

MODULE 7: HIV Prevention, Care and Treatment for Pregnant Women and Their Children



DURATION: 300 minutes (5 hours)



LEARNING OBJECTIVES:

By the end of this Module, participants will be able to:

- Define MTCT, PMTCT and MTCT-Plus
- Explain key PMTCT concepts and interventions before and during pregnancy, during the time of labor and delivery, and after the baby is born – and the Peer Educators' role in each
- Explain the importance of ART for pregnant women
- List different ways HIV-exposed and infected babies and children can be found and brought into care and treatment
- Help counsel families and caregivers on needed follow-up of babies exposed to HIV during pregnancy and breastfeeding
- Understand when and how HIV can be diagnosed in infants and children
- Understand the major differences between adult and pediatric HIV care and treatment



CONTENT:

- Session 7.1: Introduction: Prevention of Mother-to-Child Transmission (PMTCT) Overview
- Session 7.2: Strategies to Prevent Mother-to-Child HIV Transmission
- Session 7.3: Supporting Pregnant Women and Mothers with Ongoing ART Services
- Session 7.4: Identifying and Caring for Babies Exposed to HIV
- Session 7.5: Introduction to Pediatric HIV Care and Treatment
- Session 7.6: Classroom Practicum on PMTCT
- Session 7.7: Module Summary

SESSION 7.1: Introduction: Prevention of Mother-to-Child Transmission (PMTCT) Overview (20 minutes)



TRAINER INSTRUCTIONS

Methodologies: Large Group Discussion, Interactive Trainer Presentation

Step 1: Review the Module learning objectives.

Step 2: First ask participants to define "PMTCT."

Step 3: Ask if any of the participants have received PMTCT services or know someone who has. Ask participants to discuss:

- *What types of PMTCT services they or someone they know has received?*
- *What was good about these services?*
- *What could have been done better?*

Step 4: Give a brief presentation about MTCT, the goals of PMTCT programs and key MTCT-Plus concepts using the content below. Be sure to fill in the content using MTCT statistics from your own country.

Ask participants what they think are the challenges to preventing MTCT in their country (given the fact that so many babies are still becoming HIV-infected).

Step 5: Ask participants what role they think Peer Educators can play in helping more women understand and access PMTCT services for themselves and their babies.

KEY INFORMATION

Mother-to-child transmission (MTCT):

This is the transmission of HIV from a woman living with HIV to her baby during pregnancy, labor and delivery or after birth during breastfeeding. PMTCT stands for Prevention of Mother-to-Child Transmission (of HIV).

MTCT around the world:

- There are 2 million children under 15 years old living with HIV infection.
- In 2007, there were 370,000 new HIV infections among babies and children. Most of these new infections were a result of MTCT.
- Without quality maternal and child health, PMTCT and HIV care and treatment services, about 32% of babies born to mothers living with HIV will become HIV-infected during pregnancy, labor and delivery, and breastfeeding.
- Without care and treatment, about 30% of HIV-infected babies will die before they are 1 year old, and 50% before they are 2 years old.

MTCT in your country:

- Each year in our country, an estimated _____ women have babies. Of these, about _____ are women living with HIV.
- Each year in our country, an estimated _____ infants get HIV from their mothers – during pregnancy, labor and delivery or during breastfeeding.

PMTCT program objectives:

- PMTCT programs started off with the goal of reducing transmission of HIV from mothers to their babies.
- For a long time, PMTCT programs focused on HIV testing for pregnant women and giving the mother and the baby single-doses of nevirapine (NVP – one pill for the mother and one syringe of medicine for the baby) to lower the risk that the baby would get HIV. These programs, however, did not focus on treatment of the mother’s HIV or the baby’s health after delivery.
- Based on experience over time and the increasing availability of HIV care and treatment, we know that supporting the comprehensive health needs of the woman and child is the best way to ensure the entire family’s health.

What is MTCT-Plus?

- MTCT-Plus programs aim to reduce the transmission of HIV from mothers living with HIV to their babies.
- MTCT-Plus programs also emphasize taking care of the mother’s health, including enrollment in care and treatment programs, careful follow-up of HIV-exposed babies and ongoing support, care and treatment for the whole family (including those with HIV infection).
- This is why we call it MTCT-Plus – because the focus is on preventing HIV in the baby PLUS taking care of the mother, the baby and the whole family over time.

Benefits of MTCT-Plus programs:

- Fewer babies with HIV
- Healthier moms, babies and families
- Improved care, treatment and support for all mothers and children
- Stronger families and communities
- Reduced number of orphans and vulnerable children

MTCT-Plus – key concepts:

Key Concept 1 – Keep Moms Healthy

- The healthier the mom (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. 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 mom is able to take care of herself and love and take care of her baby and all of her family. Without healthy moms, we will not have healthy families or communities!

Key Concept 2 – Reduce Risk at Every Stage

The risks of passing HIV from a mother living with HIV to her baby are different at different times during and after the pregnancy.

- During pregnancy, labor and delivery, about 20 out of 100 babies will get HIV if there are no ARVs and other services offered.
- During breastfeeding, about 12 out of every 100 babies will get HIV with no services offered (this depends a lot on how and how long the mom breastfeeds).

It is important to reduce the risk of transmission at each of these stages.

