

HIV/AIDS and WOMEN

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Disclosure slide

NONE

LEARNING OBJECTIVES

- **Having a General Overview of Neurological Complications Related to HIV**
- **Knowing the epidemiological reality in the world of HIV/AIDS women**
- **Knowing the Special Features of HIV/AIDS and Women**

KEY MESSAGE

- Neurological complications related to HIV are similar in men and women.
- Globally 33 million people living with HIV and almost half are women.
- Women are at least twice more likely to acquire HIV from men during sexual intercourse.
- Women have more toxicities associated with HAART: rash, lipodystrophy, and side effects on the nervous system.
- Women have more incidence of non-adherence than men.
- Women develop AIDS faster than men with the same viral load.
- Mother-to-child transmission is the most common way that children become infected with HIV.
- An HIV-positive mother who is not being treated for her HIV during pregnancy, labor or delivery has a 25%-45% chance of passing the virus to her baby.

Neurological Complications Related to HIV

GENERAL OVERVIEW

HIV and Nervous System

- 10% patients that are diagnosed with AIDS also have some neurological complaint, 40% present neurological signs or symptoms during the course of the infection, and 80% of the autopsies present neurological alterations. ^{1,2}

HIV and Nervous System

- Our understanding of the nature and pathogenesis of the neurological complications of HIV has increased dramatically in the past 30 years.
- After the widespread use of a new treatment regimen, Highly Active Antiretroviral Therapy (HAART), a significant decrease in the number of the opportunistic infections, and an increase in patients' life expectancy were observed. ^{3, 4, 5}

Neurological Complications Related to HIV

- No part of the NS is invulnerable to HIV-related disease: brain, spinal cord, peripheral nerves, and muscles may all be affected. ⁴

Neurological Complications Related to HIV^{4,5}

- PRIMARY
 - HIV dementia
 - HIV progressive encephalopathy of childhood
 - HIV cerebrovascular disease
 - HIV myelopathy
 - HIV motor-neuron disease
 - HIV neuropathy
 - HIV myopathy

