In Cameroon, sexually transmissible infections (STI) and HIV/AIDS constitute a real public health problem. They account for approximately 10% of the grounds or reasons for consultation for the sexually active population.

According to results of the EDS III 2004, young women are more exposed to HIV/AIDS than men. Indeed, at between 20 and 24 years old, they are three times more exposed (7.9% of women are carriers of the AIDS virus, against 2.5% for men).

In the absence of any intervention, 35 HIV infected women out of 100 transmit the virus to their baby. In the event of intervention, this figure can drop to 13 women out of 100. (ONUSIDA 2003).

STI/HIV/AIDS groups together all infections whose transmission is done mainly through sexual relations. It is the case of HIV, syphilis, gonococci, herpes simplex, chlamydia, candidiasis or fungi, chancroid, etc.

Some STIs in women do not present any symptom. They can thus be infected without knowing. If STIs are not well treated, they can develop into chronic diseases and have serious consequences.

**STI and HIV/AIDS are transmitted through:**
- Unprotected sexual intercourse (vaginal or anal penetration)
- From mother to child: during pregnancy to delivery or after birth (HIV) during breast feeding
- Blood transfusions or other contacts with blood or with contaminated biological products (urine, vaginal secretion, sperm, etc...)

It is important to be protected against STI more especially as they constitute a good entry point for HIV/AIDS.

**HIV** means: Human Immuno-deficiency Virus

The HIV gradually destroys white blood cells of our body. A woman infected with HIV loses her strength, becomes weak and is exposed to certain infections known as opportunistic (diarrhoea, tuberculosis, skin diseases...)

**AIDS** means: Acquired Immuno-deficiency Syndrome. AIDS is the name of the disease caused by HIV.

At the moment, AIDS cannot be cured, but when the diagnosis is quickly done, one can live with the HIV for a very long time.
WHAT IS PMTCT?

PMTCT is the whole set of interventions which contribute to the reduction of the risk of transmission of HIV from the mother (parents) to the child. The transmission of HIV from the mother (parents) to the child can take place during pregnancy (20%), during delivery (65%) or during breast feeding (15%). The Mother/Child Transmission of HIV is the most important source of infection in children of less than 15 years old.

The PMTCT+ is the family management model of HIV infection. Management or care targets the child, the mother, the partner and the family. It is a multidisciplinary and global management approach of cases of HIV/AIDS.

The PMTCT Programme in Cameroon started in its pilot phase in the year 2000 in the Centre, North-West and Littoral Provinces. It witnessed an extension in 2002. In the West, South-West Provinces. It gained ground from July 2003 covering the rest of the provinces (extension plan).

THE AREAS OF INTERVENTION OF THIS PROGRAMME ARE:

- To prevent the HIV infection in women of child-bearing age and future parents;
- To prevent unwanted pregnancies in HIV infected women;
- To prevent the transmission of HIV from mother to child during pregnancy;
- To ensure the comprehensive management of infected women and their family.

THE MINIMUM PACKAGE OF CURRENT SERVICES IS MADE UP OF:

- Community mobilization
- Individual counselling and testing
- ARV prophylaxis: AZT - Nevirapine in a single dose - 3TC
- The practice of low risk delivery
- Counselling in support for feeding
- Access to treatment by ARV drugs
- Access to family planning

To date, the services of PMTCT are offered in maternal and infant care facilities throughout the 10 provinces of the country. 350 health units are functional for established PMTCT and 64 Units for the management or treatment children with ARV drugs.

The Programme is offered by trained health personnel in maternal and infant care health structures.
a) At Community level

The PMTCT Programme starts in communities and ends in the community passing through health units where a package of activities is envisaged to reduce the transmission of HIV from mother (parents) to child. This deals with primary prevention, counselling for voluntary and confidential testing and psychosocial, medical, nutritional and community care.

There are within communities, organized structures working for the promotion of health and the welfare of women, children and families such as:

- Women’s associations and networks;
- Support groups made up of PLWHAs;
- Dialogue structures;
- Groups of young people.

The community relay workers give exact information to the populations on all that relates to the fight against HIV/AIDS and more particularly those relating to parent-child transmission. They are supported in their actions by the media in particular community radios which broadcast advertisement, micro-programs and magazines both in official languages and national languages.

