

Prevention of Mother-to-Child Transmission of HIV



Generic Training Package Presentation Booklet



WORLD HEALTH ORGANIZATION



This publication is part of the Prevention of mother-to-child transmission of HIV generic training package: participant manual.

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The WHO/CDC *Prevention of Mother-to-Child Transmission of HIV Generic Training Package* is a comprehensive approach to the training of healthcare workers. The other components in this package are

- Training Programme and Course Director Guide
- Participant Manual
- Trainer Manual
- Pocket Guide
- Wall Charts
- CD-ROM containing MS® Word and Adobe Acrobat® (PDF) files for each programme component

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Prevention of Mother-to-Child Transmission of HIV (PMTCT)

Presentation Booklet


Module 1 – Introduction to HIV/AIDS



MODULE 1

Introduction to HIV/AIDS


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Module 1 Slide 1



Module 1: Objectives

- Describe the global and local impact of the epidemic.
- Answer basic questions about HIV/AIDS in women, children, and families.
- Discuss the natural history of HIV infection.
- Present information about HIV transmission.

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Module 1 Slide 2




Introduction to HIV/AIDS

Session 1

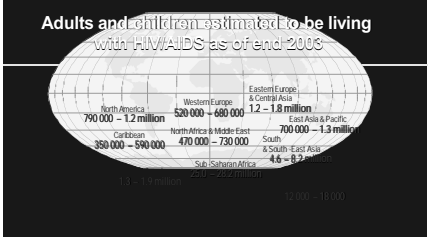
Scope of the HIV/AIDS Pandemic

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Module 1 Slide 3



Scope of the HIV/AIDS Pandemic

Adults and children estimates to be living with HIV/AIDS as of end 2006



Region	Estimate
North America	700 000 – 1.2 million
Caribbean	350 000 – 500 000
Western Europe & Central Asia	520 000 – 680 000
Eastern Europe & Central Asia	1.2 – 1.8 million
North Africa & Middle East	470 000 – 730 000
South & South-East Asia	700 000 – 1.3 million
Sub-Saharan Africa	4.6 – 8.7 million
Total	34 – 46 million

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Module 1 Slide 4



Scope of the HIV/AIDS Pandemic

Global HIV/AIDS in 2003

- 40 million people are living with HIV/AIDS.
- 2.5 million are children under 15 years.
- 14,000 new infections each day



Impact of Global HIV

- Negative economic impact on countries
- Overwhelmed healthcare systems
- Decreasing life expectancy
- Deteriorating child survival rates
- Increasing numbers of orphans



National Epidemiology

Insert national HIV/AIDS information.



National Epidemiology

Insert national HIV/AIDS information on antenatal seroprevalence rates, MTCT.



National Epidemiology

Insert national information on paediatric AIDS.



HIV and AIDS

Human Immunodeficiency Virus

H = Human

I = Immunodeficiency

V = Virus



HIV and AIDS

Acquired ImmunoDeficiency Syndrome

- A** = Acquired, not inherited
- I** = Weakens the Immune system
- D** = Deficiency of certain white blood cells in the immune system
- S** = Syndrome, a group of symptoms or illnesses as a result of HIV infection

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Module 1 Slide 11



HIV and AIDS

- When the immune system becomes weakened by HIV, the illness progresses to AIDS.
- Some blood tests, symptoms or infections indicate progression of HIV to AIDS.

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HIV-1 and HIV-2

- HIV-1 and HIV-2
 - Transmitted through the same routes
 - Associated with similar opportunistic infections
- HIV-1 is more common worldwide.
- HIV-2 is found primarily in West Africa, Mozambique and Angola.

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HIV-1 and HIV-2

Differences between HIV-1 and HIV-2

- HIV-2 is less easily transmitted.
- HIV-2 develops more slowly.
- MTCT is relatively rare with HIV-2.

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Introduction to HIV/AIDS

Session 2

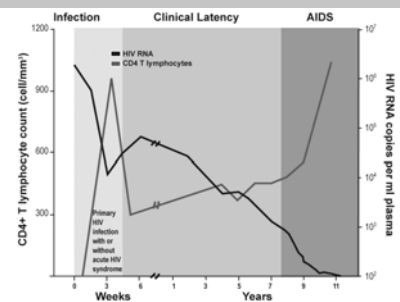
Natural History and Transmission of HIV

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Natural History of HIV Infection



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Module 1 Slide 16



Natural History of HIV Infection

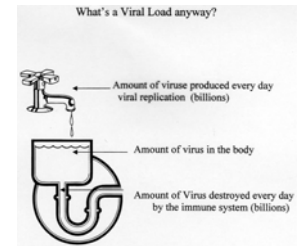
HIV can be transmitted during **each** stage

- **Seroconversion**
 - Infection with HIV, antibodies develop
- **Asymptomatic**
 - No signs of HIV, immune system controls virus production
- **Symptomatic**
 - Physical signs of HIV infection, some immune suppression
- **AIDS**
 - Opportunistic infections, end-stage disease



Natural History of HIV Infection

- Severity of illness is determined by amount of virus in the body (increasing viral load) and the degree of immune suppression (decreasing CD4 count).
- Higher the viral load, the sooner immune suppression occurs.



Natural History of HIV Infection

Immune suppression

- HIV attacks white blood cells, called CD4 cells, that protect body from illness.
- Over time, the body's ability to fight common infections is lost.
- Opportunistic infections occur.



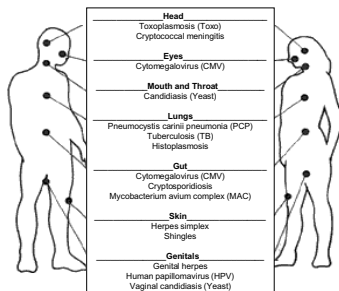
Natural History of HIV Infection

Direct infection of organ systems

- Brain (HIV dementia)
- Gut (wasting)
- Heart (cardiomyopathy)



HIV-Related Opportunistic Infections



Progression of HIV Infection

- **HIGH viral load** (number of copies of HIV in the blood)
- **LOW CD4 count** (type of white blood cell)
- Increasing clinical symptoms (such as opportunistic infections)



Natural History of HIV Infection Summary

- HIV multiplies inside the CD4 cells, destroying them.
- As CD4 cell count decreases and viral load increases, the immune defences are weakened.
- People infected with HIV become vulnerable to opportunistic infections.
- HIV is a chronic viral infection with no known cure.
- Without ARV treatment, HIV progresses to symptomatic disease and AIDS.

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Transmission of HIV

HIV is transmitted by

- Direct contact with infected blood
- Sexual contact: oral, anal or vaginal
- Direct contact with semen or vaginal and cervical secretions
- Mothers infected with HIV to infants during pregnancy, delivery and breastfeeding

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Transmission of HIV

HIV **cannot** be transmitted by:

- Coughing, sneezing
- Insect bites
- Touching, hugging
- Water, food
- Kissing
- Public baths/pools
- Toilets
- Handshakes
- Work or school contact
- Using telephones
- Sharing cups, glasses, plates, or other utensils

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Prevention of HIV Transmission

Public health strategies to prevent HIV transmission

- Screen all blood and blood products.
- Follow universal precautions.
- Educate in safer sex practises.
- Identify and treat STIs.
- Provide referral for treatment of drug dependence.
- Apply the comprehensive PMTCT approach to prevent perinatal transmission of HIV.

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Module 1: Key Points

- HIV is a global pandemic.
- The number of people living with HIV worldwide continues to increase.
- The HIV epidemic is especially severe in many resource-constrained countries.
- HIV is a virus that destroys the immune system, leading to opportunistic infections.
- The progression from initial infection with HIV to end-stage AIDS varies from person to person and can take more than 15 years.

