test.

Step 3: Refer participants to *Appendix 1B: Pre-Test.* Give participants about 25 minutes to complete the questions. Ask participants to hand their completed pre-tests to the trainer when they have finished. Tell participants that the pre-tests will be scored, and then compared to post-test scores at the end of the training to get a sense of how much participants have learned. The comparison of pre- and post-test scores will provide the trainer with information about how well the training went and identify areas where the training needs to be improved.

Step 4: After the pre-test, debrief by asking participants how they felt about the questions. Were they easy or difficult? Inform participants that you will review the test answers after they complete the post-test, which is on the last day of training.

Step 5: Once the training has been completed for the day, trainers should

- Score the pre-tests, using *Appendix 1B: Pre-Test* in the Trainer Manual as a guide. Note that Appendix 1B in the Trainer Manual includes the test answers in bold print, whereas Appendix 1B in the Participant Manual does not include answers.
- For each of the 25 questions, calculate how many participants got the answer incorrect. Note which questions were most likely to be answered incorrectly and consider if training time is sufficient for these content areas. If not, consider ways to ensure sufficient time is spent on the content areas where participants are weakest (shorten module time for the content areas that participant have mastered, ask for permission to start the training 15 minutes earlier for a particular module).



Make These Points

- We are all here to learn and at the end of the training you will all be able to answer all of these questions and many more.

Session 1.4 Basic Principles of Adult Learning and Nurse Mentoring

Total Session Time: 95 minutes (1 hour and 35 minutes)

Trainer Instructions

Step 1: Review the session objectives listed below.

Session Objectives

After completing this session, participants will be able to:

- Describe the basic principles of adult learning.
- Practice basic communication skills required for teaching and mentoring.

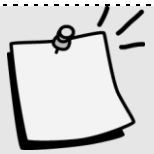
Trainer Instructions

Step 2: Begin by asking participants to reflect on their professional and personal experiences as teachers and learners. Ask the following questions to facilitate discussion and record key points on a flip chart.

- *Do you remember an occasion when you received instruction from a good teacher, mentor, or supervisor? What made the experience positive? What did the person do to enhance your learning?*
- *What experience do you have teaching and/or mentoring other adults in your practice? What strategies have worked well for you? What have been the most challenging aspects of teaching and/or mentoring?*
- *Based on your experience, what do you think you need to consider when teaching and/or mentoring adults? What types of learning activities do think engage adult learners most effectively?*

Step 3: Review the suggestions for **incorporating adult learning in nurse mentoring, educating, and teaching** in the content below and ask participants how each characteristic of adult learners will influence their teaching style as nurse mentors and educators. For example, ask participants: *"If adults are*

practical and problem centred, how might this affect your teaching style? What might you do to be an effective teacher?" Record key points on a flip chart and continue with the remainder of the characteristics.



Make These Points

- According to the principles of adult learning, adults learn best when:
  - They understand why something is important to know or do
  - They have the freedom to learn in their own way
  - Learning is experiential
  - The process is positive and encouraging
- Adults are self-directed learners who bring their experience the classroom and are motivated by tasks they find meaningful.
- There are 3 main learning styles: auditory, visual, and kinesthetic. Most people use a combination of these styles when learning.
- As much as possible, we should try to use methods that engage different types of learners since you may not know how each person learns best.
- In general, interactive and mixed educational sessions have the most significant effect on professional practice.
- Teaching adults is a challenging task that requires flexibility, excellent communication and relationship-building skills, and up-to-date clinical knowledge and teaching skills.

Principles of Adult Learning[2]

The teacher of adults has a different job from the one who teaches children. When teaching adult students, it's important to understand how adults learn. Malcolm Knowles, a pioneer in the study of adult learning, observed that adults learn best when:

- They understand why something is important to know or do.
- They have the freedom to learn in their own way and they can direct their learning.
- Learning is experiential.
- The process is positive and encouraging.

One of the most important rules in teaching is to remember that people learn differently.

- Some people will remember everything they hear. They are auditory learners. Teachers can best communicate with them by speaking clearly, asking questions, and using phrases like, "How does that sound to you?"
- Others will not remember anything unless they see it. They are visual learners. Teachers can best communicate with them by providing handouts, writing on the flip chart, and using phrases like, "Do you see how this works?"

- Sometimes people need to practice a skill before they remember it. They are kinaesthetic learners. Teachers can best communicate with them by involving volunteers, allowing them to practice what they're learning, and using phrases like, "How do you feel about that?"
- Most people use a combination of all 3 learning styles. Therefore, it is important to incorporate different teaching styles to accommodate all types of learners.

Any training or teaching activity that gets people involved makes the learning experiential.

- This includes small group discussions, role play and skits, analyzing a case study, writing or drawing something specific, having the mentee be co-trainer or teacher for a day – activity of any kind. Activities also keep people energized, especially activities that involve getting up and moving about.

Incorporating adult learning in nurse mentoring, educating, and teaching[3]

Teaching adults is a challenging task that requires flexibility, excellent communication and relationship-building skills, and up-to-date clinical knowledge and teaching skills.

Adults prefer learning situations which:

1. **Are practical and problem-centred, so…**

- Give overviews, summaries, examples, and use stories and case studies to link clinical theory to practice.
- Discuss and help your mentees plan for direct application of new information.
- Use content that they can make use of right away and point out the immediate usefulness of information presented.
- Anticipate problems applying the new ideas to their clients and clinic settings, so offer concrete and practical suggestions.
- Avoid being too theoretical.

2**. Promote their positive self-esteem, so…**

- Provide low-risk activities in small group settings, like case studies or problem analysis.
- Create a comfortable and safe learning environment and utilise methods that will reassure your mentees that their contributions will be received respectfully.
- Help mentees become more effective and confident through guided skill practice and one-on-one bedside clinical teaching.

3. Integrate new ideas with existing knowledge, so…

- Help your mentees recall what they already know from prior experience that relates to the topic of you are teaching.
- Ask what else they would like to know about the topic.

- Suggest follow up ideas and next steps for support and implementation after the teaching or mentoring session.

4. Show respect for the individual learner, so…
- Never "talk down" to mentees.
- Validate and affirm their knowledge, contributions, and successes.
- Ask for feedback on your work and provide opportunities for input.
- Avoid being judgmental or overly critical.

5. Capitalize on their experience, so…
- Don't ignore what your mentees already know; their experience and expertise are resources for you.
- Plan alternate learning activities and choices, so mentees can adjust the process to fit their experience level.
- Create activities that use your mentees' experience and knowledge.
- Listen and gauge your mentees' learning needs and understanding before, during, and after any teaching or mentoring session.

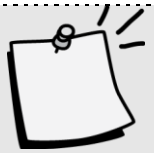
6. Allow choice and self-direction, so…
- Build your plans around the learners' needs.
- Share your agenda and assumptions and ask for input on them.
- Ask what they know already about the topic (their perception).
- Ask what they would like to know about the topic.
- Build in options within your mentoring and training plans so you can easily shift if needed.
- Allow time for planning their next steps related to training and ongoing education.

Trainer Instructions

Step 4: Continue by explaining that clear and effective communication is the key to good teaching, mentoring, and supervision. Without effective communication, there can be no learning, no growth, and no relationship. Refer participants to *Appendix 1D: Listening and Learning Skills Checklist* and explain that these 7 basic listening and learning skills are the building blocks for effective communication.

Discuss each of the 7 skills and explain why each is important for quality teaching, supervising, and nurse mentoring.

Also refer participants to *Appendix 1C: Tips on Mentoring and Coaching*, and encourage them to incorporate these general principles into their communication, mentoring, and teaching approaches.



Make These Points

- Nurse mentors and educators are important role models for other nurses, so relationship and communication skills are crucial.
- While knowledge about a subject is a prerequisite for effective teaching, learning is more often a result of how knowledge is communicated.
- Good communication skills are the key components to effective teaching, supervision, and nurse mentoring. These are the 7 key listening and learning skills (listed in *Appendix 1D: Listening and Learning Skills Checklist*) nurse mentors and educators should always use when teaching their mentees:
  - Use helpful non-verbal communication
  - Actively listen and show interest
  - Ask open-ended questions
  - Reflect back what the person is saying
  - Empathize — show that you understand how the person feels
  - Avoid words that sound judging and provide positive, constructive feedback.
  - Help set goals and summarise new concepts.

Overview of Listening and Learning Skills[456]

Nurse mentors and educators are important role models for other nurses, so relationship and communication skills are crucial. Content and style are both critical in effective communication in a health care setting. Remember: while knowledge about a subject is a prerequisite for effective teaching, learning is more often a result of how knowledge is communicated!

These are the 7 key listening and learning skills (listed in *Appendix 1D: Listening and Learning Skills Checklist*) that nurse mentors and educators should always use:

- Skill 1: Use helpful non-verbal communication
- Skill 2: Actively listen and show interest
- Skill 3: Ask open-ended questions
- Skill 4: Reflect back what the person is saying
- Skill 5: Empathize — show that you understand how the person feels
- Skill 6: Avoid judging words and provide positive, constructive feedback
- Skill 7: Help set goals and summarise new concepts

Participants can also to *Appendix 1C: Tips on Mentoring and Coaching*, and should incorporate these general principles into their communication, mentoring, and teaching approaches.

Skill 1: Use helpful non-verbal communication

Non-verbal communication refers to all aspects of a message that are not conveyed by the literal meaning of words. It includes the impact of gestures, gaze, posture, and expressions capable of substituting for words and conveying information and attitude. The acronym "ROLES", as shown in Table 1.1: ROLES can be used to help remind nurse mentors and educators of behaviours that convey helpful non-verbal communication, which encourage their mentees to feel that they are being listened to and respected.

Table 1.1: ROLES

Non-verbal behaviour that conveys caring	
R	A **relaxed** and natural attitude with your mentee is important. Do not move around quickly or chat nervously.
O	Adapt an **open posture**. Crossing one's legs or arms can signal that you are critical of what the person is saying or are not listening. Using an open posture shows that you are open to the person and to what the person is saying.
L	**Leaning forward** toward the person is a natural sign of involvement.
E	Culturally appropriate **eye contact** should be maintained to communicate interest; never stare or glare at the person.
S	**Sitting squarely** facing another person shows involvement. If for any reason this may be threatening, then sitting to the side is an option.

These physical behaviours convey respect and genuine caring. However, these are guidelines, and should be adapted based on cultural and social expectations.

Skill 2: Actively listen and show interest

Another way to show that you are interested and want to encourage a person to talk is to use gestures such as nodding and smiling, responses such as *"Mmm",* or *"Aha"* and skills such as clarifying and summarising. These skills, also referred to as attending skills, demonstrate that you are actively listening and invite the person to relax and talk more about herself or himself.

Skill 3: Ask open-ended questions

Asking questions helps identify, clarify, and break down problems into smaller, more manageable parts. Open-ended questions begin with "*how", "what", "when", "where"* or *"why".* Open-ended questions encourage responses that lead to further discussion, whereas closed-ended questions tell a person the answer that you expect; responses are usually one-word answers such as, *"Yes"* or *"No".* Closed-ended questions usually start with words like *"are you?" "did he?" "has she?" "do you?"*

Examples of open-ended questions a nurse mentor and educator can use include:

- *"How do you see this situation?"*
- *"What are your reasons for . . . ?"*
- *"Can you give me an example?"*
- *"How does this affect you?"*
- *"How did you decide that?"*
- *"What would you like to do about it?"*
- *"What part did you play?"*

Skill 4: Reflect back what the person is saying

"Reflecting back", also referred to as paraphrasing, focuses on listening first and then reflecting the two parts of the speaker's message — *fact* and *feeling* — back to the speaker. Often, the fact is clearly stated, but a good listener is "listening between the lines" for the "feeling" part of the communication. Paraphrases are not an opportunity to respond by giving an opinion, offering advice, analysing, or questioning. Using this skill is a way to check out what you heard for accuracy — did you interpret what the mentee said correctly?

Examples for *fact*:

- *"So you're saying that . . ."*
- *"You believe that . . ."*
- *"The problem is . . ."*

Examples for *feeling*:

- *"You feel that . . ."*
- *"Your reaction is . . ."*
- *"And that made you feel . . ."*

Skill 5: Empathize — show that you understand how the person feels

Empathy develops when one person is able to comprehend (or understand) what another person is feeling. Empathy is used to respond to a statement that is emotional. Empathy, however, is not the same as sympathy; sympathy implies that you feel sorry for (pity) the other person.

Empathy is needed to understand how the mentee feels and helps to encourage the person to discuss issues further. For example, if a mentee says, *"I just can't tell that poor young mother that her child has HIV!"* the nurse mentor could respond by saying *"It sounds like you might be afraid of the client's reaction."*

Skill 6: Avoid judging words and provide positive, constructive feedback

Judging words are words like: *right, wrong, well, badly, good enough,* and *properly*. If a nurse mentor and educator uses judging words when asking questions, mentees may feel that they are wrong or that they should respond in a certain way to avoid disappointing the nurse mentor. Avoid phrasing a question in a way that is overly critical, laughing at or humiliating a mentee, contradicting or arguing with a mentee, and being disrespectful of a mentee's beliefs, way of life, or method of providing client care.

Nurse mentors and educators should always focus on providing positive and non-judgmental feedback. Judgmental feedback is negative and inhibits the mentee from talking freely and usually meets more resistance. Positive feedback, however, is typically met with acceptance. Avoid vague, general statements like "*you did a good job"* or *"that was a really bad decision*." Instead, provide information that focuses on specific behaviours and individual action: "*You did a great job with counselling that client. You demonstrated real sensitivity and provided her with very accurate and comprehensive information*."

It is important not to embarrass the mentee in front of a client. At the same time, you cannot allow your mentee to do anything that will endanger the health or well-being of the client. This means that sometimes feedback is held back until you can talk in private; in other cases, the feedback needs to be given immediately in a diplomatic, supportive, yet honest way. When making suggestions for improvement, use statements like: *"You may want to consider…" and "Another option is to…"* Constructive feedback can also be saying something like, *"The information you covered about how HIV is transmitted was accurate, but I'm not sure the client was following you."*

Skill 7: Help set goals and summarise new concepts

Toward the end of a supervision, training, or teaching session, the nurse mentor should work with the mentee to come up with "next steps" related to their own learning:

Develop "next steps". The nurse mentor could initiate this part of the discussion by stating, "*Okay, now let's think about the things you will do this week based on what we talked about*."

To help the mentee develop a more specific plan, the nurse mentor could ask:

- *What do you think might be the best thing to do?*
- *What will you do now?*
- *How will you do this?*
- *Who might help you?*
- *When will you do this?*

Summarise the mentee's plan and review next steps. The nurse mentor could say, *"I think we've talked about a lot of important things today.* (List main points.) *We agreed that the best next steps are to…"*

Trainer Instructions

Step 5: Facilitate Exercise 3 to help participants practice the communication skills most frequently used in teaching, mentoring, and supervision.

Exercise 3: Practise Listening and Learning Skills for Nurse Mentors and Educators: Role play in small groups and large group discussion	
Purpose	• To provide participants with an opportunity to gain experience using listening and learning skills in conversation
Duration	60 minutes
Advance Preparation	• Read through and adapt the suggested topics as needed • Identify an experienced participant or a co-trainer to demonstrate use of the listening and learning skills • Encourage participants to review the *Appendix 1D: Listening and Learning Skills Checklist*
Introduction	Explain that nurse mentors and educators' manner of communicating is an essential part of teaching effectively and in determining whether mentees will listen or act on the information. Remind participants that a good mentor and communicator should: • Use helpful non-verbal communication • Actively listen and show interest • Ask open-ended questions • Reflect back what the person is saying • Empathize — show that you understand how the person feels • Avoid words that sound judging and provide positive, constructive feedback • Help set goals and summarise new concepts
Activities	**Part 1: Trainer Demonstration** Invite a co-trainer or a volunteer (if possible, someone with training experience) from the group to discuss one of the suggested topics below, as the trainer demonstrates the basic listening and learning skills. 1. Place 2 chairs in square faced position. Ensure that all of the participants can easily observe the role play. 2. Ask participants to follow along with *Appendix 1D: Listening and Learning Skills Checklist,* as they observe the basic listening and learning skills demonstration. 3. The co-trainer (or volunteer) should then take about 5

minutes to discuss one of the following topics. The trainer (or participant with teaching skills) should demonstrate each of the listening and learning skills just discussed to guide the conversation.

Topics:

- Describe a change you would like to make in your job.
- Talk about a change you think needs to be made in the clinic and what you would like to do about it.
- Talk about a recent challenging situation that you experienced with client.
- Talk about a recent challenging situation that you experienced when teaching or mentoring another nurse.
- Talk about a personal or professional goal.
- Any other topic you would like to talk about.

4. Take 5 minutes to debrief with participants using *Appendix 1D: Listening and Learning Skills Checklist.*
5. Ask participants to share their observations and suggestions.

Part 2: Small Group Work

6. Break participants into groups of 3.
7. Ask participants to:
   - Identify 2 "speakers" and an "observer".
   - Ask the "speakers" to role play a discussion with about one of the topic areas above or a topic of their choice. Give the "speakers" about 5 minutes for their session.
   - One of the "speakers" will discuss 1 of the topic areas above and the other "speaker" will practise responding, by using as many of the listening and learning skills possible in the 5 minutes provided.
8. After 5 minutes, stop the exercise and ask the "observer" to provide feedback on each of the skills and techniques observed using *Appendix 1D: Listening and Learning Skills Checklist*.
9. Repeat this exercise so that everyone has an opportunity to practise each role.
10. Trainers should circulate around the room during the role plays to ensure that participants are using their listening and learning skills and providing accurate and appropriate support and advice.

Part 3: Large Group Discussion

	11. Bring participants back to the large group and ask each group to report key findings on things that the "speakers" did well and the things they can do to improve their communication: • *Which listening and learning skills worked well?* • *Which listening and learning skills did you find difficult? Why?* • *Which skills do you think will be most helpful to practice when you are teaching, training, or mentoring?* 12. Record key points on a flip chart and lead an interactive discussion pointing out strengths and possible ways to improve listening and learning skills.
Debriefing	• Summarise the key points from the group feedback. • Remind participants that improving listening and learning skills requires continuous practise and commitment, but these skills are the foundation for being an effective nurse mentor and educator.

Trainer Instructions

Step 6: Allow 5 minutes for questions and answers on this session.

Session 1.5 Creating an Evolving Case Study

Total Session Time: 50 minutes

Trainer Instructions

Step 1: Review the session objectives listed below.

Session Objectives

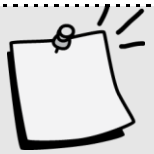
After completing this session, participants will be able to:

- Describe the importance of case-based learning for nurses.
- Create a background for an evolving case study.

Trainer Instructions

Step 2: Explain to participants that one of the main teaching methods implemented throughout this training course will be the use of an evolving case study. Participants will have the opportunity to apply what they have learned about HIV care and treatment and nurse mentoring to a series of clinical scenarios, based on their local context. Ask participants:

- *How can case-based learning be a helpful strategy when mentoring or educating other nurses?*



Make These Points

- A case study is a written description of a hypothetical situation that is used for analysis and discussion. It is a detailed account of a real or hypothetical occurrence (or series of related events involving a problem) that participants might encounter in real life. It is analyzed and discussed. Learners are often asked to arrive at a plan of action to solve the problem.
- Case studies are effective tools for clinical teaching. Teaching by case study method is meant to develop the ability of students to apply the theory they have learned to a 'real world' situation.
- The goal of case studies is not necessarily a single correct answer, but rather an analysis of the information presented and how an informed decision is made.

- In order for the case discussion to facilitate learning, the case must be relevant to the learner and must contain sufficient information to lead the person to an appropriate conclusion or result.
- Case-based teaching is a valuable strategy in all areas of clinical education, and it is particularly important for educating nurses about HIV disease and about individualizing HIV care and treatment, given the complexity and chronic nature of the disease.

Teaching with Case Studies

- A case study is a written description of a hypothetical situation that is used for analysis and discussion. It is a detailed account of a real or hypothetical occurrence (or series of related events involving a problem) that participants might encounter in real life. It is analyzed and discussed. Learners are often asked to arrive at a plan of action to solve the problem.
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- Case-based teaching is a valuable strategy in all areas of clinical education, and it is particularly important for educating nurses about HIV disease and about individualizing HIV care and treatment, given the complexity and chronic nature of the disease.

Trainer Instructions

Step 3: Facilitate Exercise 4 to help participants create the background narrative for an evolving case study, which will be used in exercises throughout the training.

Exercise 4: Creating an evolving case study: Large group exercise	
Purpose	• To help participants create the initial framework and background for an evolving case study, which will be used throughout the training modules
Duration	30 minutes
Advance Preparation	• None required
Introduction	This is an activity that will help participants create a background narrative for an evolving case study, which will then be used throughout the training course as a method of learning and knowledge application. The

	family members featured in this case study narrative will appear in subsequent case scenarios in the upcoming modules. Explain to participants that in order for the case studies in this training course to be as relevant and realistic, they will need to frame the background according to their real lives and adapt it according to their local community and setting.
Activities	**Large Group Discussion** 1. Ask participants to review the background for the evolving case study in their Participant Manuals. 2. Begin by asking participants to choose a name for their case study community. 3. The trainer should read the suggested narrative for the case study and participants should fill in information and relevant details required for the case study background, based on their own setting and context. 4. Participants should be encouraged to add more detail and adapt the narrative as needed.
Debriefing	• Remind participants that this evolving case study is method is meant to help participants apply and strengthen their knowledge of HIV care and treatment services. • Specific case studies, with associated questions, will be included in each training module and will contain references to this background narrative. • Nurse mentors and educators can use a case-based teaching method for encouraging analysis and discussion with their mentees.

Background for the Evolving Case Study

Welcome to (insert the name of your case study community)

(Insert the name of your case study community) is a town of about (use desired population base) people located about 75 km from (insert name of capital city). This community has many families with small children, as well as extended families with a significant number of elders.

There is a small government health clinic in (insert name of large town or city #2) that provides general care, VCT, and antiretroviral treatment (ART) to HIV-infected adults, adolescents, and children. The clinic is staffed by 1 doctor, 3 nurses, and 2 nurse assistants. Across town, there is a small ANC clinic for women and infants, but it is open only when the traveling nurse midwife can visit – usually about once a week (if it's not the rainy season). There is no emergency care available except for what can be provided by the 2 clinics. Severe medical problems are transferred to _____ (town #2), where there is a larger clinic, or to the capital city, where there are more comprehensive facilities.

The concept of preventive health care, or even regular health care, is not well established among the population. Many families utilize the wisdom of elders or traditional medicine handed down through the generations. The major health problem, as in many other African communities, is infectious disease: HIV, TB, and malaria. There are the 'usual' problems of diarrhoea and dehydration, especially among children and the elders, malnutrition, failure to thrive, and various parasite infestations. The problems generated by increasing HIV and TB infection are reaching dangerous levels. There seems to be not only lack of clinic staff, materials, and drug supply but also a significant knowledge gap – and not only among the few providers in town but also among the population.

Meet the L___ family

The L___ family resides close to the main clinic in your town. S___, is a 50-year old unemployed woman, who has two children: her 21-year-old son M___ and 22-year-old daughter T___. M___ is single, lives in town, and has a job working in a small bar. T ___ is also unmarried and still lives with her mother. T___ only has a secondary school education and sometimes earns money by watching people's children. S___'s 36-year old sister, N___, and her 57-year-old husband, V___, also live with her, in a small, sparsely furnished 2-bedroom home with very basic amenities and poor sanitation. Both N___ and V___ are HIV-infected.

Trainer Instructions

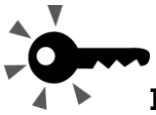
Step 4: Allow 5 minutes for questions and answers on this session.

Trainer Instructions

Step 5: Ask participants what they think the key points of the module are. What information will they take away from this module?

Step 6: Summarise the key points of the module using participant feedback and the content below.

Step 7: Ask if there are any questions or clarifications.



Module 1: Key Points

- There are a variety of definitions for nurse mentoring. The most important components are:
  - Nurse mentors and educators are experienced trainers who provide case review, problem solving, quality assurance, and continuing education to other nurses, or mentees.
  - Nurse mentors and educators provide "hands-on" HIV care and treatment training for their mentees in health facilities.
  - A nurse mentor and educator's ultimate goal is to help each of their mentees to do the best job possible and to help maximize the number of positive outcomes for PLHIVs.
- According to the principles of adult learning, adults learn best when:
  - They understand why something is important to know or do
  - They have the freedom to learn in their own way
  - Learning is experiential
  - The process is positive and encouraging
- There are 3 main learning styles: auditory, visual, and kinesthetic. Most people use a combination of these styles when learning.
- Good communication is the key component to effective teaching, supervision, and mentoring. These are the 7 key listening and learning skills that nurse mentors and educators should always use:
  - Use helpful non-verbal communication
  - Actively listen and show interest
  - Ask open-ended questions
  - Reflect back what the person is saying
  - Empathize — show that you understand how the person feels
  - Avoid words that sound judging and provide positive, constructive feedback.
  - Help set goals and summarise new concepts.
- Case studies are an effective tool for clinical teaching. Teaching by case study method is meant to develop the ability of students to apply the theory they have learned to a 'real world' situation.

Appendix 1A: Sample Training Agenda

Session 1	
Morning or Afternoon Session	• Official Opening • Module 1: Course Overview and Introduction to Nurse Mentoring and Adult Learning
Session 2	
Morning or Afternoon Session	• Recap and "Rounds" • Module 2: HIV Transmission, Counseling, and Testing
Session 3	
Morning or Afternoon Session	• Recap and "Rounds" • Module 3: The Progression of HIV
Session 4	
Morning or Afternoon Session	• Recap and "Rounds" • Module 4: Clinical Care for People Living with HIV
Session 5	
Morning or Afternoon Session	• Recap and "Rounds" • Module 5: Preventing Mother-to-Child Transmission of HIV
Session 6	
Morning or Afternoon Session	• Recap and "Rounds" • Module 6: Paediatric HIV
Session7	
Morning or Afternoon Session	• Recap and "Rounds" • Module 7: Tuberculosis and HIV
Session 8	
Morning or Afternoon Session	• Recap and "Rounds" • Module 8: Sexual and Reproductive Health Services for People Living with HIV
Session 9	
Morning or Afternoon Session	• Recap and "Rounds" • Module 9: Review of Clinical Decision-Making, Course Evaluation, and Closure

Appendix 1B: Pre-Test

NOTE: This version is for trainer only. Correct answers are in bold.

Participant identification number: _____ Score: ____/25

1) Which of the following are good teaching strategies for nurse mentors and educators? (**select all that apply**)
   a) Using case studies with mentees
   b) Independent learning assignments
   c) Bedside teaching
   d) Use of visual aids
   e) All of the above

2) A HIV-infected adolescent or adult client with which of the following meets eligibility criteria for ART?
   a) WHO stage 2 illness
   b) **CD4 ≤350 or WHO stage 3 or 4, regardless of CD4 count**
   c) Past history of TB
   d) I don't know

3) Before initiating ART, nurses should also think about:
   a) Readiness for ART: The client understands what ARVs are, how they are to be taken, and is ready to take on this life-long commitment
   b) Ability and willingness of client to return for regular follow up
   c) Adverse reactions to cotrimozazole
   d) All of the above
   e) A and B

4) Which of the following statements are true regarding HIV counseling and testing?
   a) Clients with HIV-negative rapid tests should repeat testing in 3 months to exclude the window period
   b) It is the responsibility of clients only to initiate or request HIV testing, not providers
   c) Both are true
   d) Neither are true

5) When should a PCR test be done to check HIV status in an infant born to a HIV-infected mother?
   a) 2 weeks
   b) 6 weeks
   c) 10 weeks
   d) At birth

6) When should HIV-infected clients be screened for TB?
   a) Initial visit

b) Initial visit + every 3 months
c) Initial visit + when complain of symptoms
d) Initial visit + every follow-up visit

7) Who should be screened for HIV?
   a. A 28 year old male with multiple sexual partners
   b. A 15 year girl with pulmonary TB
   c. A 70 year old male with back pain
   d. A 24 year old pregnant woman who was HIV-negative during her previous pregnancy
   e. All of above

8) Family-centred care means that nurses and other healthcare workers can talk openly with caregivers about any information shared between the client and healthcare workers.
   a) True
   b) False

9) Ideally, a client's CD4 cell count should be monitored how frequently?
   a) Every 12 months; but 6 monthly as CD4 count approaches threshold (to initiate ART)
   b) Every 9 months; but 4 monthly as CD4 count approaches threshold
   c) Every 6 months; but 3 monthly as CD4 count approaches threshold
   d) Every 4 months; but 2 monthly as CD4 count approaches threshold
   e) Every 2 months; but monthly as CD4 count approaches threshold

10) In HIV-infected clients, the combination of findings that could be seen with active TB are:
   a) A positive sputum smear with an abnormal chest x ray
   b) A positive sputum smear with a normal chest x ray
   c) A negative sputum smear with an abnormal chest x ray
   d) Any of the above

11) Which are <u>not</u> the following are classes of antiretrovirals?
   a) NRTIs
   b) NNRTIs
   c) Tricyclics
   d) Protease Inhibitors

12) The process of HIV post-test counseling with a client (who tests positive for HIV) should include discussion of the following:
   a) The diagnosis, the infection and disease process, and health changes that could occur.
   b) Strategies for reducing risk of transmission to others
   c) How to cope with the possible negative reactions of others
   d) A and C
   e) All of the above

13) The only reliable way to assess client adherence is with pill counts.
   a) True
   b) False

14) Which of the following statements is correct?
   a) Nurses need to stress that only heterosexual behaviour is NORMAL
   b) Nurses need to stress that homosexual, bisexual, and transsexual/transgendered behaviour is NORMAL
   c) Nurses need to stress that homosexual, bisexual, and transsexual/transgendered behaviour is ABNORMAL
   d) Nurses need to stress that transsexual/transgendered should not be tolerated

15) HIV infection, its progression in the body, and its effects on the immune system can generally be broken down into these stages: (**select all that apply**)
   a) Primary infection
   b) Clinically asymptomatic stage
   c) Subclinical stage
   d) Symptomatic HIV infection
   e) Progression from HIV to AIDS.

16) Nurses should always screen for STIs in clients who are sexually active.
   a) True
   b) False

17) What advice would you give a HIV-infected client who wants to get pregnant? (**select all that apply**)
   a) It is safest when both partners have CD4 count of over 350
   b) Do not eat eggs while pregnant
   c) Talk to your provider and ask for his/her advice
   d) Make sure you do not have any opportunistic infections
   e) Make sure you are adhering to your ART regimen

18) Which of the following are good family planning options for PLHIV? (**select all that apply**)
   a) Condoms
   b) Combined oral contraceptive pills (COCs), progestin-only oral contraceptive pills
   c) Natural (fertility awareness) method
   d) Hormonal implants

19) Which are key concepts of PMTCT? (**select all that apply**)
   a) Keep mothers healthy: a healthy mother is able to take care of herself, her baby and her family
   b) It is important to reduce risk of HIV transmission during pregnancy, labour, delivery, and breastfeeding
   c) All babies of HIV-infected mothers need ARVs and CTX
   d) HIV-infected women should limit the number of children they have

20) Which of the following statements are true for paediatric HIV testing? (**select all that apply**)
   - **a) Paediatric HIV testing requires the participation and cooperation of the caregiver(s), who may also be living with HIV and coping with his or her own illness**
   - **b) Identifying HIV early in life is even more critical in children than in adults given their fast disease progression and high mortality rates**
   - **c)** HIV testing in children less than 18 months of age or in those who are still breastfeeding is a one-time event
   - **d) The goal of diagnosing children as early as possible is to identify HIV-exposed and HIV-infected children and engage them in life-saving care**

21) Which statements are true for isoniazid preventive therapy (IPT)? (**select all that apply**)
   - **a. The WHO clearly recommends that a course of IPT should be provided to all HIV-infected clients who are not currently on treatment for TB and who have a negative symptom screen**
   - b. It is important to delay initiation of ARV therapy in favour of IPT
   - **c. IPT is safe for most people**
   - d. All of the above

22) Adults learn the best when: (**select all that apply**)
   - **a) The information they are learning is relevant to their jobs**
   - **b) Adults prefer a learning environment where they feel valued and respected for their experiences.**
   - c) Adults are mainly auditory learners
   - **d) Adults appreciate having an opportunity to apply what they have learned as soon as possible**
   - **e)** All of the above

23) Which statements apply to the 5-step method of teaching clinical skills? (**select all that apply**)
   - **a) Provide an overview of the skill and how it is used in client care**
   - **b) Demonstrate exactly how the skill is conducted without commentary**
   - **c) Repeat the procedure, but describe each step**
   - d) Point out errors using judgmental and critical language
   - **e) Have participant "talk through the skill" by detailing each step**
   - **f) Observe and provide feedback to the participant as he or she performs the skill**

24) It is important for nurse mentors and educators to establish mentoring action plans with their mentees because: (**select all that apply**)
   - **a) Action plans and work plans, can help prioritise, guide, and monitor work and learning in a specific area over time**

b) Having a comprehensive and measurable action plan will help ensure mentees learn key competencies related to HIV care and treatment after returning to their clinic
c) Action plans can help nurse mentors and educators identify the key responsibilities of the role and optimise the support you provide to your mentees
d) Action plans are a waste of time

25) Which statements are true for WHO clinical staging? (**select all that apply**)
a) There is 1 staging system for adults and children
b) Staging should be assessed at time of HIV diagnosis, prior to starting ART, and with each follow-up visit to assess response to ART and to monitor disease progression
c) A full clinical assessment and medical history is NOT required for staging
d) If a person has one or more conditions listed within the stage, they are categorized into that stage
e) There are three points that should be kept in mind when staging clients: their recent clinical signs, their most recent clinical diagnosis if any made, and the level of activity of client

Appendix 1C: Tips on Mentoring and Coaching

What are the qualities of a good mentor?

- Strong knowledge, skills, and experience related to HIV care and treatment
- Professional
- Understands the importance of skill sharing and capacity building and is therefore willing to teach and to mentor
- Respects others
- Conscientious and trustworthy
- Accountable for her or his work; responsive to feedback
- Upholds confidentiality at all times
- Ethically sound decision making
- Leadership

Mentoring Do's and Don'ts

Do:

- Make mentees feel welcome and valued.
- Set shared achievable goals.
- Put yourself in the mentee's shoes.
- Ask questions that show interest in developing participants' skills.
- Monitor progress and give feedback frequently.
- Provide guidance, encouragement and support.

Don't:

- Appear unprepared.
- Be vague about your expectations.
- Confine the participant to passive roles.
- Leave feedback to the final assessment.
- Embarrass or humiliate participants.
- Accept behaviour that is unethical or unsafe.
- Judge if a participant does not know something.

Appendix 1D: Listening and Learning Skills Checklist

Listening and Learning Skills Checklist		
Skill	**Specific Strategies, Statements, Behaviours**	**(√)**
SKILL 1: Use helpful non-verbal communication	1. Make eye contact	
	2. Face the person (sit next to him or her) and be relaxed and open with posture	
	3. Use good body language (nod, lean forward, etc.)	
	4. Smile	
	5. Do not look at your watch, the clock or anything other than the person	
	6. Avoid distracting gestures or movements	
	7. Other (specify)	
SKILL 2: Actively listen and show interest	8. Use gestures that show interest (nod and smile), use encouraging responses (such as *"yes," "okay"* and *"mm-hmm"*).	
	9. Clarify to prevent misunderstanding	
	10. Summarise to review key points at any time during the session	
	11. Other (specify)	
SKILL 3: Ask open-ended questions	12. Use open-ended questions to get more information	
	13. Other (specify)	
SKILL 4: Reflect back what the person is saying	14. Reflect back or paraphrase	
	15. Encourage the person to discuss further ("Let's talk about that some more")	
	16. Other (specify)	
SKILL 5: Show empathy, not sympathy	17. Demonstrate empathy: show an understanding of how the person feels by naming the emotion expressed	
	18. Avoid sympathy	
	19. Other (specify)	
SKILL 6: Avoid judging words and provide positive, constructive feedback	20. Avoid judging words such as *"bad," "proper," "right," "wrong,"* etc.	
	21. Use words that build confidence and give support (for example, praise what a mentee is doing right)	
	22. Other (specify)	
SKILL 7: Help set goals and summarise new concepts	23. Work with the mentee to come up with realistic "next steps" for their learning	
	24. Summarise the main points of the teaching exercise or mentoring session	
	25. Set next date for teaching or mentoring session	

Adapted from: World Health Organization. 2008. Prevention of Mother-to-Child Transmission of HIV Generic Training Package. Available at: http://www.womenchildrenhiv.org/pdf/p03-pi/pi-60-00/Intro_PM_2-05.pdf

References and Resources

1 I-TECH. 2008. *Basics of Clinical Mentoring: Facilitator Guide.* International Training and Education Center on HIV.
[2] Knowles, M. S. et al.1984. *Andragogy in Action. Applying Modern Principles of Adult Education*, San Francisco: Jossey Bass.
[3] Best Practice Resources. 2005. *Principles of Adult Learning Best Practice Resources*. Available at: http://wcwpds.wisc.edu/mandatedreporter/adult_learning.pdf
[4] Zambia MoH. 2010. *National Training Package on Paediatric Provider-initiated HIV Testing & Counselling in Zambia.*
[5] World Health Organization. 2008. *Prevention of Mother-to-Child Transmission of HIV Generic Training Package.*
[6] ICAP. 2010. *Improving Retention, Adherence, and Psychosocial Support within PMTCT Services, Implementation Workshop Curriculum for Health Workers, Trainer's Manual.*

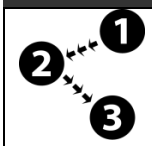
Module 2 HIV Transmission, Counselling, and Testing

Total Module Time: 285 minutes (4 hours and 40 minutes)

Learning Objectives

After completing this module, participants will be able to:

- Discuss the prevalence and impacts of HIV globally and in sub-Saharan Africa.
- Review the definitions of and differences between HIV and AIDS.
- Discuss modes of HIV transmission.
- List methods of primary HIV prevention.
- Discuss the meaning and benefits of provider-initiated testing and counselling.
- Practice the core competencies required by nurses for HIV testing and counselling services.
- Practice communicating feedback to mentees on HIV pre- and post- test counselling activities.
- Describe independent and supplemental learning activities for the module.
- Develop a measurable action plan to prioritise nurse mentoring and learning activities.

Methodologies	
	• Interactive trainer presentation • Game • Large group discussion • Demonstration • Case Studies • Role play • Small group work

Materials Needed	
	• Attendance sheet for Module 2 • Flip chart and markers • Tape or Bostik • Participants should have their participant manuals. The Participant Manual contains background technical content and information for the exercises. • Extra copies of *Appendix 2D: Mentoring Action Plan* and *Appendix 2E: Mentoring Orientation Guide* (several per group, in case participants need extra copies)

	• Electronic version of *Appendix 2D: Mentoring Action Plan* on flash drive so that participants with laptop computers can work in the electronic version rather than on paper.

References and Resources	
	• Becker, J., Tsague, L., Twyman, P., Sahabo, R. (2009). *Provider Initiated Testing and Counseling (PITC) for HIV in resource-limited clinical settings: important questions unanswered.* The Pan African Medical Journal. 3:4. • International Center for AIDS Care and Treatment Programs. (2010). *Improving Retention, Adherence, and Psychosocial Support within PMTCT Services, Implementation Workshop: A Toolkit for Health Workers*. • Republic of Zambia, Ministry of Health. (2010). *National Training Package on Provider-Initiated Paediatric HIV Testing & Counselling in Zambia*. • UNAIDS, WHO HIV/AIDS Programme, (2007). *Guidance on Provider-Initiated HIV Testing and Counselling in Health Facilities*. World Health Organization.

Advance Preparation	
	• Make sure you have all of the materials listed in "Materials Needed" on the first page. • Prepare the attendance sheet in advance and ask participants to sign in as they arrive for the 2nd training session. • Read through the entire module and ensure that all trainers are prepared and comfortable with the content and methodologies. • Review the appendices and ensure all trainers are comfortable using them and integrating them into the module. • Review any applicable national guidelines about HIV counselling and testing as well as national HIV testing algorithms ahead of time and prepare to incorporate them into the discussion. • Invite a Laboratory Officer or a member of the multidisciplinary care team who is has been trained in HIV testing to provide a demonstration of HIV Testing in Session 2.1. • Procure both HIV negative and HIV positive blood samples from blood bank, if possible, for HIV testing demonstration in Session 2.1. • Exercise 2 and 3 require advance preparation by the trainer. Please review these exercises ahead of time.

Session 2.1: Review of Key Competencies and Key Updates for HIV Transmission, Counseling, and Testing

Activity/Method	Time
Interactive trainer presentation and large group discussion	15 minutes
Exercise 1: HIV Fact or Fiction: Game and large group discussion	20 minutes
Interactive trainer presentation and large group discussion	60 minutes
Questions and answers	5 minutes
Total Session Time	100 minutes

Session 2.2: Teaching, Mentoring, and Skills Transfer

Activity/Method	Time
Interactive trainer presentation and large group discussion	20 minutes
Exercise 2: Practicing HIV Counselling: Role play and large group discussion	60 minutes
Questions and answers	5 minutes
Total Session Time	85 minutes

Session 2.3: Additional Learning Activities

Activity/Method	Time
Interactive trainer presentation and large group discussion	15 minutes
Questions and Answers	5 minutes
Total Session Time	20 minutes

Session 2.4: Action Planning

Activity/Method	Time
Interactive trainer presentation and large group discussion	15 minutes
Exercise 3: Creating Mentoring Action Plans: Small group work and large group discussion	45 minutes
Questions and Answers	5 minutes
Review of Key Points	10 minutes
Total Session Time	75 minutes

Session 2.1 Review of Key Competencies and Key Updates for HIV Transmission, Counselling, and Testing

Total Session Time: 100 minutes (1 hour and 40 minutes)

Trainer Instructions

Step 1: Begin by reviewing the Module 2 learning objectives and the session objective, listed below.

Acknowledge that, for participants who have received specific training in HIV counselling and testing or who work in HIV care and treatment settings, this module may be a review. However, some participants may not have received some aspects of this training, or they may have received training a long time ago. Encourage participants more familiar with HIV transmission, counselling, and testing to guide those that may be less experienced.

Step 2: Ask participants if they have any questions before moving on.

Session Objectives

After completing this session, participants will be able to:

- Discuss the prevalence and impacts of HIV globally, in sub-Saharan Africa, and in their own country setting.
- Review the definitions of and differences between HIV and AIDS.
- Discuss modes of HIV transmission.
- List methods of primary HIV prevention
- Discuss the meaning and benefits of provider-initiated testing and counselling.

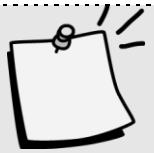
Trainer Instructions

Step 3: Review the statistics for HIV globally and in sub-Saharan Africa in the content below. Ask participants:

- *What is the current HIV prevalence (or the proportion of individuals in a population who have HIV) in your country? What areas of your country are most affected?*
- *Who are the highest risk groups and populations in your*

country for HIV infection?

- *How many PLHIV are you currently caring for in your clinic?*
- *Approximately, how many clients are testing positive for HIV each month?*
- *What is the impact of this on your clinic and your nursing staff?*



Make These Points

- Statistics for the end of 2009 indicate that around 33.3 million people globally are living with HIV. Each year, around 2.6 million more people become infected with HIV and 1.8 million die of AIDS.
- Sub-Saharan Africa is more heavily affected by HIV and AIDS than any other region of the world. An estimated 22.5 million people are living with HIV in the region - around two thirds of the global total.
- Youth and women are at the centre of the epidemic: 120,000 children between the ages of 0–14 years are living with HIV. Among young women, HIV prevalence is more than twice that of men of the same age.
- Women and girls make up almost 57% of adults living with HIV in sub-Saharan Africa. Overall, three quarters of all women with HIV worldwide live in that region.

Key Facts about HIV

Globally:[1]

- Statistics for the end of 2009 indicate that around 33.3 million people are living with HIV, the virus that causes AIDS. Each year around 2.6 million more people become infected with HIV and 1.8 million die of AIDS.
- Although HIV and AIDS are found in all parts of the world, some areas are more afflicted than others. The worst affected region is sub-Saharan Africa, where in a few countries more than one in five adults is infected with HIV. The epidemic is spreading most rapidly in Eastern Europe and Central Asia, where the number of PLHIV increased by 54.2% between 2001 and 2009.

In Africa[2]

- Both HIV prevalence rates and the numbers of people dying from AIDS vary greatly between African countries.
- Sub-Saharan Africa is more heavily affected by HIV and AIDS than any other region of the world. An estimated 22.5 million people are living with HIV in the region - around two thirds of the global total. In 2009 around 1.3 million people died from AIDS in sub-Saharan Africa and 1.8 million people became infected with HIV. Since the beginning of the epidemic 14.8 million children have lost one or both parents to HIV/AIDS.

- Youth and women are at the centre of the epidemic: 120,000 children between the ages of 0–14 years are living with HIV. Among young women, HIV prevalence is more than twice that of men of the same age.
- Women and girls make up almost 57% of adults living with HIV in sub-Saharan Africa. Overall, three quarters of all women with HIV worldwide live in that region.
- The social and economic consequences of the HIV epidemic are widely felt, not only in the health sector but also in education, industry, agriculture, transport, human resources, and the economy in general. The HIV epidemic in sub-Saharan Africa continues to devastate communities, rolling back decades of development progress.

Trainer Instructions

Step 4: Next, facilitate Exercise 1 to review some facts related to HIV and AIDS.

Exercise 1: HIV Fact or Fiction: Game and large group discussion	
Purpose	• To help participants review some of the basic facts related to HIV and AIDS
Duration	20 minutes
Advance Preparation	• None required
Introduction	The aim of this activity is to create a fun learning environment that enables participants to review key concepts related to HIV and AIDS.
Activities	**Game and large group discussion:** 1. The trainer should begin the game by reading one of the "**Statements for True and False"** to the large group. 2. For each statement, the trainer should ask a participant to offer a response of "TRUE" or "FALSE." 3. To encourage discussion, the trainer should then ask the rest of the participants if they agree or disagree. 4. If someone responds "FALSE" to a statement, ask the participant to explain why the statement is false and to correct the wrong information 5. The trainer should ensure that as many participants as possible get an opportunity to speak.
Debriefing	• Remind participants that in order to provide high-quality HIV care and treatment services to clients and educate other nurses effectively, nurse mentors and educators must have a solid understanding of the basic facts of HIV disease.

Exercise 1: HIV Fact or Fiction: Game and large group discussion

Statements for True and False

1. HIV means Human Immune Virus. (**False:** Human Immunodeficiency Virus)
2. HIV can be transmitted by all of the following: unprotected vaginal intercourse, breastfeeding, blood transfusion, insect bites, and use of contaminated syringes. (**False**: HIV is transmitted by unprotected intercourse, breastfeeding, blood transfusion, and use of contaminated syringes.)
3. HIV is a rotavirus. (**False:** HIV is classified as a retrovirus, because it uses reverse transcriptase to convert RNA into DNA, which is sent into the cell's nucleus.)
4. Red blood cells are the main targets for HIV inside the body. (**False:** Although HIV can infect a number of cells in the body, its main targets T-cells, also called CD4 positive (CD4+) cells.)
5. HIV cannot be transmitted through contact with sweat and tears. (**True**)
6. In most regions of the world, the group with the highest rate of HIV is men who have sex with men. (**False**: Although men who have sex with men have the highest rate of HIV infection in the United States, in most regions of the world the group with the highest rate is those who have heterosexual intercourse.)
7. Tests can usually detect HIV antibodies in the blood 1–3 months after exposure to the virus, although in some cases it may take up to 6 months. (**True**)
8. HIV lies dormant during the asymptomatic period. (**False:** Although people have no signs or symptoms of HIV disease during the asymptomatic period, the virus is multiplying and their immune systems are already suffering from the presence of HIV.)
9. Nurses should only routinely test pregnant women and drug users for HIV. (**False:** Every client should be offered HIV testing as part of routine health care.)
10. Having a CD4 count of 750 is an indicator of AIDS. (**False:** According to the WHO, the case definition of AIDS is having a CD4 count lower then 200/ml).

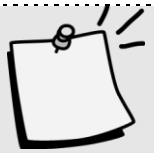
Trainer Instructions

Step 5: Lead participants through a brief overview of HIV and AIDS using the content below. Ask participants the following questions, record key points on a flip chart, and fill in using content below:

- *Can you explain the difference between HIV and AIDS?*
- *What does it mean if a person has "advanced HIV infection"?*
- *What does it mean if a person is "HIV infected"? What about "HIV-exposed"?*

Explain to participants that they will learn more about the HIV

life cycle, the specific stages of HIV disease progression, and its effects on the immune system in Module 3.



Make These Points

- HIV is the virus that causes immune deficiency. When HIV enters CD4 cells for reproduction, it damages the CD4 cell, eventually killing it. Therefore, HIV damages the very system that usually protects the body from infection. This state of immune deficiency makes the body vulnerable to opportunistic infections.
- The collective presence of different opportunistic infections, as a result of immune deficiency, is known as Acquired Immune Deficiency Syndrome (AIDS).
- Because HIV may begin causing subtle changes in the immune system long before an infected person feels sick, most doctors have adopted the term "HIV disease" to cover the entire HIV spectrum, from initial infection to full-blown AIDS (which is also called "advanced HIV disease").
- **HIV-infected** is when HIV has entered a person's body. A person who is HIV-infected might be very healthy and may not have any signs of illness for a long time.
- **HIV-exposed** usually refers to an infant born to a mother infected with HIV and exposed to HIV during pregnancy, childbirth, or breast-feeding.

Overview of HIV and AIDS

HIV stands for **Human Immunodeficiency Virus:**

- **Human:** HIV, like all viruses, must enter other cells if it is to replicate and survive. HIV cannot stay alive outside the human body unless under laboratory conditions.
- **Immunodeficiency:** HIV damages an individual's immune system and unlike most viruses, and it cannot be destroyed by the body. After becoming infected, a person has HIV for the rest of his or her life.
- **Virus:** HIV is a "retrovirus." The genetic material of retroviruses is carried in the form of RNA rather than DNA. Retroviruses usually contain an enzyme reverse transcriptase that helps in converting RNA to DNA during the replication process.

Over time, HIV destroys the CD4 cells and the immune system becomes increasingly weakened. As the CD4 count falls, the immune system is unable to fight off infections that it would usually be able to fight off, even with the help of medication. Infections therefore take the opportunity of this weak immune system and are called opportunistic infections (OIs), infections that are caused by bacteria, funguses, or viruses that may not cause illness in people with normal immune systems.

AIDS stands for **Acquired Immune Deficiency Syndrome:**

- Occurs when an individual's CD4 count drops (<200) or presents with an AIDS-defining event, regardless of the CD4 cell count.
- The individual is more likely to have opportunistic infections, such as PCP (pneumocystis pneumonia), Karposi sarcoma, toxoplasmosis of brain, and wasting syndrome due to HIV.
- Also includes **Advanced HIV infection.**

Other important definitions

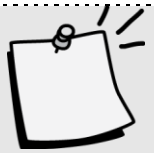
- **HIV-infected** is when HIV has entered a person's body. A person who is HIV-infected might be very healthy and may not have any signs of illness for a long time. The time it takes for HIV to develop into AIDS varies from person to person. This time can be as long as 10 years for some people or as short as 1-2 years for others.
- **HIV-exposed** usually refers to an infant born to a mother infected with HIV and exposed to HIV during pregnancy, childbirth, or breast-feeding.

Trainer Instructions

Step 6: Continue by explaining that participants will now review the main modes of HIV transmission and basic concepts of HIV prevention. Reinforce that understanding HIV transmission and prevention is critical to providing quality testing and counselling services, which will be the core competency taught in this module. Ask participants:

- *What are the main modes of HIV transmission?*
- *What are the ABCs of HIV prevention?*
- *Why don't some people practice the ABC's of HIV prevention in your community?*
- *How can nurses overcome these barriers when educating clients?*
- *What do you know about "treatment as prevention"?*

Remind the group that some people do not have access to information and services regarding their sexual health. This lack of access can result in their inability to make responsible and appropriate decisions about protecting themselves from disease. Nurses have an important role to play in both educating their clients and helping them with responsible decision-making.



Make These Points

- HIV is most easily transmitted in these body fluids: semen, vaginal

fluids, blood, birthing fluids, and breast milk.

- It is important to remember that contact with HIV, even in high concentrations, does not necessarily result in infection. To cause infection, the virus needs to get into the bloodstream.
- Nurses should be able to educate all clients about the ABCs of HIV prevention:
  - A: Abstinence — this approach works best for young people but may be appropriate for others to consider
  - B: Be faithful to your partner
  - C1: Consistent and correct condom use (male or female)
  - C2: Circumcision — male circumcision for HIV negative men can reduce the risk of sexual HIV transmission from women living with HIV to HIV-negative men
  - D: Delay sexual debut in young people
  - E: Early and complete treatment of sexually transmitted infections (STIs)
  - F: Free and open communication between partners about sex
  - G: Get to know your HIV status
- "Treatment as prevention" is a term describing the use of ART to reduce the risk of passing HIV to others. The goal of ''treatment as prevention'' is to reduce a person's viral load, making the person less infectious and less likely to pass on the virus.
- An important part of a nurse's job is to educate their clients about risk-reduction practices, including condoms, and help people learn how to protect themselves and their partners from HIV.

HIV Transmission[3]

Modes of HIV Transmission

HIV is most easily transmitted in these body fluids:

- Semen
- Vaginal fluids
- Blood
- Birthing fluids
- Breast Milk

HIV is not usually transmitted in these body fluids - unless there is also blood:

- Urine
- Feces
- Saliva
- Sweat
- Mucous
- Pus

Ways HIV is transmitted

Sexual transmission:

- Unprotected sexual intercourse with an infected person– this includes male-female sex, male-male sex, and female-female sex.
- Direct contact with body fluid of infected person (blood, semen, vaginal secretions).
- Sexual transmission accounts for most HIV transmission worldwide.
- HIV transmission is more likely if:
  - One or both people have advanced HIV infection or AIDS.
  - One or both people have just recently been infected with HIV (because at this time there is a high level of virus concentration in the blood).
  - One or both people are eligible for ART and are not taking it or have poor adherence. Taking ART the right way every day lowers the chance the transmitting the virus (see box entitled **Future HIV Prevention Options with ARVs).**

Mother-to-child transmission (MTCT):

- During pregnancy.
- During labour and delivery (most MTCT happens at this stage).
- During breastfeeding.
- Viral, maternal, obstetrical, foetal and infant-related factors all influence the risk of MTCT. More information on MTCT and preventing mother-to-child transmission is included in Module 5.

Blood-to-blood transmission:

- Transfusion with infected blood.
- Direct contact with infected blood/body fluids.

Remember:

- Whether an actual infection occurs depends on the virus concentration. HIV concentration in blood may be very high, whereas its concentration in saliva is very low (10,000 times less). It is important to remember that contact with HIV, even in high concentrations, does not necessarily result in infection.
- To cause infection, the virus needs to get into the bloodstream. To reach the bloodstream, the virus has to get into a wound or on mucous membranes, or enter directly into the bloodstream (during blood transfusion or through contaminated syringes, or via the placenta).
- With increased or repeated exposure to the virus, there is an increased risk of becoming infected.

Primary Prevention of HIV

Prevention activities must be multi-faceted, such as the "ABC approach" to prevention of sexual transmission. **The ABCs of preventing sexual transmission include:**

- A: Abstinence — this approach works best for young people but may be appropriate for others to consider
- B: Be faithful to your partner

- C1: Consistent and correct condom use (male or female)
- C2: Circumcision — male circumcision for HIV negative men can reduce the risk of sexual HIV transmission from women living with HIV to HIV-negative men
- D: Delay sexual debut in young people
- E: Early and complete treatment of sexually transmitted infections (STIs)
- F: Free and open communication between partners about sex
- G: Get to know your HIV status

Future HIV Prevention Options with ARVs

Treatment as Prevention[4]

- **"Treatment as prevention"** is a term describing the use of ART to reduce the risk of passing HIV to others. The goal of "treatment as prevention" is to reduce a person's viral load, making the person less infectious and less likely to pass on the virus.
  - Findings from an important study, known as HPTN 052, were released in 2011. The study assessed HIV transmission in nearly 900 discordant couples (where 1 partner is HIV-infected and the other is not).
  - The results showed that study participants who started ART earlier were much less likely to pass HIV to their HIV-negative partners than those who started ART later.
  - The study showed a 96% reduction in risk of HIV transmission when ART was initiated with a CD4 count of between 350 and 550 (earlier than current WHO guidelines).

PrEP[567]

- **Pre-exposure prophylaxis, or PrEP,** is an experimental approach that uses ARVs to reduce the risk of HIV infection in HIV-negative people:
  - Results announced in 2011 by the Partners PrEP study demonstrated that HIV infection among discordant heterosexual couples can be prevented by taking PrEP daily. The study showed that taking a daily tablet of the ARV tenofovir (TDF) alone or in combination with another ARV called emtricitabine, also known as Truvada (TDF/FTC), was effective in preventing HIV infection in both men and women.
  - The iPrEx study results released in 2010 showed that in men and transgender women who have sex with men, taking a daily tablet containing TDF or TDF/FTC reduced the risk of acquiring HIV by 44%.
  - The CDC TDF2 study in Botswana found that a once-daily tablet containing TDF/FTC (Truvada) reduced the risk of acquiring HIV infection by roughly 63% among uninfected heterosexual men and women in the study.
- **PrEP is not yet recommended for use. More research studies are currently being carried out to determine how well PrEP works in other populations.**

Reasons why people may NOT practice the ABC's of prevention:

- Think they are not vulnerable to HIV. *"It can't happen to me"* or *"I don't have sex often enough to contract HIV".*
- Lack of access to accurate information in community and from media.
- Denial: *"My partner would never expose me to any risk".*
- Fear of rejection from the partner.
- Embarrassment.
- Due to myths, such as condoms are only for sex workers or that married people do not use condoms.
- Provider's attitude is shameful and judgmental.
- Limited communication skills, cannot negotiate condom use with partner.

An important part of a nurse's job is to educate their clients about risk-reduction practices, including condoms, and help clients learn how to protect themselves and their partners from HIV.

Trainer Instructions

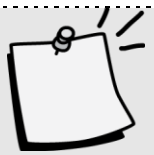
Step 7: Ask participants:

- *What do you know about provider-initiated HIV testing and counselling (PITC)? How does it differ from Voluntary Testing and Counselling (VCT)?*
- *What is the "opt-out" approach to HIV testing?*
- *What are some benefits of the PITC approach for clients, nurses, and your community?*
- *What are some challenges or barriers to providing quality PITC in your clinics? What are some potential solutions or ways to strengthen the existing systems?*

Step 8: Ask participants:

- *What are the main components of HIV Pre-Test Counselling? Of Post-test Counselling?*

Continue by discussing the main components of the pre- and post- test counselling sessions with clients and record key points on a flip chart. Ask participants to refer to *Appendix 2A: Sample Pre- and Post Test Counselling Scripts* as guidance during this session.



Make These Points

- In order to reach all the HIV-infected people who urgently need care, it

is important to offer a HIV test routinely to all clients.

- Provider-initiated HIV testing and counselling (PITC) refers to HIV testing and counselling which is recommended by healthcare workers to clients attending health facilities, as a standard component of medical care.
- PITC should not be confused with mandatory testing, as clients maintain the right to "opt-out"or decline testing.
- With the "opt-out" approach, individuals must specifically decline the HIV test after receiving pre-test information if they do not want the HIV test to be performed.
- Any client who is tested for HIV should receive an age- appropriate pretest and posttest counseling session. This session should include an explanation of the test, the implications of the results, and the availability of treatment for HIV-infected clients. Other issues—future infection/reinfection, and disclosure to partner—are also key components of these counseling sessions.
- Pre-test counselling can be conducted in groups or individually, depending on the circumstances.
- There are many challenges to ensuring quality counseling in the clinic setting, which nurses must work to overcome, such as providing adequate information before and after testing due to high volume of work, ensuring the confidentiality of client records, ensuring that all clients testing HIV positive are effectively referred for support, and ensuring the availability of testing kits and lab consumables.
- Counseling messages will be different based on the test results: negative, indeterminate, or positive. It is important to make sure that all clients understand the meaning of the test result, risk factors, and ways to prevent HIV.
- Although it is very important to follow the counseling steps, nurses should find an individual approach to each client based on his or her specific situation.
- HIV testing and counseling should therefore be fully integrated into routine clinical care and handled just like other investigations. This implies that the nurses can participate in the testing process at all levels: offering the test, providing the pre- and post-test information, giving the test result, discussing and initiating care for HIV-infected clients, and/or referring them for follow-up care.

Provider-Initiated HIV Testing and Counselling (PITC) and Opt-Out Testing[8]

- A strategy to maximize access to HIV testing is called **provider-initiated testing and counselling (PITC)**, meaning that it becomes the responsibility of the health care professional to advocate that each client is tested rather than waiting for the client to request testing.
- Opt-out testing means that all clients seen by a healthcare worker will receive diagnostic testing for HIV unless they request not to. This

approach ensures that as many clients as possible know their HIV status.

- PITC should not be confused with mandatory testing, as clients maintain the right to opt out or decline testing.
- **Voluntary Counseling and Testing (VCT),** in contrast, is client initiated HIV testing and counselling and is when a client chooses to seek out these services.
- HIV testing based solely on clinical assessment for likelihood of HIV infection is inaccurate and misses many clients who could be infected. In order to reach all the HIV positive people who urgently need care, it is important to offer the test routinely to all clients.
- HIV testing and counseling should therefore be fully integrated into routine clinical care and handled just like other investigations. This implies that the nurses can participate in the testing process at all levels: offering the test, providing the pre- and post-test information, giving the test result, discussing and initiating care for HIV-infected clients, and/or referring them for follow-up care.
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Pre-test Counselling Session

Any client who is tested for HIV should receive a pre-test and post-test counseling session.

The purpose of the pre-test session is to discuss basic information about the risk of infection, the benefits of HIV testing, and the steps in the HIV testing procedure so clients can make an informed decision about being tested. Nurses can provide pre-test counselling in groups, or individually, depending on the circumstances. Individual sessions can be adapted to specifically meet the needs of one individual, while group pre-test sessions need to cover all of the topics.

Informed Consent

As part of the session, the nurse must ensure that that the elements of informed consent — benefits and risks of testing, right to confidentiality, right to decline testing — are included in the counselling process. Once the nurse has ascertained that the client has heard the pre-test information, has no more questions and no objections to testing, the nurse should let the client know that as part of today's exam, blood will be taken by finger-prick or other means (according to national guidelines, testing algorithms, and test kit manufacturer's instructions) for the HIV test.

What to do if testing is declined:

Clients are entitled to decline HIV testing for themselves or for their children. Although HIV testing is strongly recommended, the client's decision should be respected. If the HIV test is declined, clients should be provided with additional, individual counselling to:

- Further explore concerns about testing.
- Clarify the importance of knowing his/her status to provide the best healthcare.
- Encourage the client to reconsider testing.

Exploratory questions to consider include:

- *Would you be willing to share your reasons for deciding not to be tested today?*
- *What do you know about the benefits of knowing your HIV status?*
- *What would have to change before you agreed to have the test?*

Continue with pre-test counselling. If HIV testing is still declined:

- Let the client know your door is open, and that she or he can decide to be tested anytime.
- If available, provide the client with a take home flyer or educational information.
- Arrange for further individual (or couple) pre-test counselling at the next visit.

Overview of Post-test Counselling

- Post-testing counseling should be offered to clients in all cases, regardless of the test result. It is desirable that the same provider that conducted the pre-test counseling informs the client about the test results and provides post-test counseling.
- Counseling messages will also be different based on the test results: negative, indeterminate, or positive. It is important to make sure that the client understands the meaning of the test result, risk factors, and ways to prevent HIV.

Post-test counselling always includes the following:

- Delivery of results, discussion and explanation of the meaning of the results.
- Attention to the client's ability to process and cope with the information provided.
- Assessment of sources of caregiver support system, identifying potential sources of social support, referring and providing support.
- Discussion of post-test follow-up, which will vary according to the results of the test, the age of the client, and the specific needs of the client and family.
- Discussion of the ongoing care and treatment needs of the client.

The key points and some suggested dialogue for both the pre- and post-test sessions are listed in *Appendix 2A: Sample Pre- and Post- Test Counselling Scripts* and *Appendix 2B: Pre- and Post- Test Counselling Checklists.*

Trainer Instructions

Step 9: Before teaching the HIV testing content of this module, review the following documents with participants:

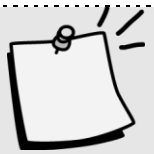
- National HIV counselling testing guidelines and HIV testing algorithm(s)— as a reminder of the sequence of testing, antibody vs. DNA PCR testing, and the age range for each test.
- The meaning of positive and negative HIV test results used in the algorithm(s).

Ask participants to describe the different methods of HIV tests they are familiar with and fill in content as needed. Emphasize that nurses should always adhere to the national testing algorithms and protocols.

Step 10: Invite a Laboratory Officer or a member of the multidisciplinary care team who has been trained and certified in HIV testing to provide a demonstration of the HIV testing procedure(s), with the relevant HIV test kits, used in the clinic.

- Discuss questions about the testing procedure.
- Discuss how to read/interpret results.
- Discuss common mistakes and how to avoid them.

Note: If the trainer wishes, s/he can procure HIV positive blood from a blood bank and ask for a volunteer who is HIV negative to act as the client during this demonstration.



Make These Points

- Several types of HIV diagnostic tests have been developed. The affordability and availability of these tests vary by country.
- Diagnostic tests fall into 2 main categories: antibody tests (e.g. HIV rapid tests), and virologic tests (e.g. PCR tests).
- Rapid tests are the most commonly used HIV tests in health facilities.
- Nurses should always follow their national guidelines or algorithm(s) for HIV testing.
- Nurses should always remember the basic 3 "C's" of HIV testing:
  - Test results are confidential.
  - Testing is always accompanied by counseling.

- Testing can only be conducted with informed consent.

