Revista de Enfermagem e Atenção à Saúde
REAS
Original Article

# PRENATAL ASSISTANCE TO PREGNANT WOMEN DIAGNOSED WITH SYPHILIS

# ASSISTÊNCIA PRÉ-NATAL A GESTANTE COM DIAGNÓSTICO DE SÍFILIS

# ASISTENCIA PRENATAL PARA LAS MUJERES EMBARAZADAS CON DIAGNÓSTICO DE LA SÍFILIS

Cleuma Sueli Santos Suto[1], Débora Lima da Silva[2], Eliana do Sacramento de Almeida[3], Laura Emmanuela Lima Costa[4], Taiana Jambeiro Evangelista[5]

## ABSTRACT

**Objective**: to characterize the care provided to pregnant women diagnosed with syphilis during prenatal care in Family Health Units. **Methods:** cross-sectional study, using analysis reports of information systems and structured questionnaire on exposure to syphilis during pregnancy, applied pregnant women/mothers and nurses. **Results**: identification of six cases of syphilis in pregnant women, with significant underreporting in the information system, detection of inadequately treated pregnant women because of the difficulties presented by professionals in the clinical management of syphilis in the course of gestation and percentage of prenatal consultations with realization of basic examinations and test for syphilis below the recommended by the Ministry of Health. **Conclusion:** it is evident the need for training/sensitization of the professionals and amplification of consultation offers, examinations and syphilis notification in the prenatal care.

**Keywords:** Syphilis; Prenatal care; Syphilis congenital.

## RESUMO

**Objetivo**: caracterizar a assistência prestada a gestante com diagnóstico de sífilis durante o pré-natal em unidades de saúde da família. **Métodos:** estudo transversal, por meio da análise de relatórios de sistemas de informação e questionário estruturado sobre exposição à sífilis durante a gestação, aplicados a gestantes/puérperas e enfermeiras. **Resultados:** identificação de seis casos de sífilis em gestante, com subnotificação importante em sistemas de informação, detecção de gestantes inadequadamente tratadas devido às dificuldades apresentados pelos profissionais no manejo clínico das sífilis no curso da gestação e, percentuais de consultas pré-natais com realização de exames básicos e teste para sífilis abaixo do preconizado pelo Ministério da Saúde. **Conclusões:** é notória a necessidade de capacitação/sensibilização dos profissionais, ampliação da oferta de consultas, exames e notificação da sífilis na assistência ao pré-natal.

**Descritores:** Sífilis; Cuidado pré-natal; Sífilis congênita.

[1] Nurse, by Universidade do Estado da Bahia (UNEB), Senhor do Bonfim-BA, e-mail: deboralisi.18@hotmail.com.
[2] Nurse, by UNEB/Campus VII, Senhor do Bonfim–BA, e-mail: taianjambeiroevangelista@gmail.com.
[3] Nurse, Master student in Education and Diversity by Universidade do Estado da Bahia, Jacobina. Auxiliar Professor of the Nursing Collegiate of UNEB, Senhor do Bonfim–BA, e-mail: elianadosacramento@hotmail.com.
[4] Nurse, Master's, Assistant Professor of Physical Education Collegiate of UNEB, Jacobina–BA, e-mail: manuela.jacobina@gmail.com.
[5] Nurse, Master's, Auxiliar Professor of the Nursing Collegiate of UNEB, Senhor do Bonfim–BA, e-mail: cleuma.suto@yahoo.com.br. Feira de Santana-BA.

**RESUMEN**

**Objetivo:** caracterizar la asistencia dada a las embarazadas diagnosticadas con sífilis durante el prenatal en Unidades de Salud de la Familia. **Métodos**: estudio transversal, mediante los informes de análisis de sistemas de información e un cuestionario estructurado sobre la exposición a la sífilis durante el embarazo, aplicado a las mujeres embarazadas/madres y enfermeras. **Resultados**: identificación de seis casos de sífilis en mujeres embarazadas, con un subregistro importante en el sistema de información, la detección de embarazadas con tratamiento inadecuado debido a las dificultades presentadas por los profesionales en el trato clínico de la sífilis durante el embarazo y el porcentaje de consultas prenatales con realización de análisis básicas y teste para sífilis por bajo de lo preconizado por el Ministerio de la Salud. **Conclusión**: és evidente la necesidad de capacitación/sensibilización de los profesionales, amplitud de consultas, análisis y notificación de la sífilis en la asistencia al prenatal.