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Module 1 Slide 27



Module 1: Key Points

- The most common route of HIV transmission worldwide is heterosexual transmission.
- Women of childbearing age are at particular risk for acquiring HIV. The main behaviour that places them at risk is unprotected sex with an infected male partner.
- Pregnant women who are HIV-infected are at risk of passing HIV infection to their newborn.
- Risk of HIV transmission from mother-to-child can be greatly reduced through effective PMTCT programmes.

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Module 1 Slide 28



Prevention of Mother-to-Child Transmission of HIV (PMTCT)

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Module 2—Overview of HIV Prevention in Mothers, Infants, and Young Children



MODULE 2

Overview of HIV Prevention in Mothers, Infants and Young Children

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Module 2

Slide 1



Module 2: Objectives

- Describe the comprehensive approach to prevention of HIV infection in infants and young children.
- Discuss mother-to-child transmission (MTCT) of HIV infection.
- Describe the four elements of a comprehensive approach to the prevention of HIV in infants and young children.
- Describe the role of maternal and child health (MCH) services in the prevention of HIV in infants and young children.

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Module 2

Slide 2



Overview of HIV Prevention in Mothers, Infants and Young Children

Session 1

Comprehensive Approach to Reducing HIV Infection in Infants and Young Children

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Module 2

Slide 3



Scope of HIV

Insert country or local data on HIV in childbearing women and children.

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Module 2

Slide 4



Scope of HIV

Insert country or local data on MTCT.



Comprehensive Approach to Reducing HIV Infection in Mothers, Infants and Young Children

- **Element 1** Primary prevention of HIV infection
- **Element 2** Prevention of unintended pregnancies among women infected with HIV
- **Element 3** Prevention of HIV transmission from women infected with HIV to their infants
- **Element 4** Provision of treatment, care and support to women infected with HIV, their infants and their families



Overview of HIV Prevention in Mothers, Infants, and Young Children

Session 2

Mother-to-Child Transmission (MTCT) of HIV Infection



Language of HIV/AIDS

- MTCT – mother-to-child transmission of HIV infection
- PMTCT – prevention of MTCT
- PLWHA – people living with HIV/AIDS
- Local slang for HIV infection



Estimated MTCT Rates

Without intervention

During pregnancy	5–10%
During labour and delivery	About 15%
During breastfeeding	5–15%

MTCT infection rates = up to 40%



PMTCT Interventions

During pregnancy

- Decrease viral load by using ARV treatment and prophylaxis
- Monitor and treat infections
- Support optimal nutrition





PMTCT Interventions

Safer delivery practices

Avoid

- Routine rupture of membranes
- Invasive delivery techniques
- Unresolved infections such as STIs

Provide

- Elective caesarean section when safe and feasible

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Module 2

Slide 11



PMTCT Interventions

Promote safer infant feeding

- Replacement feeding
- Exclusive breastfeeding for limited time
- Avoidance of mixed feeding

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Slide 12



Overview of HIV Prevention in Mothers, Infants, and Young Children

Session 3

Four Elements of a Comprehensive Approach to Prevention of HIV Infection in Infants and Young Children

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Slide 13



A Framework for a Comprehensive Approach to PMTCT

Prevention of Primary HIV Infection

Prevention of Unintended Pregnancies among Women Infected with HIV

Prevention of HIV Transmission from Women Infected with HIV to their Infants

Provision of Treatment, Care, and Support to Women Infected with HIV and their Families

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Element 1: Prevention of Primary HIV Infection

ABCs of primary HIV prevention for parents-to-be:

A = Abstain

B = Be faithful to one HIV-uninfected partner

C = Condom use – use condoms consistently and correctly

Adapt approach to local culture and target groups at risk

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Element 2: Prevention of Unintended Pregnancies Among Women Infected with HIV

- Access to counselling and referral for family planning
- Safe, consistent, effective contraception

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Element 3: Prevention of HIV Transmission from Women Infected with HIV to Their Infants

Core Interventions

- HIV testing and counselling
- Antiretrovirals
- Safer delivery practices
- Safer infant-feeding practices

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Element 4: Provision of Treatment, Care and Support to Women Infected with HIV and their Families

- Prevention and treatment of opportunistic infections
- ARV treatment
- Palliative and non-ARV care
- Nutritional support
- Reproductive healthcare
- Psychosocial and community support

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Overview of HIV Prevention in Mothers, Infants, and Young Children

Session 4

Role of Maternal and Child Health Services in the Prevention of HIV Infection in Infants and Young Children

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Slide 19



MCH Programmes Offer Services that Facilitate PMTCT

- Antenatal care
- Family planning services
- ARV treatment and prophylaxis
- Safer delivery practices
- Counselling and support for the woman's chosen infant-feeding method

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Slide 20



Module 2: Key Points

- A comprehensive approach is needed to prevent HIV infection in infants and young children.
- The four elements of the comprehensive approach to PMTCT are:
 - Primary prevention of HIV infection
 - Prevention of unintended pregnancies among women infected with HIV
 - Prevention of HIV transmission from women infected with HIV to their infants
 - Provision of treatment, care and support to women infected with HIV, their infants and their families

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Module 2: Key Points

- Without intervention the risk of MTCT is 25–40%.
- Combination interventions can reduce the MTCT rate by up to 40% in breastfeeding populations.
- Because ARV prophylaxis alone does not treat the mother's infection, ongoing treatment, care, and support are needed.

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Module 2

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Module 2: Key Points

- MCH services can act as an entry point to the range of services that can provide care and support to the woman who is HIV-positive and affected family members.
- Linkages to community services can provide enhanced treatment, care, and support.



Prevention of Mother-to-Child Transmission of HIV (PMTCT)

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Module 3— Specific Interventions to Prevent MTCT



MODULE 3

Specific Interventions to Prevent MTCT

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Module 3

Slide 1



Module 3: Objectives

- Name specific interventions for prevention of mother-to-child transmission (PMTCT).
- List locally available and recommended antiretroviral (ARV) regimens.
- Discuss antenatal management of women infected with HIV and women whose HIV status is unknown.

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Module 3

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Module 3: Objectives

- Explain the management of labour and delivery in women infected with HIV and women whose HIV status is unknown.
- Explain postpartum care of women infected with HIV and women whose HIV status is unknown.
- Explain immediate care of infants born to mothers infected with HIV and to mothers whose HIV status is unknown.

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Module 3

Slide 3



Specific Interventions to Prevent MTCT OF HIV

Session 1

Antiretroviral Treatment and Prophylaxis for the Prevention of MTCT

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Module 3

Slide 4



Antiretroviral (ARV) Treatment and Prophylaxis

- **ARV Treatment**
Long-term use of antiretroviral drugs to treat maternal HIV/AIDS and prevent PMTCT
- **ARV Prophylaxis**
Short-term use of antiretroviral drugs to reduce HIV transmission from mother to infant

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Antiretroviral Treatment

- Reduces viral replication and viral load.
- Treats maternal infection
- Protects the HIV-exposed infant
- Improves overall health of mother
- Requires ongoing care and monitoring

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Module 3

Slide 6



Co-Infection with Tuberculosis

Women infected with HIV can receive both antiretroviral and TB treatment at the same time with

- Careful drug selection
- Clinical management

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Module 3

Slide 7



ARV Prophylaxis for PMTCT

WHO (2004)

- Longer, combination prophylaxis regimens
- Short-course prophylaxis regimens
 - Combination regimen not available
 - Combination regimen is not feasible

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Module 3

Slide 8



ARV Prophylaxis for PMTCT

Insert country protocol.

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Module 3

Slide 9



Alternative Regimens for ARV Prophylaxis

Refer to country protocol.

