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ARTIGO ORIGINAL

Analysis of the occurrence of gestational syphilis in a municipality of the Metropolitan Region of Belo Horizonte from 2011 to 2021

Análise da ocorrência de sífilis em gestantes em um município da Região Metropolitana de Belo Horizonte entre 2011 e 2021

Análisis de la incidencia de sífilis en mujeres embarazadas en un municipio de la Región Metropolitana de Belo Horizonte entre 2011 y 2021

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RESUMO

Objective: To describe the occurrence and epidemiological profile of syphilis in pregnant women between 2011 and 2021 in a municipality in Metropolitan Region of Belo Horizonte, Minas Gerais. **Methodology**: A descriptive cross-sectional study with data obtained from Sistema de Informação de Agravos de Notificação gestational syphilis notification forms and the DATASUS and Instituto Brasileiro de Geografia e Estatística platforms. The data was analyzed using Microsoft® Excel, with posterior description analysis.. **Results**: The municipality studied had higher rates than the state and the country from 2015 onwards, reaching 29.3% in 2020. In 2018, the number of new cases of congenital syphilis also increased. The cases occurred specially in pregnant women aged between 20 and 29 (58,4%), and who were identified as brown (62,2%). Vulnerabilities include late diagnosis and inadequate treatment of partners. **Conclusion**: More qualified prenatal care is needed, with early diagnosis and timely treatment for pregnant women and their partners, as well as strengthening epidemiological surveillance.

DESCRIPTORS: Syphillis; Prenatal Care; Health Profile.

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ABSTRACT

Objetivo: Descrever a ocorrência da sífilis em gestantes entre 2011 e 2021 em um município da Região Metropolitana de Belo Horizonte, Minas Gerais. **Metodologia**: Estudo transversal descritivo com dados obtidos das fichas de notificação de sífilis gestacional no Sistema de Informação de Agravos de Notificação e plataformas DATASUS e Instituto Brasileiro de Geografia e Estatística. Os dados foram planilhados no Microsoft® Excel, com posterior análise descritiva. **Resultados:** O município estudado teve taxas superiores às do estado e do país a partir de 2015, atingindo 29,3% em 2020. Em 2018, o número de casos novos de sífilis congênita também aumentou. Os casos ocorreram principalmente em gestantes entre 20 e 29 anos (58,4%), e naquelas que se autodeclararam pardas (62,2%). As vulnerabilidades incluem diagnóstico tardio e tratamento inadequado dos parceiros. **Conclusão:** É necessário um pré-natal mais qualificado, com diagnóstico precoce e tratamento oportuno para as gestantes e seus parceiros, além de reforçar a vigilância epidemiológica.

DESCRITORES: Sífilis; Cuidado Pré-Natal; Perfil Epidemiológico.

RESUMEN

Objetivo: Objetivo: Describir la ocurrencia y el perfil epidemiológico de la sífilis en gestantes entre 2011 y 2021 en un municipio de la Región Metropolitana de Belo Horizonte, Minas Gerais. **Metodología**: Estudio descriptivo transversal con datos obtenidos de los formularios de notificación de sífilis gestacional del SINAN y de las plataformas DATASUS e IBGE. Los datos fueron analizados utilizando el Microsoft® Excel y posterior análisis descriptivo. **Resultados**: El municipio estudiado tuvo tasas más altas que el estado y el país a partir de 2015, alcanzando el 29,3% en 2020. En 2018 también aumentó el número de nuevos casos de sífilis congénita. Los casos ocurrieron especialmente en mujeres embarazadas entre 20 y 29 años y que se identificaron como morenas. Los puntos vulnerables incluyen el diagnóstico tardío y el tratamiento inadecuado de las parejas. **Conclusión**: Se necesita una atención prenatal más cualificada, con diagnóstico precoz y tratamiento oportuno para las embarazadas y sus parejas, así como reforzar la vigilancia epidemiológica.

DESCRIPTORES: Sífilis; Atención Prenatal; Perfil de Salud.