These community relay workers have as principal missions to lead the greatest number of pregnant women to attend ANC services.

b) At the level of health units or facilities:

Counsellors and health personnel for the psychological care and medical follow-up.

This programme benefits from the support of development partners.

The gate way to the PMTCT programme is double, first at the level of community with community relay workers and then at the hospital through antenatal consultation (ANC), the delivery room or family planning services.
Antenatal consultation makes it possible to detect and confirm pregnancy and to manage hazards and possible complications.

Information and counselling are given her on the monitoring of pregnancy, delivery and post partum, birth control and child spacing, the prevention of mother-to-child transmission of HIV.

The pregnant woman should at least go for ANC at least 4 times. It would be preferable for her partner to accompany her there.

**ANC services are as follows:**

**1st ANC: 4 months**

It is this one that confirms the real state of pregnancy of the woman. It includes:

1) **Reception and information:**
   - The health worker welcomes the client and gives her all information on the services provided including HIV testing.

2) **History taking**
   - This makes it possible to identify the woman and to know her family, medical/surgical, gynaecological/obstetrical and even immunological history.

3) **Physical and obstetric examination**
   - It makes it possible to observe, palpate, examine the woman in a bid to detect any physical anomaly. It is at this level that the vital signs are taken and assessed.
   - A pregnancy that is not yet visible can be confirmed by obstetrical examination.

4) **Laboratory test**
   - It makes it possible, through the testing of certain biologicals specimens such as urine, blood, stool, vaginal secretions, to detect pathologies likely to weaken the health of the woman and the foetus such as anaemia, intestinal parasitic diseases, HIV/AIDS and STIs.

5) **Counselling**
   - The prescription of certain drugs such as folic acid, IPT (Intermittent preventive treatment of malaria) and appointments; The handing over of insecticide-treated mosquito nets; the administration of the first dose of intermittent preventive treatment in the presence of the health worker (she will be given 3 doses of this treatment with 2 months intervals between the doses during the pregnancy).

**2nd ANC : 7 months**

At this stage of pregnancy, the woman does not yet have major problems, as she is better used to her state. Customary monitoring with echography is done to detect risk cases. The antiretroviral prophylaxy can be started. It is given free.

**3rd ANC: 8th month**

At this level, the health worker assesses the development of the foetus and prepares the woman for delivery. The pregnant woman then completes her vaccines. (she will be administered 2 doses of tetanus toxoid with at least 28 days interval during pregnancy).
4th ANC (9 months):
The last before delivery. At this stage, the health worker evaluates the prognosis of delivery. Will it be normal? Are there risks of complications?

Counselling for HIV testing: is an individual and confidential discussion between the pregnant woman or woman of childbearing age and the counsellor. The woman has the right to refuse specimen taking for testing if she is not ready to know her HIV status (opt against). There are voluntary testing centres (VTC) all over the national territory. Testing for HIV/AIDS is free of charge for pregnant women undergoing ANC.

Post-counselling (counselling after testing)
After the test, an appointment is made with the client for collection of results from the counsellor who did the pre-test counselling. This counselling is done under the same conditions as for the first except that in this case, each partner is given results individually. The partners are no longer taken together but separately. This consists in:

- Providing all necessary and specific information on STI/HIV/AIDS;
- Give specifications on what to do depending on the status of the client;
- Guide the HIV-positive client with respect to management and follow-up structures; and existing support groups;
- Encourage the client to share her results with persons close to her (partner, friend, relative, family member, etc.);
- Inform the client about preventive measures she could have. Also give her advice on feeding.

OBSTETRIC AND POSTNATAL CARE

- The risk of transmission of the virus from the mother to the child is very high during childbirth. As from the first uterine contractions the pregnant woman takes antiretrovirals which contribute to reduce the transmission of HIV from the mother to the child.
- The health worker observes Good Delivery Practices. It prevents untimely vagina examinations, respects membranes, (does not break the amnion), practises vaginal disinfection, sucks up the baby only in the event of need, does not draw the umbilical cord and decontaminates all the objects and equipment used in the delivery room in a decontamination solution.
- After birth, the child receives, as from the 6th hour and latest in 72 hours, an antiretroviral treatment to reduce the transmission of HIV from the mother to the child. This treatment is free.
The management of the HIV person or any person living with HIV (PLWHA) is done at three levels: psychosocial and community, medical, nutritional.