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Module 3

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Specific Interventions to Prevent MTCT OF HIV

Session 2

Antenatal Management of Women Infected with HIV and Women with Unknown HIV Status

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Module 3

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Antenatal Management

- Reduces risk of MTCT
- Provides linkage to treatment, care and support services
- Helps women infected with HIV stay healthier longer
- Helps HIV-negative women stay uninfected

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Routine Antenatal Care

- Test and counsel for HIV
- Diagnose and treat STIs
- Promote safer sex practises
- Provide information on HIV
- Provide infant-feeding counselling and support

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Module 3

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Prevent, Screen and Treat TB and Malaria

- Co-infection with tuberculosis (TB)
 - Follow country guidelines for prevention and treatment.
 - Any woman with cough of two weeks or more needs to be screened and treated when indicated.
- Malaria
 - Follow country guidelines for prevention and treatment.

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Module 3

Slide 14



Preventing and Treating Infections

Monitor and provide early treatment for

- Urinary tract infections
- Recurrent vaginal candidiasis
- STIs

Provide prophylaxis for OIs according to country protocol.

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Module 3

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Psychosocial and Community Support

Pregnancy – a stressful time – link to:

- PLWHA support organizations
- Community services for support with housing, nutritional needs, spiritual needs
- ARV treatment when indicated and available

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Module 3

Slide 16



Specific Interventions to Prevent MTCT OF HIV

Session 3

Management of Labour and Delivery of Women Infected with HIV and Women with Unknown HIV Status

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Module 3

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Reducing MTCT Risk During Labour and Delivery

- Minimise cervical exams.
- Use partogram to monitor labour.

Avoid

- Routine rupture of membranes
- Prolonged labour
- Unnecessary trauma during childbirth

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Reducing MTCT Risk During Labour and Delivery

- Minimise risk of postnatal haemorrhage.
- Use safe transfusion practises (blood screened for HIV and syphilis, malaria, hepatitis B & C when possible).

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Reducing MTCT Risk During Labour and Delivery

- Minimise risk of postnatal haemorrhage.
- Use safe transfusion practises (blood screened for HIV and syphilis, malaria, hepatitis B & C when possible).

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Module 3

Slide 20



Elective Caesarean Section versus Vaginal Delivery

- Elective cesarean section
 - Consider elective cesarean delivery when safe and feasible
 - Done at the onset of labour or membrane rupture
- Vaginal delivery
 - When ARV prophylaxis or treatment has effectively reduced the viral load

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Module 3

Slide 21



Reducing MTCT Risk in Women with Unknown HIV Status

- Offer rapid HIV testing with right to refuse
- Discuss benefits to knowing HIV status
- If HIV-positive, ARVs can be given for PMTCT and refer for treatment and care

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Reducing MTCT Risk in Women with Unknown HIV Status

- Describe the testing process
- Rapid antibody test in L&D with consent
- Provide post-test counselling
- If HIV-positive, provide ARV prophylaxis based on country regimen

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Module 3

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Specific Interventions to Prevent MTCT OF HIV

Session 4

Immediate Postpartum Care of Women Infected with HIV and Women with Unknown HIV Status

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Module 3

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Immediate Postpartum Care

Patient Education

- Symptoms of infection
- Information on where to return for care
- Perineal care
- Breast care
- Disposal of blood-stained pads

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Module 3

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Immediate Postpartum Care of Women with HIV Infection

Continuing Care

- Provide gynaecologic care, including pap smears.
- Monitor for OIs, provide prophylaxis.
- Prevent or treat TB and malaria.
- Refer for ARV treatment, care and support.

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Immediate Postpartum Care of Women with HIV Infection

Newborn Feeding

- Mother chooses and begins feeding option.
- Support the choice of feeding option.
- Provide training on feeding option.
- Observe feeding technique.

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Module 3

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Immediate Postpartum Care of Women with HIV Infection

Signs & Symptoms (S&S) of Postnatal Infection

- Instruct on S&S of infection.
- Provide information on where and when to seek health care.
- Instruct on perineal and breast care.
- Instruct on safe disposal of lochia & bloodstained materials.

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Postpartum Care of Women

Family Planning

- Prevent unintended pregnancies.
- Support child spacing.
- Promote continued safer sex practices.

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Module 3

Slide 29



Women of Unknown HIV Status: Benefits of HIV Testing After Delivery

- Initiate ARV prophylaxis for infant if indicated.
- Encourage safer feeding selection option should she test positive.
- Encourage exclusive breastfeeding if she tests negative or refuses to be tested.

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Module 3

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Specific Interventions to Prevent MTCT OF HIV

Session 5

Immediate Newborn Care of Infants and Infants who are HIV-Exposed with Unknown HIV Status

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Immediate Newborn Care of HIV-Exposed Infants

DO

- Cut cord under cover of light gauze.
- Determine mother's feeding choice.
- Administer Vitamin K.
- Use silver nitrate eye ointment (within 1 hour of birth).
- Administer BCG as per country protocol.

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Immediate Neonatal Care of Infant

DO NOT

- Suction unless meconium-stained liquid is present.
- Use mouth-operated suction.
- Use mechanical suction at **greater** than 100 mm Hg pressure.

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Module 3

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ARV Prophylaxis for the Infant who is HIV-Exposed

Insert country protocol.

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Module 3

Slide 34



Infants Born to Mothers of Unknown HIV Status

Insert country protocol.



Treatment, Care and Support of HIV-Exposed Infants

Insert country protocol.



Treatment, Care and Support of HIV-Exposed Infants

Routine assessment for signs/symptoms of HIV (persistent diarrhoea, failure to thrive)

According to country guidelines

- HIV testing
- PCP prophylaxis (starting at 6 weeks)
- Prevention and treatment of TB or malaria



Module 3: Key Points

- Integrating PMTCT services into the essential package of ANC services promotes improved care for all pregnant women and provides the best opportunity for a successful PMTCT programme.
- Specific interventions to reduce MTCT include ARV treatment and prophylaxis, safer delivery procedures, and counselling and support for safe infant feeding.



Module 3: Key Points

- Using antiretroviral treatment and prophylaxis reduces the risk of MTCT. Longer-course combination regimens are effective, but short-course prophylaxis regimens may be more feasible in some resource-constrained settings.
- PCP prophylaxis and prevention and treatment of TB and malaria are part of comprehensive care for mothers infected with HIV and their infants.



Module 3: Key Points

- Safer delivery procedures include avoiding unnecessary invasive obstetrical procedures and offering the option of elective cesarean section when safe and feasible.
- Infant-feeding options to minimise the risk of MTCT require support and guidance throughout ANC, labour and delivery, and postpartum.



Prevention of Mother-to-Child Transmission of HIV (PMTCT)

Presentation Booklet

Module 4—Infant Feeding in the Context of HIV Infection



MODULE 4

Infant Feeding in the Context of HIV Infection

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Module 4

Slide 1



Module 4: Objectives

- Describe current global recommendations for infant feeding in the context of HIV/AIDS.
- Understand importance of optimal infant and young child feeding for child health, nutrition, growth and development.
- Define main options for infant feeding and advantages and disadvantages of each.
- Describe steps for counselling mothers infected with HIV about infant feeding.
- Understand importance of postnatal follow-up and support in infant feeding

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Module 4

Slide 2



Infant Feeding in the Context of HIV Infection

Session 1

Global Recommendations for Infant and Young Child Feeding

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Module 4

Slide 3



Introduction to Infant Feeding

- ARV treatment and prophylaxis administered to the mother and infant reduces MTCT.
- Up to 15% of infants breastfed by mothers who are HIV-positive are at risk of acquiring HIV.
- National and UN infant feeding recommendations and guidelines can reduce MTCT.

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Module 4

Slide 4



Infant Feeding and Child Survival

World Health Report (2002)

- Malnutrition is an underlying cause of 60% of deaths in children under 5 years.
- Being underweight was associated with 3.7 million deaths in 2000.
- Poor feeding practices are a major cause of death in children.

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Module 4

Slide 5



Infant Feeding and Child Survival

Counselling and support of infant feeding

- Improves feeding practices
- Prevents malnutrition
- Prevents HIV transmission to infants
- Reduces the risk of death in children

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Module 4

Slide 6



Infant Feeding: Mothers who are not HIV-Infected

UN Recommendation:

- Exclusive breastfeeding for 6 months
- Continue breastfeeding for up to 2 years or beyond.
- Introduce nutritionally adequate and safe complementary foods after the infant reaches 6 months of age, while continuing to breastfeed for 2 years or beyond.