INTRODUCTION

Syphilis is an infectious disease, and its persistence is a challenge for Brazilian public health, given the high number of associated maternal infections and perinatal complications [1,2]. It is caused by the bacterium *Treponema pallidum* and transmitted through sexual and transplacental routes [3,4]. The different stages of syphilis are characterized by specific lesions, which can become chronic if not treated properly [4]. As a sexually transmitted infection (STI), it can lead to complications during pregnancy and childbirth, fetal death, infertility, and health issues for both adults and children [5-7].

Since 2005, when its notification became mandatory in Brazil, epidemiological surveillance has been striving to enable disease control actions, both gestational and congenital, focusing on Primary Health Care (PHC), as pregnant women's access to prenatal care allows for early identification of the condition through low-complexity resources [8-10]. This fact facilitates the establishment of planning, prevention, and control measures for reinfection in pregnant women and congenital syphilis [11,12].

According to the World Health Organization (WHO), the estimated global prevalence of syphilis is 0.5% [3,10]. Brazil has an even higher prevalence, ranging from 1.1% to 11.5%, while Minas Gerais (MG)

presents a similar scenario to the national one, with regions of high notification [3,10,13]. Among them is Belo Horizonte Regional Health Superintendency (RHS-BH), a region composed of 39 municipalities that has the highest state notification rates of syphilis cases in pregnant women (GS) [13].

Studies show barriers to reducing GS cases, such as inadequate prenatal follow-up, either due to lack of access to services or failure to perform tests for syphilis detection, and lack of approach for evaluation and treatment of partners who are testing positive [2,10,11].

The National Pact for the Elimination of Vertical Transmission of HIV, Syphilis, Hepatitis B, and Chagas Disease proposes goals that, by 2025, 100% of syphilis cases in pregnant women will be notified and that coverage of pregnant women with at least one syphilis test in prenatal care will be expanded to 95% [33]. Knowing the epidemiological profile of syphilis in pregnant women in this municipality becomes relevant so that health actions can be better directed and these goals can be achieved.

OBJECTIVE

Describe the epidemiological profile of gestational syphilis (GS) from 2011 to 2021 in a municipality of the Metropolitan Region of Belo Horizonte (MRBH), Minas Gerais.

METHODOLOGY

Design

This is a descriptive epidemiological study, of the cross-sectional type, aimed at analyzing the occurrence and epidemiological profile of GS in a municipality of the MRBH, Minas Gerais.

Study Location and Period

The study was conducted from 2011 to 2021 in a municipality of the MRBH – also part of the Belo Horizonte Regional Health Superintendence – with an estimated population of 137,877 inhabitants and a Municipal Human Development Index (MHDI) of 0.731 [14].

MRBH was established in 1973 and currently comprises 34 municipalities. The RHS-BH includes 39 municipalities, of which 28 are part of the MRBH, including the municipality under study [15-18]. RHS-BH had the highest number of new GS case notifications in Minas Gerais in 2021 [14].

The municipality in question was chosen due to experiences in one of its Basic Health Units (BHU) in monitoring pregnant women during prenatal care, which revealed weaknesses in the detection and control of GS, such as late initiation of prenatal care, failure to perform syphilis tests, and lack of treatment for pregnant women and their partners.

Inclusion and Exclusion Criteria

All new SG cases diagnosed in this MRBH municipality from 2011 to 2021 were included. The eleven-year period allowed for an analysis of the scenario over time, enabling the monitoring of epidemiological variations in congenital syphilis and its impact on health services [19].

Study Protocol

The study protocol covers sociodemographic, clinical, and care variables of pregnant women with syphilis, the disease detection rate; data sources such as DATASUS, the Brazilian Institute of Geography and Statistics (IBGE), the Notifiable Diseases Information System (SINAN), and epidemiological reports; as well as the data collection process.

Sociodemographic variables include age group, race/color, and education level. Age group: 16-19, 20-23, 24-27, 28-31, 32-35, 36-39, 40-43, and 44-49 years, and "not filled". Race/color: "white", "black", "yellow", "brown", "indigenous", or "ignored". Education level: "illiterate", "1st to 4th grade incomplete of elementary school", "4th grade complete of elementary school", "5th to 8th grade incomplete of elementary school", "elementary school complete", "high school incomplete", "high school complete", "graduation incomplete", "graduation complete", "ignored", and "not applicable".