Overview of HIV Testing

- Presence of HIV infection in a person can be confirmed through the HIV tests. Several types of HIV diagnostic tests have been developed. The affordability and availability of these tests vary by country.
- Diagnostic tests fall into 2 main categories:
  - Antibody tests: HIV rapid tests, HIV enzyme-linked immunosorbent assay (ELISA; also called EIA {enzyme immunoassay}), and Western blot and;
  - Virologic tests: HIV DNA polymerase chain reaction (PCR) assays, RNA assays, p24 antigen assays, and viral culture.
- Once HIV infection is diagnosed, the stage of infection can be established both clinically and immunologically. Additional information on clinical staging of HIV is found in Module 3.

Methods of HIV Testing

Common types of HIV diagnostic tests are described below and are listed in Table 2.1

HIV Antibody Tests

These tests detect antibodies to HIV and are classified as rapid and non-rapid.

Non-rapid Tests:

- ELISA: These are confirmatory tests used in the detection of HIV antibodies in whole blood, serum, or plasma. They are easy to perform but require strict adherence to procedures.
- ELISAs have the following characteristics: good sensitivity and specificity, adaptable for testing many samples at a time, do not require use of radioactive substances.
- Western Blot (WB): It is the most widely accepted antibody confirmatory test and it is referred to as a gold standard in HIV testing. WB has high specificity due to its ability to separate and concentrate all the antigens in their specific bands, thus enhancing antigen/antibody binding to specific sites on the strip. It is easy to perform the test but difficult to interpret the results.

Rapid Tests

- These are simple and easy to perform tests, which do not require sophisticated equipment. Rapid tests are the most commonly used HIV tests in health facilities. Results are read within a specified time, usually within 30 minutes. Test samples can be run individually. All rapid tests use whole blood, serum, or plasma, but preferably serum or plasma is better due to higher concentration of the virus in them.

HIV Viral Test

These are tests that detect the presence of HIV. There are 2 types:

- PCR: Detects RNA/DNA of HIV even before antibodies are produced.
- Viral Culture: HIV can be isolated by culture in highly sophisticated laboratories.

Table 2.1: Common HIV tests

Antibody	Virologic
HIV Rapid Test	HIV-1 DNA PCR
HIV ELISA (also called EIA)	HIV-1 RNA PCR (viral load)
Western Blot	Ultrasensitive p24 antigen assay test
	HIV culture

Interpretation of Results for Antibody Tests

A positive antibody test result means:

- The body has produced antibodies against HIV. This does not mean that the infected person will either remain healthy or has AIDS. It definitely means that this person is infectious. Studies show that the virus can be detected in almost all persons who have antibodies.

A negative antibody test result means:

- HIV antibodies were not detected in the blood.
- If it has been more than two months since the last episode of risky behavior, most likely the person is not infected with HIV. Antibodies are produced on average within 2-3 months from the time of getting HIV. This period is often called the "window" period. During this time, the test result may be negative, while the person is actually infected. Therefore, it is important to repeat the test after this window period.

The **window period** is the period when one is HIV infected but the body has not produced enough antibodies to be detected by tests based on antibodies. This period ranges from two weeks to three months (12 weeks) after infection. If the client thinks that he/she may have been exposed to HIV in the past three months, advise him/her to return for a second HIV test. Also, the client should abstain from sex or use condoms until after he/she receives the results from the second HIV test.

The 3 "C's" of HIV Testing

The principles for conducting an HIV test for individuals require that:

- Test results are confidential.
- Testing is accompanied by counselling.
- Testing can only be conducted with informed consent.
- *Informed consent means that (1) The client has enough information to understand what they are agreeing to and what the implications are; and (2) The counsellor is honest and objective and allows the client to make his/her own decision regardless of the counsellor's opinion or preference.

Trainer Instructions

Step 11: Allow five minutes for questions and answers on this session.

Session 2.2 Teaching, Mentoring, and Skills Transfer

Total Session Time: 85 minutes (1 hour and 25 minutes)

Trainer Instructions

Step 1: Review the session objectives with participants.

Session Objectives

After completing this session, participants will be able to:

- Practice the core competencies required by nurses for HIV testing and counselling services.
- Practice communicating feedback to mentees on HIV pre- and post- test counselling activities.

Trainer Instructions

Step 2: Explain that in this session participants will have an opportunity to apply what they have learned in this module as well as practice teaching and mentoring other nurses on this topic area.

Step 3: Review the key skills participants will be asked to demonstrate during a pre- and post- HIV counselling session, using the *Appendix 2B: Pre- and Post- Counselling Checklists* as a guide. Ask participants again if there are skills or areas on the counselling checklists that they do not feel comfortable with or for which they need review.

Step 4: Remind participants about the evolving case study that they worked on in Module 1. Review THEIR version of the background narrative below, which participants adapted in the previous Module.

Step 5: Facilitate Exercise 2, so participants can practice demonstrating their own HIV counselling skills in addition to communicating feedback to mentees on these counselling activities.

Background for the Evolving Case Study

Welcome to (insert the name of your case study community)

(Insert the name of your case study community) is a town of about (use desired population base) people located about 75 km from (insert name of capital city). This community has many families with small children, as well as extended families with a significant number of elders.

There is a small government health clinic in (insert name of large town or city #2) that provides general care, VCT, and antiretroviral treatment (ART) to HIV-infected adults, adolescents, and children. The clinic is staffed by 1 doctor, 3 nurses, and 2 nurse assistants. Across town, there is a small ANC clinic for women and infants, but it is open only when the traveling nurse midwife can visit – usually about once a week (if it's not the rainy season). There is no emergency care available except for what can be provided by the 2 clinics. Severe medical problems are transferred to _____ (town #2), where there is a larger clinic, or to the capital city, where there are more comprehensive facilities.

The concept of preventive health care, or even regular health care, is not well established among the population. Many families utilize the wisdom of elders or traditional medicine handed down through the generations. The major health problem, as in many other African communities, is infectious disease: HIV, TB, and malaria. There are the 'usual' problems of diarrhoea and dehydration, especially among children and the elders, malnutrition, failure to thrive, and various parasite infestations. The problems generated by increasing HIV and TB infection are reaching dangerous levels. There seems to be not only lack of clinic staff, materials, and drug supply but also a significant knowledge gap – and not only among the few providers in town but also among the population.

Meet the L___ family

The L___ family resides close to the main clinic in your town. S___, is a 50-year old unemployed woman, who has two children: her 21-year-old son M___ and 22-year-old daughter T___. M___ is single, lives in town, and has a job working in a small bar. T ___ is also unmarried and still lives with her mother. T___ only has a secondary school education and sometimes earns money by watching people's children. S___'s 36-year old sister, N___, and her 57-year-old husband, V___, also live with her, in a small, sparsely furnished 2-bedroom home with very basic amenities and poor sanitation. Both N___ and V___ are HIV-infected.

Exercise 2: Practice HIV Counselling: Role play and large group discussion	
Purpose	• To provide participants with an opportunity to gain experience with HIV counselling in addition to practicing their feedback and mentoring skills with other nurses
Duration	60 minutes
Advance Preparation	• Review the case studies and suggested answers before the training, and adapt as needed
Introduction	This is a small group exercise to practise planning and

	delivering a pre-test and post-test counselling session for clients. This exercise also provides an opportunity to practice mentoring other nurses on this topic area. Practising how to convey factual information about HIV transmission and prevention can help nurses feel more comfortable when they work with such clients on these issues, as well as reinforce health-seeking behaviours.
Activities	**Part 1: Role play** 1. Ask 3 participants to role play the 1st case study in front of the large group. Ask participants to: • Identify a ''mentee'', ''client'', and a ''nurse mentor.'' • Using the 1st case study, suggest that the ''mentee'' initiate the HIV counselling session as they would in the clinic setting. Give the ''mentee'' and ''client'' about 5 minutes for their session. • The ''nurse mentor'' should observe the ''mentee'' during the counselling session. Ask the ''nurse mentors'' to pay close attention to how the ''mentee'' is interacting with her ''client'' and the different communication techniques she employs to discuss sensitive issues. • The ''mentee'' can refer to *Appendix 2A: Sample Pre- and Post- Test Counselling Scripts* and *Appendix 2B: Pre- and Post- Test Counselling Checklists* as guidance during this exercise. *2.* After five minutes, stop the exercise and ask the ''nurse mentor'' to provide feedback on the session to the ''mentee'', as she would in the clinic setting. When giving feedback remind the ''nurse mentors'' to: • Use the Listening and Learning Skills Checklist from Module 1as a guide for their feedback session. • Emphasise the positive aspects of the counselling session. • Offer specific and constructive suggestions to improve what didn't work so well. 3. Ask the ''nurse mentor'': • *Did the ''mentee'' address all of the client's main concerns?* • *What did the ''mentee'' do well overall?* • *How could the ''mentee'' have done a better job? What would you have done differently?* 4. Repeat this exercise using the remaining 2 case studies so that other participants will have an opportunity to practise each role. **Part 2: Large group discussion** 5. Reconvene the large group. 6. Encourage discussion about both the counselling and

	feedback sessions, including what went well and what could have been different. • *How did it feel taking on the role of the "nurse mentor" versus the "mentee"? Which was more challenging and why?* • *(For "mentees") How effectively did the "nurse mentors" provide feedback? How could the "nurse mentor" have done a better job? What would you have done differently?* • *What were the key differences between counselling an individual versus a group?*
Debriefing	• Summarise the key points from the group feedback. • Take the time needed to review any key content areas or mentoring skills, pulling in lessons learned from the case studies. • Remind participants that they can use the counselling scripts as tools with their mentees, as preparation for real life situations. • Remind participants that using role play with their mentees will help them to develop better counselling skills.

Exercise 2: Practice HIV Counselling: Role play and large group discussion

Case Study 1:

S___, is a 50-year-old woman, who lives in (insert name of your case study community) and is admitted to your clinic today. S___ reports a 1-month history of poor appetite, diarrhea, and weight loss. When you suggest a routine HIV test, she says to you "*I'm too old to have HIV*." After you speak with S___ a bit more, she finally agrees to the HIV test, and after 45 minutes, the test comes back positive. How do you counsel S___, once you have the results of the test?

Key points for trainers for Case Study 1

- Inform the client that her results are available.
- Explain test result clearly.
- Explain about confirmatory testing, if applicable.
- Provide emotional support.
- Emphasize that the client's information will only be accessed by the healthcare team in order to make clinical decisions (shared confidentiality).
- Discuss sources of support, including support groups.
- Discuss disclosure to other parties (sexual partners, family members, and friends).
- Explain that using condoms is one reliable way to prevent transmission of HIV to her partner. Talk about her feelings and perceptions of condoms.

- Remind client that her test result does not indicate the partner's HIV status.
- Support client to refer partner for testing.
- Assess and provide referrals for HIV-related services.
- Explore client's access to care and medical services.
- Ask if S___ has any questions.
- Engage client in HIV care. Make follow-up appointment(s) and summarize next steps.

Case Study 2:

Part A:

S___'s son, M___, is a 21-year-old male who lives on his own and is seen at your clinic by you and your nurse mentor. He reports signs and symptoms of suspected gonorrhoea. M___ confides in you that he has a male partner who he sees on the weekends but is scared of his mother and the rest of his family finding out. He has never had a HIV test before and admits he only uses condoms once in awhile, because he doesn't like the way they feel during sex. How do you counsel M___ about potential HIV testing?

Part B:

After an hour, M___' s test results come back from the lab, and the result is negative. By this time, M___ appears very anxious and worried. How do you counsel M___?

Key points for trainers for Case Study 2

Part A:

- Ask M___ about history of HIV testing.
- Discuss the benefits of knowing his/her HIV status.
- Explain that the health facility offers HIV testing to all clients who have never previously tested as well as to those who have tested HIV negative more than 3 months ago.
- Explain confidentiality of client information. M___ might need more reassurance around confidentiality.
- Counsel on partner testing, safer sex practices, and risk reduction.
- Describe test procedure and what results mean.
- Explain confidentiality of client information. M___ might need more reassurance around confidentiality.
- Review ABC's of HIV prevention and access to care and treatment.
- Explain that consent must be obtained and client's right to decline the test.
- Ask if M___ has any questions.

Part B:

- Provide test results, give M___ time to react, and provide emotional support.
- Explain window period and encourage retesting after 6 weeks.
- Counsel on partner testing.

- Provide appropriate referrals for STI treatment.
- Review ABCs of HIV again, including discussion about/demo of correct condom use.
- Give M___ take-home information, if needed.
- Ask if s/he has any questions or concerns.
- Summarize the session and next steps, including the next clinic appointment date.

Case Study 3:
As a mentee, you are asked by your mentor to provide HIV pre-test counselling to a small group of women sitting in the waiting area of your clinic. Some of the women seem very tired, and others look irritated from having to wait around so long. How do you proceed with the group?

Key points for trainers for Case Study 3

- Introduce yourself and the session.
- Ask what the group may already know about HIV.
- Discuss the reasons why HIV testing and counselling is recommended for all people.
- Discuss the benefits of testing and counselling.
- Discuss confidentiality.
- Describe how the test is done (according to national guidelines).
- Describe the meaning of test results.
- Discuss ABC's of HIV prevention and availability of care and treatment.
- Discuss the right to decline the test.
- Ask clients if they have questions.

Trainer Instructions

Step 6: Allow five minutes for questions and answers on this session.

Session 2.3 Additional Learning Activities

Total Session Time: 20 minutes

Trainer Instructions

Step 1: Review the session objective listed below.

Session Objective

After completing this session, participants will be able to:

- Describe independent and supplemental learning activities for the module.

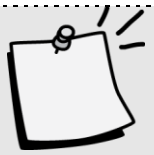
Trainer Instructions

Step 2: Explain that as part of this training course, participants will be offered different learning options and supplemental learning activities, which they are encouraged to complete independently or in small groups.

Ask participants:

- *What does the term "independent learning" mean?*
- *Think about your own experience with training and learning. Can you think of some examples of independent learning activities?*
- *What are some benefits of independent learning?*
- *How can nurse mentors and educators promote more independent learning in the clinic setting?*

Review the proposed independent learning activities for this module in the content below, and review instructions for completion of *Appendix 2C: Independent Learning Activities Contract.*



Make These Points

- The purpose of independent learning activities is to encourage participants to explore selected areas of professional practice. This opportunity also encourages self-directedness and the transition into

the professional role of "nurse mentor and educator".
- Independent learning places increased educational responsibility on the student for achieving his/her learning objectives and helps move s/he, over time, from a role as learner to that of a learning facilitator and teacher.
- Participants should work together as often as possible to complete any suggested independent learning activities, since peer support helps to ensure motivation and task completion.
- Participants who agree to complete independent learning activities should complete *Appendix 2C: Independent Learning Contract.* The learning contract will allow both the trainer and the participant to formalize and monitor their commitments.

Independent Learning Activities

Independent learning, often referred to as self-directed learning, involves participants taking the initiative in recognising their own learning requirements and undertaking activities to meet them. As nurse mentors and educators, participants should take responsibility for:

- Identifying their own learning needs.
- Searching for relevant information and gaining knowledge on their own.
- Learning on their own with minimum supervision.
- Actively seeking ways to solve their own problems and difficulties.
- Assessing their own learning to see if their needs are met.

Independent learning is a critical part of adult learning, which was introduced in Module 1. Remember that research suggests that adults like to learn:

- Doing activities they want to do.
- Having opportunities to reflect on what they have learned.
- Working at their own pace.
- Having a choice in where and when they work.
- Working in the company of others who are engaged in a similar process.

Some examples independent learning during this training course might include:

- Literature review.
- Problem-solving exercises in small groups.
- Participant-led presentations and trainings.
- Written work, in the form of short papers and responses to specific questions.

Nurse mentors and educators can use similar independent learning activities with mentees. Some people, however, may have resistance or dislike independent learning because of:

- Feeling of threat and insecurity.
- Feeling "cheated" with less "teaching".

- Lack of confidence of success.
- Lack of appropriate prior experience.
- Lack of independent learning skills.
- Habits and preferred ways to learn.

Nurse mentors and educators can reduce these barriers by:
- Giving specific instructions (explain WHAT, HOW, and WHEN).
- Ensuring a reasonable workload.
- Ensuring availability of help and feedback on progress.
- Developing a friendly and productive relationship with our mentees.
- Ensuring availability of the needed facilities and resources.
- Establishing assessments that emphasise process as well as outcomes.

Suggestions for independent learning activities

For the purposes of this training, participants will be offered "extension" or supplemental work to complete individually or in small groups. Participants should work together as often as possible, since peer support helps to ensure motivation and task completion.

Examples of supplemental learning activities for this module include the following:

Work in small groups and review the following document:
- UNAIDS, WHO HIV/AIDS Programme, (2007). *Guidance on Provider-Initiated HIV Testing and Counselling in Health Facilities.* World Health Organization.

Based on your reading, answer the following questions:
- *What are the challenges of implementing PITC in your clinic setting? What are some potential solutions to these challenges?*
- *How would you monitor and evaluate a PITC approach in your clinic?*
- *What are some ways to improve current systems for HIV testing and counselling in your clinic?*

Facilitate a lunchtime discussion about the benefits and challenges of PITC with fellow healthcare workers, and present a summary of your experience to the large group at the next training session.

Trainer Instructions

Step 3: Allow five minutes for questions and answers on this session.

Session 2.4 Action Planning

Total Session Time: 75 minutes (1 hour and 15 minutes)

Trainer Instructions

Step 1: Review the session objective listed below.

Session Objective

After completing this session, participants will be able to:

- Develop a measurable action plan to prioritise nurse mentoring and learning activities.

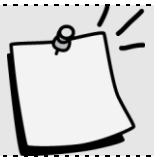
Trainer Instructions

Step 2: Ask participants if they have any previous experience writing action plans or work plans. Use the following questions to guide the discussion:

- *Why do we need action plans?*
- *Have you ever worked on an action plan (or a work plan) in the past? For what activities?*
- *How did you and your colleagues use the action plan?*
- *What could have been done differently to make the action plan more useful over the long-term?* (The most common response to this question — and it should be noted if participants don't mention it — is better monitoring of the plan.)

Explain that in every module of this training course, participants will work on an aspect of action planning, which will assist them with providing follow-up and site-level support to their mentees after the training.

Refer participants to *Appendix 2D: Mentoring Action Plan* as a guide. Review the suggested content and ensure that participants are clear about how to complete the form.



Make These Points

- Action plans and work plans, can help prioritise, guide, and monitor work in a specific area over time.
- A good action plan sets the stage for achieving the goal – it maps out the work process with a detailed schedule of key activities needed to accomplish the goal.
- Having a comprehensive and measurable action plan will help ensure that participants are able to implement what they have learned in training and are able to mentor nurses performing key competencies related to HIV care and treatment after returning to their clinic.
- Action planning can help nurse mentors and educators identify the key learning goals for the mentee, appropriate teaching and learning strategies to achieve those goals, and optimise the support they provide to their mentees.

Overview of Action Plans

- Action plans or work plans, can help prioritise, guide, and monitor work in a specific area over time.
- A good action plan sets the stage for achieving the goal – it maps out the work process with a detailed schedule of key activities needed to accomplish the goal.
- Action plans can assists s with providing follow-up and site-level support to their mentees after the training.
- Action planning can help nurse mentors and educators identify the key learning goals for the mentee, appropriate teaching and learning strategies to achieve those goals, and optimise the support they provide to their mentees.

Key Steps to Developing a Mentoring Action Plan

Having a comprehensive and measurable Mentoring Action Plan will help ensure that participants are able to implement what they have learned in training and are able to mentor and educate nurses performing key competencies related to HIV care and treatment after returning to their clinic. Here are some key steps for developing a Mentoring Action Plan:

- Meet with your mentee and discuss their individual learning gaps or problems, as well as their strengths. Nurse mentors and educators can review and incorporate questions from *Appendix 2E: Mentoring Orientation Guide* to help them build rapport and frame the initial meeting with their mentee.
- Develop a measurable action plan to prioritise activities that address the mentee's learning needs. Each action item should have a timeline, should document any resources that are needed, as well as describe how the activities will be evaluated.
- Remember to present the Mentoring Action Plan to facility managers and regularly revisit the Mentoring Action Plan to see what progress has been made and where adjustments are needed.

Trainer Instructions

Step 3: Lead participants through Exercise 3, which will give participants an opportunity to practice developing a mentoring action plan with a mentee.

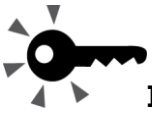
Exercise 3: Creating Mentoring Action Plans: Small group work and large group discussion	
Purpose	• To develop measurable action plan to prioritise nurse mentoring and learning activities with the mentee
Duration	45 minutes
Advance Preparation	• None required
Introduction	This will be a chance for participants to develop a Mentoring Action Plan that outlines a mentee's learning goals and the mentor's teaching strategies. Ultimately, the Mentoring Action Plan should be used by participants when they return to their clinic, to provide site-level support to their mentees.
Activities	**Part 1: Small Group Work** 1. Break participants into pairs. 2. Ask participants to assign one participant to the role of a ''nurse mentor'' and the other to a '' mentee''. 3. Refer participants to *Appendix 2D: Mentoring Action Plan*. Explain that one of the templates in Appendix 2D is partially completed with some suggested responses. Participants can use this as an example to help them with the exercise. 4. Tell participants to pretend that the ''nurse mentor'' and ''mentee'' are meeting for their first mentoring session. The ''nurse mentors'' should review and incorporate questions from *Appendix 2E: Mentoring Orientation Guide* to help them build rapport and frame the initial meeting with the ''mentees''. There will not be sufficient time to ask all of the questions in the Orientation Guide, but ''nurse mentors'' should use a few of these questions and discussion topics to fit their own style and approach. 5. Ask the pairs to discuss the roles and responsibilities of the ''nurse mentor'' and ''mentee''. 6. Ask the ''nurse mentor'' and ''mentee'' to discuss and choose 1-3 learning goals related to this module. The ''nurse mentor'' can ask the ''mentee'': • *How do you think I, as your nurse mentor, can help you to build your technical or clinical skills related to HIV testing and counseling?* • *What are your strengths and weaknesses on this*

	particular topic area? 7. Ask the pairs to start creating an action plan and list of 1-3 learning activities (or next steps) to achieve each of the "mentee's" goals. Remember, the most successful plans are those that have a range of learning activities that encourage: • Learning by doing (e.g. skills practice, special project) • Learning from others (e.g., shadowing) • Learning from challenging experiences or "stretch assignments" (e.g. project outside of clinic or department, a project that requires leadership role) 8. Ask the pairs to create a timeline and determine how many hours, days, or weeks it will take to complete each learning activity. 9. Ask the "nurse mentors" to establish a meeting schedule to support the "mentee" with their work: • Where? • When? • How long? • Frequency? • Who will initiate meetings? • How will communication/feedback be maintained between the meetings? 10. Ask the pairs to determine how the mentee's tasks and learning activities will be evaluated. • *How will you know when their learning goals are achieved (e.g. test, presentation, case review).* 11. Ask the pairs to input their information into the Mentoring Action Plan. **Part 2: Presentations and Large Group Discussion** 12. Ask for volunteers to present their Mentoring Action Plan to the large group. 13. Encourage participants to comment and ask questions.
Debriefing	• Remind participants that action plans can be used by nurse mentors and educators to follow-up with their mentees and monitor their learning at the site level, over regular intervals of time. • Nurse mentors and educators should always collaborate with their mentees on their action plan, share the plan with their facility management, and regularly review progress on the plan in order make adjustments as needed. • Explain to participants that they will practice monitoring and evaluating the success of their plans in future training sessions.

Trainer Instructions

Step 4: Allow five minutes for questions and answers on this session.

Step 5: Summarise this module by reviewing the key points in the box below.



Module 2: Key Points

- **HIV** stands for **Human Immunodeficiency Virus.** HIV damages an individual's immune system and unlike most viruses, and it cannot be destroyed by the body. After becoming infected, a person has HIV for the rest of his or her life.
- **AIDS** stands for **Acquired Immune Deficiency Syndrome** and occurs when an individual's CD4 count drops (<200) and the body is no longer able to fight off infection. The individual is more likely to have opportunistic infections, such as PCP (pneumocystis pneumonia).
- Opt-out testing means that all clients seen by a healthcare worker will receive diagnostic testing for HIV unless they request not to. This approach ensures that as many clients as possible know their HIV status.
- Another strategy to maximize access to HIV testing is called provider-initiated testing and counselling (PITC), meaning that it becomes the responsibility of the health care professional to advocate that each client is tested rather than waiting for the client to request testing.
- The main objectives of pre-test counseling are to: assess the client's individual risk of HIV, identify and negotiate safer behaviors and develop an individual plan for risk reduction, help the client make a decision about whether or not to get tested, and explain the test and clarify its meaning.
- If a client decides to get tested, the provider conducting the test must obtain informed consent from the client. Clients who want to be tested do have the right to refuse pre-test counseling.
- Post-testing counseling should be offered to clients in all cases, regardless of the test result. It is desirable that the same provider that conducted the pre-test counseling informs the client about the test results and provides post-test counseling.
- Counseling messages will be different based on the test results: negative, indeterminate, or positive. It is important to make sure that the client understands the meaning of the test result, risk factors, and ways to prevent HIV.
- **Independent learning**, often referred to as self-directed learning, involves participants taking the initiative in recognising their own learning requirements and undertaking activities to meet them.
- Having a comprehensive and measurable action plan will help ensure that participants are able to mentor and educate nurses performing key competencies related to HIV care and treatment after returning to their clinic.

Appendix 2A: Sample Pre-Test and Post-Test Counselling Scripts

Key points for pre-test counselling session (can be adapted for individuals or groups)

Objective	Script
Introduce yourself and the session.	• Introduce yourself. • *I am _____ (name/occupation) and will be talking with you about HIV testing.* • *I want you to feel comfortable asking questions today so you have the information you need.*
Ask what the person/group may already know about HIV.	• *Many of us know some things about HIV and many of us are living with HIV, caring for someone with HIV, or know someone living with HIV.* • *Do you know what HIV is?* • *What is AIDS?* • *How is HIV passed from one person to another?* • *How can HIV be prevented?* • *Can you/someone tell us what they know about care and treatment for people living with HIV?* • Clarify and fill in the gaps to make sure that participants have a basic understanding of HIV.
Discuss the reasons why HIV testing and counselling is recommended for all people.	• *HIV testing is recommended for all people as a normal and routine part of their health care.* • *Our health facility offers HIV testing to all clients who have never previously tested as well as to those who have tested HIV negative more than 3 months ago.*
Discuss the benefits of testing and counselling.	• *It's important to know your HIV status in order to provide you with the best care available. There is no cure for HIV, but HIV treatment is available. Treatment lowers the risk of getting sick or dying from HIV, and many people on treatment are living long, healthy lives.* • *Knowing your HIV status helps you and your family to plan your future together. For many people knowing their status relieves them of the worry that comes from uncertainty.*
Discuss confidentiality.	• *The result of the HIV test is confidential; it is shared only with those professional healthcare workers who need this information in order to care for your child.* • *When your result is ready, I'll talk with you by yourself, in private, to give you the result and explain what the result means. We will also talk about and arrange for the care that you might need. I will answer any questions you have.*
Describe how the test is done (adapt according to national guidelines).	• *This test is called a (insert name e.g. HIV rapid test). It is a simple test that can be done with (insert method e.g. prick of a finger).* • *The results of the test are ready in (insert time, e.g. less than an hour).*

Objective	Script
Describe the meaning of test results.	• *Let's talk about what the test result may mean (adapt according to national guidelines):* • *A positive HIV test usually means that the person is HIV-infected.* • *A negative HIV test means that the person is not HIV-infected.* • *The "window period" is the period when a person is HIV infected but the body has not produced enough antibodies to be detected by tests. This period ranges from two weeks to three months (12 weeks) after infection. If you that you may have been exposed to HIV in the past three months, you should return for a second HIV test. Also, it's important to abstain from sex or use condoms until after you receive the results from the second HIV test.*
Discuss ABC's of HIV prevention and availability of care and treatment.	• Discuss implications of staying HIV negative. • *Remember: HIV treatment works very well. In most cases, HIV treatment means that PLHIV can lead long and healthy lives.* • *If you have HIV, we will arrange for you to receive the support, care and treatment that you need.* • *Treatment for HIV is available and is free for adults and children.* • *We will also help you to learn about HIV and HIV treatment, care for yourself, develop a follow-up plan, and access ongoing support.*
Discuss the right to decline the test.	• *HIV testing is strongly recommended so all people with HIV can access life-saving treatment. However, you have the right to tell us that you do not want to be tested.* • *If you say no to the test, we will still take care of you. We will also try to address your concerns about HIV testing. However, if you have HIV and your doctor does not know about it, your health may be endangered.*
Close the session.	• *Do you have any questions or concerns?* • *To review, HIV testing is a regular part of your health care. As part of your visit today, we will test you for HIV.* • (For groups) *If you have a question or information you would like to share privately, you will be able to do so before the test is conducted.*

Borrowed and adapted from: Republic of Zambia, Ministry of Health. 2010. *National Training Package on Provider-Initiated Paediatric HIV Testing & Counselling in Zambia*.

Post-test Counselling for Negative or Indeterminate Test

Objective	Script
Introduce yourself and the session.	• Introduce yourself. • *I am _____ (name/occupation) and will be talking with you about your HIV test results.* • *I want you to feel comfortable asking questions today so you have the information you need.*
Provide the test result. Discuss the meaning of the test result for the client.	**For negative result:** • Prepare yourself for the result-giving by: checking you have the right result, making sure you understand what the results mean, making sure you have enough time. • *Your HIV test result is negative. The fact that you have a negative HIV test means that you do not have HIV at this time.* • If you think that the client may have been exposed to HIV in the past 3 months, advise him/her to return for a second HIV test. Also, the client should abstain from sex or use condoms until after he/she receives the results from the second HIV test. • *You may need to return for a repeat test in 3 months (for antibody test).* • *A negative test result does not mean your partner is negative for HIV.* • *It may mean that you have not yet been infected.* **For indeterminate result:** • *It is not possible to confirm your test results at this time. You will need to return for a repeat test in 3 months (or adapt according to national guidelines).*
Review ABC's of HIV prevention, including condom demonstration, if necessary.	• *You can still get infected if exposed to HIV.* • *What are you doing to reduce your chances of getting HIV infection?* • Discuss ABC's of HIV prevention, like abstinence, being faithful to one sexual partner, and using condoms.

Assess client's understanding of the results and the follow-up plan. Address questions or concerns.	• *I would like to make sure I covered everything with you and explained things the right way. Can you explain to me what we just talked about?*
	• Ask client to summarise the following (as appropriate to circumstances*):*
	  ◦ Meaning of the test result
	  ◦ Repeat HIV testing (if required)
	  ◦ HIV prevention
	  ◦ Partner testing
	  ◦ Follow-up appointments
	• *Is there anything else you'd like to discuss?*

Borrowed and adapted from: Republic of Zambia, Ministry of Health. 2010. *National Training Package on Provider-Initiated Paediatric HIV Testing & Counselling in Zambia*.

Post-test Counselling for Positive HIV Test

Objective	Content
Introduce yourself and the session.	• Introduce yourself. • *I am _____ (name/occupation) and will be talking with you about your HIV test results.* • *I want you to feel comfortable asking questions today so you have the information you need.*
Provide test result. • *Discuss the meaning of test result.* • *Offer support and allow time for processing the information and discussing feelings.* • *Ensure understanding that HIV is a treatable, lifelong disease.* • *Discuss availability of care and treatment services.* • *Review ABC's of HIV prevention, including condom demonstration if necessary.*	• Prepare yourself for the result-giving by: checking you have the right result, making sure you understand what the results mean, making sure you have enough time. • *Your HIV test result is positive. The fact that you have a positive HIV test means that you have HIV.* • *Your client information will only be accessed by the health care team in order to make clinical decisions (*shared confidentiality*).* • *We have plenty of time to discuss this result. Let's discuss what you understand about this and how you are feeling.* Allow the client time to consider the results, discuss feelings, and ask questions. • *We will need to do another test to make sure that the result is the same* (adapt based on national guidelines). • *HIV is a lifelong disease. Although we can't cure HIV, treatment is available and it works very well. Today, many people with HIV live healthy, long lives.* • *Care, treatment, and support are available. We'll arrange care for you and others in your family (as needed) before you leave today.* • *It is very important that your partner(s) be tested for HIV as soon as possible. You can pass the virus to another person.* • *What will you do to reduce your chances of transmitting HIV to your partner(s)?* • Discuss ABC's of HIV prevention strategies like abstinence, being faithful to one infected sexual partner, and using condoms.
Find out more about the support system and provide support for the client.	• *How are you coping right now?* • *Are your friends or family members aware of your HIV status? Or, if newly diagnosed: Are there friends or family members you can tell about your HIV status?* • *Do you have any support at home? Do you have someone who you can talk to about your HIV status?* • *Where are you going after this visit?* Assess need for community services or support and provide information/referrals and/or follow-up counselling. • *At the end of our talk, we can discuss the next steps for your care.*

Objective	Content
Discuss meaning of test for other family members and partner(s).	• *Do you have a husband, partner or partners with whom you have a sexual relationship? Has your partner had an HIV test? Do you feel you could discuss your status and HIV testing with your partner(s)?* • *Until your partner is tested you should use condoms. If s/he tests HIV-negative, you should continue to use condoms to ensure s/he stays HIV-negative. Is it possible for you and your partner to only have sex with each other? Discuss the importance of using condoms.* • *Let's discuss whether or not there are other members of your family who would benefit from having an HIV test.*

Make appropriate referrals for HIV care and treatment for the child, the mother, and any other family members as needed. Explain what to expect at the visits.	• *For your care, you will go to the (name of clinic).*
	• *At the clinic, they will evaluate you, explain the process of decision-making regarding treatment, discuss options with you and answer any questions you have.*
	• Explain:
	  ◦ Date, place, time of appointments
	  ◦ How to change the appointments
	  ◦ What to do if the client is ill
	  ◦ Importance of engaging in care and attending all appointments

Assess client's understanding of the results and the follow-up plan. Address questions or concerns.	• *I would like to make sure I covered everything with you and explained things the right way. Can you explain to me what we just talked about?*
	• Ask client to summarise the following (as appropriate to circumstances):
	  ◦ Meaning of the test result
	  ◦ Confirmatory HIV testing (if required)
	  ◦ Partner testing
	  ◦ ABC's of HIV prevention
	  ◦ Follow-up care and appointments
	• *Is there anything else you'd like to discuss?*

Appendix 2B: Pre- and Post- Test Counselling Checklists

These pre- and post-test counseling checklists were developed to support a range of providers (trained counselors, lay counselors, peer educators, expert clients, doctors, nurses, pharmacists, community health workers, and others) who work with people living with HIV and their families. Pre- and post-HIV test counseling can help clients understand the importance of HIV testing, the HIV testing process, the meaning of their test results, and key steps to ensure their own health. The pre- and post-test counseling checklists should be adapted to reflect national HIV testing and counseling guidelines, as well as the specific clinic, community, and cultural contexts in which they are used. It may be helpful to translate the checklists into the local language.

There are 3 checklists: 1 on pre-test counselling for adults, 1 on post-test counseling for HIV-negative adults, and 1 on post-test counseling for HIV-positive adults. Pre-test counseling may be conducted individually or in group sessions, depending on national and clinic protocols. Post-test counseling should always be conducted in an individual setting, ensuring the client's privacy and confidentiality.

Key information from pre- and post-test sessions should be recorded on the checklists and kept in the client's file. Information from pre- and post-test sessions is a very important part of quality, continuous care and client-centered counseling. If individual client files are not maintained at the clinic, these checklists can also be used as job aides to guide providers when conducting pre- and post-test counseling.

Basic information: Write down the client's name and file number. Be sure to sign and date the form at the end of each session and then put the completed form in the client's file.

Key topics: Lists of key topics to cover during pre- and post-test counseling, and a suggested flow of topics, are provided. These topic lists should be used as a guide to pre- and post-test counseling sessions, and adapted as needed according to the client's specific situation and needs. Once a specific topic is covered and discussed with the client, place a tick mark in the appropriate column. It is important to allow time for the client to react and to ask questions throughout the pre- and post-test sessions. Never rush sessions. Clients should always be made to feel comfortable expressing emotions and questions and should never be judged or punished. Clients' rights should always be respected and upheld, including their right to decline testing or to return at a later date for testing and counseling.

Notes: Write any additional notes about the post-test session, the client's needs, or next steps in the space provided.

Date of next counseling session/clinic appointment: Schedule a follow-up counseling appointment with the client and record this date, as well as any clinic appointments, in the space provided.

Pre-HIV Test Counseling Checklist (group or individual session)

Client's Name: _____
Client's File#: _____

Topic and Key Points	Tick
1. Introduce yourself and give an overview of the counseling session	
2. Review HIV basics, transmission, and prevention	
- Review HIV basics and answer questions	
- Modes of HIV transmission	
- Ways to prevent HIV transmission	
3. Counsel on benefits of HIV testing	
- You cannot tell from looking at a person if he or she has HIV	
- Everyone should learn their HIV-status	
- HIV testing is a part of routine health care and is offered to all clients	
- If a person has HIV, s/he can pass it to her partner, baby, etc	
- Benefits of knowing one's HIV-status	
3. Explain HIV testing process	
- Confidentiality	
- Client's right to refuse or get tested at a later time	
- Method of HIV testing	
- Meaning of test results	
4. Counsel on discordance and partner testing	
- One partner can be living with HIV while the other is HIV-negative	
- Encourage partner testing and couples counseling	
5. Counsel on HIV prevention and HIV/STI risk reduction	
- Assess risk and vulnerability –assess personal risks for HIV infection and the various obstacles to prevention	
- Practice ABC's of HIV prevention (e.g., mutual faithfulness, always using condoms, abstinence)	
- Condoms, challenges to using condoms	
- STI screening, prevention, signs, and treatment	
7. Offer the client an HIV test	
- If s/he gives consent (written or verbal, depending on your guidelines), perform HIV test	
- If s/he refuses, encourage her to think about why and to come back if s/he has more questions or changes her mind; set up a return visit date	
8. Provide referrals for ongoing counseling or other support, as needed	
9. Ask if s/he has any questions or concerns	
10. Summarize the session and next steps	

Borrowed and adapted from: Republic of Zambia, Ministry of Health. 2010. *National Training Package on Provider-Initiated Paediatric HIV Testing & Counselling in Zambia*.

Post-HIV Test Counseling Checklist for HIV-NEGATIVE Adults

Client's Name: _____
Client's File#: _____

Topic	Tick
1. Provide test results and give client time to react, give emotional support	
2. Explain window period and encourage retesting	
- Retesting in 6 weeks if there was possible exposure to HIV in past 6 weeks	
3. Counsel on disclosure, discordance, and partner testing	
- Who will client share the results with?	
- The test does not tell us if her/his partner has HIV	
- Encourage partner testing and couples counseling	
4. Counsel on HIV prevention and HIV/STI risk reduction	
- Practice ABC's of HIV prevention (e.g., mutual faithfulness, always using condoms, abstinence)	
- Condoms, challenges to using condoms	
- STI screening, prevention, signs, and treatment	
6. Provide appropriate referrals and take-home information, if needed	
7. Ask if s/he has any questions or concerns	
8. Summarize the session and next steps, including the next clinic appointment date	

Notes:

_____
_____
_____
_____
_____
_____

Date of next counseling session/clinic appointment:

_____

Counselor's signature: _____

Date: _____

Borrowed and adapted from: Republic of Zambia, Ministry of Health. 2010. *National Training Package on Provider-Initiated Paediatric HIV Testing & Counselling in Zambia*.

Post-HIV Test Counseling Checklist for HIV-POSITIVE Adults

Client's Name: _____
Client's File#: _____

Topic	Tick
1. Provide test results and give client time to react, give emotional support	
2. Discuss any concerns the client has about his/her own health	
3. Discuss ABC's of HIV prevention	
- Encourage partner testing and couples counselling	
- If a person has HIV, s/he can pass it to her partner, baby, etc	
- Practice ABC's (e.g., mutual faithfulness, always using condoms, abstinence)	
4. Counsel on staying healthy and living positively with HIV	
- Come back to the clinic for all appointments	
- Importance of emotional support from family and friends	
- CD4 testing and meaning of results	
- ARVs or ART and importance of starting early and adherence	
- Disclosure - who will client share the results with?	
- Partner testing, testing children if applicable	
- Preventing and early treatment of opportunistic infections	
- Nutrition and hygiene	
8. Provide appropriate referrals and take-home information	
9. Ask if she has any questions or concerns s/he wants to discuss now	
10. Summarize the session and next steps, including the next clinic appointment	

Notes:

_____
_____
_____

Date of next counseling session/clinic appointment:

_____

Counselor's signature: _____

Date: _____

Borrowed and adapted from: Republic of Zambia, Ministry of Health. 2010. *National Training Package on Provider-Initiated Paediatric HIV Testing & Counselling in Zambia*.

Appendix 2C: Independent Learning Contract

The purpose of independent learning activities is to encourage participants to explore selected areas of learning and professional practice. This opportunity encourages self-directedness and the transition into the professional role of a "nurse mentor".

With guidance from the modules, the participant creates a contract with the trainer that reflects 1 or more of the learning activities described in the 3rd session of every module.

Guidelines:

1. If a participant misses a training session or would like additional practice and supplemental information on the topic areas in a particular module, s/he will submit a proposed Independent Learning Contract (see contract on next page), suggesting a topic area and choosing an independent learning activity described in Session 3 of the module. Trainers and participants are encouraged to think of their own ideas for learning activities in addition to those suggested in the module.

Example of Completed Independent Learning Contract (refer to blank contract on next page)

Module name and number: *HIV Basics: Transmission, Testing, and Counselling, Module 2*

Topic Area: *Provider-initiated HIV counselling and testing*

Description of Independent Learning Activity*: I will review and provide summary of a journal article on provider-initiated HIV counselling and testing.*

2. Both the participant and trainer should sign and date the learning contract upon submission and note the proposed date of completion for the activity.

3. Unless agreed otherwise, participants should usually complete and present assignments on the date of the next training session.

4. Participants should be encouraged to work in small groups, in order to ensure peer review and feedback on their work.

5. Final evaluation of the activities will be conducted by the trainer and should be documented on the contract.

INDEPENDENT LEARNING CONTRACT

Name of participant: _____

Module name and number: _____

Topic Area: _____

Description of Independent Learning Activity: _____
_____
_____
_____

Submission date: _____

Proposed date of completion for activity: _____

Signature of participant: _____

Signature of trainer: _____

FINAL EVALUATION BY TRAINER:

Tick one:

____ Assignment was completed in satisfactory manner

____ Assignment was not completed

Comments:
_____
_____
_____

Appendix 2D: Mentoring Action Plan (Sample with suggested responses)

Name of nurse mentor:_____

Name of mentee:_____ Date of plan: _____

Mentoring Goal	What are the specific learning activities to achieve this goal?	Date to be completed	What resources or support are needed?	Means of evaluation	Date completed	Comments
Goal #1: Increase competency in delivering pre- and post-test counselling to clients	**1. Provide pre- test counselling to 3 groups in the clinic**	**3 weeks: to be completed by Jan 31, 2012**	**Feedback session with mentor after sessions, to discuss challenges**	**Mentor will observe one group session**		
	2. Provide pre- and post- test counselling to 3 clients in the clinic	**3 weeks: to be completed by Jan 31, 2012**	**Feedback session with mentor after sessions, to discuss challenges**	**Mentor will observe one individual session**		
	3.Mentee will shadow the nurse mentor, if needed	**Every third week of the month (e.g. Tues)**	**Agreement and commitment from supervisor and client**	**N/A**		

Goal #2	1.					
	2.					
	3.					
Goal #3	1.					
	2.					
	3.					

Mentoring Action Plan (Blank, for participant use)

Name of nurse mentor:_____

Name of mentee:_____ Date of plan: _____

Mentoring Goal	What are the specific learning activities to achieve this goal?	Date to be completed	What resources or support are needed?	Means of verification	Final Evaluation of Competency	Comments
Goal #1:	**1.**					
	2.				**N**	
	3.					

Goal #2	1.					
	2.					
	3.					
Goal #3	1.					
	2.					
	3.					

Appendix 2E: Mentoring Orientation Guide

These are some basic steps for how to get started with your mentee and are designed based on research of "best practices" for mentoring programs. You will not be able to cover all of these topics in one meeting, so use these questions and discussion topics to fit your own style and approach.

1. Talk about what nurse mentoring is and the mentee's understanding of the process (e.g. opportunity for skill development, ongoing training, advanced knowledge).

2. Mentor talks about why they mentor.

3. Discuss what information is confidential in the mentoring relationship and what is not (e.g. describe what instances will conduct or performance be reported to a supervisor).

4. Mentor asks mentee what they would like to get out of the partnership.

5. Mentor asks mentee some questions to begin to get to know more about them and what they want to achieve.

6. Mentor talks about their own background.

7. Review roles and responsibilities of mentor and mentee.

8. Mentor asks questions about what mentee needs from the mentor.

9. Mentor shares with mentee what they need from them as the mentee (e.g. what's important to them in the mentoring relationship and how they like to work as a mentor).

10. Mentor and mentee decide on the logistics and structures that they want to use to support their relationship (e.g. meeting frequency, teaching and learning strategies, such as case review, bedside teaching, etc).

11. Mentor and mentee make some agreements based on above conversations about how to support mentee in achieving their agenda and goals. Mentor and mentee should review job competencies and identify some areas in which mentee requires support).

12. Mentor asks mentee if there is anything else that is important to the mentee to cover in the meeting.

13. Close with what the next steps are and agree on next meeting.

References and Resources

[1] UNAIDS (2010) 'UNAIDS report on the global AIDS epidemic'
[2] UNAIDS (2010) 'UNAIDS report on the global AIDS epidemic'
[3] ICAP. 2010. *Improving Retention, Adherence, and Psychosocial Support within PMTCT Services, Implementation Workshop Curriculum for Health Workers, Trainer's Manual.*
[4] Prevention Trials Network (HPTN). 2011. *Initiation of antiretroviral treatment protects uninfected sexual partners from HIV Infection (HPTN Study 052.* Press Release. HPTN.
[5] University of Washington International Clinical Research Center (ICRC). 2011. *Pivotal study finds that HIV medications as highly effective as prophylaxis against HIV infection against men and women in Africa.* Press Release. ICRC.
[6] Centers for Disease Control and Prevention (CDC). 2011. CDC trial and another major study find PrEP can reduce risk of HIV infection among heterosexuals. Press Release. CDC.
[7] Grant RM, lama JR, Anderson PL, McMahan V, Liu AY, Vargas L, et al. 2010. *Pre-exposure chemoprophylaxis for HIV prevention in men who have sex with men.* New England Journal of Medicine. 363(27):2587-99.
[8] Republic of Zambia, Ministry of Health. 2010. *National Training Package on Provider-Initiated Paediatric HIV Testing & Counselling in Zambia*.

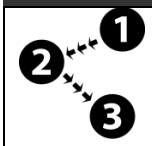
Module 3 The Progression of HIV Disease

Total Module Time: 270 minutes (4 hours and 30 minutes)

Learning Objectives

After completing this module, participants will be able to:

- Discuss the life cycle of HIV.
- Explain primary stages of HIV disease progression in the body.
- List the clinical conditions that characterize each WHO stage of HIV.
- Classify an HIV-infected adult client according to the WHO clinical stages.
- Practice the bedside clinical teaching technique that can be used for helping mentees achieve competence in HIV care and treatment services.
- Describe alternative and supplemental learning activities for the module.
- Describe the role of the nurse mentor and educator as a coach for their mentees.
- Practice tracking and reviewing a mentee's progress on the Mentoring Action Plan.

Methodologies	
	• Interactive trainer presentation • Case studies • Large group discussion • Small group work • Role play

Materials Needed	
	• Attendance sheet for Module 3 • Flip chart and markers • Tape or Bostik • Participants should have their participant manuals. The Participant Manual contains background technical content and information for the exercises.

References and Resources	
	• ITECH. 2008. *Empowering Nurses to Deliver HIV/AIDS Nursing Care and Education (ENHANCE) Training Curriculum*, International Training and Education Center on HIV.

	• WHO. 2007. *WHO case definitions of HIV for surveillance and revised clinical staging and immunological classification of HIV-related disease in adults and children*, World Health Organisation. • WHO. 2006. *Recommendation for Clinical Mentoring to Support Scale-Up of HIV Care, Antiretroviral Therapy and Prevention in Resource-Constrained Settings*. World Health Organization. • ITECH.2008. *Clinical Mentoring Toolkit*. Version 2.0. International Training and Education Center for Health. • WHO. 2000. *IMAI Clinical Mentors Training Manual for Participants.* World Health Organization.

Advance Preparation	
	• Make sure you have all of the materials listed in "Materials Needed" on the first page. • Prepare the attendance sheet in advance and ask participants to sign in as they arrive for the 3rd session of training. • Read through the entire module and ensure that all trainers are prepared and comfortable with the content and methodologies. • Review the appendices and ensure all trainers are comfortable using them and integrating them into the module. • Review any applicable national guidelines ahead of time and prepare to incorporate them into the discussion. • Exercise 1and 2 require advance preparation by the trainer. Please review these exercises ahead of time.

Session 3.1: Review of Key Competencies and Key Updates for Progression of HIV Disease

Activity/Method	Time
Interactive trainer presentation and large group discussion	50 minutes
Exercise 1: WHO Clinical Staging: Case studies and large group discussion	30 minutes
Questions and answers	5 minutes
Total Session Time	85 minutes

Session 3.2: Teaching, Mentoring, and Skills Transfer

Activity/Method	Time
Interactive trainer presentation and large group discussion	35 minutes
Exercise 2: Practicing Beside Teaching Techniques: Large group discussion, with role play	60 minutes
Questions and answers	5 minutes
Total Session Time	100 minutes

Session 3.3: Additional Learning Activities

Activity/Method	Time
Interactive trainer presentation and large group discussion	10 minutes
Questions and Answers	5 minutes
Total Session Time	15 minutes

Session 3.4: Action Planning

Activity/Method	Time
Interactive trainer presentation and large group discussion	20 minutes
Exercise 3: Reviewing the Mentoring Action Plan: Case studies, with role play and large group discussion	30 minutes
Questions and Answers	5 minutes
Review of Key Points	10 minutes
Total Session Time	65 minutes

Session 3.1 Review of Key Competencies and Key Updates for Progression of HIV Disease

Total Session Time: 85 minutes (1 hour and 25 minutes)

Trainer Instructions

Step 1: Begin by reviewing the Module 3 learning objectives and the session objectives, listed below.

Step 2: Ask participants if they have any questions before moving on.

Session Objectives

After completing this session, participants will be able to:

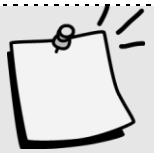
- Discuss the life cycle of HIV.
- Explain primary stages of HIV disease progression in the body.
- List the clinical conditions that characterize each WHO stage of HIV.
- Classify an HIV-infected adult client according to the WHO clinical stages.

Trainer Instructions

Step 3: Explain that, as part of quality care for clients, all nurses will be required to provide explanations about the immune system and progression of the HIV disease as part of ongoing client education. Ask participants:

- *What do you know about the HIV life cycle in the body?*

Refer participants to Figure 3.1, and provide an overview of the HIV life cycle using the content below.



Make These Points

- Understanding HIV and its life cycle helps us to understand disease progression in the body, enables us to provide the best possible nursing care for clients, and increases our ability to educate other nurses about how to manage HIV.

- When HIV enters the body, it infects and destroys an important type of cell in the body's immune system known as the T-helper (TH) cell, also known as the CD4 cell.
- HIV infects a T cell and combines with the cell's genetic material.
- HIV reproduces in the T cell to make more virus particles.
- Naturally, the release of the new virus particles significantly weakens the host cell, which soon dies.
- The immune system becomes more damaged as HIV disease progresses.
- Over time, as this process continues, serious infections and symptoms that characterize AIDS develop.

HIV Life-Cycle

The HIV life-cycle is the story of how a single HIV virus particle invades a cell and uses it to produce new HIV particles:

Infection:

- In order for a person to become infected with HIV, one or more virus particles must enter the body.
- HIV infects cells in the immune system and the central nervous system. HIV can only replicate (make new copies of itself) inside human cells. The main cell that HIV infects is the T helper lymphocyte. These cells play a crucial role in the immune system, by coordinating the actions of other immune system cells. A large reduction in the number of T helper cells seriously weakens the immune system.

Binding and Fusion:

- HIV infects the T helper cell because it has the protein CD4 on its surface, which HIV uses to attach itself to the cell before gaining entry. This is why the T helper cell is sometimes referred to as a CD4+ lymphocyte or CD4 cell.

Reverse Transcription:

- HIV is a retrovirus, which means it has genes composed of ribonucleic acid (RNA) molecules. It's considered a retrovirus because it uses an enzyme, reverse transcriptase, to convert RNA into DNA.

Integration:

- The virus' new genetic material enters the nucleus of the CD4 cell and uses an enzyme called integrase to integrate itself into the body's own genetic material, where it may stay inactive for several years.

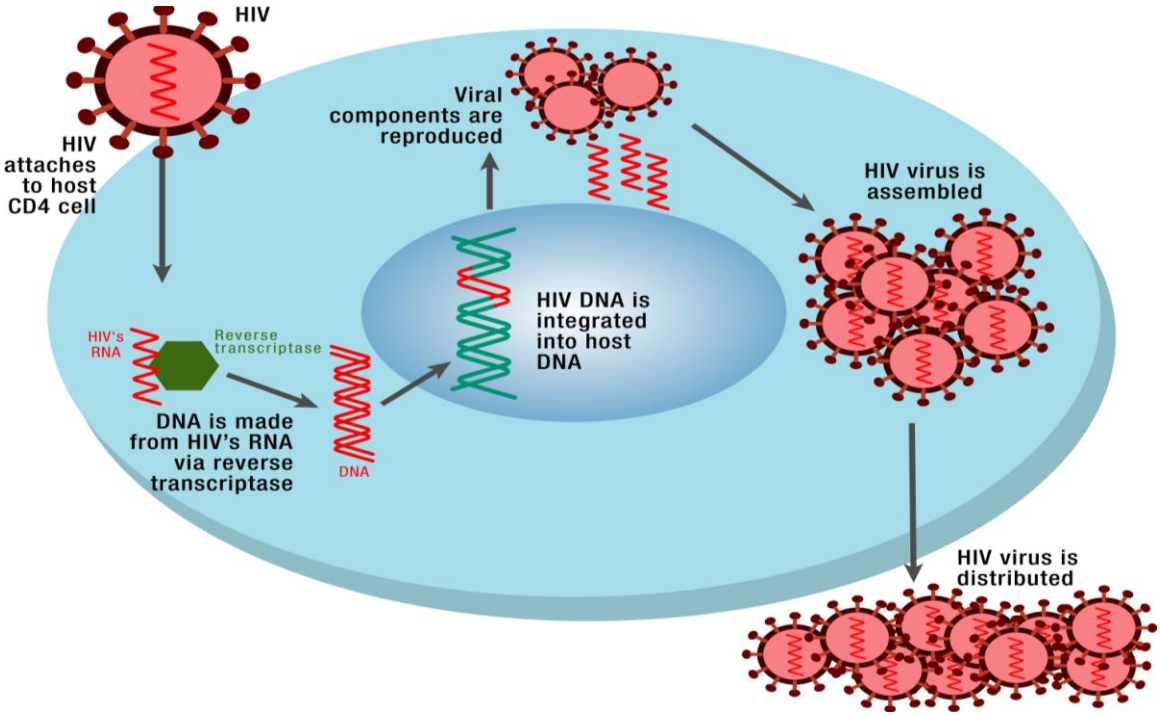
Transcription:

- When the host cell becomes activated, and the virus uses the body's own enzymes to create more of its genetic material—along with a more specialized genetic material that allows it make longer proteins.

Assembly, Budding, and Maturation:

- This is followed by assembly, budding, and maturation, in which the new HIV particles are packaged up and sent out to infect new cells.
- The host CD4 cell gets destroyed during this process.
- HIV infection leads to a severe reduction in the number of T helper cells available to help fight disease. The number of T helper cells is measured by having a CD4 test and is referred to as the CD4 count. It can take several years before the CD4 count declines to the point that an individual is said to have progressed to AIDS.

Figure 3.1: HIV Life-Cycle



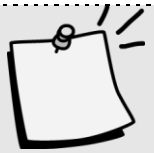
Source: I-TECH, 2005

Trainer Instructions

Step 4: Ask participants:

- *What are the stages of HIV progression in the body?*
- *Drawing on your clinical experience, what happens in each stage?*
- *Why is having an understanding of the stages of HIV disease progression important for nurses?*

Review the stages of HIV progression in the body using the content below.



Make These Points

- Knowing the continuum of HIV disease enables nurses to provide effective client care and ensure planning to delay HIV progression, by monitoring for signs and symptoms of immune system suppression.
- HIV infection, its progression in the body, and its effects on the immune system can generally be broken down into four distinct stages: primary infection, clinically asymptomatic stage, symptomatic HIV infection, and progression from HIV to AIDS.
- Progression of HIV among individuals varies: some PLHIV progress rapidly (within 1-2 years) to a low CD4 count, become ill and, without treatment, die. Some PLHIV may become infected and remain healthy with relatively normal CD4 counts for many years.
- In general, severity of HIV is determined by amount of virus in the body (increasing viral load) and the degree of immune suppression (decreasing CD4+ counts). As the viral load increases, the immune function decreases (Figure 3.2).

Stages of HIV Progression

- HIV infection can generally be broken down into four distinct stages: primary infection, clinically asymptomatic stage, symptomatic HIV infection, and progression from HIV to AIDS.
- Knowing the continuum of HIV disease enables nurses to provide effective client care and ensure planning to delay HIV progression, by monitoring for signs and symptoms of immune system suppression.

Stage 1: Primary HIV Infection

- During this stage, HIV is present in the blood but antibody laboratory tests cannot detect it for up to 3 months. This stage is divided into 2 parts:
  - Entry / point of infection: This is the time when the virus enters the body. The person has no signs or symptoms of the infection but can pass on the infection to others.
  - Window period: During this time, HIV is multiplying in the body but cannot usually be detected by antibody laboratory tests because the body has not produced sufficient antibodies. Frequently, this occurs for a period of time between two weeks and three months.
- During this stage there is a large amount of HIV in the blood and the immune system begins to respond to the virus by producing HIV antibodies and cytotoxic lymphocytes that keep viral replication in check. This process is known as seroconversion. If an HIV antibody test is done before seroconversion is complete, then it may not be positive.

Stage 2: Asymptomatic

- Early immune depletion - CD4>500.

- Level of virus is low. HIV replication takes place mostly within lymph nodes.
- This stage lasts for an average of 10 years and, as its name suggests, is free from major signs and symptoms, although there may be swollen glands. The time period ranges from 2 months to several years and varies from person to person.
- The length of time a person stays in good health depends on one's immunity as well as other factors such as access to health care, nutritional status, and co-infection.

Stage 3: Symptomatic HIV Infection

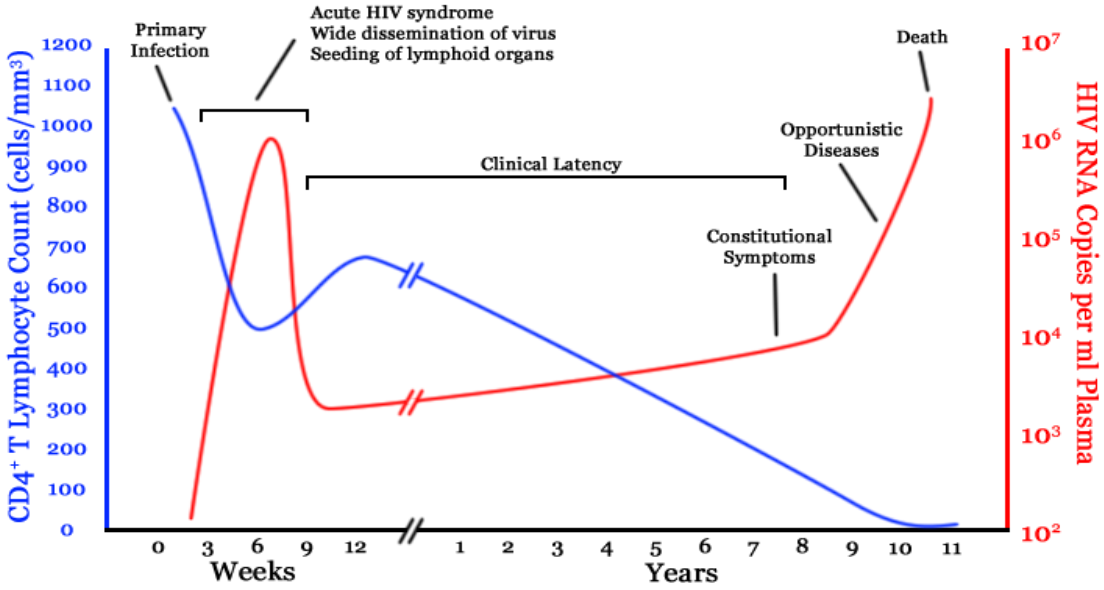
- Intermediate immune depletion – CD4 between 500 – 200.
- HIV mutates and becomes more pathogenic, in other words stronger and more varied, leading to more T helper cell destruction.
- Infections start and persist as CD4 count decreases.
- Symptomatic HIV infection is mainly caused by the emergence of opportunistic infections and cancers that the immune system would normally prevent. These can occur in almost all the body systems.
- This phase can be divided into two parts:
  - **Early symptomatic HIV disease:** At this stage, the symptoms that appear include fever, unexplained weight loss, recurrent diarrhoea, fatigue, headache, and loss of appetite. Cutaneous manifestations (skin changes) like seborrheic dermatitis, folliculitis, recurrent herpes simplex infections and oral hairy leukoplakia may occur. Other signs/ symptoms of opportunistic infections (OI) include sores (in or around the mouth or in the genital areas), continuous or severe headaches, unclear sight or other changes in vision, vaginal discharge, vaginal burning or itching, irregular menstrual bleeding, and/or continuous abdominal pain.
  - **Late symptomatic HIV disease:** As the CD4 count falls, the risk of developing serious opportunistic infections or malignancy is very high. Such infections include: pneumocystis jiroveci pneumonia (formerly called PCP), tuberculosis (TB), kaposis sarcoma (KS), toxoplasma encephalitis, cryptococcosis, disseminated mycobacterium avium complex (MAC), esophageal candidiasis, cryptosporidiosis, cytomegalovirus (CMV), isosporiasis, and lymphoma.

Stage 4: Advanced HIV/AIDS

- The viral load is very high, and the CD4 count is less than 200.
- HIV-infected clients continue to develop new opportunistic infections, such as cytomegalovirus infection, mycobacterium avium complex, cryptococcal meningitis, progressive multifocal leukoencephalopathy, and other infections

In general, the severity of HIV disease is determined by amount of virus in the body (increasing viral load) and the degree of immune suppression (decreasing CD4 counts). As the viral load increases, the immune function

decreases. **Figure 3.2** shows the natural course of HIV infection with corresponding viral load and CD4 count.



Source: Fauci, et al, Immu. Mech HIV Inf, 1996

Trainer Instructions

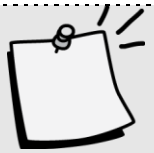
Step 5: Explain that the World Health Organization (WHO) has developed a list of symptoms to help health care workers decide which of the 4 stages of HIV an individual is in.

In 2006, the WHO released revised criteria for clinical staging of HIV disease in adults and adolescents. These criteria allow healthcare workers to determine an individual's disease progression and the appropriate time to begin ART, in settings where there is no access to CD4 and viral load testing.

Ask participants:

- *How would you or do you identify the stage of HIV in a client?*
- *What do you know about the WHO clinical staging criteria?*
- *How are these staging criteria used in care and treatment of HIV-infected clients in your clinic?*
- *How often should we stage clients?*

Lead participants through an overview of the main characteristics of each stage, as outlined in *Appendix 3A: WHO Clinical Staging for HIV Infected Adults and Adolescents.* Remind participants that clinical staging criteria are often adjusted and updated, and nurses should ensure they are using the most recent reference tables.



Make These Points

- Understanding the clinical stages of HIV is important in predicting progress of the disease and determining when to begin ART.
- WHO has developed a staging system in which different stages of HIV disease are characterized by certain signs and symptoms. These give us an idea of the severity of disease and prognosis.
- The WHO staging system is a way to categorize an HIV-infected client's status by symptoms and conditions (OIs) experienced and level of performance of activities of daily life (ADLs).
- The client's stage is commonly used to guide decisions on treatment, including cotrimoxazole prophylaxis and ART.
- There are different staging systems for adults and children.
- Staging should be assessed at time of HIV diagnosis, prior to starting ART, and with each follow-up visit to assess response to ART and to monitor disease progression.
- A full clinical assessment and medical history is required for staging.
- If a person has 1 or more conditions listed within the stage, they are categorized into that stage.
- There are 3 main points that should be kept in mind when staging clients: their recent clinical signs, their most recent clinical diagnosis if any made, and the level of activity of client.

WHO Staging for HIV Infection and Disease in Adults

In areas with adequate resources, laboratory measurements of CD4 cells and HIV viral load are commonly used to establish a client's degree of immunosuppression and the rate of destruction of the immune system. These tools are used to ascertain a client's eligibility for treatment and to monitor disease progression. With insufficient resources, nurses must rely on clinical parameters when assessing a client's disease status.

The World Health Organisation (WHO) has therefore developed a staging system for HIV disease based on clinical symptoms, which may be used to guide medical decision-making.

HIV clinical staging criteria were developed to:

- Provide uniformity for the clinical evaluation of persons with HIV infection.
- Predict the progression to AIDS in persons with HIV infection.
- Guide clinical management of clients, including initiation of prophylaxis and ART.
- Help people to study the natural history of HIV infection.

The WHO clinical staging system has been shown to be a practical and accurate way to manage HIV-infected clients, with international studies showing agreement between clinical manifestations included in the WHO

staging system and laboratory markers, including CD4 count and total lymphocyte count.

When using the WHO staging system, nurses should remember:

- There are different staging systems for adults and children.
- Staging should be assessed at time of HIV diagnosis, prior to starting ART, and with each follow-up visit to assess response to ART and to monitor disease progression.
- A full clinical assessment and medical history is required for staging.
- If a person has 1 or more conditions listed within the stage, they are categorized into that stage.
- There are 3 points that should be kept in mind when staging clients: their recent clinical signs, their most recent clinical diagnosis if any made, and the level of activity of client.

