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Transition of the epidemiological profile of maternal and congenital syphilis in the State of Goiás (2009-2018): a retrospective analysis

Transição do perfil epidemiológico da sífilis gestacional e congênita no Estado de Goiás (2009-2018): uma análise retrospective

Transición del perfil epidemiológico de la sífilis gestacional y congénita en el Estado de Goiás (2009-2018): un análisis retrospectivo

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ABSTRACT

Introduction: Syphilis is a bacterial infection transmitted sexually and transplacental. In Brazil, in the last decade, there has been an increase in notifications of maternal (MS) and congenital (SC) syphilis. Aim: To analyze the epidemiological profile of reported cases of GS and CS in the historical series, from 2009 to 2018, in the state of Goiás. Outlining: Epidemiological, cross-sectional, and analytical retrospective study that describes and analyses the data on MS and CS available in the Information System for Notifiable Diseases (SINAN). Contingency tables, descriptive and inferential statistics were presented, with the application of the G Test and significance level ≤ 0.05 . Results: The results highlighted epidemiological changes in the sociodemographic profile and in the data of the care of pregnant women with syphilis. Implications: The evidenced epidemiological transition shows that there was an improvement in prenatal care in the state of Goiás, requiring health policy measures for specific risk groups. It is fundamental to plan and implement strategic actions with the redefinition of priorities in relation to the epidemiologically affected groups.

DESCRIPTORS

Prenatal Care; Syphilis; Women's Health; Public Health.

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INTRODUCTION

Sexually Transmitted Infections (STIs) are among the more common acute conditions in the world. There are more than 30 infections that can be sexually transmitted and can lead to severe complications and long-term sequels. STIs still result in stigma, stereotypes, vulnerability, and shame. They have been associated with gender-based violence, domestic violence, and loss of relationships. ¹⁻²

An STI that must be faced, whose prevalence has been increasing considerably, is syphilis. This increasing has been occurring considerably all around the world, being important to cope with and to understand the epidemiology of this SIT. It is a bacterial infection, of chronic evolution, caused by the etiological agent *Treponema pallidum*, subspecies *pallidum*. Its transmission can occur sexually, corresponding to maternal syphilis (MS), or vertically during pregnancy, corresponding to congenital syphilis (CS).³⁻⁴

In Brazil, in the last decade, especially from the year 2010, there was an increase in case notifications of both MS and CS. In 2017, 193,479 cases of GS were reported in the Information System for Notifiable Diseases (SINAN) throughout Brazil, in addition to 206 deaths from CS throughout Brazil.⁵

In the state of Goiás, in the last five years, there has been an increase in the notification of cases of MS and CS in the SINAN. From 2016 to 2017, an increase of more than 30% in cases of MS and 2% in cases of CS was identified.⁶

Inadequate prenatal care is responsible for the high incidence of CS worldwide, as it involves preventable injuries and deaths. Therefore, CS can be considered an indicator of the quality of prenatal care.⁷⁻⁹

Brazilian studies have been developed with the aim of drawing an epidemiological profile of syphilis and, in particular, CS. Studies were carried out, for example, in Palmas/TO,⁷ in Belo Horizonte/MG⁹ and in a national hospital-based study. ¹⁰

In this sense, the main objective of this study was to analyze the epidemiological profile of reported cases of MS and CS in the historical series, from 2009 to 2018, in the state of Goiás, Brazil.

METHOD

This is an epidemiological, cross-sectional and analytical retrospective study that sought to describe and analyze the data from the notifications of confirmed GS and CS cases, available in SINAN, in the 2009 to 2018 period, in the state of Goiás, Midwest region of Brazil. The research was carried out in September 2020, with access to the website of the Department of Informatics of the Brazilian Unified Health System (DATASUS, access at https://datasus.saude.gov.br), a database of the Ministry of Health, which is in the public domain.