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Module 4

Slide 7



Exclusive Breastfeeding

Definition

- Giving an infant only breastmilk, with the exception of drops or syrups consisting of vitamins, mineral supplements, or drugs
- No food or drink other than breastmilk—not even water

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Module 4

Slide 8



Infant Feeding: Mothers Infected with HIV

UN Recommendation:

Replacement feeding when

- **Acceptable**
- **Feasible**
- **Affordable**
- **Sustainable**
- **Safe**

Otherwise, exclusive breastfeeding for the first months of life

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Module 4

Slide 9



Implementing UN Guidance in the Community

- Ensure all mothers who are HIV-positive receive infant feeding counselling.
- Identify the range of feeding options that are acceptable, feasible, affordable, sustainable and safe.
- Educate the public about MTCT.
- Train infant-feeding counsellors.
- Train peer counsellors.

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Module 4

Slide 10



Infant Feeding in the Context of HIV Infection

Session 2

Feeding Options

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Module 4

Slide 11



Policy and Protocol

Insert national HIV infant-feeding policy and protocol.

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Module 4

Slide 12



Commercial Infant Formula

Advantages

- No risk of transmitting HIV
- Made especially for infants
- Includes most nutrients an infant needs
- Others can feed infant

Disadvantages

- Infant is more likely to get sick
- Need reliable formula supply
- Formula is expensive
- Requires clean water
- Must be made fresh each time
- Infant needs to drink from a cup
- Not breastfeeding may raise questions about mother's HIV status

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Module 4

Slide 13



Home-Modified Animal Milk

Advantages

- No risk of transmitting HIV
- Can be less costly than commercial formula
- Can be used when commercial infant formula is not available
- Others can feed infant

Disadvantages

- Infant more likely to get sick
- Must be made fresh each time
- Difficult to digest
- Multivitamin supplements are needed
- Must add boiled water and sugar
- Mother must stop breastfeeding
- Does not contain antibodies
- Infant needs to drink from a cup
- Not breastfeeding may raise questions about mother's HIV status

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Module 4

Slide 14



Exclusive Breastfeeding

Advantages

- Easily digestible
- Nutritious and complete
- Always available
- No special preparation needed
- Protects from diarrhoea, pneumonia, and other infections/diseases
- Promotes bonding

Disadvantages

- Risk of passing HIV to baby
- Requires feeding on demand
- Mother requires additional calories to support breastfeeding

PMTCT Generic Training Package

Module 4

Slide 15



Exclusive Breastfeeding with Early Cessation

Advantages

- Early cessation limits infant's exposure to HIV

Disadvantages

- Breastmilk substitute is necessary
- Mother's breasts may become engorged
- Mother at risk of becoming pregnant if sexually active

PMTCT Generic Training Package

Module 4

Slide 16



Wet Nurses

Advantages

- Same benefits as breastmilk feeding
- No risk of HIV if wet nurse is not HIV-positive

Disadvantages

- Wet nurse must be confirmed HIV-negative
- She must protect herself from HIV infection
- She must be available to breastfeed infant on demand



Expressed Heat-Treated Breastmilk

Steps for breastmilk preparation

- Wash all containers with soap and water
- Heat enough expressed milk for one feed
- Heat to boiling and cool
- Use within one hour



Infant Feeding in the Context of HIV Infection

Session 3

Infant-Feeding Counselling and Support



Infant-Feeding Counselling and Support

- Offer counselling, education and support by trained healthcare workers.
- Provide before birth and during first 2 years of life.
- Base on country or local guidelines.
- Base on a woman's circumstances.
- Include information on infant-feeding options and advantages and disadvantages.
- Provide women with safer feeding skills.
- Encourage partner or family involvement.



Infant-Feeding Counselling and Support

Counselling Visits

- At least one during the antenatal period
- Immediately after birth
- Within 7 days of birth to monitor post-partum and infant-feeding progress
- Monthly follow-up sessions
- Additional sessions may be required during high-risk time periods



Infant-Feeding Counselling and Support

Infant-Feeding Counselling Steps

STEP 1: Explain risks of MTCT.

STEP 2: Explain advantages and disadvantages of different feeding options, starting with mother's initial preference.

STEP 3: Explore mother's home and family situation.



Infant-Feeding Counselling and Support

STEP 4: Help mother choose appropriate option.

STEP 5: Demonstrate how to practise chosen feeding option.

- Replacement feeding
- Exclusive breastfeeding
- Other breastmilk options

STEP 6: Provide follow-up counselling and support.



Module 4: Key Points

- All women who are HIV-positive need infant feeding counselling and support.
- HIV transmission risk continues the entire time a mother who is HIV-positive breastfeeds her child.
- The mother has the right to choose how she wants to feed her infant; the healthcare worker's job is to support her choice.
- Mothers who are HIV-positive should avoid breastfeeding when replacement feeding is acceptable, feasible, affordable, sustainable, and safe.



Module 4: Key Points

- Exclusive breastfeeding with early cessation at or before 6 months is appropriate when breastfeeding is the chosen option.
- Counselling, education, and support are key to establishing and maintaining safer infant-feeding practices.
- Postnatal counselling and infant follow-up are required throughout the first 2 years of the infant's life.



Module 4: Key Points

- Prevent misuse of replacement feeding
- Promote exclusive breastfeeding for the general population
- Discourage use of replacement milk supplies by mothers whose infants don't need them
- Respect International Code of Marketing of Breastmilk Substitutes



Prevention of Mother-to-Child Transmission of HIV (PMTCT)

Presentation Booklet

Module 5—Stigmas and Discrimination Related to MTCT



MODULE 5

Stigma and Discrimination Related to MTCT

PMTCT Generic Training Package

Module 5

Slide 1



Module 5: Objectives

- Define and identify HIV/AIDS-related stigma and discrimination.
- Better understand international and national human rights issues.
- Clarify personal values and attitudes with regard to HIV/AIDS prevention and care.
- Know how to address stigma and discrimination in the context of providing PMTCT services.

PMTCT Generic Training Package

Module 5

Slide 2



Stigma and Discrimination Related to MTCT

Session 1

Introduction to the Concepts of Stigma and Discrimination and International Human Rights

PMTCT Generic Training Package

Module 5

Slide 3



Introduction to Stigma and Discrimination

- HIV/AIDS-related stigma is increasingly recognized as the single greatest challenge to slowing the spread of HIV/AIDS.
- HIV/AIDS – a threefold epidemic
 - HIV
 - AIDS
 - Stigma, discrimination and denial

PMTCT Generic Training Package

Module 5

Slide 4



Stigma versus Discrimination

- Stigma refers to unfavourable attitudes and beliefs directed toward someone or something.
- Discrimination is the treatment of an individual or group with partiality or prejudice.

PMTCT Generic Training Package

Module 5

Slide 5



Stigma versus Discrimination

- Stigma reflects an attitude.
- Discrimination is an act or behaviour.

PMTCT Generic Training Package

Module 5

Slide 6



Human Rights

- Freedom from discrimination is a fundamental human right.
- Discrimination on the basis of HIV/AIDS status is prohibited by human rights standards.

PMTCT Generic Training Package

Module 5

Slide 7



PMTCT Programmes and Human Rights

Women have a right to:

- Determine the course of their reproductive lives
- Access information about HIV/AIDS and infection prevention
- Access testing and counselling services

PMTCT Generic Training Package

Module 5

Slide 8



PMTCT Programmes and Human Rights

Women have a right to:

- Know their HIV status
- Decide not to be tested or to choose not to know the result of an HIV test
- Make informed decisions about infant feeding

PMTCT Generic Training Package

Module 5

Slide 9



Stigma and Discrimination Related to MTCT

Session 2

Values Clarification (Individual Perspective)

PMTCT Generic Training Package

Module 5

Slide 10



Themes Related to Stigma

- Attitudes and actions are stigmatising.
- Choice of language may express stigma.
- Lack of knowledge and fear foster stigma



Themes Related to Stigma

- Shame and blame are associated with stigma and HIV.
- Stigma makes disclosure more difficult.
- Stigma can exist, even in a caring environment.