Key Concept 3 – All Moms 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 mom has a CD4 cell count below 350, the baby is at high risk of getting HIV. According to the WHO, women with a CD4 cell count of 350 or lower should start ART and stay on ART for their entire lives (check with your own national guidelines).
- If a mom has a CD4 cell count above 350, the baby has a lower risk of getting HIV than if the mom's CD4 cell count is low. According to the WHO, women with a CD4 cell count above 350 should take a shorter course of ARVs (AZT during the last part of pregnancy and single dose NVP at delivery) during the pregnancy (check with your own national guidelines). These women should stop taking the ARVs shortly after they deliver the baby.

Key Concept 4 – All Babies of HIV-Infected Moms Need Medicine

- Babies need to take ARVs at the time of birth and for the first few weeks of life to help prevent them from becoming HIV-infected.
- They 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, it is likely that the baby will also need lifelong ART (check with your own national guidelines).

Remember: If the mom and the baby get the care and treatment they need, including ARVs, the chance of MTCT can be lowered from 1 baby out of every 3 babies to 1 baby out of every 50 babies.

SESSION 7.2: Strategies to Prevent Mother-to-Child HIV Transmission (75 minutes)



TRAINER INSTRUCTIONS

Methodologies: Interactive Trainer Presentation, Small Group Work, Large Group Discussion, Role-Play

- Step 1:** Prepare 6 pages of flip chart, each with one of the following headings:
- "BEFORE PREGNANCY"
 - "DURING PREGNANCY"
 - "DURING LABOR AND DELIVERY"
 - "AFTER THE BABY IS BORN – MOM'S HEALTH"
 - "AFTER THE BABY IS BORN – BABY'S HEALTH"
 - "AFTER THE BABY IS BORN – INFANT FEEDING"
- Step 2:** Break participants into 6 groups and give each one of the flip chart papers. Give each group about 15 minutes to brainstorm what can be done to prevent MTCT and to keep the mom healthy at their assigned stage. Have groups record their ideas on the flip chart.
- Step 3:** After 15 minutes, ask each small group to present back their PMTCT strategies to the large group. Encourage group discussion and fill in as needed from the content below on PMTCT strategies at each stage.
- Step 4:** Pass around AZT, NVP and 3TC tablets and syrups (or other ARVs used in the national PMTCT program) to the whole group and explain how they are taken during and after pregnancy by the mom and the baby (according to your national guidelines).
- Step 5:** Ask participants what they think we mean by the phrase "saving 2 lives." Record answers on flip chart. Explain to participants that this is the motto of PMTCT and a message they should share with moms, partners and the whole community to show how important PMTCT services are. Have participants turn to the person sitting next to them and role-play how they would explain the motto "saving 2 lives" to a mom that just found out she was HIV-positive during an ANC visit.

KEY INFORMATION

PMTCT strategies

PMTCT strategies before pregnancy:

<ul style="list-style-type: none">• Prevent HIV transmission in the first place – through programs that promote:• Risk reduction• Condoms• Being faithful• Delaying the age at which young people have sex for the first time• Making sure all people understand HIV prevention and have access to services, including condoms and HIV testing and counseling• Community support to access HIV prevention services
<ul style="list-style-type: none">• Prevent unwanted pregnancies through good family planning and reproductive health programs (see also Module 3 and Advanced Module 16). Promote “dual protection.” Dual protection means preventing unwanted pregnancy, STIs and HIV at the same time. Here are some ways to have dual protection:• Using male or female condoms every time you have sex• Using male or female condoms PLUS another family planning method
<p>Promote HIV testing and counseling, especially before having sex with someone, getting married and getting pregnant.</p> <ul style="list-style-type: none">• Emphasize the importance of knowing your HIV-status before becoming pregnant so that you can make informed decisions about having a healthy baby.
<p>Make sure people know about STIs and get treatment for themselves and their partner(s) right away.</p>

Remember: All women have the right to have or not have babies, no matter what their HIV status.

PMTCT strategies during pregnancy:

Promote antenatal care for all women (at least 3 visits, but more is better).

Promote HIV testing and counseling for all pregnant women and their partners (unless they say that they do not want to be tested for HIV).

Make sure all pregnant women receive ARVs (adapt to your national guidelines)

- **The WHO recommendation for women eligible for ART (CD4 cell count less than 350):**
 - The mom gets AZT + 3TC + NVP each day while she's pregnant, during labor and continues on treatment after the baby is born.
 - The baby gets AZT 2 times every day for 7 days or 4 weeks (depending on how long the mom took ART during pregnancy).
- **The WHO recommendation for women not eligible for ART (CD4 cell count more than 350):**
 - The mom gets AZT 2 times per day from 28 weeks (7 months) of pregnancy and a single dose of NVP during labor.
 - The baby gets NVP syrup and AZT syrup 2 times every day for either 7 days or 4 weeks (depending on how long the mom took her ARVs during pregnancy).
 - CD4 test taken within 3-6 months after delivery

**Note that along with the CD4 cell count, the doctor or nurse may also use WHO staging to decide which pregnant women need to start ART.

Make sure all women receive CTX prophylaxis (adapt to your national guidelines).

In many places, women with CD4 cell counts less than 350 should be given CTX prophylaxis to take everyday. In other places, all pregnant women living with HIV will be given CTX, no matter what her CD4 cell count.

Make sure women plan for a safe delivery at a health facility.

Promote safer sex and condom use during pregnancy.

Make sure women receive nutrition advice and supplements (iron, multivitamins) and infant feeding education, support and counseling.

Promote prevention of malaria, TB and tetanus.

Promote treatment of STIs.

Create linkages to mothers support groups and other social support in the community.

Plan for postpartum follow-up of the mother and the baby.

