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SYPHILIS IN PREGNANCY: KNOWLEDGE OF PREGNANT AND PUERPEROUS WOMEN

*Sífilis na gestação: conhecimento de gestantes e puérperas**Sífilis durante el embarazo: conocimientos de las mujeres embarazadas y puérperas***Pamela Panas dos Santos Oliveira**¹ **Adriana Valongo Zani**² **Catia Campaner Ferrari Bernardy**³ **Emily Marques Alves**⁴ **Fabiana Fontana Medeiros**⁵ **Keli Regiane Tomeleri da Fonseca Pinto**⁶ 

ABSTRACT

Objective: to identify the knowledge of pregnant and postpartum women about syphilis. **Method:** descriptive research, with a qualitative approach. Data collection took place using a semi-structured instrument, between April and July 2021, with 18 pregnant/postpartum women diagnosed with syphilis during pregnancy. The responses were recorded and transcribed in full, using the Collective Subject Discourse technique for analysis. **Results:** three central ideas were identified: 1) Knowledge about syphilis, 2) Seeking knowledge about syphilis and 3) False prevention. The knowledge of the participants was conflicting, as some had some knowledge and others none, and all of them should have been educated about the disease. **Final considerations:** a flaw in the care offered in health services was identified. Therefore, strategies aimed at health education should be encouraged and implemented in prenatal care, offering health promotion and prevention, in order to reduce cases of syphilis during pregnancy.

DESCRIPTORS: Syphilis; Gestation; Sexually transmitted infections; Infectious complication in pregnancy;

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RESUMO

Objetivo: identificar o conhecimento de gestantes e puérperas acerca da sífilis. **Método:** pesquisa descritiva, com abordagem qualitativa. A coleta de dados ocorreu por meio de instrumento semiestruturado, entre abril a julho de 2021, com 18 gestantes/puérperas com diagnóstico de sífilis na gestação. As respostas foram gravadas e transcritas na íntegra, sendo utilizado para análise a técnica do Discurso do Sujeito Coletivo. **Resultados:** identificou-se três ideias centrais: 1) Conhecimento sobre a sífilis, 2) Buscando conhecimento sobre a sífilis e 3) Falsa prevenção. O conhecimento das participantes mostrou-se conflitante, pois algumas apresentaram algum conhecimento e outras nenhum, sendo que todas deveriam ter sido orientadas sobre a doença. **Considerações finais:** identificou-se uma falha no atendimento ofertado nos serviços de saúde. Assim, estratégias voltadas à educação em saúde devem ser incentivadas e implementadas no acompanhamento de pré-natal, ofertando a promoção e prevenção da saúde, a fim de reduzir os casos de sífilis na gestação.

DESCRITORES: Sífilis; Gestação; Infecções sexualmente transmissíveis; Complicação infecciosa na gravidez;

RESUMEN

Objetivos: identificar el conocimiento de las mujeres embarazadas y puérperas sobre la sífilis. **Método:** investigación descriptiva, con enfoque cualitativo. La recolección de datos se realizó mediante un instrumento semiestructurado, entre abril y julio de 2021, con 18 mujeres embarazadas/puérperas diagnosticadas con sífilis durante el embarazo. Las respuestas fueron grabadas y transcritas en su totalidad, utilizando para su análisis la técnica del Discurso del Sujeto Colectivo. **Resultados:** se identificaron tres ideas centrales: 1) Conocimiento sobre sífilis, 2) Búsqueda de conocimiento sobre sífilis y 3) Falsa prevención. El conocimiento de los participantes fue contradictorio, ya que algunos tenían algún conocimiento y otros ninguno, y todos deberían haber sido educados sobre la enfermedad. **Consideraciones finales:** se identificó una falla en la atención ofrecida en los servicios de salud. Por lo tanto, se deben fomentar e implementar estrategias orientadas a la educación en salud en la atención prenatal, ofreciendo promoción y prevención de la salud, con el fin de reducir los casos de sífilis durante el embarazo.

DESCRIPTORES: Sífilis; Gestación; Infecciones de transmisión sexual; Complicación infecciosa en el embarazo.

