ACQUIRED IMMUNODEFICIENCY SYNDROME (AIDS) 
IN THE AMERICAS

The document provides a brief summary of the HIV/AIDS situation in the Americas and updates the Executive Committee on several issues discussed at the previous meeting including the status of second generation surveillance of HIV/AIDS and sexually transmitted infections (STI), as well as the current responses and challenges faced by Member States.

The Committee is requested to review the document and provide comments to assist the Organization in terms of policy definition and implementation on the following issues: (a) appropriate models of HIV/AIDS care including access to antiretroviral drugs; (b) prevention of maternal to child transmission; (c) enhanced STI prevention and control activities; and (d) sustained interprogrammatic efforts to guarantee the safety of blood and blood products.
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1. Evolution of Epidemics of HIV/AIDS and Sexually Transmitted Infections in the Region: Challenges and Opportunities

1.1 Current Dimensions of the Problem

In spite of the substantial efforts displayed in the last decade, epidemics of HIV/AIDS and sexually transmitted infections (STI) still represent a serious public health problem in the Region of the Americas.

The Pan American Health Organization estimates that there are 1.6 million people living with HIV in Latin America and the Caribbean, and close to one million in North America. Adult prevalence rates in the Region, which reflect the proportion of adults (15 to 49 years of age) living with HIV/AIDS in the Americas in 1998, are estimated to be about 1 in 200 in North America and Latin America (0.56% and 0.57%, respectively) and 1 in 50 in the Caribbean (1.96%). These prevalence rates are higher than those of other regions, such as Western Europe, the Western Pacific, and Australia and New Zealand. The Caribbean rates are second to those of Sub-Saharan Africa, which is the hardest-hit region in the world.

At the present time, the HIV/AIDS pandemic consists of clusters of different epidemics, with a large variety of routes of transmission and population groups affected. Thus, the driving forces and routes of transmission of the HIV/AIDS epidemic differ both between countries and within the same country. A common thread is the concentration of the HIV infection in those groups that are socially and economically marginalized, which accentuates the inequities in access to health care.

HIV/AIDS has taken its greatest toll on men who have unprotected sex with other men and injecting drug users. However, in some places there is clear evidence of increased spread among impoverished and illiterate segments of society. Heterosexual transmission is also becoming more prominent as indicated by rising rates in women and, consequently, infants.

The main factors that define the severity of the epidemics and cause concern among public health experts include:

(a) the presence of social and cultural obstacles to modifying high risk behaviors, especially among the more vulnerable groups;

(b) the shifting of the HIV epidemic to younger populations;
the augmented prevalence of STI, including HIV, among groups with restricted or limited access to health education and health care services;

the continuing biological, social, and economic vulnerability of women;

the increasing number of cases of mother-to-child transmission (MTCT) of HIV and STI;

evidence of various HIV-1 pathogenic subtypes in the Region;

development of drug resistances by sexually transmitted pathogens, including HIV.

1.2 Typology of the HIV/AIDS/STI Epidemics in the Region

Although the HIV/AIDS epidemic is still concentrated and affecting mostly men, heterosexual transmission is becoming more prominent in the Region as indicated by rising rates of infection among women. Twenty per cent of HIV-positive adults in North America and Latin America and one in three adults in the Caribbean are women.

As a consequence, increased rates of HIV/AIDS among infants have been documented in almost all Member States, which is a reflection of an increase in the MTCT of HIV. In countries in the Region with low transmission or concentrated epidemics, the HIV prevalence among pregnant women is under 1%. However, in countries with generalized epidemics—where HIV has spread to the general population—the prevalence of HIV among pregnant women is greater than 5%. This is the case in the Bahamas, Guyana and Haiti, as well as in some urban areas in Brazil and on the Caribbean coast of Honduras.

Until recently only one HIV-1 subtype (B) had been identified as the causal agent of the AIDS epidemic in the Region of the Americas. However, some studies have demonstrated that other subtypes have also been introduced into the Western Hemisphere. This fact may impact the dynamics of transmission, the pathogenesis of AIDS, and the development of an effective vaccine. Moreover, the introduction of antiretroviral therapies has elicited the development of resistant viral strains that may already be circulating in the Region.