Remember to promote the PMTCT motto of “saving 2 lives” (the mom’s and the baby’s) by enrolling in MTCT-Plus services, taking ARVs and coming back to the clinic often.

Remember that most moms who need ART for their own health and to prevent HIV in their baby do not look or feel sick!

PMTCT strategies near to and during labor and delivery:

Help moms plan to deliver the baby in a health facility with a trained provider. Talk to partners and other family members about how important it is for the mom and baby to have a safe delivery.
Encourage moms with unknown HIV-status to get tested right away.
If the mother took ARVs during the pregnancy, the WHO recommends that: <ul style="list-style-type: none">• The mother should continue taking ARVs during labor and delivery.• The baby should get a single dose of NVP within 72 hours of birth and AZT 2 times every day for 7 days.
Encourage moms who did not start taking ARVs during pregnancy to take them during labor and delivery, according to national guidelines. The WHO recommends that: <ul style="list-style-type: none">• The mom gets AZT and single dose of NVP as soon as labor starts.• The baby gets single dose of NVP within 72 hours of birth and AZT 2 times every day for 4 weeks.
Promote good infection prevention practices for all births by keeping the delivery area clean, washing hands, cleaning instruments between deliveries, etc.
Review infant feeding education and counseling received during ANC and help the mom to implement her feeding choice before she leaves the hospital.

PMTCT strategies after the baby is born:

- All babies born to women with HIV are exposed to HIV because they shared blood and fluids with the mother. This does not mean that they will all become HIV-infected.
- Many babies will escape HIV infection, especially if the mother and baby get care and ARVs.
- It is important to explain follow-up care to mothers and families very well and make sure that they continue to come to the clinic after the baby is delivered.
- There is a lot that can be done to keep the baby healthy when it has been exposed to HIV and there are tests that can be done to tell if the baby is HIV-infected.

Follow-up for the mom and family:

Link new moms with community health workers who can visit them regularly in their homes in the days/weeks after birth. In some cases, Peer Educators may also conduct home visits.
Make sure that moms are enrolled in care and treatment programs, have adherence support and are on/continue taking ART if they are eligible.
Counsel the mom and family on follow-up of the baby (including CTX prophylaxis when the baby is 6 weeks old), importance of routine child care visits and immunizations, HIV testing options for the baby and the timing and meaning of these tests.
Help create demand for needed HIV services by encouraging the mom to tell health care workers that she has HIV and that the baby has been exposed.
Provide ongoing emotional support and counseling to help the mom deal with any issues or concerns she may be having. The mom may also need help with disclosure to her partner or family members.
Discuss family planning desires and options (does she want to have another baby? If yes, how soon?) and refer her for family planning services.
Link the new mom to support groups, nutrition services, income-generating activities or other sources of needed support.

Follow-up for the baby:

The baby should get single-dose NVP within 72 hours of birth and AZT 2 times every day for 1-4 weeks, depending on if the mom took ART during pregnancy and your national guidelines.

Make sure the baby goes for check-ups and gets immunizations on schedule.

Make sure the mother tells all health care workers that the baby has been exposed to HIV.

Help moms recognize oral thrush (white spots in the mouth or throat) and other health problems in the baby and bring the baby to the clinic right away for treatment.

Make sure the baby is getting good nutrition and growing well.

Explain to the mother that the baby needs to start taking CTX starting at age 6 weeks. CTX helps prevent infections and keeps the baby healthy.

Recommend and provide counseling (and follow-up) about testing her baby for HIV. Depending on national guidelines and what tests are available, the baby may need 2 tests:

- In some places, once the baby is 6 weeks old, a small amount of blood can be taken from the baby's heel to test and see if the baby is HIV-infected. The test can find out which children are HIV-infected as early as possible so they can get the care and treatment they need.
- The baby will have to have another test 6 weeks after the baby stops breastfeeding or when the baby is about a year and a half old to make sure the baby did not become infected during breastfeeding.
- Remember that the HIV test used on adults can be used in children. But it can only be used to tell for sure if a child over 18 months old is HIV-infected. Before 18 months, it usually just shows whether the baby was exposed to HIV.

PMTCT strategies during infant feeding

- There is HIV in breast milk.
- It is important to note that most of the HIV transmission during breastfeeding happens when mothers mix-feed their babies and/or when the mothers are very sick with AIDS, have a low CD4 cell count and do not take ART.

Key Definitions

Mixed feeding means giving babies breast milk together with other liquids, like water, herbal mixtures, juice or other foods like cow's milk, formula milk or soft porridge.

Exclusive breastfeeding means only giving the baby breast milk (and any medicines prescribed by a doctor).

Breastfeeding vs. Formula Feeding

- Exclusive formula feeding (no breast milk) is the only way to guarantee that a baby will not get HIV from its mother after delivery.
- **HOWEVER**, in most places in sub-Saharan Africa, replacement feeding causes many babies to become sick and die from diseases, malnutrition, infections and other problems. This happens because formula feeding is expensive and depends on having clean water and the time and money to prepare the formula frequently each day to meet the infant's need.
- If for any reason the mother will not be able to practice safe formula feeding, it is safer for her to breastfeed the baby.
- Also, there is stigma against women who do not breastfeed, and it is often very difficult for the mom to prepare replacement feeds.
- Peer Educators can help mothers decide which feeding choice is best for them and safest for the baby, and continue to support mothers while they feed their babies.
- **Remember: for the majority of women you will work with, exclusive breastfeeding for as long as possible – up to 6 months – is going to be safest for the baby.**

There is much lower transmission from breast milk if:

- The mother is healthy
- The mother is on ART during breastfeeding
- The baby **ONLY** gets breast milk for as long as possible up to 6 months (exclusive breastfeeding), and there is no mixed feeding
- Breast infections are prevented and treated right away
- Thrush (white spots, yeast) in the baby's mouth is treated right away

Peer Educators should support women to make good decisions around infant feeding and help them implement their infant feeding plan (or change the plan if it is not working). Although Peer Educators are not sufficiently trained to be infant feeding counselors, they can refer mothers to other members of the multidisciplinary care team for counseling and provide basic information to women and their families in the community and at the health care facility.