INTRODUCTION

Sexually transmitted infections (STIs) are considered a worldwide public health problem. Some STIs are transmitted vertically and are associated with serious adverse effects during pregnancy.¹

Syphilis is an infection caused by the bacterium *Treponema pallidum*. When left untreated, it can affect various organs and systems of the body. Syphilis is divided into stages. The primary stage is usually characterized by a single, hard, painless lesion that occurs at the site where the bacteria enter. The secondary phase is characterized by the presence of an erythematous macular rash on the trunk, palms of the hands and soles of the feet. In the latent phase, the infection is asymptomatic. The tertiary phase can appear between 1 and 40 years after the onset of infection, causing tissue destruction, mainly affecting the nervous and cardiovascular systems, with serious consequences such as disability and death.²

Syphilis is considered an STI, which is also transmitted vertically, from mother to fetus. Exposed pregnancies can develop into congenital syphilis, miscarriage, stillbirth, low birth weight, prematurity and early neonatal mortality.³

Vertical transmission can occur at any stage of pregnancy. Detection during pregnancy takes place through serological tests for syphilis, carried out in the first and third trimesters of pregnancy and at the time of delivery. Because of this, prenatal care is of great importance in the prevention, early

diagnosis and treatment of syphilis, reducing the possibility of congenital syphilis and other possible complications for the woman and the fetus.³

According to data from the Syphilis Epidemiological Bulletin, there has been an increase in the incidence rate of gestational syphilis in Brazil. In 2020, 61,441 cases of syphilis in pregnant women were reported (detection rate of 21.6/1,000 live births), 22,065 cases of congenital syphilis (incidence rate of 7.7/1,000 live births) and 186 deaths from congenital syphilis (mortality rate of 6.5/100,000 live births). Another important finding is that in relation to the detection of syphilis in pregnant women, the southern region had a rate of 23.3/1,000 live births, higher than the national rate (21.6/1,000 live births).⁴

The increase in this number may be related to the lack of or ineffective implementation of health education actions.⁵ Health knowledge is fundamental in the process of self-care and disease prevention, and through health education actions it is possible to sensitize individuals to the importance of acquiring new lifestyle habits.⁶

Sex education is of great importance in the prevention of STIs and is involved in the whole process of infection: transmission, access to treatment and forms of prevention. Information, preferably before pregnancy, is an important tool for controlling congenital syphilis.⁷

Prenatal care is an extremely important space for carrying out actions to prevent syphilis during pregnancy. Health pro-

professionals must be trained to address the issue with women and their partners. According to a study carried out in Paraná, after applying an educational intervention on syphilis with primary care health professionals, it was possible to identify a significant reduction in the rate of vertical transmission of the disease.⁸

In view of the current scenario and the growing number of syphilis diagnoses, especially during pregnancy, the aim of this study was to identify the knowledge of pregnant and postpartum women about syphilis.

METHOD

Considering the objective of the study, we opted for a descriptive field study with a qualitative approach. This research followed the Consolidated Criteria for Reporting Qualitative Research (Coreq) guide.⁹

Data collection took place between April and July 2021 in two basic health units and a large regional university hospital in the north of Paraná.

The inclusion criteria for the study were: being pregnant or postpartum, having a clinical diagnosis of syphilis infection and being aged 18 or over. The exclusion criteria were: women with cognitive impairment.

The interviews were carried out in the basic health units, previously scheduled and carried out individually in a reserved room. The interviews at the hospital took place during the women's hospitalization, also individually in a private room, ensuring a careful, non-judgmental approach and confidentiality of the information provided.

A semi-structured instrument was used to collect the data. The interviews lasted an average of fifteen minutes, the audio during the interviews was recorded, then the answers were transcribed in full and identified with the letter P (participant), according to the order of data collection, guaranteeing the confidentiality of the information provided by the participants.

The data was analyzed using the Discourse of the Collective Subject (DSC) technique, which is a methodological procedure specific to empirical social research with a qualitative focus, using a discursive strategy, making social representation clearer, i.e. the way people think.¹⁰ The results were presented using one or more discourse-syntheses written in the first person singular, with the aim of expressing the thoughts of the collective.¹¹

The precepts of Resolution 466/12 of the National Health Council were complied with. This research was approved by the Research Ethics Committee of the State University of Londrina/Uel, on March 29, 2021, under CAAE No. 42808220.3.0000.5231, according to opinion No. 4.617.703.

