Children and HIV/AIDS in Latin America and the Caribbean
Boys and girls with HIV/AIDS in Latin America and the Caribbean

Globally, children under 15 accounted for 17% of the new infections in 2007, representing 2.1 million of the estimated 33.2 million people with HIV. In Latin America, around 44,300 children under 15 have HIV, and in the Caribbean estimates are of 11,000 children living with the virus. When the epidemic started a quarter of a century ago, no one could have predicted that the percentage of children affected would increase so much with respect to the total number of persons with HIV. It is imperative that we examine how this pandemic is affecting the child population in LAC, so as to find ways to protect this vulnerable group, prevent further infections, and mitigate the impact. Accordingly, issue number 7 of Challenges is devoted to the latest information on the vertical transmission (mother-to-child) of HIV in Latin America and the Caribbean, and how children are accessing life-saving treatment in the region.

The fact that increasing numbers of boys and girls are born with HIV is evidence of the failure of efforts to prevent vertical transmission, which occurs when a pregnant woman with HIV transmits the virus to her baby during pregnancy, during delivery or through breastfeeding. Although some progress has been made in the region in the care and treatment of adults that is not the case with children. In this context, the lead article discusses the progress that has been made and what needs to be done to ensure timely diagnosis both in pregnant mothers and in early childhood.

As in previous issues, there is a section in which adolescents and young people, as well as policy experts, express their views on the central theme, its impact and approaches to prevention among children. Brief reference is also made to recent events and key publications on the subject.
Recent events

**>> 2008 High-level Meeting on AIDS, 10-11 June 2008, New York**


**>> Meeting of the Coalition of First Ladies and Women Leaders of Latin America on Women and AIDS, 2 August 2008, Mexico City, Mexico**

Hosted by the First Lady of Mexico, this meeting will bring First Ladies and women leaders together to discuss ways to move the AIDS response forward, particularly with regard to (a) the feminization of the HIV epidemic in the Americas; (b) the scaling up of prevention of mother-to-child transmission efforts; and (c) the empowerment of young women. [http://www.unaids.org/en/KnowledgeCentre/Resources/FeatureStories/archive/2008/20080828_coalition_first_ladies_IV_meeting.asp](http://www.unaids.org/en/KnowledgeCentre/Resources/FeatureStories/archive/2008/20080828_coalition_first_ladies_IV_meeting.asp)

**>> XVII International AIDS Conference, 3-8 August 2008, Mexico City, Mexico**

The Conference is the most important gathering for the release and discussion of scientific, programmatic and policy developments in the global response to HIV/AIDS. The AIDS 2008 theme, “Universal Action Now”, emphasizes the urgent need for continued efforts in the worldwide response to HIV/AIDS and for action on the part of all stakeholders. [http://www.aids2008.org](http://www.aids2008.org)

Key Documents

**>> UNAIDS, UNICEF, WHO, 2008**


**>> WHO, 2007**


**>> PAHO/WHO, 2007**

Tratamiento antirretroviral de la infección por el VIH en niños en Latinoamérica y el Caribe: en la ruta hacia el acceso universal. Recomendaciones para un enfoque de salud pública. [http://www.paho.org/Spanish/AD/FCH/Al/Guia_Adultos_Final_editada.pdf](http://www.paho.org/Spanish/AD/FCH/Al/Guia_Adultos_Final_editada.pdf)

**>> UNICEF, UNAIDS, 2004**


Facing the impact of HIV/AIDS: attitudes and life lessons

- The testimonies which follow were drawn from *Ynisiquierallorë*, a book which gathers the stories and testimonies of girls and young women with HIV in Latin America and the Caribbean.

I want to send a message to all the children and all the people, to tell them not to discriminate against boys and girls with HIV/AIDS, because they feel really bad, because they have the same soul and the same heart, and we’re all God’s creatures. Everyone has to know how to take care (of themselves), how to protect (themselves). People do not have to be afraid of people with HIV, because the virus lives inside us, not outside.

**Keren, Honduras, 12 years old**

There is one thing they have to change. Many people who have HIV/AIDS know how it gets transmitted, how it doesn’t, but they say the wrong word: “Oh, I’ve caught it, oh, I’m sick”. If I say I’m sick, a lot of people who aren’t in a situation like mine are going to point me out and say, “She’s sick”.