Key messages about infant feeding:

Breast milk is “the norm” in most places. Breastfeeding is healthy, free and helps prevent diseases in the baby like diarrhea and respiratory problems that could be deadly. Breast milk is the only food babies need until they are 6 months old.
Women should take ART if they are eligible, as this will decrease the amount of HIV in their blood and breast milk. All women, whether on ART or not, should be encouraged to exclusively breastfeed and come back to the clinic regularly.
In most developing country contexts, exclusive breastfeeding for as long as possible up to 6 months (no water, juices or other liquids and no foods like cow’s milk, formula milk or soft porridge – except medicines prescribed by a doctor) is usually the best and healthiest choice for all babies. Mothers may also opt to exclusively formula feed their baby if it is safe to do so.
Women should not wean (stop breastfeeding) before 6 months. Early weaning will cause more harm than good to the baby.
Before 6 months, it can be harmful for the baby to have more than breast milk OR formula. At 6 months, the baby’s immune system is stronger and the baby needs to have other foods, in addition to breast milk or formula, to get the nutrients it needs. Adding foods, in addition to breast milk or formula, does not increase the risk of MTCT after the baby is 6 months old. Mothers should be referred to a nurse or infant feeding counselor to talk about safely preparing other foods for the baby at 6 months.
Women should not be advised to quickly wean the baby off of the breast at 6 months.
The baby can have breast milk and other foods until it is 12-18 months old and/or the mother stops breastfeeding completely. Moms should not stop breastfeeding if there are not enough healthy foods for the baby to eat.
If the baby is tested and found to be HIV-infected, the mother should keep breastfeeding.
Women should watch out for breast infections (cracking, sore nipples, strange discharge from nipples, pain, etc.) and come to the clinic right away if this happens.
Peer Educators should help link women with nutritional support during the weaning period.

SESSION 7.3: Supporting Pregnant Women and Mothers with Ongoing ART Services (30 minutes)



TRAINER INSTRUCTIONS

Methodologies: Large Group Discussion, Interactive Trainer Presentation

- Step 1:** Remind participants that one of the best ways to prevent MTCT is for the mother to stay healthy, take ART and adhere to her own ongoing care and treatment.
- Step 2:** Ask participants to think about some of the challenges to linking moms with ongoing ART services. Record these on flip chart and fill in using the content below or other examples specific to your clinical and community contents.
- Step 3:** Next, ask participants to discuss some of the ways Peer Educators can make sure women and their babies are offered care and treatment and routine child health care services when they are all in different locations and provided by different health care workers. List specific solutions on flip chart and fill in as needed using some of the ideas below and other examples specific to your context.
- Step 4:** Close the session by reminding participants that making sure moms and babies are linked to ongoing care and treatment services is a key part of their work as Peer Educators.

KEY INFORMATION

We have talked about the need for pregnant women to enroll in ongoing HIV care and treatment.

Some of the challenges of linking PMTCT and ART services include:

- Services are located in different parts of the hospital and it is difficult for women to go to multiple service delivery points on different days.
- Many times, women get antenatal services from a clinic or a health center close to their home, whereas ART services may only be available at a hospital or higher level facility.
- Different providers provide various services, with no one person coordinating the mother's or the baby's care.
- Records may not give information on where else in the hospital a client has been seen or the results of visits to other hospital services.
- There are no formal referral systems in place from one service to another in many hospitals, and even if a referral is made, there is often no way to follow up to see if the mom and baby went for other services.
- Moms and families are not always given the counseling they need to understand how important it is to enroll in and adhere to care and treatment.

- Women may not get the support they need at home to come back to the clinic often for appointments. Women who have not disclosed to family members may find it very hard to come back to the clinic for services since they will not have support at home.
- Many women come for antenatal care, but it is often late in the pregnancy.
- There are myths and fears about taking ARVs during pregnancy in many communities.
- In some places, many women deliver their baby at home and may not have regular contact with a health care facility.

Some possible solutions to link PMTCT and ART services include:

- Facilities can strengthen the care portion of services so that women who are not eligible for ART are still seen regularly for care, get medicines like CTX to prevent infections, receive CD4 testing and get regular counseling.
- Facilities can develop intra-facility referral forms and follow-up systems between PMTCT, ART and other services (like TB, family planning, etc.).
- Referral forms and linkages between clinics, health centers and hospitals can be developed and strengthened.
- Peer Educators can provide quality information and counseling to women in their homes and at the clinic on the benefits of ongoing care and treatment for themselves and other family members.
- Peer Educators can literally walk with clients from one part of the hospital or health center to another and help them understand why they are being referred and what to expect.
- Peer Educators can also work with other multidisciplinary team members to prioritize pregnant women for care and treatment. For example, they can ensure that they are not made to wait long hours at the clinic, that there are family care and treatment days where the mom and baby can be seen at the same time by one doctor or that there are designated days in the ART clinic for pregnant and postpartum women. They can also collaborate with community health workers to identify and visit pregnant women in the community.
- Peer Educators can greet their pregnant or newly-delivered clients at the ART clinic to make them feel comfortable and welcome.
- Peer Educators can keep their own records about which women they should follow up with. For example, they can keep a list of all pregnant women eligible for ART and make sure that each comes to scheduled appointments and receives home visits.
- Peer Educators can educate the community, including community leaders, about the importance of antenatal care for all moms and of care and treatment services for moms and babies living with HIV.
- Peer Educators can start mothers support groups so women have the support and information they need to keep themselves and their babies healthy.