The period selected for the study was 10 years in order to represent a historical series of the disease in the state of Goiás. The inclusion criteria for this study were all MS and CS cases notified and registered in the SINAN, from 2009 to 2018 in the state of Goiás.

The variables analyzed for MS were: age range, educational attainment, race/color, gestational age, and clinical classification. For CS, data were analyzed on child's age, mother's age range, educational attainment, prenatal care, period of diagnosis of maternal syphilis, and outcome of CS were analyzed.

Data collected at DATASUS were carefully reviewed by the research team, coded and entered into a database using the Microsoft Excel. Subsequently, contingency tables were presented, and the data analyzed by descriptive and inferential statistics. Absolute and relative values were calculated for each investigated variable.

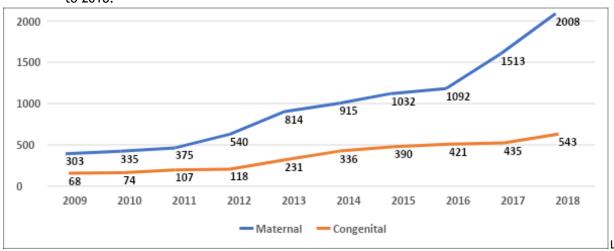
As for inferential statistics, the period analyzed in the study was divided into two 5-year

periods, for comparison and better analysis of the historical series: Group A (2009 to 2013) and Group B (2014 to 2018). For each grouped variable, the absolute and relative values were calculated. Comparisons between variables were analyzed using the Statistical Package for Social Sciences (SPSS) version 23.0, applying inferential statistics and the G Test, with a significance level of less than or equal to 0.05.

In the 2009 to 2018 period 8,927 MS cases and 2723 CS cases were registered in the state of Goiás. The occurrence of a progressive increase in the number of cases is identified. It was observed that the highest amount of MS cases occurred in the year 2018, with 2,008 cases, and a trend of increasing over the years of the historical series, with an expressive increase from 2016. CS cases started to raise from 2013, reaching 543 cases in the year 2018 (Figure 1).

RESULTS

Figure 1 - Historical series of reported cases of maternal and congenital syphilis in the state of Goiás, Brazil-2009 to 2018.



Legend: MW =

Source: DATASUS.

An epidemiological alteration of the MS cases in relation to the reported age range was identified with statistical significance. In the group A, 18.8% of the pregnant women diagnosed with syphilis were in the 15 to 19 age range, increasing for 26.1% in the Group B. There was a reduction of pregnants with syphilis in the 30 to 39 age range when comparing Group A (24.3%) and Group B (17.7%). Thus, there is evidence of an increase in the condition among adolescents and a decrease among women over 30 years of age (p<0.001) (Table 1).

In relation to educational attainment, it is observed in the historical series that in Group A, 0.7% of the pregnant women were illiterate, reducing for 0.3% in the Group B. There also was reduction in the levels of educational attainment incomplete 1st to

4th grade, complete 4th grade, and incomplete 5th to 8th grade. On the other hand, the categories of educational attainment complete and incomplete high school, complete and incomplete higher education had an increase in relation to the analyzed groups. In the group A, 0.5% of the pregnants with MS had the level complete higher education, increasing for 1.3% in the Group B (p<0.001) (Table 1).

In group A, white women totaled 26.0%, reducing to 19.7% in group B. As for pardo (mixed ethnicity) pregnant women, they increased from 48.2% in group A to 60.2% in group B. A frequency of indigenous women with MS tripled from group A to group B. Black pregnant women reduced from 10.8% to 9.5% in groups A and B, respectively (p<0.001) (Table 1).

Table 1 - Comparative analysis between the first five and last five years of the historical series referring to the sociodemographic data of MS cases in the state of Goiás, Brazil, 2009-2018.

