

Prevention of Mother-to-Child Transmission of HIV

Approximately 1.5-2% of antenatal clinic attendants are estimated to be HIV positive. Without intervention, Mother-to-Child Transmission occurs in approximately 25% of all cases, either during the actual pregnancy, through maternal-fetal exchange of blood or during labor and delivery (60%-70%) or after delivery through breast-feeding, (10%-15%).

With appropriate interventions, Mother to Child Transmission can be reduced from 25% to below 5%.

An opportunity is therefore missed when a woman of childbearing age is unaware of her HIV status or her risk for HIV and when an HIV infected pregnant woman:

- Does not receive antenatal care
- Is not offered HIV testing
- Is unable to obtain HIV testing
- Is not offered treatment to reduce chance of passing virus to the child
- Is unable to obtain treatment to reduce chances of passing virus to the child
- Does not complete the treatment regimen

PMTCT Prevention Strategies

Primary Prevention

The first interventions in Mother to Child Transmission are the prevention of new infections in women of childbearing age and the prevention of unintended pregnancies in HIV infected females. These interventions include:

- Empowering women with knowledge and skills to prevent HIV/STI transmission
- Promoting safer sex behaviour (correct and consistent use of condom and reduction of the number of sexual partners)
- Promoting use of an effective Family Planning method e.g. Tubal Ligation, Depo Provera oral contraceptives or Norplant.
- Early diagnosis and complete treatment of Sexually Transmitted Infections

Secondary Prevention

These interventions are aimed at preventing transmission of HIV from each infected woman to her unborn child and include:

- Ensuring that HIV infected females and their partners make informed reproductive choices
- The use of anti-retroviral (ARV) drugs.
- Obstetrical interventions such as avoidance of some invasive procedures (e.g. Episiotomy and artificial rupture of membranes, fetal scalp monitor) and interventions to prevent prolonged labour.
- Ensuring that all HIV-infected mothers receive counseling about the risks and benefits of various infant feeding options and specific guidance in selecting the option most likely to be suitable for their situation.
- When replacement feeding is acceptable, feasible, affordable, sustainable and safe, it is recommended that HIV-infected mothers avoid all breastfeeding.
- The major factors that limit compliance of patients to prevent MTCT are:
- Lack of confidence that health care workers will maintain confidentiality.
- The perception that they (patients) will be victimized and discriminated against by health care workers due to the stigma associated with the disease.

Each patient/client must therefore be assessed and a plan developed based on the particular needs and circumstances for continued management.

Therapeutic Interventions

Each of the following regimes has been proven to reduce significantly the risk of mother to child transmission and may be utilized as appropriate:

- Triple therapy utilizing Highly Active Antiretroviral Therapy (HAART) regime where indicated.
- A short course of AZT given 300 mg orally twice daily starting between 28-36 weeks of gestation and 300 mg orally intrapartum every 3 hours as well as to the new born at 4mg/kg every twelve hours for up to four weeks.

- A single (200 mg) dose of Nevirapine (NVP) given at the onset of labour to the mother and 2mg/kg body weight Nevirapine suspension given to the infant within the first 72 hours after birth.

The effect of AZT/NVP in reducing the transmission appears to be partly through the reduction of maternal viral load and also by acting as post exposure prophylaxis to the infant.

Counselling for Pregnant Women Who Test HIV Negative

Counselling provides an opportunity for the patient/client who has received a negative result following the HIV test to:

- Make choices to reduce her risks of HIV infection in the future (including talking to partners about testing, decreasing the number of partners, etc.)
- Understand and maintain safer sex behaviour (including abstinence, partner reduction and condom use) in order to prevent HIV infection in the future.

Counselling for Pregnant Women Who Test HIV Positive

Counselling provides an opportunity for the patient/client who has received a positive result following the HIV test to:

- React to an HIV-positive result and receive empathy and support from a counselor
- Choose antiretroviral prophylaxis therapy to reduce the risk of mother-to-child transmission or to access antiretrovirals for her own health
- Understand infant feeding options and choose the most appropriate one
- Learn more about HIV infection and its implications for her health
- Prepare to talk to her partner about her HIV status and discuss HIV testing
- Make informed choices about sexual behaviour (condom use) and future fertility, including tubal ligation or other long-term methods such as Depo Provera, Norplant, etc.
- Be prepared for the follow up during pregnancy and delivery

The Role of Group Education

Group education provides antenatal clients with the essential information about HIV/AIDS so counselors can focus on counseling instead of educating their clients. Group education can be conducted by a staff member, volunteer or a community peer educator.

The following topics are covered in group education sessions:

- What is HIV/AIDS
- National HIV/AIDS statistics
- Local myths and misconceptions
- Routes of HIV transmission
- HIV risk behaviors
- Relationship between Sexually Transmitted Infections and HIV transmission and infection
- How to prevent HIV infection
- How to decrease risks of HIV, including talking to partners about testing
- Explain basic principles of the HIV test and procedure
- Mother to child transmission
- Explain the benefits of Mother-to-Child Transmission Interventions
- Availability of Voluntary Counselling and Testing (VCT)
- Special care and services for HIV positive women

Antenatal Follow-up for HIV Positive Pregnant Women

- Refer the HIV positive mother to clinic for evaluation
- Advise the mother not to miss any of her antenatal appointments
- Appointments should be once per month until seven months and every two weeks until 36 weeks then every week until the baby is born or as ordered by the clinician at the clinic.
- Advise the mother about healthy nutrition and meals and if necessary refer her to the nutritionist.
- Advise the pregnant woman to avoid smoking and alcoholic beverages
- Advise the client to bring her antenatal card at the time of labour
- Reinforce information on the advantages and disadvantages of breastfeeding and breast milk substitutes.
- If she chooses to breastfeed, demonstrate to the mother good breastfeeding techniques to help prevent and treat breast problems (eg. Cracked nipples, mastitis) that can increase the risk of HIV-transmission.
- If she chooses to use replacement feeds, remind her not to breast feed newborn and to ask the maternity ward nurse to give medication to her baby before discharge

- Refer the pregnant mother back to the clinic for clinical and medical assessment by a doctor especially if she complains of fever, loss of weight, loss of appetite, weakness, and/or night sweats.
- Fully involve the relevant spouse in the antenatal management of the patient. (Encourage mother to bring her partner to the clinic)
- Give the mother adequate supply of antiretrovirals to serve at least one week past the next visit date.
- All participants will undergo the standard antenatal investigation including syphilis serology, HIV, Haemoglobin, sickle, group, and Rhesus and urine test.
- Referral at any stage of pregnancy for obstetric or other medical indications according to Maternal and Child Health guidelines for high-risk pregnancy still obtains.