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Method for setting up an observatory for gestational and congenital syphilis: experience report

Método para establecer un observatorio para gerentes y congénitos: un informe de experiencia

Método para implantação de um observatório para sífilis gestacional e congênita: relato de experiência

ABSTRACT
Objective: to describe the method of implanting an "Observatory for gestational and congenital syphilis". Method: Descriptive study, carried out in the city of Londrina, Paraná, Brazil, from 2013 to 2016. To implement the observatory, it was necessary to comply with the following steps: 1) formation of the syphilis working group; 2) situational diagnosis; 3) permanent education workshops; 4) structuring the line of care and communication; 5) adequacy of technical laboratory procedures for performing the Venereal Disease Research Laboratory; 6) ordering the work process in obstetric care. Results: The actions implemented impacted the increase in the detection of syphilis cases in pregnant women in primary care, which went from 9.4 per thousand live births in 2013 to 16.7 in 2015. The specific mortality from congenital syphilis reached 41.7 cases per 100,000 live births in 2013 and reduced to zero in subsequent years. Conclusion: The creation of the observatory allowed the expansion of the diagnosis of syphilis during pregnancy, improved maternal and child care and reduced vertical transmission of syphilis.
DESCRIPTORS: Health Observatory; Syphilis, Congenital; Prenatal Care; Primary Health Care.

RESUMEN
Objetivo: describir el método de implantación de un observatorio de sífilis gestacional y congénita. Método: Estudio descriptivo, realizado en la ciudad de Londrina, Paraná / Brasil, de 2013 a 2016. La implementación del observatorio se realizó en seis etapas: 1) formación de un grupo de trabajo; 2) diagnóstico situacional 3) desarrollo de talleres de educación permanente; 4) estructuración de la línea de atención y comunicación; 5) adecuación de los procedimientos técnicos de laboratorio; 6) ordenar el proceso de trabajo. Resultados: Las acciones implementadas impactaron el aumento en la detección de casos de sífilis en mujeres embarazadas en atención primaria, que pasó de 9.4 por mil nacidos vivos en 2013 a 16.7 en 2015. La mortalidad específica por sífilis congénita alcanzó 41.7 casos por cada 100,000 nacimientos vivos en 2013 y reducido a cero en años posteriores. Conclusión: La creación del observatorio permitió la expansión del diagnóstico de sífilis durante el embarazo, mejoró el cuidado materno-infantil y redujo la transmisión vertical de sífilis.
DESCRIPTORES: Observatorio de Salud; Sífilis Congénita; Cuidado prenatal; Atención Primaria de Salud.

RESUMO
Objetivo: descrever o método de implantação de um observatório para sífilis gestacional e congênita. Método: Estudo descritivo, realizado no município de Londrina, Paraná/Brasil, no período de 2013 a 2016. A implantação do observatório se deu em seis etapas: 1) formação de grupo de trabalho; 2) diagnóstico situacional 3) educação permanente; 4) estruturação da linha de cuidado e comunicação; 5) adequação dos procedimentos técnicos laboratoriais; 6) ordenação do processo de trabalho. Resultados: As ações implantadas impactaram no aumento da detecção de casos de sífilis em gestantes na atenção básica, que passaram de 9,4 a cada mil nascidos vivos em 2013 para 16,7 em 2015. A mortalidade específica por sífilis congênita alcançou 41,7 casos por 100 mil nascidos vivos em 2013 e reduziu para zero nos anos subsequentes. Conclusão: A criação do observatório permitiu a ampliação do diagnóstico da sífilis na gestação, melhoria da assistência materno-infantil e redução da transmissão vertical da sífilis.
DESCRITORES: Observatório de Saúde; Sífilis Congênita; Cuidado Pré-Natal; Atenção Primária a Saúde.

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Flaviane Mello Lazarini
Adjunct Professor, Nursing Departments, University of the Region of Joinville, UNIVILLE.
ORCID: 0000-0003-1325-2744

Guilherme Cassins Valdez
Graduating in Medicine, University of the Region of Joinville, UNIVILLE.
ORCID: 0000-0003-2816-2805

Luan Gabriel Bueno Valgas
Graduating in Medicine, University of the Region of Joinville, UNIVILLE.
ORCID: 0000-0002-9710-2382

Marcos Vinícius Maruyama Ribeiro
Graduating in Medicine, University of the Region of Joinville, UNIVILLE.
ORCID: 0000-0003-3627-4110

Pietro Domit
Graduating in Medicine, University of the Region of Joinville, UNIVILLE.
ORCID: 0000-0003-1972-7392

Luciano Henrique Pinto
Adjunct Professor, Departments of Medicine, Nursing and Pharmacy, University of the Region of Joinville, UNIVILLE, Coordinator of the Integrated Project ECOSAM.
ORCID: 0000-0003-0250-7502