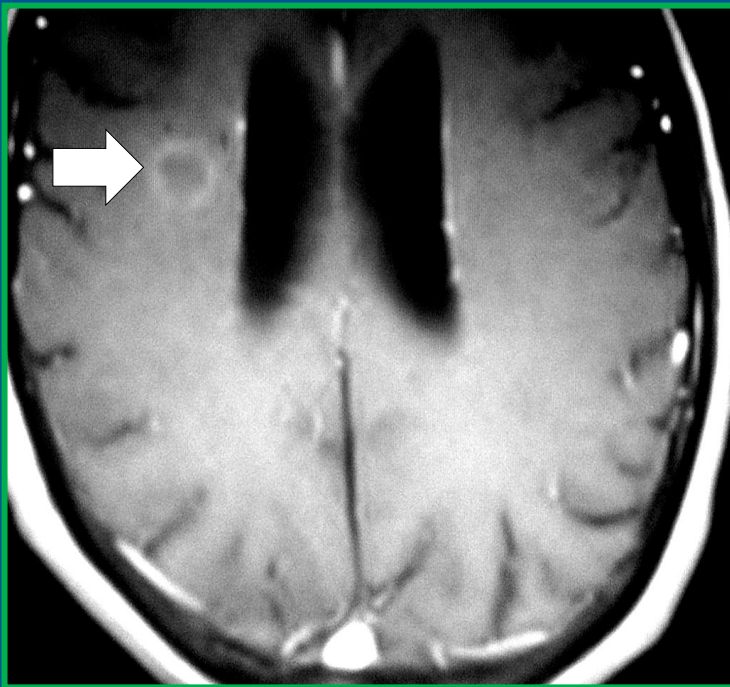
HIV Dementia



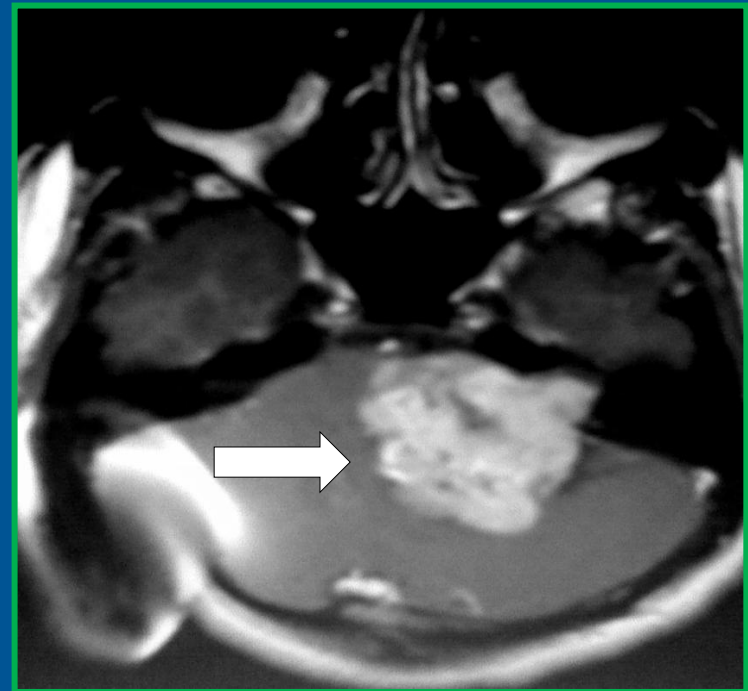
Neurological Complications Related to HIV ^{4, 5}

- SECONDARY
 - Neoplasms:
 - Primary CNS lymphoma
 - Metastatic systemic lymphoma
 - Opportunistic infections in CNS:
 - BACTERIA:
 - Mycobacterium tuberculosis and atypical mycobacteria
 - Syphilis
 - Listeria
 - Nocardia
 - FUNGI:
 - Cryptococcus
 - Coccidiomycosis
 - Histoplasmosis
 - Aspergillus
 - Candida albicans
 - VIRUSES:
 - Herpes viruses
 - Cytomegalovirus
 - Herpes simplex virus
 - Varicella zoster virus
 - JC virus
 - HTLV/I-II
 - PARASITES:
 - CNS toxoplasmosis
 - Tripanosoma cruzi (Chagas' disease)
 - Drugs