In order to plan efficient strategies for HIV prevention and control, epidemiological surveillance must be extended beyond reporting of AIDS cases. Sentinel surveillance, studies of HIV/AIDS seroprevalence, behavioral surveillance, and molecular surveillance are epidemiological tools that need to be incorporated into a more up-to-date “second generation” surveillance approach.
1.3 **Sexually Transmitted Infections**

Sexually transmitted infections (STI) not only increase the likelihood of acquiring HIV, but they are a serious health problem themselves. Even though the actual number of cases of STI (other than HIV) that cause clinical manifestations is not known, conservative estimates give a figure of around 50 million cases annually of treatable STI in the Region of the Americas. Some studies indicate that around 20% of sexually active young adults and teenagers contract an STI each year. These figures may serve as an indicator of the magnitude of unprotected sexual intercourse that occurs despite all the educational efforts to inform the general public about this extremely common behavioral risk factor and the threat of HIV. There is a great need to strengthen the local capacity to better assess the situation of STI, the risk behaviors associated with their transmission, and the factors that hamper their prevention and control.

2. **Current Responses and Challenges**

2.1 **The Challenge of Improved Surveillance**

The reporting of AIDS cases is not an adequate strategy by itself. Reporting of HIV infection permits a better understanding of the current dynamics of the epidemics. When using this approach, however, caution should be exercised to prevent the potential abuse of human rights, the possible violation of confidentiality or the misuse of resources by searching for evidence of infection among targeted groups. Planning of HIV surveillance must be carefully conducted to ensure technical accuracy and ethical correctness.

Molecular surveillance is closely linked to HIV infection surveillance and requires the same technical and ethical concerns to be raised whenever samples are obtained from individuals in a population for testing purposes. In collaboration with the Office of Naval Research of the United States, several countries (including Argentina, Bolivia, Ecuador, Peru, and Uruguay) will soon embark in a multicenter study to typify the genetic characteristics of the HIV circulating in those settings. In addition, great progress has been made in the multiagency, multicountry approach to “second generation HIV/AIDS/STI surveillance” with the participation of country experts and agency representatives at the Latin American/Caribbean Epi-Networks meeting in April 1999.

2.2 **Provision of Counseling/Testing Services**

Sound public health policies should emphasize the value of voluntary and informed access to HIV testing. Furthermore, the added value of counseling should be stressed: it is an opportunity to provide support to the HIV-infected person and ensure adherence to
treatment. Moreover, counseling provides the best opportunity to persuade the individual to collaborate in stopping the spread of HIV by adopting safer behaviors and practices and ensuring that her/his partner also has access to counseling and testing services. Even if the test result is negative, effective counseling can help a person make plans for her/his future sexual health.

Counseling should be more than the mere provision of factual information. When it is properly provided, counseling helps the individual to cope with test results. If positive it can help a person to develop an appropriate life plan. For this reason, counseling is more than a prevention strategy—it is the first step in the provision of comprehensive care for people living with HIV. To this end, the PAHO Secretariat has produced training and reference materials: Guidelines for HIV/AIDS Counseling; Guidelines for Domiciliary Care for Persons Living with HIV/AIDS; and Guidelines for the Management of Women with HIV/AIDS (includes the prevention of mother-to-child transmission). These materials are being disseminated and used in Member States.

2.3 The Need for HIV/AIDS Care Models

Recent information in the media about the benefits of antiretroviral drugs has caused a profound effect on the provision of care for HIV-infected people. In some settings a rather simplistic but untenable response to HIV care has been limited to trying to provide access to antiretroviral medications, neglecting other more basic and affordable interventions.

While PAHO recognizes the value of antiretroviral therapy (ARV) in the management of HIV infection and in the prevention of perinatal transmission of HIV, Member States need to view and use ARVs as one component of a “package” of comprehensive care.

It is imperative that policy directives aimed at improving access to ARV treatments do not interfere with the provision of a comprehensive continuum of care. To fully combat the spread of HIV/AIDS, a spectrum of care needs to be available and accessible that consists of: prevention, education, counseling, access to HIV testing, prophylactic treatment of opportunistic infections, treatment of STI, nutritional interventions, domiciliary options, management of stress and emotional and social support—all delivered with respect for the patient’s dignity.

Thus, in two Regional Consultations (November 1998 and May 1999), the “building blocks” for improving the quality and enhancing the provision of HIV care services are being agreed upon. These building blocks will serve as guiding principles to design comprehensive, yet affordable services for the increasing numbers of men, women
and children in the Americas living and coping with HIV infection. Similarly, PAHO has continued to pursue the financial, legal, technical and administrative mechanisms to reduce ARV costs through the establishment of a revolving fund.