WHO clinical staging of HIV infection and disease

Participants should refer to *Appendix A: WHO Clinical Staging of HIV Disease in Adults and Adolescents.* This appendix can be used as a reference guide when working in the clinic or mentoring other nurses. Clinical staging systems are often adjusted and updated, and nurses should ensure they are using the most recent reference tables.

Clinical Stage 1

- Asymptomatic
- Persistent generalised lymphadenopathy
- Performance Scale 1: Asymptomatic, normal activity

Clinical Stage 2

- Weight loss less is than 10% of body weight
- Minor mucocutaneous manifestations (seborrhoeic dermatitis, prurigo, fungal nail infections, recurrent oral ulcerations, angular stomatitis
- Herpes Zoster within the last 5 years
- Recurrent upper respiratory tract infections, e.g., bacterial sinusitis
- And/or Performance Scale 2: Symptomatic but normal activity

Clinical Stage 3

- Weight loss is more than 10% of body weight
- Unexplained chronic diarrhoea for more than 1 month
- Unexplained prolonged fever, intermittent or constant, for more than 1 month
- Oral candidiasis
- Oral hairy leukoplakia
- Pulmonary tuberculosis within the past year
- Severe bacteria infections such as pneumonia, pyomyositis
- And/or Performance Scale 3: Bed-ridden for less than 50% of the day during the last month

Clinical Stage 4

- HIV wasting syndrome – weight loss of more than 10%, and either unexplained chronic diarrhoea for more than 1 month, or chronic weakness or unexplained prolonged fever for more than 1 month
- Pnemocystis carinii pneumonia
- Toxoplasmosis of the brain
- Cryptosporidiosis with diarrhoea for more than 1 month
- Extrapulmonary cryptococcosis
- Cytomegalovirus (CMV) disease of an organ other than liver, spleen or lymph nodes
- Herpes simplex virus (HSV) infection, mucocutaneous for more than one month, or visceral of any duration
- Progressive multifocal leukoencephalopathy (PML)
- Any disseminated endemic mycosis such as histoplasmosis, coccidiodomycosis
- Candidiasis of the esophagus, trachea, bronchi or lungs
- Atypical mycobateriosis, disseminated
- Non-typhoid salmonella septicaemia
- Extrapulmonary tuberculosis
- Lymphoma
- Kaposi's sarcoma
- HIV encephalopathy – disabling cognitive and/or motor dysfunction interfering with activities of daily living, progressing slowly over weeks or months, in the absence of concurrent illness or condition other than HIV infection that could account for the findings
- And/or Performance Scale 4: Bed-ridden for more than 50% of the day during the last month

Considerations for nurse mentors and educators when teaching clinical staging[1]

- Nurse mentors and educators should distinguish between understaging (client's HIV is more advanced than mentee says) and overstaging (client's HIV is less advanced than a mentee says).
- It is important to spend adequate time educating a mentee about correctly interpreting WHO standards for staging.
- As a learning exercise, nurse mentors and educators should consider asking their mentees to create job aids, such as wall charts or pocket cards with staging criteria.
- Common errors in staging are as follows:
  - Overstaging is often due to self-limited or acute problems, such as infectious diarrhea or vaginitis, that are mistakenly identified as chronic or recurrent.
  - Understaging is often due to having insufficient information about the client's history (e.g. failing to assess client for current or previous OIs).
  - Mentees often have difficulty in calculating percentage weight loss.

- On its own, the WHO clinical staging table found in *WHO Case Definitions of HIV for Surveillance and Revised Clinical Staging and Immunological Classification of HIV-Related Disease in Adults and Children (2006)* does not sufficiently explain how to identify staging criteria. All nurses should review the companion WHO table *Criteria for HIV-related Clinical Events in Adults and Adolescents (Annex 1 of the 2006 Case Definition)* as well as use *Appendix A: WHO Clinical Staging of HIV Disease in Adults and Adolescents* as a reference guide.

Trainer Instructions

Step 6: Facilitate Exercise 1, so participants can apply their knowledge of the WHO clinical staging system for adults.

Exercise 1: WHO Clinical Staging: Case studies and large group discussion	
Purpose	• To provide participants with an opportunity to apply their understanding of the WHO clinical staging criteria to specific case studies
Duration	30 minutes
Advance Preparation	• Read through and adapt the case studies as needed
Introduction	The WHO staging criteria gives us a clear indication of the severity of HIV disease and prognosis and enables us to plan appropriate treatment and care for the client. Therefore, it is critical for nurses to be competent in applying these stages to clients. The case studies in this exercise will assist participants in making clinical diagnoses and categorising clients according to the WHO Clinical Staging Guidelines.
Activities	**Part 1: Small Group Work** 1. Break participants into small groups of approximately 4-5 people. 2. Ask participants to read each case study and, in their respective groups, answer the accompanying questions in their Participant Manuals. 3. Encourage participants to refer to *Appendix 2A: WHO Clinical Staging of HIV Disease in Adults and Adolescents* during the exercise. **Part 2: Large Group Discussion** 4. Allow approximately 15 minutes time for the small groups to discuss their answers. 5. Ask if all group members are in agreement with the answer, and if any other points of discussion came up within the small groups. 6. Make any additions or corrections as needed, and ask

	participants if they have any questions or comments before moving on.
Debriefing	• Summarise the key points from the group feedback. • Review any content areas, pulling in lessons learned from the case studies.

Exercise 1: WHO Clinical Staging: Case studies and large group discussion

Case Study 1:

C___ is a 24-year-old woman who was raped 3 months ago. About a month later, she visited her village clinic, complaining of fever, malaise, fatigue, and swollen lymph nodes. At that clinic, she was diagnosed with influenza. One month later she comes to see you for a routine check up, tests positive for HIV, but is now asymptomatic.

- *What is the client's clinical stage of HIV infection in this case study? Explain your reasoning.*

Key points for trainers for Case Study 1

- WHO clinical stage 1: A newly HIV-infected adult will often experience an acute retroviral syndrome.
- Signs and symptoms of acute retroviral syndrome include fever, myalgia, headache, nausea, vomiting, diarrhea, night sweats, weight loss, and rash, which occur 2-4 weeks after infection, subside after a few days, and often are misdiagnosed as influenza or infectious mononucleosis.

Case Study 2:

N___ is a 27-year-old HIV-infected client. He is brought to your clinic in a wheelchair accompanied by his mother. He says he is unable to walk due to fatigue and feeling weak. He also reports diarrhea and intermittent fever. On examination, N___ presents with weight loss of 8 kg (from 50kg to 42kg) over last 6 months.

- *What is the client's clinical stage of HIV infection in this case study? Explain your reasoning.*

Key points for trainers for Case Study 2

- WHO clinical stage 4: Based on these findings, the client meets criteria for HIV wasting syndrome (weight loss of more than 10%, and either unexplained chronic diarrhoea for more than 1 month, or chronic weakness or unexplained prolonged fever for more than 1 month), placing him in WHO stage 4.
- Chronic unexplained diarrhea, fever, and weight loss independently are stage 3 defining conditions.

Case Study 3:

A 37-year-old HIV-infected male, named H___, presents at your clinic. He has lost 9 kg in last 3 months (previously 75 kg) and reports having a fever for the 2 weeks. He says that he generally goes to bed by late afternoon

every day. Five months ago, he was treated for pulmonary TB.

- *What is the client's clinical stage of HIV infection in this case study? Explain your reasoning.*

Key points for trainers for Case Study 3:

- WHO clinical stage 3: The client has lost more than 10% of his body weight (9 kg out of 75 kg), and been treated for pulmonary TB in the last year.

Case Study 4:

D___ is a 29-year-old female client who presents with white linear, vertical, raised, lesions over the side of the tongue.

- *What is the client's diagnosis and clinical stage of HIV infection in this case study? Explain your reasoning.*

Key points for trainers for Case Study 3:

- WHO clinical stage 3: Client has diagnosis of oral hairy leukoplakia.

Case Study 5:

P___ is a 69-year-old male client known to have HIV who was admitted to the hospital with complaints of fever and cough for 2 weeks and weight loss (he weighed 70 kg 6 months ago and now weighs 64 kg). Chest x-ray and sputum results are not yet available.

- *What is the client's clinical stage of HIV infection in this case study? Explain your reasoning.*

Key points for trainers for Case Study 3:

- WHO clinical stage 2: Fever and cough for less than 1 month and weight loss < 10% of body weight.
- Symptoms are suggestive of TB, but you do not have a definitive diagnosis.

Trainer Instructions

Step 7: Allow five minutes for questions and answers on this session.

Session 3.2 Teaching, Mentoring, and Skills Transfer

Total Session Time: 100 minutes (1 hour and 40 minutes)

Trainer Instructions

Step 1: Review the session objective with participants.

Session Objective

After completing this session, participants will be able to:

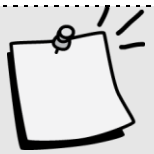
- Practice the bedside clinical teaching technique that can be used for helping mentees achieve competence in HIV care and treatment services.

Trainer Instructions

Step 2: Ask participants:

- *What experience do you have with bedside teaching? Can you share an example about the experience?*
- *What are some of the principles of bedside teaching?*
- *What do you think are some benefits of bedside teaching? What are some of the challenges?*

Explain that clinical diagnosis and skills are difficult to teach solely by lecture. Teaching by example, or bedside teaching, is one of the most effective ways for nurses to learn. Review the 5 steps of bedside teaching using the content below.



Make These Points

- Bedside teaching is an opportunity for nurse mentors and educators to teach by example.
- Typically, with bedside teaching, the mentee sees the client first, presents the case to the nurse mentor outside of the exam room, and then both return to the room to complete the visit.
- Seeing a client together can also allow an opportunity for significant role modeling as well as save time, especially in clinics with a high-volume of clients

- If possible, one should provide the client with advance notice of a bedside visit with a brief discussion of its purpose and what to expect.
- Remember that when bedside teaching, the role of the nurse mentor should always be supportive and respectful, not punitive.
- The 5 key steps for bedside teaching are:
  - Getting a commitment
  - Probing for supporting evidence
  - Reinforcing what was done well
  - Giving guidance about errors and omissions
  - Summarizing the encounter with a general principle

Overview of Bedside Teaching[2]

Bedside teaching is an opportunity for nurse mentors and educators to teach by example. Teaching in the presence of the client has several advantages. The presence of the client strengthens the learning possibilities. As opposed to listening to a presentation or reading off a blackboard, learners have the opportunity to use nearly all of their senses -- hearing, vision, smell, touch — to learn more about the client and their problems.

There are 5 basic steps to bedside clinical teaching, originally outlined by Neher, Gordon, et al[3]. The steps below are usually followed after the mentee has completed the presentation of the case to the mentor. Typically, the mentee sees the client first, presents the case to the nurse mentor outside of the exam room, and then both return to the room to complete the visit. Seeing a client together, however, can also allow an opportunity for significant role modeling as well as save time, especially in clinics with a high-volume of clients.

If possible, one should provide the client with advance notice of a bedside visit with a brief discussion of its purpose and what to expect. All procedures that are to be performed should be explained to the client, even something as simple as a basic physical exam. In addition any discussion or communication about the client should be understandable by the client and should be explained to the client. For this reason, mentees should avoid making presentations at the bedside. Presenting about the client in the third person can be demeaning and confusing for the client.

Remember that when bedside teaching, the role of the nurse mentor should always be supportive and respectful, not punitive.

Key steps for bedside teaching

- **Get a commitment.** In the first step, ask the mentee to state the diagnosis or plan for treatment based upon the history and symptoms the client has just presented. The nurse mentor might ask questions such as *"What do you think is going on here?"* or *"What would you like to do next?"*

- **Probe for supporting evidence.** Ask the mentee to explain how they reached their conclusion. Listening to their reasoning will help you to identify areas in which they need more information or, if their suggested diagnosis or plan of action was incorrect, in which they used faulty reasoning. Questions by the nurse mentor for this stage might include "*What led you to that conclusion?"* or *"Tell me how you reached that diagnosis."*

- **Reinforce what was done well.** Offer specific feedback to the mentee in a private setting, like *"It was good that you did a very comprehensive exam with that client, since this was your first time seeing him."* Giving specific comments will provide the mentee with tools to use in similar situations in the future.

- **Give guidance about errors and omissions.** As when you offer positive feedback, any corrections should be specific and offered in a private setting. Care should also be taken to make sure the feedback is constructive and includes specific plans for improvement. When making suggestions for improvement, use the first person: "*I think", "I saw", or "I noticed"* and use statements like *"you may want to consider…"* Examples:
  - *"I'd like to give you some feedback on that follow-up client visit. Is that OK? I saw that you were a little hesitant when you were staging that client. You may want to consider using the wall chart as a guide."*
  - *"I'd like to provide some feedback on what I observed during my visit today."*

  Feedback should address what a person did, not your interpretation or judgment of the motivation or reason for it. An example that includes interpretation:
  - *"You skipped several sections of the counseling script. I know you want to finish because it's almost lunch time, but…"*

- **Summarise the encounter with a general principle.** Choose 1 or 2 general principles that arose from this encounter to become the take-home message. Summarizing the encounter in this way will help the mentee apply the lessons learned to other situations.

Trainer Instructions

Step 3: Facilitate Exercise 2, so participants can practice the technique of bedside teaching with their mentees.

Exercise 2: Practicing Bedside Teaching Techniques: Large group discussion, with role play	
Purpose	• To provide participants with an opportunity to gain

	experience with the bedside teaching technique
Duration	60 minutes
Advance Preparation	• Review the case studies and suggested answers before the training, and adapt as needed
Introduction	Nurse mentors and educators will find that their mentee's strengths and weaknesses become very clear in the clinic. Bedside teaching allows the nurse mentor to model important clinical skills, attitudes, and communication techniques in the context of actual client care, reinforcing important learning points from the classroom.
Activities	**Large group discussion, with role play** 1. Ask participants to review the case studies in their Participant Manual. 2. Ask 2 participants to volunteer to role play the 1st case study in front of the large group. One participant will be the "nurse mentor" and the other the "mentee." If necessary, another volunteer can play the role of the client. 3. Ask the "nurse mentor" to demonstrate how they would use the principles Bedside Teaching, based on the case study. 4. Give the participants about 5–8 minutes to conduct their role play. 5. Upon completion of the role play, facilitate a discussion with the large group by asking the following questions: • *What did the "nurse mentor" do well?* • *What would you have done differently?* • *How can you use this teaching technique with your mentees in the clinic?* • *What are the most challenging aspects of bedside teaching?* 6. Ask a participant to read the 2nd and 3rd case study; discuss, in the large group, the "nurse mentor's" potential responses to the "mentee" in each scenario and how they would manage the situation themselves, incorporating the principles of bedside teaching.
Debriefing	• Summarise the key points from the group feedback. • Take the time needed to review any content areas, pulling in lessons learned from the case studies. • Remind participants that bedside teaching is an opportunity to teach by example, and the role of the nurse mentor should be supportive and respectful, not punitive.

Exercise 2: Practicing Bedside Teaching Techniques: Large group discussion, with role play
Case Study 1: You have recently started to work with a mentee in your clinic. You are

shadowing the mentee as she sees clients today. The mentee has just finished seeing a client and is presenting a quick case summary to you in the hallway, while the client waits in the exam room. The mentee states: *"S___ is here today with a complaint of cough and shortness of breath. This is her 2nd visit to this clinic. She was diagnosed as HIV-positive about 6 weeks ago. She has been feeling 'tired and unwell on and off for the last month'. S___ also reports losing at least 3 kg over the past month. She has trouble catching her breath when she tries to do activities around the house, like cooking or cleaning, or when she has to walk to the store to do shopping. Her lung exam reveals faint scattered bilateral crackles. She is not wheezing, or showing intercostal retractions."*

When you ask the mentee for her diagnosis, she states: *"S___ might have a respiratory infection—I think that she needs to be prescribed some antibiotics."*

As the nurse mentor, you suspect possible pneumonia or tuberculosis, but your mentee does not seem to be reaching the same diagnosis.

- *How do you use this situation to apply the bedside teaching technique with the mentee?*

Key points for trainers for Case Study 1

- **Probe for supporting evidence.** Ask the mentee to explain how they reached their conclusions.
- **Reinforce what was done well:** *"You summarized the client's symptoms very comprehensively."*
- **Give guidance for errors and omissions:** Offer feedback that is constructive and includes specific plans for improvement: *"One thing that might help us narrow S___'s diagnosis is to obtain more information about her cough. You did not mention whether or not S___ has any sputum associated with her cough. Also, it is important to inquire if she's had a history of TB, or if anyone in her family has had a recent history of TB, especially given her HIV status."*
- **Summarize the encounter with a general principle and review and summarise key learning points: "***Make sure you always note whether clients are producing sputum when they present with the symptom of a cough. Additionally, always make sure to ask about a client's history of TB, and their family's recent history of TB, given their HIV status."*
- **Ask for questions from the mentee. Discuss any problems the mentee identified.**
- **Offer any additional specific positive and constructive feedback.**
- **Agree on an area for improvement and formulate a plan for how to improve.**

Case Study 2:
You decide to observe your mentee as she sees clients in the exam room,

in order to save time and not disrupt client flow. S___'s 36-year-old, HIV – infected sister, named N___, arrives at the clinic. She suffers from bacterial sinusitis and a fungal infection on her toes. She has no problem keeping up with his usual activities and her weight is stable**.** N___ was also treated for herpes zoster 4 years ago.

After conducting a brief physical exam, you ask the mentee to stage the client, but she seems uncertain about how to proceed. You know that the mentee generally lacks confidence with clinical staging. After some hesitation, your mentee says that she thinks the client is stage 3.

- *Has the mentee correctly staged the client?*
- *How do you apply the bedside teaching technique with the mentee in this situation?*
- *How and where do you address any misinformation provided by the mentee?*

Key points for trainers for Case Study 2

- Remember to explain to the client that you are shadowing the mentee and get her consent for this.
- After asking the mentee to state the clinical stage of the client, **probe for supporting evidence.** Ask the mentee to explain how they reached their conclusions.
- Decide how and where to correct the misinformation--- either discuss the case privately with the mentee in the hallway or correct her mistake in a non-punitive way: **"***Client is WHO Clinical Stage 2, because the she is suffering from bacterial sinusitis and fungal infection of her toes. She also had herpes zoster in the past. Her weight is stable and she is able keep up with his regular activities."*
- **After the exam, reinforce what was done well** and **summarise the encounter with a general principle: "***When staging clients, always keep in mind their recent clinical signs, their most recent clinical diagnosis if any made, and the level of activity of client."*
- **Ask for questions from the mentee. Discuss any problems the mentee identified.**
- **Offer any additional specific positive and constructive feedback.**
- **Agree on an area for improvement and formulate a plan for how to improve: "***Consider using the wall charts that show the staging criteria to help you remember the criteria."*

Case Study 3:

It is nearing the end of a long day and there is one more client to be seen. S___'s husband, V___ is a 57-year-old man, who comes to a clinic for routine follow-up. He was diagnosed with HIV infection 3 years ago and started ART 9 months ago. He has missed several follow-up appointments, but has come to the pharmacy to receive his medications every month. The doctor started him on ART, and this is the first time you and your mentee have seen him. He says that his appetite is fine, and that he is not losing

weight. He denies fevers, but has some sweats at night. He denies pain, tingling, or numbness in his extremities. The remainder of his review of systems is normal, by his report. Since the mentee does not know him, she quickly reviews his chart. It reveals that he had some anaemia at baseline, and his chemistries and liver enzymes were normal before starting ART. He had reported some discolorations on his skin, but there is no further mention of this in the notes. He would like to pick up his medications and return home. The mentee agrees to this.

- *As the nurse mentor, do you agree with the mentee's decision?*
- *How should the mentee proceed with this client?*
- *How and where do you apply the bedside teaching technique with the mentee in this situation?*

Key points for trainers for Case Study 3:

- Remember to explain to the client that you are shadowing the mentee and get her consent for this.
- **Probe for supporting evidence.** Ask the mentee to explain how they reached their conclusions. Ask the mentee:
  - *What is your preliminary diagnosis?*
  - *Is there other testing or examination would you like to perform?*
- Decide how and where to correct any misinformation--- either discuss the case privately with the mentee in the hallway or correct her mistake in a non-punitive way: "One thing that might help us ensure V___'s is healthy is to obtain more information about him and confirm his own report by doing a quick physical exam."
- **After the exam, reinforce what was done well** and **summarise the encounter with a general principle: "***Diagnoses will be missed if we always the client's self-report and not perform an independent physical exam. It's important to do a quick physical exam, since it's has been some time since this client has seen a clinician."*
- **Ask for questions from the mentee. Discuss any problems the mentee identified.**
- **Offer any additional specific positive and constructive feedback.**
- **Agree on an area for improvement and formulate a plan for how to improve.**

Trainer Instructions

Step 4: Allow five minutes for questions and answers on this session.

Session 3.3 Additional Learning Activities and Resources

Total Session Time: 15 minutes

Trainer Instructions

Step 1: Review the session objective listed below.

Session Objective

After completing this session, participants will be able to:

- Describe independent and supplemental learning activities for the module.

Trainer Instructions

Step 2: Review the independent learning activities suggested for this module using the content below.

Independent Learning Activities

Work in small groups and review the following documents:

- *WHO case definitions of HIV for surveillance and revised clinical staging and immunological classification of HIV-related disease in adults and children. 2006. Page 17, Table 4.*
- The companion WHO table "Criteria for HIV-related Clinical Events in Adults and Adolescents" (Annex 1 of the 2006 Case Definition) and *Appendix A: WHO Clinical Staging of HIV Disease in Adults and Adolescents*.

Then, organise a lunchtime learning session for other nurses, to discuss the WHO clinical staging criteria for adults. Incorporate case studies as examples and ask nurses to discuss their own cases and challenges with staging clients as well. Groups should present a summary of the session at the beginning of the next training session and answer the following questions:

- *What are some of the typical challenges that nurses experience when staging clients?*
- *In general, what are the skills and knowledge still required by nurses in your clinic to stage clients competently?*

- *What are some teaching strategies that you might implements as nurse mentors and educators to help your mentees overcome these challenges?*

Session 3.4 Action Planning

Total Session Time: 65 minutes (1 hour and 5 minutes)

Trainer Instructions

Step 1: Review the session objectives listed below.

Session Objectives

After completing this session, participants will be able to:

- Describe the role of the nurse mentor and educator as a coach for their mentees.
- Practice tracking and reviewing a mentee's progress on the Mentoring Action Plan.

Trainer Instructions

Step 2: Remind participants about the Mentoring Action Plan that they developed in the previous module. Explain that in order track progress towards achieving one's goals, the nurse mentor and mentee should review and monitor the execution of the Mentoring Action Plan together regularly.

- *How would you review progress on the Mentoring Action Plan? What questions would you ask the mentee?*

Step 3: Remember that the key components of nurse mentoring are relationship building, identifying areas for improvement, and building capacity with mentees. Oftentimes, nurse mentors and educators will need to adopt the role of a supportive coach, especially when evaluating a mentee's progress. Ask participants:

- *How does being a coach differ from merely giving someone instructions or telling them what to do?*
- *How does a coaching approach facilitate learning?*
- *How can you use a coaching approach when reviewing a mentee's progress with their learning goals?*

Review the content below about the nurse mentor's role as a coach, and provide an overview of the suggested questions that nurse mentors and educators can use when reviewing the Mentoring Action Plan with their mentees.

Step 4: Explain that even in the best situations, problems can arise in the mentoring relationship, and there are times when a way forward does not seem possible. Ask participants:

- *How will you respond if a mentee is not making adequate progress with their learning goals?*
- *What are some examples of potential problems that may happen when critiquing a mentee's performance?*
- *How would you manage potential conflict with your mentee?*

Review the **key points for resolving conflicts** that nurse mentors and educators can incorporate in their practice, using content below.

Make These Points

- It is important to nurse mentors and educators to provide adequate time for reflection, feedback, monitoring, and documenting of a mentee's progress.
- A nurse mentor should regularly review progress and help facilitate the mentee's success in meeting the established and agreed upon goals listed on the Mentoring Action Plan.
- When nurse mentors and educators review mentee's progress, they should guide them through a thinking process, helping them to discover the answers to their own questions, rather than imposing a solution.
- Coaching is not telling your mentees what to do or providing simple answers to their questions. Coaching is helping your mentees discover the answers themselves.
- When we act as coaches, we are helping our mentees to develop their own knowledge, skills, and answers.
- Nurse mentors and educators should keep contentious discussions with their mentees positive and constructive. This helps to prevent the antagonism and dislike which so-often causes conflict to spin out of control.
- Remember that learning is an ongoing process and is best facilitated when the learner has a chance to test ideas, analyze mistakes, take risks, and be creative.

Reviewing a Mentee's Progress

The nurse mentor's role as a coach

- As a nurse mentor and educator, you should also be a coach for your mentee. When you act as a coach, you are helping them master their work and grow their own knowledge and skills.
- Coaching is not telling your mentees what to do or providing simple answers to their questions. Coaching is helping your mentees discover

the answers themselves. It is unlocking a mentee's potential to maximize their own performance, helping them to learn rather than instructing them.

- When you review a mentee's progress, you guide them through a thinking process, helping them to discover the answers to their own questions, rather than imposing a solution. The questions below are designed to guide you through this process.
- Remember that learning is an ongoing process and is best facilitated when the learner has a chance to test ideas, analyze mistakes, take risks, and be creative.

Key points for reviewing the Mentoring Action Plan

To track progress towards achieving one's goals, the nurse mentor and mentee should review the Mentoring Action Plan regularly. The following questions can serve as a guide when reviewing the plan with the mentee:

- *What goal or activity on your Action Plan are you currently working on? What is happening now related to your learning goals?*
- *Rate yourself, on a scale of 1 to 10, on your progress towards each of the goals on the Mentoring Action Plan.*
- Always provide positive feedback n what has been accomplished.
- If their progress rating is low, ask:
  - *What obstacles are you facing? What have you done about this so far and what results did your actions produce?*
  - *What options do you have?* Getting the mentee to consider alternative actions can not only help to broaden his perspective on the situation, it can also help you discover options that you may not have considered in the past.
  - *What support do you need?* Make certain the mentee can identify what resources s/he requires to achieve her goals.
  - *Would you like another suggestion?* Try to ask the question in this way, rather than imposing your own solution on the mentee. Imposing a solution does not help the mentee learn.
  - *How will you now move forward, and when will you do it?* Help the mentee to recommit to a plan of action.

Conflict Resolution with a Mentee[4]

Conflict in the workplace can be incredibly destructive to good teamwork. Managed in the wrong way, real and legitimate differences between you and your mentee can quickly spiral out of control, resulting in situations where co-operation breaks down and the clinic's morale and functionning is threatened.

To calm these situations down, it helps to take a positive approach to conflict resolution, where discussion is courteous and non-confrontational, and the focus is on issues rather than on individuals. If this is done, then, as long as people listen carefully and explore facts, issues and possible solutions properly, conflict can often be resolved effectively.

Key points for resolving conflicts

Nurse mentors and educators can use these conflict resolution methods to think about the most appropriate approach (or mixture of approaches) for their particular situation with mentees. Ideally nurse mentors and educators should adopt an approach that meets the situation, resolves the problem, respects the mentee's legitimate interests, and mends damaged working relationships.

- **Make sure that good relationships are the first priority:** As far as possible, make sure that you treat the mentee calmly and that you try to build mutual respect. Do your best to be courteous to one-another and remain constructive under pressure.
- **Keep people and problems separate:** Recognize that in many cases the mentee is not just "being difficult" – real and valid differences can lie behind conflictive positions. By separating the problem from the person, real issues can be debated without damaging working relationships.
- **Pay attention to the interests that are being presented:** By listening carefully, you will understand why the person is adopting his or her position.
- **Listen first; talk second:** To solve a problem effectively you have to understand where the other person is coming from before defending your own position.
- **Set out the "Facts":** Agree and establish the objective, observable elements that will have an impact on the decision.
- **Explore options together:** Be open to the idea that a third position may exist, and that you can get to this idea jointly.

Key steps to resolving conflicts

By following these key steps, nurse mentors and educators can often keep contentious discussions positive and constructive. This helps to prevent the antagonism and dislike which so-often causes conflict to spin out of control.

- **Step 1-Set the Scene**: Understand that the conflict may be a mutual problem, which may be best resolved through discussion and negotiation rather than through raw aggression. If you are involved in the conflict, emphasize the fact that you are presenting your perception of the problem. Use the 7 listening and learning skills to ensure you hear and understand other's positions and perceptions.
- **Step 2-Gather Information:** Ask for the other person's viewpoint and confirm that you respect his or her opinion and need his or her cooperation to solve the problem. Try to understand his or her

motivations and goals, and see how your actions may be affecting these.

- **Step3-Agree on the Problem:** Different people may see different but interlocking problems – if you can't reach a common perception of the problem, then at the very least, you need to understand what the other person sees as the problem.
- **Step 4-Brainstorm Possible Solutions:** To solve a problem effectively you have to understand where the other person is coming from before defending your own position.
- **Step 5-Negotiate a Solution:** By this stage, the conflict may be resolved: Both sides may better understand the position of the other, and a mutually satisfactory solution may be clear to all.
  However you may also have uncovered real differences between your positions. This is where a compromise technique can be useful to find a solution that, at least to some extent, satisfies everyone.

Trainer Instructions

Step 5: Lead participants through Exercise 3, which will give participants an opportunity to discuss strategies for review and feedback on the Mentoring Action Plan, when presented with challenges in the mentoring relationship.

Exercise 3: Reviewing the Mentoring Action Plan: Case studies, with role play and large group discussion	
Purpose	• To discuss coaching strategies that can be used when reviewing a mentee's performance
Duration	45 minutes
Advance Preparation	• Review the case studies and suggested answers before the training, and adapt as needed
Introduction	Regular review and tracking of the mentee's performance provides information needed to address learning gaps and opportunity to support and coach the mentee. This exercise will be a chance for participants to discuss how to adopt a coaching approach, when presented with some relational challenges and performance issues in the mentoring relationship.
Activities	**Part 1: Role Play and Large Group Discussion** 1. Ask participants to review the 1st case study in their Participant Manuals. 2. Ask 2 participants to role play the 1st case study in front of the large group. One participant will be the "nurse mentor" and the other participant will play the part of the "mentee." 3. Ask the "nurse mentor" to respond to the conflict presented in the case study, by using a coaching approach, and help the "mentee" move forward with

	her learning goals. 4. "Nurse mentors" can also refer to *Appendix 3B: Listening and Learning Skills Checklist* as a guide for the conversation. 5. Lead an interactive discussion, asking participants to identify strengths of the role play and possible ways to improve the "nurse mentor's" conflict resolution and coaching skills. 6. Ask participants to review the 2nd case study in their Participant Manuals. 7. Discuss how the "nurse mentors" should manage the review session and write key points on a flip chart.
Debriefing	• Summarise the key points from the group feedback. • Remind participants that mentees may not always respond positively to the mentoring relationship at first, and nurse mentors and educators must remember their role as a supportive coach when monitoring progress on their Mentoring Action Plans.

Exercise 3: Reviewing the Mentoring Action Plan: Case studies, with role play and large group discussion

Case Study 1:

You have been mentoring a new nurse at your clinic for about 3 months. You arrange a brief meeting with her to review the Mentoring Action Plan and update the mentee's learning goals, but it is obvious the mentee has not made much progress. Your mentee seems frustrated and says that "*it's not my fault"* and states that your mentoring is *"getting in the way"* of her work and is *"slowing her down when seeing clients".* She explains that she already has too much responsibility---"*this mentoring thing is just making things worse."* How do you proceed?

Key points for trainers for Case Study 1

- Remember the nurse mentor's role as a coach.
- Review the reasons for mentoring in the first place and help the mentee recommit to a plan of action.
- Ask the mentee: *What is happening now related to your goals? Why are you having difficulty moving forward? What options do you have? What can you do this week to change the situation?*
- Refer to **key steps for resolving conflicts**, reviewed during this session.
- Discuss options and agree on a plan.
- Reviewing principles of adult learning theory may help you come up with ways to better reach the mentee—maybe the mentee will respond to different ways of teaching.

Case Study 2:

You are a nurse mentor and you are 10 years younger than your mentee. You feel somewhat uncomfortable advising and critiquing the performance

of a superior. When you meet with your mentee to review her progress on the Mentoring Action Plan, she seems a bit irritated when you ask about her learning goals and tells you that she doesn't have time for this. How do you proceed with the mentee?

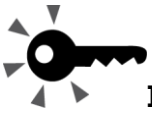
Key points for trainers for Case Study 2:

- Mentees may resent your presence at the clinic for a variety of reasons: this may reflect issues of nationality, cultural tradition, gender, age, or experience level as compared to the mentee, especially in the case of the mentor being younger (e.g. "less senior") than the mentee.
- It is important to recognize that the mentee may feel just as uncomfortable in this situation as the nurse mentor.
- Remember to use positive communication skills when addressing this issue with the mentee.
- Using appropriate phrasing and language that recognizes the seniority of the mentee can build a good relationship between a junior mentor and a senior mentee, and will allow the mentee to accept feedback.
- Refer to **key steps for resolving conflicts**, reviewed during this session.
- Ask the mentee about her expertise and skills, and what s/he knows about HIV care and treatment. Show respect for the mentee's professional experience while filling gaps or correcting errors.
- Remember that building relationships take time and commitment.
- If a mentee still doesn't respond to you over time, consult your supervisor.

Trainer Instructions

Step 6: Allow five minutes for questions and answers on this session.

Step 7: Summarise this module by reviewing the key points in the box below.



Module 3: Key Points

- Understanding HIV and its life cycle helps us to understand disease progression in the body, enables us to provide the best possible nursing care for clients, and increases our ability to educate other nurses and midwives about how to manage HIV.
- HIV infection can generally be broken down into four distinct stages: primary infection, clinically asymptomatic stage, symptomatic HIV infection, and progression from HIV to AIDS.
- WHO has developed a staging system of HIV in which four clinical stages of disease are identified based on certain signs and symptoms. These stages give us a clear indication of the severity of disease and prognosis and facilitate planning for appropriate treatment and care.
- Staging should be assessed at time of HIV diagnosis, prior to starting ART, and with each follow-up visit to assess a client's response to ART and to monitor disease progression.
- A full clinical assessment and medical history is required for clinical staging.
- If a person has one or more conditions listed within the stage, they are categorized into that stage.
- There are three points that should be kept in mind when staging clients: their recent clinical signs, their most recent clinical diagnosis if any made, and the level of activity of client.
- Bedside teaching is an opportunity to teach by example, and the role of the mentor should be supportive and respectful, not punitive.
- Regular review and tracking of the mentee's performance provides nurse mentors and educators with information needed to address learning gaps and opportunity to support and coach the mentee.
- Nurse mentors and educators should keep contentious discussions with their mentees positive and constructive. This helps to prevent the antagonism and dislike which so-often causes conflict to spin out of control.

Appendix 3A: WHO Clinical Staging of HIV Disease in Adults and Adolescents

Use this clinical staging for adults and adolescents age 15 years or older.

Clinical Stages	
Clinical Stage 1	
• Asymptomatic	• Persistent generalised lymphadenopathy
Clinical Stage 2	
• Moderate unexplained[1] weight loss (under 10% of presumed or measured body weight)[2] • Recurrent respiratory tract infections (sinusitis, tonsillitis, otitis media, pharyngitis)	• Herpes zoster • Angular cheilitis • Recurrent oral ulceration • Papular pruritic eruptions • Seborrhoeic dermatitis • Fungal nail infections
Clinical Stage 3	
• Unexplained[1] severe weight loss (over 10% of presumed or measured body weight)[2] • Unexplained[1] chronic Candidiasis for longer than one month • Unexplained persistent fever (intermittent or constant for longer than one month) • Persistent oral Candidiasis • Oral hairy leukoplakia	• Pulmonary tuberculosis • Severe bacterial infections (for example, pneumonia, empyema, pyomyositis, bone or joint infection, meningitis, bacteraemia) • Acute necrotising ulcerative stomatitis, gingivitis or periodontitis • Unexplained anaemia (below 8 g/dl), neutropenia (below 0.5 x 109/l) and/or chronic thrombocytopenia (below 50 x 109 /l)
Clinical Stage 4	
• HIV wasting syndrome • Pneumocystis Jiroveci pneumonia • Recurrent severe bacterial pneumonia • Chronic herpes simplex infection (oro-labial, genital or ano-rectal of more than one month's duration or visceral at any site) • Oesophageal Candidiasis (or Candidiasis of trachea, bronchi or lungs) • Extra pulmonary tuberculosis • Kaposi sarcoma • Cytomegalovirus infection (retinitis or infection of other organs) • Central nervous system toxoplasmosis • HIV encephalopathy • Extra pulmonary cryptococcosis including meningitis	• Disseminated non-tuberculosis mycobacterial infection • Progressive multifocal leukoencephalopathy • Chronic cryptosporidiosis • Chronic isosporiasis • Disseminated mycosis (extra pulmonary histoplasmosis, coccidiomycosis) • Recurrent septicaemia (including non-typhoidal Salmonella) • Lymphoma (cerebral or B cell non-Hodgkin) • Invasive cervical carcinoma • Atypical disseminated leishmaniasis • Symptomatic HIV-associated nephropathy or HIV-associated cardiomyopathy
[1] Unexplained refers to a condition that is not explained by other conditions. [2] Assessment of body weight among pregnant women needs to consider the expected weight gain of pregnancy.	

Adapted from: WHO. (2006). Revised WHO clinical staging and immunological classification of HIV and case definition of HIV for surveillance.

Appendix 3B: Listening and Learning Skills Checklist

Listening and Learning Skills Checklist		
Skill	**Specific Strategies, Statements, Behaviours**	**(√)**
SKILL 1: Use helpful non-verbal communication	1. Make eye contact	
	2. Face the person (sit next to him or her) and be relaxed and open with posture	
	3. Use good body language (nod, lean forward, etc.)	
	4. Smile	
	5. Do not look at your watch, the clock or anything other than the person	
	6. Avoid distracting gestures or movements	
	7. Other (specify)	
SKILL 2: Actively listen and show interest	8. Use gestures that show interest (nod and smile), use encouraging responses (such as *"yes," "okay"* and *"mm-hmm"*).	
	9. Clarify to prevent misunderstanding	
	10. Summarise to review key points at any time during the session	
	11. Other (specify)	
SKILL 3: Ask open-ended questions	12. Use open-ended questions to get more information	
	13. Other (specify)	
SKILL 4: Reflect back what the person is saying	14. Reflect back or paraphrase	
	15. Encourage the person to discuss further ("Let's talk about that some more")	
	16. Other (specify)	
SKILL 5: Show empathy, not sympathy	17. Demonstrate empathy: show an understanding of how the person feels by naming the emotion expressed	
	18. Avoid sympathy	
	19. Other (specify)	
SKILL 6: Avoid judging words and provide positive, constructive feedback	20. Avoid judging words such as *"bad," "proper," "right," "wrong,"* etc.	
	21. Use words that build confidence and give support (for example, praise what a mentee is doing right)	
	22. Other (specify)	
SKILL 7: Help set goals and summarise new concepts	23. Work with the mentee to come up with realistic "next steps" for their learning	
	24. Summarise the main points of the teaching exercise or mentoring session	
	25. Set next date for teaching or mentoring session	

Adapted from: World Health Organization. 2008. Prevention of Mother-to-Child Transmission of HIV Generic Training Package. Available at: http://www.womenchildrenhiv.org/pdf/p03-pi/pi-60-00/Intro_PM_2-05.pdf

References and Resources

[1] ITECH.2008. *Clinical Mentoring Toolkit*. *Version 2.0.* International Training and Education Center for Health.
[2] ITECH.2008. *Clinical Mentoring Toolkit*. *Version 2.0.* International Training and Education Center for Health.
[3] Neher J, Gordon K, Meyer B, et al. 1992. *A five-step "microskills" model of clinical teaching*. *Journal of American Board Family Practitioners.* 5:419-424.
[4] Mind Tools, *Conflict Resolution: Resolving conflict rationally and effectively*, available at: http://www.mindtools.com

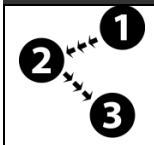
Module 4 Clinical Care for People Living with HIV

Total Module Time: 270 minutes (4 hours and 30 minutes)

Learning Objectives

After completing this module, participants will be able to:

- Define the key components of HIV package of care for PLHIV.
- Review key steps for clinical visits with HIV-infected clients.
- Review eligibility criteria for initiating cotrimoxazole prophylaxis and ART with HIV-infected clients.
- Review basic principles of adherence assessment with clients.
- List WHO recommended first-line ART regimens for HIV-infected adults and adolescents.
- Review basic principles of adherence assessment and support with clients.
- Define conditions for treatment failure in HIV-infected clients.
- Practice the 5A's, as part of the WHO's Integrated Management of Adolescent and Adult Illness (IMAI) approach to chronic care.
- Describe alternative and supplemental learning activities for the module.
- Discuss some of the systems challenges that may arise in nurse mentoring and potential solutions through the use of case studies.

Methodologies	
	• Interactive trainer presentation • Case studies • Large group discussion • Small group work

Materials Needed	
	• Attendance sheet for Module 4 • Flip chart and markers • Tape or Bostik • Participants should have their Participant Manuals. The Participant Manual contains background technical content and information for the exercises • Extra copies of *Appendix 4E: Action Plan Worksheet* (several per group, in case participants need extra copies) • Electronic version of *Appendix 4E: Action Plan Worksheet* on flash drive, so that participants with laptop computers can work in the electronic version rather than on paper.

References and Resources

- WHO. 2010. *Antiretroviral Therapy for HIV Infection in Adults and Adolescents. Recommendations for a Public Health Approach*, 2010 revision.
- WHO. 2007. Integrated Management of Adolescent and Adult Illness and Integrated Management of Childhood Illness. *Chronic HIV Care with ARV Therapy and Prevention: Interim Guidelines for Health Workers at Health Centre or District Hospital Outpatient Clinic.* Geneva, Switzerland: WHO.
- WHO.2006. *Guidelines on Co-Trimoxazole Prophylaxis for HIV-Related Infections among Children, Adolescents and Adults in Resource-Limited Settings: Recommendations for a Public Health Approach*. Geneva, Switzerland: WHO.
- Zambia Ministry of Health, ICAP, and FXB (2011). *Adolescent HIV care and treatment: A training curriculum for multidisciplinary healthcare teams (trainer and participant manuals)*. Lusaka, Zambia and NY, NY: MOH & ICAP.

Advance Preparation

- Make sure you have all of the materials listed in "Materials Needed" on the first page.
- Prepare the attendance sheet in advance and ask participants to sign in as they arrive for the 4th session of training.
- Read through the entire module and ensure that all trainers are prepared and comfortable with the content and methodologies.
- Review the appendices and ensure all trainers are comfortable using them and integrating them into the module.
- Review any applicable national guidelines ahead of time and prepare to incorporate them into the discussion.
- Exercise 1 and 2 require advance preparation. Please review ahead of time.

Session 4.1: Review of Key Competencies and Key Updates for Clinical Care for People Living with HIV

Activity/Method	Time
Interactive trainer presentation and large group discussion	75 minutes
Questions and answers	5 minutes
Total Session Time	80 minutes

Session 4.2: Teaching, Coaching, and Skills Transfer

Activity/Method	Time
Interactive trainer presentation and large group discussion	20 minutes
Exercise 1: The Package of Care for PLHIV: Case studies and large group discussion	60 minutes
Questions and answers	5 minutes
Total Session Time	85 minutes

Session 4.3: Additional Learning Activities

Activity/Method	Time
Interactive trainer presentation and large group discussion	10 minutes
Questions and answers	5 minutes
Total Session Time	15 minutes

Session 4.4: Action Planning

Activity/Method	Time
Interactive trainer presentation and large group discussion	15 minutes
Exercise 2: Overcoming Obstacles to Nurse Mentoring in Healthcare Systems: Case studies in small groups and large group discussion	60 minutes
Questions and answers	5 minutes
Review of key points	10 minutes
Total Session Time	90 minutes

Session 4.1 Review of Key Competencies and Key Updates for Clinical Care for People Living with HIV

Total Session Time: 80 minutes (1 hour and 20 minutes)

Trainer Instructions

Step 1: Review the session objectives, listed below.

Step 2: Ask participants if they have any questions before moving on.

Session Objectives

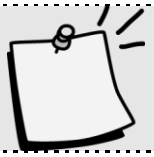
After completing this session, participants will be able to:

- Define the key components of HIV package of care for PLHIV.
- Review key steps for clinical visits with HIV-infected clients.
- Review eligibility criteria for initiating cotrimoxazole prophylaxis and ART with HIV-infected clients.
- Review basic principles of adherence assessment and support with clients.
- List WHO recommended first-line ART regimens for HIV-infected adults and adolescents.
- Review basic principles of adherence assessment with clients.
- Define conditions for treatment failure in HIV-infected clients.

Trainer Instructions

Step 3: Ask participants to raise their hand if they have completed training in ***adult*** HIV care and treatment.

Tell participants that in this session, we will focus briefly on the clinical components of adult HIV care and treatment, but that they should refer to national guidelines and training packages for more detailed information.



Make These Points

- As with HIV care and treatment for clients of any age, it is important to provide family-focused care to PLHIV. Nurses should always ask clients about their living and family situations, and when appropriate, engage family members in care and treatment (for their own care and treatment or as supporters to the client).
- When appropriate, nurses should also ask about partners and encourage steady partners to come to the clinic for education and testing.
- In this session, we will focus primarily on reviewing the clinical care for adults living with HIV.

Overview of the Package of Care for PLHIV

To be effective, the package of care for PLHIV must ensure:
- Integration of services.
- That there is an emphasis on both care and treatment, and also retaining adults not eligible for ART in care.

The goals of comprehensive HIV care are to:
- Reduce HIV-related illness and death,
- Improve quality of life,
- Improve the lives of families and communities affected by HIV, and
- Prevent further spread of HIV.

The Importance of Family-Focused Care

- Family-focused care means that all members of the multidisciplinary care team think about the needs of all family members, and not just those of the client.
- It also means thinking about the linkages between the individual client, the client's family, and the community as a whole.
- Nurses should always enquire about partners and children. When the clients is ready, he or she should be encouraged and supported to bring his or her partner to the clinic for information on HIV, safer sex — including condoms use — and HIV testing.
- Depending on the client's age and family situation, nurses should make it a normal practice to ask clients about other family members and encourage them to bring family members to the clinic for services, if needed. Nurses can provide family members with ongoing education and information on HIV care and treatment, adherence counselling and support, and general support on caring for PLHIV.

Trainer Instructions

Step 4: Provide an overview of the clinical assessment. Note that there are three clinical assessment checklists: the 1st is the listing of activities that are conducted at the initial, or baseline, visit. The 2nd and 3rd list the steps conducted at all follow-up visits —

depending on whether or not the client is on ART. There is much overlap between the three lists.

Ask participants the following questions, record key points on a flip chart, and fill in using content from the tables below:

- *What activities are conducted during the baseline clinical assessment?*
- *What are the key activities during a follow-up clinical assessment?*

Feel free to underline points mentioned as part of the baseline clinical assessment that also appear on the follow-up visit clinical assessment list (rather than writing them twice).

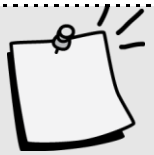
Step 5: Explain to participants that addressing the psychosocial needs of a client is also a key component of clinical care. Ask participants the following questions, record key points on a flip chart, and fill in using content from the tables below:

- *What are some of the main psychosocial needs of HIV-infected clients?*
- *How do you assess and manage clients' psychosocial needs in your clinic setting? What resources or services are available to help client with their psychosocial needs?*
- *What is providing or referring clients to psychosocial support important for PLHIV?*

Refer participants to *Appendix 4B: Psychosocial Assessment Guide and Recording Form*, and explain that nurses can use and adapt this standardized psychosocial assessment tool for clinical visits.

Step 6: Provide an overview of the laboratory assessments, referring participants to *Appendix 4A: Clinical and Laboratory Monitoring for Adults and Adolescents*.

Emphasize that it is critical for nurse mentors and educators to understand the relevant lab systems for collection, documentation, and delivery of test results at their specific clinics.



Make These Points

- Upon enrolment into HIV care, clients should undergo a comprehensive baseline assessment that includes both clinical and psychosocial evaluations. The information gathered from the baseline assessment guides the care plan, including both specific medical and supportive services and the frequency of monitoring and follow-up.

- The clinical assessment for a client with HIV needs to be thorough and include a focus on clinical, laboratory, nutrition, and social parameters.
- All PLHIV should have regular clinical check-ups based on their WHO clinical stage and status.
- Actively follow up on clients who do not come back on their appointment date, either by calling them, by phoning their treatment supporter, by visiting them at home, or by linking with community based support services.
- The use of tools, such as the *Appendix 4B: Psychosocial Assessment Guide and Recording Form*, can help determine what services and referrals are needed to support a client and ensure his or her psychosocial well-being. Findings from the assessment should be recorded on the assessment tool and stored in the client's file.
- Psychosocial support can help clients deal with long-term illness, stigma or discrimination, taking medications every day, caring for an HIV-exposed or HIV-infected child, etc.
- If resources permit, CD4 cell count should be measured at time of diagnosis and 6 monthly, regardless of whether the client is on ART or not. Measure CD4 more often if CD4 is approaching the threshold for starting ART, just prior to starting ART and if a new clinical staging event develops.

Comprehensive HIV Care[1]

Comprehensive care includes the provision of the services listed in the clinical assessment checklists in Table 4.1, Table 4.2, and Table 4.3 below. It may take a few visits to complete all activities on the baseline clinical assessment.

All clients diagnosed with HIV need to be enrolled into chronic care and regularly reviewed clinically and immunologically. Upon enrolment into HIV care, clients should undergo a comprehensive baseline assessment that includes both clinical and psychosocial evaluations. The information gathered from the baseline assessment guides the care plan, including both specific medical and supportive services and the frequency of monitoring and follow-up.

Nurses should actively follow up on clients who do not come back on their appointment date, either by calling them, by phoning their treatment supporter, by visiting them at home, or by linking with community based support services.

The standard approach to reviewing all pre-ART clients includes:
- History.
- Interim history: presenting complaints.
- TB screening.
- Clinical examination and staging.
- Review of laboratory results.
- Assessment of ART eligibility.

- Adherence review and psychosocial support (See Appendices 4B and 4C for standardized psychosocial and adherence assessment tools).
- Management plan.

The 1st table ((Table 4.1) outlines steps conducted at the initial baseline visit. The 2nd (Table 4.2) is the list of steps conducted at follow-up visits for clients ***not*** on ART, the 3rd table (Table 4.3) is a list of steps conducted at follow-up visits for clients on ART.

Table 4.1: Key steps — baseline visit

✓	**Steps**
	• Confirm HIV infection status.
	• Take a complete medical, social, and family history. Enquire about disclosure to others and HIV and treatment status of the family members, partner(s), and offspring.
	• Identify concomitant medical conditions (for example, hepatitis B or C infection, other co-infections or OIs, such as TB).
	• Enquire about concomitant medication, including CTX (discussed in this module), oral contraceptives, and traditional or herbal therapies.
	• Conduct physical examination, including weight, neurodevelopment, STI screening, and skin exam.
	• Prevent, diagnose, and treat OIs and other concomitant conditions, including tuberculosis, diarrhoea, malaria, and pregnancy.
	• Assess nutrition.
	• Conduct psychosocial assessment, counselling, and support. See *Appendix 4B* for an example of a standardized psychosocial assessment that nurses can use with clients.
	• Assess client's WHO clinical stage. If not on ART, determine whether the client meets the clinical criteria for ART initiation. If already on ART, determine if any new stage 3 or 4 events have occurred since ART was initiated.
	• For those eligible for ART by clinical criteria (WHO stage 3 or 4), consider initiating ART preparation. See *Appendix 4C* for an example of a standardized adherence readiness assessment that nurses can use with clients.
	• Discuss findings.
	• Advise and guide (reinforce and support adherence to ART and CTX — if applicable, nutrition, when to seek medical care, medication side effects, adherence, provide referrals for follow up).
	• Schedule lab tests indicated.
	• Schedule next visit.

Table 4.2: Key steps — follow-up visit, clients NOT on ART

✓	**Steps**

	• Review interim medical history.
	• Conduct physical examination, including weight, neurodevelopment, skin exam, STI screening.
	• Prevent, diagnose and treat OIs and other concomitant conditions, including tuberculosis diarrhoea, malaria, and pregnancy.
	• Review concomitant medications (consider drug interactions).
	• If on CTX, provide refill, monitor adherence, and address the client's understanding of and adherence to therapy.
	• Assess client's WHO clinical stage.
	• Review clinical findings at this visit and laboratory findings (include CD4 cell count) from recent visits and consider eligibility for ART and CTX. If eligible for ART, initiate adherence preparation. See Appendix 4C for an example of a standardized adherence readiness assessment that nurses can use with clients.
	• Provide nutrition counselling and support.
	• Conduct psychosocial assessment, counselling, and support, including for disclosure. See Appendix 4B for an example of a standardized psychosocial assessment that nurses can use with clients.
	• Discuss prevention of transmission and risk reduction (discussed in Modules 2 and 8).
	• Provide sexual and reproductive health information, screening, diagnosis, treatment, counselling, and supplies (discussed in Module 8).
	• Provide education, care, and support for family members and/or partner.
	• Discuss findings.
	• Advise and guide (reinforce and support adherence to ART and CTX — if applicable, nutrition, when to seek medical care, medication side effects, adherence, provide referrals for follow up.
	• Schedule lab tests indicated.
	• Schedule next visit.

Table 4.3: Key steps — follow-up visit, clients on ART

✓	**Steps**
	• Conduct physical examination, including weight, neurodevelopment, and skin exam (evidence of skin changes, ART complications).
	• Review interim medical history.
	• Prevent, diagnose and treat OIs and other concomitant conditions, including TB, diarrhoea, malaria and pregnancy.
	• Review concomitant medications (consider drug interactions).
	• Provide refills for ART and CTX, monitor adherence, and address the client's understanding of and adherence to therapy. See

	Appendix 4C for an example of a standardized adherence assessment that nurses can use with clients.
	• Assess client's WHO clinical stage, determine if any new stage 3 or 4 events have occurred since ART was initiated. Assess CD4 count and determine if treatment failure has occurred.
	• Provide nutrition counselling and support, as indicated.
	• Conduct psychosocial assessment, counselling, and support, including for disclosure. See *Appendix 4B* for an example of a standardized psychosocial assessment that nurses can use with clients.
	• Discuss prevention of transmission and risk reduction (discussed in Modules 2 and 8).
	• Provide sexual and reproductive health information, screening, diagnosis, treatment, counselling, and supplies (discussed in Module 8).
	• Provide education, care, and support for family members and/or partner (discussed throughout this curriculum).
	• Discuss findings.
	• Advise and guide (reinforce and support adherence to ART and CTX — if applicable, nutrition, when to seek medical care, medication side effects, adherence, provide referrals for follow up).
	• Schedule lab tests indicated (discussed briefly below).
	• Schedule next visit.

Source: All tables adapted from Zambia Ministry of Health, ICAP, and FXB (2011). Adolescent HIV care and treatment: A training curriculum for multidisciplinary healthcare teams (trainer and participant manuals). Lusaka, Zambia and NY, NY: MOH & ICAP.

Further guidance on these visits and their components can be found in the *WHO Antiretroviral Therapy for HIV Infection in Adults and Adolescents. Recommendations for a Public Health Approach*, 2010 revision.

Psychosocial Support Needs of PLHIV

PLHIV have additional psychosocial needs, which may include:

- Support in understanding and coming to terms with their own HIV-status and the effect it has on their own and their family's lives.
- Support with the disclosure process.
- Help coping with their diagnosis.
- Strategies to deal with stigma and discrimination.
- Strategies to encourage their partners and family members to test and, if appropriate, enrol into care and treatment programmes.
- Access to social welfare services.
- Spiritual support and referrals to spiritual counselling.
- Support for mental health, including strategies for managing anxiety and depression.
- Substance abuse management.
- Strategies to best utilise support networks.

Providing psychosocial support is important for PLHIV and their families because:

- HIV affects all parts of a person's life: physical, mental, social and spiritual dimensions.
- Psychosocial well-being is related to better adherence to HIV care and treatment.
- Good mental health is closely linked to good physical health.
- Psychosocial support will increase clients' understanding and acceptance of all HIV comprehensive care and support services.
- Psychosocial support can help clients deal better with long-term illness, stigma or discrimination, taking medications every day, caring for an HIV-exposed or HIV-infected child, etc.

Nurse mentors and educators can adapt and use *Appendix 4B: Psychosocial Assessment Guide and Recording Form* as a standardized psychosocial assessment tool for clinical visits and as a teaching tool with their mentees.

Laboratory Monitoring

The unavailability of laboratory monitoring, including CD4 and chemistries, should NOT prevent clients from receiving ART.

If resources permit, **CD4** should be measured at the time of diagnosis, AND

- **Clients not yet eligible for ART**: monitor every 6 months; but 3 monthly as CD4 count approaches threshold for starting ART.
- **Clients on ART**: measure just prior to starting ART (if previous CD4 was measured more than 3 months ago) and every 6 months thereafter.
- **All clients**: measure CD4 if a new clinical staging event develops, including growth faltering and neurodevelopmental delays.

Trainer Instructions

]

Step 7: Provide an overview of cotrimoxazole (CTX). Ask participants the following questions and fill in using content from the tables below:

- *Why is CTX an important medication for HIV-infected clients?*
- *When is CTX initiated in newly diagnosed client?*
- *When would you discontinue CTX?*

Summarise the contraindications and dosing for CTX. Refer participants to the *WHO Guidelines on Co-Trimoxazole Prophylaxis for HIV-Related Infections among Children, Adolescents and Adults in Resource-Limited Settings* for additional guidance.

Step 8: Transition to a discussion of ART in PLHIV. Start by providing a

brief overview of the benefits of ART then discuss the issues that need to be considered before starting ART. Then ask participants:

- *What is the immunological criteria for adults and adolescents, older than15 years, to start ART (according to WHO s and your national guidelines)?*
- *What is the first line ART regimen for adults and adolescents older than15 years (according to WHO and your national guidelines)?*
- *How is ART administered to clients in your setting? What is the nurse's role?*
- *What are some possible complications of ART?*

Refer participants to *Appendix 4D: ARV Dosages for Post-pubertal Adolescents and Adults* for additional guidance. Emphasize that this chart may need to be adapted according to national guidelines.

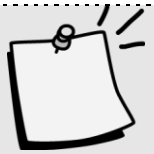
Step 9: Remind participants that adherence to both care and medications are crucial for PLHIV. Ask participants the following questions, record key points on a flip chart, and fill in using below:

- *What happens in your clinic now to prepare clients and to start ART? What do you think works well? What are some of the challenges?*
- *What topics do you think should be covered in adherence preparation with clients?*
- *Why is it important to provide ongoing adherence support?*
- *What are the questions you ask your clients to find out how well they are adhering to their medications?*
- *What other ways to healthcare workers in your clinic assess adherence? What do you think works well? What are some of the challenges?*

Review with participants *Appendix 4C: Adherence Assessment Guide and Recording Forms.* Discuss how to conduct an adherence readiness assessment for a client who is beginning lifelong ART as well as an assessment for a client already on ART.

Step 10: Ask participants the following questions, record key points on a flip chart, and fill in using content below:

- *How often do clients on ART need to return to the clinic after starting ART?*
- *How often do clients not yet eligible for ART need to return to the clinic?*



Make These Points

- Initiate CTX when CD4 count is <350 regardless of clinical stage, or if CD4 count is unavailable start when the client is in clinical stage 2, 3 or 4.
- CTX may be discontinued in client on ART if he or she shows evidence of immune recovery of CD4 >350 after at least 6 months of treatment.
- According to the WHO guidelines, the decision to initiate ART is based on immunological and clinical criteria (CD4 ≤350 or WHO stage 3 or 4).
- The WHO recommended first line ART regimen is AZT (or TDF)+ 3TC + NVP or EFV.
- In the context of ART, studies have shown that clients must take over 95% of the necessary doses to achieve the conditions for therapeutic success, e.g. clients should adhere or "stick" to at least 95% of their drug schedule.
- As nurses, 2 of our most important tasks are to provide adherence preparation counselling and ongoing adherence support to our clients.
- When helping clients prepare for ART, nurses should always address the ARE YOU COMMITTED and then the WHO, WHAT, WHEN, WHERE and HOW of the medications.
- Assessing adherence is very challenging and there is no perfect way to do so. Only through ongoing, individual adherence assessment and counselling, coupled with other adherence measures and review of the client's response to ART over time can we really learn about adherence.
- It is very important to assess adherence at each visit. A standardised assessment tool can help determine a client's readiness for ART and help them to form an adherence plan.
- Treatment supporters can be especially helpful for clients. A treatment supporter is someone who is chosen by a client about to start ART to provide ongoing support for adherence to care and treatment.
- The frequency of clinical monitoring will depend on response to ART. Most adults and older adolescents (>15 years) need to return to the clinic every 3 to 6 months.

Cotrimoxazole (CTX) Prophylaxis

Cotrimoxazole prophylaxis, often referred to simply as CTX, is a well-tolerated, cost-effective, and life saving intervention for PLHIV. It should be implemented as an integral component of chronic care for clients on ART as well as a key element of pre–ART care.

CTX can help protect clients from the following opportunistic infections:

- Pneumocystis pneumonia (PSP): a type of pneumonia typical among people with low immunity. This type of pneumonia presents with shortness of breath on exertion, dry cough, fever, hypoxemia

(decreased level of oxygen in the blood). The prognosis of this type of pneumonia is often very poor.
- Toxoplasma brain abscess: this disease can cause hemiparesis (one side of the body is weak or cannot move anymore), often together with headache and fever.
- Pneumonia from S. pneumoniae.
- Isospora belli: this type of micro-organism is responsible for some cases of chronic diarrhoea with weight loss.
- Salmonella species: gastro-intestinal symptoms and fever.

Initiating CTX

Indications for CTX
- Clinical criteria: Start CTX when client is in clinical stage 2, 3 or 4 regardless of CD4.
- Immunologic criteria: Start CTX when CD4 count is <350 regardless of clinical stage.
- The general recommendation is to continue CTX among adults living with HIV indefinitely, but this needs to be weighed against the challenges of adherence and potential drug resistance.

Discontinuing CTX

- CTX can be discontinued in a client on ART if he or she shows evidence of immune recovery of CD4 >350 after at least 6 months of treatment.
- In situations where CD4 is not available, CTX may be discontinued when there is evidence of good clinical response to ART (absence of WHO clinical stage 2,3, or 4 events after at least one year of therapy), good adherence, and secure access to ART.
- If CTX is discontinued, it should be restarted if the CD4 falls below 350 cells/mm^3 or if the client has a new or recurrent WHO clinical Stage 2, 3, or 4 condition.

Discontinuation of CTX due to adverse events

- Severe adverse reactions to CTX are uncommon.
- CTX should be discontinued if the client experiences drug-related adverse events such as jaundice, extensive exfoliative rash, Stevens-Johnson syndrome, severe anaemia or pancytopaenia.

Contraindications to CTX

Contraindications of CTX include:
- Clients with history of severe and life-threatening adverse reactions — grade 3 and 4 to CTX or other sulfa drugs — should not be prescribed CTX: dapsone 100 mg/day should be given as an alternative.
- Severe liver disease.
- Severe renal insufficiency.
- Ask about a previous history of sulpha allergy - these clients should not be given cotrimoxazole.

Table 4.4: Dosing for CTX Among Adults and Adolescents (>15 years)

Recommended daily dose	
>14 years (or >30 kg) 800 mg sulfamethoxazole/ 160 mg trimethoprim	2 tablets, (400mg/80mg) daily OR 1 tablet, (800 mg/160 mg) daily
CTX can be safely continued or initiated during pregnancy, regardless of stage of pregnancy, and breastfeeding.	

Source: WHO, 2006.*Guidelines on Co-Trimoxazole Prophylaxis for HIV-Related Infections among Children, Adolescents and Adults in Resource-Limited Settings, WHO.*

When to Start ART in PLHIV

ART helps HIV-infected clients to preserve, and enhance, their immune systems — reducing their risk of OIs, restoring growth, improving mental functioning, and overall quality of life. The decision to start ART in a client relies on clinical and immunological assessment, as well as evaluation of the client's social environment.

When to start ART

The criteria to initiate ART is the same in all adolescent and adult clients:

- **CD4 ≤350 or WHO stage 3 or 4, regardless of CD4 count.**

Recommended First-Line ART Regimens

The WHO recommends the following regimens for post-pubertal adolescents and adults, explained in Table 4.5.

Table 4.5: WHO recommended regimens for post-pubertal adolescents and adults

	Regimen		
	NRTI backbone		**NNRTI component**
Preferred 1st line[4]	AZT (or TDF) + 3TC (or FTC)		NVP[2] or EFV[3]
Preferred 2nd line[5, 6]	If AZT used in 1st line, then TDF + (3TC or FTC)	If TDF used in 1st line, then AZT + (3TC or FTC)	ATV/r or LPV/r

1 In resource-limited settings, d4T is still the preferred option to AZT. Cumulative exposure to d4T has the potential to cause disfiguring, painful, and life-threatening side effects, such as lipodystrophy, peripheral neuropathy, and lactic acidosis. If d4T is used, it should be dosed at 30mg BID for all individuals, irrespective of body weight.

2 Avoid use of NVP either of the following groups of clients:

- Women who have had exposure to sdNVP without tail coverage with 7 days of AZT + 3TC within the last 12 months (for PMTCT). Instead do not use an Efavirenz containing regimen, instead use LPV/r. If unsure whether tail coverage for sdNVP was provided then use LPV/r

- Clients with CD4 greater than 250

3 The use of EFV should be avoided in women due to the fact that it may cause foetal harm in the first trimester of pregnancy. If possible, women taking EFV should be switched to a NVP-based or other regimen or counselled on and provided with a contraceptive method.