Stigma and Discrimination

- Media
- Health services
- Workplace
- Religion
- Family and local community



Effects of Stigma

- Social isolation
- Limited rights and reduced access to services
- Secondary stigma (stigma by association)



Consequences of Stigma in PMTCT Programmes

- Discourages access to ANC services
- Prevents access to HIV testing, counselling and PMTCT services
- Discourages disclosure of HIV test results to partner(s)
- Discourages acceptance of PMTCT interventions
- Inhibits use of safer infant-feeding practises
- Confers secondary stigmatisation on child



Stigma and Discrimination Related to MTCT

Session 3

Dealing with Stigma and Discrimination in Healthcare Settings and Communities



Addressing Stigma

Interventions addressing HIV-related stigma take place at all levels

- National
- Community and social/cultural
- PMTCT site/facility
- Individual



National Level Interventions

For national HIV/AIDS initiatives addressing human rights of PLWHA

- Enlist political support.
- Encourage high-profile individuals to serve as leaders and role models.



National Level Interventions

▪ Support

- Human rights legislation
- National efforts to scale up ARV treatment
- Funding for PMTCT services

▪ Share

- PMTCT success stories



Community Level Interventions

In the community, promote

- HIV awareness and knowledge
- PMTCT activities as integral to health care and HIV/AIDS prevention and treatment
- Referrals to and from PMTCT services
- Awareness of PMTCT interventions



Community Level Interventions

- Partnerships with churches, schools and community organisations
- PLWHA in implementing initiatives
- Networking with needed linkages
- Ongoing training



PMTCT Programme Level Interventions

- Integrate PMTCT into antenatal care services.
- Encourage partner involvement.
- Enlist partner and family support to decrease HIV transmission.



PMTCT Programme Level Interventions

Educate and train healthcare providers in

- HIV transmission
- Activities to address stigma
- Awareness of language that describes PLWHA
- PMTCT-related policies
- Counselling and safer infant feeding practises



PMTCT Programme Level Interventions

Educate and train healthcare providers in

- Controlling infection
- Maintaining confidentiality and obtaining informed consent
- Serving as role models and advocates
- Facilitating community support and linkages



Role of PMTCT Programme Managers

Enlist managers' help to ensure policies and procedures are in place and implemented for

- Non-discrimination
- Confidentiality
- Universal Precautions
- Post-exposure prophylaxis (PEP)



Module 5: Key Points

- While stigma reflects an attitude, discrimination is an act or behaviour.
- Discrimination is often defined in terms of human rights and entitlements in health care, employment, the legal system, social welfare, reproductive, and family life.
- Stigma and discrimination are often interlinked. Stigmatising thoughts can lead to discrimination and human rights violations.



Module 5: Key Points

- International and national human rights declarations affirm that all people have the right to be free from discrimination on the basis of HIV/AIDS status.
- PMTCT programme staff have a responsibility to respect the rights of all women and men, irrespective of their HIV status.



Module 5: Key Points

- HIV/AIDS-related stigma and discrimination may discourage PLWHA from accessing key HIV services. It may also:
 - Discourage disclosure of HIV status
 - Reduce acceptance of safer infant-feeding practices
 - Limit access to education, counselling, and treatment even when services are available and affordable



Module 5: Key Points

- PMTCT programme staff can help reduce stigma and discrimination in the healthcare setting, community, and on the national level.
- Encourage PMTCT staff to serve as role models by treating PLWHA just as they would treat patients assumed to be HIV-negative.



Module 5: Key Points

- Involve PLWHA in every aspect of the PMTCT programme.
- Promote partner participation and community support.



Prevention of Mother-to-Child Transmission of HIV (PMTCT)

Presentation Booklet

Module 6—HIV Testing and Counselling for PMTCT



MODULE 6

HIV Testing and Counselling for PMTCT

PMTCT Generic Training Package

Module 6

Slide 1



Module 6: Objectives

- Discuss the integration of HIV testing and counselling (TC) into antenatal care (ANC) settings.
- Discuss the healthcare worker's role in maintaining confidentiality.

PMTCT Generic Training Package

Module 6

Slide 2



Module 6: Objectives

- Provide information to pregnant women about HIV testing.
- Explain the meaning of positive and negative HIV test results.
- Identify needs of newly diagnosed women who are infected with HIV.

PMTCT Generic Training Package

Module 6

Slide 3



HIV Testing and Counselling for PMTCT

Session 1

Overview of HIV Testing and Counselling of Pregnant Women

PMTCT Generic Training Package

Module 6

Slide 4



HIV Testing and Counselling (TC)

- Plays vital role in identifying women who are HIV-positive to provide services
- Provides an entry point to comprehensive HIV/AIDS treatment, care, and support
- Helps identify and reduce behaviours that increase HIV transmission risks
- Becomes available to all women of childbearing age and their male partners



HIV Testing and Counselling

HIV Testing

The process that determines whether a person is infected with HIV.

HIV Counselling

Confidential discussion(s) between an individual and their care provider to examine HIV transmission risk and explore HIV testing.

HIV TC

A flexible intervention integrated into ANC settings.



HIV Testing and Counselling

All pregnant women in ANC should receive information on:

- Safer sexual practises
- Prevention and treatment of STIs
- PMTCT
- Post-test counselling and follow-up services



Guiding Principles for TC in PMTCT

Confidentiality

- All patient information is kept private.
- Information is shared only with providers directly involved in care—and only on a “need to know” basis.
- All medical records and registers are kept in secure place.



Guiding Principles for TC in PMTCT

Informed Consent

- Clarifies the purpose, advantages, and disadvantages of testing
- Ensures understanding of the TC process
- Respects the client's testing decision



Guiding Principles for TC in PMTCT

Post-test support and services

- Always give results in person.
- Provide appropriate post-test information.
- Offer counselling or referral.



Approaches to HIV Testing in PMTCT

Opt-In

- Explicit request to be tested
- Written or verbal informed consent

Opt-Out

- Testing routinely offered
- Clients not explicitly asked to be tested
- Client may refuse

PMTCT Generic Training Package

Module 6

Slide 11



Preferred Strategy: Opt-Out

Opt-Out approach

- Normalises HIV testing by integrating it into ANC care
- Increases the number of women who receive testing and PMTCT interventions
- May increase the uptake of PMTCT services including testing

PMTCT Generic Training Package

Module 6

Slide 12



HIV Testing and Counselling for PMTCT

Session 2

HIV Testing

PMTCT Generic Training Package

Module 6

Slide 13



Test Selection Decision

- National/local policies
- Availability of supplies
- Availability of trained personnel
- Evaluation of specific tests in country
- Cost of test kits and supplies

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Module 6

Slide 14



Steps in the Testing Process

- 1) Obtain test sample.
Blood, saliva, urine
- 2) Process sample, on site or through lab.
- 3) Obtain results.
Keep confidential
Method determined by clinic protocols and client
- 4) Provide results to client.
- 5) Provide post-test counselling, support, and referral.