Remember: Multidisciplinary team meetings that include Peer Educators are a good place to talk about how to improve linkages and follow-up for pregnant women and their families.

SESSION 7.4: Identifying and Caring for Babies Exposed to HIV (60 minutes)



TRAINER INSTRUCTIONS

Methodologies: Large Group Discussion, Interactive Trainer Presentation, Small Group Work

Step 1: Ask participants to think of places where we can find babies who may need HIV care and treatment and record on flip chart. Remind participants that while PMTCT services are a good place to start, there are many other places where Peer Educators can look for HIV-exposed or HIV-infected babies and bring them to the clinic for testing, care and treatment.

Step 2: Break participants into 3 groups. Give each group flip chart paper and markers. Give the small groups about 15 minutes to discuss the following:

- Group 1: Discuss the care of HIV-exposed babies immediately after delivery and for the first few weeks of life.
- Group 2: Discuss the care of HIV-exposed babies from 6 weeks to 12 months of age.
- Group 3: Discuss what kind of ongoing care HIV-exposed and HIV-infected babies need.

Step 3: After 15 minutes, ask each small group to quickly present the key points of their discussion. When Group 2 presents, pass around CTX syrup so participants can be familiar with the way it looks.

Allow time for the large group to add or ask questions and fill in as needed from the content below. Explain to participants why it is always important for Peer Educators to think about and focus on the whole family, using the content below.

Step 4: Ask if any participants know about HIV testing for babies. After allowing time for participants to give their ideas, present key points about HIV testing in babies under 18 months of age, and in children over 18 months of age, using the content below. If DBS testing is available at the health facilities where participants will be working, be sure to show DBS sample cards and any forms/registers the facility is using for early infant diagnosis.

Step 5: Close the session by reminding participants of the key role of Peer Educators in finding exposed babies and making sure they are tested, that the results are picked up and understood by the mom or caretaker and that HIV-infected babies are enrolled in care and treatment.

KEY INFORMATION

All babies born to women with HIV are exposed to HIV because they shared blood and fluids with the mom. HIV transmission to the baby does not happen in all pregnancies. Therefore, many babies will escape HIV infection, especially if the mother and baby get care and treatment.

Remember: It is important to explain follow-up care to moms and families very well and to make sure that they continue to get the medical attention they need and are not lost after the baby is delivered. There is a lot that can be done to keep the baby healthy when it has been exposed to HIV and there are tests that can be done to tell if the baby itself is HIV-infected.

Finding babies and bringing them into care:

PMTCT programs are one of the best ways to find babies exposed to HIV who should be tested and enrolled in care and treatment. But there are other places where Peer Educators can help the multidisciplinary team find babies exposed to HIV or infected with HIV since not all will get PMTCT services or come back for follow-up. These places include:

- Under-5 clinics
- Pediatric inpatient wards
- Adult ART clinics
- Health centers and hospital outpatient departments where babies are taken when they are sick
- Homes with adults living with HIV
- With community health workers and community-based organizations, especially those working with orphans
- With traditional healers and traditional birth attendants who may be a first point of contact for sick babies

It is important to remember that while most babies living with HIV are infected through MTCT, others may have been victims of sexual abuse. Peer Educators should always turn to a professional counselor in these situations.

Caring for babies exposed to HIV:

The most important thing for babies exposed to HIV and HIV-infected babies is that they come back to the clinic often to see the doctor and that they take CTX every day.

- Babies with HIV may get sick very quickly and they need to be seen at the clinic more often than adults with HIV or children who do not have HIV.
- Peer Educators should counsel moms and other caretakers about bringing babies back to the clinic every month for a check-up and whenever they are sick.

Right away after the baby is delivered to a mom with HIV:

- The baby should get single-dose NVP within 72 hours of birth and AZT 2 times every day for 1-4 weeks, depending on whether the mother took ART during pregnancy and your national guidelines.
- These medicines can be given in the maternity ward. In some places, where women often deliver their babies at home, NVP is given to the mother to take home during her pregnancy so that the mother can give the dose to the baby right away after delivery. Babies delivered at home should be seen at the clinic as soon as possible for a check-up and for ARVs.

At 6 weeks of age:

- All exposed babies should start taking CTX. This is the same drug that adults take to prevent pneumonia. It is available as a syrup or tablet for babies. This is one of the best ways to keep babies healthy and prevent illness. Babies exposed to HIV or with confirmed HIV infection should take CTX every day.
- The dose of CTX will depend on the baby's weight. We all know that babies grow very fast – even every day – so the baby needs to come back to the clinic very often to be weighed so we know how much medicine to give.
- Where available, babies should be tested for HIV with DNA PCR as soon as possible after 6 weeks of age (as explained in the box below).