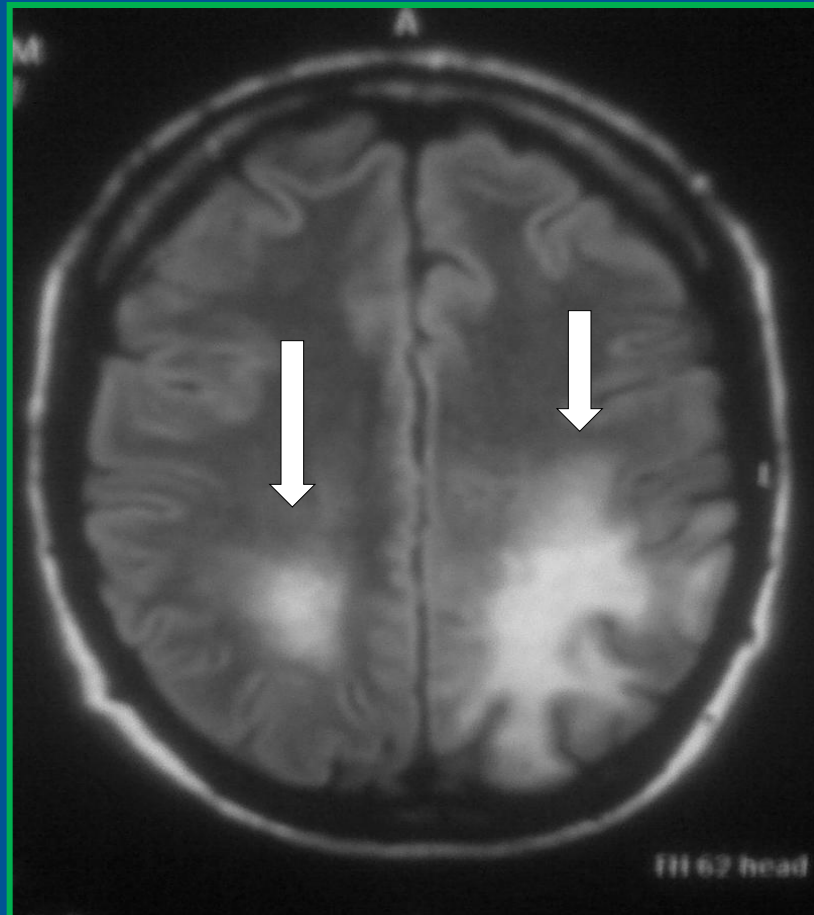
CNS Toxoplasmosis



Primary CNS Lymphoma



JC Virus



SPECIAL FEATURES HIV/AIDS AND WOMEN

Adults and children estimated to be living with HIV | 2013



Total: 35.0 million [33.2 million – 37.2 million]

Source: UNAIDS



EPIDEMIOLOGY ⁶

...a day in 2013

About 6,000 new HIV infections a day in 2013

- About 68% are in Sub Saharan Africa
- About 700 are in children under 15 years of age
- About 5,200 are in adults aged 15 years and older, of whom:
 - almost 47% are among women
 - about 33% are among young people (15-24)

Source: UNAIDS



One in five HIV+ people in Chile are women.

One in three HIV+ people in the United Kingdom are women.

Four in ten HIV+ people in India are women.

Almost six in ten HIV+ people in sub-Saharan Africa are women.

WOMEN: FACTS ⁶

- There are clear sex-related biological differences between men and women. Diseases that affect the two sexes differently are studied separately. However, some diseases affect both men and women, but their incidence or outcome are clearly different. In human immunodeficiency virus infection, the potential differences in the effects of antiretroviral therapy are poorly characterized and few studies have been designed to elucidate these differences. Moreover, women are usually poorly represented in clinical trials of antiretroviral drugs.

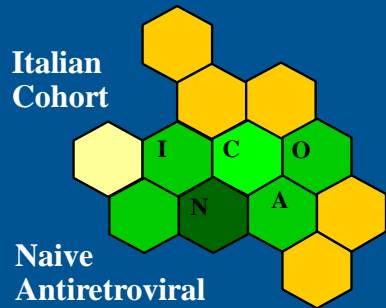
WOMEN: FACTS ⁶

- **Some women feel guilty or embarrassed about having HIV.**
- **17% higher likelihood of acute stress disorder among women compared with men.**
- **Have more depression than men.**
- **Women scored lower in all QOL domains, and had more symptoms of depression/anxiety than men.**
- **30–60% of women with HIV in the community and clinic samples report depression.**
- **Substance use is very common among those with HIV infection.**
- **Substance use can increase levels of distress, interfere with treatment adherence, and lead to impairment in thinking, and memory.**