INTRODUCTION

In 2010, the World Health Organization (WHO) estimated that of the more than two million cases of gestational syphilis annually across the globe, approximately 25% occurred in Latin America and the Caribbean, where the prevalence of gestational syphilis reached 3,9%, above the world average of 1,8%. [1]

According to the Pan American Health Organization (PAHO), by 2015, the goal was to reduce congenital syphilis to less than 0,5 cases/thousand live births. [2] This goal is far from being achieved in Brazil, since national data indicated an incidence of 4,7 cases of congenital syphilis per thousand live births. In the same year, the city of Londrina, located in the state of Paraná, surpassed the national indexes (7,1/1000).[1]

The global syphilis epidemic generated the need to expand the monitoring of vertical transmission rates of the disease at the local level, and to carry out interventions with management in the maternal and child health care network (RAS - Rede de Atenção à Saúde). In this context, the observatory is a tool to support the management of health policies and systems, internationally recognized. [3]

Considering that the fifth Millennium Development Goal (MDG), which sought to improve maternal health in Brazil and in the world by 2015, has not been achieved [4] and that PAHO's proposal for the elimination of vertical transmission requires feasible strategies, with policies that encourage the identification and correction of syphilis-generating failures according to the different Brazilian regional realities [5], the need arises to propose and implement an observatory for congenital and gestational syphilis in a Brazilian municipality with a high incidence of the disease in order to improve local prenatal care and consequently reduce vertical transmission of syphilis.

The objective of this study is to describe the method of implanting an observatory for gestational and congenital syphilis and to report the experience obtained in this experience.

METHOD

This is a descriptive study analyzing the process of implanting an observatory for congenital and neonatal syphilis in the city of Londrina PR. This municipality is located in the North of Paraná, Brazil, being considered the second most populous city in the State. With 80 years and steady growth, the municipality has established itself as the main regional reference. In 2010, the resident population in Londrina reached 506.701 inhabitants. [6]

The observatory was implemented from 2013 to 2015 as an epidemiological surveillance tool and was later incorporated into municipal management for the control and monitoring of syphilis.

Its implementation was carried out by researchers from the State University of Londrina and by 102 health professionals working in primary, medium and high complexity in the municipality. The analysis and study of the results were made by professors and students of the University of the Region of Joinville -SC, involved in syphilis project.

The establishment of the observatory took place in six stages: 1) Formation of the syphilis working group; 2) Situational diagnosis through the survey of existing problems in the health care network; 3) Development of permanent education workshops for Primary Care; 4) Structuring the line of care and communication between the different points of care; 5) Adequacy of technical laboratory procedures for the performance of the Venereal Disease Research Laboratory (VDRL); 6) Ordering the work process in obstetric care.

Inclusion criteria adopted were: being a health professional linked to the basic and maternal child care services of the health department of Londrina, graduated or bachelor. Exclusion criteria: undergraduate students who participated were excluded.

The evaluation of the questionnaire was carried out taking into account the correct and incorrect answers according to the framework that supported the training.

The study was preceded by the approval of the Research Ethics Committee (REC) of Unifesp (opinion nº 520.189 of 02/12/2014) and the signing of the Free and Informed Consent Term (ICF) by the professionals included in the research.

RESULTS

The implantation of the Observatory for Gestational and Congenital Syphilis in the city of Londrina, Paraná, was structured in six stages, shown in Figure 1.

The following describes each step of the method in detail for the implementation of this management tool.

Formation of the syphilis working group (GT - Grupo de trabalho)