Sociodemographic variables	A - 2009-2013		B - 2014-2018		n value
	n	f(%)	n	f(%)	p-value
Age Range					
10 to 14	30	1.3	84	1.3	
15 to 19	446	18.8	1711	26.1	
20 to 29	1242	52.5	3487	53.2	<0.001
30 to 39	576	24.3	1164	17.7	
over 40	73	3.1	114	1.7	
Educational attainment					
Illiterate	16	0.7	17	0.3	
Incomplete 1st to 4th grade	132	5.6	191	2.9	
Complete 4th grade	100	4.2	206	3.1	
Incomplete 5th to 8th grade	428	18.1	1077	16.4	
Complete Elementary School	191	8.1	531	8.1	<0.001
Incomplete High school	286	12.1	1004	15.3	
Complete High School	279	11.8	1036	15.8	
Incomplete High School	25	1.1	77	1.2	
Complete High School	12	0.5	84	1.3	
Ignored	898	37.9	2337	35.6	
Skin Color					
White	616	26.0	1295	19.7	
Black	256	10.8	621	9.5	
Yellow	36	1.5	108	1.6	<0.001
Pardo	1142	48.2	3949	60.2	
Indigenous	3	0.1	21	0.3	
Ignored	314	13.3	566	8.6	

Source: Direct search.

In the clinical data of pregnant women with MS, it was identified an epidemiological alteration as to the gestational age of the syphilis diagnosis. A total of 20% happened in the 1st trimester of pregnancy in group A and in group B it increased to 25.3%. The diagnosis in the 2nd trimester of pregnancy in group A was 40.2%, decreasing to 38.4% in group B (p<0.001) (Table 2).

Another clinical data refers to the clinical classification of OS, in which all clinical variables underwent significant changes in the analyzed

groups. There was a reduction of cases classified as primary syphilis, in group A (37.7%) and in group B (25.5%). Ignored cases also reduced from 28.6% (group A) to 16.6% (group B). Regarding latent syphilis, there was an increase from 13.2% (group A) to 30.8% (group B) (p<0.001) (Table 2).

Table 2 - Comparative analysis between the first five and last five years of the historical series referring to the clinical data of the cases of MS in the state of Goiás, Brazil, 2009-2018.

Clinical variables	A - 2	A - 2009-2013		B - 2014-2018	
	n	f(%)	n	f(%)	p-value
Gestational age					
1st Trimester	474	20.0	1662	25.3	
2nd Trimester	952	40.2	2516	38.4	
3rd Trimester	795	33.6	2185	33.3	<0.001
Ignored	146	6.2	197	3.0	
Clinical Classification					
Primary	893	37.7	1671	25.5	
Secondary	354	15.0	1204	18.4	
Tertiary	130	5.5	572	8.7	<0.001
Latent	312	13.2	2023	30.8	
Ignored	678	28.6	1090	16.6	

Source: Direct search

The diagnosis of CS in newborns younger than 7 days old increased from 94.8% in group A to 96.7% in group B, on the other hand there was a reduction in the diagnosis of babies aged 28 to 364 days, from 3.2% to 1.3% in the analyzed groups. A reduction in the age ranges of 1 year and 5 to 12 years and an increase in the age range of 2 to 4 years (p = 0.002) was observed (Table 3).

With regard to the data of pregnant women with CS outcome, significant changes were observed in educational attainment levels. There was a reduction in the category of illiterates, incomplete 1st to 4th grade, complete 4th grade, incomplete 5th to 8th grade and complete elementary school in group A for group B. On the other hand, the levels complete and incomplete high, complete, and incomplete higher education, and the ignored data had an increase between the analyzed groups (p<0.001) (Table 3).

There were significant changes (p=0.005) in the frequencies of the groups of pregnant women with CS outcomes, in relation to color/race, in almost all races, apart from indigenous pregnant women (Table 3).

Regarding the age range, there was an increase in the age group of adolescents (15 to 19 years old) from 17.6% in group A to 23.4% in group B, and a reduction in women in the age range of 20 to 29 years, 30 to 39 years and over 40 (p=0.004) (Table 3).

ignored by 61% when compared to Floriano (p= 0.005; IC95%=0.203 - 0.751).