Clinical variables analyzed in the study include the trimester of pregnancy and the clinical classification of the disease. Trimester of pregnancy: 1st, 2nd, or 3rd trimester. Clinical classification: "primary", "secondary", "tertiary", "latent", or "ignored".

Care variables include the care level of the notification unit and the partner's treatment status. Care level: "primary", "secondary", or "tertiary". Partner's treatment status: "yes", "no", or "ignored/empty".

The study used the SG detection rate, calculated according to the methodology of the Ministry of Health, which relates cases of syphilis in pregnant women to the number of live births, multiplied by 1,000, to assess the magnitude of the disease and guide control actions [3].

Data were obtained from DATASUS, IBGE, and 2021 epidemiological reports, as well as SINAN Notification Forms provided by the Municipal Health Department. Data collection was done in duplicate using Microsoft® Excel software, with cross-review by two researchers to ensure data consistency and reliability.

Analysis of Results and Statistics

The results were obtained by tabulating the data in a specific Microsoft® Excel spreadsheet that included all variables, followed by descriptive analysis, with information organized into tables and graphs.

Ethical Aspects

The study was conducted in accordance with Resolution 466/12 of the National Health Council, which establishes ethical guidelines for research involving human beings [20]. Since secondary data were used, it was not necessary to obtain the Free and Informed Consent Term (FICT).

To access the Syphilis Notification Forms for Pregnant Women in SINAN from the MRBH municipality, an official letter was sent to the Health Department, which authorized access via Official Letter GAB No. 28/2021. This process, along with data anonymization, ensured confidentiality, privacy, and ethical use of these data exclusively for the study.

RESULTS

Table 1 presents the frequency of cases and the detection rate of GS in the municipality of the MRBH during the period of study. The results demonstrate the evolution in the number of cases and the frequency of diagnoses over time. Notably, 2018 stood out with 20.4% (n=81) of cases, while 2011 had only 1.3% (n=5). However, in 2021, the detection rate exceeded all other years, reaching 34.9 per 1,000 live births.

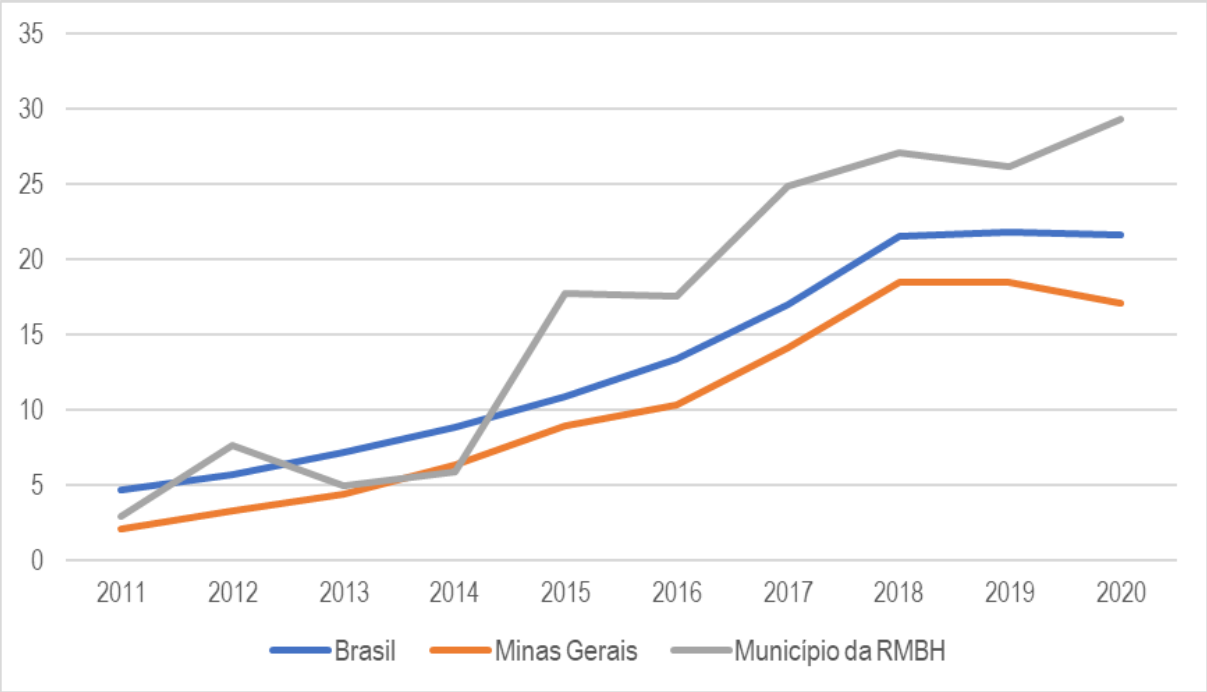
Table 1. Cases of syphilis in pregnant women and detection rate in the municipality of MRBH, Minas Gerais, and Brazil – Period: 2011 - 2021.

