ACCESSIBILITY TO WOMEN'S HEALTHCARE SERVICE DURING PREGNANCY AND POSTPARTUM

Sheila Milena Pessoa dos Santos¹, Lais Vasconcelos Santos², Jéssica Oliveira Rodrigues³, Lara Caline Santos Lira², Laianne Barbosa de Souza², Ueigla Batista da Silva²

ABSTRACT: The objective of this study was to analyze accessibility to women's healthcare service during pregnancy and postpartum. A documental, exploratory and descriptive study, with a quantitative approach, was conducted with a sample of 69 women who were pregnant or in postpartum, from January 2012 to April 2014. A semi-structured questionnaire was used for data collection, and descriptive statistics and specific literature were used for data analysis. We identified poor medical records; women with no prenatal consultations; a low number of women who were submitted to breast inspection procedures, gynecological examination and dentist appointments; and a low number of accomplished tests recommended by the Rede Cegonha program, linked to the municipality. This research is expected to serve as support to understand how current medical actions work and to acknowledge the existence of accessibility barriers to woman's healthcare service and the possibility of creating new strategies to improve medical care during pregnancy and postpartum.

DESCRIPTORS: Women's health; Health services accessibility; Prenatal care.

ACESSIBILIDADE AO SERVIÇO DE SAÚDE DA MULHER NO CICLO GRAVÍDICO-PUERPERAL

RESUMO: Objetivou-se analisar a acessibilidade ao serviço de saúde da mulher no ciclo gravídico-puerperal. Trata-se de um estudo documental, exploratório e descritivo, com abordagem quantitativa. A população foi composta por 69 mulheres que estiveram em período gravídico ou puerperal no período de janeiro de 2012 a abril de 2014. Na coleta de dados utilizou-se um instrumento semiestruturado. Para a análise, adotou-se estatística descritiva e a literatura pertinente à temática. Diante os achados, identificou-se deficiência nos registros de prontuários e cartões das gestantes; ausência de consulta de pré-natal com médicos; baixos percentuais dos procedimentos de inspeção de mamas, exame ginecológico e consulta odontológica; baixa realização dos exames preconizados no programa Rede Cegonha, vinculado ao município. Pretende-se que esta pesquisa sirva de subsídio para compreensão do funcionamento das ações atuais, reconhecimento das barreiras de acessibilidade existentes e possibilidade da criação de estratégias para melhorar a assistência prestada durante o ciclo gravídico-puerperal.

DESCRITORES: Saúde da mulher; Acessibilidade aos serviços de saúde; Assistência pré-natal.

ACCESIBILIDAD AL SERVICIO DE SALUD DE LA MUJER EN EL CICLO EMBARAZO-PUERPERIO

RESUMEN: Se objetivó analizar la accesibilidad al servicio de salud de la mujer en el ciclo embarazo-puerperio. Estudio documental, exploratorio y descriptivo, con abordaje cuantitativo. Población compuesta por 69 mujeres que estuvieron en período de embarazo o puerperal entre enero de 2012 y abril de 2014. Datos recolectados mediante instrumento semiestructurado; analizados por estadística descriptiva y literatura pertinente a la temática. Entre los hallazgos, se identificó deficiencia en registro de historias clínicas y fichas de embarazadas; ausencia de consulta prenatal con médicos; bajos porcentajes de procedimientos de inspección mamaria, examen ginecológico y consulta odontológica; baja realización de los análisis recomendados en el programa Rede Cegonha, impulsado por el municipio. Se pretende que la investigación colabore en la comprensión del funcionamiento de las acciones actuales, el reconocimiento de los obstáculos de accesibilidad existentes y la posibilidad de creación de estrategias que mejoren la atención brindada durante el ciclo embarazo-puerperio.

DESCRIPTORES: Salud de la Mujer; Accesibilidad a los Servicios de Salud; Atención Prenatal.