**Morena, Panama, 14 years old**

Everybody has the right to have a sex life. But a person who has HIV/AIDS can’t say, “I just won’t tell my partner”. You’ve got to think about the other person, to talk about sexually transmitted diseases. Many young people believe that by standing next to someone you can catch HIV/AIDS. At school, I didn’t say anything to anybody and people would say, “I don’t know anyone who has HIV/AIDS”, and I’d be sitting right there beside them.

**Ouka, Colombia, 18 years old**

---

Children and HIV/AIDS in Latin America and the Caribbean

Vivian López, Senior Specialist HIV/AIDS, UNICEF TACRO and Mónica Alonso, Associate Professional Officer for HIV, PAHO/WHO
Preventing vertical transmission: situation and urgencies

HIV infection continues to be one of the most devastating epidemics in human history. This pandemic has disproportionately affected those who are most vulnerable, including women and children. Globally, children under 15 accounted for 17% of the new infections in 2007, representing 2.1 million of the estimated 33.2 million people with HIV.

In Latin America and the Caribbean, it is estimated that 1.9 million persons were living with HIV in 2007, of which 55,104 were children under 15 years of age. With an average HIV prevalence of 1%, the Caribbean continues to be the region of the world with the second highest prevalence following Sub-Saharan Africa, with an estimated quarter-million persons infected with the virus. In 2007, 108,550 individuals in Latin America and 20,247 in the Caribbean became newly infected with HIV.

At the onset of the epidemic some 25 years ago, few would have predicted that children and young people would constitute the group most seriously affected by the spread of the disease. Young people already account for 420,000 infections in LAC, and they contract HIV primarily through unprotected sexual activity. Myriad factors increase their vulnerability to infection, including their continued lack of information, skills, services, commodities and protective environments. In addition to their own infection, children and adolescents are also impacted by the epidemic through the death of parents and caregivers. But children orphaned by AIDS are not the only children affected by the epidemic. Particularly in the LAC region, many more children live with parents who are chronically ill, and often suffer discrimination and isolation.

The increasing number of children entering the world with HIV is greatly driven by a failure to prevent the vertical transmission of HIV. This represents a major cause of morbidity and mortality among young children, particularly in developing countries. Regionally, the vast majority of children with HIV were infected through mother-to-child transmission (MTCT) of HIV. MTCT occurs when a pregnant woman who is HIV-positive passes the virus on to her baby during pregnancy, labour,
In the absence of any intervention, the risk of mother-to-child-transmission of HIV is approximately 15-30% if the mother does not breastfeed the child. This risk can rise to as high as 30-45% with prolonged breastfeeding. The risk of transmission can be reduced to less than 2% with simple, inexpensive and effective interventions such as the administration of antiretroviral prophylaxis to a woman during pregnancy and delivery, and to her infant shortly following birth, in conjunction with safe delivery practices and replacement feeding. To date in LAC, only half of pregnant women are tested for HIV and less than 36% of those infected with HIV are currently offered services to prevent mother-to-child transmission of HIV, ultimately resulting in 6,363 children newly infected with HIV in 2007 in the region.

Access to antiretroviral treatment in developed countries has made HIV infection in children a chronic illness associated with a prolonged lifespan and a good quality of life. Without treatment, however, about one third of children who get HIV from their mother die in their first year of life, and 50% die before their second birthday. As many children in LAC still lack access to antiretroviral therapy (ART), in 2007 alone, 4,319 children under the age of 15 died of AIDS-related illnesses in the region. Most of these children could have been saved by timely administration of ART. Worldwide, data on early infant diagnosis is scarce, and among those countries that do report, only 8% of infants born to women with HIV have been tested within the first 2 months after birth.

Although the region has seen great advances in the expansion of care and treatment for adults (64% of adults in Latin America in need of treatment received ART in 2007), children continue to fall behind in access to treatment and care – even though HIV progresses more rapidly and aggressively in children than in adults.

In summary, progress in LAC remains unsatisfactory in the prevention and diagnosis of HIV disease in children. This represents one of the tragic aspects of the response to the pandemic in LAC; the means to change the impact of HIV on children exist but the political will and the leadership to protect and support children affected by the pandemic are still insufficient.