Year	Cases (N)	Frequency (%)	MRBH Municipality Rate	Minas Gerais Rate	Brazilian Rate
2011	5	1,3	2,9	2,1	4,7
2012	14	3,5	7,7	3,3	5,7
2013	9	2,3	5,0	4,4	7,2
2014	13	3,3	5,9	6,4	8,0
2015	29	7,3	17,7	9,0	8,9
2016	31	7,8	17,6	10,3	13,4
2017	52	13,1	24,9	14,0	17,1
2018	81	20,4	27,1	18,5	21,5
2019	51	12,8	26,2	18,5	22,7
2020	59	14,9	29,3	18,2	24,1
2021	53	13,4	34,9	19,7	26,4
Total	397	100,0	100,0	100,0	100,0

Source: SINAN. Prepared for the purposes of this study. DATASUS. Prepared for the purposes of this study.

Figure 1 shows the comparison of the GS detection rate in the MRBH municipality when related to the state of Minas Gerais and Brazil, observing an increasing trend in all three scenarios. However, Minas Gerais presented a lower GS detection rate than Brazil and the MRBH municipality over the eleven years analyzed. The MRBH municipality showed a similar profile to the national one, evidenced by the high detection rate, especially from 2016 onwards.

Figure 1. Detection rate of syphilis in pregnant women (per 1,000 live births) according to year of diagnosis and municipality of MRBH, Minas Gerais, and Brazil - Period: 2011 to 2021



Source: DATASUS - Prepared for the purposes of this study; Brasil = Brazil; Municipio da RMBH = Municipality in the metropolitan region of Belo Horizonte.

Table 2 presents the socioeconomic, clinical, and care variables of syphilis cases in pregnant women from the MRBH municipality during the study period.

Sociodemographic Data

Regarding the "age group" variable, 58.4% (n=232) of the cases were aged between 20 and 29 years old, followed by the age group of 30 to 39 years old, with 24.9% (n=99) of the cases. The most reported race/color was brown, 62.2% (n=247), followed by black 12.8% (n=51), and 14.6% (n=58) were left blank. During the period, only 0.8% (n=3) declared themselves yellow and indigenous. In 2011, there were more cases of self-declared black than brown.

Approximately 60% of the notifications had the "education level" field ignored/blank, totaling 241 cases out of 397. Of the completed forms, it was highlighted that 12.3% (n=49) reported having partially attended high school and 10.3% (n=41) completed high school.

Clinical Data

Observing the gestational trimester in which women were diagnosed with syphilis in the MRBH municipality, it is noted that 50.1% (n=199) were in the third trimester of pregnancy. This pattern of majority in the third trimester was repeated throughout the period, until the years 2020 and 2021, when the number of cases diagnosed in the first trimester of pregnancy (20 and 21, respectively) was higher than in the

third (19 and 18, respectively), totaling 59 and 53 women, respectively. It is observed that 7.6% (n=30) of the diagnosed women had the gestational trimester field "ignored/blank".

Regarding the clinical form, 35.5% (n=141) were in the latent phase and 37.5% (n=149) classified as "ignored/blank".

Care Data

The highest proportion of care levels occurred in tertiary care, 57.7% (n=229), while 35.0% (n=139) were attended in primary care. Regarding partner treatment, 35.8% (n=142) did not receive treatment. The "ignored/blank" field totaled 40.3% (n=160).

Table 2. Socioeconomic, clinical, and care variables of syphilis cases in pregnant women in a municipality of MRBH – Period: 2011 – 2021.