Corresponding author:

Sheila Milena Pessoa dos Santos Universidade Federal de Campina Grande Av. Juvêncio Arruda, 795 - 58430-800 - Campina Grande, PB, Brasil E-mail: sheila.milena@gmail.com Received: 01/09/2015

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¹Nurse, PhD candidate in Nursing. Professor at Universidade Federal de Campina Grande. Campina Grande, Paraíba, Brazil.

²Nursing student at Universidade Federal de Campina Grande. Campina Grande, Paraíba, Brazil.

³Nurse. Universidade Federal de Campina Grande. Campina Grande, Paraíba, Brazil.

INTRODUCTION

The World Health Organization estimates that around the world about 287 thousand women died during pregnancy or childbirth in 2010. Most of these deaths occurred in developing countries due to the lack of adequate routine and emergency care. Although it indicates a reduction of deaths when compared to 1990, this number is far from the objective of the fifth Millennium Development Goal, which intended to reduce 75% of maternal mortality until 2015⁽¹⁾.

In this sense, to improve pregnant women and newborn medical care, planned actions should consider the identification of risk factors related to maternal and neonatal mortality, once they represent an important indicative of socio-economic and reproductive conditions, mainly those related to prenatal, childbirth and newborn healthcare⁽²⁾.

Prenatal care, when supplied with quality, is understood as the availability of adequate infrastructure with regard to physical, human and financial resources, multidisciplinary support, and guidelines and practices that satisfy the needs of each pregnant woman⁽³⁾. Thus, the care provided to these women should be based not only on clinical procedures, but also on a set of actions such as health promotion, embracement, bonding, and the use of technologies, in order to develop the empowerment of women for self-care⁽⁴⁾.

Although access to prenatal care can virtually cover the entire population, its quality is still unsatisfactory, as the educational activities in healthcare services do not help to solve the reproductive and sexual needs of men and women, the diagnostic network support services do not address the local needs, and in some places women have difficulties finding a health facility at the time of labor and childbirth⁽⁵⁾.

Faced with such information, the evaluation of the quality of health services work as a guideline for the health team and managers to measure its effectiveness. Thus, analyzing the accessibility to health services is important to drive studies that investigate the performance of these services and the quality of provided care. These analyses are essential, since the consideration of their findings in the light of theoretical advances can transform practices within the services⁽⁶⁻⁷⁾.

In the current context, the issue of insufficient accessibility for gestational care causes maternal and child vulnerability. At the same time, it makes both the pregnant and postpartum period something disjointed and fragmented. Therefore, investments should be made to investigate these gaps and to propose strategies that can overcome the identified obstacles.

In the light of the aforementioned, this study analyzed women's accessibility to women's health care during their pregnancy and postpartum.

METHODOLOGY

This is a documental, exploratory and descriptive study with a quantitative approach, originated from a project entitled "Acessibilidade ao serviço no ciclo gravídico-puerperal: Uma avaliação da atenção à mulher na atenção básica" [Accessibility to healthcare services during postpartum: an evaluation of assistance in women's primary care], linked to the National Program for Redirection of Professional Training in Health, linked to the Educational Program for Health Work of Rede Cegonha, held in the municipality of Lagoa Seca, Paraíba, Brazil, in partnership with the Federal University of Campina Grande, from 2012 to 2014.

The research was conducted in two Family Health Units (FHU) in the municipality of Lagoa Seca, with women who were pregnant or in postpartum, from January 2012 to April 2014, and received prenatal care in these FHU, with no limitation of age, color/race and permanent or transient physical disability. It was considered a survey of pregnant women from the records of each FHU during the adopted period, which resulted in FHU (A) with 125 and FHU (B) with 102 pregnant women.

The sample was calculated taking into account the formula for determining the minimum sample

size for a finite population:
$$n = \frac{N \cdot p \cdot q \cdot (Z\alpha_2)^2}{p \cdot q \cdot (Z\alpha_2)^2 + (N-1)E^2}$$

where n = number of subjects in the sample, N = population size, p = proportion of studied population, q = proportion of non-studied population, $Z\alpha/2$ = desired level of confidence, E = margin of error. A confidence level of 98% and margin of error of 2% were adopted, which provided groups of 38 and 31 women for FHU (A) and FHU (B), respectively.