**Palabras clave:** Sífilis; Atención prenatal; Sífilis congénita.

## INTRODUCTION

Syphilis is a systemic infectious disease, caused by the bacteria *Treponema pallidum* occurring mainly through sexual transmission and other intimate contacts. The highest frequency is in women of fertile age, and during pregnancy the vertical transmission can occur, resulting in congenital syphilis and its complications to newborns.

In accordance with the World Health Organization[1], it is estimated that in Brazil there are over 900 thousand cases of syphilis per year. The prevalence of syphilis in pregnant women being of 2.6%, corresponding to almost 50 thousand pregnant women and 12 thousand cases of congenital syphilis per year. Bahia accumulated during the period from January 2000 to September 2012, 3,227 cases of syphilis in pregnant women and 1,851 cases of congenital syphilis[2]. The manifestation of this condition, in the numbers presented in the country and in the state of Bahia, reveals flaws in prenatal care.

With the purpose of guaranteeing better access and quality in prenatal care, assistance in childbirth and to new mothers to the pregnant women and to the newborn, the Ministry of Health established, in 2000, the Program for Humanization of Prenatal and Childbirth Care (PHPN), with the perspective of reducing the maternal and perinatal morbi-mortality rates in the country[3]. In this respect, a quality prenatal care represents a tool in the prevention, early detection, treatment and reduction of morbidity, making the reduction of the prevalence of syphilis.

Allied to the PHPN, the Information Technology Department for the National Health System (DATASUS) developed a software called *SisPreNatal* which permits the registration of pregnant women enrolled in the PHPN and accompany the pregnancy/new mothers cycle through the minimum list of procedures for adequate

prenatal care[3]. Considering the magnitude of the syphilis issue in pregnant women, this condition became of compulsory notification in July 2005, in compliance with ordinance MS/SUS n.33[4].

In the present structure of the prevailing model, primary healthcare is responsible for the diagnosis, notification and investigation of cases of syphilis. Therefore, prenatal care is the optimal space for healthcare in favor of prevention of congenital syphilis. This paper aims to contribute towards the professional formation process, regarding comprehensive care to the pregnant woman, with or without the diagnosis of syphilis. It may also contribute as a source of information, awareness, reflection and intervention for changes to the present practices for handling syphilis in pregnant women in the Family Health Strategy (ESF).

Nonetheless, it is observed that the actual numbers of new cases of syphilis in pregnant women are underestimated, once the lack of notification and sub-registration is a reality in the country[5]. Thus, these flaws in the health service are among the risk factors that favor the constant prevalence of syphilis and congenial syphilis in the country.

Despite countless isolated studies performed in relation to prenatal care and also on syphilis, the lack of studies approaching prenatal care to patients diagnosed with syphilis is observed, therefore, we aim to understand the care rendered by primary healthcare to these women, reflecting on weaknesses in the quality of healthcare services during the prenatal period and during childbirth, contributing towards the high prevalence of syphilis and congenital syphilis, considering the proposed actions to be developed to overcome these, reducing, in this manner, the negative impacts of the health indicators, costs with treatment and hospitalization and, improvement in the quality of life of these women and their newborns.

Once the vulnerability of pregnant women to syphilis is high and in view of the scenario presented in Brazil, and more specifically so in Bahia, the study is justified and the care offered to these women diagnosed with syphilis in primary healthcare is questioned. Under this perspective, the present investigation has the purpose of characterizing the assistance rendered to the pregnant women diagnosed with syphilis during prenatal care in the family health units.

## METHOD

A cross-sectional study, which proposed to supply information about the distribution of syphilis among pregnant women in the municipality investigated,

with a quantitative approach. Despite being an exploratory study, it also has the purpose of developing hypothesis, increasing the familiarity of the researcher with the phenomena and subsidizing the future performance of a more precise research[6].