4 TDF has been associated with renal toxicity: if CrCl <50 ml/min, initiate therapy with AZT/3TC (the alternative 1st line regimen)

5 This is the preferred 2nd line regimen for clients failing 1st line regimen.

6 AZT is not recommended in clients with Hgb <10. Delay ART until anaemia is treated or use alternative NRTI combination (some of the alternatives are listed in note 4, above).

Source: *WHO Antiretroviral Therapy for HIV Infection in Adults and Adolescents. Recommendations for a Public Health Approach, 2010 revision*

For additional information, see *Appendix 4D: ARV Dosages for Post-pubertal Adolescents and Adults* and the *WHO Antiretroviral Therapy for HIV Infection in Adults and Adolescents. Recommendations for a Public Health Approach, 2010 revision* or consult a local or provincial HIV specialist for guidance on transitioning to the 2010 recommendations.

Possible events during the first 6 months

The first 6 months on ART are critical. In most clients, CD4 cell counts rise with the initiation of ART, increase over the course of the first year of treatment, reach a plateau and then continue to rise further over the second year. But, some fail to respond as expected or may even exhibit clinical deterioration.

- Complications in the first few weeks following the initiation of ART are seen most commonly in those with severe immunodeficiency.
- As a client with advanced disease recovers immune function, there is risk of immune reconstitution inflammatory syndrome (IRIS). IRIS — which most often occurs within the first weeks to months after initiation of ART — is a complication caused by reactivation of the immune system. IRIS can present as a flare-up of symptoms when the recovering immune system begins to respond to an existing infection, for example, TB. The response is not due to failure of ART, but rather to its success and the resulting immune reconstitution. When IRIS is suspected, consult a clinician experienced in managing PLHIV.
- Allow sufficient time (at least 6 months on therapy) before judging the effectiveness of a regimen. Supporting adherence during this period is critical and, in such cases, switching of ARV regimen would be inappropriate.
- Persistent failure to see a CD4 response should alert the nurse to potential adherence problems or non-response to ART. In this case, viral load determination can be useful as well as a consultation with a clinician experienced in managing PLHIV.

Supporting Adherence to Care and Treatment

Adherence describes how faithfully a person sticks to and participates in his or her HIV prevention, care, and treatment plan. In the context of ART, studies have shown that clients must take over 95% of the necessary doses

to achieve the conditions for therapeutic success, e.g. clients should adhere or "stick" to at least 95% of their drug schedule. Therefore, as nurses, our aim is to support clients to achieve and sustain this rate of adherence to their regimens.

Before initiating ART, healthcare providers should also think about:

- Readiness for ART: The client understands what ARVs are, how they are to be taken, and is ready to take on this life-long commitment.
- Ability and willingness of client to return for regular follow up.
- How well the client has done taking CTX daily.
- Adherence and treatment preparation: The nurse will have discussed adherence with the client and worked out a plan with the client to take ARVs every day exactly as prescribed.
- When helping clients prepare for ART, nurses should always address the ARE YOU COMMITTED and then the WHO, WHAT, WHEN, WHERE and HOW of the medications.
- Family and peer support: Ideally, clients would have family members, partners, or peers that understand their HIV diagnosis and the implications of ART, including the importance of adherence for life, and support them to take their ARVs every day.

Appendix 4C includes two standardised adherence assessment tools that nurses can use with clients:

- The *Adherence Preparation/Support Assessment for Clients Starting ART* can be used to assess adherence readiness and to help clients to develop a personal adherence plan.
- The *Adherence Assessment for Clients Taking ART* can be used at every follow up and refill visit to ensure that the client understands the care and medication plan.
- The assessment questions on each of the forms should be used to identify areas where the client may need additional information and support.

Adherence support services should be ongoing — not one-time events — and the entire multidisciplinary team, not just nurses, is responsible for providing these services.

Frequency of clinical monitoring

Adults and adolescents taking ART:

- The frequency of clinical monitoring will depend on response to ART.
- At a minimum, after starting ART, ***follow-up visits should occur every 3 months*** once the client has stabilised on ART.

Adults and adolescents not yet eligible for ART:

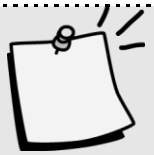
- Follow-up visits should occur every 3 months if CD4 count is between 350–500 and every 6 months if CD4 cell count is greater than 500.

Trainer Instructions

Step 11: Provide a brief overview of toxicities to ART referring participants to the guidelines for additional information. Note that the potential for an adverse reaction to ART is possible and should be mentioned in pre-ART adherence counselling session.

Step 12: Briefly discuss treatment failure. Ask participants:

- *What is the definition of treatment failure?*
- *There are five things that need to be excluded before we can conclude that a client's assumed lack of response to ART if real, can anyone name any one of these five conditions?*



Make These Points

- Many ARV drug toxicities are time-limited and resolve spontaneously even when the same ART regimen is continued.
- Severe life-threatening toxicities require discontinuation of all ARV drugs, whereas those that are mild or moderate do not require discontinuation (but may require drug substitution).
- Nurses need to ensure that the PLHIV has been adherent to his or her regimen before considering the possibility of treatment failure.
- In the absence of viral load measurement, clinical criteria, and CD4 count can be used to identify treatment failure. In this case, suspected treatment failure should be referred to the most senior or experienced treatment provider for assessment.

Toxicities

Toxicity can be monitored clinically, based on client reporting and physical examination, and can also be assessed by a limited number of laboratory tests. Drug toxicities generally fall into one of the following 3 categories:

- **Mild toxicities** do not require discontinuation of therapy or drug substitution, and symptomatic treatment may be given (for example, antihistamines for a mild rash).
- **Moderate or severe toxicities** may require substitution with a drug in the same ARV class but with a different toxicity profile, or with a drug in a different class, but do not require discontinuation of all ART.
- **Severe life-threatening toxicities** require discontinuation of all ARV drugs, and the initiation of appropriate supportive therapy until the client is stabilised and the toxicity is resolved. NNRTIs have a longer half-life than NRTIs, and stopping all first-line drugs simultaneously may result in exposure to sub-therapeutic levels of the NNRTI and subsequently to the development of NNRTI resistance. However, if a

child has a life-threatening toxicity, all ARV drugs should be stopped simultaneously until the client is stabilised.

Refer to the *WHO Antiretroviral Therapy for HIV Infection in Adults and Adolescents, 2010 revision,* for additional information about dealing with toxicities or to a local HIV specialist.

Considerations for adherence

Regardless of their severity, adverse reactions may affect adherence to therapy. A proactive approach to managing toxicity is recommended:

- Before initiating ART, discuss the potential side-effects.
- During the early stages of treatment, offer support during minor and moderate adverse reactions.

Many ARV drug toxicities are time-limited and resolve spontaneously even when the same ART regimen is continued.

Treatment Failure

In the absence of viral load measurement, clinical criteria and CD4 count can be used to identify treatment failure. Therefore, when treatment failure is suspected, confirm that:

- The client has been on ART for at least 24 weeks. The client has been adherent, that is, that he or she has taken nearly all of his ARVs exactly as prescribed. If adherence has not been optimal, then the first course of action is to keep the client on the same regimen, but counsel and support adherence (see *Appendix 4C: Adherence Assessment Guides and Recording Forms*).
- Any inter-current infection or major clinical event has been treated and resolved.
- IRIS has been excluded.

When treatment failure is confirmed (see box below), switching to a new second-line regimen becomes necessary. In the absence of viral load testing, suspected treatment failure should be referred to the most senior/ experienced treatment provider for assessment.

Treatment failure

Where available, confirm treatment failure with viral load testing. Viral load is the only marker that accurately identifies clients with ***virologic failure*** or suppression. ***Clinical*** and ***immunologic*** criteria can raise the suspicion of virologic failure and be useful to prompt further investigation and help clinical decision making in the absence of viral load monitoring.

Clinical criteria of treatment failure: New or recurrent stage 4 event at least 6 months after starting ART

- Condition must be differentiated from immune reconstitution inflammatory syndrome (IRIS)

- Certain WHO stage 3 conditions can also indicate treatment failure, such as pulmonary TB and some severe bacterial infections

Immunological criteria of treatment failure:

- Developing or returning to the following immunologic threshold after at least 24 weeks on ART in a treatment-adherent client:
  - CD4 count of <100
- Note: Rule out concomitant infection as a cause of transient CD4 cell decrease or slow increase

Virological criteria of treatment failure:

- Virologic failure is defined as VL >5000 copies/ml*.
- If viral load is not available, consult the multidisciplinary team or HIV Specialist for joint decision to either initiate 2nd line therapy or monitor the client using clinical and immunologic indicators.

* For additional information on virologic failure, see the WHO Antiretroviral Therapy for HIV Infection in Adults and Adolescents. Recommendations for a Public Health Approach, 2010 revision.

Trainer Instructions

Step 13: Allow 5 minutes for questions and answers on this session.

Session 4.2 Teaching, Mentoring, and Skills Transfer

Total Session Time: 85 minutes (1 hour and 25 minutes)

Trainer Instructions

Step 1: Review the session objective with participants.

Session Objective

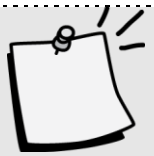
After completing this session, participants will be able to:

- Practice the 5A's, as part of the WHO's Integrated Management of Adolescent and Adult Illness (IMAI) approach to chronic care.

Trainer Instructions

Step 2: Ask participants if they have ever heard of the "5 A's." Explain to participants that the 5 "A's" are part of the WHO's Integrated Management of Adolescent and Adult Illness (IMAI) approach to chronic care.

Review each of the 5 "A's" with participants and ensure their understanding of each concept.



Make These Points

- The 5 "A's" are a principle of chronic care, developed by WHO and included in the IMAI package of materials.
- The 5 "A's" are a series of steps to use during client consultations: ASSESS, ADVISE, AGREE, ASSIST, and ARRANGE.
- Nurses can use the 5 "A's" when providing client-centred clinical and psychosocial care and support to PLHIV.
- Nurse mentors and educators can also use the 5 "A"s as a teaching framework for their mentees, to help them structure clinical visits.
- Always document delivery of 5 "A's" in the client file.

Using the 5 "A's" in Consultations with Clients

The 5 "A's" are part of the WHO IMAI guidelines on working with clients with chronic conditions, including HIV. The 5 "A's" are a series of steps to use during client consultations: ASSESS, ADVISE, AGREE, ASSIST, and ARRANGE.

Nurses can use the 5 "A's" when providing clinical and psychosocial care and support to clients. Nurse mentors and educators can also use the 5 "A"s as a teaching framework for their mentees, to help them structure clinical visits.

Table 4.6: Using the 5 "A's" during clinical visits with PLHIV

The 5 "A's"	More Information	What the Nurse Might Say to the Client
ASSESS	• Assess the client's goals for the visit • Asses the client's clinical status, classify/identify relevant treatments and/or advise and counsel • Assess risk factors • Assess the client's knowledge, beliefs, concerns, and behaviours • Assess the client's understanding of the care and treatment plan • Assess adherence to care and treatment • Acknowledge and praise the client's efforts	• *What would you like to address today?* • *What can you tell me about _____?* • *Tell me about a typical day and how you deal with _____?* • *Have you ever tried to _____? What was that like for you?* • *To make sure we have the same understanding, can you tell me about your care and treatment plan in your own words?* • *Many people have challenges taking their medicines regularly. How has this been for you?*
ADVISE	• Use neutral and non-judgemental language • Correct any inaccurate knowledge and complete gaps in the client's understanding • Counsel on risk reduction • Repeat any key information that is needed • Reinforce what the client needs to know to manage his or her care and treatment (for example, recognising side effects, adherence tips, problem-solving skills, when to come to the clinic, how to monitor one's own care, where to get support in the community, etc.)	• *I have some information about ____ that I'd like to share with you.* • *Let's talk about your risk ____. What do you think about reducing this risk by _____.* • *What can I explain better?* • *What questions do you have about _____?*
AGREE	• Negotiate WITH the client about the care and treatment plan, including any changes • Plan when the client will return	• *We have talked about a lot today, but I think we've agreed that _____. Is that correct?* • *Let's talk about when you will return to the clinic for ____.*

ASSIST	• Provide take-away information on the plan, including any changes • Provide psychosocial support, as needed • Provide referrals, as needed (support groups, peer support, etc.) • Address any problems or challenges the client is facing • Help the client come up with solutions and strategies that work for him/her	• *Can you tell me more about any challenges you've faced with _____(for example, taking your medicines regularly, seeking support, practising safer sex)?* • *How do you think we can solve this problem/challenge?* • *What questions can I answer about _____?* • *I want to make sure I explained things well — can you tell me in your own words about _____?*
ARRANGE	• Arrange a follow-up appointment • Arrange for attendance in support groups or group educations sessions, etc. • Record what happened during the visit	• *I would like to see you again in ____ for _____. It's important that you come for this visit, or let us know if you need to reschedule.* • *What day/time would work for you?*

Source: WHO. 2004. *General Principles of Good Chronic Care: IMAI. Guidelines for First-level Facility Health Workers.*

Trainer Instructions

Step 2: Lead participants through Exercise 1, which will give an opportunity to apply their knowledge of the 5 "A's" to specific case studies.

Exercise 1: The Package of Care for PLHIV: Case studies and large group discussion	
Purpose	• To review clinical care and treatment of PLHIV according to WHO and national guidelines, using the 5 "A's" as an approach to client consultation
Duration	60 minutes
Advance Preparation	• Review the case studies and suggested answers before the training, and adapt as needed • Write "Assess", "Advise", "Agree", "Assist", and "Arrange" along the left margin of 4 pieces of flip chart paper and hang them on the wall
Introduction	We will now break into small groups to work through some case studies and apply the 5 "A's" as a framework for the clinical consultation.
Activities	**Case Studies and Large Group Discussion** 1. Refer participants to the case studies written in the Participant Manual. Ask participants to refer to the case studies in Session 2.2 The case studies in this exercise build on these previous ones and include some of the same characters. 2. Remind participants to refer to Table 4.3: Using the "5A's", as guidance during this exercise. 3. Ask participants to apply the 5 "A's" to each of the

	case studies, by responding to the following questions: • *Assess: what are the key points inferred from the assessment? (participants may have to make inferences from the case study)* • *Advise: how should the client be advised?* • *Agree: what are the key points that should be negotiated with the client?* • *Assist: how should the client be assisted?* • *Arrange: what services or follow-up appointments need to be arranged and what should be recorded in the notes*? 4. The trainer should record key points each flip chart paper. 5. Allow time for the large group to comment on and contribute to each of the case studies. Make any additions or corrections as needed.
Debriefing	• Nurse mentors and educators can use the "5As" to guide their visits with clients and assist their mentees, as a clinical teaching aid.

Exercise 1: The Package of Care for PLHIV: Case studies and large group discussion

Case Study 1:

Recall S___ from the case study in Session 2.2. Since S___ found out she was HIV-infected 8 months ago, she has not attended your clinic again until today. This afternoon, she arrives looking thin and tired — much different than she looked the last time you saw her. Her CD4 count is currently 375. How do you proceed with S___ using the 5 "A's"?

Key point for trainers: Case Study 1

- Assess by providing her with the routine follow-up care (as per the follow-up clinical assessment checklist).
- Assess for any co-infections.
- Assess nutrition and advise accordingly.
- Advise, agree, and assist S___ according to the findings from the physical exam, prescription for CTX, psychosocial assessment, etc.
- Arrange next appointment date.

Case Study 2:

Two months later, S___ comes back to your clinic. She is still weak and thin, but looks much better then before and her weight has increased. You determine that her CD4 count is 250 and she is in clinical stage 3. She was prescribed CTX last time she was at the clinic and has not missed any doses. You have invited S___ for an adherence preparation session. You realize that S___ has some friends and family members on ART, so she may already know some information. How do you proceed with S___ using the 5 "A's"?

Key point for trainers: Case Study 2

- Assess readiness for ART (refer to *Appendix 4C: Adherence Assessment Guide and Recording Forms*).
- Assess her psychological status and support structures (refer to *Appendix 4B: Psychosocial Assessment Guide and Recording Form).*
- Assess her adherence to CTX, as this could be an indicator of her readiness for ART.
- Assess by providing her with the routine follow-up care (as per the follow-up clinical assessment checklist).
- Advise about the WHO, WHAT, WHEN, WHERE and HOW of the medications.
- Advise about treatment supporter or family counselling with her husband.
- Advise about risk reduction and HIV prevention, as needed.
- Assist her with medication refills.
- Agree and establish that the client is willing and motivated and agrees to treatment, before initiating ART.
- Arrange next appointment date.
- Arrange referral to adherence or peer support group

Case Study 3:

During her first follow-up visit after initiating ART, S___ states that she has missed 3 doses of her medications in the last month. S___ thinks that taking the doses most of the time is good enough. She also tells you that she thinks the pills are making her sick and more tired. She wants to stop taking them completely and is considering consulting a traditional healer instead. How do you proceed with S___ using the 5 ''A's''?

Key point for trainers: Case Study 3

- Assess treatment and adherence to ART (refer to *Appendix 4C: Adherence Assessment Guide and Recording Forms*).
- Assess her psychological status and support structures (refer to *Appendix 4B: Psychosocial Assessment Guide and Recording Form).*
- Assess by providing her with the routine follow-up care (as per the follow-up clinical assessment checklist).
- Advise her of the dangers of stopping ART: risk of resistance and decline in health.
- Advise on the side effects of ART.
- Assess her situation at home, which can reinforce adherence or can be a barrier to adherence. For example, if the client needs to hide the status for other family members, she might forget the medications more easily, because there is nobody to remind her, or because she needs to be alone to take the drugs.
- Advise again about treatment supporter or family counselling with her husband, sister, or daughter—since they live in the same household.

- Advise about the possibility that she, as a compromise, at least continue to take CTX, even if she stops taking ART.
- Advise about risk reduction and HIV prevention, as needed.
- Agree on goals that are under the client's control (e.g. attending an adherence support group, disclosing to family members about HIV diagnosis, so they provide support).
- Assist her with getting her medication.
- Arrange next appointment date, including partner if possible.
- Arrange referral to adherence or peer support group.

Trainer Instructions

Step 3: Allow 5 minutes for questions and answers on this session.

Session 4.3 Additional Learning Activities and Resources

Total Session Time: 15 minutes

Trainer Instructions

Step 1: Review the session objective listed below.

Session Objective

After completing this session, participants will be able to:

- Describe independent and supplemental learning activities for the module.

Trainer Instructions

Step 2: Review the independent learning activities suggested for this module using the content below.

Independent Learning Activities

Ask participants to work in small groups and review the following documents:

- WHO. 2010. *Antiretroviral Therapy for HIV Infection in Adults and Adolescents. Recommendations for a Public Health Approach,* 2010 revision.
- WHO. 2007. Integrated Management of Adolescent and Adult Illness and Integrated Management of Childhood Illness. *Chronic HIV Care with ARV Therapy and Prevention: Interim Guidelines for Health Workers at Health Centre or District Hospital Outpatient Clinic.* Geneva, Switzerland: WHO.
- WHO.2006. *Guidelines on Co-Trimoxazole Prophylaxis for HIV-Related Infections among Children, Adolescents and Adults in Resource-Limited Settings: Recommendations for a Public Health Approach*. Geneva, Switzerland: WHO.

Then, ask participants to choose one or more of the following learning activities:

- Co-facilitate a PLHIV support group at your clinic, to get a better understanding of clients' needs and expectations of HIV care and

treatment. Summarize what you learned in a brief paper and present it at the next training session.

- Facilitate a "lunch and learn" discussion with other members of the multidisciplinary care team, and brainstorm about what factors related to the client, the community, and the healthcare system most affect clients' adherence. Discuss how to creatively overcome these challenges. Summarize the outcomes of the discussion in a brief paper and present it at the next training session.
- Write a brief paper describing some teaching strategies you might implements as a nurse mentor and educator to help your mentees effectively counsel their clients about adherence to care and treatment.
- Conduct a lunchtime case discussion with other healthcare workers, on various HIV management topics, such as:
  - Common opportunistic infections in PLHIV—their diagnosis and treatment.
  - When to switch therapies (e.g., clinical failure, toxicity, pregnancy, etc.).
  - Immune Reconstitution Syndrome.
  - Adherence counseling.
  - Complicated cases seen recently.

Session 3.4 Action Planning

Total Session Time: 90 minutes (1 hour and 30 minutes)

Trainer Instructions

Step 1: Review the session objective listed below.

Session Objective

After completing this session, participants will be able to:

- Discuss some of the systems challenges that may arise in nurse mentoring and potential solutions through the use of case studies.

Trainer Instructions

Step 2: Explain that today, we will explore how nurse mentors and educators can identify, address, and reduce resource constraints and system barriers to mentoring in their own clinics. Ask participants the following questions and record key points on a flip chart.

- *What are some factors related to your health facility systems that could affect your mentoring plan, your mentoring, and your mentee's capacity to learn? (Possible responses include: long queues of clients and insufficient time for teaching, lack of testing options, stock-outs, lack of client records and follow-up.)*
- *What needs to be done in your clinic to improve systems for nurse mentoring?*
- *As nurse mentors and educators, how can you help create the leadership involvement in your clinic needed to drive this systemic change?*

Make These Points

- Nurse mentoring is not only about teaching clinical skills. Nurse mentors and educators must also act as advocates to strengthen existing systems, in order to ensure quality care and treatment services for their

clients.

- Nurse mentors and educators may not always have the resources necessary to overcome certain hurdles that they encounter, but they are well positioned to identify problems and help think of solutions for systems problems in healthcare settings.
- The nurse mentor and educator's role as an advocate is vital. Nurse mentors and educators can bring important clinic issues to the clinic administration's attention and discuss options for increasing quality care for clients.
- Nurse mentors and educators can also seek out means of redressing problems by discussing issues with their colleagues and/or through meetings with clinic staff and leaders. This provides a forum for staff to discuss challenges and problems they are facing in the clinic, e.g., bottlenecks in client flow, staffing issues, etc. These meetings are also a platform for implementing quality improvement projects.

Nurse Mentors and Educators' Role in Strengthening Healthcare Systems

- Nurse mentoring is not only about teaching clinical skills. Nurse mentors and educators must also act as advocates to strengthen existing systems, in order to ensure quality care and treatment services for their clients.
- Nurse mentors and educators may not always have the resources necessary to overcome certain hurdles that they encounter, but they are well positioned to identify problems and help think of solutions for systems problems in healthcare settings.
- The nurse mentor and educator's role as an advocate is vital. Nurses can bring important clinic issues to the clinic administration's attention and discuss options for increasing quality care for clients.
- Nurse mentors and educators can also seek out means of redressing problems by discussing issues with their colleagues and/or through meetings with clinic staff and leaders. This provides a forum for staff to discuss challenges and problems they are facing in the clinic, such as bottlenecks in client flow, staffing issues, etc. These meetings are also a platform for implementing quality improvement projects.

Trainer Instructions

Step 3: Lead participants through Exercise 2, which will give participants an opportunity to begin developing an action plan for reducing some common systems barriers to mentoring in healthcare facilities.

Exercise 2: Overcoming Obstacles to Nurse Mentoring in Healthcare Systems: Case studies in small groups and large group discussion	
Purpose	• To develop site-specific strategies for reducing systems

	barriers to nurse mentoring in the clinic setting
Duration	45 minutes
Advance Preparation	• Review the case studies and adapt as needed
Introduction	The following case studies allow participants to discuss and develop potential solutions to challenging scenarios commonly encountered while mentoring in clinic settings.
Activities	**Part 1: Case Studies and Small Groups** 1. Break participants up into small groups of 4-5 people. Ask participants from the same clinic to work together. 2. Refer participants to the case studies written in the Participant Manual. *3.* Ask participants to refer to *Appendix 4E: Action Plan Worksheet.* 4. Ask the group to identify and summarize the main "systems" problem in each of the case studies. 5. Ask the groups to think of a "system" solution that nurse mentors and educators might be able to implement, in response to each problem. Ask: • *What will we do about this problem?* • *What do we want to achieve?* 6. Remind participants that good solutions are "SMART," or: • **Specific:** It addresses the matter specifically • **Measurable**: It can be measured to determine whether it has been achieved. • **Achievable:** It is within the means and capacity of your group. • **Realistic:** It is practical and can be accomplished within a reasonable time frame. • **Time-bound:** The time period for reaching it is clearly specified. 7. Ask the groups to list 1-3 specific strategies, activities, or "next steps" to achieve each solution. 8. For each activity, ask the groups to discuss and answer the following questions: • *Who is responsible for this activity?* • *When will you be able to implement this activity?* • *What kind of support or resources (including funds) do you need in order to achieve this activity?* • *Any other comments to note about this activity or strategy?* 9. Groups should use *Appendix 4E: Action Plan Worksheet* to record their plans. 10. The trainer should circulate between the small groups during the discussion to respond to questions. **Part 2: Large Group Discussion**

	11. Each small group should present their proposed solution, and associated action plan, for one of the the case studies. 6. After each group presents, ask other participants if they have other solutions that were not listed.
Debriefing	• The role of the nurse mentor is crucial in achieving positive changes in the healthcare system. • Nurse mentors and educators have significant responsibility and leadership potential, and are therefore well-positioned to act as advocates and lead necessary systems reform in their clinic settings.

Exercise 2: Overcoming Obstacles to Nurse Mentoring in Healthcare Systems: Case studies in small groups and large group discussion

Case Study 1[2]:

You are a nurse mentor at your busy community clinic. The waiting area is always crowded and the lines are very long. Your mentee's priority is often seeing clients as quickly as possible. It is becoming increasingly difficult to teach effectively under these conditions.

- *What is the "system" problem?*
- *What is your solution?*
- *What are your next steps?*

Key points for trainers for Case Study 1

System problem: High volume of clients
Possible solution: Improve systems/capacity of clinic settings to better manage client flow
Possible activities or "next steps" achieve solution:

- A variety of factors may contribute to long client queues. It is important to debrief with clinical staff when the day is over. Long client queues may be a sign that work flow or clinic hours or days need to be adjusted.
- Depending on national policies, consider task shifting and discuss this with facility leadership. Perhaps some of the counselling could be shifted to Peer Educators or lay counsellors.
- Nurse mentors and educators can share the work and ensure learning by sitting side-by-side with the mentee and assist with aspects of the client's visit, thus increasing the efficiency of the consultation. For example, if a mentee is doing a focused physical exam, the nurse mentor can assist with recording the visit in the client record.
- Ensure triage system is in place. For example, identify clients who acute care versus those who are presenting at the clinic for medication refills and do not need to see a nurse or clinician. Fast-track them to the pharmacy.

Case Study 2:

You notice that your mentee and some of the other multidisciplinary team

members seem to be suffering from low morale and a lack of motivation in their work. You also notice that your mentee seems "burned out" and often has an indifferent and sometimes insensitive attitude towards clients.

- *What is the "system" problem?*
- *What is your solution?*
- *What are your next steps?*

Key points for trainers for Case Study 2

System problem: Low morale and lack of motivation affecting client care
Possible solution: Reduce burnout
Possible activities or "next steps" to achieve solution:

- Identify causes of burnout. Several factors may lead to burnout, including a high volume of clients and a low number of staff, feelings of hopelessness due to inadequate resources to help clients, and experiencing frequent deaths of HIV clients.
- Advocate for better resources. Nurses can become demoralized when they do not have adequate resources to provide the level of care they were trained to (e.g. if the severity of clients' illnesses outstrips the resources available at the clinic for their care).
- Conduct on-site training sessions to improve nurses' skills can boost morale. Regular debriefing sessions are also valuable. These allow people to share experiences, validate each others' feelings, and offer encouragement to one another.
- Use positive reinforcement. Openly credit mentees for actions that made a difference for a client or improved the clinic.
- Model a human rights-based approach to care. Emphasize good counseling skills with your mentee to help encourage a more humanistic approach to caring for clients.

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Case Study 3:
While you are working as a nurse mentor, you notice that your mentee and other healthcare workers are not always documenting the necessary clinical information in the client's medical record. For example, you notice there is a lack of consistent documentation of weight amongst all the client records. On one occasion, during bedside teaching, your mentee failed to notice the beginning of wasting syndrome because she was not paying close attention to trend in weight.

- *What is the "system" problem?*
- *What is your solution?*
- *What are your next steps?*

Key points for trainers for Case Study 3

Problem: Poor record keeping practices
Possible solution: Help mentees improve record keeping skills
Possible activities or "nest steps" to achieve solution:

- Emphasize the importance of accurate and thorough record keeping.
- Give examples of how failure to record clinical information and activities impedes clinical management, harms clients, and ultimately leads to inaccurate outcome data being reported to ministries and funders.
- Ask mentees to help you make a list of job aids (wall charts, pocket cards, standardized pre-printed visit forms with embedded checklists) that would increase their efficiency while improving documentation.
- Provide suggestions to mentees regarding timely documentation of HIV activities (e.g. have mentee spend a brief amount of time charting after every client encounter or periodically during the day).
- Encourage clinic staff to take advantage of "slow" days and enter data in charts when there are not too many clients to be seen.

Trainer Instructions

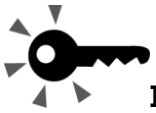
Step 4: Allow five minutes for questions and answers on this session.

Ask participants what they think the key points of the module are. What information will they take away from this module?

Summarise the key points of the module using participant feedback and the content below.

Step 5: Provide copies of the *WHO Antiretroviral Therapy for HIV Infection in Adults and Adolescents. Recommendations for a Public Health Approach, 2010 revision* or any applicable guidelines, if possible. Refer participants to the national training courses in these areas for more information.

Step 6: Ask if there are any questions or clarifications.



Module 4: Key Points

- To be effective, the package of care for PLHIV must ensure:
  - Integration of services.
  - That there is an emphasis on both care and treatment, and retaining clients not eligible for ART in care.
  - That services are family-centred.
- Key components of comprehensive care for PLHIV include the following:
  - Conduct physical examination and confirm stage of HIV disease.
  - Prevent, diagnose and treat OIs and other concomitant conditions, including tuberculosis.
  - If eligible, provide ART (if CD4≤ 350 or stage 3 or 4) and CTX (if CD4<350 or stage 2, 3 or 4) as well as adherence monitoring and support.
  - Provide the client and his or her family with psychosocial assessment, counselling, education and support, and provide referral for follow up.
  - Discuss findings, advise and guide.
- As nurses, 2 of our most important tasks are to provide adherence preparation counselling and ongoing adherence support to our clients.
- When helping clients prepare for ART, nurses should always address the ARE YOU COMMITTED and then the WHO, WHAT, WHEN, WHERE and HOW of the medications.
- Routine adherence assessments help identify and solve specific adherence challenges in a timely manner.
- The 5 ‘‘A’s’’ are part of the WHO IMAI guidelines on working with clients with chronic conditions, including HIV. Nurses can use the 5 ‘‘A’s’’ when providing clinical and psychosocial care and support to clients. Nurse mentors and educators can also use the 5 ‘‘A’’s as a teaching framework for their mentees.
- Nurse mentoring is not only about teaching clinical skills. Nurse mentors and educators must also act as advocates to strengthen existing systems, in order to ensure quality care and treatment services for their clients.
- Nurse mentors and educators may not always have the resources necessary to overcome certain hurdles that they encounter, but they are well positioned to identify problems and help think of solutions for systems problems in healthcare settings.

Appendix 4A: Clinical and Laboratory Monitoring for PLHIV

Laboratory tests for diagnosis and monitoring	Baseline (at entry into care)	At initiation of first- or second-line ART regimen	Every 6 months	As required or symptom directed
HIV Antibody testing	✓			
Haemoglobin[a] (and white cell count, if available) or FBC	✓	✓		✓
LFT[c] and RFT	✓			✓
CD4 cell count[d]	✓	✓	✓	✓
Creatinine Clearance[e]	✓	✓		✓
ALT and/or AST[f]	✓			
Urinalysis	✓			
Pregnancy testing in females[gh]		✓		✓
Full chemistry (including, but not restricted to, liver enzymes, renal function, glucose, lipids, amylase, lipase and serum electrolytes)[i]		✓		✓
HIV VL measurement[jk]				✓
Hepatitis B and C status (where available)	✓			
RPR	✓			✓
OI screening (where possible)	✓	✓	✓	✓
Sexually active females: PAP smear (if unavailable, then visualisation with acetic acid screening) or refer to next level of care for PAP smear[l]	✓			✓
If available, chemistry panel to include glucose, cholesterol, triglycerides	✓			

a. Monitor haemoglobin at week 4 and 12 after initiation of ART if AZT is used.

b. FBC can be repeated at initiation of ART if last FBC was done at least 3 months prior. If FBC if not available at baseline, conduct haemoglobin measurement.

c. Liver function tests (LFT e.g. liver enzymes) are recommended during the first few months of treatment in children receiving NVP who have signs of hepatitis or hepatotoxicity, who are co-infected with hepatitis viruses, or who are on hepatotoxic medications. Based on data in adults on ART, routine monitoring of LFTs is unlikely to be cost-effective.

d. HIV-infected children not yet eligible for ART should be monitored with CD4 count every six months. For infants and children who develop new or recurrent WHO stage 2 or 3 events, or whose CD4 count approaches threshold values, the frequency of CD4 measurement can be increased.%CD4+ is preferred in children <5 years of age.

e. Repeat creatinine clearance 12 weeks, 6 months and then yearly after initiating ART.

f. Conduct ALT and/or AST in clients initiated on NVP-containing regimen or those testing HBsAg positive. Monitor closely in the first 12 weeks of initiating a NVP-containing regimen.

g. Pregnancy testing needed for sexually active females prior to initiating a regimen containing EFV.

h. For pregnant females, provide prophylaxis or combination ART to those who are in need of it for their own health and/or to prevent vertical transmission. (See WHO PMTCT Guidelines, 2010) [102]

i. Routine monitoring (every six months) of full chemistry, particularly lipid levels, liver enzymes and renal function, should be considered for infants and children on second-line drugs and LFTs for those on NVP.

j. At present, VL measurement is not a prerequisite for initiation or regular monitoring of ART in resource-limited settings. VL can be used to diagnose HIV infection, and to confirm clinical or immunological failure prior to switching treatment regimen.

k. If possible VL should be assessed in infants on NNRTI-based regimens who are known to have been exposed to NNRTIs intrapartum or through breastfeeding every 6 months.

l. Repeat PAP or visual screen at 6 months and if normal, every 12 months

Source: Zambia Ministry of Health, ICAP, and FXB (2011). *Adolescent HIV care and treatment: A training curriculum for multidisciplinary healthcare teams (trainer and participant manuals)*. Lusaka, Zambia and NY, NY: MOH & ICAP.

Appendix 4B: Psychosocial Assessment Guide and Recording Form

How to Use the Psychosocial Assessment Guide

This psychosocial assessment guide was developed to support a range of providers (trained counselors, lay counselors, peer educators, expert clients, mother mentors, doctors, nurses, pharmacists, community health workers, and others) who work with PLHIV and their families. Conducting a psychosocial assessment with each client helps to learn more about his or her specific situation, to prioritize needs, and to give direction to ongoing counseling and psychosocial support. This includes referrals for needed community and home-based services. The psychosocial assessment guide should be adapted to reflect national care and treatment guidelines, as well as the specific clinic, community, and cultural contexts in which they are used. It may be helpful to translate the guide into the local language.

A psychosocial assessment should be conducted with **each client after enrollment in HIV care services.** Health workers may want to conduct another psychosocial assessment or revisit specific psychosocial issues when a client's situation changes in a significant way, such as after a client gives birth. Always respect client confidentiality and conduct sessions in a space that offers visual and auditory privacy. Key information from the psychosocial assessment should be recorded on the form and kept in the client's file. A template to record follow-up counseling notes is also included.

Completed psychosocial assessment forms should be kept in the client's file and referred to during follow-up visits. While many HIV care and treatment programs do not keep client files, psychosocial assessments and documentation of psychosocial issues are very important parts of quality, continuous care and client-centered counseling. If individual client files are not maintained at the clinic, this guide can also be used as a job aide to help providers assess psychosocial needs and provide follow-up counseling and referrals.

Basic information: Write down the client's name and file number. Be sure to sign and date the form at the end of each session and ensure that the form is kept in the client's clinic file.

Questions to ask the client: The questions in these sections allow the health worker to discuss and assess the client's psychosocial issues and needs. Different questions are suggested for different topic areas, including: coping, support system, disclosure, and partner and family testing. It is important to allow time for the client to respond to each question. Clients should always be made to feel comfortable expressing psychosocial challenges and should never be judged or punished. Write down any important information from their responses, as this will help decide on effective next steps, important areas for follow-up, and in supporting the client's psychosocial wellbeing over the long term.

Questions, summary, and next steps: Ensure that the client has time to ask questions and that the provider has time to summarize the session and agreed upon next steps. Record key next steps in the space provided.

Additional notes: Write any additional notes about the session, the client's psychosocial needs, or next steps in the space provided.

Referrals made: Linkages and referrals to psychosocial support services are important elements of quality HIV care and treatment programs and the ongoing support of clients and their families. Each clinic should have an up-to-date list of community support services (such as mother's support groups, home-based care programs, adherence supporters, PLHIV associations, food support, legal support, etc.) and formal two-way referral systems to these organizations and services. Clients with severe psychosocial and psychological issues (such as depression, use of drugs and alcohol, feeling suicidal) will require careful follow-up and immediate referrals and linkages to ongoing professional counseling and other services. Record any referrals made to the client in the space provided. At the next session, follow up to determine if the client accessed these referral services.

Date of next counseling session/clinic appointment: Schedule a follow-up counseling appointment with the client and record this date, as well as any clinic appointments, in the space provided.

Psychosocial Assessment Form

Client's Name: _____
Client's File#:_____

Coping, Support System, and Disclosure

1. Now that you know your HIV-status, what feelings or concerns do you have?	
2. Can you tell me how things have been going since you learned your HIV-status? How are you coping? *Explore and discuss client's coping strategies*	
3. Who can you go to for emotional support?	
4. How often in the last week have you used cigarettes, alcohol, or other drugs to help you cope? *Assess for harmful coping strategies, such as drug/alcohol use, and provide counseling/ referrals*	
5. Have you disclosed your HIV-status to anyone? *Counsel on full and partial disclosure*	Yes No
5a. If yes, to whom? What was their reaction?	
5b. If no, how do you feel about disclosing to someone whom you trust? What support do you need?	
6. Do you belong to a community organization, support group, or religious group that gives you the support you need?	Yes No Name/location of organization or group:
6a. Would you be willing to join a support group at this clinic or in the community? *Give information about support groups*	Yes No
7. Have you experienced or do you fear stigma, discrimination, or violence because of your HIV- status or other reasons? *Counsel and discuss available support services*	Yes No Details:
7a. If you experience stigma, discrimination, or violence, or are afraid you will, what do you think you will do? *Counsel on available support services*	
8. Do you have a regular source of income or do you receive help, such as social grants, food parcels, or anything else? *Counsel and refer to social worker and*	Yes No Sources of income/support: Receiving social grant? Yes No

community-level support	

Plans for Care

10. Other than coming to this clinic, do you go to other places for health services (e.g. other clinics, traditional healers, etc.)?	
11. How will you remember to take your medications every day? How will you remember when to come back to the clinic? Is there someone who can help you? *Counsel on adherence to care and medicines*	
12. What do you think are the most important things you can do to care for yourself? *Counsel on retention in care and attending all clinic appointments*	
15. Would it be ok if we called you (or someone you trust) if you miss an appointment at the clinic? Would it be ok if we visited you at home?	Consent for phone call: Yes No Phone number (own/other's?): Consent for home visit: Yes No Detailed address:

Partner and Family Testing

16. Can you tell me who lives with you at home? *Counsel on family-testing, care, and treatment*	Name:_____ Age:_____Relationship:_____ Name:_____ Age:_____Relationship:_____ Name:_____ Age:_____Relationship:_____ Name:_____ Age:_____Relationship:_____
17. For the children who live with you, can you tell me if each has been tested for HIV and what the test result was? *Counsel on HIV testing for all children, even if they seem well, and importance of early care and treatment for HIV-infected children*	Name:_____ Age:_____Tested: Yes No *Result:* pos neg *If positive, in care and tx*: Yes No Name:_____ Age:_____Tested: Yes No *Result:* pos neg *If positive, in care and tx*: Yes No Name:_____ Age:_____Tested: Yes No *Result:* pos neg *If positive, in care and tx*: Yes No
18. Do you have a sexual partner(s) now?	Yes No
18a. If yes, has your partner been tested for HIV? What was the result? *Counsel on partner testing and discordance*	Partner tested? Yes No Don't know Partner's test result? Positive Negative Don't know If positive, in care and tx? Yes No Don't know

18b. If no, do you think your partner would be willing to come for an HIV test?	Yes No Don't know
18c. If yes, can you tell me how you and your partner(s) practice safer sex?	

Questions, Summary, and Next Steps

19. What other questions or concerns do you want to discuss today?	
20. *Summarize the session and review immediate plans and next steps, including the next clinic visit date*	Note next steps here and in the space below:

Notes:

_____
_____
_____

Referrals made:

_____
_____

Date of next counseling session/clinic appointment:

_____

Provider's signature: _____

Date: _____

Source: International Center for AIDS Care and Treatment Programs. (2010). *Improving Retention, Adherence, and Psychosocial Support within PMTCT Services, Implementation Workshop: A Toolkit for Health Workers*.

Appendix 4C: Adherence Assessment Guide and Recording Forms

How to Use the Adherence Assessments

These adherence assessment guides were developed to support a range of providers (trained counselors, lay counselors, peer educators, expert clients, mother mentors, doctors, nurses, pharmacists, community health workers, and others) who work with PLHIV and their families. Routine adherence assessments help identify and solve specific adherence challenges in a timely manner. The adherence assessment guides should be adapted to reflect national HIV care and treatment guidelines, as well as the specific clinic, community, and cultural contexts in which they are used. It may be helpful to translate the guides into the local language.

Included in this guide are 2 adherence assessments:

- The *Adherence Preparation/Support Assessment for Clients Starting ART* can be used to assess adherence readiness and help clients to develop a personal adherence plan. The assessment questions should be used to identify areas where the client may need additional information and support.

- The *Adherence Assessment for Clients Taking ART* can be used at every follow up and refill visit to ensure that the client understands the care and medication plan and is taking his or her medicines the correct way, every day. The assessment questions should be used to identify areas where the client may need additional information and support.

Completed adherence assessment forms should be kept in the client's file and referred to at follow-up visits. If individual client files are not maintained at the clinic, these guides can be used as job aides to help providers when counseling clients. The completed assessments can then be given to clients to keep with their health card, which is brought to each clinic visit.

Basic information: Write the client's name and file number at the top of the form. Then, tick the box corresponding to the type of visit. Be sure to sign and date the form at the end of each session, and ensure that the form is kept in the client's clinic file.

Questions to ask the client: The questions in this section allow the health worker to discuss and assess adherence. It is important to allow time for the client to respond to each question. Clients should always be made to feel comfortable expressing adherence challenges and should never be judged or punished. Remember to write down any important information from their responses, as this will help decide on effective next steps, know important areas for follow-up, and support the clients' adherence over the long term.

Other assessment measures and next steps:
This is the section where nurses will plan with the client to ensure that he or she keeps up good adherence or develops strategies to improve adherence.

- **Other adherence assessment measures:** Depending on standard procedures at the clinic, the health worker may do a pill count and/or review the client's medicine diary or calendar. Record the results in the space provided.
- **Specific adherence challenges identified by client and health worker:** Based on the answers to the questions asked in the first section of this form, discuss the specific challenges to adherence that the client is having. Together, discuss possible solutions to each challenge.
- **Referrals made:** If there is an outside organization, such as a support group or a home-based care program, that could help support the client to overcome his or her challenges to adherence, refer the client to that organization or service and indicate the name and specific service in this part of the form. In some cases, the client may need to be referred for other facility-based services, such as an appointment with a trained counselor or a session with the pharmacist to explain dosing.
- **Next steps and follow-up plan:** Together with the client, identify which solutions and next steps he or she thinks are feasible and manageable. For each solution, list the necessary steps the client or health worker will need to take and a time line for each. Also, make an appointment for a follow-up visit and record the date on the form. This section of the form can be used as a starting point for the adherence assessment during follow-up visits.

Adherence Preparation/Support Assessment for Clients Starting Lifelong ART

Client's Name: _____
Client's File#: _____

1. Can you tell me about the group or one-on-one counseling sessions you have had here at the clinic?	
2. Can you explain why you need to take ART for your entire life?	
3. What do you expect from taking ART?	
4. How confident do you feel about taking medicines every day for your entire life?	
5. Can you tell me the names of the ARVs you will be taking and when you will take them (how many pills, what times of day)?	
6. Can you tell me some possible side effects of your ARVs? What will you do if you have side effects?	
7. Can you explain what happens if you do not take all of your ARVs every day, at the same time, for your entire life?	
8. Is there someone who can help you come to the clinic for appointments and help you take your medicine every day? What is their contact information?	
8a. Has he/she been to the clinic with you?	
9. Do you think you will have any problems coming to this clinic for your appointments?	
10. How will you remember to come for your clinic appointments?	
11. How will you remember to take your medicines the right way, at the same time, every day?	
13. Are you taking any medicines - other than the ones prescribed to you by the doctor or nurse (including traditional or herbal medicines)?	
14. Where will you store your medicines?	
15. What will you do if you are about to run out of your medicine(s)? What about if you will be away from home?	
16. What will you do if you miss a dose of your medicine?	

17. Do you have any questions about the plan for your care or your medicines?	

Client requires more counseling and support in these areas (LIST):

Provider's signature: _____

Date: _____

Date of counseling session: _____

Key issues and concerns discussed:

_____

_____

_____

_____

_____

Next steps and areas for follow-up:

_____

_____

_____

_____

_____

Provider's signature: _____

Source: International Center for AIDS Care and Treatment Programs. (2010). *Improving Retention, Adherence, and Psychosocial Support within PMTCT Services, Implementation Workshop: A Toolkit for Health Workers*.

Adherence Assessment for Clients Taking ART

Client's Name: _____
Client's File#: _____

Tick one: **O 2-week follow-up visit** **O 1-month follow-up visit** **O monthly refill** **O 3-month refill**

Questions to ask the client:

1. Can you tell me more about how you took your medications this past month (or 2 weeks)? (Do you know the names of the medicines? How many pills do you take? At what time of day do you take them?)	
2. I would like you to think about the last 7 days. How many pills did you take late in the last 7 days? What were the main reasons you took them late?	
3. How many pills did you miss in the last 7 days? What were the main reasons you missed them?	
4. Which of these pictures best shows how many of your doses you took in the last month (or 2 weeks)? *(circle one)*	
5. How did the medicines make you feel?	
6. Can you tell me about any changes you noticed (such as in your health) or challenges you had with your medicines?	
7. What support or reminders do you have to help you take your medicines at the same time, every day?	
8. What questions do you have about your care or your medicines?	

Other assessment measures and next steps:

Results of pill count, if applicable:	
Review of medicine diary or calendar, if applicable:	
Specific adherence challenges identified by client and nurse: *(discuss possible solutions to each)*	

Referrals made:	
Next steps and follow-up plan:	Next appointment date: _____

Notes:

Provider's signature: _____

Date: _____

Date of counseling session: _____

Key issues and concerns discussed:

_____
_____
_____
_____
_____

Next steps and areas for follow-up:

_____
_____
_____
_____
_____

Provider's signature: _____

Source: International Center for AIDS Care and Treatment Programs. (2010). *Improving Retention, Adherence, and Psychosocial Support within PMTCT Services, Implementation Workshop: A Toolkit for Health Workers*.

Appendix 4D: ARV Dosages for Post-pubertal Adolescents and Adults

Drug	Usual adult dosage	Notes
Efavirenz (EFV)	600 mg once a day Evening dosing on an empty stomach recommended initially to decrease side effects.	Contraindicated in 1st trimester of pregnancy.
Emtricitabine (FTC)	200 mg once a day, With our without food	Can be administered as a co-formulated product with TDF(Truvada) or with TDF and EFV (Atripla). Adjust if CrCl <50 ml/min.
Lamivudine (3TC)	150mg twice daily 300 mg once a day	Can cause pancreatitis. Adjust if CrCl <50 ml/min.
Boosted Lopinavir (LPV/r)	400/100 mg twice a day, With our without food	Can cause hyperlipidemia, insulin resistance, pancreatitis, transiminitis, and/or fat redistribution
Nevirapine (NVP)	200 mg twice a day	Two-week lead-in recommended (200 mg once a day), as it reduces risk of rash and hepatotoxicity. Can cause Stevens Johnson Syndrome, toxic epidermal necrolysis, hepatotoxicity (monitor ALT/AST first 12 weeks), liver failure, and hypersensitivity
Stavudine (d4T)	• Wt >60 kg: 40 mg twice-daily • Wt <60 kg: 30 mg twice-daily (WHO recommends and data supports 30 mg twice-daily, less toxic and equally effective.)	Contraindicated with AZT due to in vitro and in vivo antagonism. Can cause peripheral neuropathy, lipoatrophy, hyperlipidemia, pancreatitis, lactic acidosis. Adjust if CrCl <50 ml/min.
Tenofovir (TDF)	300 mg once a day, With our without food	Avoid TDF based regimen in clients with renal insufficiency (CrCl <50 ml/min).
Zidovudine (AZT)	300 mg twice a day, With our without food (often better tolerated with food)	Avoid AZT in clients with Hb <10 gm/dl (monitor Hb in the first 12 weeks). Can also cause neutropenia, myopathy, and lactic acidosis. Adjust if CrCl <15 ml/min.

Source: WHO. 2010. *Antiretroviral Therapy for HIV Infection in Adults and Adolescents. Recommendations for a Public Health Approach*, 2010 revision., Annex 21.1

Appendix 4E: Action Plan Worksheet

What is the problem?	What is your solution to this problem?	What are your strategies, activities, or "next steps" to achieve the solution?	What is your timeframe?	What resources or support are needed?	Comments
#1		**1.**			
		2.			
		3.			
#2		1.			
		2.			
		3.			
#3		1.			
		2.			
		3.			

References and Resources

[1] This section was adapted from Zambia Ministry of Health, ICAP, and FXB (2011). *Adolescent HIV care and treatment: A training curriculum for multidisciplinary healthcare teams (trainer and participant manuals).* Lusaka, Zambia and NY, NY: MOH & ICAP.

[2] Case studies borrowed and adapted from: *Strategies for Addressing Real-Life Situations in Clinical Mentoring: Adult ART Clinics, I-TECH Clinical Mentoring Toolkit.*

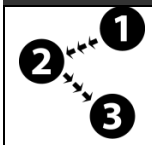
Module 5 Preventing Mother to Child Transmission of HIV

Total Module Time: 275 minutes (4 hours and 30 minutes)

Learning Objectives

After completing this module, participants will be able to:

- Understand changes to the PMTCT guidelines and how they should be applied in clinical settings.
- Describe routine antenatal care procedures for pregnant HIV-infected women.
- Review routine procedures during labour and delivery for pregnant HIV-infected women.
- Identify routine postpartum procedures for pregnant HIV-infected women.
- Review routine care procedures for HIV-exposed infants.
- Describe key updates in infant feeding practices.
- Describe the correct procedure for obtaining a Dried Blood Spot (DBS) specimen.
- Apply knowledge of PMTCT care to specific case studies.
- Describe alternative and supplemental learning activities for the module.
- Develop a site-specific action plan to overcome barriers to PMTCT services at their specific clinics.

Methodologies	
	• Interactive trainer presentation • Case studies • Large group discussion • Small group work

Materials Needed	
	• Attendance sheet for Module 5 • Flip chart and markers • Tape or Bostik • Participants should have their Participant Manuals. The Participant Manual contains background technical content and information for the exercises. • Extra copies of *Appendix 5C: Action Plan Worksheet* (several per group, in case participants need extra copies) • Electronic version of *Appendix 5C: Action Plan Worksheet* on

	flash drive so that participants with laptop computers can work in the electronic version rather than on paper.

References and Resources	
	• François Xavier Bagnoud (FXB) Center. 2010. *Comprehensive Paediatric HIV Care & Treatment Training Series: Module 2,* South to South Partnership for Comprehensive Family HIV Care and Treatment Program (S2S). • International Center for AIDS Care and Treatment Programs (ICAP) (2011). *Improving Retention, Adherence and Psychosocial Support within PMTCT Services: A Toolkit for Health Workers,* New York, New York: Columbia University, ICAP. • WHO. 2010. *Antiretroviral drugs for treating pregnant women and preventing HIV infections in infants*, 2010 revision. • WHO. 2010. *Guidelines on HIV and infant feeding 2010 Principles and recommendations for infant feeding in the context of HIV and a summary of evidence* • WHO. 2006. *IMAI Chronic HIV Care with ARV Therapy and Prevention*, Draft.

Advance Preparation	
	• Make sure you have all of the materials listed in "Materials Needed" on the first page. • Prepare the attendance sheet in advance and ask participants to sign in as they arrive for the 5th session of training. • Read through the entire module and ensure that all trainers are prepared and comfortable with the content and methodologies. • Review the appendices and ensure all trainers are comfortable using them and integrating them into the module. • Review any applicable national guidelines ahead of time and prepare to incorporate them into the discussion. • Invite a member of the multidisciplinary care team who is has been trained in HIV testing to provide a demonstration of Dried Blood Spot (DBS) Specimen Collection in Session 5.1. • Exercise 1 requires advance preparation by the trainer. Please review these exercises ahead of time.

Session 5.1: Review of Key Competencies and Key Updates for Prevention of Mother to Child Transmission (PMTCT) of HIV

Activity/Method	Time
Interactive trainer presentation and large group discussion	75 minutes
Questions and answers	5 minutes
Total Session Time	80 minutes

Session 5.2: Teaching, Coaching, and Skills Transfer

Activity/Method	Time
Interactive trainer presentation and large group discussion	20 minutes
Exercise 1: PMTCT Continuum of Care: Case studies and large group discussion	60 minutes
Questions and answers	5 minutes
Total Session Time	85 minutes

Session 5.3: Additional Learning Activities and Resources

Activity/Method	Time
Interactive trainer presentation and large group discussion	10 minutes
Questions and answers	5 minutes
Total Session Time	15 minutes

Session 5.4: Action Planning

Activity/Method	Time
Interactive trainer presentation and large group discussion	15 minutes
Exercise 2: Overcoming Challenges to PMTCT: Small group work and large group discussion	60 minutes
Questions and answers	5 minutes
Review of key points	10 minutes
Total Session Time	90 minutes

Session 5.1 Review of Key Competencies and Key Updates for Prevention of Mother to Child Transmission (PMTCT) of HIV

Total Session Time: 80 minutes (1 hour and 20 minutes)

Trainer Instructions

Step 1: Review the session objectives, listed below.

Step 2: Ask participants if they have any questions before moving on.

Session Objectives

After completing this session, participants will be able to:

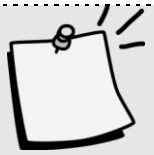
- Understand changes to the PMTCT guidelines and how they should be applied in clinical settings.
- Describe routine antenatal care procedures for pregnant HIV-infected women.
- Review routine procedures during labour and delivery for pregnant HIV-infected women.
- Identify routine postpartum procedures for pregnant HIV-infected women.
- Review routine care procedures for HIV-exposed infants.
- Describe key updates in infant feeding practices.
- Describe the correct procedure for obtaining a Dried Blood Spot (DBS) specimen.

Trainer Instructions

Step 3: Ask, by a show of hands, how many participants have received training in PMTCT. Encourage any participants that have not received training in PMTCT to do so, as this is also an important component of HIV care and treatment services.

Step 4: Remind participants that they should always follow WHO or national guidelines when providing PMTCT services to pregnant PLHIV. Remind participants that the WHO PMTCT guidelines were updated in 2010.

Step 5: Review the key concepts of PMTCT during pregnancy, labour and delivery, postpartum, and during infant feeding. Then review the key updates in the 2010 WHO PMTCT guidelines.



Make These Points

- There are 3 stages when a mother can pass HIV to her child: pregnancy, labour, and delivery, and post-natal through breastfeeding.
- Pregnancy in HIV-infected women appears to have little effect on the progression of HIV infection. However, pregnant women with HIV are at increased risk of preterm delivery, postpartum infections, and even infant death — these risks can be minimised by participation in comprehensive care.
- Key concepts in the WHO PMTCT protocol guidelines include the following:
  - Keep mothers healthy — the higher her CD4 cell count the less likely her infant will be HIV infected
  - Reduce risk at every stage — pregnancy, labour, delivery and during breastfeeding
  - All mothers need ARVs — mothers with CD4 cell count below 350 are eligible for lifelong ART, those with CD4 cell count above 350 should get ARVs during pregnancy
  - All babies of HIV-infected mothers need ARVs and CTX — for the first 6 weeks of life; if mother is breastfeeding, either mother or baby will take ARVs during the entire breastfeeding period.

Overview of Prevention of Mother-to-Child Transmission of HIV (PMTCT)

Mother-to-child transmission of HIV (MTCT) is the transmission of HIV from an infected mother to her baby during pregnancy, labour, delivery and breastfeeding. MTCT is also referred to as **"vertical transmission"** or **"perinatal transmission**". MTCT can occur during:

- Pregnancy
- Labour and delivery
- Breastfeeding

PMTCT is a term used to describe a package of services intended to reduce the risk of MTCT. PMTCT interventions are integrated into routine maternal, child, and women's health services.

Pregnancy in HIV-infected women appears to have little effect on the progression of HIV infection. However, pregnant women with HIV are at increased risk of preterm delivery, postpartum infections, and even infant death — these risks can be minimised by participation in comprehensive care.

Nurses and midwives should follow national guidelines, if applicable, when providing services to pregnant PLHIV, their partners, and family members. Some of the key PMTCT concepts are summarised below in Table 5.1.

Table 5.1: Key PMTCT concepts

Key Concept 1 – Keep mothers healthy
• The healthier the mother (the less HIV she has in her blood and the higher her CD4 cell count), the less likely it is that the baby will become HIV-infected. Conversely, the sicker the mother (a lot of virus in the blood and low CD4 cell count), the more likely it is that the baby will become HIV-infected. • A healthy mother is able to take care of herself, her baby and her family. Without healthy mothers, we will not have healthy families or communities!
Key Concept 2 – Reduce risk at every stage
The risk of passing HIV from a mother living with HIV to her baby depend on timing: • During pregnancy, labour and delivery, about 20 out of 100 babies will get HIV if there are no ARVs or other services offered. • During breastfeeding, about 12 out of every 100 babies in the absence of a PMTCT programme. This depends on how the baby is fed — mixed feeding in the first 6 months of life dramatically increases risk — and how long the baby is breastfed. • **It is important to reduce the risk of transmission at each of these stages.**
Key Concept 3 – All mothers need ARVs
• One of the best ways to lower the amount of HIV in the mother's body, increase her CD4 cell count and make her healthy and less likely to pass HIV to the baby is for her to get the care and treatment she needs to be as healthy as possible, including ART. All pregnant women with HIV need to take ARVs. • If a mother has a CD4 cell count **at or below 350**, the baby is at high risk of getting HIV. According to the WHO 2010 PMTCT guidelines, women with a CD4 cell count of 350 or lower should start ART and stay on ART for their entire lives. • Women with a CD4 cell count above 350 should also get ARVs during pregnancy to prevent the baby from acquiring HIV.
Key Concept 4 – All babies of HIV-infected mothers need ARVs and CTX
• All babies need to take daily NVP at the time of birth and for the first 6 weeks of life, to help prevent them from becoming HIV-infected. If baby is breastfed and mother is not on ART, then the baby will continue taking daily NVP until one week after complete cessation of all breastfeeding. Babies of mothers on ART and those who are formula feeding, stop taking NVP at 6 weeks of age. • Either the mother or the baby needs to be taking ARVs for the **entire time the baby is breastfeeding**. This helps protect the baby from getting HIV during breastfeeding.

- HIV-exposed babies need to take CTX starting at 6 weeks to prevent other infections that may make them very sick or lead to a rapid death. Babies should take CTX until it is certain that they are not HIV-infected.
- If the baby gets tested and is HIV-infected, the baby will also need lifelong ART.

Source: Table 5.1 was borrowed from International Center for AIDS Care and Treatment Programs (ICAP) (2011). *Improving Retention, Adherence and Psychosocial Support within PMTCT Services: A Toolkit for Health Workers,* New York, New York: Columbia University, ICAP.

Key Updates for 2010 WHO Guidelines

Key recommendations on eligibility for treatment

- The 2010 guidelines promote starting lifelong ART for all pregnant women with severe or advanced clinical disease (stage 3 or 4), or with a CD4 count at or below 350, regardless of symptoms.
- The new ART eligibility criteria are the same as those for adults in general.

What ART regimen to initiate

- In the 2010 guidelines, the recommended first-line regimens for pregnant women are:

  AZT + 3TC + NVP or
  AZT + 3TC + EFV or
  TDF + 3TC (or FTC) + NVP
  TDF + 3TC (or FTC) + EFV

ARV prophylaxis

- The 2010 guidelines include two options for ARV prophylaxis, both of which should start earlier in pregnancy, at 14 weeks or as soon as possible thereafter:
  - Twice daily AZT for the mother and infant prophylaxis with either AZT or NVP for 6 weeks after birth if the infant is not breastfeeding.
  - If the infant is breastfeeding, daily NVP infant prophylaxis should be continued for 1 week after the end of the breastfeeding period.
  - A three-drug prophylactic regimen for the mother taken during pregnancy and throughout the breastfeeding period, as well as infant prophylaxis for six weeks after birth, whether or not the infant is breastfeeding.
- The recommended first-line prophylaxis regimens for pregnant women are:

  AZT + 3TC + LPV/r
  AZT + 3TC + ABC
  AZT + 3TC + EFV
  TDF + 3TC (or FTC) + EFV

- Participants can refer to *Appendix 5A: ARV Protocols for Pregnant Women with HIV and their Infants* and *Appendix 5B: ARV Dosing Guide (Adult and Infant)* as guidance in their own practice or use these appendices as job aids with their mentees.

Infant feeding

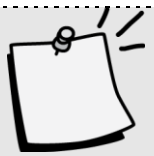
- National health authorities should decide whether health services will principally counsel and support HIV-positive mothers to either: breastfeed and receive ARV interventions, **or** avoid all breastfeeding, as the strategy that will most likely give infants the greatest chance of HIV-free survival.
- In settings where national authorities recommend HIV-positive mothers to breastfeed and provide ARVs to prevent transmission, mothers should exclusively breastfeed their infants for the first 6 months of life, introducing appropriate complementary foods thereafter, and should continue breast-feeding for the first 12 months of life.
- Infant feeding is covered in more detail later in this session.

Trainer Instructions

Step 6: Ask participants:

- *What are the basic ANC management steps that should be taken with HIV-infected women?*
- *What can we do as nurses and midwives to ensure that ANC is welcoming, accessible and encourages ongoing attendance throughout a woman's pregnancy?*

Review the key steps nurses and midwives should follow during labour and delivery in Table 5.2 below. Refer participants to *Appendix 5A: ARV Protocols for Pregnant Women with HIV and their Infants* and *Appendix 5B: ARV Dosing Guide (Adult and Infant)* for additional detail about mothers' ART and ARV prophylaxis administration and dosages.



Make These Points

- ANC improves the general health and well-being of ALL mothers and their families, regardless of HIV status.
- All women attending ANC should routinely be given information and education about HIV, HIV testing, and the PMTCT programme. For many women, the offer of HIV counselling and testing during ANC will be the first time they are faced with deciding whether they want to know their HIV status.
- Women with HIV should receive the same basic ANC services as women who are HIV-uninfected, with the addition of interventions that treat their HIV disease, prevent MTCT, treat or prevent HIV-related infections, and improve general health.

Antenatal Care for HIV-Infected Women

All women attending ANC should routinely be given information and education about HIV, HIV testing, and the PMTCT programme. For many women, the offer of HIV counselling and testing during ANC will be the first time they are faced with deciding whether they want to know their HIV status.
The offer of HIV testing is routine for the first visit; women who test HIV-negative are routinely re-offered HIV testing at/after 32 weeks gestation. Women not tested and/or women not re-tested during ANC, should be tested during labour and delivery. Women not tested during ANC or during labour should be tested during postpartum care.

It is important that all mothers, and particularly HIV-infected mothers, get basic antenatal care (ANC). In addition to regular follow-up for pregnancy monitoring, routine care for HIV-infected women is outlined in Table 5.2 below.

Table 5.2: ANC Services for Women Living with HIV

ANC Service	Key Steps
Opportunistic Infection (OI) prophylaxis	• Provide CTX prophylaxis based on national guidelines.
Tuberculosis	• Screen for TB using standard symptom screening tool (if more than two symptoms, investigate for TB): ◦ Cough > two weeks. ◦ Sputum production, which may occasionally be blood stained. ◦ Fever >2 weeks. ◦ Drenching night sweats >2 weeks. ◦ Weight loss (>1.5 kg in 4 weeks or poor weight gain in pregnancy). ◦ Loss of appetite, malaise, or tiredness. ◦ Shortness of breath or chest pain
ARV therapy	• Assess readiness to initiate ARV. • **Provide ARV therapy to women with CD4 count ≤350/mm or WHO stage 3 and 4, regardless of stage of pregnancy** (see *Appendix 5A: ARV Protocols for Pregnant Women with HIV and their Infants* and *Appendix 5B: ARV Dosing Guide (Adult and Infant).* • Provide adherence counselling. • Educate mother about importance of infant ARV prophylaxis.
ARV prophylaxis	• **If patient is not eligible for ARV therapy (CD4 count >350 or WHO stages 1-2), assess readiness to initiate ARV prophylaxis** (see *Appendix 5A: ARV Protocols for Pregnant Women with HIV and their Infants* and *Appendix 5B: ARV Dosing Guide (Adult and Infant).*

	• Provide ARV prophylaxis starting at 14 weeks gestation or as soon as possible thereafter. • Ensure baseline haemoglobin is >8g/dl (if not, discuss results with a doctor before initiating AZT). • Provide adherence counselling. • Educate mother about importance of infant ARV prophylaxis.
Infant feeding	• All women require infant feeding information, counselling and support. • Assess if she will have any partner and family IF support, because it may affect how she will choose to feed her infant • Promote and support exclusive breastfeeding for first 6 months of life. • Link mother to breastfeeding or peer support groups, if available. • Demonstrate how she could discuss infant feeding with her partner and family members.
Nutrition	• Review weight and weight gain, if underweight or not gaining sufficient weight, screen for tuberculosis and then provide nutrition screening and assessment. • All pregnant women: provide nutrition education. • If eligible, provide targeted nutritional supplements. • If eligible and if appropriate, provide supplementary/replacement and therapeutic feeding. • If eligible and if appropriate, provide targeted food assistance and safety net programmes.

