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# Prenatal assistance according to the guidelines of the Stork Network in a city of Ceará

Atención prenatal según las directrices de la Red Stork en una ciudad de Ceará

Assistência pré-natal conforme as diretrizes da Rede Cegonha em um município cearense

## ABSTRACT

Objective: to analyze prenatal care according to the guidelines of Rede Cegonha in a municipality in Ceará. Methods: field research, descriptive, with a quantitative approach, carried out in a city in the interior of Ceará, with 10 nurses who work in Basic Health Units, through the application of a questionnaire. Results: 90% of professionals capture pregnant women in the 1st trimester, 80% refer pregnant women with complications to a reference place, just as pregnant women return to the unit for continuity of prenatal care, 100% of pregnant women perform examinations in the city itself, of these, 70% are received in about 15 days, 100% refer pregnant women with high-risk prenatal care to specialized services. Conclusion: in general, prenatal care in the studied municipality occurs in an appropriate way, however, there are some aspects that need to be evaluated and improved so that the criteria relevant to the guidelines of Rede Cegonha are really covered.

**DESCRIPTORS:** Prenatal Care; Basic Attention; Maternal and Child Health Services; Maternal and child health.

## RESUMEN

Objetivo: analizar la atención prenatal según los lineamientos de la Rede Cegonha en un municipio de Ceará. Métodos: investigación de campo, descriptiva, con enfoque cuantitativo, realizada en una ciudad del interior de Ceará, con 10 enfermeros que laboran en Unidades Básicas de Salud, mediante la aplicación de un cuestionario. Resultados: 90% de los profesionales captan gestantes en el 1er trimestre, 80% derivan gestantes con complicaciones a un lugar de referencia, así como las gestantes regresan a la unidad para continuidad de atención prenatal, 100% de gestantes realizan reconocimientos en la ciudad. En sí, de estos, el 70% se recibe en unos 15 días, el 100% deriva a las embarazadas con atención prenatal de alto riesgo a servicios especializados. Conclusión: en general, la atención prenatal en el municipio estudiado se da de manera adecuada, sin embargo, hay algunos aspectos que necesitan ser evaluados y mejorados para que realmente se cubran los criterios relevantes a los lineamientos de la Rede Cegonha.

**DESCRIPTORES:** Cuidado prenatal; Atención básica; Servicios de salud materno-infantil; Salud maternal e infantil.

## RESUMO

Objetivo: analisar a assistência pré-natal conforme as Diretrizes da Rede Cegonha em um Município Cearense. Métodos: pesquisa de campo, descritiva, com abordagem quantitativa, realizada em um município do interior do Ceará, com 10 enfermeiros que atuam em Unidades Básicas de Saúde, através da aplicação de um questionário. Resultados: 90% dos profissionais realizam a captação das gestantes no 1º trimestre, 80% encaminham as gestantes com intercorrências para um lugar de referência, assim como, as gestantes retornam à unidade para a continuidade do pré-natal, 100% das gestantes realizam os exames no próprio município, destes, 70% são recebidos em torno de 15 dias, 100% encaminham as gestantes com pré-natal de alto risco para serviços especializados. Conclusão: em geral, a assistência pré-natal no município estudado ocorre de forma adequada, todavia, existem alguns aspectos que precisam ser avaliados e aprimorados para que assim sejam realmente contemplados os critérios pertinentes às diretrizes da Rede Cegonha.

**DESCRITORES:** Assistência Pré-Natal; Atenção Básica; Serviços de Saúde Materno-Infantil; Saúde materno-infantil.

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**INTRODUCTION**

**P**renatal care is an important tool for women's health care during pregnancy. This, in turn, aims to improve the health conditions of the fetus and the mother, preventing them from possible complications that can affect them during the gestational period, as well as promoting a healthy birth.<sup>(1)</sup>

In Brazil, even though maternal mortality has decreased in the last few decades, the number of neonatal deaths continues, and unfortunately they still happen due to preventable causes. Even with the increase in prenatal care coverage in the country, the most frequent causes of maternal and perinatal morbidity and mortality are systemic arterial hypertension, as well as congenital syphilis, HIV/AIDS, urinary tract infection and diabetes, which can be monitored and reduced during good prenatal care.<sup>(2)</sup>