Table 3 - Comparative analysis between the first five and last five years of the historical series referring to the sociodemographic data of CS cases in the state of Goiás, Brazil, 2009-2018.

sociodemographic data of CS Sociodemographic variables		A - 2009-2013		014-2018	
	n	f(%)	n	f(%)	. p-value
Child's age					
Less than 7 days	567	94.8	2055	96.7	
7 to 27 days	12	2.0	42	2.0	
28 to 364 days	19	3.2	28	1.3	0.002
1 year	1	0.2	3	0.1	
2 to 4 years	0	0.0	2	0.1	
5 to 12 years	3	0.5	0	0.0	
Mother's Age Range (years)					
10 to 14	5	0.8	18	0.8	
15 to 19	105	17.6	498	23.4	
20 a 29	318	53.2	1081	50.9	0.004
30 a 39	129	21.6	366	17.2	
Over 40	16	2.7	34	1.6	
Ignored	29	4.8	133	6.3	
Mother's Educational Attainment					
Illiterate	8	1.3	14	0.7	
Incomplete 1st to 4th grade	39	6.5	68	3.2	
Complete 4th grade	25	4.2	46	2.2	
Incomplete 5th to 8th grade	149	24.9	380	17.9	
Complete Elementary School	46	7.7	160	7.5	<0.001
Incomplete High School	66	11.0	337	15.9	
Complete High School	61	10.2	227	10.7	
Incomplete Higher Education	4	0.7	23	1.1	
Complete Higher Education	0	0.0	14	0.7	
Not applicable	13	2.2	28	1.3	
Ignored	191	31.9	833	39.2	
Mother's Skin Color					
White	113	18.9	258	12.1	
Black	46	7,7	122	5.7	
Yellow	7	1.2	28	1.3	
Pardo	330	55.2	1296	61.0	
Indigenous	0	0.0	1	0.0	0.005
Ignored	106	17.7	425	20.0	

Source: Direct search.

A significant difference was identified in the compared groups regarding the diagnosis of maternal syphilis. In group A, the frequency was 46.8% of diagnosis of maternal syphilis during prenatal care

and in group B there was a significant increase to 57.3%. In the same category, postpartum diagnosis reduced from 20.9% in group A to 11.8% in group B (p<0.001) (Table 4).

When analyzing maternal treatment, it was observed that the frequency of inadequate treatment was 47.8% in group A and in group B it was 63.8% (p<0.001). There was a reduction in relation to non-carried out treatment, from 38% in group A to 22.7% in group B (Table 4).

In this historical series, there were significant differences in relation to the treatment of the partner both in group A and B. In group A, 14.2% of the partners of pregnant women with CS outcome

received treatment and in group B there was an increase to 19.6% (p=0.002) (Table 4).

In relation to the outcome of the pregnancy, there was a significant reduction in both recent CS and late CS in the analyzed groups. On the other hand, the frequency of abortions due to syphilis doubled from group A (1.0%) to group B (2.0%) and stillbirths due to syphilis increased from 2.0% (group A) to 3.4% (group B) (p=0.021) (Table 4).

Table 4 - Comparative analysis between the first five and last five years of the historical series referring to the clinical data of CS cases in the state of Goiás, Brazil, 2009-2018.