Counselling on safer pregnancy	• Provide women with information and instructions on seeking care early in their pregnancy.
	• Provide information on pregnancy complications such as:
	  • Bleeding
	  • Fever >38.0 C
	  • Pre-eclampsia (swelling of hands and feet, severe headaches and blurred vision)
	  • Severe pallor
	  • Abdominal pain
	• Teach about the importance of delivering in a health facility with nurses and midwives skilled in safer delivery practices, standard precautions and the administration of ARV therapy or prophylaxis to mother and child.
	• Provide counselling about the effects of drugs, alcohol, and smoking on growth and development of the foetus. Refer to treatment programmes if needed.
	• Assess if she has any questions or concerns about pregnancy, L&D, or how she will feed her baby.

Counselling on HIV	• Provide women with information on seeking healthcare for symptoms of HIV disease progression,

danger signs	such as opportunistic infections, chronic persistent diarrhoea, candidiasis, fever or wasting.
Partners and family	• Stress and lack of support have been linked to progression of HIV infection. • Refer women, partners and families to community-based support clubs or organisations where available. • Encourage partner counselling and testing. • Assess need to counsel and test other children.
Effective contraception planning	• Counsel about correct and consistent use of condoms during pregnancy to prevent infection with other STIs, which can increase the rate of MTCT. • Provide family planning and contraception counselling — with partner involvement when possible. • Counselling should include the different types of methods available (barrier, hormonal, long-term and permanent), dual protection including condoms, when to start contraception, and possibilities of drug interactions (e.g. with antibiotics or TB medications). • Women living with HIV on ARV therapy can safely and effectively use all forms of contraceptives.

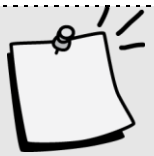
Source: François Xavier Bagnoud (FXB) Center. 2010. *Comprehensive Paediatric HIV Care & Treatment Training Series: Module 2,* South to South Partnership for Comprehensive Family HIV Care and Treatment Program (S2S).

Trainer Instructions

Step 7: Ask participants:

- *How is labour and delivery different for the women with HIV? What are the main considerations for HIV-infected women?*
- *What steps need to be taken during labour and delivery to minimise the chance of MTCT*?
- *What can we do to ensure that women with HIV get their full course of ARVs during labour, delivery and immediately post-partum?*

Review the key steps nurses and midwives should follow during labour and delivery in Table 5.3 below.



Make These Points

- Standard obstetric practices apply to all women in labour and delivery, regardless of HIV-status. MTCT can be minimised by reducing foetal exposure to infected maternal blood and body fluids.
- Nurses and midwives should continue ARV therapy or ARV prophylaxis

during labour and delivery according to guidelines (see *Appendix 5A: ARV Protocols for Pregnant Women with HIV and their Infants*).

- Caesarean sections can reduce MTCT in women with a high viral load or other risk factors, but that they are not part of routine obstetric practice in South Africa because of the increased risk of maternal morbidity and mortality.
- HIV counselling and testing during labour and delivery provides an opportunity for the mother and infant to receive the maternal and infant ARV prophylaxis regimens.

Labour and Delivery

Standard obstetric practices apply to all women in labour and delivery, regardless of HIV-status. Additional considerations for HIV-infected women are outlined in Table 5.3 below.

Table 5.3: ANC Services for Women Living with HIV During Labour and Delivery

L&D Service	Key Steps
ARV administration	• Continue ARV therapy or ARV prophylaxis during labour and delivery according to national guidelines (see *Appendix 5A: ARV Protocols for Pregnant Women with HIV and their Infants* and *Appendix 5B: ARV Dosing Guide (Adult and Infant)*. • For mothers identified as HIV-infected, verify labour and ask the mother whether she took her NVP. • Some mothers may know their status from previous testing. Offer NVP if they say they are HIV-infected. • Offer HIV counselling and testing to women in labour whose HIV status is unknown. • Offer NVP if the first HIV rapid test is positive. The second rapid test and further counselling can be done after delivery. Since NVP has proven efficacy, is a WHO standard treatment, the risk to the baby of not giving it outweighs the concern that the labouring woman is unable to give informed consent.
Obstetric practices	• Standard obstetric practices apply to all women in labour and delivery, regardless of HIV-status. • Reduce MTCT by reducing foetal exposure to infected maternal blood and body fluids. • Caesarean section, when performed before the onset of labour or membrane rupture, has been associated with reduced MTCT in women with a high viral load. However, in many resource-limited settings, caesarean sections are not part of routine obstetric practice because they have been associated with increased maternal morbidity and mortality. Caesarean section should only be performed for

	obstetric indications.
HIV counselling and testing (for women of unknown HIV status)	• HIV counselling and testing during labour and delivery provides an opportunity for the mother and infant to receive the maternal and infant ARV prophylaxis regimens.

Source: François Xavier Bagnoud (FXB) Center. 2010. *Comprehensive Paediatric HIV Care & Treatment Training Series: Module 2,* South to South Partnership for Comprehensive Family HIV Care and Treatment Program (S2S).

Trainer Instructions

Step 8: Ask participants:

- *What steps need to be taken to care for the HIV Exposed Infant (HEI) immediately after birth? In his/her first year of life?*

Review the key steps nurses and midwives should follow for immediate and follow up care of HIV-exposed infants in Table 5.4 below. Refer participants to *Appendix 5A: ARV Protocols for Pregnant Women with HIV and their Infants* and *Appendix 5B: ARV Dosing Guide (Adult and Infant)* for additional detail about mother and infants' ART and ARV prophylaxis administration and dosages.

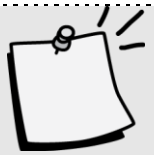
Step 9: Explain that the introduction of early infant diagnosis techniques is an important step in the fight against HIV in Africa. By identifying infants who need services as early as possible, these children will have a better chance of maturing into healthy adults.

Invite a member of the multidisciplinary care team who has been trained and certified in Dried Blood Spot (DBS) specimen collection procedure to provide a demonstration. Review the key steps nurses and midwives should follow during DBS specimen collection in Table 5.3 below.

- Provide an overview of the procedure.
- Discuss questions about the testing procedure.
- Discuss how to read/interpret results.
- Discuss common mistakes and how to avoid them.
- Discuss what safety practices nurses and midwives should keep in mind when collecting blood.

Present and describe the required supplies for DBS specimen collection procedure (from a DBS collection kit). Pass items around after describing them for participants to look at. Explain to participants that this is just an introduction and that

they should receive further instruction at their clinics. Emphasize that it is critical for nurse mentors to understand the relevant lab systems for collection, documentation, and delivery of test results at their specific clinics.



Make These Points

- Infants who are HIV-exposed require follow-up care to monitor growth and development, immunisations, and prophylaxis for infections. They also require testing to determine HIV status.
- Nurses and midwives should provide linkages to ART for mothers who are HIV-infected, their children, and other family members.
- ARV prophylaxis reduces MTCT, however, infants who are HIV-exposed require diagnostic testing and close monitoring to determine their HIV status.
- HIV progresses much more quickly in infants and children than in adults. Early detection of HIV infection will make it possible for infants to start treatment earlier.
- HIV DNA PCR tests are close to100% accurate at 6 weeks of age. Because most babies will be seen at 6-weeks, this can be utilised as a point of entry for large numbers of infants to be tested.
- Dried Blood Spot (DBS) procedure is a simple, safe, and cost effective way to collect specimens for infant HIV PCR testing.
- Care for the HIV-Exposed Infant (HEI) includes:
  - Infant feeding support
  - Infant HIV testing
  - CTX prophylaxis for the infants at age 6 weeks and continued until HIV is ruled out and there are no additional risk factors, such as breastfeeding
  - Routine immunisations, Vitamin A, TB screening
  - Monitoring of growth and health status
  - Developmental milestone screening
- Integrated Management of Childhood Illness (IMCI) provides guidance to nurses and midwives regarding provision of treatment for HIV-exposed infants and their families.
- Because the health of mother and child is so closely related, assessment of maternal health and nutrition should be concurrent with assessment of the infant and appropriate referrals for maternal care should be given during infant check ups.
- Nurses and midwives should always stress the importance of regular clinic attendance to monitor the baby's progress as well as to support safe infant feeding choices and ARV adherence.

Care of HIV Exposed Infants (HEIs)

PMTCT interventions reduce, but do not eliminate, the risk of HIV transmission from mother to infant. Regular follow-up care is critical for an

infant born to a mother with HIV and for infants whose mothers' HIV status is unknown. This includes infants who have received ARV prophylaxis, because HIV exposure increases an infant's risk of illness and failure to thrive, whether or not the infant has HIV infection.

- The newborn should be seen in the healthcare facility or at home. It is recommended that subsequent visits be scheduled to coincide with the country recommended schedule for immunisations. WHO recommends subsequent visits as follows:
  - At ages 6, 10, and 14 weeks.
  - Once a month from 14 weeks to 1 year.
  - Review feeding options, NVP adherence, follow up PCR 6 weeks after cessation of breastfeeding and general health assessment.
  - HIV Rapid test at 18 months for all HIV Exposed Infants with prior negative test.
  - Every 3 months from the ages of 1 to 2.
- Because the health of mother and child is so closely related, assessment of maternal health and nutrition should be concurrent with assessment of the infant and appropriate referrals for maternal care should be given during routine infant check ups.
- Encourage HIV-infected mothers to attend a final post natal visit at the time of infants 6 month clinic visit to ensure reassessment of her disease progression (CD4 count, WHO clinical staging, and TB screening), and transition her to another clinic as required.
- Anytime the infant becomes ill or the mother suspects a problem, seeking early medical intervention is strongly encouraged.

Table 5.4: Care of HIV Exposed Infants (HEIs), outlines the basic steps nurses and midwives should follow when caring for an HIV Exposed Infant.

Table 5.4: Care of HIV Exposed Infants (HEIs)

ANC Service	Key Steps
Growth and development	• Assess for common illnesses and manage appropriately as directed by the WHO Integrated Management of Childhood Illness (IMCI) guidelines. • Identify non-specific symptoms or conditions that could be related to HIV infection using the HIV-adapted IMCI algorithms, if available. • Monitor growth and assess causes of growth failure. • Do developmental milestone screening at each visit. • Check immunisation status and immunise as indicated. • Provide Vitamin A at 6 months age and 6 monthly intervals thereafter. • Treat anaemia.
Opportunistic Infection (OI) prophylaxis	• Provide CTX prophylaxis, beginning at 6 weeks and continuing until DBS PCR test shows the infant has no HIV infection AND the baby is no longer

	breastfeeding. • Prevention and treatment of malaria.
ARV prophylaxis for the HIV-exposed infants	• Assess the infant at time of delivery for signs of HIV infection and initiate NVP or AZT prophylaxis (see *Appendix 5A: ARV Protocols for Pregnant Women with HIV and their Infants* and *Appendix 5B: ARV Dosing Guide (Adult and Infant).*
Infant feeding support	• Assess and support a mother's choice about infant feeding. • Reinforce the importance of exclusive breast feeding for the first 6 months, no mixed feeding, breast health, dual protection, infant follow-up appointments, and BF support groups. • Assessment at 3 and 10 days post delivery to monitor feeding progress is strongly advised. • Assess diet for infants older than 6 months and provide appropriate counselling that considers locally available food, family circumstances and feeding customs.
Nutrition	• **Provide nutrition education to all pregnant women**. • Review weight and weight gain, if underweight or not gaining sufficient weight, screen for tuberculosis and then provide nutrition screening and assessment. • If eligible, provide targeted nutritional supplements. • If eligible and if appropriate, provide supplementary or replacement and therapeutic feeding. • If eligible and if appropriate, provide targeted food assistance and safety net programmes. • Underlying infections should be treated immediately or ruled out as a cause of growth failure.
HIV testing	• Provide HIV PCR testing at 6 weeks and ensure that results are available at next visit. • Follow up HIV PCR test to be done 6 weeks after cessation of any breastfeeding. • The infant's 6-week postnatal evaluation with DBS PCR sample collection should coincide with mother's important routine post natal visit. • HIV Rapid test at 18 months for all HIV Exposed Infants with prior negative test. • Every 3 months from the ages of 1 to 2.
Tuberculosis	• Screen and treat TB if indicated.

Source: François Xavier Bagnoud (FXB) Center. 2010. *Comprehensive Paediatric HIV Care & Treatment Training Series: Module 2,* South to South Partnership for Comprehensive Family HIV Care and Treatment Program (S2S).

Dried Blood Spot (DBS) Specimen Collection

The challenge in resource-limited settings is identifying HIV-infected infants and providing early access to this life- saving medicine. Recently,

however, a new technology has emerged that allows PCR to be performed on small spots of dried blood. The Dried Blood Spots (DBS) are easy to prepare in a resource-limited setting and can be stored and shipped to testing facilities without refrigeration. Infants can be tested using PCR as early as 6 weeks of age. Table 5.5 (below) outlines the basic steps nurses and midwives should follow when collecting a DSB specimen. This table is just a brief procedural overview, and participants should receive further instruction at their clinics.

Table 5.5: Dried Blood Spot (DBS) Specimen Collection

✓	Steps
	• Warm the baby's foot (or hand, if older than 10 months or larger than 10 kg) to facilitate blood flow. This can be done by wrapping a hand around the foot, while the baby sits in its mother's lap.
	• Position the baby with its feet down.
	• Clean the baby's foot with disinfectant and let it dry.
	• Wearing powder free gloves, prick the baby's heel or toe with a lancet to draw blood.
	• The first drop of blood should be wiped away with gauze or cotton wool. • The provider should then allow a large drop of blood to collect on the foot before touching it (blood drop) to the circle on the filter paper. • The baby's foot should not touch the filter paper. The circle should be filled completely by the blood drop and all three circles should be filled per card.
	• Review concomitant medications (consider drug interactions, make dose adjustments if pre-pubescent adolescent)
	• Stop bleeding by applying pressure with a dry swab and leave unbandaged.
	• Samples should be stored horizontally out of direct sunlight for at least 3 hours. Once dry, samples are stored in sealable plastic bags with desiccant packets and a humidity card and are ready for transport to the laboratory. If not sent that day, samples should be refrigerated—though they need not be refrigerated during transport. Lack of refrigeration facilities should not be a barrier to DBS PCR testing.

Source: François Xavier Bagnoud (FXB) Center. 2010. *Comprehensive Paediatric HIV Care & Treatment Training Series: Module 2,* South to South Partnership for Comprehensive Family HIV Care and Treatment Program (S2S).

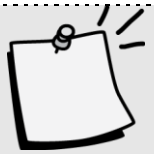
Trainer Instructions

Step 10: Review the WHO recommendations for infant feeding in the content below. Ask participants:

- *What do you know about the infant feeding*

recommendations, according to the 2010 WHO guidelines for HIV-infected women? What are the recommendations for HIV-uninfected women?

- *How do you currently counsel women on their feeding choices? What if the mother's choice does not follow the recommended guidelines?*



Make These Points

- All mothers who are HIV-infected should receive counselling, which includes general information about the risks and benefits of infant-feeding options and specific guidance on selecting the option most likely to be suitable for their situation.
- If the mother plans to breastfeed, nurses and midwives should stress the importance of exclusively breastfeeding for the first 6 months of life. Safe and complementary foods can be introduced from 6 months, while the mother continues breastfeeding.
- If mother plans to formula feed, nurses and midwives should ensure she meets the conditions for safe formula feeding. Help her choose between breastfeeding and formula feeding and support her to implement her choice.
- A mother's chosen feeding option will not always reflect national policies. **Whatever choice a mother makes, she should be supported with care and support**

Infant Feeding

All mothers who are HIV-infected should receive counselling, which includes general information about the risks and benefits of infant-feeding options and specific guidance on selecting the option most likely to be suitable for their situation. **The 2010 WHO infant feeding recommendations are as follows:**

Infant feeding for HIV-uninfected mothers and mothers with unknown HIV status:

- Breastfeed exclusively for the first 6 months of life.
- Introduction of safe complementary foods that provide sufficient nutritional balance from 6 months and continuation of breastfeeding.

- Continue breastfeeding for up to 2 years or longer, and transition from breastmilk to age appropriate replacement feeding from 6-12 months.
- Gradual cessation of breastfeeding over a period of 4 weeks.
- Mothers should also receive information about the risk of becoming infected with HIV late in pregnancy or during breastfeeding. Women with unknown HIV status should be encouraged to be tested for HIV

Definition

Exclusive breastfeeding: The mother gives her infant only breastmilk except for drops or syrups consisting of vitamins, mineral supplements, or medicines. The exclusively breastfed child receives no food or drink other than breastmilk—not even water.

Infant feeding for HIV–infected mothers:

- Exclusive breastfeeding is recommended during the first 6 months of life.
- Introduction of safe complementary foods from 6 months and continuation of breastfeeding.
- Continued breastfeeding up to 12 months of life.
- Breastfeeding should then only stop once a nutritionally adequate and safe diet, without breastmilk, can be provided.
- All mothers who are HIV-infected should receive counselling, which includes general information about the risks and benefits of infant-feeding options and specific guidance on selecting the option most likely to be suitable for their situation.

Whatever choice a mother makes, she should be supported with care and support

- Explain that now breastfeeding can be made safe by following guidelines on ARV prophylaxis for either the infant or by mother being on ARV treatment for at least 4 months.
- Ensure she is provided with infant feeding counselling and support. Observe her feeding technique and provide assistance.
- Encourage exclusive breastfeeding for the first 6 months of life. Ensure she understands the risk of mixed feeding and can respond to family or friends who recommend that she introduce foods or liquids before six months.
- If she is formula feeding, make sure she understands the importance of formula feeding exclusively (and not breastfeeding at all). Also ensure that she knows how to make infant formula correctly and hygienically; demonstrate and give her time to practice while she is observed by a nurse or midwife. Asking the client the following questions can help assess the safety of formula feeding:
  - *Do you have access to enough clean water and soap to wash your hands thoroughly before preparing the baby's feeds?*
  - *How much money can you afford for formula each month?*

- *Do you have money for transportation to get replacement feeds when you run out?*
- *Can you sterilise feeding equipment and utensils such as bottles, teats, measuring and mixing spoons?*
- *Is your partner supportive of formula feeding and is he willing to help? How about your mother-in-law? Other responsible family members?*
- *Will all caregivers be able to prepare the feeds safely and correctly?*

- Nurses and midwives should support the client in the selection of an infant-feeding option that considers personal, familial, and cultural concerns and reflects the best option for the client's circumstances.

New HIV Infection During Breast Feeding

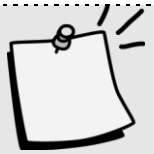
- If the mother tests HIV-negative during pregnancy or immediately after delivery, the nurse or midwife should ensure she knows how to stay uninfected. Provide her with information and support to protect herself from getting or passing HIV:
  - Encourage partner testing (if he has not been tested already).
  - Encourage use of condoms to protect against HIV, other STIs and unintended pregnancy.
- It is particularly important that she understands the risk of new HIV infection during breastfeeding. Breastfeeding women who acquire HIV carry a very high risk of MTCT (much higher than women who were infected before they got pregnant).
- Women who tested HIV negative should be encouraged to have a follow up HIV test if not done during the last trimester of pregnancy

Trainer Instructions

Step 7: Explain to participants that PMTCT does not end at delivery–mothers require care and support throughout the entire duration of PMTCT care and interventions. Ask participants:

- *What are the key topics that need to be discussed with HIV-infected women before they leave the maternity ward?*
- *How does ongoing postpartum care different for the women with HIV? What are the main considerations to keep in mind?*
- *What support services does your clinic offer to clients at this stage of PMTCT care? Who is responsible for offering these services?*
- *What can be done to support the linkages to ongoing care so that clients are not lost to follow-up?*

Review the key steps nurses and midwives should follow for postpartum care for HIV-infected women in the content below



Make These Points

- Mothers living with HIV need ongoing practical, psychosocial, and adherence support: to assist them in adhering to care as well as to their own and their infants' ARV regimens and to help them adhere to safe infant feeding practices.
- Despite the importance of follow up care, many women and infants are "lost" (lost to the healthcare system) in the postpartum period, so providing clear information on the follow-up care plan and location is critical.
- All women and their infants should be seen postpartum within the first 2 weeks and again at 6 weeks.

Postpartum and Continuing Care

Mothers living with HIV need ongoing practical, psychosocial, and adherence support: to assist them in adhering to care as well as to their own and their infants' ARV regimens and to help them adhere to safe infant feeding practices.

All women and their infants should be seen postpartum within the first 2 weeks and again at 6 weeks. These visits are important and support child and maternal health. Despite the importance of follow up care, many women and infants are "lost" (lost to the healthcare system) in the postpartum period, so providing clear information on the follow-up care plan and location is critical.

Postpartum Care for HIV-Infected Women

When providing postpartum care to women living with HIV, nurses and midwives should follow national guidelines. The following areas require special attention:

Immediate postpartum care

- Assess the amount of vaginal bleeding.

Early postpartum visit

- At 3 – 10 days after delivery, the mother should be assessed for general health (Hb, BP, temp) as well as uterine involution, perineal care, and breast hygiene.
- Assess infant feeding option and stress exclusive feeding options.
- Discuss support at home and in the community, assessing need for referral or home visit.
- Assess whether or not the mother has any IF and/or PMTCT questions, concerns, or difficulties.

Routine postpartum visit

- At 6 weeks after delivery, encourage mother-infant pair visit to clinic.
- General health assessment, including Pap Smear, if not routinely done during antenatal care.
- TB symptom screening and IPT adherence or initiation, if indicated.
- Review CD4 count and clinical staging in HIV-infected women.
- Discuss family planning options.
- Reassess partner and family support, and when or if she plans to return to work, and if she plans to change her infant feeding practices.
- Reinforce the importance of exclusive breast feeding for the first 6 months, no mixed feeding, breast health, infant follow-up appointments, and breast feeding support groups.
- Introduce the topic of complementary feeding so the mother is prepared to start introducing other foods at 6 months.
- Assess whether or not the mother has any IF and/or PMTCT questions, concerns, or difficulties.

Late postpartum visit

- At 6 months after delivery, re-assess the ongoing health of the HIV-infected mother.
- Review Hb, WHO clinical staging, CD4 count, and TB symptom screening.
- Counsel on family planning and contraception use.
- Assess adherence to ARV treatment if appropriate.
- Review and counsel on infant feeding options.
- Assess psychosocial needs.
- Assess whether or not the mother has any IF and/or PMTCT questions, concerns, or difficulties.

Nutrition counselling

- Women receiving HIV-related medications require counselling on nutritional needs, in order to successfully manage side effects and avoid nutrition-related complications.
- Emphasise importance of cleanliness during food preparation and storage.
- Counsel on adequate nutrition, exercise, rest, good hygiene practices, and abstinence from harmful habits such as smoking, alcohol and drug abuse support overall health and improve immune function.

Psychosocial support

- Regular monitoring of mental health and psychosocial support needs are critical at all stages of HIV infection. The following services should be offered directly or by referral:
  - Support to help the woman come to terms with her diagnosis.
  - Psychosocial support for the mother and for the infant who is exposed to HIV, in cases when the infant's HIV status is uncertain and when a positive diagnosis is made.

- Community support, including referrals to community-based and faith-based programmes.
- Peer support from health agencies or NGOs.
- Support and counselling to assist women who are HIV-infected and their partners with disclosure issues.

Faith-based support

- Faith-based involvement provides mothers who are HIV-infected with spiritual and psychosocial support. It also may provide them with an important sense of belonging to a larger community that offers them compassionate care. In many programmes, faith-based organisations are providing comprehensive treatment, care, and support services.

Home-based support

- In many resource-limited settings, home-based care provides services to PLHIV when hospital and outpatient services are expensive or not accessible. The advantages of home-based care for clients and families, and for communities and the healthcare system include:
  - Care is provided in a familiar, supportive environment that allows for continued participation in family matters.
  - Medical expenses are reduced.
  - The local community is involved in caring for PLHIV, which may help counter myths and misconceptions.
  - The burden on the healthcare system is eased.

Session 5.2 Teaching, Mentoring, and Skills Transfer

Total Session Time: 85 minutes (1 hour and 25 minutes)

Trainer Instructions

Step 1: Review the session objective with participants.

Session Objective

After completing this session, participants will be able to:

- Apply knowledge of PMTCT care to specific case studies.

Trainer Instructions

Step 2: Lead participants through Exercise 1, which will give an opportunity to apply their knowledge of PMTCT care to specific case studies.

Exercise 1: PMTCT Continuum of Care: Case studies and large group discussion	
Purpose	• To review key components PMTCT services for HIV-infected women, by applying participants' knowledge of PMTCT care to specific clinical challenges in the context of case studies
Duration	60 minutes
Advance Preparation	• Review the case studies and suggested answers before the training, and adapt as needed
Introduction	Remind participants about their case study community from the previous modules. The purpose of this exercise is to follow one of the case study characters through the antenatal, labour and delivery, and post partum stages of PMTCT, so that participants can apply their knowledge of PMTCT care and services.
Activities	**Case Studies and Large Group Discussion** 1. Ask participants to review the case studies in their Participant Manuals. 2. Ask a participant to read the first case study and the associated questions. 3. Allow time for the large group to comment on and

	contribute to responses to the questions. 4. Record key points on a flip chart. Make any additions or corrections as needed. 5. Continue with discussion of the remaining case studies.
Debriefing	• Mothers living with HIV and their infants need ongoing and comprehensive clinical and psychosocial: to assist them in adhering to care as well as to their own and their infants' care and treatment regimens. • Without this support, many women and infants will be "lost" in the postpartum period. • Remind the group that PMTCT skill building takes time and lots of experience. Encourage participants to continue to share their knowledge and experiences with each other.

Exercise 1: PMTCT Continuum of Care: Case studies and large group discussion

Case Study 1:

S___'s daughter, T___, is a 22-year-old woman who tested HIV-positive at her first antenatal visit at 3 months gestation. During that visit, she received HIV post-test counseling, was assessed at WHO clinical stage 1, was asked to return to the clinic in 1 week, and was encouraged to bring her partner in for testing. At today's visit, she is 26 weeks pregnant. She arrived alone, without her partner. Upon questioning, it becomes clear that not only did she miss her follow up appointment, but she also has not told her partner her test results. Her lab results indicate a CD4 count of 450. She has no history of any other health-related problems. This is her first child.

- *What are the basic ANC management steps that should be taken?*
- *What specific HIV-related care does T___ need?*
- *What might be some of T___'s psychosocial needs?*
- *When would you ask her to come back to the clinic?*

Key point for trainers: Case Study 1

What are the basic ANC management steps that should be taken?

- Encourage participants to note that most components of basic ANC are the same for all women (physical exam, STI and TB screening), while others differ depending on HIV status.

What specific HIV-related care does T___ need?

T___ will need the following care during this and subsequent visits:

- Review her WHO clinical stage to ensure there are no changes from the initial visit.
- Ask why she did not return for her follow up. Ask what we can do to help her return for all of her visits in the future.
- Counsel her on the factors that may increase risk of HIV transmission

her baby.
- Counsel on ARV prophylaxis (which would have been discussed during her first visit).
- Ask about adherence to ARV prophylaxis. Given that she didn't return for her follow up, suspect that she may not be adhering to her regimen (adherence to follow up appointments and adherence to ARV regimen often — but not always — go hand in hand).
- Counsel on the infant feeding counselling and support and ask what questions she has about infant feeding. Ask how she plans to feed her baby.
- Educate about common infections in women living with HIV.
- Conduct physical exam to rule out presence of an infection.
- Discuss partner testing and counselling.

What might be some of T___'s psychosocial needs?
- Ask T___ whom she has told about her HIV test result. Ask what she told her partner. If it is true that she hasn't told her partner that she is HIV-infected, ask why.
- Provide support around the underlying issues that arise as T___ discusses her relationship.
- Provide support for disclosure, if disclosure is considered safe.
- Ask what support T___ has from family and friends. Identify her support needs and provide her with referrals to meet her psychosocial needs.
- Refer T___ to mothers support group if available.

When would you ask her to come back to the clinic?
- T___ should return to the clinic for her 32-week visit (in 6 weeks time).

Case Study 2:
T___ expects to give birth next month. She tells you, despite your counseling, that she does not want to breastfeed because she is afraid of giving her baby HIV. However, her boyfriend is putting pressure on her to breastfeed, because he is afraid of his family's reaction if she doesn't. How do you proceed with T___?

Key point for trainers: Case Study 2

- Provide further infant feeding counselling and support to address her specific concerns.
- Discuss the importance of exclusive breastfeeding and why it is recommended for all women, including those who are HIV-infected.
- Remember that T___ has the right to choose to formula feed.
- If she still wants to formula feed, make sure she understands the importance of formula feeding exclusively (and not breastfeeding at all). Ensure T___ understands the risk of mixed feeding and can respond to family or friends who recommend that she introduce foods

or liquids before 6 months.

- Ask the following questions to help T__ assess the safety of formula feeding:
  - *Do you have access to enough clean water and soap to wash your hands thoroughly before preparing the baby's feeds?*
  - *How much money can you afford for formula each month?*
  - *Do you have money for transportation to get replacement feeds when you run out?*
  - *Can you sterilise feeding equipment and utensils such as bottles, teats, measuring and mixing spoons?*
  - *Is your partner supportive of formula feeding and is he willing to help? How about your mother-in-law? Other responsible family members?*
  - *Will all caregivers be able to prepare the feeds safely and correctly?*
- Ensure that she knows how to make infant formula correctly and hygienically; demonstrate and give her time to practice while you observe her.

Case Study 3:

Two weeks later, T___ gives birth to twin daughters. They are born prematurely, weighing only 1.6kg and 1.8 kg at birth.

- *What HIV-specific care do T___'s infants require at birth and after birth?*
- *What general postpartum care does T___ require?*
- *What can you accomplish with T___ and her infants before she leaves the facility in 12 hours?*

Key point for trainers: Case Study 3

What HIV-specific care do T___'s infants require at birth and after birth?

Immediate newborn care for infants born to mothers living with HIV should include actions that reduce the risks of MTCT and also minimise the risk of occupational exposure to bloody maternal and/or infant fluids, including:

- Initiate infant ARV prophylaxis, according to mother's ARVs and infant feeding choice.
- Assessment of infant feeding and support to exclusively breastfeed for the first 6 months of life.
- Scheduling of regular clinic appointments for follow-up care.
- HIV testing according to national guidelines.
- Immunisations.
- Monitoring of growth and development.
- Monitoring for TB exposure.
- Monitoring for any clinical signs or symptoms of HIV.
- Cotrimoxazole prophylaxis starting at 6 weeks of age.
- Close follow-up.

What general postpartum care does T___ require?

- Education on signs and symptoms of postpartum infection and other complications; how and when to seek care for signs or symptoms.
- Education on perineal and breast care and disposal of potentially infectious materials such as blood-stained sanitary pads.
- Advice on family planning and sexual activity in the postpartum period.
- Appointments for general postpartum care.
- Continued adherence and psychosocial support.

What can you accomplish with T___ and her infants before she leaves the facility in 12 hours?

- Provide additional counselling and support for safe infant feeding. Ensure T___ confident in their infant feeding choice and can demonstrate how to feed their infants.
- Make sure T___ is able to administer the infant ARV prophylaxis regimen.
- Counsel T___ on the importance of completing the full infant ARV prophylaxis regimen (e.g. NVP).
- Ensure T___ has a supply for the full course or know where to obtain the medication.

Trainer Instructions

Step 3: Allow 5 minutes for questions and answers on this session.

Session 5.3 Additional Learning Activities and Resources

Total Session Time: 15 minutes

Trainer Instructions

Step 1: Review the session objective listed below.

Session Objective

After completing this session, participants will be able to:

- Describe independent and supplemental learning activities for the module.

Trainer Instructions

Step 2: Review the independent learning activities suggested for this module using the content below.

Independent Learning Activities

Ask participants to work in small groups and review the following documents:

- WHO. 2010. *Antiretroviral drugs for treating pregnant women and preventing HIV infections in infants*, 2010 revision.
- WHO. 2010. *Guidelines on HIV and infant feeding 2010 Principles and recommendations for infant feeding in the context of HIV and a summary of evidence.*
- WHO. 2006. *IMAI Chronic HIV Care with ARV Therapy and Prevention*, *Draft.*

Then, ask participants to choose one or more of the following learning activities:

- Co-facilitate or assist with an infant feeding or peer support group for HIV-infected pregnant women at your clinic, to get a better understanding of their needs and expectations of HIV care and treatment. Summarize what you learned in a brief paper and present it at the next training session.
- Conduct a lunchtime training with other members of the multidisciplinary team about safe infant feeding practices, and:

    - *Discuss counselling strategies for providers to use to help mothers successfully breastfeed.*
    - *Discuss breastfeeding and infant feeding counselling opportunities.*
    - *Provide an outline of the feeding messages and when to discuss them with mothers.*
- Create a health poster for your clinic, which communicates key facts and messages around PMTCT for mothers in your community.

Session 5.4 Action Planning

Total Session Time: 90 minutes (1 hour and 30 minutes)

Trainer Instructions

Step 1: Review the session objective listed below.

Session Objective

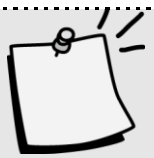
After completing this session, participants will be able to:

- Develop a site-specific action plan to overcome barriers to PMTCT services in their specific clinics.

Trainer Instructions

Step 2: Tell participants that we have learned a great deal about PMTCT services for pregnant and postpartum women and their children. Explain that, in this session, participants will problem-solve about some systems barriers to providing PMTCT services in their specific clinics.

Briefly review **Key Points for Supporting PMTCT Activities**, using content below.



Make These Points

- When thinking about how to better support and integrate basic PMTCT services for HIV-infected women within clinic settings, nurse mentors and educators should keep 3 key standards in mind:
  - *Every health facility, to the best of its ability, should have systems in place to identify HIV-infected women and infants.*
  - *Every health facility, to the best of its ability, should have systems in place to ensure all pregnant and postpartum women living with HIV have clear and correct information about PMTCT services.*
  - *Every health facility, to the best of its ability, should have systems in place to retain pregnant and postpartum women living with HIV and their infants in care.*

Key Points for Supporting PMTCT Activities

Most infant HIV infections can be averted. PMTCT is one of the most effective ways to prevent perinatal transmission of HIV, yet pediatric HIV still remains an uncontrolled epidemic in some countries. When thinking about how to better support and integrate basic PMTCT services for HIV-infected women within their clinic settings, nurse mentors and educators should keep 3 key standards in mind:

- Every health facility, to the best of its ability, should have systems in place to identify HIV-infected women and infants.
- Every health facility, to the best of its ability, should have systems in place to ensure all pregnant and postpartum women living with HIV have clear and correct information about their own and their baby's PMTCT care plan.
- Every health facility, to the best of its ability, should have systems in place to retain pregnant and postpartum women living with HIV and their infants in care.

Trainer Instructions

Step 3: Lead participants through Exercise 2, which will give an opportunity to think about some systems barriers to PMTCT and to develop a site-specific action plan to overcome them.

Exercise 2: Overcoming Challenges to PMTCT: Small group work and large group discussion	
Purpose	• To develop a site-specific action plan addressing some of the systemic barriers to effective PMTCT services
Duration	45 minutes
Advance Preparation	• None required
Introduction	Most infant HIV infections can be averted. PMTCT is one of the most effective ways to prevent perinatal transmission of HIV, yet pediatric HIV still remains an uncontrolled epidemic in some countries. This exercise will allow participants to brainstorm about barriers to providing effective PMTCT services at their clinics and then develop a site-specific action plan to address these barriers.
Activities	**Part 1: Small Group Work** 1. Break participants into small groups of 4-5 individuals each. Participants from the same clinic should work together. *2.* Ask participants to refer to *Appendix 5C: Action Plan Worksheet* during this exercise. 3. Ask each group to reflect on the PMTCT program in their local setting. 4. Ask groups to answer the following questions:

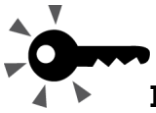
	• *Which components of your PMTCT programs do you think are the most effective, by preventing the greatest number of cases of HIV in infant?* • *What challenges exist at your workplace or in the community that make implementation or delivery of PMTCT services difficult?* • *What are the main program barriers at your clinic? (e.g. integration of ANC services, staff shortages, lack of funding, attitudes of staff, stigma, limited supplies)* 5. Ask each group to brainstorm about the main programme or systems barriers to PMTCT service delivery in their clinics. 6. Ask the groups to think of a solution that nurse mentors and educators might be able to implement, in response to each barrier or problem. Ask participants: • *What will we do about this barrier or problem?* • *What do we want to achieve?* 7. Remind participants that good solutions are "SMART," or: • **Specific:** It addresses the matter specifically • **Measurable**: It can be measured to determine whether it has been achieved. • **Achievable:** It is within the means and capacity of your group. • **Realistic:** It is practical and can be accomplished within a reasonable time frame. • **Time-bound:** The time period for reaching it is clearly specified. 8. Ask the groups to list 1-3 specific strategies, activities, or "next steps" to achieve each solution. 9. For each activity, ask the groups to answer the following questions: • *Who is responsible for this activity?* • *When will you be able to implement this activity?* • *What kind of support or resources (including funds) do you need in order to achieve this activity?* • *Any other comments to note about this activity or strategy?* 10. Groups should use *Appendix 5C: Action Plan Worksheet* to record their plans. 11. The trainer should circulate between the small groups during the discussion to respond to questions. **Part 2: Large Group Discussion** 12. Each group has 5 minutes for presenting their plans to the larger group. 13. After each group presents, ask other participants if they have other solutions that were not listed.

Debriefing	• There are many barriers in implementing PMTCT at all levels that need to be addressed to ensure program effectiveness. Many of the barriers are systemic in nature and relate to the functioning of the health care system in general as opposed to the functioning of PMTCT program specifically. • Nurse mentors can use action planning with their mentees and other members of the multidisciplinary care team to problem solve about overcoming some of these challenges.

Trainer Instructions

Step 4: Allow five minutes for questions and answers on this session.

Step 5: Summarise this module by reviewing the key points in the box below.



Module 5: Key Points

- Mother-to-child transmission of HIV (MTCT) is the transmission of HIV from an infected mother to her baby during pregnancy, labour, delivery and breastfeeding. MTCT is also referred to as ''vertical transmission'' or ''perinatal transmission''. MTCT can occur during:
  - Pregnancy
  - Labour and delivery
  - Breastfeeding
- PMTCT is a term used to describe a package of services intended to reduce the risk of MTCT.
- Key concepts in the WHO PMTCT protocol guidelines include the following:
  - Keep mothers healthy — the higher her CD4 cell count the less likely her infant will be HIV infected
  - Reduce risk at every stage — pregnancy, labour, delivery and during breastfeeding
  - All mothers need ARVs — mothers with CD4 cell count below 350 are eligible for lifelong ART, those with CD4 cell count above 350 should get ARVs during pregnancy
- Key PMTCT Updates for 2010 are:
  - **Earlier diagnosis and treatment of HIV with ART:** CD4 ≤ 350, Stage III, IV*
  - **Prophylaxis started earlier and longer duration:** Regimens initiated at 14 weeks gestation and continued throughout duration of breastfeeding
  - **Safer infant feeding practices to maximize HIV-free survival:** Exclusive breastfeeding for 6 months, with breastfeeding continued through 12 months in the presence of maternal/infant prophylaxis
- All women attending ANC should routinely be given information and education about HIV, HIV testing, and the PMTCT programme. For many women, the offer of HIV counselling and testing during ANC will be the first time they are faced with deciding whether they want to know their HIV status.
- Women with HIV need ongoing practical, psychosocial, and adherence support: to assist them in adhering to care as well as to their own and their infants' ARV regimens.
- Infants who are HIV-exposed require follow-up care to monitor growth and development, immunisations, and prophylaxis for infections.
- Dried Blood Spot (DBS) procedure is a simple, safe, and cost effective way to collect specimens for infant HIV PCR testing.
- Every health facility, to the best of its ability, should have systems in place to identify HIV-infected women and infants, to ensure all pregnant and postpartum women living with HIV have clear and correct information about PMTCT services, and to retain these women and their infants in care.

Appendix 5A: ARV Protocols for Pregnant Women with HIV and their Infants

Clinical Decision	Regimen for Woman	Regimen for Infant
ARV therapy: CD4 count ≤ 350/mm or WHO stage III or IV	• **AZT + 3TC + NVP** **OR** • **TDF + 3TC/FTC + NVP** • Ensure serum creatinine is at least 50ml before starting TDF. • Ensure ALT is less than 100 before starting NVP. • Begin at any gestation. • After the first trimester, if woman develops NVP-associated toxicity, then NVP should be substituted with EFV.	NVP or twice daily AZT at birth and then daily for six weeks irrespective of infant feeding choice.
Already on ARV therapy before pregnancy	• Continue with treatment as per 2010 WHO Guidelines: through labour, delivery, and postnatal periods. • EFV-based regimen: if presenting in first 12 weeks of pregnancy, substitute EFV with NVP. If presenting after the first trimester continue with EFV-containing regimen and provide adverse event monitoring, including foetal anomaly scans where available. • d4T-based regimen: remain on d4T if well tolerated. Switch if toxicity is experienced or if at high risk of toxicity (high BMI, low Hb, older female).	
Contraindication to TDF (renal disease)	• **AZT + 3TC + NVP**	
ARV prophylaxis: CD4 count >350/mm^3 *	• Start AZT from 14 weeks or as soon as possible thereafter	Provide as soon as possible after birth: • **Breastfed infants**: Daily

	AND, during labour give: • **Single dose NVP** (if in false labour, do NOT repeat dose of NVP) • **TDF + FTC** as a single dose together with single dose NVP * • **AZT** 3-hourly * TDF + FTC may be given after delivery, but only if single dose NVP was given during labour and TDF + FTC was omitted at that time. If single dose NVP was not given during labour, do not give TDF + FTC.	NVP at birth or twice daily AZT until one week after complete cessation of breastfeeding • **Formula fed infants**: Daily NVP at birth or twice daily AZT for 6 weeks
* If a woman is started on ARV prophylaxis and her CD4 count later indicates the need for ARV therapy (CD4 count ≤350), initiate ARV therapy. Discontinue AZT immediately prior to starting ARV therapy.		
Unbooked woman of unknown status presents in labour (Also applies to women of known HIV-positive status who have had no ARVs during pregnancy, although these women do not require HIV counselling and testing)		
If in stage 1 labour, routinely offer HIV counselling and testing. If in advanced labour, defer HIV counselling and testing until after delivery	If HIV-positive, administer the following during labour: • **Single dose of NVP** (if in false labour, do NOT give a second dose as this has the potential to cause drug resistance). • **TDF + FTC** as a single dose together with single dose NVP * • **AZT** 3-hourly * TDF + FTC may be given after delivery, but only if single dose NVP was given during labour and TDF + FTC was omitted at that time. If single dose NVP was not given during labour, do not give TDF + FTC.	Provide as soon as possible after birth: • **Breastfed infants**: NVP at birth and then daily until one week after complete cessation of breastfeeding • **Formula fed infants**: NVP at birth and then daily for 6 weeks

Source: François Xavier Bagnoud (FXB) Center. 2010. *Comprehensive Paediatric HIV Care & Treatment Training Series: Module 2,* South to South Partnership for Comprehensive Family HIV Care and Treatment Program (S2S).

Appendix 5B: ARV Dosing Guide (Adult and Infant)

ARV Dosing Guide for Adults

Drug	Dosage (ARV therapy, only)	Notes
3TC (Lamivudine)	150mg 12-hourly po OR 300mg daily	
AZT (Zidovudine)	300mg 12-hourly po (dosage is the same for women on ARV prophylaxis except that frequency is increased to 3-hourly during labour)	Avoid if severe anaemia (Hb < 8g/dl). For pregnant women eligible for ARV prophylaxis, consider replacing AZT with TDF 300mg daily (remember to follow creatinin clearance at baseline and at 3 and 6 months).
d4T (Stavudine)	30mg 12-hourly po	All adult patients must receive 30mg regardless of weight
EFV (Efavirenz)	600mg nocte po	Avoid during first trimester of pregnancy and if psychiatric conditions are present
FTC (Emtricitabine)	200mg daily	Generally well tolerated.
NVP (Nevirapine)	200mg daily po X two weeks then 200mg 12-hourly po For PMTCT purposes, single-dose NVP given as 200mg tablet one time along with TDF + FTC.	Should be used with caution with TB treatment Contraindicated if ALT raised >100. Repeat ALT at 2,4,8 and 12 weeks, and anytime thereafter if hepatitis symptoms occur.
TDF (Tenofovir)	300mg daily	Contraindicated in creatinine clearance of <50ml/min. Check creatinine clearance at 3 months, then at 6 months.
po = by mouth nocte = every night/bedtime		
Truvada	Emtricitabine (FTC)+ Tenofovir DF (TDF)	
Atripla	Emtricitabine (FTC)+ Tenofovir DF (TDF) + Efavirenz (EFV)	

Nevirapine Infant Dosing Guide

Drug	Age	Weight	Dose	Quantity
NVP syrup (10mg/ml)	Birth to 6 weeks	< 2.5 kg birth weight	10mg/d	1ml
	Birth to 6 weeks	≥ 2.5 kg birth weight	15mg/d	1.5ml
	6 weeks to 6 months	All infants	20mg/d	2ml
	6 months to 9 months	All infants	30mg/d	3ml
	9 months to end of breastfeeding	All infants/children	40mg/d	4ml

Cotrimoxazole Infant Dosing Guide

Age or weight of child	Dose	Suspension 5ml 200mgSMX 40mg TMP	Single strength tablet 400mg SMX 80 mg TMP	Double strength tablet 800mg SMX 160 mg TMP
<6 months Or <5 kg	100mg SMX 20mg TMP	2.5 ml	¼ tablet	-
6 months–5 years Or 5–15 kg	200mg SMX 40mg TMP	5 ml	½ tablet	-
6–15 years Or 15–30kg	400mg SMX 80mg TMP	10 ml	1 tablet	½ tablet
> 14 years Or > 30 kg	800mg SMX 160mg TMP	-	2 tablets	1 tablet.

Source: François Xavier Bagnoud (FXB) Center. 2010. *Comprehensive Paediatric HIV Care & Treatment Training Series: Module 2,* South to South Partnership for Comprehensive Family HIV Care and Treatment Program (S2S).

Appendix 5C: Action Plan Worksheet

What is the problem?	What is your solution to this problem?	What are your strategies, activities, or "next steps" to achieve the solution?	What is your timeframe?	What resources or support are needed?	Comments
		1.			
		2.			
		3.			
		1.			
		2.			
		3.			
		1.			
		2.			
		3.			

References and Resources

None for this module.

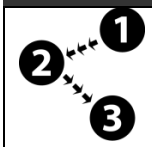
Module 6 Paediatric HIV

Total Module Time: 270 minutes (4 hours and 30 minutes)

Learning Objectives

After completing this module, participants will be able to:

- Discuss the importance of early diagnosis of HIV infection in children.
- Review routine care and treatment procedures for HIV-infected children.
- List ART eligibility criteria and recommended first-line ART regimens for HIV-infected children.
- Review basic principles of adherence and psychosocial support for HIV-infected children and their caregivers.
- List recommended first-line ART regimens for HIV-infected children.
- Discuss the role of nurses in supporting caregivers with disclosure of their child's HIV status.
- Describe alternative and supplemental learning activities for the module.
- Apply their knowledge of paediatric care to specific case studies.
- Develop a site-specific action plan to overcome mentoring and systems barriers to providing quality paediatric care to HIV-infected children at their clinics.

Methodologies	
	• Interactive trainer presentation • Small group work • Large group discussion • Case studies • Role play

Materials Needed	
	• Attendance sheet for Module 6 • Flip chart and markers • Tape or Bostik • Participants should have their Participant Manuals. The Participant Manual contains background technical content and information for the exercises. • Extra copies of *Appendix 6D: Action Plan Worksheet* (several per group, in case participants need extra copies) • Electronic version of *Appendix 6D: Action Plan Worksheet* on flash drive so that participants with laptop computers can work in the electronic version rather than on paper.

References and Resources	
	• Anova Health Institute., 2011. *Kids Count: Guide for Trainers.* • François Xavier Bagnoud (FXB) Center. 2010. *Comprehensive Paediatric HIV Care & Treatment Training Series: Module 6,* South to South Partnership for Comprehensive Family HIV Care and Treatment Program (S2S). • Republic of Zambia, Ministry of Health. (2010). *National Training Package on Provider-Initiated Paediatric HIV Testing & Counselling in Zambia*. • World Health Organization. 2010. *Antiretroviral therapy for HIV infection in infants and children. Recommendations for a public health approach. 2010 revision.* • World Health Organization. 2008. *A systematic review of the effectiveness of shortening Integrated Management of Childhood Illness guidelines training.* WHO.

Advance Preparation	
	• Make sure you have all of the materials listed in "Materials Needed" on the first page. • Prepare the attendance sheet in advance and ask participants to sign in as they arrive for the 6th session of training. • Read through the entire module and ensure that all trainers are prepared and comfortable with the content and methodologies. • Review the appendices and ensure all trainers are comfortable using them and integrating them into the module. • Review any applicable national guidelines ahead of time and prepare to incorporate them into the discussion. • Exercise 1 requires advance preparation by the trainer. Please review these exercises ahead of time.

Session 6.1: Review of Key Competencies and Key Updates for Paediatric HIV

Activity/Method	Time
Interactive trainer presentation and large group discussion	75 minutes
Questions and answers	5 minutes
Total Session Time	80 minutes

Session 6.2: Teaching, Coaching, and Skills Transfer

Activity/Method	Time
Interactive trainer presentation and large group discussion	20 minutes
Exercise 1: Paediatric HIV: Case studies, with large group discussion and role play	60 minutes
Questions and answers	5 minutes
Total Session Time	85 minutes

Session 6.3: Additional Learning Activities and Resources

Activity/Method	Time
Interactive trainer presentation and large group discussion	10 minutes
Questions and answers	5 minutes
Total Session Time	15 minutes

Session 6.4: Action Planning

Activity/Method	Time
Interactive trainer presentation and large group discussion	15 minutes
Exercise 2: Overcoming Systems and Mentoring Challenges with Paediatric HIV: Small group work and large group discussion	60 minutes
Questions and answers	5 minutes
Review of key points	10 minutes
Total Session Time	90 minutes

Session 6.1 Review of Key Competencies and Key Updates for Paediatric HIV

Total Session Time: 80 minutes (1 hour and 20 minutes)

Trainer Instructions

Step 1: Review the session objectives, listed below.

Step 2: Ask participants if they have any questions before moving on.

Session Objectives

After completing this session, participants will be able to:

- Discuss the importance of early diagnosis of HIV infection in children.
- Review routine care and treatment procedures for HIV-infected children.
- List ART eligibility criteria and recommended first-line ART regimens for HIV-infected children.
- Review basic principles of adherence and psychosocial support for HIV-infected children and their caregivers.
- List recommended first-line ART regimens for HIV-infected children.
- Discuss the role of nurses in supporting caregivers with disclosure of their child's HIV status.

Trainer Instructions

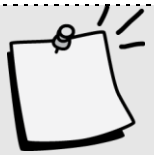
Step 3: Begin by asking participants to share some of their fears, anxieties, hopes, and goals regarding providing paediatric HIV clinical care and teaching these skills to their mentees. Remind the group that confidence and competence with paediatric care and treatment takes time and lots of experience. Encourage participants to share their knowledge and experiences with each other.

Step 4: Continue by explaining that there are primarily 2 subgroups of children infected with HIV: children infected through parent-to-child transmission (perinatal transmission) and children who have contracted HIV through:

- High-risk activity such as multiple sex partners, lack of

condom use, or injection drug use.
- Sexual abuse
- Blood transfusion, or use of un-sterile needles

Ask participants:
- *Do you have experience caring for children with HIV infection?*
- *How is the clinical management of children different than adults?*
- *What are some differences in the way children and adults present with HIV?*



Make These Points

- Children have unique needs. They are physically, developmentally, and psychologically different than adults, and should be managed and treated differently.
- Diagnosis of HIV is more difficult in young children. A different staging system for children than adults must be used.
- The child is dependent on the family for care; a healthy, informed caregiver is critical to the health of the child. The caregiver needs guidance and support from the healthcare worker; likewise, the healthcare worker needs information from caregivers.
- The family-centred approach to care acknowledges that the best health outcomes occur when clinicians recognise that the family is central to supporting the health of the child.
- Nurses who have little or no experience caring for children are often anxious about providing paediatric care. This is reasonable and justifiable, since children are not simply miniature adults.
- Knowledge and skills for providing paediatric health care can be learned and confidence developed. Comprehensive training combines interactive classroom learning with guided clinical experiences and ongoing support and mentoring.

Overview of Paediatrics

The following are some key differences between adults and children relevant to health and health care.

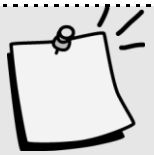
- Children have unique anatomic, physiologic, immunologic, developmental and psychological attributes that affect the nurse's approach to assessment, care and treatment.
- Unlike adults, key aspects of paediatric care include monitoring of growth and development.
- Children are dependent upon adults, yet have a right to participate in their care at a level that is appropriate to their development.

- The family-centred approach to care acknowledges that the best health outcomes occur when clinicians recognise that the family is central to supporting the health of the child.
- Nurses who are inexperienced in providing paediatric care may feel overwhelmed or fearful of assuming responsibility for the care of children. Facts must be combined with the development of specific skills ↓ such as physical examination and developmental assessment ↓ that must be practiced in the clinical setting under the guidance of an experienced mentor.

Trainer Instructions

Step 5: Discuss some of the key considerations of HIV testing in children, including the differences between testing adults and testing children. Ask participants:

- *What are some of the benefits of knowing a child's HIV status as early as possible?*
- *What are some of the most important factors to consider when testing children for HIV?*



Make These Points

- The goal of paediatric HIV testing and counselling is to identify HIV-exposed and HIV-infected children as soon as possible so that they may be engaged in life-saving care and treatment.
- Early access to HIV care and treatment can delay disease progression, improve health and prevent death in children.
- Regardless of the child's age, paediatric PITC begins with the pre-test session during which caregivers are asked to consent to the HIV testing of their child.
- All children of unknown HIV-exposure status are first tested with an HIV antibody test, regardless of age. Final determination of HIV status may require additional testing, depending on the child's age and breastfeeding status.
- For children who are known to be HIV-exposed, conduct DNA PCR testing if the child is less than 18 months of age. If the child is 18 months of age or older, use HIV antibody testing.
- Nurses should follow national algorithms for diagnosis carefully to ensure an accurate determination of the child's HIV status.
- Provide all caregivers with post-test counselling, regardless of the test results. All children who are HIV-exposed or HIV-infected must be referred for life-saving care and treatment, including ART if eligible.

The Importance of Early Diagnosis of HIV in Children[1]

As discussed in Module 5, most HIV infection in children results from mother-to-child transmission of HIV, which can occur during pregnancy, labour and delivery, or breastfeeding. There are many interventions to reduce the risk of MTCT. There are also many things we can do to care for children who are HIV-infected.

It is crucial to diagnose HIV infection in children **as early as possible — ideally in infancy —** to prevent death, illness and growth and developmental delays. Children with HIV infection should begin ART as soon as possible to prevent or limit disease progression.

The goal of diagnosing children as early as possible is to identify HIV-exposed and HIV-infected children and engage them in life-saving care. Early access to HIV care and treatment can delay or limit disease progression, improve health and prevent death.

Considerations for Paediatric HIV Testing

Diagnosing HIV infection in children is somewhat different than diagnosing HIV infection in adults.

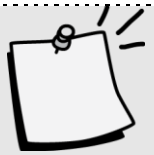
- While many of the same tests and procedures for HIV testing and counselling in children are used in adults, such as pre- and post-test counselling and rapid HIV antibody tests, there are a number of differences in how these tests and procedures are used and interpreted. These differences are discussed in more depth below.
- Paediatric HIV testing requires the participation and cooperation of the caregiver(s), who may also be living with HIV and coping with his or her own illness. Caregivers may become worried and anxious when children are sick; mothers may have guilt about the possibility that they passed HIV to their child.
- Identifying HIV early in life is even more critical in children than in adults given their fast disease progression and high mortality rates.
- HIV testing in children less than 18 months of age or in those who are still breastfeeding is not a one-time event. Instead, HIV testing and counselling in children less than 18 months is an ongoing process that may require the child to be tested multiple times.
- HIV infection cannot be excluded in breastfeeding children (of any age) because they continue to be at risk of acquiring HIV infection through breast milk if the mother is herself living with HIV.

Trainer Instructions

Step 6: Ask participants:

- *What are the key components in the care package for HIV-infected children who are not yet on ART?*
- *What are the key components in the care package for HIV-infected children who are on ART?*

Review the checklists in **Table 6.1: Care package for HIV-infected children NOT on ART** and **Table 6.2: Care package for HIV-infected children on ART** with participants, which provide an overview of the basic components of care for HIV-infected children.



Make These Points

- Growth is a sensitive indicator of child health and growth faltering is common in children living with HIV. For children known to be HIV-infected, growth faltering may be a sign of disease progression. This may signal a need to initiate or change ARV therapy.
- Developmental delay is common in children with untreated HIV disease. A child of unknown HIV status with developmental delay should have an HIV test as part of the evaluation.
- Routine assessment is referred to as "developmental surveillance"; it is critical to early recognition of abnormalities. Attention to developmental progress also informs discussion with caregivers on how best to support a child's development and how to assess any perceived abnormalities.
- In addition to growth monitoring, the care package for HIV-infected children includes routine physical examinations, preventative health care (e.g. immunisations), CTX prophylaxis, TB screening and prevention, ongoing assessment of ART eligibility or adherence, psychosocial support for the child and caregiver, and overall family-centred support.
- More detailed and specific information about caring for children with chronic illness, such as HIV, may be obtained from the national *Guidelines for the Management of HIV-infected Children* and the *Integrated Management of Childhood Illnesses* manuals produced by the World Health Organization.

Care Package for HIV-Infected Children

The following information captures the general areas that should be covered to ensure comprehensive care of HIV-exposed and HIV-infected children. More detailed and specific information may be obtained from the national *Guidelines for the Management of HIV-infected Children* and the *Integrated Management of Childhood Illnesses* manuals produced by the World Health Organization.

Monitor (and record) the child's growth and development

- Growth progression is one of the best indicators of any infant's overall health. Growth failure is a sensitive marker of HIV infection; it affects up to 50 percent of infected infants and children In general, under nutrition and malnutrition affect the infant's immune system and make the infant more susceptible to infections (e.g., ear infections, pneumonia, diarrhoea) and death. After every acute infection the infant requires extra calories to help the healing and repair process.
- Routine performance of and attention to a developmental assessment is a critical part of the assessment of a child. Nurses can d can use *Appendix 6A: Developmental Checklist*, as a basic assessment tool for developmental milestones.

Physical exam assessment

- A routine physical exam (see Table 6.1 for specific exam components) should always be conducted at the initial visit and as clinically indicated.
- If the patient is new to the health facility, it is important to obtain a comprehensive medical history, including information about the ARV prophylaxis the mother and infant received, mode of delivery, complications, and birth weight, specifics about the home environment, family medical history.

Ensure that immunisations are started and completed according to the recommended schedule

All HIV-exposed or -infected children should undergo the recommended immunisations according to the national EPI programme with the exception of:

- BCG vaccination should not be given to symptomatic HIV-exposed or HIV-infected infants.
- Because of the increased risk of early and severe measles infection, HIV-exposed children who are not severely immunocompromised should receive a dose of standard measles vaccine at 6 months of age with a second dose as soon after the age of 9 months as possible.
- However, children who are severely immunosuppressed (based on age-specific CD4 count) due to HIV infection should not receive measles vaccine until immunological improvement is observed.

Opportunistic infection prophylaxis

CTX prophylaxis has been shown to prevent PCP, toxoplasmosis, possibly malaria and some causes of diarrhoea as well as other infections. PCP is a leading cause of death in HIV-infected children. PCP often strikes children between the ages of three and six months.

HIV-infected children and those whose HIV status have not yet been determined should be given CTX according to the national guidelines. CTX prophylaxis should be initiated in:

- All HIV-exposed children starting at 6weeks (or as soon as possible

thereafter) until the child has been determined to not have HIV.
- All HIV-infected children less than 12 months old, regardless of CD4% or clinical status.
- All children between 12 months and four years old in WHO clinical stage 2, 3 or 4 regardless of CD4%.
- All children who have had an episode of PCP.

TB screening and prevention

When screening for exposure to TB, the most important question to ask is has the infant had close contact within the past 12 months with an adolescent or adult with sputum-positive TB. See Table 6.1 for specific screening criteria.

- Typically, any infant who screens positive for TB infection should undergo further diagnostic evaluation with chest X-ray (CXR), TST, sputum culture or gastric aspirate for AFB, and lymph node fine needle aspiration or biopsy (in the case of a neck mass) to aid in diagnosis. However, many sites do not have this capability.
- In cases where the child does not have TB disease, but may be at high risk for developing TB, provide preventive therapy -isoniazid (INH) monotherapy for 6 months

Conduct disease staging

Nurses should stage HIV-infected according to WHO criteria. Nurses and midwives can refer to *Appendix 6B: WHO Clinical Staging Chart for Infants and Children* for more detail about disease staging. Clinical staging should be done at every clinical visit and will help clinical monitoring of paediatric HIV disease.

Signs and conditions common in HIV-infected children but uncommon in HIV-uninfected children

- Severe pneumonia
- Severe bacterial infections esp. if recurrent
- Persistent or recurrent oral thrush
- Bilateral painless parotid swelling
- Generalised lymphadenopathy other than inguinal
- Hepatosplenomegaly (enlargement of liver and spleen)
- Persistent or recurrent fever
- Neurologic dysfunction
- Herpes zoster – single dermatome
- Persistent generalised dermatitis not responding to treatment

Signs and conditions very specific to HIV infection

- Pneumocystis jiroveci pneumonia (PCP)
- Oesophageal candidiasis
- Extrapulmonary cryptococcosis
- Invasive salmonella infection
- Lymphoid interstitial pneumonitis (LIP)
- Herpes zoster affecting several dermatomes

- Kaposi's sarcoma
- Lymphoma
- Recto-vaginal or recto-vesical fistula

Provide family-centred support

- Although the focus of health care visits may be on the child, healthcare workers should be alert to signs that the caregiver and other members of the family are also in need of healthcare services.
- Services for the family might include providing testing and counselling services, referrals to care and treatment for HIV-infected family members, adherence preparation and support, preventive counselling, and psychosocial support, such as peer support groups.

Table 6.1 outlines the basic components of routine care for HIV-infected children who are not yet on ART and Table 6.2 outlines the components of care for children who are on ART. Nurses can refer to the *WHO Integrated Management of Childhood Illness for High HIV Settings (2008)* for additional guidance. It has guidelines for HIV-exposed and -infected children on infant and young child feeding, immunisation, cotrimoxazole prophylaxis, Vitamin A, zinc and other micronutrient supplementation, as well as nutritional support

Table 6.1: Care package for HIV-infected children NOT on ART

Paediatric Service	Key Steps
Measure, record, plot, and evaluate growth	• Weight for age. • Length for age. • Head circumference, if less than 3 years of age.
Assess development	• According to the age of the child. • See *Appendix 6A: Developmental Checklist*, as a guide
Physical exam	• General appearance (including nutritional status). • Vital signs. • Skin and hair (including scars, burns, bruises, birthmarks). • Head and neck (including facial features, fontanels in infants). • Eyes (including discharge, alignment). • Ears (including infections, discharge). • Nose and throat (including discharge, infections). • Mouth, tongue, palate, gums and teeth (including evidence of thrush, caries, lesions, intact palate). • Lungs and pulmonary system (listen for wheezing, crackle, rhonchi, and pleural rub). • Heart and cardiac system (including presence of

	murmurs). • Abdomen and gastrointestinal system (including presence of hernias). • Genitalia, rectum and urinary system (including presence of testicles (boys) and normal female genitalia). • Musculoskeletal system (including spine, hips, muscle tone). • Neurological system (including reflexes, motor coordination, gait). • Extremities (including range of motion, strength).
Preventative health care	• TB screening: suspect TB if the child has: ◦ Contact with an adult pulmonary tuberculosis source case — often the first indication of childhood tuberculosis. ◦ If the child is the index case, then the mother or caregiver may be the TB source case. ◦ Fever for more than a week. ◦ A chronic, unremitting cough (for more than two weeks). ◦ Ongoing weight loss or poor weight gain ◦ Loss of playfulness. • Immunisations • Vitamin A • Deworming • Provide CTX as indicated • Health education to the caregiver
Ongoing reassessment of ART eligibility	• Clinical review for any new WHO staging conditions at least every 3 months. More frequent review for children with active illness, pending investigations or complications. • CD4 percentage (Under 5 years) and/or total CD4 count (all ages) every 6 months.
Psychosocial support	• Psychosocial support to the child and caregiver, including the reassessment of the disclosure process. • Involve the child in his/her own healthcare, as much as possible. • Important elements of psychosocial support include: ◦ Level of support – financial, logistical (e.g. transportation), emotional ◦ Mental health and well-being of caregiver and child ◦ Observation of interaction between caregiver and child ◦ Factors preventing appropriate care of child (mental health, substance use, illness, etc.) ◦ Appropriate behaviours for age of child ◦ Child's adjustment to school, peer relationships

	• Family conflict, instability or other family stressors • Impact of stigma and discrimination on care seeking, caring for health/child, accessing support • Community resources
Family History	• Take a family history for HIV, TB and any other concerns that may impact the infant's health or ability to receive ongoing chronic care. Encourage HIV testing for all family members, even if clinically well.
Caregivers and family	• Refer caregivers to community-based support clubs or organisations where available. • Assess need to counsel and test other children.
Effective contraception planning for caregiver	• Counsel about correct and consistent use of condoms during pregnancy to prevent infection with other STIs, which can increase the rate of MTCT. • Provide family planning and contraception counselling — with partner involvement when possible. • Counselling should include the different types of methods available (barrier, hormonal, long-term and permanent), dual protection including condoms, when to start contraception, and possibilities of drug interactions (e.g. with antibiotics or TB medications). • Women living with HIV on ARV therapy can safely and effectively use all forms of contraceptives.