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Module 6

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Antibody Tests

Rapid Tests

- Sample: blood from finger prick, saliva swabs
- Lab: no special equipment
- Ease: minimal training
- Result time: less than 30 minutes

ELISA

- Sample: blood from arm
- Lab: special equipment
- Ease: trained lab technician
- Result time: up to 2 weeks

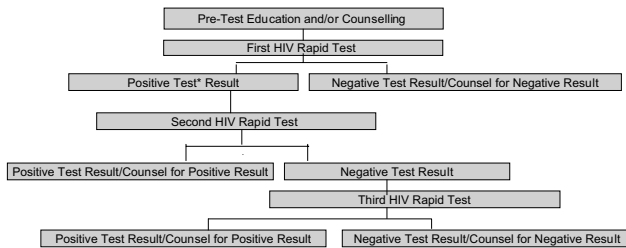
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Module 6

Slide 16



Algorithm for Use of 3 Rapid HIV Tests in Testing and Counselling Services (Serial Testing)



* In the context of labour in a MTCT-prevention setting, it is advised to give a single dose of nevirapine on the basis of a single positive rapid test. The test result should be confirmed after delivery.

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Module 6

Slide 17



HIV Viral Antigen Tests

HIV viral antigen tests (or assays) detect the presence of HIV in blood and must be done by laboratory personnel.

- **PCR** (polymerase chain reaction) tests detect DNA or measure RNA (viral load) in the blood.
- **p24** antigen tests measure one of the proteins found in HIV.

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Diagnosing HIV in Infants Exposed to HIV

- Antiretroviral treatment and prophylaxis reduces but does not eliminate MTCT transmission of HIV infection.
- Since maternal antibodies cross the placenta, antibody testing is not recommended prior to 18 months of age.
- Infants who are breastfeeding require additional testing once breastfeeding has completely discontinued.

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Module 6

Slide 19



Antibody Testing of the Infant Exposed to HIV

Non-breastfeeding

At or after 18 months of age:

- **Negative** HIV antibody test indicates that the child is *not* infected.
- **Positive** HIV antibody test indicates that the child is infected.

Breastfeeding

At or after 18 months of age:

- **Negative** HIV antibody test should be repeated 6 weeks after complete cessation of breastfeeding.
- **Positive** HIV antibody test indicates that the child is infected.

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Module 6

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Non-Breastfeeding Infants Who are Exposed to HIV

HIV DNA PCR after 6 weeks of age

- Positive, the infant is HIV-infected
- Negative, the infant is not HIV-infected

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Module 6

Slide 21



Breastfeeding Infants Who are Exposed to HIV

HIV DNA PCR after 6 weeks of age

- Positive, the infant is HIV-infected
- Negative, repeat the test 6 weeks after cessation of breastfeeding
 - Negative, the infant is not infected
 - Positive, the infant is HIV-infected

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Module 6

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HIV Testing and Counselling for PMTCT

Session 3

Pre-Test Information and Counselling

PMTCT Generic Training Package

Module 6

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Pre-Test Information Provision

- Prepares women & partners for the TC process
- Explores personal HIV risk
- Protects confidentiality

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Module 6

Slide 24



Individual Pre-Test Counselling

- May be offered in ANC settings.
- Refer when indicated to trained HIV counsellors or VCT site.

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Module 6

Slide 25



Group Information Provision

- HIV and AIDS
- Transmission and prevention
- HIV testing and test result interpretation
- Individual counselling and risk assessment

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Module 6

Slide 26



Working with Couples

- Provides TC to male partners
- Emphasises male responsibility to protect the health of partner and family
- Reduces “blaming” the woman
- Identifies discordant couples

PMTCT Generic Training Package

Module 6

Slide 27



Discordant Couples

One partner is not infected with HIV and the other is infected with HIV

- Discuss safer sex options.
- Refer the partner infected with HIV for treatment, care and support.

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Module 6

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HIV Testing and Counselling for PMTCT

Session 4

Post-Test Information and Counselling

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Module 6

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Post-Test Counselling for ALL Women

- Provide the test result.
- Help the woman understand the test result.
- Provide PMTCT essential messages when indicated.
- Provide support, information, and referral when indicated.
- Encourage risk-reducing behaviour.
- Encourage disclosure and partner testing.

PMTCT Generic Training Package

Module 6

Slide 30



Post-Test Counselling

HIV-negative result

- Prevent future infection.
- Review MTCT risk with new infection.
- Educate partner and encourage partner testing.

PMTCT Generic Training Package

Module 6

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Post-Test Counselling

HIV-positive result

- Clarify understanding.
- Acknowledge feelings.
- Review benefits of knowing HIV status.
- Address immediate concerns.
- Schedule follow-up visit.
- Provide name and telephone number of clinic and contact person.

PMTCT Generic Training Package

Module 6

Slide 32



Disclosure

- Ensure confidentiality.
- Respect woman's choices.
- Encourage partner testing.
- Review prevention of transmission.
- Identify support.

PMTCT Generic Training Package

Module 6

Slide 33



Module 6: Key Points

- Pre-test information, HIV testing and post-test counselling should be available to all pregnant women.
- The need for individual pre-test counselling should be determined based on national or local policies.
- The healthcare provider and the facility must maintain confidentiality of HIV status.

PMTCT Generic Training Package

Module 6

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Module 6: Key Points

- Partner testing and couples counselling are encouraged.
- Rapid tests with same day results are the recommended procedure for most ANC settings.
- Infant diagnosis is complex but important for clinical management.



Module 6: Key Points

- Post-test counselling is important for all women:
 - For women who are not HIV-infected, emphasise the prevention of HIV infection.
 - For women infected with HIV, provide referrals to the PMTCT programme and options for treatment, care, and support.
- Disclosure skills building should be encouraged for all women regardless of HIV status.



Prevention of Mother-to-Child Transmission of HIV (PMTCT)

Presentation Booklet

Module 7—Linkages to Treatment, Care, and Support for Mothers and Families with HIV Infection



MODULE 7

Linkages to Treatment, Care, and Support for Mothers and Families With HIV Infection

PMTCT Generic Training Package

Module 7

Slide 1



Module 7: Objectives

- Explain the treatment, care, and support needs of mothers with HIV infection and their HIV-exposed infants.
- Identify local supportive resources for mothers, children, and their families.
- Develop and strengthen linkages with treatment, care, and support services for women and children infected with or exposed to HIV.

PMTCT Generic Training Package

Module 7

Slide 2



Linkages to Treatment, Care, and Support for Mothers and Families with HIV Infection

Session 1

Linkages with Local Treatment, Care, and Support Services for Mothers and Families

PMTCT Generic Training Package

Module 7

Slide 3



Linkages to Local Treatment, Care, and Support Services for Mothers and Families

Promote linkages with:

- MCH and HIV services
- Health programmes for special needs
- Community and faith-based AIDS service programmes

PMTCT Generic Training Package

Module 7

Slide 4



Linkages to Treatment, Care, and Support for Mothers and Families with HIV Infection

Session 2

Treatment, Care, and Support of the Mother with HIV Infection

PMTCT Generic Training Package

Module 7

Slide 5



Postpartum Care of the Woman with HIV Infection

Assessment of Healing

- Wound healing
- Uterine involution
- Cessation of postpartum bleeding

PMTCT Generic Training Package

Module 7

Slide 6



Postpartum Care of the Woman with HIV Infection

Infant-Feeding Support

- Assess infant-feeding practice.
- Assist mother to safely implement chosen feeding option.
- Work with her to address challenges.

PMTCT Generic Training Package

Module 7

Slide 7



Prevention of *Pneumocystis Carinii* Pneumonia

- HIV-infected adults with
 - Symptomatic disease (WHO Stages 2, 3, or 4)
 - Asymptomatic disease and a CD4 count of less than 500/mm³ or equal total lymphocyte count
- Regimen
 - Cotrimoxazole 960 mg once daily (substitute if unable to tolerate)

PMTCT Generic Training Package

Module 7

Slide 8



Prevention and Treatment of Infection

Follow national guidelines

- Provide prophylaxis, screen and treat tuberculosis.
- Prevent and treat malaria.
- Provide immunisations.