The source of primary documents was composed of records and/or forms and follow-up cards of pregnant women (pregnancy cards) that were used in this investigation. There was a lottery to arrange the order of inclusion and search for participants. The exclusion criterion adopted was the incompatibility of the residence with the area covered by the FHU. The 69 selected women agreed to participate in this study and provided their records and pregnancy cards to be used as the information source for this study. Regarding the pregnancy cards, nine women had no cards or reported to have lost it.

The instrument of data collection was adapted from a form⁽⁸⁾, considering perinatal records⁽⁹⁾, the pregnancy cards⁽¹⁰⁾ and strategic indicators for the Rede Cegonha. The information included identification, obstetric history and evaluation of accessibility to prenatal care.

The data collected from the documents fed a database, divided by source, performed by the statistical program EpiInfoTM, version 7. After being typed, the information was reviewed and tabulated. Descriptive statistics was adopted for the analysis, composing profiles for socio-demographic variables (age, education, marital status, race and occupation), obstetrical information [number of pregnancies, number of children and type of child delivery (previous and current ones)], and assessment of accessibility (number of medical appointments, service procedures, performed tests and postpartum care). The results were discussed based on the specific literature related to accessibility, prenatal care, childbirth and postpartum.

The project was submitted to the Research Ethics Committee of the University Hospital Alcides Carneiro, and was approved (ID number 869.561). The collection of data began just after the approval by the referred committee.

RESULTS

The socio-demographic composition considered variables related to age, education, marital status, race and occupation. It is noteworthy that incomplete filling of the pregnancy card and/or data not registered in the medical records hampered the collection of certain information, and so, its analysis.

The study included 69 women, with a predominance of women between 21-25 years old (31.67% pregnancy cards and 26.09% medical records), married, living with partners and children (65% pregnancy cards and 53.62% medical records), and with high school education (50% pregnancy cards and 39.13% medical records). Regarding their race, there was divergence among the sources, with the absence of this information in the pregnancy cards reaching 13.33% of women; in the medical records, this absence reached 89.86%. Regarding the pregnancy cards, there were more white (36.67%) and black women (26.67%).

In relation to the occupation, which was registered in the medical records, there was a predominance of farmers n=35 (50.72%), possibly related to the housing location in the rural area n=51 (73.91%).

With regard to the obstetric profile related to the number of pregnancies, women had mostly one pregnancy (30% pregnancy cards and 36.23% medical records) and two pregnancies (31.67% pregnancy cards and 28.99% medical records). A range from one to four children was observed, being more frequent those that had just one child (26.67% pregnancy cards and 24.64% medical records). Regarding the type of previous childbirth, there was a predominance of vaginal deliveries (46.67% pregnancy cards and 40.58% medical records), but this information was missing on the pregnancy cards at maternity hospitals (76.74%).

The occurrence of deaths was identified in the first week (2.90%) and the absence of stillbirth records and deaths records after the first week. Regarding abortions, there were records on the pregnancy cards (7.25%), with 2.90% being spontaneous.

For the description of prenatal care, the following characteristics were considered: number of appointments, number of appointments done by professional, start of prenatal care, routine procedures (measurement of blood pressure, anthropometric data, vaccination, breasts inspection, gynecological exam, and dentist appointment), tests (first requested and repetitions) and postpartum consultation.

In relation to the amount of medical appointments during prenatal, there was a predominance of more than six consultations (58.33% pregnancy cards and 57.97% medical records) initiated in the first trimester (76.67% pregnancy cards and 68.15% medical records). Regarding the number of medical appointments performed by professionals, the nurses did most of them. It was possible to identify that most women had no appointment with physicians during the prenatal period (48.33% pregnancy cards and 48.28% medical records).