Ongoing:

- If the baby is HIV-infected, a CD4 test needs to be done. The CD4 cell count number is measured the same as for adults but, if available, CD4% is a better measure in children under 5 years of age. A health care worker will interpret the results, but Peer Educators should know that what is considered a high or a low CD4 count in adults is not the same for children. For example, a CD4 cell count of 500 is good for an adult but very low for a baby.
- Babies should keep taking CTX until it is definite that they are not HIV-infected and they are no longer breastfeeding.
- Make sure the baby goes for check-ups and gets immunizations on schedule.
- Health care providers should look for and treat infections.
- Make sure the baby is getting good nutrition and growing well. The doctors or nurses will weigh, measure and examine the baby at every visit to see if it is growing and developing normally. The baby's height, weight and head measurement should be recorded on a growth chart at each visit. This is one of the best ways to see if a baby is healthy.

Focus on the family:

- Having a sick baby and knowing that the baby may have HIV can be very hard for parents and caretakers.
- It is important for Peer Educators to spend time talking with the family about how they are feeling and making sure they understand what is happening with the baby (tests, medicines, side effects, etc.) in easy-to-understand terms.
- HIV is a family disease and parents of sick babies will often themselves be sick and in need of care and treatment and support to adhere, disclose to others or seek community services.
- Parents and caretakers should be active in the baby's care and monitoring, as they often know best when "something is not right" with the baby (the baby is crying all the time, the baby is not eating, the baby is not sitting up or playing, etc.). Whenever the baby is not doing well, parents and caretakers should be encouraged to trust their instincts and bring the baby to the clinic right away.
- Peer Educators should also ask about all caretakers of the baby, as they often change. All caretakers should know what is going on with the baby's health and care.

5 key points about caring for babies exposed to or infected with HIV:

- Come back to the clinic often. If the baby is sick, don't wait – come in right away.
- Go for early HIV testing.
- Give CTX to the baby every day.
- Weigh and measure the baby at every visit.
- Focus on the whole family.

HIV testing in Babies and Children

Some moms are scared to have their children tested because of lack of information about what services will be available if the test is positive. Peer Educators need to explain to moms and caregivers that there is help available for the child and that the sooner they know the child's HIV-status, the more quickly the child, if infected, can take medicines to stay healthy. As always, it is important to follow national guidelines for HIV testing in babies and children.

HIV testing in babies under 18 months of age:

- The only way to know for sure if a child under 18 months of age is HIV-infected is through DNA PCR testing with dried blood spots, or DBS. If this test is not available, the doctor can also examine the baby, check the CD4 cell count, and look for signs of HIV and AIDS.
- Rapid HIV tests used in adults can be used to test babies, but they will only tell us if the baby is exposed to HIV, not if the baby is definitely HIV-infected.
- Once the baby is 6 weeks old, a small amount of blood can be taken from the baby's heel and a test can be done to see if the baby is HIV-infected (this is for the DNA PCR test). Once the nurse has counseled the mother and the baby's blood is taken, the sample will be sent out to a laboratory to be tested.
- During counseling, Peer Educators should help the mom think about her support system – who will help her if the baby is HIV-infected? Who will help her come to clinic appointments? These people can be her treatment supporters if and when the baby starts taking medicines.
- Peer Educators should make sure mothers understand that the results will take time and schedule an appointment for the mother and baby to return to the clinic to pick up the results. Peer Educators should follow up if the mom or caregiver does not come back to pick up the results of the child's HIV test.
- **If the result of the test is positive**, the baby is HIV-infected and most babies should start ART right away (the WHO recommends that all HIV-infected babies start ART – refer to your national guidelines). Help the mom and the baby go to the ART clinic to get the baby enrolled as soon as possible. If the mom is breastfeeding, she should continue to do so, as this will help the baby.
- **If the result of the test is negative** and the mom is still breastfeeding, she should keep breastfeeding, make sure the baby is brought to the clinic for regular visits and then retest the baby 2-3 months after she has stopped breastfeeding completely. The baby is still at risk of becoming HIV-infected as long as she is breastfeeding.

HIV testing in children over 18 months of age:

- Once children are 18 months old, they can be tested for HIV with the standard rapid test used on adults.
- If the child is still breastfeeding, he or she should be retested after the mother has completely stopped breastfeeding.
- Be sure to follow your national guidelines on HIV testing in babies and children!

SESSION 7.5: Introduction to Pediatric HIV Care and Treatment (40 minutes)



TRAINER INSTRUCTIONS

Methodologies: Large Group Discussion, Interactive Trainer Presentation

- Step 1:** Introduce the session by reminding participants that Peer Educators can help caregivers and parents get their children tested for HIV, and if the child is infected, link the family with pediatric care and treatment services.
- Step 2:** First ask participants to discuss how HIV is different in children and adults. Be sure to make the point that HIV progresses much more quickly in children and that children with HIV need ART more quickly than most adults with HIV.
- Step 3:** Ask participants if they think ARVs for children are the same as ARVs for adults, and if not, to list some of the differences. Ask participants caring for children with HIV when their child started ART, what ARVs they give, how much, how often and some of the challenges in giving medicines to children every day. Encourage participants to ask questions of others who have firsthand experience with pediatric ART.
- Step 4:** Review the common ART regimens for babies and children (according to your national guidelines), stressing that the doses will change depending on the child's weight. Ask the group to brainstorm about some of the key issues when starting a baby or a child on ART. Fill in using the content below as needed.
- Step 5:** Close the session by discussing what Peer Educators can do to help children living with HIV and their caregivers access and adhere to care and treatment. Remind participants that they will learn more about pediatric HIV care and treatment in *Advanced Module 18* (and advise them whether this *Advanced Module* will be taught during basic training or as an update training).

