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Artigo Original

Perfil epidemiológico de gestantes portadoras de sífilis em um município da região do Cariri

Epidemiological profile of pregnant women with syphilis in a municipality of the Cariri region

Perfil epidemiológico de gestantes portadoras de sífilis en un municipio de la región del Cariri

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RESUMO

Justificativa e Objetivos: A sífilis é umas das infecções sexualmente transmissíveis que causam grandes danos às gestantes e seus conceitos. O objetivo deste estudo foi conhecer o perfil epidemiológico de gestantes portadoras de sífilis em um município da região do Cariri, Ceará, Brasil. **Métodos:** Trata-se de uma pesquisa de natureza descritiva, documental, com abordagem quantitativa, realizada no período de fevereiro a dezembro de 2018. O estudo ocorreu no setor de vigilância epidemiológica de um município da região do Cariri, e teve como amostra, após aplicação dos critérios de inclusão e exclusão, 96 fichas de investigação de sífilis em gestantes. Um roteiro de formulário foi utilizado como instrumento de coleta de dados. Posteriormente, os dados foram analisados pelo *Statistical Package for the Social Sciences* (SPSS). **Resultados:** Em relação ao perfil sociodemográfico, 53,2% (n=51) das participantes tinham idade entre 14 e 23 anos, 87,5% (n=84) estavam no último trimestre da gestação, 84,4% (n=81) eram pardas, 54,2% (n=52) tinham ensino fundamental incompleto, 84,4% (n=81) residiam na cidade de Juazeiro do Norte - Ceará, e 76% (n=73) possuíam como ocupação ser dona do lar. Quanto ao estágio clínico, 83% (n=80) apresentavam a forma latente da doença. No ano de 2017, a incidência foi de 48% (n=46) e em 2018, foi de 52% (n=50). **Conclusão:** Embora o acesso ao diagnóstico da sífilis no período gestacional tenha melhorado após a incorporação do teste rápido para sífilis nas unidades básicas de saúde da família, esta patologia ainda tem grande predominância no Brasil, como evidenciado no estudo.

Descritores: Gravidez. Sífilis. Epidemiologia.

ABSTRACT

Background and Objectives: Syphilis is one of the sexually transmitted infections that cause great harm to pregnant women and their concepts. The aim of this study was to know the epidemiological profile of pregnant women with syphilis in a municipality located in the Cariri region, Ceará, Brazil. **Methods:** This is a descriptive, documental, quantitative study. It was conducted from February to December 2018 in the epidemiological surveillance sector of a municipality in the Cariri region. After application of the inclusion and exclusion criteria, the sample included 96 syphilis investigation forms of pregnant women. A form script was used as data collection instrument. Subsequently, data were analyzed by the Statistical Package for the Social Sciences (SPSS). **Results:** In relation to the sociodemographic profile, 53.2% (n=51) of participants were aged between 14 and 23 years old, 87.5% (n=84) were in the last trimester of pregnancy, 84.4% (n=81) were mixed race, 54.2% (n=52) had incomplete primary education, 84.4% (n=81) lived in the city of Juazeiro do Norte - Ceará, and 76% (n=73) had housewife as occupation. Regarding clinical stage, 83% (n=80) presented the latent form of the disease. In 2017, the disease incidence was 48% (n=46), and in 2018, it was 52% (n=50). **Conclusion:** Although the access to the diagnosis of syphilis in pregnancy has improved after the incorporation of the rapid syphilis test in family health centers, this pathology still has great predominance in Brazil, as evidenced in the study.

Keywords: Pregnancy. Syphilis. Epidemiology.

RESUMEN

Justificación y objetivos: La sífilis es una de las infecciones de transmisión sexual que causan gran daño a las mujeres embarazadas y sus conceptos. El objetivo de este estudio fue conocer el perfil epidemiológico de gestantes con sífilis en una ciudad de la región de Cariri, Ceará, Brasil. **Métodos:** Se trata de un estudio descriptivo, documental y cuantitativo. Se realizó de febrero a diciembre de 2018 en el sector de vigilancia epidemiológica de un municipio de la región de Cariri. Tras la aplicación de los criterios de inclusión y exclusión, la muestra incluyó 96 formularios de investigación de sífilis en gestantes. Se utilizó un guión de formulario como instrumento de recolección de datos. Posteriormente, los datos fueron analizados por el Paquete Estadístico para las Ciencias Sociales (SPSS). **Resultados:** En relación al perfil sociodemográfico, el 53,2% (n=51) de los participantes tenían entre 14 y 23 años, el 87,5% (n=84) estaban en el último trimestre del embarazo, el 84,4% (n=81) eran mestizos, el 54,2% (n=52) tenían educación primaria incompleta, el 84,4% (n=81) vivían en la ciudad de Juazeiro do Norte - Ceará, y el 76% (n=73) tenían como ocupación ser ama de casa. En cuanto a la etapa clínica, el 83% (n=80) presentaban la forma latente de la enfermedad. La incidencia en 2017 fue del 48% (n=46), y en 2018, fue del 52% (n=50). **Conclusión:** Aunque el acceso al diagnóstico de sífilis en el embarazo ha mejorado debido a la incorporación de la prueba rápida de sífilis en los centros de salud familiar, esta patología aún tiene gran predominio en Brasil, como se evidencia en el estudio.