The collection of primary data was performed in the municipality of Jacobina, Bahia, Brazil, in nine Family health units, during the months of May to July, 2013. Questionnaires were used to pregnant women/new mothers and nurses, with information related to the socio-demographic-professional characterization and specific questions to each participating group, such as: number of pregnancies, diagnosis and treatment of syphilis, notification, qualification, invitation to the partners. The population was defined by geographical and temporal criteria, through simple random sampling.

As inclusion criteria for participation of the pregnant women/new mothers, it was established that they would be over 18 years, positive for syphilis during prenatal care performed in primary healthcare. For the nurses the criteria established were: perform prenatal care in the primary healthcare units with cases of syphilis in pregnant women, even in cases that were not notified.

Out of this search, four nurses informed that they had cared for pregnant women diagnosed with syphilis during the established period, nevertheless, one of them refused to participate in the research and the questionnaire was applied to three nurses.

Subsequently, household visits were made0 to the pregnant women, previously contacted by the nurse of the unit and which had agreed to participate of the research. The questionnaire was applied to these women after having signed the informed consent form.

The registration of the secondary information, from the Brazilian Case Registry Database (SINAN) and SisPreNatal was processed separately from the first phase of the study. In the SINAN, between 2011-2013 only two cases of syphilis in pregnant women were registered in the municipality of Jacobina-Bahia.

Considering the existence of sub-notification, it was decided, after having accepted as evident the assumption of sub-notification by the epidemiological surveillance department of the municipality, to cover all the units of the municipality headquarter, approaching the nurses responsible for prenatal care, within the specified period, between 2011-2013, in the search of cases not notified in the information system. Thus, six cases of syphilis in pregnant women were traced within the mentioned three-year period.

These findings were classified under two categories: the primary findings, from the field research, with the application of the questionnaire to the pregnant women/new mothers and nurses, and, the category of data from the information system provided by the Municipal Health Department of Jacobina. Subsequently, all the information was inserted and calculated using the Microsoft Excel 2010, which permitted the preparation of tables and analyses using the distribution of relative frequencies.

In order to assure the ethical aspects, in compliance with resolution 466/2012, this study was submitted to the ethics and research committee of Universidade do Estado da Bahia (UNEB) and approved through decision 491.421, dated 12/12/2013.

In the development of this study, among the nine health teams visited, three new mothers and three nurses were approached who, in accordance with the established method, were apt to participate at the moment of application of the questionnaire.

In the present research, the pregnant women/new mothers are identified by the letter "G" ordinal numbers 1, 2 and 3, according to the order of approach in the collection of information. The nurses are identified by the letter "E", maintaining the numerical order identical to the pregnant women. Table 1 presents the socio-demographic variables of the pregnant women participating in the study:

## RESULTS

**Table 1.** Socio-demographic variables of pregnant women with positive VDRL, Jacobina-Ba, 2014.

| Variables | G1 | G2 | G3 |
|---|---|---|---|
| Age group (years) | 20 | 22 | 19 |
| Number of prenatal consultations | 6 | 6 | 1 |
| VDRL diagnosis, positive | 1st quarter | 3rd quarter | 2nd quarter |
| Treatment | Yes | Yes | Yes |
| Prescription of medication | Nurse | Nurse | Doctor |
| Treatment of partner | Yes | No | No |
| After treatment was VDRL performed | Yes | No | Yes |
| New VDRL result | Positive | - | Not known |

**Source:** Data collected by the authors.

Among the pregnant women participating in the research, it is observed that these are young women with low schooling, which characteristics could

directly interfere in the prenatal care. In relation to the period of positive diagnosis of syphilis, through the positive VDRL exam, these occurred in distinct moments, varying between the 1st and 3rd quarter. Another relevant fact was that only G1 informed about treatment by the partner.

Table 2 presents variables collected through the instrument applied to nurses.

**Table 2.** Variables related to professional activities of nurses participating of the research, Jacobina-Ba, 2014.

| Variables | E.1 | E.2 | E.3 |
|---|---|---|---|
| Years of experience | 3 | 2 | >1 |
| Prenatal training | Yes | No | No |
| Knowledge of FIN-syphilis in pregnant women and congenital syphilis | Yes | No | Yes |
| Training in clinical management of STDs | Yes | Yes | Yes |
| Educational activities on syphilis at the Primary Healthcare Units | Yes | Yes | Yes |

**Source:** Data collected by the authors.

In relation to the profile of the nurses that perform the prenatal care, it is verified that the participants are young, with experience varying between 1 and 3 years and only one informed that she received prenatal care training.