Studies have documented the near universal acceptance of HIV testing among pregnant women who receive PMTCT, illustrating that women desire and need this important bridge to prevention and treatment services. On the other hand, diagnosing HIV in infants as soon as possible is critical. Early treatment can significantly improve survival rates. However, diagnosis of infants under 18 months is difficult, and in some cases nearly impossible owing to the lack of appropriate HIV testing equipment.

Antibody tests, the most common tests in resource-poor settings, can reliably identify infection in children between 15-18 months. Since infants often have maternal antibodies transferred to the baby during pregnancy, resulting in false-positive tests before 15 months of age, virological tests are required and can accurately determine whether an infant is infected with HIV within the first weeks of life. These tests are more expensive; require specialized laboratories and technical experts. The use of dried blood spots (DBS) permits samples to be collected in remote locations and allows expansion of virological testing in countries with limited number of specialized laboratories, thus facilitating early diagnosis in infants.

Once diagnosed, children with HIV require access to ART. Ensuring children’s access, however, presents many challenges. The youngest children need liquid formulations, as they cannot easily swallow pills. These often require refrigeration. Moreover, many drugs do not come in solid form in doses appropriate for use. When these paediatric formulations are not available, treatment needs to be administered by a skilled provider; otherwise, imprecise dosing can jeopardize the child’s life owing to drug toxicity or drug resistance.

Parents and caregivers are often responsible for providing treatment to children, and adherence to a treatment regimen poses many challenges, often further complicated by familial health and/or economic problems. Studies have indicated that adherence is a serious problem in children; only 20-25% of children under treatment properly adhere to the treatment regimen. There are many reasons for low adherence rates. The medicines are often bitter-tasting and unpleasant for the child to swallow. In addition, nutritional intake affects absorption of the drugs; thus caregivers need to ensure a proper diet. Dosing schedules can be difficult to follow and become a greater challenge once the child enters school or day care. Moreover, dosing schedules can become disrupted if the caregiver does not disclose the child’s HIV status.

If administered appropriately, antiretroviral therapy is extremely effective in children, even in low and middle income countries. Survival rates of over 80% have been reported from scientific studies as well as from programmes.

In addition to antiretroviral therapy, the prevention and early treatment of opportunistic infections is the mainstay of medical management in children. Cotrimoxazole is a cheap and effective...
antibiotic against a wide range of organisms, including Pneumocystis jiroveci pneumonia (PJP), which is an important cause of death and illness in the first year of life. It is also safe, with relatively few side effects. Although the policy exists in many countries, limited data suggest that the implementation is poor (fewer than 4%).

2. Recent progress and pending efforts

Since highly active antiretroviral therapy (HAART) became available to treat HIV in the late 1990s, the distribution of this treatment across the Latin American region has been noteworthy. According to the World Health Organization, approximately 64% (51%-73%) of those in need of antiretroviral drugs (ARV) in South and Central American countries (excluding Guyana and Suriname) received them by the end of 2007. This is quite an impressive achievement, particularly since 31% of those in need of treatment in low- and middle-income countries globally received it.

Today, many low- and middle-income countries in LAC are in the process of scaling up their national PMTCT programmes, and many have already made substantial progress. In Jamaica, 90% of pregnant women attending public antenatal care (ANC) are now tested for HIV (a sevenfold increase since 2002). In Trinidad and
Since HIV has direct and indirect impacts on both maternal and child survival, it is essential to integrate services for the prevention of mother-to-child transmission (PMTCT) in maternal, newborn and child health programs

Tobago, 95% of pregnant women attending public ANC were tested for HIV in 2005. In Cuba, all pregnant women are tested for HIV, with only 28 cases of MTCT of HIV reported to date.

In the region as a whole, however, progress is still insufficient. In LAC, the proportion of HIV-positive pregnant women receiving ARVs for PMTCT increased from 26% [22-31%] in 2004 to 36% [29-43%] in 2007. The region remains far from the 80% coverage target set in 2001 and continues to lag behind other regions like Central and Eastern Europe, where coverage rates are 71%.