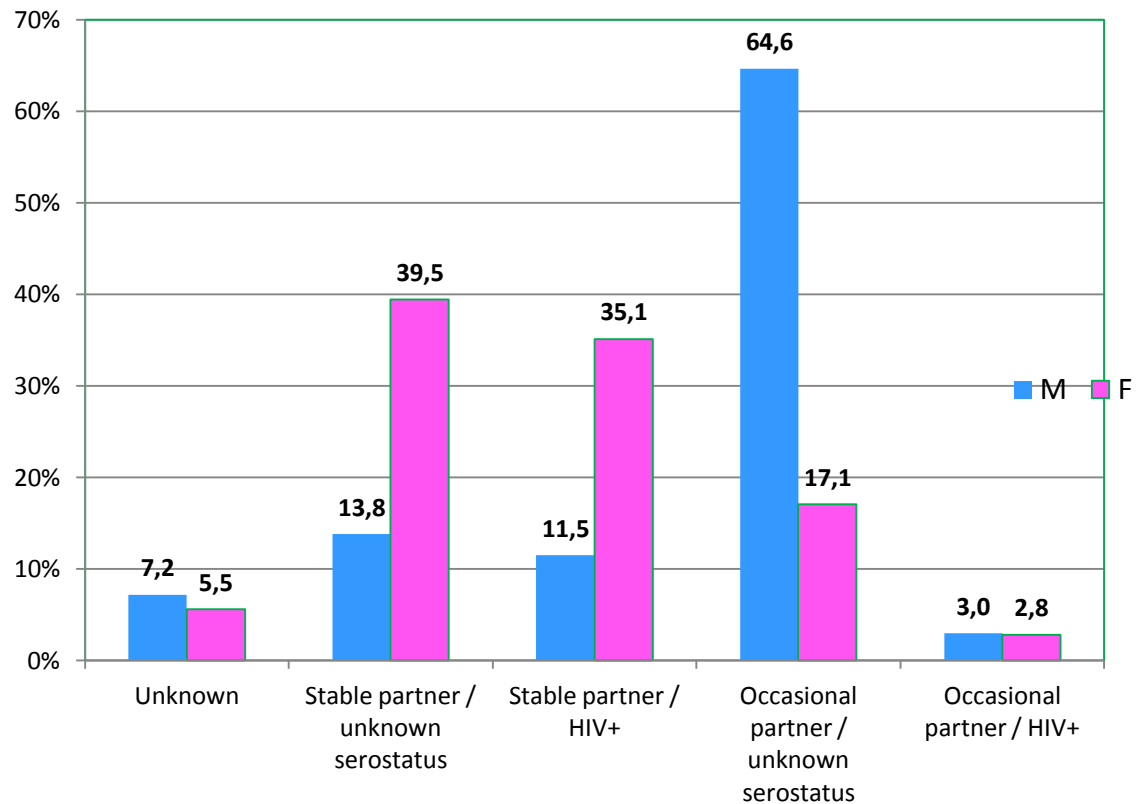
WOMEN: FACTS ⁶

- **Women are at least twice more likely to acquire HIV from men during sexual intercourse.**
- **Have more toxicities associated with HAART: rash, lipodystrophy, and side effects on the nervous system.**
- **Have more incidence of non-adherence than men. ⁷**
- **Women develop AIDS faster than men with the same viral load.**

Up to 75% of women are infected by their stable partner



Source of heterosexual HIV transmission by gender



When women are first diagnosed ^{6, 9, 10}

- **Women generally have lower viral load than men with the same CD4 and Clinical Stage.**
- **Women are more likely than men to develop bacterial pneumonia.**
- **Women have higher rates of herpes infections than men.**
- **Women get thrush (a yeast infection) in their throats more often than men.**
- **Men are eight times more likely than women to develop Kaposi's sarcoma (a cancer-like disease caused by a herpes virus-8).**

PREGNANCY 6, 9, 10

- **Mother-to-child transmission of HIV is the spread of HIV from an HIV-infected woman to her child during pregnancy, childbirth (also called labor and delivery), or breastfeeding. Mother-to-child transmission is the most common way that children become infected with HIV.**
- **An HIV-positive mother who is not being treated for her HIV during pregnancy, labor or delivery has a 25%-45% chance of passing the virus to her baby.**
- **When an HIV-positive mother receives antiretroviral drugs during pregnancy, labor, and delivery, has her baby by caesarean section, and avoids breastfeeding, the chance of passing the infection to her baby falls to less than 2%. The newborn babies are also given treatment after birth to protect them.**

PREGNANCY ^{6, 9, 10}

- **HIV is the leading cause of death among women of reproductive age.**
- **In 2013, 54% of pregnant women in low- and middle-income countries did not receive an HIV test, a key step to accessing HIV prevention, treatment and care.**
- **Without treatment, about one third of children living with HIV die by their first birthday and half die by their second.**
- **For children, the health benefits of HIV treatment are magnified. Beginning antiretroviral therapy before the twelfth week of life reduces HIV-related mortality in children living with HIV by 75%.**

STRATEGIES

PUBLIC POLICY
HIV DIAGNOSIS AND
PREVENTION



PUBLIC POLICY
TREATMENT COVERED

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