



## EDITORIAL

# GESTATIONAL AND CONGENITAL SYPHILIS SITUATION IN COLOMBIA, A CHALLENGE TO THE GENERAL SYSTEM OF SOCIAL SECURITY IN HEALTH

Syphilis is a sexually transmitted infection (STI) caused by *Treponema Pallidum*, and is considered a serious public health problem as it affects more than 12 million people worldwide. It is estimated that over two million pregnant women are infected with syphilis each year worldwide, and a significant number of cases (692,100 to 1,53 million), are untreated (1). When it occurs in pregnant women it is easily transmitted to the fetus, causing complications in up to 81% of cases, including stillbirth, early neonatal death, prematurity, low birth weight or congenital infection (2).

In Colombia, gestational and congenital syphilis is notifiable, and the figures reported by the System of Public Health Surveillance (sivigila, for its acronym in Spanish), are among the highest in Latin America and the Caribbean. In 2011 Colombia reported 2.9 cases of congenital syphilis / 1000 live births (3), a value which is worth almost six times higher than the target set by the Pan American Health Organization (PAHO) in its Elimination of Congenital Syphilis Plan (2, 4). The Colombian Pacific coast provides the country with a significant number of cases each year, being the port of Buenaventura, in Valle del Cauca, one of the worst affected areas, reporting on 2010, 141 cases of congenital syphilis, nine of which ended in a fatal outcome (5).

Syphilis is curable with appropriate antibiotic therapy, and the vertical transmission is preventable if the mother is diagnosed and treated early. If all

pregnant women would be screened for syphilis, and positive ones were treated with at least one dose of penicillin, over 97% of newborns would avoid infection (6). For this reason, cases of congenital syphilis in our country are unacceptably high, and reflect serious problems in prenatal care of pregnant women.

There are several reasons that contribute to poor diagnosis, treatment, reporting and monitoring of cases of congenital and gestational syphilis in Colombia:

*1. Absence of updated Clinical guidelines for gestational and congenital syphilis.* There are several protocols, manuals or clinical practice guidelines (CPGs) that orient disease management to health workers, including Resolution 412 (2000), the Strategy for the Reduction of Perinatal Transmission of HIV and Congenital Syphilis from the Ministry of Social Protection (2009), Guide to Diagnosis and Management of Gestational and Congenital Syphilis of the University of Antioquia and Nacer (2008), the Gestational and Congenital Syphilis Protocol from the National Institute of Health (NIH) (2007) and the Clinical Guideline for the Elimination of Mother to Child Transmission of HIV and Congenital Syphilis in Latin America and the Caribbean from PAHO (2009), among others (7-12).

These documents are not consistent with each other. In particular different definitions of congenital syphilis are used. In addition, there are a differences

in the adoption and implementation of these CPGs between health institutions (13) which exacerbate inconsistencies in the diagnosis, treatment and reporting of cases. There are also several guides with outdated concepts, in example; Resolution 412 recommends treatment to pregnant women with endo-venous crystalline penicillin if diagnosed with syphilis after week 34. This leads to inadequate medical behaviors as noted in a review of medical records of pregnant women with syphilis reported by the Hospital Departmental de Buenaventura in 2011, where some pregnant women with syphilis were hospitalized for endo-venous antibiotic treatment for being in their last month of pregnancy.

The need for an updated comprehensive care guidelines is urgent in Colombia, that CPG should facilitate the diagnosis and treatment of pregnant women with syphilis in a single visit to their prenatal control. This implies the inclusion of algorithms use of diagnostic tests in point of care. Furthermore, the prevention of vertical transmission of syphilis should also have a positive impact on the prevention of mother-to-child HIV program as with the appropriate use of diagnostic testing it will be possible to diagnose syphilis and / or HIV within only 20 minutes (14-18). With a single drop of blood, a case of congenital syphilis can be prevented immediately, and initiate necessary steps to prevent HIV transmission to the newborn.

2. *Absence of clear indicators of gestational syphilis in the health system.* Indicators presented by the NIH of Colombia for measuring progress of the Strategy for the Elimination of Mother to Child Transmission of Congenital Syphilis, are oriented to congenital syphilis case, in accordance with the proposal by PAHO in its plan, which is focused on reach a goal of less than 0.5 cases of congenital syphilis / 1000 live births. These indicators include 1) Prevalence of syphilis in pregnant women; 2) Incidence of Congenital syphilis; 3) Fatality due to congenital syphilis; 4) Percentage of deaths due to congenital syphilis analyzed in a epidemiological surveillance

committee (COVE). The accurate and complete report of these indicators implies a larger effort by the health personnel in the analysis of each potential case of congenital syphilis, which requires careful integration of clinical and laboratory data of both the mother and the newborn. Also, the complexity of the analysis of each case, leads to an imprecise knowledge of congenital syphilis cases and problems for a correct notification of cases. Although this investigation of cases should not be omitted, if diverts attention on the essential: screening of the mother and treat her in time. This is why, new monitoring official indicators for the strategy of elimination of congenital syphilis should be obtained, and these should include: number of pregnant women screened for syphilis and number of women with positive screening test that were treated (19).

3. *Lack of education to health care providers and the community on issues of sexually transmitted infections and syphilis.* There is the lack of knowledge on health providers about STI issues in Colombia, and another part of the problem is the nonexistence of clinics specializing in the management of STI's, where patients could receive education about STI. On the other hand the whole and proper approach of a pregnant woman with syphilis, includes managing of her partner, and without proper knowledge in the diagnosis and treatment of STI's, this becomes difficult. The Ministry of Health has promoted the development of a comprehensive guideline for STI management, which focuses on the syndromic approach, and it is still pending its official presentation to the health system and more importantly its diffusion through intensive education health personnel. Similarly, it will be important to generate a new guide care to pregnant women with syphilis and their newborns, this must be accompanied by the assurance of an implementation program of this one. The paper presented by Gallego et al, in this issue of the *Colombian Journal of Obstetrics and Gynecology*, shows how an education program can help improve diagnosis systems, treatment and reporting of gestational and congenital syphilis, and should be

an example for other regions of the country. The unawareness of the importance of adequate prenatal care, and STD's prevention in the most affected communities, which are in turn the ones with higher socioeconomic inequity, is clear. It is essential for the success of any strategy for elimination of congenital syphilis or HIV it is performed in parallel, an intense campaign of community education using mass media such as radio and television.

It is vital that in Colombia, the Ministry of Health, the INS and the third party payers health care give more attention to the problem of gestational syphilis, whose prevalence (1.6%) is 7 times higher than the prevalence of HIV pregnant women in our country (0.22%). With the availability of diagnostic tests to be applied at point of care for syphilis and HIV, in the first prenatal visit, the mother could have the opportunity to be screened for these two diseases simultaneously, reducing costs and avoiding the possibility of giving birth to newborns free of HIV, but with congenital syphilis (20). The implementation of diagnostic tests at point of care, with an improvement in the monitoring indicators which follow up a number of pregnant women screened and treated, together with a program of education are key to achieving the objectives of the Syphilis Elimination Plan. As Walker and Walker said: "policies are only as effective as the system implementation and its users are or want to be" (21).

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