Source: François Xavier Bagnoud (FXB) Center. 2010. *Comprehensive Paediatric HIV Care & Treatment Training Series: Module 2,* South to South Partnership for Comprehensive Family HIV Care and Treatment Program (S2S).

Table 6.2: Care package for HIV-infected children on ART

Paediatric Service	Key Steps
Measure, record, plot, and evaluate growth	• Weight for age • Length for age • Head circumference, if less than 3 years of age
Assess development	• According to the age of the child. • See *Appendix 6A: Developmental Checklist*, as a guide
Assess and treat any new illness	• Assess for new WHO staging conditions, treatment side effects, or toxicities • Provide care and treatment for any chronic conditions
Assess adherence to treatment	• Discuss successes and challenges - medication bottle inspection and pill counts • Provide caregiver support and individualized adherence counseling • Counsel on managing symptoms and side effects
Physical exam	• General appearance (including nutritional status) • Vital signs • Skin and hair (including scars, burns, bruises,

	birthmarks) • Head and neck (including facial features, fontanels in infants) • Eyes (including discharge, alignment) • Ears (including infections, discharge) • Nose and throat (including discharge, infections) • Mouth, tongue, palate, gums and teeth (including evidence of thrush, caries, lesions, intact palate) • Lungs and pulmonary system (listen for wheezing, crackle, rhonchi, and pleural rub) • Heart and cardiac system (including presence of murmurs) • Abdomen and gastrointestinal system (including presence of hernias) • Genitalia, rectum and urinary system (including presence of testicles (boys) and normal female genitalia) • Musculoskeletal system (including spine, hips, muscle tone) • Neurological system (including reflexes, motor coordination, gait) • Extremities (including range of motion, strength)
Preventative health care	• TB screening: suspect TB if the child has: ◦ Contact with an adult pulmonary tuberculosis source case — often the first indication of childhood tuberculosis. ◦ If the child is the index case, then the mother or caregiver may be the TB source case. ◦ Fever for more than a week. ◦ A chronic, unremitting cough (for more than two weeks). ◦ Ongoing weight loss or poor weight gain ◦ Loss of playfulness. • Immunisations • Vitamin A • Deworming • Provide CTX as indicated • Health education to the caregiver
Ongoing reassessment of ART eligibility	• Clinical review for any new WHO staging conditions at least every 3 months. More frequent review for children with active illness, pending investigations or complications. • CD4 percentage (Under 5y of age) and/or total CD4 count (all ages) every 6 months.
Psychosocial support	• Psychosocial support to the child and caregiver, including the reassessment of the disclosure process. • Involve the child in his/her own healthcare, as much as possible.

	• Important elements of psychosocial support include:
	  ◦ Level of support – financial, logistical (e.g. transportation), emotional
	  ◦ Mental health/well-being of caregiver and child
	  ◦ Observation of interaction between caregiver and child
	  ◦ Factors preventing appropriate care of child (mental health, substance use, illness, etc.)
	  ◦ Appropriate behaviours for age of child
	  ◦ Child's adjustment to school, peer relationships
	  ◦ Family conflict, instability or other family stressors
	  ◦ Impact of stigma and discrimination on care seeking, caring for health/child, accessing support
	  ◦ Disclosure counseling
	  ◦ Community resources

Family History	• Take a family history for HIV, TB and any other concerns that may impact the infant's health or ability to receive ongoing chronic care. Encourage HIV testing for all family members, even if clinically well.
Caregivers and family	• Refer caregivers to community-based support clubs or organisations where available. • Assess need to counsel and test other children.
Effective contraception planning	• Counsel about correct and consistent use of condoms during pregnancy to prevent infection with other STIs, which can increase the rate of MTCT. • Provide family planning and contraception counselling — with partner involvement when possible. • Counselling should include the different types of methods available (barrier, hormonal, long-term and permanent), dual protection including condoms, when to start contraception, and possibilities of drug interactions (e.g. with antibiotics or TB medications). • Women living with HIV on ARV therapy can safely and effectively use all forms of contraceptives.

Source: François Xavier Bagnoud (FXB) Center. 2010. *Comprehensive Paediatric HIV Care & Treatment Training Series: Module 2,* South to South Partnership for Comprehensive Family HIV Care and Treatment Program (S2S).

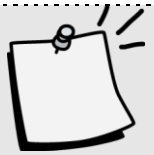
Trainer Instructions

Step 7: Ask participants:

- *When are HIV-infected infants (less than12 months) eligible to start ART?*
- *When are children over 12 months eligible to start ART?*
- *What are the preferred regimens according to WHO or according to your national guidelines?*

- *Do children get the same side-effects from ART as adults?*
- *What laboratory and clinical monitoring are necessary for children on ART?*
- *How do you recognize treatment failure in children?*

Review the common ART regimens for infants and children (according to your national guidelines), stressing that the doses will change depending on the child's weight. Fill in using the content below as needed.



Make These Points

- The overall aim of therapy in children is to maintain the child's immune system at a level that protects them from developing opportunistic infections and disease progression.
- Like adults, ARV drugs will not cure HIV in children but help to "control" the virus by reducing viral replication thus preserving the immune system.
- The WHO recommends that **all** HIV-infected infants (PCR+) less than 12 months of age and all children 12 -24 months should start ART, regardless of CD4 result or WHO Stage, but it is important to follow your national guidelines. Only a doctor can decide if a paediatric patient is eligible for ART.
- For infants and children, first line ART regimens contains NVP or EFV plus a "backbone" consisting of 2 NRTIs.
- Doses are very different for children. Children usually need higher doses of ARVs. The way in which drugs are distributed and metabolised in children is different to adults and varies with growth.
- As CD4 cell count varies with age, CD4 percentage is considered a more reliable marker of immunological status in children
- The more common side effects seen in children are similar to those seen in adults. They are commonly short-term and resolve after a few months of starting the drugs.
- The unavailability of laboratory monitoring, including CD4 and chemistries, should NOT prevent HIV-infected infants and children from receiving ART.

Eligibility for ART

The overall aim of therapy in children is to maintain the child's immune system at a level that protects them from developing opportunistic infections and disease progression. Like adults, ARV drugs will not cure HIV in children but help to "control" the virus by reducing viral replication thus preserving the immune system.

The following infants and children are eligible for ART:

- All HIV-infected infants (PCR+) less than 12 months of age, regardless of CD4 result or WHO Stage.
- All children 12 -24 months, regardless of CD4 result or WHO Stage.
- Any child WHO Stage 3 or 4.
- Any child with CD4 below threshold as defined by:
  - 1 - 4y: CD4% less than 25% or total CD4 count of less than 750.
  - Age 5- 14 years, with a total CD4 less than 350.
- Age 15 years or older: Refer to WHO. 2010. *Antiretroviral Therapy for HIV Infection in Adults and Adolescents. Recommendations for a Public Health Approach*, 2010 revision.

Preferred Regimens for Infants and Children

The WHO recommends the following regimens for infants and children, outlined in Table 6.3. For infants and children, first line ART regimens contains NVP or EFV plus a "backbone" consisting of 2 NRTIs. Nurses should always follow national guidelines, if applicable, when prescribing ART for clients.

Table 6.3: Regimens for infants and children

	Regimen	
	NRTI backbone	**NNRTI component**
Infant or child <24mo, not exposed to ARVs	**AZT + 3TC + (preferred)** or ABC + 3TC + or d4T[4] + 3TC +	**NVP** [1, 2]
Infant or child <24mo, exposed to NNRTI	**AZT + 3TC + (preferred)** or ABC + 3TC + or d4T + 3TC +	**LPV/r**[, 2]
Infant or child <24mo, with unknown ARV exposure	AZT + 3TC + or ABC + 3TC + or d4T + 3TC +	NVP [1, 2]
Children 24mo-3 yrs	AZT + 3TC + or ABC + 3TC + or d4T + 3TC +	NVP
Children >3yrs	AZT + 3TC + or ABC + 3TC + or	NVP or EFV[1, 2]

	d4T + 3TC +	

1 The preferred regimen for children, < 3yrs of age, with tuberculosis is EFV + the 2 NRTI backbone.
2 The use of EFV should be avoided in adolescent girls due to the fact that it may cause foetal harm in the first trimester of pregnancy. If possible, adolescent girls taking EFV should be switched to a NVP-based or other regimen or counselled on and provided with a contraceptive method.
3 Use the alternative 1st line regimen only if there are contraindications to AZT (for example, severe anaemia, <8g/dl; or neutropenia, <500 cells/mm^3) or AZT availability cannot be assured.
4 Due to its unfavourable toxicity profile and its selection for unfavourable resistance patterns, use of d4T should be minimised; therefore d4T/3TC should only be used as a last resort for initiating infants on ART if the use of AZT or ABC is contraindicated or cannot be assured.

Note that the WHO 2010 guidelines call for the phasing out of used of d4T-containing regimens, unless AZT or ABC are contraindicated or not assured.

Doses are very different for children. The way in which drugs are distributed and metabolised in children is different to adults and varies with growth. Dosing in children is usually based on either weight or body surface area. As these change with growth, drug doses must be adjusted at each visit to avoid the risk of under-dosing. For additional information on dosing and regimens for specific scenarios (for example, clients with hepatitis), participants should refer to *Appendix 6C: ARV Dosing Guide for Children* and the *WHO Guidelines for Antiretroviral Therapy for HIV in Infants and Children, 2010 revision, Appendix E.*

Side effects in children

Side effects to ARVs are thought to be less common among children than adults.

Examples of mild side-effects:
- Nausea, vomiting, and diarrhoea.
- Dizziness.
- General tiredness.
- Nail discoloration.
- Pins and needles and pains in hands, legs and feet.
- It is recommended that children remain on treatment if the side effects are mild.

Examples of serious side-effects include:
- Persistent generalised fatigue, weakness.
- Persistent nausea, vomiting, diarrhoea.
- Abdominal pain.
- Sudden unexplained weight loss.
- Respiratory difficulties.
- Neurological problems, including motor weakness.

Longer term side effects (more likely to be seen in older children):
- Fat loss from limbs, buttocks and face.
- Increased fat around abdomen and breast.

Clinical and laboratory monitoring for infants and children

The unavailability of laboratory monitoring, including CD4 and chemistries, should NOT prevent HIV-infected infants and children from receiving ART.

For infants and children, **CD4** should be measured at the time of diagnosis, AND
- Every 6 months thereafter; but 3 monthly as CD4 count approaches threshold for starting ART, and measure just prior to starting ART.
- Every 6 months after initiating ART.
- If a new clinical staging event develops, including growth faltering and neurodevelopmental delays.

For infants and children, **baseline haemoglobin level** (and white cell count, if available) should be assessed at initiation of ART AND
- Measure haemoglobin at week 8 after initiation of AZT-containing regimens, or more frequently if symptoms indicate.
- Growth, development and nutrition should be monitored monthly.
- Laboratory monitoring for toxicity should be symptom directed.

Treatment failure in children

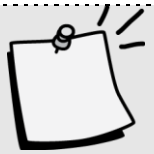
- Lack of or decline in growth rate in children who show an initial response to treatment (WHO clinical stage 3 or 4 – moderate or severe unexplained malnutrition not adequately responding to standard therapy despite adequate nutritional support and without explanation)
- Loss of neurodevelopmental milestones or development of HIV encephalopathy (WHO clinical stage 4)
- Occurrence of new OI or malignances, or recurrence of infections such as oral candidiasis that is refractory to treatment or esophageal candidiasis (WHO clinical stage 3 or 4)

Trainer Instructions

Step 8: Ask participants:
- *How do you think we can support long-term adherence to care among children and their caregivers?*
- *What are some considerations for children and their caregivers in terms of adherence readiness and preparation?*

Review *Appendix 6D: Adherence Preparation and Support Guides* with participants. Ask participants:
- *How do you think you could use these tools in your work?*

- *What other tools or resources do you currently use to assess and support adherence with children and their caregivers?*



Make These Points

- Success with paediatric ART depends on a partnership among the caregiver(s), the child, the multidisciplinary care team at the clinic, and the community.
- All members of the family and all caretakers must be prepared to give the child ART at the same time, the right way, every day. The child must cooperate and be involved in the treatment as well.
- There are many barriers to adherence with paediatric ART. Children may not want to take the medicines, they may be away at school for many hours of the day or caregivers may be at work or not always with the child when the medicines need to be given.
- As with adults, adherence support services for children and caregivers should be ongoing — not one-time events — and the entire multidisciplinary team, not just nurses or counsellors, is responsible for providing these services.
- Nurses should always tailor their approach to adherence to the age, developmental level, and emotional state of the child.
- Assessing adherence and providing adherence support to clients and caregivers are important tasks, but can be challenging. There is no one particular way of assessing adherence. The best way is to use many a number of methods, such as a standardised adherence assessment combined with client/caregiver self-report, pill count, and review of clinical and laboratory records.
- Support groups can provide both caregivers and children with emotional, practical and problem-solving support from others who face similar challenges.
- Adherence support services should be ongoing — not one-time events — and the entire multidisciplinary team is responsible for providing these services.

Adherence and Psychosocial Support for HIV-Infected Children

Children living with HIV and their caregivers need ongoing practical, psychosocial, and adherence support. However, there are many barriers to adherence with paediatric ART. Children may not want to take the medicines, they may be away at school for many hours of the day or caregivers may be at work or not always with the child when the medicines need to be given.

Adherence support services should be ongoing — not one-time events — and the entire multidisciplinary team, not just counsellors or Peer Educators, is responsible for providing these services.

- This is a task that requires addressing both the child's needs and issues and those of the caregiver:
- The child MUST be involved
- Assessment of child & family prior to child commencing ARVs
- Assist families in developing routine for ARVs; ARVs should NOT dictate every aspect of daily life
- Promote an open, supportive approach
- Give age-appropriate explanations to child regarding need for medication.
- Children cope far better when they are able to understand what is happening to them and have a sense of control
- Use child-sensitive, age-appropriate explanation such as "*you need the medicine to keep you strong and prevent infections".*
- Continue support and re-assessment of each child and family's situation.
- Encourage peer support (support from other parents and children).

A variety of **strategies** may be used to help encourage the child to take ARVs and to assist and support the caregiver. Some methods are mentioned below. They can be used individually or in combination:

- Trial runs: Finding out the best way that the child can take the medicine.
- Use a doll or puppet to demonstrate how the doll felt better after taking some medicine. Then ask the child whether they would like to try the same.
- Having a reward chart with dates and timing. Rewards can be simple, such as a visit to the park, a big hug, or doing something they like to do with the caregiver.
- Taking medication with parent.
- Peer support groups for the child and caregiver.

Nurses should always tailor their approach to adherence to the age, developmental level, and emotional state of the child. The following are some tips for nurses when communicating or counselling children, and may be incorporated during:

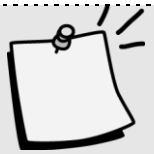
- The child's emotional well-being, relationships with others, and developmental level (including level of understanding and capacity to express him/herself, as well as capacity for self-care) need to be assessed at every visit. This will help to ensure that expectations of the child are appropriate and take account of changes over time.
- With very young children, the focus of counselling and communication is generally on the caregiver.
- The older the child, the better the child's understanding and ability to express him/herself.
- Communicate with the child in a manner and at a level that s/he can understand.

- Find out what the child knows. Be guided by the questions s/he asks.
- Use short, simple sentences.
- Younger children understand concrete things that they can touch and see. A doll or teddy bear can be used to make information more concrete.
- Use drawings and demonstration to help a primary school child understand.
- Encourage questions to check understanding.
- Be aware of the child's attention span. A younger child will lose interest more quickly than an older child.
- Watch the child's body language to determine whether s/he is taking in the information.
- If the child is inattentive, stop and try again at a later stage.

Trainer Instructions

Step 8: Children have the right to participate in decision making about their own health care. Knowledge of their status may also help to promote adherence to treatment, while not knowing or having a confused understanding may cause difficulties with adherence. Ask participants:

- *When do you think a child should know his/her HIV status?*
- *When should the child know about the parent's diagnosis if it was transmission from parent –to-child?*
- *When should other siblings be told? What may be some of the issues faced by siblings (i.e. a sibling's possible perception that HIV+ child gets more attention, etc.)*



Make These Points

- Disclosure is a process that takes place over time. It is not a once-off event.
- Most caregivers find it difficult to disclose the child's status to the child, but they can be helped through the process.
- Disclosure needs to taken into account the needs, wishes and views of caregivers, and allow them to feel a sense of control over the process.
- Disclosure needs to take into account the developmental stage of the child and her or his individuality.
- Children often react badly at first to disclosure, but with ongoing and regular support, they come to terms with their diagnosis.
- The caregiver is the person who is most suited to disclose, but in exceptional circumstances a nurse may need to undertake disclosure.

The Nurse's Role in Disclosure[2]

The role of the nurse in the disclosure process:

- Usually, the primary caregiver should be the person to disclose to the child. Sometimes, caregivers ask for help with the process. A healthcare worker can assist, first by preparing the caregiver and then, if asked, being present when the caregiver talks with the child. In some cases, the healthcare worker may be asked to take a more active role in the disclosure process.
- Nurses may or may not be involved in the discussions during which the adolescent is disclosed to — some caregivers prefer to do this at home, but some may prefer to come to the clinic where they can get assistance from the healthcare worker.
- The role of the nurse is to encourage open dialogue about disclosure and offer practical strategies that are tailored to the individual family situation. They can help caregivers decide what information to give to the child and when, given their child's age and development.

Supporting the caregiver in the disclosure process begins with the initial visits to clinic. The nurse should:

- Build trust by getting to know the caregiver; find out what HIV means to him or her.
- Assess the caregiver's psychosocial situation, ability to cope, answer questions, and establish their sources of support.
- Discuss the implications of disclosure with the caregiver and the family to help them consider in advance the reactions of the child, family members, friends, and teachers.
- Help the caregiver develop a plan of disclosure for the child. The plan will:
  - List any preparations they need to make before disclosure,
  - Include what they will say, how and where they will disclose, and
  - Include plans for ongoing support.
- Arrange to see the caregiver (and the child) again, to review this process.
- If there is disagreement between family members about timing and process of disclosure, assess all family members' concerns, and discuss benefits and risks of disclosure, potential harm of long-term non-disclosure. Collaborate with caregivers to make a plan tailored to the needs of the entire family.
- Always respect and try to understand caregivers' reasons for fearing or resisting disclosure. Validation of caregivers' concerns can foster a partnership and prevent the development of an adversarial relationship between the members of the healthcare team and caregivers.

Trainer Instructions

Step 9: Allow 5 minutes for questions and answers on this session.

Session 6.2 Teaching, Mentoring, and Skills Transfer

Total Session Time: 85 minutes (1 hour and 25 minutes)

Trainer Instructions

Step 1: Review the session objective with participants.

Session Objectives

After completing this session, participants will be able to:

- Apply their knowledge of paediatric care to specific case studies.

Trainer Instructions

Step 2: Lead participants through Exercise 1, which will give an opportunity to apply their knowledge of paediatric care to specific case studies.

Exercise 1: Paediatric HIV: Case studies , with large group discussion and role play	
Purpose	• To review key components of paediatric HIV care for HIV-infected children, by applying participants' knowledge to specific case studies.
Duration	60 minutes
Advance Preparation	• Review the case studies and suggested answers before the training
Introduction	Remind participants about their case study community from the previous modules. The purpose of this exercise is to follow one of the case study characters, so that participants can apply their knowledge of paediatric HIV care and services.
Activities	**Large group discussion, with role play** 1. Ask participants to review the case studies in their Participant Manual. 2. Ask a volunteer to read the 1st case study to the entire group; invite the group to discuss the answers to the first 3 questions. Then, ask 2 participants to role play potential responses to the 4th question in front of the large group (e.g. how the nurse mentor

	would address the situation with the mentee). Upon completion of the role play, facilitate a discussion by asking the following questions: • *What was done well by the mentor?* • *What would you do differently?* 3. Ask a volunteer to read the 2nd case study to the entire group (the 2nd case study lends itself more to discussion than role play); invite the group to discuss the nurse's potential actions or next steps, using the questions as a guide. 4. Ask a volunteer to read the 3rd case study to the entire group (the 3rd case study lends itself more to discussion than role play); invite the group to discuss the nurse's potential actions or next steps, using the questions as a guide. 5. Ask 3 participants to role play the 4th case study in front of the large group. One participant will be the "nurse" and the others will play the parts of the "caregiver" and "child client." Give the "nurse" , "caregiver", and "child client" about 5–8 minutes to conduct their role play. Encourage participant to refer to *Appendix 6D: Adherence Preparation and Support Guides.* Upon completion of the role play, facilitate a discussion by asking the following questions: • *How did the nurse try to build rapport and trust with the caregiver? And the client?* • *What was done well?* • *What would you do differently?*
Debriefing	• Remind the group in order to provide a comprehensive care and support to children, mothers, caregivers and other family members, barriers to paediatric care and treatment, including adherence, psychosocial issues, and disclosure must also be addressed as part of the care package.

Exercise 1: Paediatric HIV: Case studies, with large group discussion and role play
Case Study 1: Remember that T___, from the previous module, has given birth to twins. Her infants are now 13 months old. T___ comes to the clinic today and has spent 3 hours in a crowded waiting room with her child. She has brought one of her twins, D___, who has had a fever for 3 days. T___ is finally ushered into the exam room by your mentee, who seems tired and a bit distracted. You are there to observe the visit with the client, so you can feedback to your mentee later. She takes D___'s temperature and weight, tells him to take off his shirt, and leaves the room. A few minutes later, your mentee returns and asks, "*Why are you here today?"* T___ describes the

fever and other symptoms; your mentee does not comment. She examines the child without speaking to him, and then says, "*It's just a virus. He will be OK."* and leaves.

- *How well did the nurse engage the caregiver and child in this case?*
- *What would have improved this situation?*
- *What steps, in terms of routine care, should the nurse have taken?*
- *As a nurse mentor and educator, how would address with your mentee? (role play)*

Key point for trainers: Case Study 1

- D___ needs a complete physical examination, including measurement of weight, length, and head circumference and developmental assessment. Pay close attention to any signs or symptoms of HIV.
- Spend time educating mentees about the importance of encouraging caregivers to test children for HIV. All providers in the clinic, including physicians, nurses, and counselors, should ideally be encouraging testing of all family members.

Case Study 2:

Three months later, T___ returns to the clinic with her other twin, B___, who you are seeing for the first time today. Because T___ is trying to look for employment during the day, her twins are cared for by a neighbour in the morning and T___'s younger cousin, once she returns from school in the afternoon. T___ reports that both twins are behind on their vaccinations, because she has not had time to bring him to clinic. She does not express any particular worries about their growth or development, but her neighbour insisted that she bring B___ to the clinic because she thinks something is wrong and that B___ seems "slow".

- *What approach would you take with T___? What questions would you ask?*
- *What would you look for in observing B___ and on the physical examination?*
- *What might be some of your next steps with this family?*

Key point for trainers: Case Study 2

- At every visit, perform a developmental assessment.
  - Is there developmental delay or loss of milestones?
- At every visit, weigh the infant, measure height and head circumference.
  - Is there low weight-for-age?
  - Has weight gain been unsatisfactory?
- Perform HIV testing.
- Arrange for HIV testing and counseling for sibling.
- Assess CTX adherence (all HIV-exposed infants should receive CTX from 6 weeks)
- Assess ARV prophylaxis (her twins should be receiving ARV prophylaxis)

- Immunize according to national guidelines.
- Assess the mother's general health and her access to care for her own health. If on ARV therapy, assess adherence.
- Determine if her home environment is supportive.
- Determine if she should be referred for psychosocial support.
- Ensure she receives appropriate counseling and referral to ARV therapy as soon as she is determined eligible (if not already on ARV treatment).
- Ensure access to family planning.

Case Study 3:

T___ returns to the clinic and states that has been very unwell over the past 6 months. After treatment for cryptosporidiosis, she started ARVs. Unfortunately, although she recovered from cryptosporidiosis, her overall health has remained poor. She keeps getting recurrent chest infections. At the clinic, T___ reveals that she frequently forgets to take her ARVs. In further discussion, she informs you that her partner left her 6 months ago and she is feeling very depressed and alone. At the same clinic appointment, the twins, D___ and B___, also seen by the doctor. The doctor informs T___ that 1 of the twins, B___ is HIV-infected.

- *How you would proceed with T___ and B___?*
- *What next steps, in terms of care, would you take with this family?*

Key point for trainers: Case Study 3

- Provide routine care: e.g. immunisations, Vitamin A,etc, as needed for B___.
- Assess caregiver's adherence to ART and provide support as needed.
- Counsel on HIV testing for sibling.
- Conduct routine screening for tuberculosis
- Assess ART readiness for T__/B___.
- Ensure linkages to care, treatment and psychosocial support
- Possibly refer caregiver to peer support group to help with adherence and home life issues.
- Revisit family planning discussion

Case Study 4:

T___'s daughter, B___, will begin taking ART today. T___ will be responsible for giving her children their medicines every day, but she is worried how she will manage.

- *How would you help T___ prepare for adherence at the clinic today.*
- *What questions would you ask to assess her understanding of adherence and readiness for her children to start ART?*

Key point for trainers: Case Study 4

- Start by asking T___ what questions they have so far. (for example: ""We are going to start your daughter on ART, can you tell me how

you think ART will help her?" "Why do you think excellent adherence is so important?").

- Emphasize the relationship between poor adherence and resistance.
- Then start working with T___ to develop a personal adherence plan for B___, by asking the ARE YOU COMMITTED and then ask the WHO, WHAT, WHEN, WHERE, and HOW questions.
- Administer the "Adherence Preparation/Support Guide for Assessing Caregivers' Readiness for ART" to T___.
- Ensure T___ is ready to take an active role in assuring her children's adherence is excellent.
- Take note (on paper) of key points as you go along, reassure T___ that this is the right decision and that you are confident her ability to help her daughter adhere to their medicines.
- Summarise the key points (using your notes) along with next steps as you close the discussion.

Trainer Instructions

Step 3: Allow 5 minutes for questions and answers on this session.

Session 6.3 Additional Learning Activities and Resources

Total Session Time: 15 minutes

Trainer Instructions

Step 1: Review the session objective listed below.

Session Objective

After completing this session, participants will be able to:

- Describe independent and supplemental learning activities for the module.

Trainer Instructions

Step 2: Review the independent learning activities suggested for this module using the content below.

Independent Learning Activities

Ask participants to work in pairs and choose one or more of the following learning activities:

- Design a creative counselling tool or job aid that could be used to assist and support caregivers and children with ART adherence. Remind participants to accommodate the possibility of caregivers being illiterate or innumerate and living in resource-poor settings.
- Facilitate a lunchtime discussion with members of the multidisciplinary team. Ask the following questions to facilitate discussion, and summarise the discussion in a brief paper:
  - *Based on your personal and professional experiences, what are some key differences between adults and children that relate to health and health care?*
  - *What does family-centred care mean to you?*
  - *Why would we want our care to be family-centred?*
  - *How can we make sure our care is family-centred?*
  - *Describe the difference between HIV testing of a child versus an adult.*
  - *What are some of the challenges and considerations for HIV testing of infants and children?*
- Present the key steps to set up and implement paediatric PITC. Ask participants to imagine that, for this assignment, that THEY are the

director at a site that is establishing a new paediatric PITC service. Ask participants to develop an action plan addressing the following question:
    - *What do you think will be needed to set up YOUR new paediatric PITC service?*
- Co-facilitate or assist with a support group for caregivers to discuss adherence issues from the family perspective. Ask caregivers to describe challenges of caring for their HIV infected children, adherence issues as well as challenges they face communicating with providers and engaging the health care service system. Summarise your findings in a brief paper.
- Facilitate a lunchtime training session with nurses and other members of the multidisciplinary care team to discuss their experience with addressing disclosure of HIV status to an HIV-infected child. Discuss the pros and cons of disclosure; discuss disclosure as an ongoing process; describe a developmental appropriate approach to disclosure; talk about family responses and expectations around disclosure; list obstacles to disclosure, and share team members' approaches to answering a child's questions about the illness in an age appropriate manner in a brief paper.

Session 6.4 Action Planning

Total Session Time: 90 minutes (1 hour and 30 minutes)

Trainer Instructions

Step 1: Review the session objective listed below.

Session Objective

After completing this session, participants will be able to:

- Develop a site-specific action plan to overcome mentoring and systems barriers to providing quality paediatric care to HIV-infected children at their clinics.

Trainer Instructions

Step 2: Lead participants through Exercise 2, which will give an opportunity to think about some systems barriers to delivering effective paediatric HIV services and to develop a site-specific action plan to overcome them.

Exercise 2: Overcoming Systems and Mentoring Challenges with Paediatric HIV: Small group work and large group discussion	
Purpose	• To strengthen participants' systems thinking and problem solving abilities, in relation to nurse mentoring and the delivery of paediatric HIV services
Duration	45 minutes
Advance Preparation	• None required
Introduction	This exercise will allow participants to brainstorm about some of the mentoring and systems barriers to effective paediatric services at their clinics and then develop a site-specific action plan to address these barriers.
Activities	**Part 1: Small Group Work** 1. Break participants into small groups of 4-5 individuals each. Participants from the same clinic should work together. 2. Ask participants to refer to *Appendix 6E: Action Plan Worksheet* during this exercise. 3. Ask each group to reflect on the barriers to paediatric care and nurse mentoring in the clinic setting listed

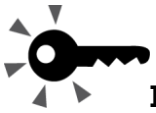
	below: (Note: The examples can be changed, depending on local context) • *Your mentees who lack previous pediatric ART training are seeing pediatric clients and are not comfortable with providing care to children.* • *Your mentees do not encourage adult clients to bring in children for testing and/or subsequent ART treatment when it is needed.* • *There is poor adherence to ART among HIV-infected children at your clinic.* 4. Ask the groups to think of a solution that nurse mentors and educators might be able to implement, in response to each barrier or problem. Ask: • *What will we do about this barrier or problem?* • *What do we want to achieve?* 5. Remind participants that good solutions are "SMART," or: • **Specific:** It addresses the matter specifically • **Measurable**: It can be measured to determine whether it has been achieved. • **Achievable:** It is within the means and capacity of your group. • **Realistic:** It is practical and can be accomplished within a reasonable time frame. • **Time-bound:** The time period for reaching it is clearly specified. 6. Ask the groups to list 1-3 specific strategies, activities, or "next steps" to achieve each solution. 7. For each activity, ask the groups to answer the following questions: • *Who is responsible for this activity?* • *When will you be able to implement this activity?* • *What kind of support or resources (including funds) do you need in order to achieve this activity?* • *Any other comments to note about this activity or strategy?* 8. Groups should use *Appendix 6E: Action Plan Worksheet* to record their plans. 9. The trainer should circulate between the small groups during the discussion to respond to questions. **Part 2: Large Group Discussion** 10. Give each small group 5 minutes for presenting their plans to the larger group. 11. After each group presents, ask other participants if they have other solutions that were not listed.
Debriefing	• Nurse mentors and educators can use action planning template as a tool, in order to problem solve about how

	to overcome challenges and barriers in their practice. Their plans can be shared with their mentees and supervisors, to initiate discussion on how barriers can be addressed.

Trainer Instructions

Step 3: Allow five minutes for questions and answers on this session.

Step 4: Summarise this module by reviewing the key points in the box below.



Module 6: Key Points

- The goal of diagnosing children as early as possible is to identify HIV-exposed and HIV-infected children and engage them in life-saving care. Early access to HIV care and treatment can delay or limit disease progression, improve health and prevent death.
- Growth is a sensitive indicator of child health and growth faltering is common in children living with HIV. For children known to be HIV-infected, growth faltering may be a sign of disease progression. This may signal a need to initiate or change ARV therapy.
- Nurses can refer to the *WHO Integrated Management of Childhood Illness for High HIV Settings (2008)* for additional guidance. It has guidelines for HIV-exposed and -infected children on infant and young child feeding, immunisation, cotrimoxazole prophylaxis, Vitamin A, zinc and other micronutrient supplementation, as well as nutritional support.
- **The WHO recommends that all HIV-infected infants** (PCR+) less than 12 months of age and all children 12 -24 months should start ART, regardless of CD4 result or WHO Stage, but it is important to follow your national guidelines.
- Children living with HIV and their caregivers need ongoing practical, psychosocial, and adherence support. Promoting adherence is multi-faceted and must be a continuous process.
- Children living with HIV and their caregivers need ongoing practical, psychosocial, and adherence support. Adherence support services should be ongoing — not one-time events — and the entire multidisciplinary team is responsible for providing these services.
- The role of the nurse is to encourage open dialogue about disclosure of HIV and offer practical strategies that are tailored to the individual family situation. They can help caregivers decide what information to give to the child and when, given their child's age and development.

Appendix 6A: Developmental Checklist

Developmental Checklist		
Age	**Milestones**	**Potential Problems**
3 months	• Turns head toward sound • Smiles • Raises head when on stomach • Brings hand to mouth • Watches faces intently • Recognises familiar people • Follows moving objects with eyes • Vocalises	• Does not seem to respond to loud noises • Floppy or excessively stiff • Poor sucking or swallowing • No visual fixation or following asymmetry of tone or movement • Excessive head lag • Does not smile
6 months	• Sits unsupported or with minimal support • Babbles • Turns to caregiver's voice • Reaches for familiar persons • Reaches for objects • Shows likes and dislikes • Plays with feet when prone • Rolls over	• Floppiness or excessive stiffness • Failure to use both hands • No response to sound • Squinting or inability to move both eyes • Does not roll over
9 months	• Sits without support • Rolls over • Babbles and imitates sounds • Understands a few words • Able to drink from a cup and hold a bottle • Points at objects or people • Pulls to stand	• Floppiness or excessive stiffness • Unable to sit • No response to sound • Squinting or inability to move both eyes, follow object or face • Persistence of primitive reflexes
12 months	• May walk alone or "creep" around furniture • Imitates actions • Looks for toys or objects that are out of sight • Responds to own name • Understands simple commands, • Feeds self finger foods	• Unable to bear weight on legs • No single words • Does not point to objects • Does not use gestures, such as waving or shaking head • No response to sound • Unable to grasp objects
18 months	• Runs • Scribbles • Throws a ball • Climbs onto chair • Obvious hand preference • Can say 6-20 words • Spoon feeds • Imitates actions • Walks backward	• Failure to walk • Unable to understand simple commands • Cannot say any words • Unable to grasp small objects
2 years	• Combines words • Asks for food, drink, and toilet • Handles spoon well, spoon feeds without mess • Pretend play • Looks at pictures	• Does not develop mature heel-toe walking pattern after several months of walking, or walks only on toes • Does not use a 2-word sentence • Does not understand simple

		Instruction • Poor coordination
3 years	• Climbs • Goes up and down stairs • Knows name and sex • Balances on one foot • Puts on a shirt • Speech is understandable	• Unstable walk • Few words, no sentences • No involvement in "pretend" play • No interest in other children
4 years	• Hops • Knows full name and age • Recognises colours • Dresses and undresses • Make-believe play	• Speech difficult to understand because of poor articulation, omission, or substitutions of consonants • No interest in interactive games • No interest in other children • Does not use sentences

Source: Republic of Zambia, Ministry of Health. (2010). *National Training Package on Provider-Initiated Paediatric HIV Testing & Counselling in Zambia*.

Appendix 6B: WHO Staging for Children with Established HIV Infection

Clinical Stages	
Clinical Stage 1	
• Asymptomatic	• Persistent generalised lymphadenopathy
Clinical Stage 2	
• Unexplained persistent hepatosplenomegaly • Papular pruritic eruptions • Extensive wart virus infection • Extensive molluscum contagiosum • Unexplained persistent parotid enlargement	• Recurrent oral ulcerations • Lineal gingival erythema • Herpes zoster • Recurrent or chronic upper respiratory tract infection (otitis media, otorrhea, sinusitis, tonsillitis) • Fungal nail infections
Clinical Stage 3	
• Unexplained moderate malnutrition not adequately responding to standard therapy • Unexplained persistent diarrhoea (14 days or more) • Unexplained persistent fever (above 37.5°C intermittent or constant, for longer than 1 month) • Persistent oral Candida (outside first 6–8 weeks of life) • Acute necrotising ulcerative gingivitis/periodontitis	• Oral hairyleukoplakia • Lymph node TB • Pulmonary TB • Severe recurrent presumed bacterial pneumonia • Symptomatic lymphoid interstitial pneumonitis • Chronic HIV-associated lung disease including bronchiectasis • Unexplained anaemia (<8g/dl), neutropenia (<05 x 109) or chronic thrombocytopenia (<50 x 109/13)
Clinical Stage 4	
• Unexplained severe wasting, stunting or severe malnutrition not responding to standard therapy • Pneumocystis pneumonia • Recurrent severe bacterial infections (for example, empyema, pyomyositis, bone or joint infection, meningitis, but excluding pneumonia) • Chronic herpes simplex infection; (orolabial or cutaneous > 1 month' s duration or visceral at any site) • Extra pulmonary tuberculosis • Kaposi sarcoma • Esophageal candidacies (or Candida of trachea, bronchi or lungs) • Central nervous system toxoplasmosis (outside the neonatal period) • HIV encephalopathy • Chronic Isosporiasis	• Cytomegalovirus (CMV) infection; retinitis or CMV infection affecting another organ, with onset at age >1 month. • Extra pulmonary cryptococcosis including meningitis • Disseminated endemic mycosis (extra pulmonary histoplasmosis, coccidiomycosis, penicilliosis) • Chronic Cryptosporidiosis • Disseminated non-tuberculous mycobacteria infection • Acquired HIV-associated rectal fistula • Cerebral or B cell non-Hodgkin lymphoma ▪ Progressive multifocal leukoencephalopathy ▪ HIV-associated cardiomyopathy or HIV-associated nephropathy

Source: Republic of Zambia, Ministry of Health. (2010). *National Training Package on Provider-Initiated Paediatric HIV Testing & Counselling in Zambia*.

Appendix 6C: ARV Dosing Guide for Children

<table>
<tr><th></th><th>Stavudine (d4T)</th><th>Lamivudine (3TC)</th><th>Zidovudine (AZT)</th><th>Didanosine (ddI)</th><th>Abacavir (ABC)</th><th>Efavirenz (EFV)</th><th>Nevirapine (NVP)</th><th>Lopinavir/ritonavir (LVP/rtv)</th><th>Ritonavir boosting (RTV)</th><th>CTX</th><th>Multivitamins</th></tr>
<tr><td>Target Dose</td><td>1 mg/kg/dose TWICE daily</td><td>4–6 mg/kg/dose TWICE daily</td><td>240mg/m^3/dose TWICE daily</td><td>90–120mg/m^3/dose TWICE daily</td><td>8mg/kg/dose TWICE daily</td><td>By wt. band ONCE daily</td><td>150 mg/m^3/dose TWICE daily</td><td>300/75mg/m3/dose LPV/rtv TWICE daily</td><td>**ONLY as booster for LPV/rtv when on Rifampicin TWICE daily</td><td>Once Daily</td><td>Once Daily</td></tr>
<tr><td>Available formulations ✱</td><td rowspan="2">Sol. 1mg/ml Caps 15, 20, 30mg</td><td rowspan="2">Sol. 10mg/ml Tabs 150mg (scored)</td><td rowspan="2">Sol. 10mg/ml Caps 100mg Tabs 300mg (not scored)</td><td rowspan="2">Tabs 25, 50, 100mg (dispensable in 30ml water) Caps 250mg EC</td><td rowspan="2">Sol. 20mg/ml Tabs 300mg (not scored)</td><td rowspan="2">Caps 50, 200mg Tabs 50, 200, 600mg (not scored)</td><td rowspan="2">Sol. 10mg/ml Tabs 200mg (scored)</td><td rowspan="2">Sol. 80/20mg/ml Tabs 200/50mg, 100/25mg</td><td rowspan="2">Sol. 80mg/ml</td><td rowspan="2">Sol 40/200mg /5ml Tabs 80/400mg (scored)</td><td rowspan="2">Sol. Tabs (B Co)</td></tr>
<tr><td>✱ Wt. (kg.)</td></tr>
<tr><td><3</td><td colspan="10">Consult with a clinician experienced in paediatric ARV prescribing for neonates (<28 days of age) and infants weighing <3kg</td><td rowspan="5">2.5ml</td></tr>
<tr><td>3-3.9</td><td rowspan="2">6ml</td><td rowspan="2">3ml</td><td rowspan="2">6ml</td><td>AVOID</td><td rowspan="3">3ml</td><td rowspan="5">Dosing <10kg not established</td><td rowspan="2">5ml</td><td>1ml</td><td>**1ml</td></tr>
<tr><td>4-4.9</td><td rowspan="4">2x25mg tabs</td><td rowspan="4">1.5ml</td><td rowspan="4">**1.2ml</td></tr>
<tr><td>5-5.9</td><td rowspan="3">7.5mg: open 15mg capsule into 5ml water; give 2.5ml & discard rest</td><td rowspan="4">4ml</td><td rowspan="4">9ml</td></tr>
<tr><td>6-6.9</td><td rowspan="2">8ml</td></tr>
<tr><td>7-7.9</td><td rowspan="3">10mg: open 20mg capsule into 5ml water; give 2.5ml & discard rest</td><td rowspan="3">4ml</td><td rowspan="4">5ml OR ½ tab</td></tr>
<tr><td>8-8.9</td></tr>
<tr><td>9-9.9</td></tr>
<tr><td>10-10.9</td><td rowspan="3">15ml: open 15ml capsule into 5ml water</td><td rowspan="3">6ml</td><td rowspan="3">12ml</td><td>1x50mg+1x25mg tabs am: 2x25mg tabs pm</td><td rowspan="3">? ml</td><td rowspan="3">200mg caps/tabs</td><td rowspan="3">10ml</td><td rowspan="3">2ml twice daily OR 100/25mg tabs; 2 tabs am: 1 tab pm</td><td rowspan="3">**1.5ml</td><td rowspan="8">5ml</td></tr>
<tr><td>11-11.9</td><td>1x50mg tabs + 1x25mg tabs</td></tr>
<tr><td>12-13.9</td></tr>
<tr><td>14-16.9</td><td rowspan="2">20mg: open 20mg capsule into 5ml water</td><td rowspan="2">½ tab</td><td rowspan="2">2 caps am; 1 cap pm</td><td>2x50mg tabs am; 1x50mg + 1x25mg tabs pm</td><td rowspan="2">? ml</td><td rowspan="2">200mg caps/tabs+50 mg cap/tab</td><td rowspan="3">1 tab am: ½ tab pm</td><td rowspan="2">2.5ml twice daily OR 100/25mg tabs: 2 tabs twice daily</td><td rowspan="2">**2ml</td><td rowspan="3">10ml or 1 tab</td></tr>
<tr><td>17-19.9</td><td>2x50mg tabs</td><td rowspan="2">60ml</td></tr>
<tr><td>20-24.9</td><td>20mg am: 30mg pm</td><td>1 tab am; ½ tab pm</td><td>2 caps</td><td>1x100mg tab+ 1x25mg tab twice daily OR</td><td>200mg cap/tab + 2x50 mg caps/tabs</td><td>3ml twice daily OR 100/25mg tabs: 3 tabs am; 2 tabs pm</td><td>**2.5ml</td></tr>
</table>

25-29.9	30mg	1 tab	1 tab	1x250mg EC cap once daily	1 tab	200mg caps/tabs + 3x50mg caps/tabs	1 tab	3.5ml twice daily OR 200/50mg tabs; 2 tabs am: 1 tab pm	**3ml		
30-34.9						2x200mg caps/tabs		4ml twice daily OR 200/50mg tabs; 2 tabs am; 1 tab pm		2 tabs	1 tab
35-39.9								5ml twice daily OR 200/50mg tabs; 2 tabs twice daily	**4ml		
>40						600mg tab					

Source: World Health Organization. 2010. *Antiretroviral therapy for HIV infection in infants and children. Recommendations for a public health approach. 2010 revision*.

Appendix 6D: Adherence Preparation and Support Guides

How to use these guides:

These adherence preparation and support guides were developed to assist a range of providers (trained counsellors, lay counsellors, Peer Educators, doctors, nurses, pharmacists, community healthcare workers, and others) who work with children living with HIV and their caregivers. These guides can help providers work with caregivers of HIV-infected children to understand the importance of adherence to HIV care and treatment throughout their child's life; to ensure understanding of the care and medications plan; to identify potential adherence challenges; and to come up with practical solutions. The adherence guides should be adapted to reflect national HIV care and treatment guidelines, as well as the specific clinic, community, and cultural contexts in which they are used, including the age and situation of the individual adolescent client. It may be helpful to translate the guides into the local language.

Included in this guide are 2 adherence assessments:

- The *Adherence Preparation/Support Guide for Assessing Caregivers' Readiness for ART* can be used to assess adherence readiness and help caregivers to develop a personal adherence plan for their child. The assessment questions should be used to identify areas where the caregiver and client may need additional information and support.

- The *Adherence Assessment for Caregivers of Children Taking ART* can be used at every follow up and refill visit to ensure that the caregivers understand their child's care and medication plan, and that the child is taking his or her medicines the correct way, every day. The assessment questions should be used to identify areas where the caregiver and client may need additional information and support.

Included in this guide is one adherence preparation and support guide to assess caregiver's readiness for their child to start ART and one to assess the adherence of caregivers. The forms should be adapted as needed and used during adherence counselling sessions, according to the caregiver's needs and situation. Completed adherence assessment forms should be kept in the client's file and referred to during follow-up visits.

Basic information:

Write the client's name, age, file number, as well as the caregiver's name at the top of the form. Be sure to sign and date the form at the end of each session and ensure that the form is kept in the client's clinic file.

Questions to ask the caregiver:

The questions in this section allow the health worker to discuss specific care, medication, and adherence issues with the caregiver. The questions should be used to identify areas where the caregiver may need additional information and support, but should not be used to "score" their knowledge and readiness to take ARVs. It is important to allow time for the caregiver to respond to each question. Caregivers should always be made to feel comfortable asking questions and expressing potential adherence challenges and they should never be judged or punished. Remember to write down any important information from their responses, as this will help decide on next steps, important areas for follow up, and in supporting the client's adherence over the long term.

Caregiver requires more counselling and support in these areas:

Write down specific areas in which the caregiver and client need ongoing adherence counselling and support. Refer to this section of the form during follow-up counselling appointments and clinic visits. Even if a caregiver has questions about their child's care and medicines, or is facing specific adherence challenges, this is usually not a reason to delay initiation of ARVs/ART. Instead, these issues should be viewed as important areas for ongoing counselling and support.

Adherence Preparation/Support Guide for Assessing Caregivers' Readiness for ART

Client's Name: _____ **Client's Age:** _____ **Client's File#:** _____

Caregiver and/or Treatment Buddy's Name: _____

Questions to ask the caregiver:	Notes
1. Can you tell me what support group or group education sessions you and your child have attended here at the clinic?	
2. Can you explain why your child needs to take ARVs?	
3. Who knows about your child's HIV status?	
4. What do you expect from your child taking ARVs?	
5. How do you feel about your child taking medicines every day for his or her lifetime?	
6. Can you tell me the names of the ARVs your child will be taking and when he or she will take them (how many pills, what times of day)?	
7. Can you tell me some possible side effects of your child's ARVs? What will you do if your child has side effects?	
8. Can you explain what happens if your child does not take all of his or her ARVs every day, at the same time?	
9. Who will help your child come to the clinic for appointments and help him or her take his or her medicines every day? What is your contact information/other supporters' contact information?	
9a. If someone other than the caregiver, has he or she been to the clinic with your child?	
9. What might make it difficult for your child to come to this clinic for his or her appointments?	
10. How will your child remember to come for his or her clinic appointments?	
11. How will your child remember to take his or her medicines the right way, at the same time, every day?	
12. Is your child taking any medicines — other than the ones prescribed to him or her by the doctor or nurse (including traditional or herbal medicines)?	
13. Where will you store the medicines?	
14. What will you do if you are about to run out of medicine(s)? What about if you or your child will be away from each other, or away from home, such as when he or she is at school?	

15. What will you do if the child misses a dose of the medicine?	
16. What questions do you have about the plan for your child's care or medicines?	
17. Do you feel that you and your child are ready to start taking these medicines?	

Caregiver requires more counselling and support in these areas (LIST):

Signature of person completing assessment: _____ **Date:** _____

Adapted from: ICAP. 2010. *Improving Retention, Adherence, and Psychosocial Support within PMTCT Services: A Toolkit for health workers.*

Adherence Assessment for Caregivers of Children Taking ART

Client's Name: _____ **Client's Age:** _____ **Client's File#:** _____

Caregivers Name: _____

Tick one: ⑧ 2-week follow up ⑧ 1-month follow up ⑧ monthly refill ⑧ 3-month refill

Questions to ask the caregiver:	Notes
1. Can you tell me more about how your child took his or her medications this past month (or 2 weeks)? (Do you know the names of the medicines? How many pills does he or she take? At what time of day does he or she take them?)	
2. I would like you to think about the last 7 days. How many pills did your child take late in the last 7 days? What were the main reasons he or she took them late?	
3. How many pills did your child miss in the last 7 days? What were the main reasons he or she missed them?	
4. If we put all the pills your child had to take in the last 2 weeks into one cup this is what you would see. If he or she took all of them the cup would be empty. If he or she forgot to take all of them the cup would be full. Which of these pictures best shows how many of your child's doses he or she took in the last month (or 2 weeks)? (circle one)	
5. How did the medicines make your child feel?	
6. Can you tell me about any changes you or your child noticed (such as in your child's health) or challenges your child had with his or her medicines?	
7. What support or reminders does your child have to help him or her take his or her medicines at the same time, every day?	
8. What questions do you have about your child's care or your medicines?	

Other assessment measures and next steps:	Notes
Referrals made:	
Next steps and follow-up plan:	Next appointment date: _____

Notes:

Signature of person completing assessment: _____ **Date:** _____

Adapted from: ICAP. 2010. *Improving Retention, Adherence, and Psychosocial Support within PMTCT Services: A Toolkit for health workers.*

Appendix 6E: Action Plan Worksheet

What is the problem?	What is your solution to this problem?	What are your strategies, activities, or "next steps" to achieve the solution?	What is your timeframe?	What resources or support are needed?	Comments
Your mentees who lack previous pediatric ART training are seeing pediatric clients and are not comfortable with providing care to children.		**1.**			
		2.			
		3.			
Your mentees do not encourage adult clients to bring in children for testing and/or subsequent ART treatment when it is needed.		1.			
		2.			
		3.			
There is poor adherence to ART among HIV-infected children at your clinic.		1.			
		2.			
		3.			

References and Resources

[1] Borrowed from Republic of Zambia, Ministry of Health. (2010). *National Training Package on Provider-Initiated Paediatric HIV Testing & Counselling in Zambia*.

[2] The South to South Partnership for Comprehensive Family HIV Care and Treatment Program; International Center for AIDS Care and Treatment Programs; François Xavier Bagnoud, University of Medicine and Dentistry of New Jersey. 2010. "HIV Care & Treatment Training Series", Module 6: Disclosure Process for Children Ages 3 to 18 Living with HIV. Pages 6-19.

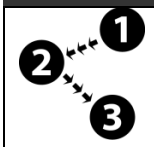
Module 7 Tuberculosis and HIV

Total Module Time: 240 minutes (4 hours)

Learning Objectives

After completing this module, participants will be able to:

- Review clinical manifestations, diagnosis, prevention, and treatment of tuberculosis (TB).
- Review how to implement the WHO's "Three I's" in the clinic setting.
- Discuss challenges one may encounter when simultaneously using ART and anti-TB drugs to treat co-infected individuals.
- Apply their knowledge of care and treatment of co-infected clients to specific case studies.
- Describe alternative and supplemental learning activities for the module.
- Develop a site-specific action plan to overcome barriers to implementing "Three I's" at their clinics.

Methodologies	
	• Interactive trainer presentation • Case studies • Large group discussion • Role play • Small group work

Materials Needed	
	• Attendance sheet for Module 7 • Flip chart and markers • Tape or Bostik • Participants should have their Participant Manuals. The Participant Manual contains background technical content and information for the exercises. • Extra copies of *Appendix 7D: Action Plan Worksheet* (several per group, in case participants need extra copies) • Electronic version of *Appendix 7D: Action Plan Worksheet* on flash drive so that participants with laptop computers can work in the electronic version rather than on paper.

References and Resources	
	• ITECH. 2099. *National training on TB/HIV for healthcare workers*, Tanzania Ministry of Health and Social Welfare. • World Health Organization. 2011. *Guidelines for intensified case-finding TB and isoniazid preventive therapy for people*

	living with HIV resource-constrained settings. Geneva: WHO. • World Health Organization. 2009. WHO policy on TB infection in health-care facilities, congregate settings and households. Geneva: WHO.

Advance Preparation	
	• Make sure you have all of the materials listed in "Materials Needed" on the first page. • Prepare the attendance sheet in advance and ask participants to sign in as they arrive for the 7th session of training. • Read through the entire module and ensure that all trainers are prepared and comfortable with the content and methodologies. • Review the appendices and ensure all trainers are comfortable using them and integrating them into the module. • Review any applicable national guidelines ahead of time and prepare to incorporate them into the discussion. • Exercise 1 requires advance preparation by the trainer. Please review these exercises ahead of time.

Session 7.1: Review of Key Competencies and Key Updates for Tuberculosis and HIV

Activity/Method	Time
Interactive trainer presentation and large group discussion	75 minutes
Questions and answers	5 minutes
Total Session Time	80 minutes

Session 7.2: Teaching, Coaching, and Skills Transfer

Activity/Method	Time
Interactive trainer presentation and large group discussion	5 minutes
Exercise 1: TB and HIV: Case studies, with large group discussion and role play	45 minutes
Questions and answers	5 minutes
Total Session Time	55 minutes

Session 7.3: Additional Learning Activities and Resources

Activity/Method	Time
Interactive trainer presentation and large group discussion	10 minutes
Questions and answers	5 minutes
Total Session Time	15 minutes

Session 7.4: Action Planning

Activity/Method	Time
Interactive trainer presentation and large group discussion	5 minutes
Exercise 2: The "Three I's": Small group work and large group discussion	60 minutes
Questions and answers	5 minutes
Review of key points	10 minutes
Total Session Time	80 minutes

Session 7.1 Review of Key Competencies and Key Updates for Tuberculosis and HIV

Total Session Time: 80 minutes (1 hour, 20 minutes)

Trainer Instructions

Step 1: Review the session objectives, listed below.

Step 2: Ask participants if they have any questions before moving on.

Session Objectives

After completing this session, participants will be able to:

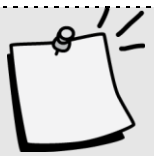
- Review clinical manifestations, diagnosis, prevention, and treatment of tuberculosis (TB).
- Review how to implement the WHO's "Three I's" in the clinic setting.
- Discuss challenges one may encounter when simultaneously using ART and anti-TB drugs to treat co-infected individuals.

Trainer Instructions

Step 3: Begin by explaining that TB is one of the most common deadly infections on earth. Each year, 8 million of the world's people develop active TB and 2 million die unnecessarily from this treatable disease.

Step 4: Continue by asking participants what they know about TB.

- *What is TB?*
- *How is it spread?*
- *What are the different types of TB?*
- *What are some risk factors for TB?*
- *What is the relationship between HIV and TB?*



Make These Points

- TB is caused by inhaling Mycobacterium tuberculosis (*M. tuberculosis*) bacilli. If infection is successfully established, a primary focus forms in

the lung, then bacilli spread to the lymph nodes and later via the lymph and blood to organs throughout the body.
- There are two types of TB. The type that affects the lungs is pulmonary TB (PTB) and is the most common type. The type that affects other parts of the body other than the lungs is called extra pulmonary TB (EPTB) is becoming more common, especially due to HIV. Both types of TB are caused by the same bacteria.
- TB can remain in an inactive (dormant) state for years without causing symptoms or spreading to other people.
- When the immune system of a client with dormant TB is weakened, the TB can become active (reactivate) and cause infection in the lungs or other parts of the body.
- The risk factors for acquiring TB include close-contact situations, alcohol and injection drug use, and certain diseases (for example, diabetes, cancer and HIV) and occupations (for example, health-care workers).
- TB and HIV are overlapping epidemics. HIV is the greatest risk factor for TB. An HIV positive person has a 50% chance of developing TB in lifetime (5- 15% chance per year).

Overview of TB

- TB is caused by inhaling Mycobacterium tuberculosis (*M. tuberculosis*) bacilli. These droplets are mainly produced by TB-infected adolescent and adults with cavities in their lungs. If infection is successfully established, a primary focus forms in the lung, then bacilli spread to the lymph nodes and later via the lymph and blood to organs throughout the body.
- There are two types of TB. The type that affects the lungs is pulmonary TB (PTB) and is the most common type. The type that affects other parts of the body other than the lungs is called extra pulmonary TB (EPTB) is becoming more common, especially due to HIV. Both types of TB are caused by the same TB bacteria.
- Other parts of the body commonly affected by TB are lymph nodes, skin, spine, intestines, and the brain.
- TB can remain in an inactive (dormant) state for years without causing symptoms or spreading to other people.
- When the immune system of a client with dormant TB is weakened, the TB can become active (reactivate) and cause infection in the lungs or other parts of the body.
- The risk factors for acquiring TB include close-contact situations, alcohol and injection drug use, and certain diseases (for example, diabetes, cancer, and HIV) and occupations (for example, health-care workers).
- TB and HIV are overlapping epidemics. HIV is the greatest risk factor for TB. An HIV positive person has a 50% chance of developing TB in lifetime (5- 15% chance per year).

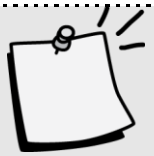
Trainer Instructions

Step 5: Ask participants:

- *How is TB screened for at your clinic? What questions should you always ask a client when taking a history?*
- *What tests provide the confirmed diagnosis in adults? In children?*
- *Are there any special challenges in diagnosing TB among persons with HIV?*

Emphasise that when a client presents for care and treatment at the health facility, nurses must ACTIVELY pursue the diagnosis of TB if a cough has been present for more than weeks.

Refer participants to *Appendix 7A: TB Screening Questionnaire for Collaborative TB/HIV Activities* and explain that this tool can be adapted for use in their clinic setting.



Make These Points

- The WHO guidelines recommend that adults and adolescents who report any 1 of the symptoms of current cough, fever, weight loss, or night sweats be evaluated further for TB and other diseases.
- If a client has symptoms suggestive of TB, investigate as per national guidelines.
- It is very important to investigate clients for TB before starting ARV therapy and to routinely screen patients on ARV therapy.
- It can be difficult to recognise latent TB infection in someone with HIV, because the tuberculin skin test (TST) (or purified protein derivative, PPD) for latent disease can be difficult to interpret. TB patients with severe immunodeficiency are also less likely to have positive sputum smears because of a decreased ability to mount an inflammatory response.
- It can be difficult to detect when latent TB has become active disease by simply screening for symptoms. Chest x-rays help but are unavailable or would make programmes unaffordable in many settings. Debate persists about whether chest x-ray is a necessary screening tool for IPT programmes.

Screening for TB

The WHO 2011 Guidelines on ICF and IPT propose that PLHIV be screened for TB with a simple clinical algorithm at each and every clinic visit, regardless of the reason for the visit. The guidelines recommend that adults and adolescents who report any one of the symptoms of current

cough, fever, weight loss, or night sweats be evaluated further for TB and other diseases.

Other symptoms of TB can include:
- Sputum production which may occasionally be blood stained
- Loss of appetite, malaise, tiredness
- Shortness of breath, chest pains
- New palpable lymphadenopathy
- Tachycardia (elevated heart rate)
- Fever
- Crackles, wheezes heard in the lungs
- Weight loss
- Laboured breathing

Nurses should screen all HIV-infected clients for signs and symptoms of active TB at each clinic visit. If a client has symptoms suggestive of TB, investigate as per national guidelines. It is very important to investigate clients for TB before starting ARV therapy and to routinely screen patients on ARV therapy.

Diagnosis of TB

TB can be diagnosed in several different ways, including chest X-rays, analysis of sputum, and skin tests.

- **Direct microscopy** is the most reliable and cost effective way to identify persons who are most likely to transmit TB to others. Examination of the sputum on a slide (smear) under the microscope can show the presence of the TB-like bacteria. Bacteria of the Mycobacterium family, including atypical mycobacteria, stain positive with special dyes and are referred to as acid-fast bacteria (AFB).
  - **Sputum smear positive:** Treatment is started for those who have one or two positive sputum smears.
  - **Sputum smear negative:** The patient who tests negative on sputum smear microscopy on at least two specimens should have a chest X-ray to look for radiographic abnormalities that are consistent with active TB. Treatment should be started if the X-ray shows signs of active TB and there is a decision made by a clinician to treat with a full course of anti-TB medications.

- Examination by **mycobacterial culture** is the gold standard of TB diagnosis. A sample of the sputum also is usually taken and grown (cultured) in special incubators so that the TB bacteria can subsequently be identified as TB or atypical TB. Traditionally, sputum is collected for three successive mornings and than examined. However, culture is more costly and time-consuming than microscopy, and requires specialised media and skilled laboratory personnel. Indications for the need to use culture are as follows:

- History of previous unsuccessful TB treatment (interruption, failure, relapse).
- In cases where drug susceptibility testing is necessary e.g. where contact may be multiple drug resistant (MDR).
- Clients who remain positive at the end of the intensive phase of treatment and or at the end of the treatment period.
- Clients who have two negative smears, not responded to a course of antibiotics and clinically TB is suspected.

- Several types of **skin tests** are used to screen for TB infection. These so-called tuberculin skin tests include the Tine test and the Mantoux test, also known as the PPD (purified protein derivative) test.
- In each of these tests, a small amount of purified extract from dead TB bacteria is injected under the skin. If a person is not infected with TB, then no reaction will occur at the site of the injection (a negative skin test). If a person is infected with TB, however, a raised and reddened area will occur around the site of the test injection. This reaction, a positive skin test, occurs about 48-72 hours after the injection. When only the skin test is positive, or evidence of prior TB is present on chest X-rays, the disease is referred to as "latent TB." This contrasts with active TB as described above, under symptoms.

- **Radiography (chest x-rays)** has more than 90% sensitivity but only 65-70% specificity for detecting PTB. A chest x-ray is an important tool in supporting the diagnosis of PTB in symptomatic individuals whose sputum smears are negative for AFB but it is not possible to diagnose PB using chest x-rays only.

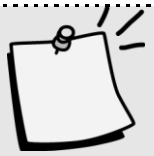
TB Diagnosis and HIV Status

- TB patients with severe immunodeficiency are less likely to have positive sputum smears because of a decreased ability to mount an inflammatory response. Important to recognise the clinical and chest radiographic characteristics of HIV-TB, so patients who are smear-negative can be recognised and treated appropriately.
- It can be difficult to recognise latent TB infection in someone with HIV, because the tuberculin skin test (TST) (or purified protein derivative, PPD) for latent disease can be difficult to interpret. Advancing HIV disease causes some people to be anergic on TST (without substantial reactions) so some experts recommend using a lower cut-off (a reaction ≥ 5mm rather than ≥10mm) as a positive result.
- The symptoms and signs of TB and those of other HIV-related lung disease may be indistinguishable. Symptoms such as chronic cough, weight loss, lymphadenopathy and fever are common with other HIV-related lung diseases.

Trainer Instructions

Step 6: Ask participants:

- *What do you know about the "Three I's"? What are some different ways of ensuring intensive case finding in your clinic setting? What about TB infection control measures? And isoniazid preventive therapy (IPT)?*
- *How have you used IPT in your practice? If not, are there ways in which your clinic could incorporate IPT?*
- *Does, or could, your clinic work with community partners regarding IPT? Describe ways to establish or improve these working relationships.*



Make These Points

- In countries with high TB and HIV burdens, the World Health Organization recommends the "Three I's" strategy for controlling these dual diseases: intensified TB case finding, isoniazid preventive therapy (IPT) and infection control for TB.
- Main features of intense case finding include: asking a series of symptom screening questions at every visit (current cough, fever, night sweats, or weight loss); conducting an appropriate diagnostic evaluation for anyone with a positive symptom screen; and performing TB screening for household contacts of all index patients.
- TB infection control refers to the development and implementation of basic infection control practices in facilities and communities where individuals are at risk of transmitting or contracting TB.
- *Appendix 7B: Infection Control Checklist* provides a practical framework for implementing the WHO policy recommendations on TB infection control.
- Isoniazid preventive therapy (IPT) means taking a course of isoniazid treatment in order to stop the development of TB. IPT can prevent TB in people with HIV regardless of CD4 count or antiretroviral treatment.
- The WHO clearly recommends that a course of IPT should be provided to all HIV-infected clients who are not currently on treatment for TB and who have a negative symptom screen.
- The 2011 WHO guideline also recommends a 6 month course of isoniazid for all HIV-infected children, adolescents, and adults who successfully complete treatment for TB. In addition, children under 5 years of age (including infants less than 1 year old), who are household contacts of a person with TB and have no evidence of TB disease themselves, should receive 6months of isoniazid, regardless of their HIV status.

Prevention of TB[1]

In countries with high TB and HIV burdens, the World Health Organization recommends the "Three I's" strategy for controlling these dual diseases: **i**ntensified TB case finding, **i**soniazid preventive therapy (IPT), and **i**nfection control for TB.

Intensified TB case finding

- Main features of intense case finding include: asking a series of symptom screening questions at every visit (current cough, fever, night sweats, or weight loss); conducting an appropriate diagnostic evaluation for anyone with a positive symptom screen; and performing TB screening for household contacts of all index patients.
- When a client is diagnosed with any form of TB, close family or household members should be carefully questioned for symptoms suggestive of TB, as one of them may have been the source case that infected the child. If a source case is identified, other children in the house, or who may have been exposed to the index case, should also be evaluated for TB.