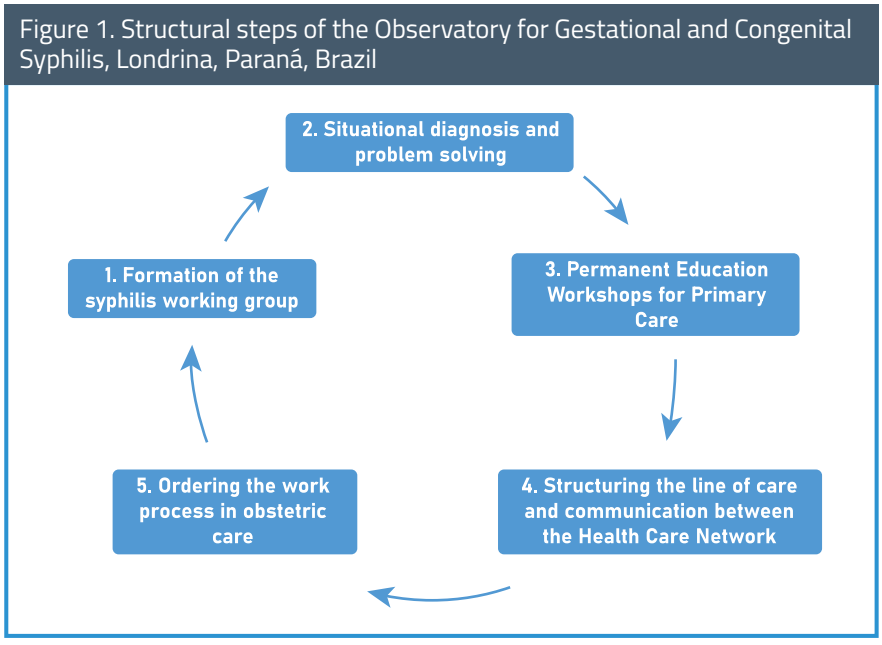
In order to support the interventions carried out by the observatory, in October 2013 the Syphilis Working Group (GT syphilis) was created, composed of two doctors and six nurses, working on the Municipal Committee for the Prevention of Maternal and Child Mortality (CMPMMI - Comitê Municipal de Prevenção da Mortalidade Materna e Infantil) , the Directorate of Primary Health Care (DAPS - Diretoria de Atenção Primária à Saúde), the Directorates of Health Surveillance (DVS - Diretorias de Vigilância em Saúde) and Special Services (Center for Testing and Counseling - CTA [Centro de Testagem e Aconselhamento] and Maternity) and the State University of Londrina. With one meeting every month, the group collected epidemiological data and listed the problems in the local Health Care Network (RAS - Rede de Atenção à Saúde).

Situational diagnosis by surveying the existing problems in the health care network

The data collection took place through the cases of fetal and infant deaths that were investigated by CMPMMI and also through epidemiological data from the information systems Mortality Information System (SIM - Sistema de Informação sobre Mortalidade) and Notifiable Diseases Information System (SINAN - Sistema de Informação de Agravos de Notificação). Thus, the following deadlocks were listed:

a. The number of fetal and infant deaths from syphilis was increasing annually;
b. The factors related to most cases of congenital syphilis were the late start of prenatal care, social vulnerability and difficulty in diagnosing and treating the pregnants' sexual partners;
c. Fragmented care work, cases of gestational syphilis in the territory of Basic Health Units that were not being followed up;
d. Lack of reliability of VDRL tests, a problem that was identified with the repetition of positive VDRL tests at the time of delivery in pregnant women who had three negative prenatal tests;
e. Disarticulation of the Attention Network for prenatal, delivery and puerperium;
f. Absence of information feedback between levels of assistance (reference and counter-reference);
g. Notification delays and inadequate form filling;
h. Absence of local flow to monitor the newborn exposed to syphilis.

Figure 1. Structural steps of the Observatory for Gestational and Congenital Syphilis, Londrina, Paraná, Brazil



Development of permanent education workshops for primary care (AB - atenção básica)

From the situational diagnosis two work fronts were drawn. The first aimed at the permanent education of professionals in local maternal and child care and the second at the organization of the local RAS, instituting reference, counter-reference and monitoring of epidemiological indicators.

The main focus of the observatory was AB, so the 102 professionals who became multipliers were trained. These trainings took place in three stages. The trained facilitators replicated the permanent education workshops in 50 of the 54 BHU in Londrina.

The workshops mainly worked with the notification of individuals infected with syphilis, with an emphasis on the proper filling in of the forms of gestational syphilis and congenital syphilis, adequacy of the work process for quick sending of notifications to the sector of epidemiology, diagnosis and management of syphilis according with the current ministerial protocols and accountability for cases that occurred in the territories covered by the Health Units.

At the end of each educational intervention, supported by flowcharts describing the work process, the teams themselves identified the errors made in prenatal care through the discussion of real clinical cases of fetal deaths and preventable abortions caused by syphilis.

Parallel to the training, as of January 2014, the notification of syphilis acquired by the local UBS began, since it did not formally occur in the notification form itself. In the same period, the "Appointment (Aprazamento)" became effective, a document for monitoring pregnant women with syphilis in AB, produced in two copies, one attached to the medical record and the other to the pregnant woman's card.

The reference instrument contains the dates of the treatment regimen recommended according to the stage of syphilis, the results of the monthly monitoring of the VDRL titration and the location and treatment information of the sexual partner. In January 2016, the 17th Regional Health Department of Paraná standardized this instrument for all its 21 municipalities.

Structuring the line of care and communication between the different points of the Health Care Network

This work front sought to structure the local care line for comprehensive care in the pre-established Care Network. Considering the need to prevent the chain of transmission of syphilis through prevention and adequate treatment, population strategies were triggered during the three years of work of the observatory (2014 to 2016).