**Table 3.** Indicator of the prenatal care process, SisPreNatal, Jacobina-BA, for the period 07/01/2011 – 07/31/2013.

| Primary Healthcare Unit | Total number of pregnant women registered in the program that had the 1st consultation | % of pregnant women that had 06 consultations | % of pregnant women that had 06 consultations and all the basic exams |
|---|---|---|---|
| UNI 1 | 50 | 14.29% | 2.04% |
| UNI 2 | 208 | 0.48% | 0.00% |
| UNI 3 | 44 | 23.26% | 11.63% |
| UNI 4 | 49 | 28.57% | 12.50% |
| UNI 5 | 69 | 20.90% | 4.48% |
| UNI 6 | 78 | 14.10% | 5.13% |
| UNI 7 | 57 | 16.36% | 16.36% |
| UNI 8 | 70 | 8.57% | 4.29% |
| UNI 9 | 42 | 19.05% | 19.05% |

**Source:** SisPreNatal - Information System for the Prenatal and Birth Humanization Program, 2014

According to the data obtained through the SisPreNatal, between July 1st, 2011 and July 31st, 2013 the municipality registered 2,832 live births. In the same period a total number of 1,098 pregnant women were enrolled in the program and performed the first consultation. This reveals a much lower proportion between

the number of live births and the number of pregnant women enrolled, in other words, less than 50% as demonstrated in Table 3.

The percentages found in the SisPreNatal presented significant variations, among the nine units studied and, with percentages below those proposed by the Ministry of Health. Other important information also collected from the SisPreNatal, in relation to the process of attention to the pregnant women can be verified on Table 4.

**Table 4.** Indicator of the prenatal care process, SisPreNatal according to the percentage of pregnant women having performed two VDRL exams, Jacobina - BA de 07/01/2011 – 07/31/2013.

| Primary Healthcare Unit | % of pregnant women having performed two VDRL exams | Proportion of pregnant women selected in the period |
|---|---|---|
| UNI 1 | 25.00% | 1 out of 4 pregnant women |
| UNI 2 | 25.00% | 1 out of 4 pregnant women |
| UNI 3 | 80.00% | 8 out of 10 pregnant women |
| UNI 4 | 30.00% | 3 out of 10 pregnant women |
| UNI 5 | 35.00% | 7 out of 20 pregnant women |
| UNI 6 | 37.50% | 6 out of 16 pregnant women |
| UNI 7 | 88.46% | 23 out of 26 pregnant women |
| UNI 8 | 76.92% | 20 out of 26 pregnant women |
| UNI 9 | 94.74% | 18 out of 19 pregnant women |

**Source:** SisPreNatal - Information System for the Prenatal and Birth Humanization Program, 2014.

According to Table 4, it is observed that the most significant percentage was found at UNI 9 (94.74%), nevertheless, when considering that the mentioned unit had 42 pregnant women enrolled in the period, the information loses significance. The lowest percentage found was of 25% in units UNI 1 and UNI 2, which is very discouraging once these units had enrolled, during the studied period, 50 and 208 pregnant women, respectively, therefore the actual calculation, according to the SisPreNatal report for UNI 1 and UNI 2 was of less than 1% for the performance of two VDRL exams.

**Table 5.** Cases of syphilis in pregnant women and congenital syphilis in 2012 and estimate of cases per year, Jacobina - Bahia.

| Municipality of residence | Year: 2012 | | Estimate number of pregnant women with syphilis * | Estimate number of congenital syphilis * |
|---|---|---|---|---|
| | SG (SINAN) | SC (SINAN) | | |
| Jacobina | 2 | 1 | 11 | 3 |

*Calculation of estimates: 1) (Live births in year Y x 10%) + Live births in year Y) x 0.8% = estimated number of pregnant women with syphilis in year Y 2) estimated number of pregnant women with syphilis in year Y x 25% = estimated number of congenital syphilis year Y

For the calculation of the estimates, the number of live births in 2012 was used, from SINASC – period researched: 2011-2012
Source: Brazilian Case Registry Database (SINAN) /Epidemiological Surveillance Department of Bahia – DIVEP-BA

Table 5 presents the results of the data research on the SINAN in relation to cases of syphilis in pregnant women (SG) and congenital syphilis (SC) in the municipality of Jacobina - BA for the year 2012. The table also presents estimates for occurrence, and the conditions for the next period.