The insufficient number of prenatal consultations can also be considered a risk factor for fetal and neonatal mortality, as well as the absence of interventions in the appropriate period of preg-

nancy can lead to the premature birth of the baby.<sup>(3)</sup>

Therefore, as a way to improve prenatal care, the Federal Government (FG) in 2000 instituted in Brazil the Program for Humanization in Prenatal and Birth (PHPN), which aims to reduce the high rates of maternal and perinatal morbidity and mortality, adopting measures to improve access, coverage, as well as the quality of prenatal, childbirth and postpartum care.<sup>(4)</sup>

In this same perspective, in 2011 the FG launched the Rede Cegonha (RC). Constituted within the scope of the Unified Health System (SUS), the RC aims to promote the implementation of new standards of attention to women's health and children's health, restructure the Maternal and Child Health Care Network so that it ensure reception and resolution and, reduce maternal and child mortality, with emphasis on the neonatal component.<sup>(5)</sup>

However, there are still problems with the adequacy of prenatal care in several locations, which have reduced the effectiveness of care during pregnancy, causing a negative maternal and

perinatal outcome.<sup>(6)</sup> Therefore, a good prenatal care can cooperate so that a pregnancy happens without complications, as well as allowing to detect and outline the most appropriate treatment in face of complications, collaborating for a peaceful and favorable end of pregnancy for both the woman's health and the baby.<sup>(7)</sup>

Thus, prenatal care should be based on a humanized and quality reception, bringing women qualified care with methods that are beneficial for both mother and fetus, and that can meet all the needs and difficulties presented during pregnancy. Thus, the professional must use his knowledge to distinguish the moments that his interventions will be necessary, so that it does not compromise the quality of care, nor generate uncomfortable impacts related to the health of the pregnant woman and the baby during the period of pregnancy, as well as, in childbirth and the puerperium.<sup>(8)</sup>

Considering all this reality, the following question arose: Has prenatal care in the municipality of Jaguaribe Ceará been carried out in accordance with the guidelines of Rede Cegonha?

The relevance of this research is given by the opportunity to increase knowledge on the subject, as well as, collaborate with the improvement of prenatal care, consequently improving the parameters of maternal and child health, with the purpose of reducing the high rate of maternal and child mortality. Also, to health professionals, it will subsidize knowledge about the reality and reflection on the current practices developed. At the same time, it will serve as an instrument for planning new strategies and actions, as well as guiding decision-making with a view to more qualified prenatal care.

Therefore, the aim of this study was to analyze prenatal care according to the guidelines of the Rede Cegonha in a municipality in Ceará.

## METHODS

It is a descriptive field research, with a quantitative approach based on the analysis of a questionnaire answered by the research participants. The study was carried out during the month of April 2019, in the municipality Jaguaribe Ceará, located in the northeast region of Brazil, 308 km from the capital Fortaleza. However, the research scenario was represented by 10 Basic Health Units (BHU) in the municipality. The choice for these UBS was due to the number of pregnant women who are registered and monitored in each unit.

The research population consisted of 10 nurse professionals, who are coordinators of the Basic Health Units, and who met the inclusion criteria: working in the Basic Health Unit for at least 6 (six) months and signing the Informed Consent Form.

Still in relation to data collection, it was mediated by a structured questionnaire, which was composed of questions related to the process of prenatal care offered by the municipality. Therefore, the questions raised were: How long does it take to start prenatal care? What are the conducts adopted, in case you

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have complications during pregnancy? In the case of referrals, do the cases return to the basic health unit? How is access to prenatal exams given? How long does it take to receive the results of the exams? How is high-risk prenatal access given if necessary?

The questions were elaborated based on data from the Pregnant Women Monitoring System (SISPRENATAL) of the municipality under study. In addition, the guidelines of Rede Cegonha were taken into account.

The questionnaire was applied in a reserved place, thus providing greater privacy and confidentiality of the data collected, as well as, collaboration for the detailed confidentiality of identity of the research participants.

After data collection, they were typed, grouped in related areas and coded in electronic spreadsheets, using the Microsoft Office Excel 2013 program, later analyzed using descriptive statistics. After organization and analysis, the data were discussed in the light of the relevant literature.