2.4 **Prevention and Control of Sexually Transmitted Infections**

In 1998, a survey of countries demonstrated that STI programs had been reduced considerably in most countries of the Region while resources and efforts were diverted to address the HIV/AIDS epidemics. However, a renewed interest in the prevention of STI as a co-factor of HIV transmission has been fueled by scientific evidence that proper management of STI reduces the sexual transmission of HIV by 50%. PAHO and WHO have been promoting the syndromic management of STI, and the end of 1998 had exposed all countries in the Region to the latest and most appropriate training materials. National training has now been conducted in seven countries. In addition, second generation STI surveillance guidelines were reviewed and endorsed at a regional workshop in April 1999 and will serve as a practical tool to improve STI surveillance in the Americas.

Fueled by the urgency to curb perinatal transmission of HIV, the old and often neglected problem of congenital syphilis is being addressed more forcefully by an increasing number of countries (e.g., Bolivia, Brazil, Cuba, Mexico, Panama, Uruguay). Also, PAHO has developed protocols for the prevention and treatment of STI in pregnant women.

Following the WHO STD-PAC initiative, a Regional Task Force on STI is being organized in the Americas with inputs from country experts, other agencies and relevant PAHO programs to devise practical approaches for resource mobilization and technical strengthening of national STI control efforts.

2.5 **Reduction of Mother-to-Child Transmission of HIV**

With the rise in heterosexual transmission of HIV in the Americas, there has been a concomitant increase in mother-to-child transmission (MTCT). As of September 1998, 6,323 cases had been reported in the Region.

There are several preventive strategies that can reduce the risk of a mother passing her HIV infection to her unborn infant. These include proper nutrition, replacement feeding for infants at risk, intrapartum management, elective cesarean section, and vaginal lavage, in combination with antiretroviral medications

Studies in Thailand have shown that a short course of zidovudine (AZT) therapy given late in pregnancy and during delivery reduces the rate of HIV transmission by one
half (51%) and is safe for use in developing regions. Compared to the ACTG 076 protocol, this regimen involves a much shorter course of therapy during pregnancy (generally the last four weeks), an oral dose rather than an intravenous dose during delivery and no infant dose. This regimen costs around $80 – $100 compared to $1,000 for the ACTG 076 protocol.

The most recent study, the PETRA trial, has shown that an even briefer treatment given at labor and followed by a week of combined drug therapy (AZT and 3TC) for both mothers and infants reduced the rate of MTCT by 37%. In this regimen, women took the double-drug pills twice a day and the infant took the drugs in syrup form for one week. This form of drug therapy is estimated to cost 1/5 of the price of the Thailand regimen (approx. $16 - $20).

A large study of over 8,500 mother-infant pairs has shown that pregnant women infected with HIV can reduce the risk of transmitting the virus to their infants by approximately 50% if they deliver by elective cesarean section before they have gone into labor and before their membranes have ruptured.

At the present time, countries such as Argentina, Bahamas, Barbados, Brazil, Chile, Cuba, Uruguay, and others are committing significant resources to successfully prevent MTCT of HIV.

2.6 Maintenance of a Safe Blood Supply

The renewed efforts triggered by the availability of HIV screening tests in 1985–1987 have resulted in multiagency and interprogrammatic collaboration to improve blood safety in the Americas. In addition to HIV, hepatitis B, malaria, syphilis and Chagas, blood safety now includes hepatitis C in an increasing number of countries. The issues of quality assurance and sustainability still remain as challenges to be overcome in several areas of Latin America.

3. Prospects for the Future

With the experience of three years of work under the umbrella of the Joint United Nations Program on AIDS (UNAIDS), the complexities of coordinating a true intersectoral response have become more apparent and challenging.

Important lessons have been learned which, if applied properly, will contribute to strengthening the national capacity to cope with this increasing public health problem. Components of a successful program include:
(a) the presence of a strong national leadership to guide and modulate the national response against HIV/AIDS as indispensable for the program’s success;

(b) the ability to identify and mobilize resources, both internally and externally, to finance HIV/STI prevention and care activities without diverting resources from other much needed programs;

(c) the increasing importance of multiple partnerships and strategic political alliances which should include not only traditional partners but all other important actors that can and should be involved in the fight against AIDS;

(d) the broad-scale applications of technically and scientifically sound (evidence-based) interventions that are known to work in a particular context;

(e) the inextricable union between successful preventive behaviors and enforcement of human rights in the multi-cultural context of the countries of the Americas.

In the coming years, PAHO will continue to provide technical collaboration to its Member States, help to strengthen their self-reliance in addressing priority problems, and promote cooperation among countries in a true spirit of equity and panamericanism.