## DISCUSSION

The data obtained in the socio-demographic characterization, Table 1, discloses participants in the condition of pregnant women/new mothers with low schooling levels. A research performed in Caxias do Sul[7] indicated that the higher the level of schooling of the pregnant woman, the earlier was the search for prenatal care and consequently, the higher the number of consultations made.

In accordance with the Epidemiological Syphilis Report[8] disclosed in 2012, the greater proportion of pregnant women with syphilis was found in the age group between 20 and 29 years (52.4%), in two separate levels of schooling – 5th to 8th grade incomplete (22.1%) and 1st to 4th year high school incomplete (10.8%), thus corroborating the findings of this study.

With reference to the number of prenatal consultations performed, G3 had only one, which occurred in the third quarter of gestation. According to the proposal of the Ministry of Health at least six consultations are necessary[1,3]. G2 calls attention because despite having been through six consultations the disease was only diagnosed in the third quarter, which could occur in view of the contamination having occurred during gestation, which would probably explain the positive diagnosis for syphilis.

Regarding the treatment for syphilis, as presented under Table 1, all the pregnant women stated that the performed the treatment, and for two of them the prescription for medication was given by the nurse. For the treatment of syphilis penicillin G benzathine is the drug of choice, once apart from having low cost, easy access and excellent effectiveness, its application is performed in the primary healthcare units and may be prescribed by the nurse in accordance with the law for professional practice of nursing care – Law 7498/86 and the Ministry of Health[9].

The nurses, when questioned about the syphilis notification and investigation sheet on pregnant women and in relation to

congenital syphilis (Table 2), they informed that they were aware of the sheets, nevertheless, E2 alleged being unaware of the instrument. In relation to the last case of syphilis in pregnant women and congenital syphilis notified, E2 informed never having notified. However, all of them stated being the nurse responsible for the investigation of cases of syphilis notified in the unit.

When syphilis is confirmed during gestation, the nurse should perform the notification, investigation and begin treatment with the prescription and administration of penicilin[7,9], as well as tested serologically, offering a qualified assistance during prenatal care, permitting the prevention of vertical transmission.

In this study, the lack of qualification of the nurses for prenatal care is alarming, once it can interfere directly in the quality of the assistance rendered to pregnant women diagnosed with syphilis. Participant E3 conveyed the feeling of difficulty in handling the treatment of syphilis, mainly regarding the posology of penicillin.

In this respect, a study performed in Rio de Janeiro[10] evidenced, among prenatal nurses of the Public Health System (SUS), various barriers related to knowledge and familiarity with the nursing care protocols, difficulties in the approach of sexually transmitted diseases (DST); it was also observed that professionals with greater access to training and to technical manuals presented better performance.

It is evident that in Brazil, the main obstacle for the control of congenital syphilis is the lack of treatment or inadequate treatment of the sexual partners of the pregnant women. The syphilis report for the year 2012 demonstrated that among the notified cases of congenital syphilis in the period, it was registered that only 11.5% of the partners had received treatment[11], a scenario that is repeated in Salvador[12], where 96.2% of pregnant women with syphilis received inadequate treatment; in the Federal District[13] the proportion of lack or inadequacy of the treatment of the partner was of (83.6%) and (88.1%) respectively.

Another matter presented to the nurses, as per Table 2, was the invitation to the partners to the primary healthcare unit for treatment. The answers obtained were varied, such as an invitation made by the professional to the partner to be present during the next prenatal consultation with the pregnant woman or setting up a consultation through active search, or even engaging the Community Health Worker (ACS), or even household visit. It is perceived that there is no specific standard in relation to the approach and counseling of the partner.