Palabras clave: Embarazo. Sífilis. Epidemiología.

INTRODUCTION

Syphilis is a Sexually Transmitted Infection (STI) caused by the *Treponema pallidum* bacterium.¹ It is a condition of known nature disseminated through sexual contact, from which

it can become a systemic pathology of chronic evolution and a developmental path with variations depending on the time of contagion and its stage.²

The emergence of syphilis is directly related to sociodemographic and economic factors that solidify its greater incidence in social conglomerates with low educational level, low income, lack of knowledge about reproductive health and unstable marital status.³

Congenital Syphilis (CS), in turn, is transmitted vertically from the infected mother to the fetus during pregnancy.⁴ Despite the various diagnostic methods and treatments available, CS is still a major global health problem that can cause miscarriage, premature birth, fetal and neonatal death, in addition to an estimated 4.5 times greater risk compared to pregnant women without this clinical picture.^{3, 4}

Most newborns with CS are commonly infected in the intrauterine period between the ninth week of gestation and the fourth month of pregnancy.⁵

The diagnosis of CS should be made early, during pregnant women's follow-up in prenatal consultations by means of the rapid test for syphilis, the Venereal Disease Research Laboratory (VDRL) and/or the Rapid Plasma Reagent Test (RPR) in order to minimize the risks for the mother and the fetus. The consequences of late diagnosis and/or lack of treatment during prenatal care can lead to abortion, fetal death, premature birth, and others.⁵

The Ministry of Health (MS), through the Primary Care Booklet number 32 that addresses low-risk prenatal care, recommends doing the rapid test for syphilis and/or the VDRL/RPR during the first and third trimester of pregnancy, preferably through the rapid treponemal test.^{6,7} Despite the greater scope of offering these tests to pregnant women and their partners, the vertical transmission of syphilis has not effectively decreased. This fact proves that only the availability of early diagnosis without including other educational measures is not enough to guarantee quality care for pregnant women with syphilis.^{8,9}

The development of this study is relevant given that syphilis is a highly contagious disease capable of affecting women in the pregnancy period, their partners and fetuses, and causing innumerable damages to their health. Especially when preventive measures are not correctly applied, the situation can culminate in the development of a series of public health problems.

This study can support the development of health promotion and education measures aimed at improving the quality of life and maximizing actions to reduce the rates of syphilis disease in the populations mentioned above. The objective of this study was to know the epidemiological profile of pregnant women with syphilis in a municipality of the Cariri region.

METHODS

This is a descriptive, documentary, quantitative study conducted in the epidemiological surveillance sector of the health department of a municipality located in the region of Cariri, state of Ceará.

The study population initially comprised 149 syphilis investigation forms of pregnant women. From the inclusion criteria: records of pregnant women diagnosed with syphilis attended between 2017 and 2018 and filled out with legible writing; and exclusion criteria: forms with inconclusive diagnoses, unreadable and/or incomplete forms, the final sample of the study was composed of 96 forms.

The study was conducted from February to November 2018. A structured form script previously prepared by researchers was used as data collection instrument. It contained objective questions related to age, gestational trimester, race/color, educational level, municipality of residence and occupation; and specific data of the clinical picture, such as clinical classification of gestational syphilis and prevalence of syphilis in pregnant women according to the determined period.

The collected data were tabulated using the Microsoft Office Excel (version 2010). The descriptive analysis was performed afterwards by means of the Statistical Package for the Social Sciences (SPSS) (version 22.0).

The study followed all ethical and legal aspects established by Resolution number 466/12 of the National Health Council that addresses the rules and guidelines for conducting research involving human beings, and was approved by the Research Ethics Committee of the Centro Universitário Doutor Leão Sampaio (UNILEÃO) under number CAAE: 98590918.3.0000.5048 and number 3.053.850.

RESULTS

The study consisted of 96 syphilis investigation forms of pregnant women attended in a municipality in the Cariri region (Ceará) between 2017 and 2018. Among them, 53.2% (n=51) were aged between 14 and 23 years old, 87.5% (n=84) were in the last trimester of pregnancy, 84.4% (n=81) were of mixed race, 54.2% (n=52) had incomplete elementary education, 84.4% (n=81) lived in the city of Juazeiro do Norte, and 76% (n=73) had the occupation of being a housewife (Table 1).