PMTCT Generic Training Package

Module 7

Slide 9



Antiretroviral Treatment

Using combination ARVs to lower viral load is standard of care

Advantages to ARV treatment

- Improved health status and quality of life
- Reduced HIV hospitalisation
- Reduced AIDS-related deaths
- Decreased MTCT rates

PMTCT Generic Training Package

Module 7

Slide 10



Symptomatic and Palliative Care

Patient and family-centered care that

- Provides access to information
- Honors a person's choices
- Optimises quality of life
- Anticipates, prevents and treats suffering
- Addresses physical, emotional, social, and spiritual needs

PMTCT Generic Training Package

Module 7

Slide 11



Nutritional Support

Support

- Adequate nutritional intake, including vitamin and mineral supplements as needed
- Proper storage, food, and water preparation
- Referral to nutritional services

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Module 7

Slide 12



Social and Psychosocial Support

- Support adjustment to diagnosis and approaches to disclosure.
- Support mothers when diagnosis of infant exposed to HIV is unknown.
- Refer to AIDS service organisations in the community.

PMTCT Generic Training Package

Module 7

Slide 13



Linkages to Treatment, Care, and Support for Mothers and Families with HIV Infection

Session 3

Treatment, Care, and Support of HIV-Exposed Infants and Young Children

PMTCT Generic Training Package

Module 7

Slide 14



Healthcare and Support of Infants Exposed to HIV

PMTCT interventions reduce, but do not eliminate, the risk of HIV transmission from mother to infant

- Provide HIV testing as per guidelines.
- Monitor growth and development, especially the first 2 years.
- Immunise according to national protocols.

PMTCT Generic Training Package

Module 7

Slide 15



Follow-up Visits for Infants

- Assess for illness and HIV-related symptoms
- Provide PCP prophylaxis.
- Treat helminth infections.
- Screen for TB, malaria, and anaemia.
- Monitor and support safe infant feeding.
- Link mother to primary care and HIV treatment.

PMTCT Generic Training Package

Module 7

Slide 16



Integration of HIV Paediatric Care into Ongoing Care Using IMCI

Guidelines for IMCI have been adapted to:

- Reflect and address special needs of children with HIV infection
- Guide healthcare workers in provision of treatment
- Integrate care of HIV-symptomatic children into existing MCH services

PMTCT Generic Training Package

Module 7

Slide 17



Educate Caregivers to Recognise Early Signs of HIV in Infants

- Low weight and/or growth failure
- Pneumonia including PCP
- Oral candidiasis (thrush)
- Lymphadenopathy
- Diarrhoea
- Tuberculosis

PMTCT Generic Training Package

Module 7

Slide 18



PCP Prophylaxis in Infants **Exposed** to HIV

Insert national protocol.

PMTCT Generic Training Package

Module 7

Slide 19



PCP Prophylaxis in Infants **Infected** with HIV

PCP prophylaxis should be given to:

- Infants infected with HIV under 12 months of age
- Infants infected with HIV over 12 months of age if
 - **Symptomatic or AIDS diagnosed**
 - **CD4 percentage less than 15% or equivalent total lymphocyte count**
 - **Prior history of PCP**

PMTCT Generic Training Package

Module 7

Slide 20



Paediatric ARV Treatment

Where ARV treatment is available

- Monitor infants and children for symptoms of HIV infection (and laboratory findings if available) that would make them candidates for ARV treatment.
- Refer to the appropriate HIV care setting.

PMTCT Generic Training Package

Module 7

Slide 21



Paediatric ARV Treatment

Before starting ARV treatment, consider

- Existing beliefs about medications and treatment
- Caregiver commitment to provide treatment
- Ability to follow the dosing schedule
- Ease of administration

PMTCT Generic Training Package

Module 7

Slide 22



Module 7: Key Points

- A continuum of care is provided through linkages between PMTCT, MCH and available HIV treatment, care, and support services, including those offered by non-governmental and faith-based organisations (NGOs & FBOs) in the community.
- Linkages to NGOs and FBOs may help families living with HIV/AIDS gain access to social support and assistance with specific needs such as housing, transportation, food, and income-generating activities.
- Postpartum care includes clinical assessment, infant-feeding support, family planning, and referral for HIV-related treatment and care.

PMTCT Generic Training Package

Module 7

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Module 7: Key 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.
- IMCI guidelines can help healthcare providers integrate care for children with symptomatic HIV into continuing MCH services.

PMTCT Generic Training Package

Module 7

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Module 7: Key Points

- PMTCT-Plus programmes provide linkages to antiretroviral treatment for mothers who are HIV-infected, their children, and other family members.
- Timing of testing and diagnosis of HIV infection in infants and young children varies according to feeding practices and available tests.

PMTCT Generic Training Package

Module 7

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Prevention of Mother-to-Child Transmission of HIV (PMTCT)

Presentation Booklet

Module 8—Safety and Supportive Care in the Work Environment



MODULE 8

Safety and Supportive Care in the Work Environment

PMTCT Generic Training Package

Module 8

Slide 1



Module 8: Objectives

- Describe strategies for preventing HIV transmission in the healthcare setting.
- Define Universal Precautions (UP) in the context of the prevention of mother-to-child transmission (PMTCT) of HIV.
- Identify key steps and principles involved in the decontamination of equipment and materials.

PMTCT Generic Training Package

Module 8

Slide 2



Module 8: Objectives

- Assess occupational risk and identify risk-reduction strategies in maternal and child (MCH) settings.
- Describe the management of occupational exposure to HIV.
- Identify measures to minimise stress and support healthcare workers and caregivers.

PMTCT Generic Training Package

Module 8

Slide 3



Safety and Supportive Care in the Work Environment

Session 1

Universal Precautions and Creating a Safe Work Environment

PMTCT Generic Training Package

Module 8

Slide 4



Basic Concepts of HIV Transmission

Primary source of HIV infection in the healthcare setting

- Blood or body fluids in direct contact with an open wound, or by needle or sharp stick
- High-risk MCH settings
 - Obstetric procedures
 - Labour and delivery
 - Immediate care of the infant

PMTCT Generic Training Package

Module 8

Slide 5



Universal Precautions Definition

A simple set of effective practices designed to protect health workers and patients from infection with a range of pathogens including bloodborne viruses. These practices are used when caring for all patients regardless of diagnosis.

PMTCT Generic Training Package

Module 8

Slide 6



Bloodborne Pathogens

In addition to HIV, bloodborne pathogens include:

- Hepatitis B and C viruses
- Syphilis
- Brucellosis

PMTCT Generic Training Package

Module 8

Slide 7



Prevention of HIV Transmission

- Apply universal precautions.
 - Healthcare worker to patient
 - Patient to healthcare worker
- Prevent patient-to-patient transmission .
 - Sterilise contaminated equipment and devices.

PMTCT Generic Training Package

Module 8

Slide 8



Infection Control Measures

- Universal precautions
- Management of the work environment
- Ongoing education of employees in all aspects of infection prevention

PMTCT Generic Training Package

Module 8

Slide 9



Universal Precautions

Applied in caring for all patients

- Handwashing
- Decontaminate equipment and devices
- Use and dispose of needles and sharps safely (avoid recapping, especially two-handed)
- Wear protective items
- Promptly clean up blood and body fluid spills
- Use safe disposal systems for waste collection and disposal

PMTCT Generic Training Package

Module 8

Slide 10



Promoting a Safe Work Environment

- Implement, monitor and evaluate use of universal precautions.
- Develop procedures for reporting and treating occupational exposure to HIV infection.
- Attain and maintain appropriate staffing levels.
- Provide protective equipment and materials.



Education in Infection Prevention

- Make all staff aware of established infection control policies.
- Provide ongoing training to build skills in safe handling of equipment and materials.
- Supervise and evaluate practices to remedy deficiencies.