Variables		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Total
Age group (Years old)													
15 to 19	n	-	-	-	-	-	-	2	7	3	6	7	25
	%	0	0	0	0	0	0	3,8	8,6	5,9	10,2	13,2	6,3
20 to 29	n	-	4	2	4	14	19	33	45	35	41	35	232
	%	0	28,6	22,2	30,8	48,3	61,3	63,5	55,6	68,6	69,5	66	58,4
30 to 39	n	3	5	7	6	11	9	11	20	10	8	9	99
	%	60	35,7	77,8	46,2	37,9	29	21,2	24,7	19,6	13,6	17	24,9
40 or more	n	2	4	-	3	4	3	5	9	2	3	1	36
	%	40	28,6	0	23,1	13,8	9,7	9,6	11,1	3,9	5,1	1,9	9,1
Ignored/	n	-	1	-	-	-	-	1	-	1	1	1	5
Blank	%	0	7,1	0	0	0	0	1,9	0	2	1,7	1,9	1,3
Race/Color													
White	n	1	1	-	1	3	1	5	7	6	7	6	38
	%	20	7,1	0	7,7	10,3	3,2	9,6	8,6	11,8	11,9	11,3	9,6
Black	n	2	4	2	1	7	5	9	10	3	3	5	51
	%	40	28,6	22,2	7,7	24,1	16,1	17,3	12,3	5,9	5,1	9,4	12,8
Yellow	n	-	-	-	-	-	-	-	1	-	-	-	1
	%	0	0	0	0	0	0	0	1,2	0	0	0	0,3
Brown	n	1	8	6	8	14	20	34	57	35	42	22	247
	%	20	57,1	66,7	61,5	48,3	64,5	65,4	70,4	68,6	71,2	41,5	62,2
Indigenous	n	-	-	-	-	-	-	-	-	-	-	2	2
	%	0	0	0	0	0	0	0	0	0	0	3,8	0,5
Ignored	n	1	1	1	3	5	5	4	6	7	7	18	58
	%	1,7	1,7	1,7	5,2	8,6	8,6	6,9	10,3	12,1	12,1	31,0	14,6
Education Level													
1st to 4th grade incomplete of ES	n	-	-	-	-	1	1	-	1	-	3	-	6
	%	0	0	0	0	3,4	3,2	0	1,2	0	5,1	0	1,5
4th grade	n	-	1	-	-	-	1	-	2	-	-	-	4