Clinical variables	A - 2009-2013		B - 2014-2018		p-value
	n	f(%)	n	f(%)	p-value
Final Diagnosis					
Recent congenital syphilis congênita	581	97.2	2014	94.8	
recente	301	97.2	2014	94.0	
Late congenital syphilis	3	0.5	2	0.1	
Abortion due syphilis	6	1.0	42	2.0	
Stillborn due syphilis	12	2.0	72	3.4	0.021
Prenatal Care					
Yes	467	78.1	1590	74.8	
No	119	19.9	388	18.3	0.712
Ignored	16	2.7	152	7.2	
Diagnosis of maternal syphilis					
During prenatal care	280	46.8	1218	57.3	
At birth/curettage	157	26.3	572	26.9	
Postpartum	125	20.9	251	11.8	
Not carried out	11	1.8	23	1.1	<0.001
Ignored	29	4.8	66	3.1	
Mother's treatment					
Adequate	33	5.5	100	4.7	
Inadequate	286	47.8	1355	63.8	
Not carried out	227	38.0	483	22.7	<0.001
Ignored	56	9.4	192	9.0	
Treatment of Partner					
Yes	85	14.2	417	19.6	
No	408	68.2	1348	63.4	0.002
lgnored	109	18.2	365	17.2	

Source: Direct search.

DISCUSSION

The results of this study enabled to analyze the epidemiological profile of Maternal Syphilis and Congenital Syphilis in the state of Goiás (2009-2018), as well as the possible sociodemographic factors of the mother that influence this prevalence and the related maternal care prenatal care characteristics.

The results of the analyzed historical series point out to the magnitude of the CS problem and to the urgency for investments to improve both prenatal and newborn care. Similar findings were evidenced in other studies. 8,10-16

In the comparative analysis between groups A and B, an epidemiological alteration in relation to the age range of the pregnant women notified with MS is perceived. There is an augment in MS among teenagers, similar to the one found in national^{9,12,14} and foreign¹⁷⁻¹⁸ studies. On the other hander, it has been decreasing among women over 30 years old, diverging from a study in the state of Paraná, in which the disease increased in this age range.¹⁹

Several factors tend to make adolescents vulnerable, associating them with a greater risk of syphilis and other STIs. Amongst these, early initiation of sexual intercourse, use of psychoactive substances, unprotected sex practices, high number of sexual partners and lack of knowledge about the proper use of preventive methods and forms of contagion can be mentioned.

The findings of the present study suggest the need to expand the development of educational and preventive actions in the control of STIs, with the objective of reaching mainly the adolescent population. The theme of sexuality should be present in actions of information, communication, and health education for adolescents, preferably before the first sexual intercourse occurs, and should be approached gradually and from the perspective of comprehensive care for women's and men's health.⁵

Adolescents and young people still have doubts about preventing the transmission of STIs, even with the dissemination in the media and

information in schools, in addition to being resistant to condom use, making them vulnerable and increasing the incidence of diseases. For adolescent women, vulnerability is even greater due to the lack of negotiation power and control over the relationship, where male chauvinism is still present in society.

Despite the dissemination in the media and in schools, many adolescents have doubts about the prevention of STIs and are resistant to the use of condoms, which makes them vulnerable and increases the incidence of STIs.²²

Regarding the ethnicity of women with MS, a reduction was observed among white women and an increase in indigenous and pardo (mixed-race) pregnant women, emphasizing the ethnic disparities in the phenomenon and restrictions on access to health services. 12-16,24-26

In a study in the United States, the importance of associating the maternal race/ethnicity of pregnant women with CS outcome was reported.¹⁷ A study in Australia reported the difficulty of accessibility for indigenous pregnant women to health facilities.²⁷

In Brazil, health inequalities are a fundamental and determining element in the health-disease process. The population is stratified according to income, education, occupation, gender, color, and other factors that determine vulnerabilities and differentiated exposures to health conditions.²⁸ These social determinants of health culminate in inequalities that limit access to health services by women in Brazil.

Low educational attainment is considered a risk factor for exposure to STIs, due to a limited understanding of the importance of preventive measures and difficulties in accessing health services.