Infection Control

- TB infection control refers to the development and implementation of basic infection control practices in facilities and communities where individuals are at risk of transmitting or contracting TB.
- The co-mingling of TB patients with immunosuppressed patients on hospital wards and in crowded waiting areas provides an ideal setting for transmitting TB.
- It is critical for health facilities to implement simple and effective TB infection prevention measures.
- *Appendix 7B: Infection Control Checklist* provides a practical framework for implementing the WHO policy recommendations for TB infection control in the clinic setting.

Isoniazid preventive therapy (IPT)

- Isoniazid preventive therapy, or IPT, refers to the use of isoniazid to treat patients who are infected with TB but do not have active disease, a condition known as latent TB infection.
- The WHO clearly recommends that a course of IPT should be provided to all HIV-infected clients who are not currently on treatment for TB and who have a negative symptom screen.
- The 2011 WHO guideline also recommends a 6 month course of isoniazid for all HIV-infected children, adolescents, and adults who successfully complete treatment for TB. In addition, children under 5 years of age (including infants less than 1 year old), who are household contacts of a person with TB and have no evidence of TB disease themselves, should receive 6months of isoniazid, regardless of their HIV status.

- Do not delay initiation of ARV therapy in favour of IPT. ARV therapy effectively decreases long-term TB risk.
- A positive tuberculin skin test is not required to qualify for IPT in high TB burden countries. TST testing is logistically difficult to accomplish as it requires a return visit 48 to 72 hours following placement of the test and a skilled health care worker both to administer and interpret the test. Sites that have required a positive TST prior to initiating IPT have seen large numbers of potential beneficiaries of IPT being lost to follow-up prior to its being prescribed. However, when it is feasible to perform the test without the risk of losing the patient to follow-up (as in hospitalized patients), it can be used to identify those most likely to benefit from IPT.
- IPT is safe for most people. There is a small risk of hepatitis, which is greater in people who drink a lot of alcohol or have a history of liver disease. The risk is also greater in women during pregnancy and in the three months after delivery. This form of hepatitis can be life threatening in people who get symptoms of hepatitis if they continue to take the drug.
- IPT may worsen peripheral neuropathy. Clients should be told about this, and asked to report any increase in nerve pain in the limbs immediately, especially if they are also taking ART that includes stavudine (d4T), which also causes neuropathy.

The following clients are eligible for IPT:

- All HIV positive people with no symptoms or signs suggestive of active TB are eligible for IPT.
- Pregnancy is not a contraindication to IPT.

The following clients are NOT eligible for IPT:

- Any client with signs or symptoms suggestive of active TB. In order to avoid the risk of giving isoniazid to people with active TB, the most simple rule is: only give it to well patients. If they have cough, fever or recent weight loss, watch for the development of active TB. If the client might have TB but you can't be sure, wait and investigate.
- Clients with active liver disease or active alcohol abuse should not be offered IPT because of potential hepatotoxicity of the drug used for preventive therapy.
- Clients who have had active TB in the past 2 years should not be considered.
- Clients who were treated for TB more than 2 years ago may be considered because they may have already been re-infected with TB.
- Clients on ARV therapy should not be offered TB preventive therapy, as there is currently no evidence of added benefit.

Recommended dosage for IPT, per 2011 WHO guidelines:

- The isoniazid dose for adults is 300 mg per day, while the pediatric dose is 10 mg/kg/day. Children should also receive pyridoxine (vitamin B6) 25 mg per day.

- No specific recommendation was made by WHO regarding pyridoxine supplementation in adults and adolescents who receive isoniazid, but because peripheral neuropathy is associated with both isoniazid and nucleoside reverse transcriptase inhibitors, pyridoxine (25-50 mg) is often prescribed with the hope that it will reduce the risk of peripheral neuropathy.

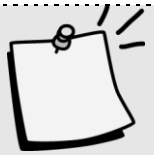
Trainer Instructions

Step 7: Ask participants:

- *How is TB treated in your clinic? Are clients referred or are TB services integrated into HIV care and treatment? If TB and HIV activities are NOT integrated in your setting, what changes need to happen to make integration possible?*
- *What do you know about TB and drug resistance? What is MDR-TB and XDR-TB? How common are these types of TB in your setting?*
- *What are some challenges with treating co-infected clients for TB? (e.g. adherence, drug interactions, etc). How are these challenges managed in your setting?*

Review key content on TB treatment and discuss any national guidelines clinic protocols for treatment and/or referral.

Refer participants to *Appendix 7C: Mode and Dosage of Anti-TB Drugs* for more information about TB drugs, their basic mode of action, and dosage. This chart should be adapted to any applicable national guidelines.



Make These Points

- Active TB is treated with a combination of medications along with isoniazid. Rifampin (Rifadin), ethambutol (Myambutol), and pyrazinamide are the drugs commonly used to treat active TB in conjunction with isoniazid (INH).
- Drug resistance usually arises when TB patients do not or cannot take their medicine as prescribed, and drug-resistant mutations of the bacteria are allowed to replicate.
- To ensure thorough treatment, it is often recommended that the client takes his or her pills in the presence of someone who can supervise the therapy. This approach is called Directly Observed Treatment Strategy (DOTS).
- Some challenges to the management of TB in people living with HIV are:
  - Adherence to 2 long-term drug regimens

    - Management of side effects of HIV and TB drugs
    - Drug interactions between some TB and ARV drugs
    - Follow-up and cost of long-term regimens
- Nurses should start ART in all HIV-infected individuals with active TB, irrespective of the CD4 cell count.
- Nurses should start TB treatment first, followed by ART as soon as possible afterwards (and within the first 8 weeks).
- Nurses should start use efavirenz (EFV) as the preferred NNRTI in clients starting ART while on TB treatment.
- In TB infected clients who are co-infected with HIV, clinical deterioration due to IRIS commonly occurs after initiation of ART. In all cases of IRIS, anti-TB therapy should be continued.
- National guidelines on the treatment of active TB provide additional guidance on screening, treatment, and monitoring of clients with TB. Nurses should follow any national guidelines for treating patients who are infected with both TB and HIV.

Treatment of TB

National guidelines on the treatment of active TB provide additional guidance on screening, treatment, and monitoring of clients with TB. Nurses should follow any national guidelines for treating patients who are infected with both TB and HIV.

Treatment strategies

To ensure thorough treatment, it is often recommended that the client takes his or her pills in the presence of someone who can supervise the therapy. This approach is called Directly Observed Treatment Strategy (DOTS). The essential features of DOTS include:

- Government commitment to sustained TB control activities
- Case detection by sputum smear microscopy among symptomatic clients self-reporting to health services
- Directly observed, standardized treatment regimen of 6-8 months
- Efficient information systems for monitoring and reporting treatment outcomes
- A regular, uninterrupted supply of all essential anti-TB drugs

HIV/TB Co-Infection

The WHO recommended treatment of TB disease in HIV-infected adults is a 6-month regimen consisting of:

- An initial phase of isoniazid (INH), rifamycin, pyrazinamide, and ethambutol for the first 2 months.
- A continuation phase of INH and rifamycin for the last 4 months.
- Clients with advanced HIV (CD4 counts < 100) should be treated with daily or 3-times-weekly therapy in both the initial and the continuation phases. Twice weekly therapy may be considered in clients with CD4 counts ≥ 100. Once-weekly INH/rifapentine in the continuation phase should not be used in any HIV-infected patient.
- 6 months should be considered the minimum duration of treatment for adults with HIV, even for clients with culture-negative TB. Prolonging treatment to 9 months (extend continuation phase to 7 months) for HIV-infected patients with delayed response to therapy (e.g., culture positive after 2 months of treatment) should be strongly considered.
- Clients exposed to an index case with poor response to TB treatment or known multidrug-resistant (MDR) TB should be discussed with the expert MDR centre in the country, if available.
- ARV regimens for TB clients are modified as necessary or, when possible, delayed until the client has been stabilised on TB treatment before initiating ARV therapy.

TB and Drug Resistance

- When a strain of TB bacteria is resistant to two or more 'first-line' antibiotic drugs it is called multi-drug resistant TB or MDR-TB.
- When it is resistant to three or more 'second-line' antibiotics as well, it is classed as extreme drug resistant TB, or XDR-TB.
- Drug resistance usually arises when TB patients do not or cannot take their medicine as prescribed, and drug-resistant mutations of the bacteria are allowed to replicate.
- People can also catch MDR and XDR-TB from others.

There are many challenges to the management of TB in people living with HIV:

- Adherence to two long-term drug regimens
- Management of side effects of HIV and TB drugs
- Drug interactions between some TB and ARV drugs
- Follow-up and cost of long-term regimens

TB and ART

- Start ART in all HIV-infected individuals with active TB, irrespective of the CD4 cell count.
- Start TB treatment first, followed by ART as soon as possible afterwards (and within the first 8 weeks).

- Use EFV as the preferred NNRTI in clients starting ART while on TB treatment. For those HIV/TB co-infected individuals who are unable to tolerate EFV, an NVP-based regimen or a triple NNRTI (AZT + 3TC + ABC or AZT + 3TC + TDF) are alternative options.

Drug Interactions

- A major concern in treating TB in HIV-infected persons is the interaction of rifampin with certain ARVs (some protease inhibitors [PIs] and NRTIs).
- Rifabutin, which has fewer problematic drug interactions, may be used as an alternative to rifampin.
- If a client already is receiving ART when TB is diagnosed, these medications should not be discontinued.
- If possible, anti-TB medications that have fewer interactions with antiretroviral medications should be used (e.g., substituting rifabutin for rifampicin).

Immune Reconstitution Inflammatory Syndrome

In TB infected clients who are co-infected with HIV, clinical deterioration due to immune reconstitution commonly occurs after initiation of ART. This is especially more likely in those clients who begin anti-TB and ART when they are severely immunocompromised and who have a rapid improvement in their CD4 counts. TB treatment failure (potentially owing to an inappropriate treatment regimen, inadequate adherence, or drug resistance) must be ruled out, and the possibility of drug toxicity should be considered. In all cases of IRIS, anti-TB therapy should be continued.

Side Effects

Side effects of TB drugs are not common but can be serious when they do occur. The side effects listed below are minor problems. If you have any of these side effects, the client can continue taking their medicine:

- Rifampin can turn urine, saliva, or tears orange.
- Rifampin can make you more sensitive to the sun.
- Rifampin also makes birth control pills and implants less effective. Women who take rifampin should use another form of birth control.

Nurses should advise clients to see medical attention immediately if they experience any of the following:

- Nausea or vomiting
- Loss of appetite
- A yellow colour to their skin (jaundice)
- A fever that lasts 3 or more days and has no obvious cause
- Abdominal pain
- Dizziness
- Skin rash
- Blurred or changed vision

Session 7.2 Teaching, Mentoring, and Skills Transfer

Total Session Time: 55 minutes

Trainer Instructions

Step 1: Review the session objective with participants.

Session Objective

After completing this session, participants will be able to:

- Apply their knowledge of care and treatment of co-infected clients to specific case studies.

Trainer Instructions

Step 2:

- Lead participants through Exercise 1, which will give an opportunity to apply their knowledge of care and treatment of co-infected clients to specific case studies.

Exercise 1: TB and HIV: Case studies, with large group discussion and role play	
Purpose	• To review key components of the clinical management of co-infected clients, by applying participants' knowledge to specific clinical challenges in the context of case studies.
Duration	45 minutes
Advance Preparation	• Review the case studies and suggested answers before the training, and adapt as needed
Introduction	Remind participants about their case study community from the previous modules. The purpose of this exercise is to follow one of the case study characters, so that participants can apply their knowledge of TB management in a co-infected client.
Activities	**Case Studies and Large Group Discussion** 1. Ask participants to review the case studies in their Participant Manuals. 2. Ask a participant to read the 1st case study and the associated questions. 3. Allow time for the large group to answer and

	comment on responses to the questions. 4. Record key points on a flip chart. Make any additions or corrections as needed. 5. Continue with discussion of the remaining case studies.
Debriefing	• National guidelines on the treatment of active TB provide additional guidance on screening, treatment, and monitoring of clients with TB. Nurses should always follow any national guidelines for treating patients who are infected with both TB and HIV.

Exercise 1: TB and HIV: Case studies, with large group discussion and role play

Case Study 1:

T___'s father, M___, is 55 years old, HIV-infected male and has been taking ART for 5 months. He comes to see his physician because he is feeling fatigued, is unable to sleep, has lost his appetite, and had been coughing for several weeks. He has a history of some psychiatric illness; he had not held a steady job for years. His current girlfriend has advanced HIV and he appears distressed. His CD4 count is 250.

- *How you would proceed with M___? What are your next steps?*
- *What are some potential challenges in terms of his diagnosis and care?*
- *What referrals or linkages to care would you provide to M___?*

Key point for trainers: Case Study 1

- Clients who report any one of the symptoms of current cough, fever, weight loss, or night sweats be evaluated further for TB and other diseases.
- Confirm TB following national guidelines or refer to TB clinic.
- Record diagnosis in client record and/or register.
- As M___ is HIV-infected and should be taking ART, ask about adherence.
- Remember TB patients with severe immunodeficiency are less likely to have positive sputum smears because of a decreased ability to mount an inflammatory response. Important to recognise the clinical and chest radiographic characteristics of HIV-TB, so patients who are smear-negative can be recognised and treated appropriately.
- Potential problems with this client can include: adherence to 2 long-term drug regimens, management of side effects of HIV and TB drugs, drug interactions between some TB and ARV drugs.
- The symptoms and signs of TB and those of other HIV-related lung disease may be indistinguishable. Symptoms such as chronic cough, weight loss, lymphadenopathy and fever are common with other HIV-related lung diseases.
- The differential diagnosis of pulmonary disease is much broader, including bacterial pneumonia, viral pneumonia, fungal infections,

PCP, pulmonary lymphoma or Kaposi's sarcoma.

Case Study 2:

M__ has now been diagnosed with active pulmonary TB.

- *How do you proceed? What do you have to consider in terms of M___'s HIV care and treatment?*
- *How would you implement active case finding in this situation?*
- *What kind of infection control practices should be in place to reduce the risk of TB transmission to other clients?*

Key point for trainers: Case Study 2

- Record diagnosis in client record and/or register.
- When a client is diagnosed with any form of TB, close family or household members should be carefully questioned for symptoms suggestive of TB, as one of them may have been the source case that infected the child. If a source case is identified, other children in the house, or who may have been exposed to the index case, should also be evaluated for TB.
- *Appendix 7B: Infection Control Checklist* provides a practical framework for implementing the WHO policy recommendations on TB infection control.

Case Study 3:

M's girlfriend, L___, arrives at the clinic, as she was identified as the primary contact of M__. She denies any prior exposure to TB. She denies any symptoms of cough, weight loss, fatigue, night sweats, or fever. She is 5'3" and weighed 86 pounds. She reported she weighed about 100 pounds last time she was checked. Her CD4 count is 250.

- *How you would proceed? What are your next steps?*

Key point for trainers: Case Study 3

- Weight loss suggests TB.
- TB must be ruled out in the contact (smear- negative, culture-negative, no symptoms of TB, and no weight loss).
- 6-month course of IPT can be offered to prevent TB, if nurse is certain client is uninfected.

Trainer Instructions

Step 3: Allow 5 minutes for questions and answers on this session.

Session 7.3 Additional Learning Activities and Resources

Total Session Time: 15 minutes

Trainer Instructions

Step 1: Review the session objective listed below.

Session Objective

After completing this session, participants will be able to:

- Describe independent and supplemental learning activities for the module.

Trainer Instructions

Step 2: Review the independent learning activities suggested for this module using the content below.

Independent Learning Activities

Ask participants to work in small groups and choose one of the following learning activities:

- The need for collaboration between TB and HIV services is recognised internationally, but clients with both HIV and TB often have to navigate two separate health care programmes, which can considerably increase the time and transport costs associated with receiving care. Ask participants to imagine that, for this assignment, that THEY are the director at a site that is establishing a new integrated TB/HIV clinic. Ask participants to develop a plan addressing the following question:
  - *What are the advantages of HIV/TB integration?*
  - *What do you think will be needed to set up YOUR new integrated clinic with collaborative HIV/TB activities?*
  - *What are your strategies for coordinating TB and HIV medical care and services?*

- Explore the individual, social and system-related factors that constitute the greatest barriers to TB treatment in clients in your setting. Answer the following questions:
  - *What influences a person with TB to be non-adherent to treatment?*

- *Are these barriers related to the individual's knowledge, attitudes, practices, or a combination of these? Are the obstacles personal, societal or related to the healthcare system?*
- *Provide examples of how some of the barriers related to the healthcare system can be overcome.*

- Facilitate a lunchtime training session with nurses and other members of the multidisciplinary care team to discuss infection control measures and how to create improvements in the current system. Summarise your conclusions in a brief paper.

Session 7.4 Action Planning

Total Session Time: 80 minutes (1 hour and 20 minutes)

Trainer Instructions

Step 1: Review the session objective listed below.

Session Objective

After completing this session, participants will be able to:

- Develop a site-specific action plan to overcome barriers to implementing "Three I's" at their clinics.

Trainer Instructions

Step 2: TB is the leading cause of morbidity and mortality among people with HIV in most parts of the world. Effective implementation of the "Three I's" is vital to ensure the best health outcomes for clients, healthcare staff, and the community.

Lead participants through Exercise 2, which will give participants an opportunity to think about some systems barriers to the "Three I's" and to develop a site-specific action plan to overcome them.

Exercise 2: The "Three I's": Small group work and large group discussion	
Purpose	• Develop a site-specific action plan to overcome barriers to implementing "Three I's" at their clinics
Duration	45 minutes
Advance Preparation	• None required
Introduction	This exercise will allow participants to brainstorm about some barriers to and solutions for effectively implementing the "Three I's" in their clinic setting.
Activities	**Part 1: Small Group Work** 1. Break participants into 4 small groups. Participants from the same clinic should work together. 2. Ask participants to refer to *Appendix 7D: Action Plan Worksheet* during this exercise.

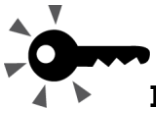
	3. Ask groups to reflect on and answer the following questions: • *What are the barriers to active case finding in your clinic? How can this be improved?* • *Where are the risks for TB transmission in your clinical setting? How can infection control systems be improved in your clinic?* • *What are the barriers to implementing IPT in your clinic settings? If it is already implemented, how can you improve the system to ensure ALL eligible clients receive IPT?* 4. Ask the groups to think of a solution that nurse mentors might be able to implement, in response to each question. Ask: • *What will we do about issue or problem?* • *What do we want to achieve?* 5. Remind participants that good solutions are "SMART," or: • **Specific:** It addresses the matter specifically • **Measurable**: It can be measured to determine whether it has been achieved. • **Achievable:** It is within the means and capacity of your group. • **Realistic:** It is practical and can be accomplished within a reasonable time frame. • **Time-bound:** The time period for reaching it is clearly specified. 6. Ask the groups to list 1-3 specific strategies, activities, or "next steps" to achieve each solution. 7. For each activity, ask the groups to discuss the following questions: • *Who is responsible for this activity?* • *When will you be able to implement this activity?* • *What kind of support or resources (including funds) do you need in order to achieve this activity?* • *Any other comments to note about this activity or strategy?* 8. Groups should use *Appendix 7D: Action Plan Worksheet* to record their plans. 9. The trainer should circulate between the small groups during the discussion to respond to questions. **Part 2: Large Group Discussion** 10. Give each group 5 minutes for presenting their plans to the larger group. 11. Ask each group the following questions to facilitate discussion: • *What are some of the challenges of implementing*

	these activities in your clinic setting? • *What opportunities do you have to bring all levels of staff together for problem identification and problem solving in your clinic?* 12. After each group presents, ask other participants if they have other solutions that were not listed.
Debriefing	• Nurse mentors and educators can use action planning template as a tool, in order to problem solve about how to overcome challenges and barriers in their practice. Their plans can be shared with their mentees and supervisors, to initiate discussion on how barriers can be addressed.

Trainer Instructions

Step 3: Allow five minutes for questions and answers on this session.

Step 4: Summarise this module by reviewing the key points in the slides and box below.



Module 7: Key Points

- The WHO guidelines recommend that adults and adolescents who report any one of the symptoms of current cough, fever, weight loss, or night sweats be evaluated further for TB and other diseases.
- If a client has symptoms suggestive of TB, investigate as per national guidelines.
- It is very important to investigate clients for TB before starting ARV therapy and to routinely screen clients on ARV therapy.
- In countries with high TB and HIV burdens, the World Health Organization recommends the "Three I's" strategy for controlling these dual diseases: intensified TB case finding, isoniazid preventive therapy (IPT) and infection control for TB.
- Main features of intense case finding include: asking a series of symptom screening questions at every visit (current cough, fever, night sweats, or weight loss); conducting an appropriate diagnostic evaluation for anyone with a positive symptom screen; and performing TB screening for household contacts of all index patients.
- TB infection control refers to the development and implementation of basic infection control practices in facilities and communities where individuals are at risk of transmitting or contracting TB.
- Isoniazid preventive therapy (IPT) means taking a course of isoniazid treatment in order to stop the development of TB. IPT can prevent TB in people with HIV regardless of CD4 count or antiretroviral treatment.
- The WHO clearly recommends that a course of IPT should be provided to all HIV-infected clients who are not currently on treatment for TB and who have a negative symptom screen.
- A major concern in treating TB in HIV-infected persons is the interaction of common TB medications, such as rifampin ,with certain antiretroviral agents (some protease inhibitors [PIs] and nonnucleoside reverse transcriptase inhibitors [NRTIs]). If possible, anti-TB medications that have fewer interactions with antiretroviral medications should be used (e.g., substituting rifabutin for rifampicin).
- National guidelines on the treatment of active TB provide additional guidance on screening, treatment, and monitoring of clients with TB.

Appendix 7A: TB Screening Questionnaire for Collaborative TB/HIV Activities

Client's name: …… **Client Number:** ……**Date of birth:** …/……/…. **Sex:** □ Male □Female

Physical Address: …… **Contact telephone:** ……

Date																						
Tick appropriate response	**Y**	**N**	**Y**	**N**	**Y**	**N**	**Y**	**N**	**Y**	**N**	**Y**	**N**	**Y**	**N**	**Y**	**N**	**Y**	**N**	**Y**	**N**	**Y**	**N**
Current Cough?																						
Fevers?																						
Weight Loss?																						
Night sweats?																						

If 'No' to all questions: Do not initiate TB investigations and repeat screening at the subsequent visit. If 'YES' to one or more questions, complete the respective column in the table below:

Date											
Do sputum smear for AFB and enter results (*pos / neg*) [1]											
If sputum negative, do chest X-ray and enter result (*suggestive* or *not suggestive*)											
Outcome of assessment (*TB* or *No TB*)											

Source: Borrowed from ITECH. 2000.*National training on TB/HIV for healthcare workers*, TB Screening Questionnaire (adapted from: Tanzania MOHSW TB Screening Questionnaire)

[1] Adapt according to national guidelines

Appendix 7B: TB Infection Control Checklist

Date: _____
Name of Clinic evaluated: _____

Instructions:
Please indicate with a tick (√) if the following was achieved/correctly implemented Put a cross (x) if the aspect was not implemented or incorrect Put a dash (-) if the aspect was not checked by you or not applicable

Chronic cough screening implemented on arrival		
TB suspects fast-tracked to the front of the queue		
TB suspects directed to a separate, well ventilated waiting area		
Sputum collection done in a safe way		
All windows and doors in the HIV clinic were open on arrival and still open on departure		
All windows and doors in other departments were open on arrival and still open on departure		
Good natural ventilation in offices and/or passages		
Offices rearranged to allow safe ventilation for healthcare workers and clients		
All fans are clean and in working condition		
Tissue paper available for clients		
Tissue paper bins available and emptied regularly		
N95 masks (and instructions or training) available for all healthcare workers		
TB C&T registers current		
VCT registers current		
TB screening done at every visit		
TB suspect registers up to date		
Sputum specimens shipping lists up to date		
Sputum results filed away in patient's file		

Appendix 7C: Mode and Dosage of Anti-TB Drugs

Essential Anti-TB drugs	Mode of action	Recommended dose in mg/kg	
		Daily	**3/weekly**
Rifampicin (R)	Bactericidal, kill metabolic active bacilli	10	10
Isoniazid (H)	Bactericidal, kills metabolic active bacilli	5	10
Pyrazinamide (Z)	Bactericidal, kills metabolic active bacilli	25	25
Ethambutol (E)	Bacteriostatic	15	30
Streptomycin (S)	Bactericidal, kill metabolic active bacilli	15	15
Thiacetazone (T)	Bacteriostatic	3	N/A

Source: Borrowed from ITECH. 2099. *National training on TB/HIV for healthcare workers*, Handout 6.2: Mode of Action, Potency and Recommended Dose of TB Drugs Tanzania Ministry of Health and Social Welfare.

Appendix 7D: Action Plan Worksheet

What is the problem?	What is your solution to this problem?	What are your strategies, activities, or "next steps" to achieve the solution?	What is your timeframe?	What resources or support are needed?	Comments
		1.			
		2.			
		3.			
		1.			
		2.			
		3.			
		1.			
		2.			
		3.			

References and Resources

[1] ITECH. 2099. *National training on TB/HIV for healthcare workers*, Tanzania Ministry of Health and Social Welfare.

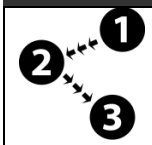
Module 8 Sexual and Reproductive Health Services (SRH) for People Living with HIV

Total Module Time: 240 minutes (4 hours)

Learning Objectives

After completing this module, participants will be able to:

- Reflect on their own attitudes, values, and beliefs on client sexuality and discuss how these may affect their work with clients.
- Define key terms related to sex, sexuality, sexual orientation, and sexual identity.
- Define safer sex and discuss how to empower clients to practise safer sex.
- Support clients to practise safer sex.
- Explain the importance of and provide STI screening and treatment for clients.
- Discuss childbearing choices and safe childbearing with female clients.
- Discuss independent and supplemental learning activities for the module.
- Develop a site-specific action plan to improve accessibility of SRH services for hard-to-reach populations.

Methodologies	
	• Interactive trainer presentation • Large group exercise • Demonstration • Case studies • Role play • Large group discussion • Small group work

Materials Needed	
	• Attendance sheet for Module 8 • Flip chart and markers • Tape or Bostik • Participants should have their Participant Manuals. The Participant Manual contains background technical content and information for the exercises. • Male and female condoms for each participant, as well as penis and vagina models. • Extra copies of *Appendix 8C: Action Plan Worksheet* (several per group, in case participants need extra copies)

	• Electronic version of *Appendix 8C: Action Plan Worksheet* on flash drive so that participants with laptop computers can work in the electronic version rather than on paper.

References and Resources	
	• Colton, T., Costa, C., Twyman, P., Westra, L., & Abrams, E. (2009, updated in 2011). *Greater involvement of people living with HIV in PMTCT and care and treatment programs: Comprehensive peer educator training curriculum (trainer and participant manuals).* New York, NY: Columbia University, ICAP. • Engender Health. 2006. *Sexual and Reproductive Health for HIV-Positive Women and Adolescent Girls, Manual for Trainer and Programme Managers.* New York: EngenderHealth. • Zambia Ministry of Health, ICAP, and FXB (2011). *Adolescent HIV care and treatment: A training curriculum for multidisciplinary healthcare teams, Module 10.* Lusaka, Zambia and NY, NY: MOH & ICAP. • WHO. 2004. *Guidelines for the management of sexually transmitted infections*. Geneva: WHO. • WHO. 2011. *Family planning: a global handbook for providers 2011 update.* Geneva: WHO. • Williams, K., Warren, C., and Askew, I. 2010. *Planning and Implementing an Essential Package of Sexual and Reproductive Health Services: Guidance for Integrating Family Planning and STI/RTI with other Reproductive Health and Primary Health Services.* UNFPA.

Advance Preparation	
	• Read through the entire module and ensure that all trainers are prepared and comfortable with the content and methodologies. • Prepare the attendance sheet in advance and ask participants to sign in as they arrive for the 8th session of training. • Review the appendices in this module ahead of time and prepare to incorporate them into the discussion. • Make sure to have enough male and female condoms for each participant, as well as penis and vagina models. • Exercise 2 and 3 require advance preparation. Please review each ahead of time.

Session 8.1: Review of Key Competencies and Key Updates for Sexual and Reproductive Health Services for PLHIV

Activity/Method	Time
Interactive trainer presentation and large group discussion	10 minutes
Exercise 1: SRH Values Clarification: Large group exercise	25 minutes
Interactive trainer presentation and large group discussion	30 minutes
Exercise 2: Condom Demonstration: Return demonstration and large group discussion	25 minutes
Interactive trainer presentation and large group discussion	30 minutes
Questions and answers	5 minutes
Total Session Time	125 minutes

Session 8.2: Teaching, Coaching, and Skills Transfer

Activity/Method	Time
Interactive trainer presentation	5 minutes
Exercise 3: Providing SRH Services to PLHIV: Case studies, role play, and large group discussion	20 minutes
Interactive trainer presentation and large group discussion	25 minutes
Questions and answers	5 minutes
Total Session Time	50 minutes

Session 8.3: Additional Learning Activities

Activity/Method	Time
Interactive trainer presentation, large group discussion, and brainstorming	10 minutes
Questions and answers	5 minutes
Total Session Time	15 minutes

Session 8.4: Action Planning

Activity/Method	Time
Interactive trainer presentation and large group discussion	10 minutes
Exercise 4: Improving SRH Services for PLHIV: Small group work and large group discussion	45 minutes
Questions and answers	5 minutes
Total Session Time	60 minutes

Session 8.1 Review of Key Competencies and Key Updates for Sexual and Reproductive Health Services for PLHIV

Total Session Time: 125 minutes (2 hours and 5 minutes)

Trainer Instructions

Step 1: Begin by reviewing the Module 8 learning objectives and the session objective, listed below.

Step 2: Ask participants if there are any questions before moving on.

Session Objective

After completing this session, participants will be able to:

- Reflect on their own attitudes, values, and beliefs on client sexuality and discuss how these may affect their work with clients.
- Define key terms related to sex, sexuality, sexual orientation, and sexual identity.
- Define safer sex and discuss how to empower clients to practise safer sex.
- Support clients to practise safer sex.
- Explain the importance of and provide STI screening and treatment for clients.
- Discuss childbearing choices and safe childbearing with female clients.

Trainer Instructions

Step 3: The goal of this session is to enable health workers to address the SRH needs of HIV-infected clients by offering comprehensive SRH services within their own particular service-delivery setting.

Begin by facilitating Exercise 1 to help participants explore their own attitudes and values related to client sexuality.

Exercise 1: SRH Values Clarification: Large group exercise	
Purpose	• To help participants begin to think about their values,

	attitudes, and prejudices related to client sexuality and SRH, and how these might affect their work with HIV-infected clients
Duration	25 minutes
Advance Preparation	• Prepare 2 large flip chart papers, one that says, AGREE" and another that says, "DISAGREE."
Introduction	This activity will help us begin to explore participants own values, attitudes, and prejudices related to client sexuality and SRH.
Activities	1. Post the prepared flip chart papers that say "AGREE" and "DISAGREE" on opposite sides of the training room. Ideally, they should be posted in an open space where participants are able to move back and forth between signs. 2. Ask participants to stand up and move to the open space in the room where the "AGREE" and "DISAGREE" signs are posted. Tell participants that you will read some statements out loud and that, after each statement, they should move to the "AGREE" or the "DISAGREE sign, based on their opinions. If participants are not sure whether they agree or disagree with the statement, they can stand somewhere between the two signs. 3. Select four to six belief statements (from list of options below) that will stimulate discussion. 4. Read out load each of the sentences listed below. Allow participants a few seconds to move to the side of the room that reflects their opinion. Ask a few participants to tell the group why they "AGREE" or "DISAGREE" with the statement. Allow participants to change their answer after these explanations, if desired. Do not worry about explaining the "right" answers, as all of these topics will be discussed during this module.
Debriefing	Ask participants what they think is the point of this activity, note the following points: • Many PLHIV desire to have sexual relations and may also choose to have children. They have the same rights to sexuality and reproduction as people not affected by HIV—e.g., the right to have a safe and satisfying sex life and to decide on whether to have children and how many to have. • We are all influenced by the society and culture within which we live, develop and mature. An important part of being a nurse mentor is having a good self-awareness of our own values, beliefs, attitudes and fears and to model openness and tolerance to other nurses. • It is also important that nurses are sensitive to the emerging feelings of their clients, make them feel

	comfortable, and make them feel that it is "safe" to talk openly and honestly in the clinic setting.

Exercise 1: SRH Values Clarification: Large group exercise

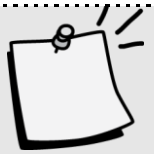
Statements for Values Clarification

1. If a male client tells you he is sometimes attracted to other men, it is your job to discourage any homosexual behaviour.
2. HIV infection can have an affect on a person's sexuality.
3. We should encourage clients living with HIV to remain abstinent for as long as possible.
4. It is wrong for a person living with HIV not to disclose his status to his sexual partner.
5. There are safe ways for people living with HIV to be sexually active.
6. Children born to HIV-infected mothers are victims.
7. All people, including PLHIV, have a right to a pleasurable sexual experience.
8. If an HIV-positive woman has already had four children, she should be sterilized.

Trainer Instructions

Step 4: Ask participants the following questions, record key points on a flip chart, and fill in using content below:

- *What does the term "sexual and reproductive health" mean?*
- *Why is comprehensive sexual and reproductive health (SRH) care important for PLHIV? Why is it particularly important for HIV-infected women and girls?*
- *What are the core services offered in a comprehensive sexual and reproductive health (SRH) care for clients? Which of theses are offered in your setting?*
- *Are these services integrated with HIV care and treatment in your setting? What are the advantages of having integrated services?*
- *What are the main barriers to integrated services in your setting? How have/can these barriers been overcome?*



Make These Points

- Comprehensive SRH care is an integrated approach to identifying the interrelated issues of contraception, disease prevention and treatment, reproduction, and experience with sexual intimacy and pleasure through a comprehensive assessment of the individual's SRH context and concerns, regardless of the reason for the visit. In many cases, subsequent visits will need to be scheduled or referrals will have to be made to other service sites.

- Although your health facility may not be able to offer all of the health and social services that clients may need, nurses can recognize and discuss with the client her range of needs and know where to refer her for further help.

Comprehensive Sexual and Reproductive Health Services

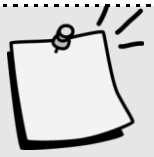
The United Nations Population Fund (UNFPA) has identified the following core areas of a comprehensive SRH package[1]:

- Family planning (FP)/birth spacing services
- Antenatal care, skilled attendance at delivery, and postnatal care
- Management of obstetrical and neonatal complications and emergencies
- Prevention of abortion, management of abortion complications, and provision of post abortion care
- Prevention and treatment of reproductive tract infections (RTIs) and sexually transmitted infections (STIs)
- Early diagnosis and treatment for breast cancer and reproductive tract cancers (men and women)
- Promotion, education, and support for exclusive breastfeeding
- Prevention and appropriate treatment of subfertility and infertility
- Active discouragement of harmful practices, such as female genital cutting/mutilation
- Prevention and management of gender-based violence.

Trainer Instructions

Step 5: Write down "SEX" on of a piece of flipchart paper. Ask the participants to define the term "sex" and record their ideas on the flip chart. After a few minutes, ask them to define the word "SEXUALITY", writing down their ideas on another piece of flipchart paper with "SEXUAL ORIENTATION" at the top. Repeat the same process for these terms. Tape all of the pieces of flipchart paper on the wall so all can see them.

Review key terms related to sex, sexuality, and sexual orientation with participants. Note responses on flip chart. Fill in, as needed, from the content below.



Make These Points

- **Sex** (as a verb) usually refers to vaginal, anal, or oral sex with another person or alone (masturbation). **Unsafe sex** is any kind of sex that puts a person at risk of a sexually transmitted infection or unplanned

pregnancy. Whereas **sexuality** includes all the feelings, thoughts, and behaviours of being a girl or boy, including being attractive, being in love, and being in relationships.
- Nurses need to stress that homosexual, bisexual, and transsexual/transgendered behaviour is NORMAL (regardless of the healthcare worker's personal views).
- Nurses do not have to be experts on sexual orientation and sexual identities. A willingness to listen, be understanding, and refer clients to resources is often enough.
- However, it is important that nurses learn as much as they can about sexuality, sexual orientation, and sexual identify so they can become more comfortable with the feelings and behaviours they will likely see among their clients. The more comfortable nurses feel discussing these issues, the more support they will be able to provide to their clients.

Sex: Key Terms[2]

Sex (as a verb):

Sex can be a normal part of life for many older clients and adults. Sex means different things to different people, including:

- Vaginal sex (when the penis or fingers go into the vagina)
- Anal sex (when the penis or fingers go into the anus)
- Oral sex (when a person kisses or licks their partner's penis, vagina, or anus)
- Inserting fingers or objects into the vagina or anus
- Masturbation (alone or with a partner)
- Having sex with men, women, or both men and women.

Sex as a verb is also referred to as "intercourse" or "sexual intercourse".

Unsafe sex

- HIV is mainly spread through unsafe sex. Unsafe sex is any kind of sex that puts a person, or his or her sexual partners, at risk of getting a sexually transmitted infection, including HIV, or unwanted pregnancy.
- It is very important for nurses to be comfortable talking about sex and reproduction with all of their clients. Frank, factual discussions about sex and sexuality can provide clients with the information they need to protect themselves and their partners from sexually transmitted infection and unplanned pregnancy.

Sexuality: Key Terms

Sexuality:

- Is more than sex and sexual feelings.
- Includes all the feelings, thoughts, and behaviours of being a girl or boy, including being attractive, being in love, and being in relationships that include sexual intimacy and physical sexual activity.

- Exists throughout a person's life and is a component of the total expression of who we are as human beings, male or female.
- Is constantly evolving as we grow and develop.
- Is a part of us from birth to death.

The following are some aspects of sexuality. Each of these aspects is connected to each other and makes a person who he or she is.

- **Body image:** How we look and feel about ourselves, and how we appear to others
- **Gender roles:** The way we express being either male or female, and the expectations people have for us based on our sex
- **Relationships:** The ways we interact with others and express our feelings for others
- **Intimacy:** Sharing thoughts or feelings in a close relationship, with or without physical closeness
- **Love:** Feelings of affection and how we express those feelings for others
- **Sexual arousal**: The different things that excite us sexually.
- **Social roles:** How we contribute to and fit into society
- **Genitals:** The parts of our bodies that define our sex (male or female). They are part of sexual pleasure and reproduction
- **Ways we can express sexuality:** dancing, talking with other sex, wearing attractive clothes, sexual dreams, feeling sexual near others, masturbation, daydreams, and others

Remember:

- In many places, "sex" is often thought to mean only penis-vagina sex between a man and a woman. But sexual behaviours include much more than penis-vagina sex.
- If nurses and midwives do not talk about sex and sexual behaviours with clients, they may not get the information, skills, and supplies they need to protect themselves and their partners and reduce risks of HIV, STIs, sexual violence, discrimination, and unplanned pregnancy.
- While we all hold our own opinions about different sexual behaviours, as nurses, we cannot project our own values on clients. Clients should always be made to feel comfortable talking about their sexual concerns, questions, and behaviours without risk of judgement.

Sexual Orientation and Identity: Key Terms

- Nurses need to stress that homosexual, bisexual, and transsexual/transgendered behaviour is NORMAL (regardless of their personal views).
- Nurses do not have to be an expert on sexual orientation. The most important thing is that they be willing to listen to clients in a non-judgemental way, and to provide referrals if necessary.

- **Sex (as a noun):** Refers to the physiological attributes that identify a person as male or female (genital organs, predominant hormones, ability to produce sperm or ova, ability to give birth, etc.).
- **Gender:** Refers to widely shared ideas and norms about women and men, including common beliefs about what characteristics and behaviour are "feminine" or "masculine." Gender reflects and influences the different roles, the social status, as well as the economic and political power of women and men in society.
- **Heterosexuality:** The sexual orientation in which a person is physically attracted to people of the opposite sex.
- **Homosexuality:** The sexual orientation in which a person is physically attracted to people of the same sex.
- **Bisexuality:** The sexual orientation in which a person is physically attracted to members of both sexes.
- Transvestism: When a person dresses and acts like a person of the opposite gender.
- **Transsexual:** A person who desires to change, or has changed, his or her biological sex because his or her body does not correspond to his or her gender identity.
- **Transgendered:** A person who lives as the gender opposite to his or her anatomical sex (for example, a male living as a female but retaining his penis and sexual functioning).

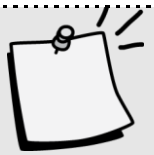
Trainer Instructions

Step 6: Ask participants to define the phrase "safer sex." Record responses on flip chart and fill in, as needed.

Step 7: Ask participants to discuss the following questions:

- *Are male and female condoms currently offered to ALL clients at your clinic? Why or why not?*
- *Are male and female condoms available in a private space in the waiting area, so clients do not have to ask for them?*
- *What have been your experiences discussing and demonstrating condom use with clients? What is challenging?*
- *What can we do to make sure that ALL clients have access to condoms and the skills and knowledge to use them?*

Step 8: Ask if anyone can define the term "dual protection" and record responses on flip chart. Fill in using the content below.



Make These Points

- Safer sex describes the range of sexual activities that do not transmit STIs (including HIV) and protect against unintended pregnancy but are

still pleasurable. Safer sex includes sexual practices during which body fluids are not passed between partners.
- Using condoms is a reliable way to practise safer sex and prevent STIs, HIV and unwanted pregnancy. For people who are living with HIV, condoms also prevent re-infection.
- All PLHIV, including young people, should have free and easy access to condoms in the clinic setting. They should not have to ask nurses for condoms; instead they should be available in waiting areas, clinic rooms, and other places where young people can access them. Nurses must remove barriers to condom use for all of their clients.
- Dual protection refers to the prevention of STIs, HIV, and unwanted pregnancy at the same time.

What Do We Mean by "Safer Sex?"

Safer sex includes the range of ways that people can protect themselves and their partner(s) from HIV (or HIV "re-infection"), STIs, and unintended pregnancy.

- Safer sex involves choosing sexual practices and protection methods that prevent body fluids from passing from one person to another.
- Safer sex reduces these risks without reducing intimacy or pleasure.

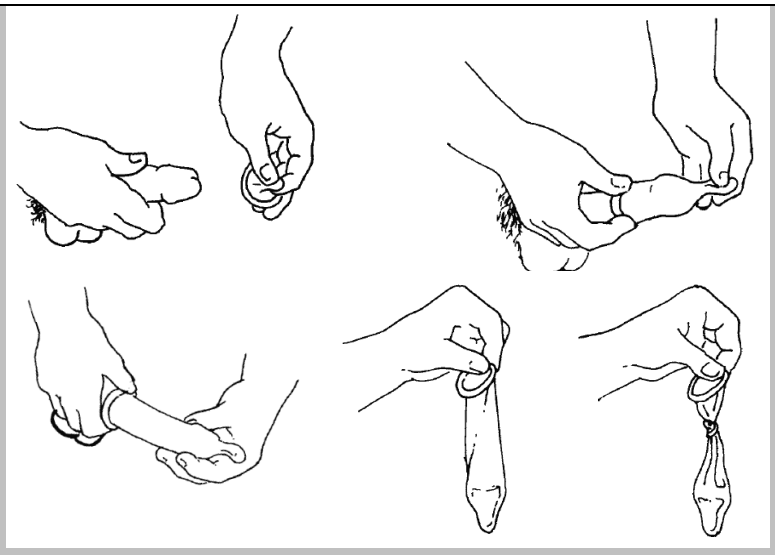
Dual protection:

Dual protection means preventing STIs, HIV, and unwanted pregnancy at the same time. Various strategies offer dual protection, including abstinence and the "no risk" and "low risk" activities listed above. Other strategies include:

- Being in a monogamous relationship in which both partners are free of STIs and at least one partner is using effective contraception
- Using male or female condoms
- Using male or female condoms to protect against STIs and a second method to protect against unplanned pregnancy (often a hormonal method)

How to use a male condom

These are the basic steps you should know for using and demonstrating how to use a male condom. If penis models are not available, you can use a bottle, banana, or corn. Only condoms made out of latex protect against HIV.



Steps to use a male condom:

- Look at the condom package and check the expiry date to make sure it is still good and that the package is not damaged.
- Open the packet on one side and take the condom out. Do not use your teeth to open the package.
- Pinch the tip of the condom to keep a little space at the tip. This will hold the semen and prevent the condom from breaking.
- Hold the condom so that the tip is facing up and it can be rolled down the penis. (Make sure it is not inside out!)
- Put it on the tip of an erect (hard) penis (only use condoms on an erect penis) and unroll it down to the bottom of the penis.
- After ejaculation (coming), the rim of the condom should be held while the man removes his penis without spilling the semen. The penis must be removed while it is still hard to make sure the condom does not fall off.
- Remove the condom and tie it in a knot to avoid spilling. Throw it away in a latrine or bury it. Do not put it in a flush toilet.

Also, it is important to:

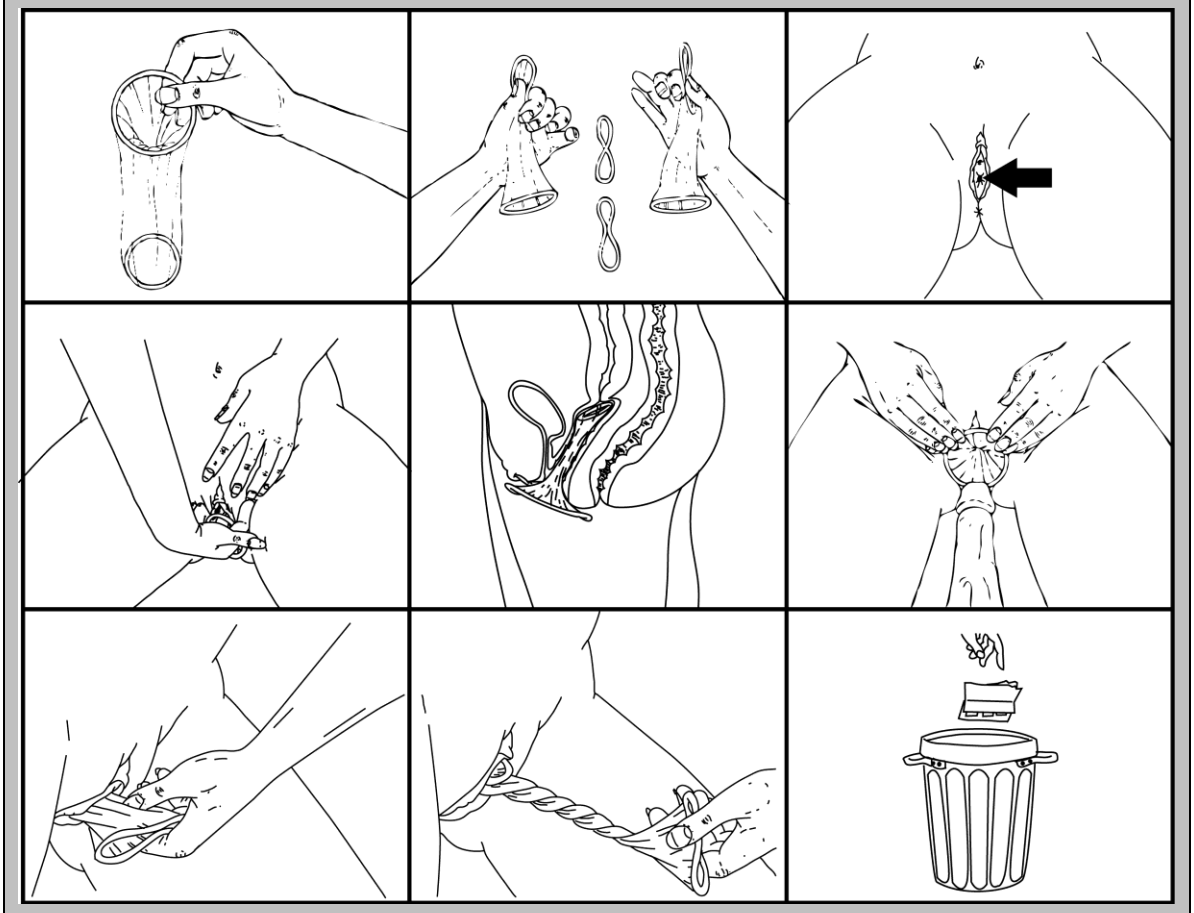
- Use a condom every time you have sex — oral sex, anal sex, or vaginal. Use a new condom every time! Never reuse a condom!
- Use only lubricants made out of water, not oils.
- Store condoms in a cool, dry place, out of the sun. Do not keep them in a wallet.
- Do not use condoms that seem to be sticky, a strange colour or damaged in any way. Throw them away.

Adapted from: Burns, A., Lovich, R., Maxwell, J., & Shapiro, K. 1997. *Where women have no doctor: A health guide for women*. Berkeley, CA: The Hesperian Foundation.

How to use a female condom

Some women like the female condom because it gives them more control over their own bodies and over sex. Some men like it, too, because they do not have to use a male condom. The female condom is becoming more affordable and available. These are the main steps for using a female condom. If no vaginal model is available to

demonstrate its use, you can use a box with a round hole cut in it or your hand.



Steps to use a female condom:

- Look at the condom package to make sure it is not damaged and check the expiry date to make sure it is still good.
- Open the packet. Do not use your teeth.
- Find the inner ring at the closed end of the condom. The inner ring is not attached to the condom.
- Squeeze the inner ring between the thumb and middle finger.
- Guide the inner ring all the way into the vagina with your fingers. The outer ring stays outside the vagina and covers the lips of the vagina.
- When you have sex, guide the penis through the outer ring so that the penis is inserted into the female condom.
- After the man ejaculates (comes), before the woman stands up, squeeze and twist the outer ring to keep the semen inside the pouch and pull the pouch out.
- Put the used condom in a latrine or bury it. Do not put it in a flush toilet.

Adapted from: Burns, A., Lovich, R., Maxwell, J., & Shapiro, K. 1997. *Where women have no doctor: A health guide for women*. Berkeley, CA: The Hesperian Foundation.

Trainer Instructions

Step 9: Facilitate Exercise 2, which provides an opportunity for participants to practise demonstrating male and female

condom use.

Exercise 2: Condom Demonstration: Return demonstration and large group discussion	
Purpose	• To help participants feel comfortable demonstrating how to put on a male and female condom
Duration	25 minutes
Advance Preparation	• Make sure to have enough male and female condoms for each participant, as well as penis and vagina models.
Introduction	Most nurses know how to use condoms, but it is important to be comfortable demonstrating both male and female condom use to clients.
Activities	**Large Group Demonstration — male condom** 1. Ask if anyone is willing to demonstrate to the entire group how to put on a male condom, using a penis model (or a substitute for a penis model, such as a banana, cob of corn or bottle). Ensure that each step is explained in simple, client-friendly language. After the volunteer (or the trainer, if there was no volunteer) demonstrates, then ask the group how they thought the demonstration went, providing corrections if there were any mistakes. **Return Demonstration** 2. Ask participants to get into pairs and take turns demonstrating how to put on a male condom on a penis model, as if they were doing such a demonstration with an client in the clinic. Make sure participants explain each step correctly. **Large Group Demonstration — female condom** 3. Ask if anyone can demonstrate to the entire group how to insert a female condom into a vagina model. The demonstrator should explain each step. Again, after the volunteer (or the trainer, if there was no volunteer) demonstrates, then ask the group how they thought the demonstration went, providing corrections if there were any mistakes. **Return Demonstration** 4. Ask participants to form new pairs and take turns demonstrating to each other how to insert the female condom into a vagina model, as if they were doing such a demonstration with a client in the clinic. Make sure participants explain each step correctly. **Large Group Discussion** 5. Bring the large group back together and ask participants how they felt demonstrating how to put on a male condom and how to insert the female condom. Then ask

	why nurses sometimes feel uncomfortable demonstrating condom use to clients.
Debriefing	• Explain that it is important for nurses to provide condoms and demonstrate how they are used. • It is also important that nurses support clients to use condoms by teaching them how to negotiate safer sex and respond to common questions or complaints that they, or their partners, may have about condoms. • Even if a nurse doesn't think a client is sexually active, it is still good to prepare them with the facts, including how condoms can prevent HIV transmission, re-infection, STIs, and unintended pregnancy. • Even though it can be hard and embarrassing for clients AND nurses to talk about condoms, condoms are a very important part of comprehensive care for PLHIV. • Condoms (male and female) should be available in many locations at the clinic — in the waiting room, in exam rooms, in bathrooms, in the lab, in the pharmacy, and with counsellors and Peer Educators. The more available condoms are, the more clients are likely to take them and use them!

Trainer Instructions

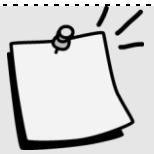
Step 10: Even though we know ***how*** to practise safer sex, many people still do not have safer sex. Explain that most people generally underestimate their own risks in life, and that this includes risks for STI and HIV transmission to uninfected partner and for unintended pregnancy.

Lead a discussion on some of the most common reasons clients do not practise safer sex, using the following questions as a guide:

- *What are some of the reasons clients may not practise safer sex?*
- *What are some reasons clients may not perceive themselves at-risk for HIV and other STIs?*
- *Why is important for nurses to ask about a client's sexual history? And especially important when this pertains to young people?*
- *What kind of risk reduction counselling happens in your clinic? What experiences do you have with risk reduction counselling with adults women? Adult men? Adolescents?*

Explain to participants that despite the many factors that can result in clients engaging in risky sexual activity, nurses can ensure they are well-informed and empowered to take steps to

reduce risky behaviour, maintain sexual and reproductive health, while also preventing new HIV infections. Discuss and record key points for sexual risk screening and risk reduction counselling on a flip chart.



Make These Points

- There are many reasons that people do not practise safer sex:
  - Ignorance: lack of information about the risks of HIV infection or re-infection and pregnancy; lack of information about safer sex and contraceptive methods including condoms
  - Denial: not wanting to plan ahead or refusing to believe the risks
  - Lack of access to condoms and other methods of family planning
  - Coercion, particularly if one partner want to get pregnant
  - Fear and embarrassment: fear of rejection, fear of the unknown, embarrassment of buying condoms (or another family planning method) or asking the partner to use them
- Nurses can help HIV-infected clients assess their own risk and can use this understanding to reduce their risk through developing and implementing risk reduction plans.
- Nurses are responsible for providing accurate information about HIV and STIs; responding to questions about sexuality, future childbearing, disclosure and transmission risk.
- SRH support and counselling must always be provided in a non-judgemental manner.

Reasons Why Clients May Not Practise Safer Sex

Ignorance:

- They think they are not vulnerable to HIV, HIV re-infection, pregnancy, or STIs. "It cannot happen to me" or "I do not have sex often enough to get pregnant."
- They do not have adequate or accurate information about safer sex:
  - The media portrays sexuality unrealistically and usually does not include any mention of protection.
- They have heard misinformation or myths about methods and their side effects.
- They do not know that methods are available or which methods can be used by PLHIV.
- They do not know where, how, or when to get condoms or other contraceptive methods.
- They do not know how to correctly use condoms.
- They are not aware of pleasurable alternatives to risky sex, such as mutual masturbation, etc.

Denial:

- *"Sex just happened."* (They did not expect to have sex).
- "*I only had sex once with that person."*
- *"Sex should be spontaneous."*
- They don't think they will get pregnant or an STI, or think that there is only a small chance of passing HIV during sex.

Lack of access:

- Access to contraceptive services for clients is limited by law, custom, or clinic/institutional policy.
- Availability and cost may restrict access.
- Irregular supply of methods available.
- Healthcare worker attitudes towards contraception may prevent them from distributing protective methods to clients.

Coercion:

- One of the partners wants to get pregnant.
- One of the partners will not let the other use protection.
- One of the partners forces the other to have sex.
- They have the attitude that condoms ruin sex or are unromantic.
- There is pressure from their family to conceive.

"What the heck" effect:

- Clients may feel that because they are already HIV-infected, there is no need to protect themselves. This might be especially true if both sexual partners are HIV-infected.
- Clients may be depressed and have lost hope — thinking "What the heck, I already have HIV so why not take risks?"

Fear:

- Fear of rejection by partner.
- Fear of people knowing HIV status if they use condoms or request partner to use condoms.
- Fear of the lack of confidentiality at the place methods can be obtained.
- Fear of side effects.

Other factors:

- They lack the skill and expertise to negotiate condom use.
- They stopped using oral contraceptives because of the side effects.
- They believe that the suggestion of protection implies mistrust of one's partner and his or her faithfulness.
- They desire conception.
- They lack the communication and negotiation skill to discuss protection.
- They think their partner "is taking care of protection."
- They have not made a firm decision about whether or not they would like to get pregnant.

- They do not know how to dispose of condoms or do not have a place to dispose of them properly and privately.

Reducing Risk

Sexual risk screening includes questions to help the nurse assess if the client is sexually active, and if so, with whom and what risks he or she is taking. Risk reduction counseling focuses on reducing risk of HIV, STIs and unwanted pregnancy by helping the client choose a strategy that is right for him or her.

Nurses can help HIV-infected clients assess their own risk and can use this understanding to reduce their risk through developing and implementing risk reduction plans. Some key points of risk-reduction counselling are as follows:

- Explore the client's needs, risks, sexual life, social context, and circumstances.
- Assess the client's knowledge and give information, as needed.
- Assist the client to perceive or determine his or her own pregnancy or HIV and STI risk:
- Ask the client if he or she feels at risk for unintended pregnancy or for HIV and STI transmission, and explore why or why not.
- Ask the client if he or she thinks that his or her partners may be at risk for unintended pregnancy or HIV and STI transmission, and explore the reasons.
- Explain HIV and STI transmission and pregnancy risks (as necessary), relating them to the individual sexual practices of the client and his or her partners.
- Help the client to recognize and acknowledge his or her risks for HIV and STI transmission or unintended pregnancy.

Questions for Sexual History

The following questions are mostly close-ended, to be asked only after there has been time for more open-ended discussion and the development of rapport:

To initiate a more detailed discussion of sexual history in relation to potential exposure:

- *Tell me what part sexual activity plays in your life right now? (If necessary, ask "Are you sexually active?")*
- *Can you describe for me what you think about your risk for HIV infection? Why do you think you may/may not be at risk?*
- *Have you ever had a sexually transmitted infection? (It helps to give examples.) Do you know if any of your sexual partners have developed a sexually transmitted disease or AIDS?*

To elicit more details about the number and sex of partners and the use of condoms:

- *Have you ever had, or do you currently have, sex with men, with women or both?*
- *How many sexual partners have you had? (If possible, determine the number of partners in the patient's lifetime, during the past year and in the past three months.)*
- *• Do you use condoms? If so, how often?*
- *When did you begin using condoms?*
- *If not, what was your reason for not using condoms?*

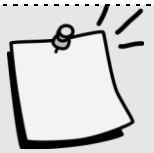
To identify sexual practices:
- *What form of sex do you usually have with your partner?*
- *Do you have vaginal intercourse?*
- *Do you have anal sex? (This may require additional explanation or description.)*
- *Do you have oral sex? (This may require additional explanation or description.)*

Adolescent clients, in particular, need access to accurate information about HIV and STI transmission to address their concerns about sexuality, dating, future childbearing, disclosure, and transmission risk. In general, younger clients want their healthcare provider(s) to give accurate information and to sensitively ask them personal questions about HIV-related risk behaviour — without judgement and ensuring confidentiality.

In order for these discussions to be effective, ALL clients must feel that their providers will comfortably and supportively engage in dialogue with them about any topic — no matter how uncomfortable it may be. Young people, in particular, can sense when nurses are out of their element or passing judgement discussing sensitive issues and this perception will likely prevent honest communication about risk behaviours.

Trainer Instructions

Step 12: Ask participants:
- *What STI screening and treatment services are currently offered clients? Are they offered as a routine part of clinical care? Are they provided at the HIV clinic or are clients referred to another clinic?*
- *What are the most common STIs that you see? What would you recommend for general symptomatic relief for the conditions just described?*
- *If STI services are not currently part of routine HIV care and treatment, why? Why is it important to integrate STI services into HIV care and treatment for all clients?*
- *What are some of barriers to integrating STI screening and treatment? What are some of the solutions?*



Make These Points

- At every visit, ask client who are sexually active about STI symptoms. If the answer to any question is 'yes', conduct a physical examination.
- Nurses should use information from the physical examination in combination with the client's history to make a ***syndromic diagnosis*** and manage according to the flow charts in the national STI guidelines.

STI Screening and Treatment

Screening and physical examination

At every visit, ask client who are sexually active about STI symptoms. If the answer to any question is 'yes', conduct a physical examination.
Nurses should also provide routine cervical screening on all sexually active women with HIV. Routine cervical screening is especially important as females living with HIV are at greater risk for cervical cancer than HIV-uninfected women.

Diagnosis and treatment

A thorough physical examination is key to diagnosing STIs. Nurses should use information from the physical examination in combination with the client's history to make a ***syndromic diagnosis*** and manage according to the flow charts in the national STI guidelines.

Treat clients diagnosed with an STI syndrome for all of the possible STIs that could cause that syndrome. In addition:

- Counsel clients to avoid sex while being treated for STIs and to use condoms with every sexual encounter after sexual activity resumes.
- Counsel clients diagnosed with STIs to inform their sexual partner(s) to seek medical care so that they can be evaluated and treated for STIs as well.
- Conduct risk reduction counselling to help clients avoid STIs in the future, including counselling on safer sex and consistent condom use with every sexual encounter.

Trainer Instructions

Step 13: Ask participants to reflect on what contraceptive counselling and contraceptive methods are currently available to female clients within the HIV care and treatment clinic. Remind participants of the importance of ''one-stop shopping'' for female clients. This includes the provision of contraceptive counselling and at least some forms of contraception (for example, condoms, pills, injectables) within the HIV care and

treatment clinic.

Nurses need to be aware that many clients perceive health workers to be in a position of authority, and therefore recommendations may be perceived as instructions. For this reason, it is important to provide accurate information on the full range of options and ensure client consent through informed decision-making.

- *What issues do nurses have to consider when discussing FP options with HIV-infected clients?*

Step 14: Review the common contraceptive issues among women as well as common side effects. Remind participants to always follow national family planning guidelines.

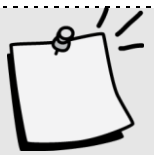
Provide an overview of contraceptive options available to HIV-infected women and clients.

Record the options on flip chart paper. Give hints until participants have listed the 10 options in Table 8.1. Then for each option ask:

- *What are the main advantages of this option?*
- *Disadvantages?*
- *Given the advantages and disadvantages, what do you think about this option for clients?*

Where there are questions, refer to *Appendix 8A: Survey of Family Planning Methods*. Refer participants to the same appendix to review special considerations for clients and key points for counselling.

With minor exceptions, HIV-infected women and adolescents can use most modern contraceptive methods.



Make These Points

- .It is important to consider a client's lifestyle, personality, and social situation before recommending and prescribing a family planning method. For example, a client may be more adherent to her family planning decision, if the method does not require a daily regimen or if it allows her to conceal sexual activity and contraceptive use.
- Good education and counselling — both before and at the time a method is selected — can help clients make informed, voluntary decisions with which they are more likely to adhere in the long term. Counselling should always include discussion of side effects.
- The following family planning methods are good options for PLHIV: condoms, COCs/POPs, injectables, hormonal implants and IUDs. Some

of these options include caveats, for examples the hormonal methods may be less effective in clients on ART, so clients must be advised to use condoms in addition to the hormonal method.
- Ensure that all clients know about emergency contraceptive pills, when they can be used and how to obtain them.
- Counsel all clients on correct condom use, whether condoms are their primary contraceptive choice or will be used for dual protection.

Counselling Clients on Family Planning

Many HIV-infected women and girls have questions about whether or not they can safely have children in the future. Nurses should provide education and counselling to clients on the safest times to become pregnant and have children.

- It is safest for a woman to have a baby when she is a physical adult.
- The safest time to get pregnant is when both partners:
  - Have CD4 cell counts over 350
  - Are healthy: they do not have any opportunistic infections (including TB) nor do they have advanced AIDS
  - Are taking and adhering to their ART regimens
- It is healthiest for a mother to wait until her child is at least 2 years before getting pregnant again.

It is important for HIV-infected women to know the facts about pregnancy and preventing mother-to-child transmission — BEFORE they become pregnant. These are good topics to discuss in PLHIV support groups and during individual counselling sessions. Clients should always be encouraged to talk with nurses about pregnancy and PMTCT if they are thinking of having children. Nurses should also encourage partners of client to come to the clinic for education and counselling on these topics.

Common Contraceptive Issues for Clients

- Clients have special needs when choosing a contraceptive method. Social and behavioural issues are important considerations. For example, methods that do not require a daily regimen may be more appropriate for younger client, because of clients' unpredictable sexual activity or the need to conceal intimacy and contraceptive use. In addition, sexually active women who are unmarried have very different needs from those who are married and want to postpone, space, or limit pregnancy.
- Proper education and counselling — both before and at the time a method is selected — can help clients make informed, voluntary decisions.
- At a minimum, all clients should be counselled on correct condom use and clearly instructed that condoms or abstinence are the only ways to prevent HIV infection. Every effort should be made to prevent the cost of services or contraceptive methods from limiting options.

Always follow the national guidelines when providing family planning counselling and support and when prescribing a family planning method. Participants can refer to *Appendix 8A: Survey of Family Planning Methods*, to review special considerations for clients and key points for counselling.

Contraceptive Side Effects:

Some clients may experience side effects from contraceptive methods (i.e. weight gain, spotting, menstrual changes). These side effects can be uncomfortable, annoying, or worrisome to clients. Side effects are the major reason that younger clients stop using contraceptive methods. Therefore it is important that nurses[3]:

- Treat all client complaints with patience and seriousness.
- Offer clients an opportunity to discuss their concerns.
- Reassure the client that side effects are manageable and reversible.
- Help the client differentiate between normal contraceptive side effects versus complications that require a return visit to the clinic.
- Offer clients information and advice on how to prevent and manage side effects.
- Always provide follow-up counselling.

A summary of common contraceptive options for PLHIV is in Table 8.1. A more detailed description of contraceptive options including special considerations for the client and advice on counselling the client about condoms can be found in *Appendix 8B: Survey of Family Planning Methods*.