complete of ES	%	0	7,1	0	0	0	3,2	0	2,5	0	0	0	1
5th to 8th grade	n	-	2	1	2	1	4	5	5	3	5	2	30
incomplete of ES	%	0	14,3	11,1	15,4	3,4	12,9	9,6	6,2	5,9	8,5	3,8	7,6
Elementary school complete	n	-	2	1	-	2	2	3	12	-	-	1	23
	%	0	14,3	11,1	0	6,9	6,5	5,8	14,8	0	0	1,9	5,8
High school incomplete	n	-	2	1	1	5	2	9	9	5	5	10	49
	%	0	14,3	11,1	7,7	17,2	6,5	17,3	11,1	9,8	8,5	18,9	12,3
High school complete	n	1	1	1	1	2	1	10	7	3	6	8	41
	%	20	7,1	11,1	7,7	6,9	3,2	19,2	8,6	5,9	10,2	15,1	10,3
Graduation incomplete	n	-	-	-	1	-	-	1	-	-	-	-	2
	%	0	0	0	7,7	0	0	1,9	0	0	0	0	0,5
Graduation complete	n	-	-	-	-	-	-	1	-	1	-	-	2
	%	0	0	0	0	0	0	1,9	0	2	0	0	0,5
Ignored/Blank	n	4	7	5	8	18	20	23	45	39	40	32	241
	%	1,7	2,9	2,1	3,3	7,5	8,3	9,5	18,7	16,2	16,6	13,3	60,7
Trimester of pregnancy													
1st trimester	n	1	-	2	2	2	3	13	20	14	20	21	98
	%	20	0	22,2	15,4	6,9	9,7	25	24,7	27,5	33,9	39,6	24,7
2nd trimester	n	3	4	1	2	5	2	8	12	5	17	11	70
	%	60	28,6	11,1	15,4	17,2	6,5	15,4	14,8	9,8	28,8	20,8	17,6
3rd trimester	n	1	10	4	7	18	24	26	46	26	19	18	199
	%	20	71,4	44,4	53,8	62,1	77,4	50	56,8	51	32,2	34	50,1
Ignored/Blank	n	-	-	2	2	4	2	5	3	6	3	3	30
	%	0	0	22,2	15,4	13,8	6,5	9,6	3,7	11,8	5,1	5,7	7,6
Clinical classification													
Primary	n	4	5	3	1	10	9	9	10	7	6	9	73
	%	80	35,7	33,3	7,7	34,5	29	17,3	12,3	13,7	10,2	17	18,4
Secondary	n	-	1	-	2	-	1	2	3	-	1	2	12
	%	0	7,1	0	15,4	0	3,2	3,8	3,7	0	1,7	3,8	3
Tertiary	n	1	2	1	2	-	1	3	3	3	4	2	22
	%	20	14,3	11,1	15,4	0	3,2	5,8	3,7	5,9	6,8	3,8	5,5
Latent	n	-	1	-	-	3	3	19	42	25	21	27	141
	%	0	7,1	0	0	10,3	9,7	36,5	51,9	49	35,6	50,9	35,5
Ignored/Blank	n	-	5	5	8	16	17	19	23	16	27	13	149
	%	0	3,4	3,4	5,4	10,7	11,4	12,8	15,4	10,7	18,1	8,7	37,5
Level of the notification unit													
Primary	n	3	5	2	2	6	2	16	24	15	34	30	139
	%	60	35,7	22,2	15,4	20,7	6,5	30,8	29,6	29,4	57,6	56,6	35
Secondary	n	1	-	-	-	4	6	5	5	2	3	3	29
	%	20	0	0	0	13,8	19,4	9,6	6,2	3,9	5,1	5,7	7,3

Tertiary	n	1	9	7	11	19	23	31	52	34	22	20	229
	%	20	64,3	77,8	84,6	65,5	74,2	59,6	64,2	66,7	37,3	37,7	57,7
Partner's treatment status													
Yes	n	1	4	2	1	1	2	18	21	15	14	16	95
	%	20	28,6	22,2	7,7	3,4	6,5	34,6	25,9	29,4	23,7	30,2	23,9
No	n	2	3	-	-	3	3	25	45	24	18	19	142
	%	40	21,4	0	0	10,3	9,7	48,1	55,6	47,1	30,5	35,8	35,8
Ignored/Blank	n	2	7	7	12	25	26	9	5	12	27	18	160
	%	40	50	77,8	92,3	86,2	83,9	17,3	18,5	23,5	45,8	34,0	40,3
Total	n	5	14	9	13	29	31	52	81	51	59	53	397

Source: SINAN. Prepared for the purposes of this study. Note: - no data available for the category in that year.

DISCUSSION

The MRBH municipality presented a higher detection rate in 2012 and from 2015 onwards compared to Minas Gerais and Brazil. Considering that the RHS in which the municipality is located is the one that most notifies GS in the state, the high detection rate may be related to the improvement of the epidemiological surveillance system combined with the expansion of rapid syphilis tests in health services [23]. Studies have shown that increased testing of pregnant women significantly increases the detection rate in municipalities [24].

The results of the analysis of sociodemographic characteristics show that the same profile of cases in the MRBH municipality appears in studies conducted in Brazil, where GS was more prevalent in the age group of 20 to 29 years old [22], brown race/color, and with about 11 to 14 years of education [25], which would correspond to the category of incomplete or complete high school of the education level variable.

The races/colors with lower incidence were yellow and indigenous, while those with higher incidence were brown and black, following the same pattern observed in studies conducted in Minas Gerais [22]. Research has shown that brown and black women have a higher prevalence of GS [25,26] and are part of a structural determinant of living conditions and access to health services [31,32].

Regarding education level, it was observed that most pregnant women with syphilis had incomplete high school education. This data is different from that observed in some studies, where syphilis in pregnant women was more prevalent in women with lower education levels [1], but it obtained a similar result to a third study, showing that syphilis in pregnant women is more common in women with more than 8 years of education [10].