**Psychosocial and community management:**
Psychosocial guidance is a significant stage in the comprehensive management of HIV infection. It is based on counselling. It allows the person infected and/or affected by HIV/AIDS to accept his/her situation. Each person infected with HIV/AIDS is a specific case. He/she needs support, from the counsellor, support group, family and community to face the multiple challenges of a chronic disease which is still subject to social discrimination.
These various community stakeholders and medical structures also play a key role in the mobilization of communities and comprehensive management.

**Medical management:**
Medical management of PLWHA includes: prevention and treatment of opportunistic infections through drugs, antiretroviral treatment, the management of malaria and the regular follow-up of both parent and child.
ARVs are exclusively issued by Approved Treatment Centres (ATC)), Treatment Centres affiliated to ATC, Management Units (MU).
Antiretroviral treatment is free in all its forms for children of 0-15 years.

The initial prescription of antiretrovirals is done by consensus of a Therapeutic Committee. The role of the latter is to manage treatment failures and cases of resistance to antiretrovirals. In addition, it provides supervision, tutoring and quality control in the health units which are attached to it.
Feeding for the child born of HIV-positive mother

Nutritional support for HIV-positive mothers decreases the risk of postnatal MTCT of HIV. Health workers provide counselling to mothers for the choice of type of food for the newborn. An infected pregnant woman will have to choose one of the three options suggested. Whatever the choice of the mother, it must be constant.

*The association of breast-feeding and artificial foods is not recommended in the feeding of the child born of the HIV-positive mother.*

- **1st option**: breast-feeding. This option has two alternatives: exclusive breastfeeding with early interruption and breastfeeding by a wet nurse.

- **2nd option**: baby foods sold in the market.

- **3rd option**: home preparations from animal milk.
  The children who are fed with modified animal milk need micronutrient/vitamin supplements because animal milk contains low iron, zinc, vitamins A, C and folic acid.
  All babies, including those under strict bottle-feeding, need food supplements as from 6 months. The latter is not intended to replace milk. They must eat each day or as regularly as possible livestock products such as meat, chicken, fish, dairy products or any other local source of proteins; fruits and vegetables rich in vitamins.

Feeding for the HIV-positive pregnant or nursing woman

The HIV-positive pregnant or nursing woman needs abundant and varied food to delay progress towards disease and to allow appropriate development of the foetus or newborn.

Her food should comprise meals enriched with soya, groundnuts, marrow seeds, milk, meats of all kinds, fish, grasshoppers, caterpillars; She should also eat crayfish, egg, liver, mushrooms, sesame seeds, vegetables: oils natural red palm, soya, maize, groundnut or olive oil etc. The regular consumption of locally available fruits and vegetables is important for vitamins and minerals which reinforce immunity: papaw, pineapple, water melon, mango, soursop, etc. In case of diarrhoea, she should eat carrot, rice soup or green banana purée.

In the event of wounds in the mouth or thrush, she should avoid spiced and hot food. It is recommended to drink a minimum of one litre and half of water, (five glasses), throughout the day. She should avoid the consumption of alcohol and tobacco which are factors worsening immuno depression.

Rules of hygiene should be respected when preparing meals. Certain foodstuffs should not be removed from one’s diet under the pretext that this can harm to the child she is bearing or breastfeeding.
Children born of HIV-positive mothers are exposed to diseases even when they received anti-retroviral prevention. It is thus important that they should be regularly followed up. A follow-up timetable is proposed to the mother one week after birth. The frequency of follow-up consultations is monthly.

Follow-up relates to growth, vaccination, and prevention of opportunistic infections, to assure a good development of the newborn.

A child born of an HIV-positive mother and not presenting any sign of AIDS must be vaccinated in accordance with the national immunization schedule.

| 0 to 1 month | BCG  OPV O |
| 6 weeks      | DTP- Hep I OPV 1 |
| 10 weeks     | DTP-Hep II OPV2 |
| 14 weeks     | DTP-Hep III OPV3 |
| 9 months     | Rouvax yellow fever vaccine |

A child presenting possible signs of AIDS should not be given the yellow fever vaccine and BCG

Where to go for vaccination:
- In all integrated health centres;
- District, Provincial Hospitals and others ranking as such;
- Central and referral hospitals in Cameroon.

Testing for HIV in the child should be done between 15 and 18 months in accordance with the national testing algorithm.