Finally, the research was developed in accordance with the principles of resolution 466/12 of the National Health Council (CNS), which deals with research with human beings.<sup>(9)</sup> In addition, data collection was carried out after approval of the research project by the Research Ethics Committee of the Centro Universitário Dr. Leão Sampaio - UNILEÃO through the opinion number 3.207.560.

## RESULTS

When analyzing the sociodemographic profile of the study participants, it can be seen that there was a prevalence of females (80%), 70% are aged between 30 and 45 years, and 30% are over 46 years old, 100% are specialists in some area, 90% have already graduated for more than 6 years, of which 60% are over 15 years old. With regard to the length of experience at UBS, 100% of the professionals have worked for more

than 4 years, of which 50% have passed 14 years.

Table 1 presents the data related to the performance of the components of prenatal care according to the guidelines of Rede Cegonha in the municipality of Jaguaribe, Ceará. These data are of paramount importance to assess the conduct and performance of health professionals with regard to prenatal care.

## DISCUSSION

When analyzing the data, it can be seen that in relation to the time that pregnant women are captured for the first prenatal consultation, 90% of the professionals indicated that they were

able to capture pregnant women in the UBS in the 1st trimester, and 10% in the 2nd trimester of gestation, being, therefore, considered a late start (Table 1).

In view of the findings of the present research, similar data were found in other studies<sup>(10, 11)</sup>, where the data found also revealed that the majority of pregnant women started prenatal care in the first trimester.

It is extremely important to capture pregnant women at the beginning of pregnancy. However, in order for this to occur in the best possible way, it is necessary that the primary care teams, together with the municipal manager, act together with women in a fertile period, with the main focus and atten-

tion to young people and adolescents in planning recognition of possible signs of pregnancy.

The main objective of prenatal care is to welcome women from the beginning of pregnancy, ensuring, at the end of pregnancy, the birth of a healthy child and the guarantee of maternal and neonatal well-being. As the UBS is the pregnant woman's preferred gateway to the SUS, it is expected to provide a better reception and adequate assistance during pregnancy and in the puerperal consultation.

With regard to the late start of prenatal care, this can make it difficult to provide assistance, as well as interfering in the performance of other actions of the minimum cast, causing absenteeism in prenatal and puerperium consultations, as well as laboratory tests, which can reflect negative maternal and child outcomes. It is advisable for the woman to start prenatal care as soon as the pregnancy is diagnosed, as the goal of early initiation is to strengthen adherence to prenatal care, as well as to diagnose any risk factors early, so as to work on preventing greater problems, since the main causes of maternal and child morbidity and mortality are due to preventable causes.<sup>(12)</sup>

In relation to the behaviors adopted in cases in which during the gestational period there is some complication, it can be seen that 80% of the professionals refer the pregnant women for specialized follow-up. However, it is observed that 20% do not refer the cases, with the pregnant woman being monitored by the BHU itself. In this sense, it is extremely important to refer to pregnant women who experience some complications during the gestational period, with a view to better assistance, as well as specialized monitoring according to the needs presented.

In the present study, it was also shown that, in the cases of referrals made by professionals, 80% indicated that pregnant women return to the UBS for the performance of prenatal consultations. These data go against the cases

Table 1 - Coverage of prenatal care according to the minimum requirements of Rede Cegonha in the municipality of Jaguaribe, Ceará.

VARIABLES	N	%
<b>Capture time for the beginning of prenatal care</b>		
1st quarter	09	90
2nd quarter	01	10
<b>Conduct adopted, if you have complications during pregnancy? (*)</b>		
It has no reference, it is in the basic unit itself	02	20
Refer to specialist in the municipality	03	30
Forward for reference at the Polyclinic in Limoeiro do Norte	07	70
Forward for reference in Fortaleza	01	10
Forward to the city hospital, depending on the complication	03	30
<b>In the case of referrals, do the cases return to the basic health unit?</b>		
Yes	08	80
No	02	20
<b>How is access to prenatal exams given? (*)</b>		
Municipal laboratory	10	100
Citolab in Tabuleiro do Norte	03	30
Particular	04	40
<b>Time to receive the results of the exams?</b>		
15 days	07	70
30 days	02	20
60 days	01	10
<b>How is high-risk prenatal access given if necessary? (*)</b>		
Forward for reference at the Polyclinic in Limoeiro	10	100
Forward for reference in Fortaleza	02	20

SOURCE: Research Data. (\*) This question admits more than one answer

that are referenced for some specialty, as well as showing us that there is a continuity of prenatal care. On the other hand, we highlight the 20% of cases in which pregnant women do not return to the UBS for follow-up, as this number refers to pregnant women who are not referred for specialized follow-up, who are in the health unit itself, as previously mentioned.