Progress has also been achieved in relation to paediatric AIDS. In 2007, a new three-in-one generic antiretroviral drug combination for children was approved by the United States Food and Drug Administration and the World Health Organization’s prequalification program. This, in conjunction with falling drug prices, increased advocacy and better forecasting of paediatric ARV drug needs, has made it possible for many more countries to access and provide ARVs for children. In LAC, 16,571 children with HIV received antiretroviral treatment in 2007, compared with 10,628 in 2005 – an increase of 56%.

### Declaration of Commitment on HIV/AIDS, 2001

During the Special Session on HIV/AIDS, held by the United Nations General Assembly in June 2001, Governments in the region pledged to significantly alter the situation of children in relation to HIV by adopting a Declaration of Commitment specifying time-bound goals and targets to measure progress and to ensure accountability. In the Declaration, Governments determined that, together with partners, they would reduce the proportion of infants infected with HIV by 20% by 2005, and by 50% by 2010.

### Health Agenda for the Americas: 2008–2017

In June 2007 the Ministers of Health of all Latin American nations issued the Agenda, which also states: “Pregnant women infected with HIV must be provided with delivery conditions in accordance with the established protocols to minimize the probability of transmission of the virus to the newborn, who should also be guaranteed a breast-milk substitute for the first six months of life.”

The region must be held to account to achieve the targets set out above by massively expanding PMTCT Plus and dramatically reducing the number of children born and living with HIV, and by providing early diagnosis and treatment to improve chances for long-term survival for children.

### 3. Required response components

Based on goals and targets described in the included boxes, interventions to prevent mother-to-child transmission of HIV offer immediate opportunities to: (i) save children’s lives; (ii) reduce the impact of HIV on families and communities; and (iii) strengthen maternal and child health services. These programs also provide an entry-point for women to access treatment for their own infection, thus allowing them to stay healthy.

A comprehensive four-pronged strategy to prevent HIV among infants and young children was released in 2003:

- The first component - preventing primary HIV infection in women and girls - promotes the delivery of interventions within services related to reproductive and sexual health, such as antenatal care, postpartum/natal care and other health and HIV service-delivery points, including working with community structures.

- The second component - preventing unintended pregnancies in women with HIV and all women at risk - emphasizes the importance of providing appropriate counselling and support to these women to enable them to make informed decisions about their future reproductive lives.

- The third component of the strategy - preventing transmission from pregnant women with HIV to their infants - focuses on providing antiretroviral prevention medicine for the mother and newborn. Women with HIV should also avoid breastfeeding. In addition, elective caesarean sections in HIV-positive women can effectively reduce the risk of transmission by limiting contact with the mother’s blood and/or secretions during labour and delivery.

- Finally, the fourth component - providing care, treatment and support for women with HIV and their families - calls for better integration of HIV care, treatment and support for women found to be HIV-positive and their families.

Scaling-up treatment for children with HIV in developing countries is an attainable goal. To this end, children in need must be identified first and foremost. Since treatment for children is often provided in a different clinic than the one where the mother received antenatal care or delivered, children exposed to HIV often go unrecognized when they present for early care such as for their first set of immunizations. To correct this, several

---

1 United Nations General Assembly Special Session (UNGASS) on HIV/AIDS, 2001
2 If formula feeding is not an acceptable, affordable, feasible, safe or sustainable option, it is recommended that the mother only breastfeed her child for six months.
countries are starting to document the mother’s HIV status on the child’s health card. This process enables health workers to more easily identify which children need additional HIV care and support. Countries are also beginning to increase access to virological testing using dry filter-paper blood spots (DBS) for transporting samples from remote points of care with no access to laboratory facilities. Linking PMTCT and HIV treatment programs using family-centred and primary health care team approaches also helps to optimize identification of more children in need of HIV care.

Other approaches for scaling up include HIV testing during labour and delivery as a routine part of PMTCT services; training of doctors and nurses in the use of WHO ‘decision trees’ that help health care providers assess whether children can safely be started on ART based on clinical signs where diagnostic tests may not be available; and integrating pre- and post-natal services with paediatric care in maternal and child health centres.

To effectively increase early diagnosis programs in LAC, countries need to allocate resources to ensure wide availability of viral testing and new diagnostic testing capabilities. This will result in increased national capacity for early identification and treatment, thus improving long-term survival for children with HIV.