Safety and Supportive Care in the Work Environment

Session 2

Handling and Decontamination of Equipment and Materials

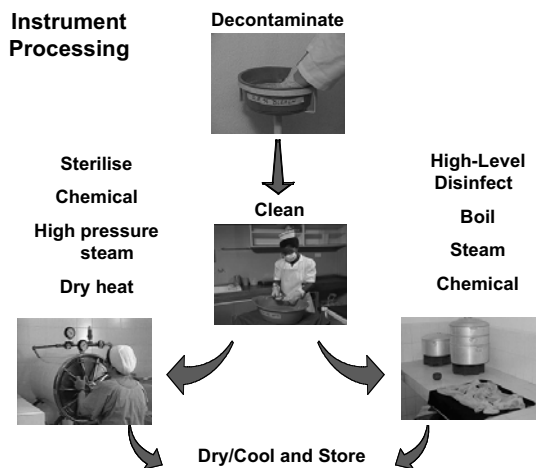


Handling of Equipment and Materials

Risk reduction strategies

- Assess condition of protective equipment.
- Safely dispose of waste materials.
- Make available appropriate cleaning and disinfecting agents.
- Decontaminate instruments and equipment.
- Monitor skin integrity.

Instrument Processing



Handling and Disposal of Sharps

- Use syringe or needle once only.
- Avoid recapping, bending, or breaking needles.
- Use puncture-proof container for disposal.
- Clearly label container—"SHARPS".
- Never overfill or reuse sharps containers.
- Dispose of sharps according to local protocol.



Handling Needles and Sharps



- Use a puncture-proof container for storage and/or disposal.
- Do **not** recap a needle before disposal unless using one-hand technique.

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Hand Hygiene

Recommended practice

- Soap and water handwashing using friction under running water for at least 15 seconds
- Using alcohol-based hand rubs (or antimicrobial soap) and water for routine decontamination

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Personal Protective Equipment

Basic personal protective equipment

- Gloves—correct size
- Aprons—as a waterproof barrier
- Eyewear—to avoid accidental splash
- Footwear—rubber boots or clean leather shoes

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Safe Work Practices

To reduce occupational risks

- Assess high-risk situations and areas.
- Develop safety standards and protocols.
- Institute measures to reduce occupational stress.
- Orient new staff to protocols.
- Provide ongoing staff education and supervision.
- Develop protocols for post-exposure prophylaxis (PEP).

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Risk Reduction in the Obstetric Setting

- Minimise high risk of exposure to HIV-infected blood and body fluids in obstetric unit.
 - Cover broken skin with watertight dressing.
 - Wear proper protective clothing.
 - Dispose of solid waste according to local protocols.

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Safety and Supportive Care in the Work Environment

Session 3

Managing Occupational Exposure to HIV

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Post-Exposure Prophylaxis (PEP)

- Immediate steps post-exposure
 - Wash exposed wound or skin with soap and water.
 - For needle or sharp injury, allow to bleed for a few seconds before washing.
 - Inform supervisor of type of exposure and the actions taken.
 - Assure confidentiality and support and referral for treatment.
- Short-course of ARV drugs is recommended to reduce the likelihood of infection.

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Guidelines for PEP

- Ideally, initiate PEP treatment within 2 hours of exposure.
- If patient is not infected with HIV, discontinue PEP and retest at 6 weeks, 3 months, and 6 months.
- If patient is infected with HIV, counsel, support, and refer healthcare worker for continued treatment.

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Guidelines for PEP

- Currently there is no single approved PEP regimen.
- Dual or triple drug therapy is recommended and believed to be more effective than a single agent.
- Follow approved PEP regimen.

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Safety and Supportive Care in the Work Environment

Session 4

Supportive Care for the Caregiver

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Compassion Fatigue and Burnout

Characteristics of burnout syndrome

- Emotional exhaustion
- Loss of interest
- Decreased productivity

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Tips to Prevent Burnout

- Find a support group of peers.
- Search out a mentor.
- Become educated on methods of coping.
- Take a new course or update skills.
- Exercise, eat right, and get enough rest.
- Make time for yourself and your family.

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Module 8: Key Points

- Universal precautions apply to all patients, regardless of diagnosis.
- Key components include:
 - Handwashing
 - Safe handling and disposal of sharps
 - Use of personal protective equipment
 - Decontamination of equipment
 - Safe disposal of infectious waste materials
 - Safe environmental practises



Module 8: Key Points

- Needle-stick injuries from patients who are infected with HIV are the most common source of HIV transmission in the workplace.
- Cleaning, disinfection, and sterilisation of all instruments used in invasive procedures reduces risk of patient-to-patient transmission of infection.
- During labour and delivery, safe care reduces risk of occupational exposure.



Module 8: Key Points

- Short-course ARV treatment reduces the risk of HIV infection after occupational exposure.
- Burnout syndrome is related to intense, prolonged job stress but can be managed and the effects minimised by individual and organisational supports.



Prevention of Mother-to-Child Transmission of HIV (PMTCT)

Presentation Booklet

Module 9—PMTCT Programme Monitoring



MODULE 9

PMTCT Programme Monitoring

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Module 9: Objectives

- Describe the programme cycle.
- Discuss the purposes of global and national PMTCT indicators.
- Understand the role of the healthcare provider in monitoring a PMTCT programme.

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PMTCT Programme Monitoring

Session 1

Introduction to the Programme Cycle

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Programme Cycle

The process of assessing a situation and then designing, implementing, monitoring, and evaluating a public health programme in response.

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Programme Cycle and Clinical Management

STEPS	PROGRAMME CYCLE	CLINICAL MANAGEMENT
1	Assess	Take medical history, perform physical exam, make diagnosis.
2	Plan	Develop patient management plan.
3	Implement	Treat condition.
4	Monitor	Monitor patient progress.
5	Evaluate	Determine treatment success.

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PMTCT Programme Monitoring

Session 2

Global, National, and Healthcare Facility PMTCT Indicators

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Programme Indicators

- Summary measures to describe a situation
- Provide information on status of activities in each step of programme cycle.

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Indicators for PMTCT Programmes

- Global indicators
 - Reflect current worldwide situation in one health area
- National indicators
 - Reflect goals, objectives, and activities of nationwide plan
- Health facility indicators
 - Help set targets and track progress towards PMTCT goals

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Health Facility Indicators Answer These Questions

- Does the PMTCT programme...
 - Run the way we planned?
 - Reach the right people?
 - Require improvement?
- Are the patients...
 - Benefiting from our services?
 - Receiving interventions?

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PMTCT Programme Monitoring

Session 3

PMTCT Programme Monitoring at the Healthcare Facility Level

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Monitoring and Evaluation in PMTCT

Monitoring

- Tracks indicators
- Involves routine record-keeping and reporting
- Determines if programmes are carried out as planned
- Usually is conducted at health facility



Monitoring and Evaluation in PMTCT

Evaluation

- Measures changes in a situation resulting from intervention
- Tells us how the programme is working to cause these changes
- May be conducted at regional and national level



Flow of Record Keeping Data

TYPE OF REPORT								
Individual Record Form	→	Daily Summary Reports	→	Monthly Reports	→	Quarterly Reports	→	Annual Global PMTCT Reports
PLACE GENERATED								
Department/ Facility	→	Department/ Facility	→	Facility/ District	→	District/ National	→	Global



Characteristic of Good Monitoring Systems

- Clear definitions of indicators
- Standard tools, data sources and collection methods
- Clear roles and responsibilities
- Clear guidelines and protocols



Tips for Good Data Collection

- Understand the data.
- Record the data every time.
- Record all the data.
- Record the data in the same way every time.

The healthcare worker should know who is responsible for the monitoring system, be able to record data accurately and reliably, and understand how and when to report service- and patient health-related information.



Module 9: Key Points

Programme cycle steps:

- Assessment
- Planning
- Implementation
- Monitoring
- Evaluation



Module 9: Key Points

- Global, national and facility-level indicators measure progress toward programme goals.
- Monitoring is the routine tracking of programme information.
- Accurate facility records provide essential information for providing quality health care and monitoring PMTCT programmes.

For further information, please contact:

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