12,26,29-31 In this research, there was a significant epidemiological change in this category, in which the condition is increasing in women with more than 8 years of schooling (with complete or incomplete high

school and higher education), similar to a study in Minas Gerais.⁸

This evidence points to the fact that low education is one of the social determinants involved in the epidemiological profile of syphilis, not the only one. The adoption of safe sexual behavior is complex, not only depending on years of study, income or even access to information, but also on the social meanings attributed to sexuality and care for one's own health.²¹

The clinical classification of syphilis is the criterion used to define the therapy to be instituted and, in this comparative study of groups in the historical series, a significant decrease of the ignored cases was observed, reflecting an improvement in prenatal care. and presenting more consistent data in relation to this category. ^{7,11,14-16,19}

The epidemiological transition observed in the state of Goiás in relation to the clinical classification of MS represents an improvement in prenatal care in relation to the training of health professionals, since it is necessary to identify the clinical signs and symptoms that determine this STI in order to classify it.⁷ Another hypothesis that can be suggested is the expansion of testing during three stages of pregnancy (first trimester, third trimester and childbirth), regardless of whether the pregnant woman has symptoms, since the latent classification is asymptomatic.³

Global regulations recommend screening for syphilis at the first prenatal care appointment, ideally during the first trimester. In the historical series analyzed, there was strong evidence in relation to gestational age at the time of syphilis diagnosis, with an increase in cases reported in the 1st trimester of pregnancy and a reduction in the 2nd and 3rd trimesters and in the ignored cases, providing opportunities for diagnosis and early treatment. ^{7,8,10,13} This evidenced epidemiological change demonstrates that the state of Goiás is experiencing an improvement in prenatal care, detecting MS earlier, allowing adequate treatment. The screening for

syphilis, according to global regulations, must be carried out in the first prenatal care appointment, preferably in the first trimester of pregnancy.

CS is considered a serious outcome because of the poor quality of medical care, showing failures in health services, particularly in prenatal care.³²⁻³³ In the historical series analyzed, there was strong evidence at the time of MS diagnosis in women with CS outcome. There was a significant increase in cases diagnosed during prenatal care and a reduction after delivery and in the categories not performed and ignored, similar to other studies carried out in Brazil.^{7,12-14,16,19,30}

This evidence demonstrates that prenatal care services in the state of Goiás are moving towards an improvement in the early diagnosis of MS. Generally, it is during the gestational period that even women with greater difficulty in accessing health services mostly seek a place for their care, seeking to minimize negative outcomes in pregnancy and childbirth.³⁴ Pregnant women face the difficulty of accessing health services for their care, thus minimizing possible negative outcomes in pregnancy and childbirth.³⁴

Regarding the maternal treatment of pregnant women with CS outcome, a significant epidemiological change was observed in this comparative study. There was an increase in cases of inadequate treatment, which explains the increase in CS cases. Similar results were demonstrated in different national studies. 12-14,16,26

The categories maternal treatment adequate, ignored and not performed decreased when comparing the groups of the historical series analyzed in this study, diverging from a national study that, in the states of Rio de Janeiro, Rio Grande do Sul and Ceará, the gestational treatment of most cases was ignored, ¹⁶ and another, in the state of Tocantins. ⁷ Two studies carried out in the United States also registered an increase in the number of pregnant women with a CS outcome whose maternal treatment was ignored. ^{24,35}

The recommendation of the Ministry of Health for the treatment of pregnant women with syphilis is that: be appropriate to the stage of the disease, performed with penicillin and completed at least 30 days before delivery, being important to treat the partner concomitantly.5 According to the results of this study, there was an improvement in the clinical classification of the disease and in the early diagnosis of pregnant women. However, it was evident the low resolution in the basic health network and in prenatal care in the state of Goiás, in relation to the treatment of pregnant women This fact points out as the main predictor for the growing increase in CS cases observed in the historical series. The increase in the occurrence of inadequate treatment shows flaws related to adherence and access to treatment for pregnant women, since the GM Ordinance No. 3,161/2011 establishes the availability of penicillin in all health units of the SUS.5

In this comparative study, statistical evidence was demonstrated in the treatment of the pregnant woman's partner diagnosed with CS. In the historical series analyzed, an increase in partners being treated and a reduction in the untreated and ignored categories can be seen, like a study carried out in the city of Itapeva, in São Paulo.³⁶