**HIV infection progresses more aggressively in infants than in adults. Early HIV diagnosis and treatment are key to dramatically improving survival rates of children with HIV**

HIV counselling and support for children, their parents and family is also essential and can considerably improve the children’s quality of life. This is also an important element in assisting families in the practical management of the infection and in improving adherence. A multidisciplinary approach should be employed as a means to ensure support from the community, social workers and counsellors. Nutritional support should also be provided, as studies have shown that children with HIV infection who are well nourished tend to have fewer infections. Above all, children should become actively involved in their own care as they grow older.

**4. Affordability**

Three key factors affect the affordability of interventions in relation to prevention and treatment: (i) the cost of drugs, (ii) the cost of safe alternatives to breastfeeding and (iii) the cost of HIV tests.

In countries with well-functioning health systems, the additional service-delivery costs of interventions to prevent mother-to-child transmission are marginal and have a high return in terms of avoiding future financial costs for the health system and economic costs for the society, should adequate care be provided for the child with HIV.

Fortunately, the last few years have seen a paradigm shift in the amount of resources expended on HIV/AIDS, estimated by UNAIDS at over US$ 10 billion in 2007. Yet ascertaining what portion of these funds has been allocated to children has proven a complex exercise, as most funding agencies/mechanisms and governments have neither a dedicated budget for children nor do they currently require that resources be tracked by age or gender.

A second major challenge related to resources is the need to ensure that “money works” and that funds reach families, communities and civil-society groups providing services for children. This does not mean simply doing more of the same, but rather doing it with an incremental increase in scale. It means mobilizing sufficient resources to make and fund a paradigm shift in the programme response for children affected by HIV/AIDS.

In addition, national governments need to remove barriers imposed through pricing, tariffs and trade, regulatory policy, and research and development, so as to accelerate access to affordable, quality HIV medicines and diagnostics. Flexibilities in international agreements could be employed to secure a sustainable supply of HIV medicine and health technologies, including by starting local production.

Many of the resources needed to achieve universal access to prevention and treatment can be found within the region itself. However, the accelerated action required to increase access in the short term would benefit from a concerted effort in support of the region and from the international community. This would require that resources be tracked by age or gender.

**5. Conclusion**

Today’s children have never known a world free of AIDS. Progress in the region is encouraging, but insufficient. The region can step up to the challenge and greatly increase access to ART for children and achieve Universal Access in the region. The Latin American and Caribbean region has already discredited the theory that treating children with HIV is too difficult or ineffective in resource-poor settings. The region can help prevent many more HIV-related deaths by ensuring increased awareness and early diagnosis and by correctly managing common childhood diseases. A strong foundation has been built on the Declaration of Commitment, including the establishment of the Global Fund to Fight AIDS, Tuberculosis and Malaria to provide financing to low- and middle-income countries. Domestic and national resources have also been allocated to support country responses to the epidemic in LAC. Prices of AIDS medicines have been reduced, and the Unite for Children, Unite against AIDS campaign is ensuring that children become centrally to the AIDS agenda.

With this foundation, Latin America and the Caribbean can become the first region in the developing world to achieve universal access to HIV treatment for children and to eliminate the vertical transmission of HIV, thus achieving a new AIDS-free generation.
1 out of every 10 children with HIV has access to antiretroviral treatment. Thus, it is imperative that children and adolescents with HIV have access to antiretroviral therapy. These drugs help prevent new infection in newborns and allow children and adolescents to live a healthy life: attend school, free themselves of opportunistic infections and dream of their future.

The vast majority of children with HIV still do not have the opportunity to access treatment. We need to ensure that paediatric AIDS initiatives play a central role in political agendas and the health sector must increase efforts to support and educate those who do have access to treatment regarding the importance of drug adherence and regular check-ups. We also need to sensitize adults caring for children with HIV so that they understand the centrality of their support in ensuring the child’s adherence to the treatment; and, finally, we must advocate for accelerated research and development to produce antiretroviral treatment appropriate for young children with HIV.

**AIDS:**

Strategies targeting the special needs of children are urgently needed

John Pape

Founder of GHESKIO, Professor of Medicine at Weill Cornell University, Division of International Medicine and Infectious Diseases

AIDS is a leading cause of death in adolescents and youth aged 13–25 years in African and Caribbean countries with generalized HIV-1 epidemics. Three-quarters of our young patients in Haiti engaged in unprotected sexual intercourse, and one-third of the young women are pregnant. Most health centres send the 13–25-year-old patients to either adult or paediatric clinics, not recognizing the special needs of this population.