Every pregnant woman who presents any complication in her prenatal period, it needs to be referred to a more complex level of care, with a view to more qualified care. As well as ensuring the return of the same to the basic unit of origin, with all the necessary information for the continuation of prenatal care.<sup>(13)</sup>

When investigating how pregnant women have access to prenatal exams, the data revealed that 100% of the research participants pointed out that pregnant women have access to exams in the city itself. Regarding the time it takes for pregnant women to receive test results, 70% of nurses answered that they are received around 15 days.

Prenatal care aims to reduce maternal-fetal morbidity and mortality. However, basic laboratory tests are indispensable in prenatal care, since they serve as a complement for the analysis of clinical and obstetric data of the pregnant woman, favoring the adoption of diagnoses and the procedures adopted in relation to them. Both clinical and laboratory tests offered to pregnant women during prenatal consultations help in identifying risk situations, as well as in making decisions about the assistance that will be offered.<sup>(14)</sup>

However, the absence of the results of routine basic examinations, as well as the failure to perform them, and the delay in receiving them for pregnant women, may imply the loss of opportunity for early diagnosis and treatment of possible control complications, for example, urinary infections, by syphilis and HIV, among others, thus causing several negative perinatal outcomes which have effective interventions.

**Every pregnant woman who presents any complication in her prenatal period, it needs to be referred to a more complex level of care, with a view to more qualified care. As well as ensuring the return of the same to the basic unit of origin, with all the necessary information for the continuation of prenatal care.**

Thus, it is possible to observe how essential it is to perform the exams since the first prenatal consultation, as well as the importance of guaranteeing to pregnant women the offer of the recommended exams with results in a timely manner, with a view to designing assistance of quality, aiming at the prevention, identification and early correction of problems that may affect the pregnant woman and her conceptus, as well as, to establish appropriate treatments to the pathologies that already exist or that may occur during pregnancy.

Table 1 also contains data related to the access of pregnant women to high-risk prenatal care, where 100% of professional nurses pointed out that pregnant women have access to follow-up in these cases. On the other hand, these data differ from those presented in relation to the conducts taken by the professionals, where 20% answered that they do not refer the pregnant women to specialized monitoring.

In view of these data, it can be seen that among professionals there is an alignment between the conducts adopted in the units of the municipality, with some still having a greater concern when the cases are more complicated. This fact leads, therefore, to the quality of care, as well as to the resolution of the problems encountered. However, some conducts need to be re-evaluated by parts of the professionals, in view of the divergence of information.

The purpose of high-risk prenatal care is to intervene in the course of a pregnancy that there are greater opportunities to have unfavorable results, in order to reduce the risk to which the pregnant woman and the fetus will be exposed, as well as seeking to reduce possible adverse consequences.<sup>(15)</sup>

In this context, it is clear the importance of referral and monitoring of high-risk prenatal care. Therefore, once the pregnant woman is taken for follow-up in a specialized referral service, it is necessary that she does not lose

the link with the BHU where she started her prenatal care. We also emphasize that it is through high-risk prenatal care that health professionals can offer better assistance to pregnant women, as well as, they can identify more serious problems during pregnancy and intervene with effective methods, thus seeking to reduce the main risks to which the pregnant woman and the fetus are exposed, and to diminish the possible adverse results.

## CONCLUSION

Prenatal care in the municipality of Jaguaribe, Ceará, usually happens in an appropriate way, however, there are some aspects that need to be evaluated and improved so that the criteria rele-

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vant to the guidelines of Rede Cegonha are really covered.

According to the data, it is necessary to take a special look at women who take a long time to start prenatal care, as well as pregnant women who are affected by some complication and are not referred to another service/specialist, which can cause losses in assistance. Thus, strategies aimed at this audience are essential, aiming to facilitate early access in prenatal care and contact with health services to ensure the realization of effective health care.

Therefore, it is believed that the observed data also contribute to future discussions and adjustments to prenatal services in accordance with the guidelines of the Rede Cegonha, resulting in concrete improvements in care actions. ■

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