The Reference Center for testing and counseling in partnership with AB carried out testing campaigns for syphilis and other sexually transmitted infections (STIs), along with oncotic cytology collection campaigns for the prevention of cervical and breast cancer in the UBS. An instructional pamphlet on syphilis for the population was also prepared and distributed, containing preventive measures, such as condom use, the importance of diagnosis and treatment of partners and consequences of vertical transmission to the fetus, available in all Health Units.

To cover obstetric care, both the Municipal Maternity, a reference for births of habitual and intermediate risk pregnancies and which attends on average 75% of the births in Londrina performed by the Unified Health System (SUS), as well as the three hospitals with private and health professionals received training for doctors and nurses addressing the importance of rapid tests for human immunodeficiency virus (HIV) and serology for syphilis in the pre-delivery period.

The coverage of the Municipal Maternity for these tests is 100% of deliveries, however for other institutions, the performance of the VDRL or rapid test was not part of the routine. The Municipal Maternity has implemented flows to organize the work process: "Screening the parturient", "Newborns (NB) of Mothers with Syphilis Adequately Treated", "Newborns of Mothers with Syphilis Untreated or Inadequately Treated". The material was made available to the other institutions so that they could adapt their practices to the recommended ministerial norms.

Adequacy of technical laboratory procedures for performing the Venereal Disease Research Laboratory (VDRL)

With the support of municipal health surveillance, representatives of public and private clinical analysis laboratories received training on the importance of following national regulations, in accordance with Ministerial Ordinance No. 3.242, of December 30th, 2011[5], since it was identified that some institutions were not using the number of suitable kits (two) for determining antibodies and confirming VDRL titration.

After the laboratory technical adaptation, a change in the communication and working process of the laboratory/UBS was also instituted, made official by internal communication, which he recommended in cases of positive VDRL exams: the laboratory sends an email to UBS informing the pregnant woman's name, card number SUS and the result. The laboratory started to keep the serology bottle, waiting for the Unit's response. UBS responds to the e-mail with the following information: if it is to send the sample for FTA-Abs (Fluorescent Treponemal Antibody - Absorption) or if it is a titration control.

Ordering the work process in obstetric care

At the same time, hospitals were instructed to perform the VDRL on women who had spontaneous abortions and in cases of fetal deaths. For this control, the Hospital Universitário Regional do Norte do Paraná (HU - Hospital Universitário), a reference for obstetric emergencies, developed a VDRL stamp used in the medical records of these cases. It is established that in the obstetric emergency room, women would be discharged only when their medical records had received the stamp.

The counter-reference was established at the Municipal Maternity Hospital through a standardized institutional email to the UBS. All live births of women who had syphilis during pregnancy started to be referred to the referral clinic for pediatric infectious diseases.

In addition, for each newborn exposed to syphilis, even when the mother was adequately treated during pregnancy, the reference maternity's HICC sends an email to the UBS of the coverage area, informing the mother's and child's data and date of birth. appointment for pediatric infectious diseases.

It is up to the team of each UBS to monitor the attendance of the binomial to the consultation with a specialist, as well as the nurse responsible for the postpartum area, to closely monitor the growth and development of the child through childcare, in addition to monthly VDRL titration until the baby is discharged.

DISCUSSION

The implantation of the observatory and the actions implemented impacted the increase in the detection of syphilis cases in pregnant women in primary care, which went from 9.4 per thousand live births in 2013 to 16,7 in 2015. The specific morta-

lity due to congenital syphilis reached 41,7 cases per 100 thousand live births in 2013 and reduced to zero in subsequent years.

In addition, we can highlight that the main benefits of the Observatory for the community were the provision of subsidies to monitor the health situation of the local population as well as to develop strategies that maintained the city's epidemiological surveillance actions.

Among the main results achieved over the two years of implementation of the observatory are the improvement in the knowledge of primary care health professionals about the diagnosis and management of syphilis, with 92,6% adherence to training in Basic Health Units.

The fragmentation of the RAS has not yet been fully overcome, but the instruments implemented to improve communication between services and the monitoring of established NBs, reinforced the integration of care in their production [7-8], resulting in responsible follow-up of cases, which prevented infant deaths in 2014, 2015 and 2016.

In this sense, the observatory in Londrina ended up exercising the task proposed by the Ministry of Health in 2015, which built guidelines for the constitution of "Vertical Transmission Investigation Committees" [9], with the objective of analyzing events related to preventable diseases and pointing out intervention measures to reduce them in each location, in order to improve the quality of information and allow a closer assessment of the reality of the assistance provided to pregnant women in prenatal, delivery and puerperium. [10-11]

CONCLUSION

The experience presented describes the Observatory intervention measure which, as a management tool, strengthened communication between the points of the RAS and improved the quality of care provided to the binomial in prenatal, childbirth and the puerperium. It is believed that this report can serve as a model to be replicated by other health services in Brazil to prevent, diagnose and treat not only syphilis, but any other condition, adapting to the regional realities of health services.

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