Targeted interventions for HIV-infected adolescents and youth are needed.

Based on the results of a study about the impact of antiretroviral therapy (ARV) on a 13–25-year-old, concomitant with the support of UNICEF, an adolescent HIV clinic was opened in Port-au-Prince. The clinic provides integrated primary care services and intensive adherence and safe-sex counselling. CD4 T-cell counts and pharmacy adherence monitoring allow us to focus extra counselling on adolescents who have signs of treatment failure.

Patients are provided with phone cards so that they can call the clinic with questions free of charge. Peer counselling groups are held to discuss adherence strategies. A multidisciplinary approach is utilized: nutritional support, tuberculosis treatment and reproductive health services are all available in the adolescent clinic. Many of our adolescents and youths are orphans and suffer depression and physical and sexual abuse. We have therefore incorporated psychological and social support services into our adolescent clinic.
The AIDS response in the Peruvian Amazon

With an estimated HIV/AIDS prevalence of 0.6%, the HIV epidemic in Peru primarily affects men who have sex with men (MSM) and heterosexual commercial sex workers. It is concentrated in the capital, Lima, and in three rural departments, Loreto, Ica and Ucayali.

Most of the indigenous people of Peru live in Loreto, the Amazon region with the second highest rate of HIV infection after Lima. In 2005, the American Society of Tropical Medicine and Hygiene conducted a public health sero-epidemiological survey on the prevalence of HIV and syphilis in Chayahuita, a native indigenous community in Loreto whose ethnic groups include Amazonian aborigines, most of whom are married or cohabiting. Risky behaviors identified in the study included early initiation into sexual activity and male polygamy. A large percentage of the young male population engaged in sex between men (44.1%) and reported high rates of unprotected sex.

In light of these findings, the Peruvian Ministry of Health, in partnership with international organizations, including UNICEF and Partners in Health, and with the support of the Global Fund for Tuberculosis, AIDS & Malaria, strengthened the national response to the epidemic in Loreto. They committed to scaling up health services in many of the hard-to-reach indigenous areas and to incorporating HIV testing in the pre-natal care program offered to pregnant women. The Government also established a Technical Panel for the Prevention of HIV in Indigenous Communities in the Amazon. The Ministry of Health, together with national partners, initiated a pilot project to identify key actors, health promoters and agents of change, as well as peer educators in HIV prevention in Loreto.

With the introduction of 95,000 rapid tests for HIV diagnosis at a national level, there has been a demonstrable increase in the number of pregnant women who have received an HIV-test as part of their pre-natal care program. HIV screening in pregnant women increased from 31.3% in 2004 to 63% in 2006. The number of HIV-positive pregnant women with access to PMTCT (prevention of mother-to-child transmission) services nearly doubled to 82% by end 2006 from only 45% in 2005. The overall national coverage of PMTCT services rose from 13.4% in 2004 to 70% in 2006.

The dramatic increase in PMTCT coverage shows that when investments are carefully targeted, even limited resources can yield high returns. It is thus imperative to continue to increase investment in both HIV prevention and treatment services in those indigenous and rural areas particularly vulnerable to an increasing incidence of HIV, such as Loreto.
¿Did you know…?

….. that in Latin America and the Caribbean, an estimated 1.9 million persons were living with HIV/AIDS in 2007; children under 15 years of age accounted for 55,104 of this total?

….. that in 2007, some 6,363 children were newly infected with HIV and 4,319 died of AIDS in Latin America and the Caribbean?

….. that most children are infected with the virus during pregnancy and delivery or while breastfeeding. Without treatment, about 50 percent of infants who get HIV from their mothers die before their second birthday?

….. that in low- and middle-income countries in Latin America and the Caribbean, only 36 percent of HIV-positive pregnant women received antiretrovirals for PMTCT in 2007?

….. that in Latin America and the Caribbean, there was a 56% increase in the number of children with HIV that received antiretroviral treatment between 2005 and 2007 (16,571 in 2007 compared with 10,628 in 2005)?