A study carried out in Ceará pointed out the difficulties in the health service in relation to engaging the partners, revealing that 75% of the partners were communicated of the diagnosis, communicated by the women themselves in 78.6% of the cases and became aware of the results of the VDRL exam before or during prenatal care 59,5%; nevertheless, 25.0% of the pregnant women did not reveal to their partners the diagnosis alleging: lack of awareness of the importance of the treatment of the partner (50.0%), not being with the partner after the diagnosis (42.9%) and not being on speaking terms with the partner (7.1%). They revealed having suffered some sort of violence after the revelation of the diagnosis 4.7%. And that only 42.8% of the partners were adequately treated[14].

In order to obtain adequate treatment of the pregnant woman as well as to decrease vertical transmission of syphilis, it is of utmost importance to understand why there is such little adhesion of the partners to the treatment, once it is evident that this is one of the main obstacles to the treatment of the pregnant women[13-14]. However, most of the studies related to syphilis during pregnancy analyze variables of the pregnant women[7,10], and the information related to the partners is restricted either to the performance of the treatment or to whether the partner was adequately treated[10,13].

It is essential that the health services present an attitude that favors the reception and joint identification with the patient in relation to strategies of negotiation with the partner, once reinfection could perpetuate the syphilis. Counseling and treatment, when well executed, are important instruments for breaking the DST transmission chain, once it offers to the person the evaluation of the risk conditions[10]. In this manner, in one consultation, the health professional should offer the diagnosis, treatment and counseling, as well as access to prevention material, when necessary[15].

In this study when the pregnant women were questioned whether they had performed again the VDRL exam, despite G1 and G3 having confirmed that they had, only G1 knew the result of the control exam. The approach recommended for the treatment of syphilis during pregnancy is that after the treatment, the pregnant woman should repeat the exam on a monthly basis for control[9-10].

In relation to the frequency of the VDRL exam after treatment only E3 acted according to the recommendation of the Ministry of Health. The behavior adopted by the nurses, regarding the accompaniment of the treatment for syphilis, leads us to reflect that the care

rendered is not in compliance with the recommended care, becoming, in this manner, a risk factor for the occurrence of congenital syphilis to the newborn.

The percentages found on the SisPreNatal demonstrate that, in general, the amount of enrolled pregnant women that performed the six prenatal consultations was low, with the highest rate being of 28% at UNI 4 and UNI 2 with 0.48%, whereby om the period there were 208 pregnant women enrolled in this establishment, in other words, UNI2 attends to four times more pregnant women in relation to other UBS, which could confirm a super concentration in the demand.

Furthermore, regarding the women that did perform the six consultations and all the basic exams, the results were disappointing, with no pregnant women contemplated in UNI 2 and UNI 9 having reached the maximum of 19.05%. A study carried out in the capital city of Bahia evidenced that access to the prenatal service in primary healthcare is inefficient, due to the low coverage of consultations[5].

The parameters recommended by the Ministry of Health is to guarantee the performance of the minimum of six consultations linked to the realization of mandatory laboratory exams, in the first consultation and in the third quarter of gestation, such as: haemogram, blood type and Rhesus factor, indirect coombs (when Rh negative), fasting glycaemia, quick test to screen for syphilis and/or VDRL/RPR, quick anti-HIV diagnostic test, anti-HIV, toxoplasmosis IgM and IgG, serology for hepatitis B (HbsAg), urine test and uroculture[8,16].

In a research, which analyzed the PHPN indicators in Ceará, during the period 2001-2006, demonstrated that the indicator, consultations during the puerperal period, laboratory exams, anti-tetanic vaccine and anti-HIV test, the lowest percentages of all years (15.67%) were obtained, the authors also considered as unacceptable that prenatal care still needs such basic guarantees as minimum laboratory exams and anti-tetanic vaccines, for example[17].

Therefore, it is possible to perceive through the indicators presented herein that the coverage of the number of consultations as well as the basic exams are well below expected, below what is proposed by the PHPN, which leads us to believe that the assistance rendered to the pregnant woman of the municipality is incipient, once not even the basic exams, many of which are of low cost and easy access, are not being performed by the pregnant women.

The low percentages observed through analysis of the SisPreNatal reports also cause concern from a financial point

of view since these will be used as data for the transfer of financial funding by the Ministry of Health to the municipality[18].