KEY INFORMATION

Pediatric HIV

- Children are not little adults. Adults can live many years with HIV before they get sick. But children, particularly babies, are not as strong and can get sick very quickly once infected with HIV.
- 50% of babies with HIV will die before their second birthday without care and ART.
- Caring for sick children and having a child die can be very hard emotional experiences for families.
- Children are our future and we need to keep them healthy to build strong communities and a strong nation.
- Babies and children with HIV who are in care and take ART can live long, healthy lives and grow up to be healthy adults.

Pediatric ART

- As with adults, ART can help keep babies and children with HIV healthy, strong and able to live a whole lifetime when they adhere to their care and medication regimens.
- But the use of ART in babies and children is not always easy and is often more complicated than ART in adults.
- Pediatric ART regimens are not always available and can be more difficult to take than those for adults. Children depend on caregivers to give their ART and take them to the clinic – and doses and regimens change often with children (depending on their age and weight).

Peer Educators can help families understand and access pediatric ART and the care and treatment services they need to have healthy families and communities.

Common first-line ART regimens for infants and children (refer to your national pediatric HIV guidelines – these are just some examples):

AZT + 3TC + NVP or EFV
d4T + 3TC + NVP or EFV
ABC + 3TC (or AZT/3TC) + LPV/r

**Note that EFV should not be given to children under 3 years of age.

ARV names

AZT = zidovudine
3TC = lamivudine
NVP = nevirapine
EFV = efavirenz
d4T = stavudine
ABC = abacavir
LPV/r = Kaletra

Key issues for pediatric ART:

- Most babies and young children with HIV will need ART since they get sick quickly and are at great risk for illness and death. Remember, all HIV-infected babies and children also need CTX.
- **The WHO recommends that all infants who are HIV-infected start ART**, but it is important to follow your national guidelines. Only a doctor can decide if a pediatric patient is eligible for ART.
- Once the doctor decides the child should start ART, the caregivers need to be well-prepared for the challenges ahead. Peer Educators can help caregivers understand pediatric HIV and make an ART adherence plan with the multidisciplinary care team.
- Success with pediatric 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 pediatric 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.
- Pediatric ARVs are not always available in syrup form, so pills may need to be crushed or dissolved in water or juice, adding extra time to the caregivers' day. Some of the pediatric ARV syrups taste very bad.
- The dose of different ARVs will change often in children because it depends on their weight. It can be hard for caregivers to remember the right dose to give since it changes as the child grows.
- Caregivers may also be living with HIV themselves. If parents or caregivers have not disclosed their HIV-status, it makes it hard to tell people about the child's HIV-status.

The family or other caregivers will not know what kinds of care and treatment the child needs if they do not know the child's HIV-status.

- As children get older, they should know about their own HIV-status. What we tell children about HIV depends on their age and maturity. But it is always important for children to know what is going on with their own health. Peer Educators can help caregivers prepare to disclose to their children and support them in this process.

The most important thing to remember about pediatric ART is that clients and caregivers need to come back to the clinic often to see the doctor. They also need support at home and in the community, including through Peer Educators. Like with adults, it is very important for children to take ARVs at the right time, the right way, and at the same time every day.

Note: There is more information about pediatric HIV care and treatment, including adherence and disclosure, in *Advanced Module 18*.

SESSION 7.6: Classroom Practicum on PMTCT (60 minutes)



TRAINER INSTRUCTIONS

Methodologies: Large Group Discussion, Small Group Work, Case Studies, Role-Play

- Step 1:** Ask if there are questions or areas where participants need clarification on knowledge and skills related to PMTCT.
- Step 2:** Divide the group into smaller groups of 4. Hand out one of the pre-prepared case study cards to each group. Each group should spend about 40 minutes doing rotating role-plays where one person acts as the mother, another as the Peer Educator, the third as the child or family member (when applicable to the case study) and the fourth as an observer who gives constructive feedback. Make sure the groups switch roles after about 10 minutes.
- Step 3:** The trainers should rotate around the room and provide feedback to the small groups during the activity.
- Step 4:** Ask some of the groups to perform their role-play in front of the large group and discuss.
- Step 5:** Debrief by reminding participants that they play an important role in promoting PMTCT services, preparing and supporting people on PMTCT and providing ongoing follow-up to moms and babies. Answer any remaining questions.

KEY INFORMATION

Case Study 1:

A 22-year old woman named W___ comes to the ART clinic for a regular appointment. She is doing well on her ART regimen and confides in you that she really wants to have a baby. She has discussed it with her husband, who is also living with HIV, but he told her that it is not responsible for them to have a baby because it will definitely be born with HIV. What would you tell her about PMTCT services, family planning, etc.?

Case Study 2:

You are talking with a pregnant woman named L___ who just received her CD4 test results. Her CD4 cell count is 150. You sense that she does not understand why the CD4 test was done or what the number means. She has not disclosed to her partner yet and is very afraid that her baby will have HIV. What things would you talk to her about?

Case Study 3:

C___ comes to the health center for her first antenatal care visit. She tests positive for HIV. She is very upset because she is certain that she has been cursed and her baby will have HIV for sure. You want to discuss ARVs with her to protect herself and the baby, but she says that ARVs will kill the baby – they are too strong to take while pregnant. What would you tell her about ARVs during pregnancy?