Despite this evidence, in order to break the chain of syphilis transmission, it is essential that the sexual partners of infected people are treated. In the present study, the frequency of untreated partners is

above 60%, reflecting treatment failure and reinfections, similar to another study in the state of Goiás. ¹⁵

The WHO has established the goal of keeping stillbirths due to syphilis below 2% among total fetal losses as an indicator for countries' progress towards the elimination of CS. In the present study, similar to other national research, 8,26,36 there was an increase in stillbirths and abortions, evidencing the difficulty in reaching this goal. The goal established by the WHO for the elimination of CS is to keep stillbirths due to syphilis below 2% among the total fetal losses, thus being considered as a progress of the countries.

CONCLUSION

The prevalence of maternal and congenital syphilis is still a challenge in the state of Goiás. The results of this comparative study demonstrated a significant epidemiological transition towards an improvement in MS and CS in the state of Goiás, both in terms of sociodemographic and clinical profiles.

The present study demonstrates that the planning and implementation of strategic actions with the redefinition of priorities in relation to the epidemiologically affected groups is fundamental. With coordinated and targeted actions, there may be a decrease in cases of SG and SC in the state of Goiás.

RESUMO

Introdução: A sífilis é uma infecção bacteriana transmitida por via sexual e por via transplacentária. No Brasil, na última década, observou-se aumento de notificações de sífilis gestacional (SG) e congênita (SC). Objetivo: Analisar o perfil epidemiológico dos casos notificados de SG e SC na série histórica, 2009 a 2018, no estado de Goiás. Delineamento: Estudo epidemiológico do tipo seccional, retrospectivo e analítico que descreve e analisa os dados disponíveis no Sistema de Informações de Agravos de Notificação acerca da SG e SC. Foram apresentadas tabelas de contingência, estatística descritiva e inferencial, com aplicação do Teste G e nível de significância ≤0,05. Resultados: Os resultados evidenciaram alterações epidemiológicas significativas no perfil sociodemográfico e nos dados assistenciais das gestantes com sífilis. Implicações: A transição epidemiológica evidenciada mostra que houve uma melhora na assistência pré-natal no estado de Goiás, necessitando de medidas de políticas em saúde para os grupos de risco específicos. É fundamental o planejamento e a implementação de ações estratégicas com a redefinição de prioridades em relação aos grupos epidemiologicamente afetados.

DESCRITORES

Cuidado Pré-Natal; Sífilis; Saúde da Mulher; Saúde Pública.

RESUMEN

Introducción: La sífilis es una infección bacteriana de transmisión sexual y transplacentaria. En Brasil, en la última década, hubo un aumento en las notificaciones de sífilis gestacional (GS) y congénita (SC). Objetivo: Analizar el perfil epidemiológico de los casos notificados de GS y SC en la serie histórica, de 2009 a 2018, en el estado de Goiás. Diseño: Estudio epidemiológico transversal, retrospectivo y analítico que describe y analiza los datos disponibles en el Sistema de Información de Enfermedades de Declaración Obligatoria sobre GS y SC. Se presentaron tablas de contingencia, estadística descriptiva e inferencial, con la aplicación de la Prueba G y nivel de significancia ≤0,05. Resultados: los resultados mostraron cambios epidemiológicos significativos en el perfil sociodemográfico y en los datos de atención de las gestantes con sífilis. Implicaciones: La transición epidemiológica evidenciada muestra que hubo una mejora en la atención prenatal en el estado de Goiás, requiriendo medidas de política de salud para grupos de riesgo específicos. Es fundamental planificar e implementar acciones estratégicas con la redefinición de prioridades en relación a los grupos epidemiológicamente afectados.

DESCRIPTORES

Atención Prenatal; Sífilis; Salud de la Mujer; Salud Pública.

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CONFLICTS OF INTEREST

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