For the diagnosis of syphilis during pregnancy and prevention of the occurrence of congenital syphilis, it is necessary to perform two VDRL exams during prenatal care, one being unfailingly during the first quarter and the other during the 30th week, as well as at the moment of hospitalization, either for delivery of the baby or post-abortion uterine curettage[1,5,7,15].

With regard to Table 4, other studies which also proposed the evaluation of prenatal care indicators, evidenced low percentages in the realization of two VDRL exams[17-19]. A research from Acre[17] indicated that among the pregnant women enrolled in the SisPreNatal only 17% performed the two VDRL exams. In a comparison among Brazilian states, a percentage of 12% in the realization of both VDRL exams was evidenced, in which the South and Southeast obtained the best indicators, and the North and Northeast the lowest percentages, evidencing the need to reassess the quality of this attention.

International meta-analysis studies on policies for screening syphilis in different countries, including countries under development, such as the Sub-Saharan Africa, demonstrated that 60% of pregnant women do not receive adequate screening, or receive it too late for efficient treatment, corroborating the findings of the presented research[20].

According to the information presented in the year 2012 in the municipality, there were two cases of syphilis in pregnant women and one case of congenital syphilis notified, a number well below the estimate of the department of health of the state. We believe that the cases of syphilis in pregnant women are sub-notified, because during the period of this research, we found six pregnant women, with positive VDRL, being attended in a primary healthcare unit.

Despite the fact that congenital syphilis and syphilis in pregnant women having been classified as conditions for mandatory notification, since 1986 and 2005, respectively, only 32% of the cases of syphilis during pregnancy and 7.4% of congenital syphilis are notified. This sub-notification allied to the low quality of the registrations of cases notified makes the preparation of strategies for control of the disease difficult, in the measure in which the real magnitude of this condition is unknown[5, 16-18].

The mandatory notification of a condition has the purpose of accumulating sufficient data to permit an analysis leading to interventions for its reduction and/or its consequences. In the case of the

notification and investigation of syphilis in pregnant women, the intention is clear, to reduce its occurrence until attaining the elimination of congenital syphilis.

The prenatal care manual [8] establishes that, in order to avoid the evolution of the disease, in the lines that deal with the management of syphilis during pregnancy, both the women and their partners have the right to treatment for the cure and guidance on preventive care for congenital syphilis[1,8]. In this study, the protocol was not fulfilled.

## CONCLUSION

The pregnant women/new mothers participating of the research performed their prenatal care in the primary healthcare, and the diagnosis for syphilis occurred during the 1-3 quarter, despite having performed the treatment in 2/3 of them the treatment was considered as inadequate according to the parameters of the Ministry of Health since the partners were not treated simultaneously.

The study revealed a lack of qualification of the nurses for prenatal care, since they stated that they had difficulties in the clinical management of syphilis, as well as the lack of knowledge of some of the documents necessary for notification of the condition.

It was possible to evidence, from the data collected at the primary units, that in the period under study there were six cases of syphilis in pregnant women, whereby only two were registered. This fact demonstrates a disassociation between the Family Health Strategy and the information systems, corroborating with the prevailing literature that states that there was sub notification of syphilis during pregnancy. Furthermore, the percentage of pregnant women enrolled in the program and which performed the two VDRL exams is below the percentage recommended by the PHPN, which directly contributes to the low diagnosis of syphilis in the municipality.

With reference to the SisPreNatal data, an important flaw was observed in the assistance, once the minimum quantity of consultations and basic exams were not fulfilled in any of the nine units researched, and one of the units presented this indicator as zero.

In view of the exposed, the need for public policies was perceived for the promotion of awareness and qualification of the health team towards prenatal care, aiming to qualify them as to the notification and clinical management of syphilis during pregnancy. In regards to attracting the partners for treatment, the need for promoting more efficient strategies for treatment was verified, such as awareness, counseling and preparation

of the nurses for attending to the vulnerabilities of this group.

We believe that a broader delimitation in the period under study could have evidenced other elements for analysis and strengthen the study. The fact that we opted for units located in the urban and suburban zone may also have been a limitation factor of the research.

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Received in February 02, 2016
Approved in August 29, 2016
Published in December 29,2016