Case Study 4:

F___ is 2 months old. His mother is HIV-positive and has brought him to the clinic. The mother says that she is breastfeeding the baby but complains that he does not feed well, cries a lot and that she is thinking of adding other foods so that the baby can get full and stop crying. When you talk to the mother, she says her partner has bought her formula, which she will give in addition to breastfeeding and her mother suggested that she should add some porridge so that the baby can be full and stop crying. You also notice that the baby has sores in his mouth. When you ask, you learn that the baby has not been tested for HIV. What would you talk with F___'s mother about?

Case Study 5:

S___ brings her infant niece to the clinic for immunizations. In talking with S___, you learn that the baby is HIV-infected and is taking CTX and ART. The baby's mom (S___'s sister) is very busy at her market shop and does not bring the baby back to the clinic often, causing her to run out of medicines. S___ wants a 3-month supply of medicines so that she and the baby do not have to come back to the clinic so much. What would you say to S___ about how important it is to bring the baby back to the clinic often?

Case Study 6:

At a mothers support group meeting, a woman named O___ asks a question. She has an 8-week old baby and she wants to know if her baby has HIV like she does. She is worried that her husband and mother-in-law will be very angry with her if the baby is HIV-infected. She feels very lonely and afraid. Some of the other women in the group say they are going through the same thing. What would you discuss during the support group – for example, testing babies for HIV, caring for babies that are exposed to HIV, ongoing care for mothers, safe breastfeeding, etc.?

Note: Some of the preceding information in this Module was adapted from the following sources:

Joint United Nations Programme on HIV/AIDS. (2008). *2008 Report on the Global AIDS Epidemic*. Geneva, Switzerland: UNAIDS.

De Cock, K., et al. (2000). *Prevention of mother-to-child HIV transmission in resource-poor countries: translating research into policy and practice*. Journal of the American Medical Association: 283(9)1175–1182.

Dabis, F. & Ekpini, E. (2002). *HIV-1/AIDS and maternal and child health in Africa*. Lancet: 359(9323)2097–2104.

WHO. (2007). *Antiretroviral Therapy of HIV Infection in Infants and Children: Towards Universal Access, Recommendations for a public health approach*. Geneva, Switzerland: UNAIDS.

SESSION 7.7: Module Summary (15 minutes)



TRAINER INSTRUCTIONS

Methodologies: Game, Interactive Trainer Presentation

- Step 1:** Ask participants to stand in a circle. Throw the ball to one participant and ask them to say one of the key points about PMTCT discussed during this Module. After that person says a key point, he or she should throw the ball to another participant who will say another key point. Continue until most of the key messages are reviewed.
- Step 2:** After participants return to their seats, fill in any additional key points from the list below as needed.
- Step 3:** Ask if there are any questions or clarifications.
- Step 4:** Review the learning objectives with participants and make sure all participants are confident with their skills and knowledge in these areas.
- Step 5:** If there are areas participants do not fully understand or in which they need more help, go back and review the session before moving to the next Module.

KEY INFORMATION



THE KEY POINTS OF THIS MODULE INCLUDE:

- MTCT-Plus programs try to reduce the risk of HIV to the baby, but also try to give the mother, the baby and the whole family ongoing care, support and treatment.
- The PMTCT motto is “SAVING 2 LIVES” (the mom’s and the baby’s).
- Peer Educators should help women receiving PMTCT services enroll in the care and treatment program, receive follow-up services for themselves, their babies and other family members, join support groups and find nutritional and other support services in the community.
- Not all babies born to women living with HIV will have HIV. About 1 out of 3 will become HIV-infected if there are no PMTCT interventions (including ARVs for the mother and baby).
- There are many things that can be done to prevent MTCT before pregnancy, during pregnancy, during the time of labor and delivery and after the baby is born. Peer Educators should be familiar with interventions at each stage and talk to people in the community about the importance of PMTCT services.

(KEY POINTS, CONTINUED)

- Pregnant women should be prioritized for HIV care and treatment with ART if they are eligible (according to national guidelines). Most ARVs will not hurt the baby and this is one of the best ways to prevent MTCT.
- Pregnant women should also take cotrimoxazole (CTX) if they are eligible (according to national guidelines).
- There is HIV in breast milk. Exclusive formula feeding is the only way to prevent HIV transmission from the mother to her baby after it is born, but there are also many risks of formula feeding for the baby, including sickness and death.
- For most women, exclusive breastfeeding for as long as possible up to 6 months is best for the baby. After 6 months, the baby needs other foods in addition to breast milk or formula. Giving other foods, along with breast milk or formula, does not increase the risk of MTCT after the baby is 6 months old.
- Mothers should only stop breastfeeding when there is a good, safe supply of replacement foods for the baby (many women breastfeed until the baby is 12-18 months old).
- Women and their babies should keep coming back to the clinic for care and treatment, child health and other services.
- All HIV-exposed babies should get follow-up care and take CTX until their HIV-status is known for sure.
- HIV makes babies and children sick quickly, so we need to identify them early and get them enrolled in care and treatment as soon as possible.
- The only way to tell for sure if a baby under 18 months of age is HIV-infected is through “DNA PCR” testing with dried blood spots (DBS), which can be done when the baby is at least 6 weeks old.
- Adult HIV tests can be used to tell if a baby under 18 months has been exposed to HIV or if a child over 18 months old is HIV-infected.
- Without ART, most children with HIV will die before their second birthday.
- With ART, children with HIV can become healthy, productive adults.
- The 5 key points to remember with following HIV-exposed and infected children are:
 - Come back to the clinic often.
 - Go for early HIV testing.
 - Give CTX to the baby every day (to prevent infections).
 - Weigh and measure the baby at each visit.
 - Focus on the whole family.