Table 8.11: Summary of contraceptive options

Male and female condoms		
Advantages	**Disadvantages**	**Summary**
• Provide protection from both pregnancy and STI (including HIV) transmission and acquisition • Highly effective when used consistently and correctly	• Correct and consistent condom use may be difficult to achieve, failure rates can be high • Partner involvement is required, need to negotiate their use • Does not interfere with medications	• Good method for all clients • Requires demonstration on proper use
Combined oral contraceptive pills (COCs), progestin-only oral contraceptive pills (POPs) — pills taken daily*		
Advantages	**Disadvantages**	**Summary**
• Highly effective when taken daily on schedule • POPs may be a good choice for clients who cannot tolerate estrogen in COCs or who are breastfeeding • Does not interfere with sex	• Failure rates can be high, especially in younger clients, due to confusion about how to take pill • Side effects can include nausea, weight gain, breast tenderness, headaches, spotting • Cannot be taken by clients on rifampicin • ARVs may adversely	• Women taking ARVs who want to use COCs should be counselled about the importance of taking COCs on time every day, and about consistent condom use • POPs are safe for clients, but they must be taken at exactly the same time everyday (for this reason, may not be

	affect the efficacy of low-dose COCs and/or increase their side effects	suitable for younger clients)
Injectables — "shot" given every 2–3 months*		
Advantages	**Disadvantages**	**Summary**
• Highly effective when used correctly • Does not interfere with sex	• Side effects can include spotting at first, then amenorrhea and weight gain	• Can be used by HIV-infected adult and adolescent females without restrictions • Remind client when to return for next injection
Hormonal implants — small rods inserted under skin, lasts 3–7 years*		
Advantages	**Disadvantages**	**Summary**
• Highly effective • Can be reversed • Does not interfere with sex	• Effectiveness of implant may be reduced by ARVs • Side effects can include nausea, weight gain, and changes in monthly bleeding. • Usually need to be inserted and removed at a family planning clinic	• Can be used by HIV-infected adult and adolescent females who do not take ART • Can be used by HIV-infected adolescents and women on ART, but should use condoms as a back-up method • Provide counselling to prepare client for possibility of irregular bleeding
Emergency contraceptive pills (ECP) — 2 doses of pills taken within 120 hours after unprotected sex		
Advantages	**Disadvantages**	**Summary**
• Reduces risk of pregnancy after unprotected sex by 75% • Safe for all women, including those living with HIV and those taking ART	• For emergency use only! • Side effects can include nausea, vomiting, cramps, headache, breast tenderness, and changes in the menstrual cycle	• Should be widely and easily available • Can be used by HIV-infected adult and adolescent females • Provide counselling on adopting a regular contraceptive method, as well as on condom use for dual protection
Intra-uterine devices (IUDs) — device inserted into uterus, lasts up to 12 years*		
Advantages	**Disadvantages**	**Summary**
• Highly effective • Does not interfere with sex	• Should not be initiated in a woman with AIDS not taking ART • Side effects can include heavy bleeding, discharge, cramping and pain during the first months • Usually needs to be inserted and removed at a family planning clinic	• Appropriate for clients in stable, mutually monogamous relationships • Not recommended for HIV-infected women with advanced HIV disease or AIDS, especially if not on ART
Male and female sterilisation — surgery*		
Advantages	**Disadvantages**	**Summary**
• Safe and effective	• Permanent and requires	• Permanent methods are

• Free of side effects • Does not interfere with sex	surgery	not recommended for younger clients
Lactational amenorrhea method (LAM)*		
Advantages	**Disadvantages**	**Summary**
• Temporary, natural contraceptive option for women who are less than 6 months postpartum, exclusively breastfeeding, and whose periods have not yet returned	• Only applies to women who are breastfeeding	• Appropriate only for clients who have given birth within the past 6 months
Fertility awareness methods*		
Advantages	**Disadvantages**	**Summary**
• No health risks or side effects	• Requires a woman to identify her fertile days, which takes time and effort • Requires considerable commitment, calculation and self-control, both by the woman and her partner	• A very difficult method for most clients to implement correctly and consistently • Not reliable for pregnancy prevention
* Nurses should recommend and provide condoms for dual protection.		

Adapted from: Senderowitz, J., Solter, C., & Hainsworth, G. 2002, revised 2004. *Comprehensive Reproductive Health and Family Planning Training Curriculum: Module 16: Reproductive Health Services for Clients, Unit 7.* Watertown, MA: Pathfinder International.

Session 8.2 Teaching, Coaching, and Skills Transfer

Total Session Time: 50 minutes

Trainer Instructions

Step 1: Begin by reviewing the Module 8 learning objectives and the session objective, listed below.

Step 2: Ask participants if there are any questions before moving on.

Session Objective

After completing this session, participants will be able to:

- Reflect on their own attitudes, values, and beliefs on client sexuality and discuss how these may affect their work with clients.

Trainer Instructions

Step 3: Lead participants through Exercise 3, which gives an opportunity to discuss and practise providing a range of sexual and reproductive health information, counselling, and services to client.

Exercise 3: Providing SRH Services to PLHIV: Case studies, role play, and large group discussion	
Purpose	• Participants have an opportunity to discuss and role play strategies to provide PLHIV with a range of sexual and reproductive health information, counselling, and services
Duration	60 minutes
Advance Preparation	• Review the case studies ahead of time and make any adjustments, as needed, so that they reflect the local context.
Introduction	Explain that we have covered a lot of information on providing PLHIV with sexual and reproductive health information, counselling, and services in this module. Now, participants will review and role play case studies to practise and apply some of the skills they have learned.

Activities	**Case Studies, Role Play, and Large Group Discussion**. 1. Ask 2 participants to volunteer to role play the 1st case study in front of the large group. One participant will be the "nurse" and the other the "client." Give the "nurse" and "client" about 5–8 minutes to conduct their role play. 2. Upon completion of the role play, facilitate a discussion by asking the following questions: • *What were the main SRH issues for this client? What do you think the client was thinking and feeling when he or she was with the nurse?* • *What kind of education and counselling did the nurse offer the client? What was good about this and what do you think could have been done better or differently?* • *Do you agree or disagree with the advice provided, and why?* 3. Ask a participant to read the remaining case studies and, for each one, discuss in the large group the nurse's potential responses to and "next steps" with the client. 4. Close by asking participants: • *What does this exercise tell us about how HIV-infected clients might feel when nurses ask them about their sexual practices?* • *What are some likely challenges associated with teaching SHR core skills to mentees? How will you manage these issues?*
Debriefing	• Nurses play important roles in providing clients with accurate advice, information, counselling, and clinical services related to their sexual and reproductive health. • SRH services as a standard part of comprehensive HIV care and treatment. Nurses should try to use good communication techniques and project an open, and non-judgemental attitude about clients' behaviours and choices. • Nurse mentors have a responsibility to correct misconceptions and reiterate that people living with or most at risk of HIV have the right to decide whether they want to have children or not; they have the right to information about the risks involved to them and the baby; and the right to services that reduce their health risks and their baby's risk of HIV infection.

Exercise 3: Providing SRH Services to PLHIV: Case studies, role play, and large group discussion
Case Study 1: T___ returns to the clinic for a follow-up appointment. During the visit, she discloses that she wants to have another child; however, recently the leader of her local HIV support group told her friend, "*HIV-positive women*

who have children are no better than murderesses". Her current partner is HIV-negative and is very worried about having a child with her. How do you proceed?

Key points for trainers: Case Study 1

- Counsel on appropriate contraceptive choices, suited to her lifestyle and preferences.
- Ensure she is adhering to his ART regimen (if eligible).
- If she is not using any contraceptives, recommend using condoms for now, until she can either come to the ART clinic for family planning counselling or go to a family planning clinic. Regardless of her family planning choice, she should still continue to use condoms to protect her partner from HIV.
- Ask if her partner knows her HIV status. If he does not, ask her when she plans to tell him. Discuss and provide counselling and support around disclosure.
- Give her condoms and arrange date and time for a follow-up visit.

Case Study 2:
When T___ returns to the clinic for a follow-up exam, you overhear your mentee talking to her. Your mentee advises T___ not to have any more children. When T___ admits she is still not taking her birth control, the mentee shouts at T___, "*Why did you not listen to our advice*?" How do you address this with your mentee during your supervision session?

Key points for trainers: Case Study 2

- Remind the mentee that PLHIV have the same rights to sexuality and reproduction as people not affected by HIV—e.g., the right to have a safe and satisfying sex life and to decide on whether to have children and how many to have.
- As nurses, we need to respect clients and mentees irrespective of their beliefs.
- Remind the mentee that being judgmental with clients will negatively impact on service provision to clients---nurses should always be non-judgmental in our communication with clients.

Case Study 3:
T___ returns to clinic because of the recurrence of painful sores on the labia minor and painful intercourse. She had similar lesions last year, but this year there are more sores and the pain is worse. In addition, she has experienced a whitish vaginal discharge that aggravates the sores. The clinic on this particular day has a long line of patients waiting to be seen. The mentee that you are supervising prescribes a vaginal yeast cream for T___ and tells her to come back to the clinic in 2 weeks for follow up. How would you intervene in this particular scenario?

Key points for trainers: Case Study 3

- Talk with the mentee and emphasize that, at the very least, a visual genital exam should be performed to assess the sores that the client reported. Remind the mentee that genital ulcerative disease in HIV clients can be severe in presentation and T___ has already noted that she is experiencing pain with the lesions.
- Offer to help the mentee with conducting the exam and finishing up the paperwork for the visit.
- If T___ truly does not want to do the clinical exam, then offer to postpone the exam. If possible, prescribe presumptively based on symptoms.
- Provide risk reduction counselling focuses on reducing risk of HIV, STIs and unwanted pregnancy by helping her choose a strategy that is right for him or her.
- Recommend using condoms for now, to protect her and her partner from HIV and other STIs.
- Encourage partner testing.
- Ensure she is adhering to ART.

Case Study 4:

T___ 's brother M___ returns to the clinic for a check up and medication refill. He was diagnosed with HIV 6 months ago and has been on ART for 2 months. You hear from some other nurses that M__ has sex with other men for money. When you offer him some condoms at the end of the appointment, he says that he does not need them. How do you proceed?

Key points for trainers: Case Study 4

- Talk with about his current level of sexual risk.
- Be non-judgmental in your communication with M___.
- Ask if he has any former partners that need to know their risk of HIV infection. Ask him to suggest a plan for informing them of their risk.
- Proved risk-reduction counselling and recommend using condoms, to protect him and partners from HIV and other STIs.
- Ensure he is adhering to his ART.
- Give him condoms and arrange date and time for a follow-up visit.

Trainer Instructions

Step 4: Allow 5 minutes for questions and answers on this session.

Session 8.3 Additional Learning Activities and Resources

Total Session Time: 15 minutes

Trainer Instructions

Step 1: Review the session objective listed below.

Session Objective

After completing this session, participants will be able to:

- Describe independent and supplemental learning activities for the module.

Trainer Instructions

Step 2: Review the independent learning activities suggested for this module using the content below.

Independent Learning Activities

Ask participants to work in small groups and choose 1of the following learning activities:

- Develop a set of guidelines for health workers at your health facility on SRH counselling for HIV-infected clients.

- Gather and review a national HIV/AIDS policy brief or document on legal and ethical issues (if available). Ask the following questions:
  - *What rights need to be upheld in order for PLHIV to fulfil their sexual and reproductive rights? And vice versa—how does upholding sexual and reproductive rights help them realize other rights?*
  - *What is the nurse's role is in helping PLHIV protect and fulfil their sexual and reproductive rights?*

- Facilitate a lunchtime discussion with nurses and other members of the multidisciplinary team about SRH problems, causes, and consequences of the SRH vulnerability of HIV-infected women and adolescent girls. Use the following questions to guide the discussion and summarise your findings in a brief paper:
  - *How does gender inequality contribute to these problems?*
  - *Do the causes and consequences differ at various life stages?*

- *Which of the causes do you think it is possible for us to address in our work?*
- *How, if at all, do you think addressing the "causes" will affect the "consequences"?*

Session 8.4 Action Planning

Total Session Time: 75 minutes (1 hour and 15 minutes)

Trainer Instructions

Step 1: Review the session objective listed below.

Session Objective

After completing this session, participants will be able to:

- Develop a site-specific action plan to improve accessibility of SRH services for hard-to-reach populations.

Trainer Instructions

Step 2: Lead participants through Exercise 4, which will give an opportunity to think about ways to improve accessibility of SRH services for hard-to-reach populations.

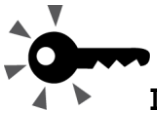
Exercise 4: Improving SRH Services for PLHIV: Small group work and large group discussion	
Purpose	• Develop a site-specific action plan to improve accessibility of SRH services for hard-to-reach populations
Duration	45 minutes
Advance Preparation	• None required
Introduction	The goal of comprehensive SRH care is to provide holisitc and integrated health services to HIV-infected clients through creating and strengthening linkages and referral mechanisms between SRH and HIV services on-site or with other services off-site. Although your health facility may not be able to offer all of the health and social services that an HIV- infected may need, health workers can recognize and discuss with the client her range of needs and know where to refer her for further help.
Activities	**Part 1: Small Group Work** 1. Divide the participants into 5 small groups, each representing one of the following populations: women living with HIV; men living with HIV; female sex workers; men who have sex with men; adolescents.

	2. Pass out pieces of flip chart paper to each group. 3. Ask each small group to list what specific SRH services the group that they represent might need. 4. Ask groups to list individual, community, and the healthcare system barriers that their target group might experience when accessing services. 5. Ask the groups to think of a solution that nurse mentors might be able to implement, in response to each barrier related to the healthcare system (e.g. change in the staff's skills and values), that would help their target group access SRH services more easily. Ask: • *What can we do about this barrier or problem?* • *What do we want to achieve?* 6. Remind participants that good solutions are "SMART," or: • **Specific:** It addresses the matter specifically • **Measurable**: It can be measured to determine whether it has been achieved. • **Achievable:** It is within the means and capacity of your group. • **Realistic:** It is practical and can be accomplished within a reasonable time frame. • **Time-bound:** The time period for reaching it is clearly specified. 7. Groups should list 1-3 specific strategies, activities, or "next steps" to achieve each solution. 8. For each activity, ask the groups to answer the following questions: • *Who is responsible for this activity?* • *When will you be able to implement this activity?* • *What kind of support or resources (including funds) do you need in order to achieve this activity?* • *Any other comments to note about this activity or strategy?* 9. Groups should use *Appendix 8B: Action Plan Worksheet* to record their plans. 10. The trainer should circulate between the small groups during the discussion to respond to questions. **Part 2: Large Group Discussion** 11. Each group has 5 minutes for presenting their plans to the larger group. 12. After each group presents, ask other participants if they have other solutions that were not listed.
Debriefing	• SRH policies should be developed and implemented that ensure ALL clients' sexual health and access to services, including a safe and supportive clinic environment, free from discrimination and stigma.

Trainer Instructions

Step 4: Allow five minutes for questions and answers on this session.

Step 5: Summarise this module by reviewing the key points in the box below.



Module 8: Key Points

- An important part of HIV care and treatment is assessing and responding to the SRH needs of clients. In order to do so, nurses must be comfortable talking about sexuality and SRH with their clients and knowledgeable about the common SRH issues faced by clients.
- Nurses need to stress that homosexual, bisexual, and transsexual/transgendered behaviour is NORMAL (regardless of the nurse's personal views). Nurses do not have to be experts on sexual orientation. A willingness to listen, be understanding, and refer clients to resources is often enough.
- Safer sex describes the range of sexual activities that do not transmit STIs (including HIV) and that protect against unintended pregnancy, but are still pleasurable. Safer sex includes sexual practices during which body fluids are not passed between partners. Using condoms is a reliable way to practise safer sex and prevent STIs, HIV and unwanted pregnancy. For people who are living with HIV, condoms also prevent re-infection. PLHIV should have free and easy access to condoms in the clinic setting.
- Sexual risk screening includes questions to help the nurse assess if the client is sexually active, if so, with whom and what risks he or she is taking. Risk reduction counselling focuses on reducing risk of HIV, STIs, and unwanted pregnancy by helping the client choose a strategy that is right for him or her.
- All clients who are sexually active should be screened for STI symptoms. If there is a suspicion of an STI, then conduct a physical examination. Nurses should always follow the national STI guidelines for diagnosis and treatment.
- Nurses can also provide counselling on the safest times to become pregnant, such as when CD4 cell count is high, when the client is well, and when she is stable on and adhering to ART.
- Good family planning education— both before and at the time a method is selected — can help clients make informed, voluntary decisions with which they are more likely to adhere in the long term. Education should always include discussion of side effects.
- The following family planning methods are good options for PLHIV: condoms, COCs/POPs, injectables, hormonal implants and IUDs.
- Nurses should counsel all clients on correct condom use, whether condoms are their primary contraceptive choice or will be used for dual protection.

Appendix 8A: Survey of Family Planning Methods

Barrier Methods

Male and female condoms

- Only condoms provide protection from both pregnancy and STI (including HIV) transmission and acquisition.
- Male and female condoms are highly effective when used consistently and correctly every time.
- In real-life situations, and especially among clients, correct and consistent condom use may be difficult to achieve. Partner involvement is required. Some people — more often men than women — report diminished sensation when using condoms during sex.
- Condom use does not interfere with medications, however, and except when an individual is allergic to latex, there are no common side effects for male and female condoms.

- **Special considerations for the client:** Male and female condoms are safe and appropriate for all PLHIV. Because condoms are available without a prescription and are the only method offering dual protection, they are a good method for clients. It is important that condoms are always available to clients for free and without having to ask an adult for supplies. Clients require skill development and practice in learning how to use condoms and negotiate their use with sexual partner(s). Client girls are frequently not assertive about the use of condoms if their partner rejects the idea; they require counselling and peer support to feel empowered and able to negotiate condom use and overcome cultural and other barriers. Consistent and correct condom use is effective in providing dual protection, but failure rates (i.e. unintended pregnancy) for condoms are high, especially among clients, who often do not use them consistently or correctly.

- **Counselling the client about condoms:** Always demonstrate, step-by-step, how condoms are used and correct disposal. Tell the client to return to the clinic if there is any problem, they need more condoms, if they are unhappy with the method, or if they think they or their partner may have been exposed to an STI. Always ask the client to repeat the instructions to ensure understanding.

Spermicides and diaphragms with spermicides

- These methods are NOT recommended for clients or adults living with HIV, as they may increase the risk of HIV transmission.

Hormonal Methods

Hormonal contraceptives, including combined oral contraceptive pills (COCs), progestin-only oral contraceptive pills (POPs), emergency contraceptive pills (ECP), injectables, and implants are appropriate and effective contraceptive methods for many PLHIV. They are generally easy to use, are suitable for short- and long-term use, are reversible, and provide noncontraceptive health benefits.

COCs and POPs:

- These are pills that a woman takes once a day to prevent pregnancy.
- They contain the hormones oestrogen and progestin (in the case of COCs) and progestin alone (in the case of POPs).
- Both types are very effective at preventing pregnancy when taken on schedule.

- **Special considerations for the client:** Low-dose COCs are appropriate and safe for all HIV-infected women, including adolescents. Many clients choose a COC because of the low failure rate, relief from painful periods, and the ease of using a method that is not directly related to sex. Failure rates for COCs are higher for clients than for all other age groups. Failure to take pills at the same time, every day, is often due to lack of knowledge or confusion about how to take pills. Nurses should stress that COCs can prevent pregnancy but should always be used in combination with condoms to provide STI/HIV protection. Nurses can assist clients to determine where they will keep their pills and how to remember to take them at the same time every day, similar to their ARVs. COCs are available in 21- or 28-day regimens. Most clients do better with the 28-day regimens because it is easier to remember to take a pill every day rather than stopping for 7 days.

  COCs should not be taken by clients taking rifampicin for TB treatment.

  ARVs may adversely affect the efficacy of low-dose COCs and/or increase their side effects. Women taking ARVs who want to use COCs can be given a formulation with at least 30mcg of oestrogen, counselled about the importance of taking COCs on time every day (without missing pills), and counselled about consistent condom use.

  POPs are also safe for clients, but since they must be taken at exactly the same time everyday for them to be effective in preventing pregnancy, they may not be the best choice for clients. POPs may however be a good choice for clients who cannot tolerate estrogen in COCs or who are breastfeeding.

- **Counselling the client about oral contraceptive pills:** The most important counselling issue with clients is to make sure they understand the importance of taking pills correctly. Show the client the pill packet

and explain in detail when to start taking pills and how to take the pills. Explain that if she forgets to take her pills, she may become pregnant. Instruct the client on what to do if she misses pills (for example, if she misses one, take it as soon as she remembers, if she misses 2, take 2 pills as soon as she remembers and use a back up method, etc.). Always review possible side effects, including that breakthrough bleeding may be common in the first cycles, but is not a reason to stop taking the pills. Like with ARVs, the client should be encouraged to talk with a healthcare worker about any side effects (nausea, weight gain, breast tenderness, headaches, spotting, etc.) and told that these will usually settle over time. Go over the times when she should return to the clinic, including if she thinks she may be pregnant, she has chest pain or shortness of breath, severe headaches with blurred vision, and swelling or severe leg pain. Make sure the client understands when to come back for re-supply and not to wait until she is out of pills (like with ARVs). Always have the client repeat information back to you so you can check understanding. And always promote dual protection with male or female condoms.

Injectables:

- Progestin-only injectable contraceptives, such as Nur-Isterate and Depo-Provera (depot medroxyprogesterone acetate, aka DMPA and 'the shot'), contain no estrogen.
- To prevent pregnancy, a shot is given to the woman in the arm or upper buttock every 2–3 months, depending on the type of injectable.
- Injectables are highly effective when used correctly.
- PLHIV can use progestin-only injectables without restrictions. Clients on ART can also use progestin-only injectables safely and effectively.
- It is important to counsel clients to come for their next injection on time and without delay.
- Side effects of injectables may include spotting at first, then amenorrhea and weight gain.

- **Special considerations for the client:** Injectables are safe and appropriate for clients. Many clients like this method because they don't have to remember to take a contraceptive pill every day and no one needs to know they are using the method. It is important that clients are reminded when to return for their injections, ideally this can be combined with their routine HIV care appointments.
- Injectables do not offer protection from STIs/HIV, so should always be used with male or female condoms.

- **Counselling the client about injectables**: Nurses should show their clients the vial of the injectable and explain how it is used. It is important to stress that the injections need to be given every 3 months and that injections can be given early if a client thinks she will not be able to return at the 3 month point. The injection will take effect immediately if she is between day 1–7 of her menstrual cycle. If the

injection is given after day 7 of her cycle, she should use a back-up method for at least 24 hours. It is important for clients to understand possible side effects, which include irregular bleeding and prolonged light to moderate bleeding with the first few cycles of injectables. With time, this should stop and many women stop getting their menstrual cycle altogether while using injectables. Some woman may also have weight gain or headaches. Nurses should encourage clients to return to the clinic if they have any questions or problems or if they have very heavy bleeding, excessive weight gain, or severe headaches. Make sure the client repeats this information back to you to check understanding. As with all hormonal methods, nurses should recommend and provide condoms for dual protection.

Hormonal implants:

- Progestin-only implants (eg, Implanon, Norplant) consist of up to 6 hormone-filled, matchstick-like rods, which are inserted under the skin in a woman's upper arm.
- Hormonal implants can prevent pregnancy for between 3 and 7 years, depending on the type.
- Highly effective at preventing pregnancy, implants are a long-term contraceptive method that can be easily reversed.
- PLHIV who do not take ART can use progestin-only implants without restrictions. PLHIV on ART can also use progestin-only implants, but should use condoms as a back-up method in the event that the effectiveness of the implant is reduced by ARVs.
- Side effects of implants may include nausea, weight gain, and changes in monthly bleeding. As with all hormonal methods, women should also be encouraged to use condoms for dual protection.

- **Special considerations for the client:** Hormonal implants, such as Norplant, are safe for clients. The main reason clients discontinue using implants is irregular bleeding; counselling is important so they are prepared for this possibility. Programmes must ensure that clients have access to services to remove implants whenever they need or want them to be removed.

- **Counselling the client about implants:** Nurses at the HIV clinic will likely have to refer clients to a family planning clinic for implant insertion and removal. It is important to explain how the implants work, what the insertion and removal procedures are, and how long the method will last. Clients should also be counselled on care of the insertion area and possible bruising or swelling after insertion. Clients should know where to go if they have problems or questions, or if they want the implants removed. Nurses should give information on common side effects, such as changes in bleeding, as well as serious problems requiring immediate care such as severe pain in the lower abdomen, very heavy bleeding, bad headaches, and yellowing of the skin or eyes.

Emergency contraceptive pills (ECP):

- ECP is used to prevent pregnancy after unprotected sex.
- ECP can be used if no contraceptive method was used, or if the contraceptive method failed — for example, a condom broke during sex.
- ECP should be taken as soon as possible after unprotected sex (although it can be taken up to 120 hours after sex).
- Used correctly and in timely fashion, ECP can reduce the risk of pregnancy by 75%.
- ECP is usually a combination of oral contraceptives taken in 2 doses.
- ECP does not cause an abortion. It prevents an egg from implanting in the uterine wall.
- ECP is safe for all women, including those living with HIV and those taking ART.
- Side effects of ECP may include nausea, vomiting, and changes in the menstrual cycle.
- Clients receiving ECP should be counselled on adopting a regular contraceptive method, as well as on condom use for dual protection.

- **Special considerations for the client:** ECP should be widely and easily available to clients, including at the HIV clinic. Clients should be educated about the availability of ECP and the importance of coming to the clinic for ECP as soon as possible after unprotected sex. The earlier ECPs are taken after unprotected sex, the more effective they will be in preventing pregnancy. ECPs can be provided in advance to clients who are at high-risk of unprotected sex, but they should be counselled that ECPs are for emergency use only. ECPs do not provide dual protection and all clients using ECPs should be counselled on more effective contraceptive methods and condom use for dual protection.

- **Counselling the client on ECP:** Nurses should explain how ECPs work and how the client should take them (for example, the first dose should be taken as soon as possible after unprotected sex, up to 120 hours after unprotected sex, the second dose should be taken 12 hours after the first dose). If more than 120 hours have passed since unprotected sex, the client should not be given ECP. If the client vomits within 2 hours of taking a dose, the dose should be repeated. Taking the doses after eating or before bed will help reduce nausea. Nurses should review what clients can expect after taking ECPs — they may have nausea, vomiting, cramping, breast tenderness, or headaches, but these should not last more than 24 hours. The client's period should come on time (or a few days late or early), and if she does not get her period within one week of when it is expected she should return to the clinic as she may be pregnant.

Long-term and Permanent Methods

- Intra-uterine devices (IUDs):

- This small device inserted into a woman's uterine cavity is highly effective at preventing pregnancy.
- The copper-containing CuT 380A — the most commonly used IUD — remains effective for up to 12 years.
- An IUD can be provided to a woman living with HIV if she has no symptoms of AIDS and no STIs. A woman who develops AIDS while using an IUD can continue to use the device. A woman with AIDS who is doing well clinically on ART can both initiate and continue IUD use but may require follow up.
- An IUD generally should not be initiated in a woman with AIDS who is not taking ART.
- Side effects of IUDs may include heavy bleeding and pain during the first months of use, as well as spotting.
- Encourage women choosing an IUD to use condoms for dual protection.

- **Special considerations for the client:** IUDs are appropriate for clients in stable, mutually monogamous relationships. Careful screening for STIs before insertion is critical and IUDs are not recommended for PLHIV with advanced HIV disease or AIDS, especially when the client is not on ART.

- **Counselling the client about IUDs:** It is important to explain that the IUD is a long-term method that lasts for 10–12 years and that it is most appropriate for clients who are in stable, monogamous relationships. Nurses may have to refer clients for IUD insertion, but should provide counselling and follow up within the HIV clinic. It is important for clients to understand how the IUD works and how to check for the strings. Nurses should explain side effects, including cramping and pain after insertion, heavier and longer menstrual flow for the first few months, vaginal discharge, and possible infection. Bleeding usually decreases during the first and second years of IUD use, and some women may not have regular periods. Clients should know the warning signs of potential complications with IUDs, including abnormal bleeding and discharge, pain, pain during sex, fever, and strings missing/shorter/longer. Make sure the client repeats this information to ensure understanding. It is very important to use condoms to prevent STIs, which can cause infection and complications, especially when using an IUD.

Male and female sterilisation

- These permanent methods are not usually recommended for clients, who may change their mind about wanting to have children in the future.
- However, some PLHIV may request sterilisation, in which case counselling should be provided and all options explored.

Traditional and Other Methods

Natural methods that do not require any materials (i.e. withdrawal, a woman learns to recognise when she is fertile and the couple avoids sex at this time.). In general, natural methods are not as effective in preventing pregnancy as the other "modern" methods. In some places, there are **traditional methods**. These are mostly traditional herbs that are given to prevent pregnancy. They are not reliable, because the dosage is not controlled and they are not scientifically proven.

Lactational amenorrhea method (LAM):

- LAM is a temporary, natural contraceptive option for women who are less than 6 months postpartum, who are exclusively breastfeeding, and whose periods have not yet returned.
- Any clients practising LAM should be advised to use condoms for dual protection.

Fertility awareness methods:

- These methods require a woman to identify the fertile days of her menstrual cycle and to abstain from sex during these times.
- To do so, she can observe fertility signs, such as the consistency of her vaginal mucus, or she can follow the calendar.
- This is a difficult method for many clients to implement correctly and consistently. It is also not very reliable for pregnancy prevention and does not protect against STIs and HIV.
- Encourage clients to use condoms as dual protection, especially during fertile days, or to abstain.
- Also counsel on the availability of more reliable contraceptive methods, emphasizing the importance of using condoms for dual protection.

Adapted from: Senderowitz, J., Solter, C., & Hainsworth, G. 2002, revised 2004. *Comprehensive Reproductive Health and Family Planning Training Curriculum: Module 16: Reproductive Health Services for Clients, Unit 7.* Watertown, MA: Pathfinder International.

Appendix 8B: Action Plan Worksheet

What is the problem?	What is your solution to this problem?	What are your strategies, activities, or "next steps" to achieve the solution?	What is your timeframe?	What resources or support are needed?	Comments
		1.			
		2.			
		3.			
		1.			
		2.			
		3.			
		1.			
		2.			
		3.			

References and Resources

[1] Williams, K., Warren, C., and Askew, I. 2010. *Planning and Implementing an Essential Package of Sexual and Reproductive Health Services: Guidance for Integrating Family Planning and STI/RTI with other Reproductive Health and Primary Health Services.* UNFPA.
[2] Zambia Ministry of Health, ICAP, and FXB (2011). *Adolescent HIV care and treatment: A training curriculum for multidisciplinary healthcare teams, Module 10*. Lusaka, Zambia and NY, NY: MOH & ICAP.
[3] Senderowitz, J., Solter, C., & Hainsworth, G. 2002, revised 2004. *Comprehensive Reproductive Health and Family Planning Training Curriculum: Module 16: Reproductive Health Services for Clients, Unit 7.* Watertown, MA: Pathfinder International.

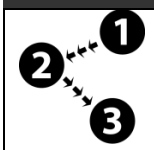
Module 9 Review of Clinical Decision-Making, Course Evaluation, and Closure

Total Module Time: 140 minutes (1hour and 30 minutes)

Learning Objectives

After completing this module, participants will be able to:

- Review basic principles of clinical decision-making and evidence-based clinical practice.
- Review teaching strategies that nurse mentors and educators can use to help promote clinical decision-making with their mentees.
- Be familiar with the core competencies needed to provide HIV care and treatment services.
- Discuss whether or not the training objectives have been achieved.
- Reflect on the concerns, expectations, and strengths discussed on the first training day.
- Complete the training post-test.
- Evaluate the training and given suggestions for improvement.

Methodologies	
	• Interactive trainer presentation • Large group discussion • Post-test • Training evaluation

Materials Needed	
	• Attendance sheet for Module 9 • Flip chart and markers • Tape or Bostik • Participants should have their Participant Manuals. The Participant Manual contains background technical content and information for the exercises. • Training completion certificates for each participant

References and Resources	
	• None for this module.

Advance Preparation	
	• Make sure you have all of the materials listed in "Materials Needed" on the first page. • Prepare the attendance sheet in advance and ask participants to sign in as they arrive for the 9th session of training. • Read through the entire module and ensure that all trainers are prepared and comfortable with the content and methodologies. • Prepare training completion certificates for each participant. • Invite a guest speaker to give participants their training completion certificates and close the training (optional).

Session 9.1: Review of Clinical Decision-Making

Activity/Method	Time
Interactive trainer presentation	30 minutes
Questions and answers	5 minutes
Total Session Time	35 minutes

Session 9.2: Reflection on Training Objectives and Concerns, Expectations, and Strengths

Activity/Method	Time
Interactive trainer presentation and large group discussion	45 minutes
Questions and answers	5 minutes
Total Session Time	50 minutes

Session 9.3: Post-test, Training Evaluation, and Closing

Activity/Method	Time
Post-test	25 minutes
Exercise 1: Training Evaluation: Individual work	15 minutes
Presentation of training certificates and closing	15 minutes
Total Session Time	55 minutes

Session 9.1 Review of Clinical Decision-Making

Total Session Time: 35 minutes

Trainer Instructions

Step 1: Begin by reviewing the Module 9 learning objectives and the session objectives, listed below.

Step 2: Ask participants if there are any questions before moving on.

Session Objectives

After completing this session, participants will be able to:

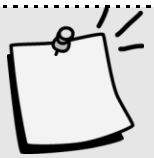
- Review basic principles of clinical decision-making and evidence-based clinical practice.
- Review teaching strategies that nurse mentors and educators can use to help promote clinical decision-making with their mentees.
- Be familiar with the core competencies needed to provide HIV care and treatment services.

Trainer Instructions

Step 3: Remind participants that this training is only the first step in improving their own knowledge and learning how to mentor nurses HIV care, treatment, and support services for clients. Learning to provide high-quality HIV care and treatment services requires technical expertise, the ability to think critically, experience, and clinical judgment. The high performance of nurses is dependent upon the nurses' continual learning, professional accountability, independent and interdependent decision-making, and creative problem-solving abilities.

Step 4: Ask participants:

- *What do we mean by clinical reasoning? By evidence-based medicine?*
- *Why are these concepts important for nurses?*
- *What are some examples of teaching strategies, used in this training, which can help mentees improve their decision making skills?*



Make These Points

- Health facilities in resource-limited settings may lack some diagnostic technology, so clinical reasoning skills are important.
- Evidence-based medicine principles should be taught to mentees to improve their clinical diagnosis skills.
- Nurse mentors and educators can use various teaching strategies to help mentees with their clinical decision-making and analysis skills, such as reinforcing new clinical concepts with case studies, independent assignments involving literature review, as well as incorporating algorithms and other job aids into their practice.

Key Points for Clinical Decision Making[i]

Health facilities in resource-settings may lack some diagnostic technology, so clinical reasoning skills are vital for nurses. The following evidenced-based medicine principles should be reinforced with mentees to improve their clinical diagnosis skills:

- Occam's razor advises choosing the simplest hypothesis that explains a set of clinical findings. HOWEVER, keep in mind that when dealing with an immunocompromised patient, there may be more than one pathological process occurring at the same time in the same or in different organs.
- Sutton's law (named after a famous bank robber who explained that he robbed banks because "that's where the money is") suggests that a clinician consider common causes in the local region for a patient's symptoms before considering uncommon causes.
- Plan your initial empiric or syndromic treatment so that you cover the most common causes and the most serious (life threatening) possible causes.
- In contrast to Sutton's law, consider what could kill a patient rapidly, even if that diagnosis may be uncommon.
- Avoid premature closure of your diagnostic process. Start out with a broad differential diagnosis and don't prematurely eliminate possibilities without sufficient evidence.
- Don't be overconfident. Seek reasons why your decisions may be wrong and consider alternative hypotheses. Ask questions that would disprove as well as prove your current hypothesis.
- Know what you don't know. Seek the missing information (e.g., from a book, a consultant, from the Internet).
- Common diseases sometimes have uncommon presentations and uncommon diseases can sometimes look like very common ones. Just because a clinical presentation looks similar to or is "representative of" a particular illness does not prove that the cause is due to that illness.
- Remember that we tend to over diagnose conditions that we have recently seen, especially those that were particularly dramatic or in which we made a mistake that we want to avoid in the future.

- Correlation ≠ causation. Just because two findings occur together, doesn't necessarily mean that one caused the other.

Teaching Strategies for Nurse Mentors and Educators

There are various teaching methodologies that have been modelled and discussed during this training course, which can help nurse mentors and educators build mentees' clinical decision-making and problem-solving skills:

Problem-based case studies and case conferences
Nurse mentors and educators can use case studies for small group, lunchtime discussions, and in-service workshops. Cases should be based on scenarios that regularly occur in your clinic setting. Include discussion questions as well as other resources that the mentee may use, such websites, journal articles, and books.

Review of clinical guidelines
It is essential that nurses understand and follow all applicable national guidelines. Lunchtime training sessions are an efficient way to review and discuss updates to guidelines, without detracting from the workday.

Independent learning assignments
Nurse mentors and educators can integrate evidence-based decision-making into any curriculum, through the use of written assignments. Ask mentees to draft a paper following this basic structure:
- Introduction: Describe a difficult clinical decision and explain why it was challenging.
- Literature: Describe the clinical options supported by at least 3 references.
- Clinical Interventions: Describe your intervention, including your role in providing information to help clients make informed decisions about their own health and the role of other members of the multidisciplinary team.
- Summary and Conclusion: Describe key highlights of your paper.

Demonstrations
A demonstration shows the skills needed to successfully perform a particular task or technique. The trainer or a participant demonstrates the task, describing each step and explaining the skills needed and the reasons for performing it in a particular way. It is often followed by a practice session where the participants perform the activity under the supervision of the trainer. Before you conduct a demonstration, arrange the necessary equipment and practice the skill. Allow sufficient time for learners to practice in pairs or in small groups.

Use of job aids

Algorithms, cue cards, pocket diagnostic guides, wall charts, and other visual aids can help mentees develop logical assessment and decision-making skills and can assist job performance by prompting nurses on the essential steps and content of clinical practices. Many of the appendices in this manual can be adapted and transformed into mentoring tools.

- For example, for the nurse management of ART, concise outlines of SOPs may be useful for critical practices such as: determining national eligibility criteria for ART, steps in initiating a client on ART, adherence counseling, baseline assessment, laboratory investigations, identification of treatment failure criteria, and steps in referring an ART client to physician care
- Additional job aids that can facilitate clinical practice include concise, standardized patient assessment and follow-up visit forms, adherence counseling checklist, procedure flow diagrams, and materials for client education on ART and other opportunistic infections.

Peer Assessment and Feedback

Mentees can learn from and teach each other by assessing one another during classroom demonstrations, role-plays, and presentations. Peer assessment should be used to provide positive feedback on a skill or task and suggestions for improvement in the future. This method is best utilized when peers can take turns observing, assessing and providing feedback. In this way everyone is given the opportunity to assess a peer as well as be assessed.

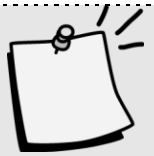
Trainer Instructions

Step 5: Review the core competencies required by nurses for HIV care and treatment, using *Appendix 9A: Skills Transfer Checklist*. Nurse mentors and educators can use this checklist to observe and teach their mentees to correctly conduct each skill in their clinic settings. Mentors should note which skills their mentee was able to practise on the checklist (a checklist should be completed for EACH mentee). Nurse mentors and educators can note any comments or areas that need improvement on the checklist. Ask participants:

- *Which competencies do you think will be the most comfortable for you to teach? Which will be the most challenging?*
- *Are there areas in which you feel you need more practice? Which ones? How will you arrange for additional training or supervision at your facility?*

Reinforce that it may not be possible to observe every skill in their clinic setting. For example, if the nurse mentor and mentee work in an adult ART clinic, it may not be possible to observe the skills associated with paediatric HIV.

Suggest to participants that they can also complete a checklist for themselves, as a self-assessment, noting which core competencies were conducted and any comments.



Make These Points

- Consistent practice of clinical skills creates the foundation for clinical decision-making.
- Mentors and mentees should use *Appendix 9A: Skills Transfer Checklist* to identify which clinical skills are relevant and necessary for their setting and incorporate them into their mentoring plan.
- Nurse mentors and educators should always apply the 5-step method for teaching clinical skills:
  - Provide an overview of the skill and how it is used in client care.
  - Demonstrate exactly how the skill is conducted without commentary.
  - Repeat the procedure, but describe each step.
  - Have participant "talk through the skill" by detailing each step.
  - Observe and provide feedback to the participant as he or she performs the skill.

Teaching Clinical Skills

- Consistent practice of clinical skills creates the foundation for clinical decision-making.
- Nurse mentors and educators can use *Appendix 9A: Skills Transfer Checklist* as a clinical teaching aid to use with their mentees. Mentors and mentees can use checklist to identify which clinical skills are most relevant and necessary for their setting and incorporate them into their mentoring and teaching plans. The checklist should be adapted to local settings as needed.
- Nurse mentors and educators should always apply the 5-step method for teaching clinical skills[ii]:
  1. Provide an overview of the skill and how it is used in client care.
  2. Demonstrate exactly how the skill is conducted without commentary.
  3. Repeat the procedure, but describe each step.
  4. Have participant "talk through the skill" by detailing each step.
  5. Observe and provide feedback to the participant as he or she performs the skill.

Trainer Instructions

Step 6: Allow 5 minutes for questions and answers on this session.

Session 9.2 Reflection on Training Objectives and Concerns, Expectations, and Strengths

Total Session Time: 50 minutes

Trainer Instructions

Step 1: Begin by reviewing the session objectives listed below.

Session Objectives

After completing this session, participants will be able to:

- Discuss whether or not the training objectives have been achieved.
- Reflect on the concerns, expectations, and strengths discussed on the first training day.

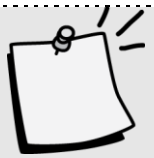
Trainer Instructions

Step 2: Congratulate participants on a job well done. Review the training objectives, listed below. Ask for a volunteer to read each of the learning objectives out loud.

After each, discuss as a group:

- *Did we meet this learning objective during the training?*
- *How confident do you feel that you will be able to do this yourself when you return to your facility?*
- *How confident do you feel that you will be able to teach this skill to other nurses when you return to your facility?*
- *What extra support would you like in this area?*

Record answers on flip chart, especially areas requiring extra support.



Make These Points

- This training was designed to build the knowledge and skills of multidisciplinary health teams to help them better provide HIV-related care, treatment, and support services to PLHIV.

- There were a number of learning objectives for the training, hopefully most of which we have met.

Campus-to-Clinic (CTC) Training Objectives

By the end of this training course, participants will:

- Explain how the principles of adult learning theory apply to mentoring.
- Demonstrate basic communication and mentoring skills.
- Discuss the prevalence and impacts of HIV globally, in sub-Saharan Africa, and in their own country setting.
- Review the definitions of and differences between HIV and AIDS.
- Review key components of HIV transmission, testing, counseling, and prevention protocols.
- Review the key information for the clinical care package of HIV care and treatment services for PLHIV.
- Review key features of HIV disease progression.
- Review laboratory tests used to diagnose HIV in infants, children, and adults.
- Apply the WHO clinical staging system for HIV-infected children and adults.
- Review routine care and treatment procedures for pregnant HIV-infected women.
- Describe procedures for safe infant feeding practices.
- Review clinical manifestations, diagnosis, prevention, and treatment of tuberculosis (TB).
- Discuss challenges one may encounter when simultaneously using ART and anti-TB drugs to treat co-infected individuals.
- Reflect on their own attitudes, values, and beliefs on sexuality and discuss how these may affect their work with clients.
- Identify prevention strategies used successfully in preventing STI/HIV transmission.
- Review childbearing choices and contraceptive options for women living with HIV.
- Practice how to educate clients on issues of sexuality, positive prevention, discordance, and sexual health.
- Review basic principles of clinical decision-making.

Trainer Instructions

Step 3: Refer to the lists of "Concerns", "Expectations", and "Strengths" compiled during the first exercise of Module 1 ("Exercise 1: Getting to know each other: Large group discussion and individual reflection"). The lists of "Concerns", "Expectations", and "Strengths" should be posted on the training room wall.

- Ask: *Would anyone like to discuss your current perspective on the "Concerns" that you listed during the "Getting to know*

each other" exercise?

Review the "Expectations" and compare them with what was actually covered. Note any expectations that were not met and discuss next steps to help ensure that this training need is met in the near future.

Reinforce the importance of the "Strengths" that each participant brings to his or her work. Ask if anyone would like to add to the "Strengths" list and note contributions on the flip chart.

Step 4: Go around the room and ask each participant to share:

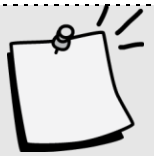
- *What was the most valuable information or skill you learned during the training?*
- *What is one action that you will prioritise in your work with your clients?*
- *What is one action that you will prioritise in your work with your mentees?*
- *What is one thing you will take away and share with your co-workers who did not attend this training?*

Step 5: Emphasize that a nurse mentoring program is not just about implementing training for a few good nurses; it is a major organisational change that requires considerable thought and preparation. Ask participants:

- *What are some of the biggest organizational challenges nurse mentors and educators might face in their health facility? How will you manage these issues?*

Step 6: Lastly, remind participants that they will be supported to implement their specific mentoring plans at their individual health facilities. Discuss potential ideas for follow up training and supervision for nurse mentors and educators. Ask participants:

- *Who at your clinic will have oversight and responsibility for the nurse mentoring program? Who will be available at your clinic for consultation if problems occur in your mentoring relationship?*
- *How will you review your progress as nurse mentors and educators and identify any further training needs as you move forward?*
- *What learning objectives will you set for yourselves for the next few months?*



Make These Points

- Nurse mentoring works best in settings where all staff are valued for their contribution to caregiving, supervision is well structured and functioning at all levels within the organization, employees receive adequate compensation for their work, and nursing staff recognize the important role mentors play in training and acclimating new employees.
- If the nurse mentor role is not properly explained to the entire staff before the program is implemented, nurse mentors and educators are likely to encounter resistance at many levels.
- It is important to ensure there is sufficient organizational support for nurse mentors and educators. "Talk up" the program, letting people know how nurse mentoring will benefit the health facility. Solicit input regarding program design. In order for a mentoring program to be effective, the organization's leadership must support it.
- It is important to also ensure there is the staff person who will provide primary oversight for the nurse mentoring program. Their responsibilities should include matching mentors to mentees, ensuring that mentors fulfill their responsibilities, scheduling, troubleshooting, and providing support to nurse mentors and educators who may find themselves in situations they don't know how to handle.
- Additional in-service trainings, once the mentors are carrying out their new responsibilities, are a good chance to build on early learning experiences.
- Nurse mentors and educators can ease the transition from the training environment to the work environment, by assisting each other with problem solving, clinical skills, and handling the emotional impact of the work.
- Peer support or peer supervision sessions can provide an opportunity for nurse mentors and educators to meet, discuss

Organisational Challenges for Nurse Mentors and Educators

- Nurse mentoring works best in settings where all staff are valued for their contribution to caregiving, supervision is well structured and functioning at all levels within the organization, employees receive adequate compensation for their work, and nursing staff recognize the important role nurse mentors play in training and acclimating new employees.
- If the nurse mentor and educator role is not properly explained to the entire staff before the program is implemented, nurse mentors are likely to encounter resistance at many levels. Staff often hold back when asked to participate in an organizational change process because they fear that the change will disrupt relationships with co-workers.

Involving all staff in defining the role and structuring the program will reduce these tensions and ensure that mentors play a positive role within your organization.

Follow Up Ideas for Nurse Mentors and Educators

- It is important to ensure there is sufficient organizational support for nurse mentors. "Talk up" the program, letting people know how nurse mentoring will benefit the health facility. Solicit input regarding program design. In order for a mentoring program to be effective, the organization's leadership must support it.
- It is important to also ensure there is the staff person who will provide primary oversight for the nurse mentoring program. Their responsibilities should include matching mentors to mentees, ensuring that mentors fulfill their responsibilities, scheduling, troubleshooting, and providing support to nurse mentors and educators who may find themselves in situations they don't know how to handle.
- The nurse must have access to continuing education opportunities to remain current on developments in the science of HIV and clinical practices related to HIV service delivery and ART; specifically, attendance at a minimum number of scientific and clinical updates should be mandated.
- Additional in-service trainings, once nurse mentors and educators are carrying out their new responsibilities, are a good chance to build on early learning experiences.
- Nurse mentors and educators can ease the transition from the training environment to the work environment, by assisting one another with problem solving, clinical skills, and handling the emotional impact of the work.
- Peer support or peer supervision sessions can provide an opportunity for nurse mentors and educators to meet, discuss challenges, and share ideas about how these can be overcome.

Trainer Instructions

Step 7: Allow 5 minutes for questions and answers on this session.

Session 9.4 Post-test, Training Evaluation, and Closing

Total Session Time: 55 minutes

Trainer Instructions

Step 1: Begin by reviewing the session objectives, listed below.

Session Objectives

After completing this session, participants will be able to:

- Complete the training post-test.
- Evaluate the training and given suggestions for improvement.

Trainer Instructions

Step 2: Lead participants through the training post-test Appendix 9C: Post-Test, explaining that it contains the same questions as the pre-test from the first day of training. (Note that the version of the post-test in Appendix 9C of Trainer Manual includes the answers in bold print; the version in the Participant Manual does NOT include the answers.)

As you did in Module 1, explain that the objective of the post-test is not to look at individual scores, but rather, to find out what the group as a whole knows about adolescent HIV care and treatment and how much the group's knowledge has improved from the pre-test. Results of the post-test, and comparison with pre-test scores will help improve future trainings and provide information on ongoing mentoring and supervision needs.

Step 3: Point participants to *Appendix 9B: Post-Test* in their manuals. First ask them to write the same number on their post-test as they wrote on their pre-test on Day 1 of the training. If they do not recall this number, then they should turn to the inside front cover of their Participant Manuals, where they should have recorded it on Day 1.

Give participants about 20 minutes to complete the questions individually. Ask participants to hand their completed post-

tests to a trainer when they have finished.

Tell participants that the post-tests will be scored, and then compared to pre-test scores to get a sense of how much they, as a group, have learned.

Step 4: After the post-test, debrief by asking participants how they felt answering the questions today compared with the first day of training.

Review the correct answers to each of the questions as a large group.

Step 5: Once the training is complete, trainers should:

- Score each post-test, using *Appendix 9B: Post-Test* (Trainer Manual version) as a guide. If anyone asks to see their score on the pre-test and/or post-test, let them know how they can do this.
- For each of the 25 questions, calculate how many participants got the answer incorrect. Compare the pre-test scores with the post-test scores, discuss the results with your supervisors, and include the scores and any recommendations in a final training report.

Trainer Instructions

Step 6: Lastly, lead participants through Exercise 1, which will give each person a chance to evaluate the training.

Exercise 1: Training Evaluation: Individual work	
Purpose	• To get participants' feedback on the training
Duration	15 minutes
Advance Preparation	None required for this exercise
Introduction	Introduce the training evaluation and encourage participants to give honest feedback (both positive and negative). Tell participants that the trainers will review the evaluation forms carefully and discuss how they can make future trainings better based on the feedback.
Activities	1. After referring participants to *Appendix 9C: Training Evaluation Form* remind participants that they do not have to write their name or position on the form if they do not want to, but that it is helpful to provide the name of their facility if they feel comfortable doing so. 2. Give participants 10–15 minutes to complete the training evaluation. 3. Ask the participants to put their evaluation forms face

	down in a pile in the front of the room when they are finished.
Debriefing	• Thank participants for their feedback and suggestions and reiterate their importance in improving future trainings.

Trainer Instructions

Step 7: Once again, congratulate participants on a job well done. Present each participant with a training completion certificate (or ask an invited guest to do so) and formally close the training.

Appendix 9A: Skills Transfer Checklist

This checklist includes many of the core competencies taught during the training. The checklist can be used as an instructional tool when nurse mentors and educators return to their sites after training, as part of supportive supervision and nurse mentoring activities.

Nurse Mentor/Educator Instructions: As you observe the mentee demonstrating a clinical skill, tick your rating as GOOD, FAIR or POOR. Record any comments or recommendations in the right-hand column; be prepared to share comments with the mentee. Complete this checklist over time during bedside teaching, supportive supervision, or observed skill practice with your mentee. In the "Comment" column, record areas for improvement or further study.

Name of Mentee: _____ **Dates of Observation:** _____

Name of Nurse Mentor/Educator(s): _____ **Name of Health Facility:** _____

CORE COMPETENCIES	NURSE MENTOR or SELF-RATING (TICK ONE)			COMMENTS
	GOOD	FAIR	POOR	
HIV Transmission, Counselling, and Testing				
Explains ways HIV is transmitted and is not transmitted				
Offers HIV testing to every client of unknown status				
Can appropriately explain progression of HIV and how HIV affects the immune system				
Effectively presents HIV pre-test counselling to a group of clients				
Effectively provides a HIV pre-test individual session to client				
Effectively provides a HIV post-test individual session for HIV-positive test result				
Effectively provides a HIV post-test individual session for HIV-negative test result				

CORE COMPETENCIES	NURSE MENTOR or SELF-RATING (TICK ONE)			COMMENTS
	GOOD	FAIR	POOR	
Effectively provides a HIV post-test individual session for HIV-indeterminate test result				
Demonstrates familiarity with national HIV counselling and testing guidelines, if applicable				
Clinical Care Package for PLHIV				
Describes the components of comprehensive HIV care				
Performs at least 1 baseline clinical assessment for each of the following: 1. Adult female 2. Adult male				
Performs at least 1 follow-up clinical assessment for on each of the following: 1. Adult female 2. Adult male				
Assesses and addresses clients' psychosocial needs during clinical visits				
Correctly documents relevant information from clinical visits into client records				
Demonstrates familiarity with national HIV guidelines — identifies criteria for ART initiation, failure, and prophylaxis in adults and adolescents (over 15 years of age)				
Correctly assesses WHO clinical stage for at least 1 adult client				
Performs at least 1 adherence readiness assessment, to help client prepare for lifelong ART, on each of the following: 1. Adult female 2. Adult male				

CORE COMPETENCIES	NURSE MENTOR or SELF-RATING (TICK ONE)			COMMENTS
	GOOD	FAIR	POOR	
Performs at least 1 adherence follow-up assessment, and helps with adherence challenges, on each of the following: 1. Adult female 2. Adult male				
Prescribes CTX correctly to at least 1 eligible adult client				
Demonstrates knowledge of relevant laboratory tests and their frequency, needed for adult PLHIV				
Applies 5 "A's" to structure at least 1 clinical visit				
PMTCT				
Provides PMTCT counselling and information; refers pregnant clients for PMTCT services				
Provides appropriate education on infant feeding to at least 1 client				
Demonstrates appropriate care of HIV-Exposed Infant, including HIV testing or referral for HIV testing at appropriate intervals				
Paediatric HIV				
Performs at least 1 clinical assessment on at least 1 child client				
Assesses WHO stage for at least 1 child client				
Demonstrates familiarity with national paediatric HIV guidelines — identifies criteria for ART initiation, failure, and prophylaxis in children				
Provides disclosure support to caregivers and their HIV-infected children				

CORE COMPETENCIES	NURSE MENTOR or SELF-RATING (TICK ONE)			COMMENTS
	GOOD	FAIR	POOR	
HIV and TB				
Screens all HIV-infected clients for TB				
Implements case finding for contacts of client with confirmed TB				
Prescribes or refers at least 1 eligible client appropriately for isoniazid preventive therapy (IPT)				
Follows correct protocol for infection control in clinic setting				
Follows correct protocol for TB treatment or referral to treatment facility				
Sexual and reproductive health				
Provides non-judgemental counselling about a client's sexuality and SRH issues				
Provides non-judgemental, accurate sexual risk reduction counselling and ways to practise safer sex				
Provides condoms to clients and accurately demonstrates male and female condom use				
Provides appropriate STI counselling, screening, and treatment (or referrals to treatment) for male and female clients				
Provides accurate, non-judgemental contraceptive counselling and supplies (and/or referrals)				
Clinical Decision-Making				
Uses sufficient, available evidence to make a clinical decision or diagnosis				
Proactively seeks missing information and consults supervisor appropriately, when needed				

FINAL EVALUATION BY NURSE MENTOR/EDUCATOR:

Name of mentee: _____

Tick one:

____ Demonstrated a majority of core competencies effectively and is ready to start providing HIV care and treatment services in a clinical setting

____ Demonstrated some core competencies effectively, but still needs more practice before providing HIV care and treatment services in a clinical setting

____ Unable to demonstrate most skills and should participate in additional training before providing HIV care and treatment services in a clinical setting

Additional comments:

Nurse Mentor/Educator signature: _____

Date: _____

Mentee signature: _____

Date: _____

Appendix 9B: Post-test

NOTE: This version is for trainer only. Correct answers are in bold.

Participant identification number: _____ Score: ____/25

1) Which of the following are good teaching strategies for nurse mentors and educators? (**select all that apply**)
   a) Using case studies with mentees
   b) Independent learning assignments
   c) Bedside teaching
   d) Use of visual aids
   e) All of the above

2) A HIV-infected adolescent or adult client with which of the following meets eligibility criteria for ART?
   a) WHO stage 2 illness
   b) **CD4 ≤350 or WHO stage 3 or 4, regardless of CD4 count**
   c) Past history of TB
   d) I don't know

3) Before initiating ART, nurses should also think about:
   a) Readiness for ART: The client understands what ARVs are, how they are to be taken, and is ready to take on this life-long commitment
   b) Ability and willingness of client to return for regular follow up
   c) Adverse reactions to cotrimozazole
   d) All of the above
   e) A and B

4) Which of the following statements are true regarding HIV counseling and testing?
   a) Clients with HIV-negative rapid tests should repeat testing in 3 months to exclude the window period
   b) It is the responsibility of clients only to initiate or request HIV testing, not providers
   c) Both are true
   d) Neither are true

5) When should a PCR test be done to check HIV status in an infant born to a HIV-infected mother?
   a) 2 weeks
   b) 6 weeks
   c) 10 weeks
   d) At birth

6) When should HIV-infected clients be screened for TB?
   a) Initial visit
   b) Initial visit + every 3 months

c) Initial visit + when complain of symptoms
d) Initial visit + every follow-up visit

7) Who should be screened for HIV?
   a. A 28 year old male with multiple sexual partners
   b. A 15 year girl with pulmonary TB
   c. A 70 year old male with back pain
   d. A 24 year old pregnant woman who was HIV-negative during her previous pregnancy
   e. All of above

8) Family-centred care means that nurses and other healthcare workers can talk openly with caregivers about any information shared between the client and healthcare workers.
   a) True
   b) False

9) Ideally, a client's CD4 cell count should be monitored how frequently?
   a) Every 12 months; but 6 monthly as CD4 count approaches threshold (to initiate ART)
   b) Every 9 months; but 4 monthly as CD4 count approaches threshold
   c) Every 6 months; but 3 monthly as CD4 count approaches threshold
   d) Every 4 months; but 2 monthly as CD4 count approaches threshold
   e) Every 2 months; but monthly as CD4 count approaches threshold

10) In HIV-infected clients, the combination of findings that could be seen with active TB are:
   a) A positive sputum smear with an abnormal chest x ray
   b) A positive sputum smear with a normal chest x ray
   c) A negative sputum smear with an abnormal chest x ray
   d) Any of the above

11) Which are <u>not</u> the following are classes of antiretrovirals?
   a) NRTIs
   b) NNRTIs
   c) Tricyclics
   d) Protease Inhibitors

12) The process of HIV post-test counselling with a client (who tests positive for HIV) should include discussion of the following:
   a) The diagnosis, the infection and disease process, and health changes that could occur.
   b) Strategies for reducing risk of transmission to others
   c) How to cope with the possible negative reactions of others
   d) A and C
   e) All of the above

13) The only reliable way to assess client adherence is with pill counts.
   a) True

b) False

14) Which of the following statements is correct?
   a) Nurses need to stress that only heterosexual behaviour is NORMAL
   b) Nurses need to stress that homosexual, bisexual, and transsexual/transgendered behaviour is NORMAL
   c) Nurses need to stress that homosexual, bisexual, and transsexual/transgendered behaviour is ABNORMAL
   d) Nurses need to stress that transsexual/transgendered should not be tolerated

15) HIV infection, its progression in the body, and its effects on the immune system can generally be broken down into these stages: (**select all that apply**)
   a) Primary infection
   b) Clinically asymptomatic stage
   c) Subclinical stage
   d) Symptomatic HIV infection
   e) Progression from HIV to AIDS.

16) Nurses should always screen for STIs in clients who are sexually active.
   a) True
   b) False

17) What advice would you give a HIV-infected client who wants to get pregnant? (**select all that apply**)
   a) It is safest when both partners have CD4 count of over 350
   b) Do not eat eggs while pregnant
   c) Talk to your provider and ask for his/her advice
   d) Make sure you do not have any opportunistic infections
   e) Make sure you are adhering to your ART regimen

18) Which of the following are good family planning options for PLHIV? (**select all that apply**)
   a) Condoms
   b) Combined oral contraceptive pills (COCs), progestin-only oral contraceptive pills
   c) Natural (fertility awareness) method
   d) Hormonal implants

19) Which are key concepts of PMTCT? (**select all that apply**)
   a) Keep mothers healthy: a healthy mother is able to take care of herself, her baby and her family
   b) It is important to reduce risk of HIV transmission during pregnancy, labour, delivery, and breastfeeding
   c) All babies of HIV-infected mothers need ARVs and CTX
   d) HIV-infected women should limit the number of children they have

20) Which of the following statements are true for paediatric HIV testing? (**select all that apply**)

a) Paediatric HIV testing requires the participation and cooperation of the caregiver(s), who may also be living with HIV and coping with his or her own illness
b) Identifying HIV early in life is even more critical in children than in adults given their fast disease progression and high mortality rates
c) HIV testing in children less than 18 months of age or in those who are still breastfeeding is a one-time event
d) The goal of diagnosing children as early as possible is to identify HIV-exposed and HIV-infected children and engage them in life-saving care

21) Which statements are true for isoniazid preventive therapy (IPT)? (**select all that apply**)
a. The WHO clearly recommends that a course of IPT should be provided to all HIV-infected clients who are not currently on treatment for TB and who have a negative symptom screen
b. It is important to delay initiation of ARV therapy in favour of IPT
c. IPT is safe for most people
d. All of the above

22) Adults learn the best when: (**select all that apply**)
a) The information they are learning is relevant to their jobs
b) Adults prefer a learning environment where they feel valued and respected for their experiences
c) Adults are mainly auditory learners
d) Adults appreciate having an opportunity to apply what they have learned as soon as possible
e) All of the above

23) Which statements apply to the 5-step method of teaching clinical skills? (**select all that apply**)
a) Provide an overview of the skill and how it is used in client care
b) Demonstrate exactly how the skill is conducted without commentary
c) Repeat the procedure, but describe each step
d) Point out errors using judgmental and critical language
e) Have participant "talk through the skill" by detailing each step
f) Observe and provide feedback to the participant as he or she performs the skill

24) It is important for nurse mentors and educators to establish mentoring action plans with their mentees because: (**select all that apply**)
a) Action plans and work plans, can help prioritise, guide, and monitor work and learning in a specific area over time
b) Having a comprehensive and measurable action plan will help ensure mentees learn key competencies related to HIV care and treatment after returning to their clinic

c) Action plans can help nurse mentors and educators identify the key responsibilities of the role and optimise the support you provide to your mentees

d) Action plans are a waste of time

25) Which statements are true for WHO clinical staging? (**select all that apply**)

a) There is 1 staging system for adults and children

b) Staging should be assessed at time of HIV diagnosis, prior to starting ART, and with each follow-up visit to assess response to ART and to monitor disease progression

c) A full clinical assessment and medical history is NOT required for staging

d) If a person has one or more conditions listed within the stage, they are categorized into that stage

e) There are three points that should be kept in mind when staging clients: their recent clinical signs, their most recent clinical diagnosis if any made, and the level of activity of client

Appendix 9C: Training Evaluation Form

Name (optional): _____

Health facility where you work (optional): _____

INSTRUCTIONS: *Please rate the following statements on a scale of 1 to 5.*

	☹ Strongly Disagree	Disagree	Neither agree nor disagree	Agree	☺ Strongly Agree
1. The training objectives were clear.	**1**	**2**	**3**	**4**	**5**
2. This training met my expectations.	**1**	**2**	**3**	**4**	**5**
3. The technical level of this training was appropriate.	**1**	**2**	**3**	**4**	**5**
4. The pace of this training was appropriate.	**1**	**2**	**3**	**4**	**5**
5. The facilitators were engaging and informative.	**1**	**2**	**3**	**4**	**5**
6. The information I learned in this training will be useful to my work.	**1**	**2**	**3**	**4**	**5**

How helpful were each of the training modules to you and your work? If you have specific comments, please write them on the next page.

	☹ Not helpful				☺ Very helpful
Module 1: Course Overview and Introduction to Nurse Mentoring and Adult Learning	**1**	**2**	**3**	**4**	**5**
Module 2: HIV Transmission, Counseling, and Testing	**1**	**2**	**3**	**4**	**5**
Module 3: Clinical Care for People Living with HIV	**1**	**2**	**3**	**4**	**5**
Module 4: The Progression of HIV	**1**	**2**	**3**	**4**	**5**
Module 5: Preventing Mother-to-Child Transmission of HIV	**1**	**2**	**3**	**4**	**5**
Module 6: Paediatric HIV	**1**	**2**	**3**	**4**	**5**
Module 7: Tuberculosis and HIV	**1**	**2**	**3**	**4**	**5**
Module 8: Sexual and Reproductive Health Services for People Living with HIV	**1**	**2**	**3**	**4**	**5**
Module 9 Review of Clinical Decision-Making, Course Evaluation, and Closure	**1**	**2**	**3**	**4**	**5**

What was the best part of this training?

How can we improve this training?

Other comments:

Thank you for your participation, and for your commitment to people living with HIV and their families!

References and Resources

[i] Borrowed from ITECH, Basics of Clinical Mentoring: Clinical Diagnosis and Decision-Making Skills

[ii] Adapted from: George, J.H., & Doto, F.X. 2001. A simple five-step method for teaching clinical skills. Family Medicine, 33, 577-8.