# Editorial

# Strategic Actions Agenda for Reducing Congenital Syphilis in Brazil: a multi-party, shared initiative

Syphilis is a curable and systemic sexually transmitted infection (STI) caused by *Treponema pallidum* bacteria. When left untreated, it progresses into different clinical manifestations that may last many years. Early syphilis includes the primary, secondary, and latent stages, while late syphilis comprises the late-latent and tertiary stages. Transmission via sexual intercourse is more common in the early stages and gradually decreases over time. It remains, however, transmittable from mother to fetus, most often within the uterus, potentially leading to abortion, preterm delivery, congenital manifestations, or even newborn death<sup>(1)</sup>. Having one STI increases the risk of acquiring HIV by two or three times.<sup>(2)</sup>.

Syphilis still represents a challenge for public health, as the increasing number of infections both nationally and internationally is clear. According to the World Health Organization (WHO), more than a million cases of STIs are estimated per year. In 2012, it was found that 357 million new cases of curable STIs (gonorrhea, chlamydia, syphilis, and trichomoniasis) occured among adolescents and adults aged between 15 and 49 years, including 5.6 million cases of syphilis. As for syphilis in pregnancy, it is estimated that 143,000 fetal deaths, 62,000 neonatal deaths, 44,000 premature infants, and 102,000 children are infected worldwide due to lack of prenatal diagnosis and treatment<sup>(3)</sup>.

In Brazil, from 2005 to June 2016, 169,546 cases of syphilis in pregnant women were reported. In 2015, the detection rate was of 11.2 cases of syphilis during pregnancy for every 1,000 live births (for a total of 33,365 cases)<sup>(4)</sup>.

As to congenital syphilis (affecting infants under the age of one), from 1998 to June 2016, 142,961 cases were reported nationally according to the National Disease Notification Information System ("Sistema de Informação de Agravos de Notificação"). In 2015 alone a total of 19,228 cases were reported, at an incidence rate of 6.5 per 1,000 live births. A 20.91% increase in the total number of new diagnostics was reported between 2014 and 2015<sup>(4)</sup>.

Among the policies adopted by the Ministry of Health (MOH), the "Rede Cegonha" (lit. "Stork Network") program was implemented within the National Unified Health System ("Sistema Único de Saúde" - SUS), through Decree no. 1,459 of June 24, 2011. This program aims to ensure the right to humanized care in reproductive planning, prenatal, delivery, and postnatal stages and infant care in health services, with a special focus on prevention, early diagnosis, and timely, adequate treatment of pregnant women (and their sexual partners) infected with syphilis during basic care<sup>(5)</sup>.

As for syphilis diagnosis, the MOH's Department for Prevention, Surveillance and Control of Sexually Transmitted Infections, HIV/Aids and Viral Hepatitis ("Departamento de Prevenção, Vigilância e Controle das Infecções Sexualmente Transmissíveis, do HIV/Aids e das Hepatites Virais" - DIAHV), a branch of the Health Surveillance Secretariat ("Secretaria de Vigilância em Saúde" - SVS), managed to increase the distribution of rapid tests from 1,126.235 in 2012 to 6,169,145 tests in 2015<sup>(6)</sup>. Despite this increase, in 2015, 32.8% of pregnant women with syphilis received late diagnoses, that is, during their last three months of pregnancy<sup>(4)</sup>. Also important is the distance learning initiative "Telelab", a continued education program offering free diagnostics courses available at Http://telelab.aids.gov.br/. In 2016, the Technical Manual for Syphilis Diagnosis was published. It aims at increasing diagnostic possibilities as well as at guiding and supporting health professionals in managing and dealing with the disease<sup>(7)</sup>.

In 2015, the National Commission for the Incorporation of Technologies in the Unified Health System ("Comissão Nacional de Incorporação de Tecnologias no SUS" - Conitec) drafted a report confirming, based on scientific evidence, that benzathine penicillin is the only option for safe and effective treatment for preventing congenital syphilis during pregnancy. As to penicillin's safety, no studies evaluating its use among pregnant women have shown occurrences of anaphylactic reactions. The risk of such reactions due to penicillin among the general population is very low<sup>(8)</sup>.

The WHO has recognized the global shortage of benzathine penicillin<sup>(3)</sup>. In Brazil, the shortage began in June 2014 and, since then, the MOH has sought solutions with help from other sectors to normalize its supply. Although drug purchase is an attribution of states and municipalities, in 2016 the MoH conducted an emergency purchase of 2.7 million bottles of benzathine penicillin 1,200.000 IU and distributed among states, recommending that pregnant women and their sexual partners to be prioritized.

In this context, in October 2016 the Strategic Actions Agenda for Reducing Congenital Syphilis in Brazil was enacted as a result of a collective work, after internal articulation and strategical meetings with the National Council of State Health Secretaries ("Conselho Nacional de Secretários de Saúde"), the National Council of Municipal Health Secretaries ("Conselho Nacional de Secretários Municipais de Saúde"), non-governmental organizations, associations, and health professionals associations<sup>(9)</sup>. On this occasion, the Letter of Commitment was signed by all parties involved.

The implementation of these actions is coordinated dynamically by the DIAHV, and is thus subject to changes, additions, and updates during its implementation period – from October 15, 2016 until October 21, 2017. It is indispensable to monitor and evaluate its actions in order to enable effective, stable, and improving public policies focusing on the preventing congenital syphilis. This Actions Agenda has as its main goal the reduction of congenital syphilis in Brazil, while also including specific goals such as early care of pregnant women and partners during the prenatal period<sup>(10)</sup>; increasing access to timely and adequate diagnoses and treatment; increasing awareness of health professionals on benzathine penicillin usage in primary care; disseminating health-related information among managers, professionals, and members of the community; the qualification of epidemiological surveillance; creating the committees for Vertical Transmission of HIV and Syphilis Investigation; and structuring the validation process for the national Certificate of Elimination of Vertical Transmission of HIV and/or syphilis in cities across the country.

This Agenda has six main sectors, under each of which strategic actions were devised for reducing congenital syphilis, as shown in **Figure 1**.

The MOH thus establishes public policies and supports local initiatives, highlighting that it is crucial to share responsibilities and join forces, effectively involving (federal, state, and municipal-level) managers, health professionals, members of communities, non-governmental organizations, and professional associations with the purpose of raising awareness of this disease throughout health practices as well as intersectoral actions; to implement preventive, diagnosis, care, treatment, and monitoring-related actions aimed at reducing cases of congenital syphilis in the country.



Figure 1 - Actions to combat syphilis.

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