The clinical classification of the disease in pregnant women was the following: 83% of cases in latent form; 5% of primary syphilis; 4% secondary; 4% tertiary; and 4% without

information. Regarding the diagnosis period, 48% of cases were identified in 2017 and 52% in 2018.

Table 1. Distribution of participants in relation to the sociodemographic profile in a municipality in the Cariri region, Ceará, Brazil, in the 2017-2018 period.

VARIABLE	N	%
AGE (years)		
14 - 23	51	53.2
24 - 33	34	35.4
34 - 43	11	11.4
GESTATIONAL TRIMESTER		
1 st Trimester	02	2.1
2 nd Trimester	10	10.4
3 rd Trimester	84	87.5
RACE/COLOR		
Mixed race	81	84.4
White	10	10.4
Black	04	4.2
Ignored	01	1.0
EDUCATIONAL LEVEL		
Illiterate	01	1.0
Incomplete Primary School	52	54.2
Complete Primary School	09	9.4
Incomplete Secondary School	16	16.7
Complete Secondary School	15	15.6
Tertiary Education	02	2.1
Ignored	01	1.0
MUNICIPALITY OF RESIDENCE		
Caririaçu	01	1.0
Juazeiro do Norte	81	84.4
Ignored	14	14.6
OCCUPATION		
Agriculture	03	3.1
Self-employed	03	3.1
Housewife	73	76.0
Housekeeper	04	4.2
Student	04	4.2
Others	09	9.4

DISCUSSION

In the study on syphilis during pregnancy and the factors associated with congenital syphilis in Belo Horizonte (state of Minas Gerais), Nonato et al.¹⁰ showed results similar to those found in the present study, that is, pregnant women affected by syphilis were young, in the age group of 20 years, given the reference of higher pregnancy rates in this age group.

Considering the prevalence of syphilis during pregnancy, different results were found in a study conducted in the south of Brazil, with a higher incidence of syphilis cases in women in the first gestational trimester (39.26%). Regarding race, a similar result was found in contemporary studies, in which a higher prevalence of pregnant women declared themselves as mixed race, represented by 38.89% and 2.7%, respectively.^{11,12}

Regarding schooling, Nonato et al.¹⁰ affirm that women with low educational level have a higher prevalence of syphilis during pregnancy as a result of the lack of knowledge about the importance of healthcare and mainly, about STIs preventive measures. A higher educational level allows that individuals have a broader understanding about the health-disease process, which can favor the maximization of access and adherence to health services.

Low schooling reflects precarious social and economic aspects, which in turn, exert direct influence on the transmission and increase of incidence of syphilis in the population, thereby making the adherence to treatment of this public difficult.

Juazeiro do Norte (Ceará), the locus of the study, is a referral center for the treatment of syphilis cases in high-risk pregnancies in the 21st Health Macro region of Ceará. This fact generates a greater demand for this service in this municipality, because the other locations of this health macro region do not have support care available within their surrounding areas.

Although not restricted to the least favored population, the results of the study showed that participants who perform household activities are more exposed to the risk of being affected by syphilis. This public often fails to seek access to health services because of their work overload.⁵

The results of a study conducted with pregnant adolescents diagnosed with syphilis in Curitiba (state of Paraná) corroborate the data obtained in the present study, with 68.7% of pregnant women in the latent stage of the disease.¹³

Quality prenatal care is essential to reduce the incidence of syphilis in social conglomerates. Health professionals and municipal health secretariats currently have significant resources for the early detection of syphilis during prenatal follow-up consultations, among which the rapid syphilis test, the VDRL and/or RPR.¹⁴

According to the aforementioned author, incorporating the rapid syphilis test in family health centers aims at a faster diagnosis that allows the immediate start of treatment in order to avoid the risk of developing CS.

Although the current technological advances facilitate the diagnosis and treatment of pregnant women, when it comes to prenatal care, the control of syphilis during pregnancy remains a challenge for primary care.^{9,15}

Data on the incidence of syphilis during pregnancy made available by the Health Department of the state of Ceará through the syphilis epidemiological report point to different results from those presented in this study. There was a reduction in syphilis cases during pregnancy between years 2017 (110 cases) and 2018 (92 cases) in the municipalities of the 21st Juazeiro do Norte Health Macro region.¹⁶

The higher rate of detection of syphilis cases in pregnancy found in the present study may be a result of the better diagnosis of the disease during this period to the detriment of the facility of doing the rapid syphilis test in family health centers.

The results of the study lead to the conclusion that there was a maximization of the syphilis incidence in pregnant women between years 2017 and 2018. Although the access to the diagnosis of syphilis in pregnancy has improved after incorporation of the rapid syphilis test in family health centers, this pathology still has a great predominance in Brazil, as shown in the study.

Despite the progress on the facility of early diagnosis of this STI, there is need for the development of public policies focused on the promotion of health education measures that favor the population's understanding of the treatment, signs and symptoms, and complications of this STI in pregnant women and babies.

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