Data from the Annual Epidemiological Report of Syphilis – RHS-BH – 2021 showed the same pattern as the cases in MRBH, with most women over the years studied being diagnosed with syphilis in the third trimester of pregnancy [21]. The state profile, however, shows that more cases are diagnosed in

the first trimester (35.2%) [13,22]. Improvements in the availability of rapid tests in primary care changed the profile in 2020 and 2021, achieving the expected result that diagnoses are made primarily in the first trimester, early, so that appropriate treatment can be applied during prenatal care and vertical transmission can be avoided [7]. The Family Health Strategy (FHS) expands health services in Primary Care, remodeling public policies that should increase diagnostic and treatment capacity, thus favoring early identification of GS [24].

When analyzing the number of diagnoses according to the clinical classification of GS, it is noted that most women were diagnosed in the latent phase, followed by the ignored clinical form and the primary phase. This result differed from studies conducted in Minas Gerais and in Paraná too, which have a higher percentage of syphilis diagnoses in the primary phase [22,27]. However, it's important to note that the number of cases with ignored clinical forms is high, given the sample size. This negatively impacts the choice of appropriate treatment, which is based on the clinical phase classification [28].

Diagnoses made in tertiary care contradict the recommended practice, as the ideal is for diagnosis and treatment to be done in the first trimester of pregnancy in primary care, preferably during prenatal appointments [30], thus avoiding the possibility of vertical transmission [7]. The municipality in question follows the guidelines adopted by the state, where prenatal care is entirely conducted in primary care, except when there is high risk and prenatal care is also provided in specialized care centers or reference maternity hospitals [34].

Considering the clinical protocol of therapeutic guidelines, which establishes three rapid syphilis tests during pregnancy – one at the first prenatal appointment, one at the beginning of the third trimester, and another at the time of childbirth – the results demonstrate failures in prenatal care and probable inadequate treatment related to reinfection due to the lack of partner treatment [24]. Partner treatment plays a fundamental role in combating GS and congenital syphilis. A treated partner indicates care provided both to the individual exposed to the infection and to the prevention of reinfection of the pregnant woman [30]. Data related to this study showed that a large part of the partners didn't receive treatment or that had the field in the forms left blank. This relates what was verified in the study municipality to what has already been identified by other studies, which indicate that partner infection increases vertical transmission fivefold [28]. The issue of partner treatment also carries a cultural burden, where women are reluctant to reveal the syphilis diagnosis to their partners or discuss delicate issues such as fidelity, in addition to the lack of active partner search by the health team itself. When a case is correctly notified, it becomes possible to monitor it and formulate actions for the prevention and control of maternal and congenital syphilis [27].

Study Limitations

This study may be influenced by information bias, as it involves secondary data extracted from Syphilis Notification Forms for Pregnant Women in SINAN, with unfilled or ignored information. However, it is believed that the data worked on allowed the objective to be achieved. Additionally, the reality verified through the collected data is limited to that of this municipality only.

Contributions to Nursing, Health, or Public Policy

This study highlights the importance of effective screening during prenatal care conducted by nurses in Primary Care, who are also responsible for health education for prevention, treatment, and control of reinfection, promoting comprehensive maternal and childcare. For public health, the research can help promote policies in the studied municipality that assist in reducing complications such as congenital syphilis by reinforcing early diagnosis and improving epidemiological surveillance, focusing on areas of high prevalence, such as Minas Gerais. In terms of public policies, the study emphasizes the need to expand access to prenatal care for pregnant women in the municipality and strengthen prevention and treatment actions for them and their partners, especially in the context of Primary Care.

CONCLUSION

The increase in GS cases over the years may be associated with prenatal care failures, resulting in late diagnoses and inadequate treatment. Incorrectly filled forms interfere with the determination of the clinical phase and treatment, as well as limit the knowledge of the epidemiological profile of pregnant women and the situation of their partners.

Therefore, it's necessary to reorganize the health system and epidemiological surveillance to improve strategies for early diagnosis, treatment and prevention, especially in primary care, aiming to reduce congenital syphilis cases and maternal illness. Additional studies are essential to evaluate the impact of primary care actions on controlling syphilis in pregnant women and reducing morbidity and mortality from vertical transmission in the studied municipality.

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