



**Pan American
Health
Organization**



Regional Office of the
World Health Organization

Elimination of congenital syphilis in Latin America and the Caribbean: a task within reach

Congenital syphilis can be prevented with a single-dose treatment of penicillin. Yet, it is estimated that every year over 100,000 children are born with congenital syphilis in Latin America and the Caribbean.

Congenital syphilis is a serious, yet underreported, public health problem in Latin America and the Caribbean (LAC). A case of congenital syphilis is a public health program failure.

Official data show a relatively low number of congenital syphilis. During 2002, the number of infants born with congenital syphilis was 10,600, according to 15 countries that reported data to the Pan American Health Organization (PAHO).

Most countries in the region have policies of universal screening in pregnant women, but they are not applied in a systematic way

The severity of the problem is certainly higher. Data from a 2002 Mexico survey showed that syphilis in the general population was underreported by 84%. In countries such as Paraguay, only 10% of infected pregnant women are detected. In addition, the fact that stillbirths or perinatal deaths are not screened, or sometimes not even registered, implies that there is also an underreporting of congenital syphilis cases.

Only recently it was possible to make a more accurate estimation of the problem. Every year, for the whole of Latin American and the Caribbean, it is conservatively estimated that 330,000 pregnant women who test positive for syphilis are not provided with treatment during the antenatal care visit. Although the stage of the disease is a determining factor, it is expected that, out of these pregnancies, 110,000 children will be born with congenital syphilis, and a similar number will end up in miscarriage.

In 2002, the estimated regional prevalence of syphilis among pregnant women was 3.1 %, ranging from 1.78 % in Cuba to 6.21 % in Paraguay. The incidence of congenital syphilis ranged from 1.4 per 1,000 live births in El Salvador to 12.0 per 1,000 live births in Honduras.

Few countries have a coordinated effort for the elimination of congenital syphilis. Honduras and Bolivia have elaborated a plan, still to be implemented. In Cuba, the program is responsibility of the Sexually Transmitted Infections Prevention and Control Program.



www.paho.org

525 23rd St., N. W., Washington, D.C. 20037-2895, U.S.A.
Telephone: (202) 974-3000
Fax: (202) 974-3663

Most of the other countries in the region have policies of universal screening in pregnant women, but they are not applied in a systematic way. So, in spite of having functioning antenatal care services, the knowledge on how to prevent the infection, and appropriate technology, elimination of congenital syphilis is still a pending issue.

Factors contributing to the persistence of congenital syphilis as a major public health problem include: the lack of perception by health care providers that congenital and maternal syphilis lead to severe health consequences; barriers to access antenatal care services; and stigma and discrimination related to sexually transmitted infections.

To prevent congenital syphilis, policy-makers must be aware of the seriousness of the disease among women and children

During the 116th Meeting of the Executive Committee of the PAHO in 1995, a Plan of Action for the elimination of congenital syphilis was drafted, and since then scattered activities at national level have been carried out. In order to strengthen the regional capacity, the HIV/AIDS Unit at PAHO has included the elimination of congenital syphilis in its 2004-2005 work plan.

The objective of the elimination of congenital syphilis as a public health problem, as stated in the 1995 Plan of Action, is to reduce incidence rates of congenital syphilis to equal or below 0.5 cases per 1,000 births. The rationale for this statement is derived from two expected outcomes: (a) over 95% of infected pregnant women should be detected and treated during pregnancy; and (b) prevalence of syphilis during pregnancy should be reduced to less than 1.0 %.

A simple dose can prevent it!

Syphilis is a systemic chronic infectious disease that can involve all the organs in the body. Clinical manifestations include an ulcerative lesion (chancre) that if untreated is followed by disseminated muco-cutaneous lesions. There can be fever and general malaise, as well as hair loss, mild hepatitis and neurological involvement.

*Syphilis can be diagnosed by laboratory tests (reaginic and treponemal antigen tests), and also by rapid tests. The infectious agent is a bacterium known as *Treponema pallidum*. Transmission occurs through sexual contact, blood, and from mother to child (trans-placental). The transmission rate for syphilis is very high, especially when compared with HIV.*

People with HIV and with untreated syphilis are more likely to transmit HIV to others, due to trauma in the mucous membranes caused by the chancre. If syphilis is present there is a two to five fold-increased risk of acquiring HIV. In HIV co infected patients, laboratory tests for syphilis appears to not be reliable. Also, the evolution of syphilis may be accelerated with increased risk of brain involvement. These considerations are extremely important within the context of the "3 by 5" initiative (three million persons living with HIV in the developing world under antiretroviral treatment by the end of 2005).

Untreated maternal syphilis can lead to miscarriage/stillbirth, perinatal mortality and congenital syphilis. Possible manifestations of congenital syphilis are hepatosplenomegaly, jaundice, low birth weight (with failure to thrive and concurrent infections), skin rash, syphilitic rhinitis (snuffles), anaemia, and joint swellings. The treatment of syphilis relies on penicillin. There are no resistances reported to this antibiotic. Prevention of congenital syphilis can be achieved with a single-dose treatment of penicillin.

To prevent congenital syphilis, clinicians, policy-makers, health services managers, public health workers, as well as service users, must be aware and convinced of the extent and seriousness of the disease, especially among women and children.

Today, simple, rapid, point of care tests for the detection of syphilis are available, requiring only basic training and logistic support. Penicillin is an inexpensive medication found on the essential drugs list of the World Health Organization and of many low and middle income countries, and it can be given to the mother or the affected infant.

Antenatal screening, followed by treatment of all sero-reactive women, is highly cost-effective, inexpensive and a feasible intervention for the prevention of congenital syphilis. According to a 1993 World Bank report, it is a critical intervention to improve child health. In addition, treating syphilis in pregnant women can reduce HIV transmission from women to their male partners, and thus provide added benefits to the community.

The scaling up of HIV programs for the PMTCT provides a chance to maximize resources on behalf of improving child morbidity and mortality

PAHO has led the creation of an inter-programmatic group with the goal of enhancing the response to congenital syphilis prevention at the regional level. PAHO is also collecting epidemiological data to develop a regional baseline and is conducting a study in three countries to determine the underreporting rate of maternal syphilis.

Other activities include the mobilization of sexually transmitted infections experts during the 8th International Conference on STI/HIV in Punta del Este, Uruguay (December, 2003); assisting the Honduras authorities in planning for the implementation of the strategy; and advocating for the commitment of Latin American ministers of Health in the implementation of the strategy. The impact of advocacy activities is positive as shown by the Nicaraguan request of assistance to develop the national plan for the elimination of congenital syphilis.

This is an important moment in the Region, with HIV/AIDS as a key public health priority. The emphasis given to the prevention of mother-to-child transmission (PMTCT) is forcing the integration of prevention of congenital syphilis within services targeting pregnant women. The scaling up of HIV programs for the PMTCT provides a chance to maximize resources on behalf of improving child morbidity and mortality. Strengthening PMTCT programmes can provide infrastructure that will assist testing efforts for syphilis, and will lead to an increased acceptance of serologic testing by women.

Internationally, the ambitious agenda provided by the Millennium Development Goals creates a great opportunity to address prevention of congenital syphilis as linked to three of the Goals: reduce child mortality; improve maternal health; and combat HIV/AIDS and other infectious diseases.

Congenital syphilis prevention is a priority in the Region, and we encourage you to promote and support this initiative.