RESULTADOS

Eighteen women took part in the study, including 11 pregnant women and 7 postpartum women, aged between 19 and 41. As for the diagnosis of syphilis during pregnancy, 09 participants were diagnosed in the first trimester, 07 in the second trimester and 02 in the third trimester.

Of these, 12 participants said they had been given relevant information about syphilis at the time of diagnosis, while the others denied having received explanations and information about the infection at the health service where they were diagnosed. 08 participants were diagnosed with syphilis for the second time, 06 of whom had been diagnosed in the previous pregnancy, all of whom reported having followed the appropriate treatment regimen from the first diagnosis. After analyzing the answers to the guiding questions and drawing up the discourses, 03 central ideas (CIs) were identified: CI 1- Knowledge about syphilis, CI 2- Seeking knowledge about syphilis and CI 3- False protection.

CI 1- Knowledge about Syphilis

The participants expressed that they knew some aspects of the infection. According to their speeches, they showed knowledge about it being a sexually transmitted infection, that its etiological agent is a bacterium, that there are phases during infection and that vertical transmission can occur.

DSC 01 - It's a sexually transmitted disease, which is caught in the intimate part of the body and stays in the blood, caused by a bacterium, it has three stages, the first is the weakest, the second is more or less, and the third can affect the organs. It can also pass from mother to child during pregnancy. (P1, P2, P6, P7, P8, P9 and P10)

During their speeches, the participants mentioned the signs and symptoms caused by syphilis and the possible consequences of developing the infection without proper treatment.

DSC 02- As for the symptoms, there can be a sore, which doesn't itch, burn or hurt, there can also be red spots on the body, muscle pain and, later on, organ problems. (P1, P2, P6, P11 and P17)

DSC 03- It affects the eyesight, I also know that it can affect the organs, such as the liver, heart and brain, and can lead to death. (P2, P3, P4, P5, P6, P8, P11, P13, P15)

Regarding the consequences of infection during pregnancy, the participants reported that vertical transmission can have serious consequences for the fetus.

DSC 04- During pregnancy, if we don't treat it, I've been told that I can pass it on to the child, that it's in the child's blood, that it can have malformations, brain problems, blindness, deafness, it can take a long time to

walk and sit up, have a premature birth or miscarriage. (P1, P2, P3, P4, P6, P7 and P9)

To prevent infection, most of the participants cited the use of barrier condoms.

DSC 05- Using a condom, since it's sexual intercourse that catches you, even if you know the person you don't know what they have. (P1, P2, P3, P6, P7, P8, P9, P10, P11, P12, P13, P14, P16 and P18)

Some of the speeches affirmed the possibility of vertical transmission, but the participants were unable to explain the consequences this could have for the development of the fetus.

DSC- 09- I know that I can pass it on to the baby and there could be a problem, but I can't explain it. (P12, P14, P15, P17 and P18)

CI 2- Seeking knowledge about Syphilis

Some participants were unable to explain what syphilis is and were also unable to report any signs or symptoms of the infection. There were reports of a lack of information in the health service, and that because of this, the internet was a strategy for searching for information.

DSC 06- I've heard of it, but they didn't tell me exactly what it is. I looked it up on the internet, it's a bacterium, you know, other things I don't know. (P3, P15 and P17)

DSC 07- To tell you the truth, I don't know the signs and symptoms, I haven't had any. (P12, P16 and P19)

CI 3 - False prevention

Regarding the prevention of Syphilis, some participants pointed out the difficulty of using barrier condoms in their relationships, and that because of this, partner fidelity would be a form of prevention for Syphilis.

DSC 10- When you're married, it's difficult to use condoms, so the couple must be committed to each other, to have confidence in their partner. (P4 and P5)

DISCUSSION

In view of the results obtained in this study, there is a lack of conformity in terms of the participants' knowledge. Some of them reported important information about the infection, showing knowledge about the cause, forms of transmission, clinical events and prevention. On the other hand, some of the participants had limited knowledge on the subject, expressing erroneous perceptions, especially about the forms of transmission and means of preventing syphilis.

According to a study carried out in Ceará, a significant deficit was identified in relation to pregnant women's knowledge of syphilis during pregnancy. Inadequate knowledge

of the infection makes it difficult to adhere to treatment and carry out preventive actions.⁶

Considering that syphilis is a disease that is easy to diagnose and treat, prenatal care is an important tool for managing the infection in primary care. During prenatal consultations, health professionals should be able to provide relevant information on sexually transmitted infections, covering aspects such as: causes, means of transmission, early identification of signs and symptoms, diagnostic tests, treatments, possible complications for the mother-baby binomial and forms of prevention. In addition, the creation of groups of pregnant women can provide a greater bond and make it easier to approach health education actions.¹²

Some of the speeches obtained in this study show that the participants had some knowledge of the consequences of vertical transmission. Even briefly, the participants expressed the possibility of alterations in the development of the fetus exposed to syphilis.

Congenital syphilis (CS) is considered a preventable complication, as it results from the lack of treatment or inadequate treatment of pregnant women diagnosed with syphilis. Failures such as low adherence to prenatal care and inadequate management of at-risk pregnant women in primary care can lead to vertical transmission of syphilis.¹³ A study of nurses in the management of syphilis prevention during the COVID-19 pandemic revealed that treating syphilis in pregnant women and their partners properly is still a challenge.¹⁴

According to a study carried out with mothers diagnosed with syphilis, the results showed that the feelings of this population about the diagnosis of CS are guilt, suffering and remorse in relation to inadequate adherence to treatment during pregnancy. The study reinforces the importance of implementing health education strategies to make it easier for users to fully understand syphilis during pregnancy.¹⁵

For better results in relation to the prevention of syphilis during pregnancy and consequently a reduction in cases of congenital syphilis, it is necessary to develop educational actions that provide an open conversation with the individual, with a view to greater understanding and adherence to treatment and prevention.¹⁶

Resistance to the use of barrier condoms was another aspect observed in the results of this study. The practice of unsafe sex was related to an act of fidelity to one's partner, and the participants reported that trust between the couple would be a preventative aspect for syphilis infection.

It is known that the request to use a barrier condom can generate a feeling of mistrust between the couple. Given this scenario, partners who give in to the practice of unsafe sex do not place themselves in the position of being vulnerable to sexually transmitted infections.¹⁷ New mechanisms need to be created to approach the practice of safe sex, with prevention policies that can guarantee the acquisition of knowledge and access to contraceptive methods.¹⁸

Some of the participants said that they did not receive any information about syphilis when they were diagnosed at the health services.

During prenatal care, health professionals must be able to offer pregnant women qualified care. Guidance should be given on the severity, forms of transmission and consequences of syphilis infection during pregnancy. Health education for pregnant women and routine screening tests during prenatal care increase the chances of prevention, early diagnosis and appropriate treatment of syphilis during pregnancy.¹²

The limitations of this study are associated with the research settings, demonstrating a reality that may not be verified in other locations.

It should be emphasized that future studies should seek the perspective of other people, such as health professionals, since the results showed that some women were not given guidance at the time of diagnosis.

The findings of this study make a contribution to practice, as they guide the implementation of measures that can contribute to the prevention and diagnosis of syphilis.

FINAL CONSIDERATIONS

The knowledge of pregnant and puerperal women about syphilis was conflicting, as some participants had some knowledge and others no knowledge at all. It should be emphasized that these women had prenatal care and should all have been informed about the disease, since prenatal care is an opportunity to implement health education with pregnant women and their partners. When used to disseminate preventive health actions, this tool becomes essential in the process of reducing maternal, fetal and perinatal morbidity and mortality.

Syphilis is a sexually transmitted infection susceptible to prevention, with treatment accessible to most of the population. Health professionals must be prepared to offer qualified care, with a focus on health promotion and prevention. Health education actions, with awareness campaigns about syphilis and other sexually transmitted infections, should be encouraged with the support of health agencies. Investing in prevention campaigns can lead to a reduction in cases of syphilis during pregnancy and congenital syphilis.

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