With regard to the activities provided in prenatal care, blood pressure measurement procedures, anthropometric data and vaccines were the most recorded, which registered a filling out in the pregnancy cards of 93.33%, 78.33% and 81.67%, respectively, and in the medical records of 86.96%, 76.81% and 73.91%, respectively. Nonetheless, data on breasts inspection (35% pregnancy cards and 40.58% medical records), gynecological examination (13.33% pregnancy cards and 27.54% medical records) and dentist appointments (18.33% pregnancy cards and 14.49% medical records) were less frequent.

In relation to tests, Table 1 shows that in the first requested tests, the pregnancy cards had more registered information than the medical records. Regarding the test type, there were fewer records for beta-HCG (66.67% pregnancy cards and 2.90% medical records), toxoplasmosis serology (56.67% pregnancy cards and 52.17% medical records) and hepatitis B (65% pregnancy cards and 53.62% medical records). There were few records, not registered in the tables, regarding the oral glucose tolerance test (1.67%), stool parasitological examination (1.67%), urea/creatinine (1.67%) and rubella serology (3.33%).

Table 2 presents the repetition of examinations. These repetitions and consequently their records were reduced when compared to the first requested tests (Table 1).

The most frequent tests were ABO/Rh and Anti-HIV, above 80%. The other tests were below 30%, and the serology for toxoplasmosis was less than 10% (Table 2).

With regard to postpartum medical home care registered in the medical records, there was 27.54% of this care provided, in 17.39% of cases it was not provided, and the lack of notes reached 55.07%. As for the professionals who carried out the visits, 27.54% were performed by nurses and 72.46% did not have records of this service.

DISCUSSION

Socio-demographic features indicate a low percentage of records. This implies an under-use of the information that could contribute to the decision-making process to benefit users during their follow-up. The absence of such information combined or isolated is related to its low use in prenatal medical care. Thus, this gap reflects inefficient care quality that can lead to increased maternal-fetal morbidity and mortality.

Considering the participants' age, it is worth highlighting the importance of being aware of the age of the pregnant women, due to the complications that can arise. Anticipating events in certain ages allows for adjusting care accordingly to guideline protocols⁽¹²⁾.

In this research, most women were married and lived with their partners and children, which agrees with similar studies that have previously reported the presence of the partner as a factor that contributes to women's compliance to healthcare services, correlating the psychological condition on security and stability to suitability of prenatal medical care⁽¹³⁾.

Table 1 - Distribution of first request tests. Lagoa Seca, Paraíba, Brazil, 2014.

Name	Exams	Medical Records		Pregnancy Cards		
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^{*1}st t: first trimester. **VDRL=Venereal Disease Research Laboratory

Table 2 - Distribution of repeated tests. Lagoa Seca, Paraíba, Brazil, 2014.

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Done 12 Not done 18 No record 31 . Hemoglobin/Hematocrit Done 12 Not done 18 No record 31 . Anti-HIV Done 8 Not done 22 No record 31 . Hepatitis B/HBsAg Done 7 Not done 22 No record 32 . Syphilis/VDRL Done 9	26.09 44.93 17.39 26.09 44.93	43 0 18 42 0	71.67 0 30 70
Not done 18 No record 31 . Hemoglobin/Hematocrit Done 12 Not done 18 No record 31 . Anti-HIV Done 8 Not done 22 No record 31 . Hepatitis B/HBsAg Done 7 Not done 22 No record 32 . Syphilis/VDRL Done 9	26.09 44.93 17.39 26.09 44.93	43 0 18 42 0	71.67 0 30 70
No record 31 . Hemoglobin/Hematocrit Done 12 Not done 18 No record 31 . Anti-HIV Done 8 Not done 22 No record 31 . Hepatitis B/HBsAg Done 7 Not done 22 No record 32 . Syphilis/VDRL Done 9	17.39 26.09 44.93	18 42 0	30 70
Hemoglobin/Hematocrit Done 12 Not done 18 No record 31 Anti-HIV Done 8 Not done 22 No record 31 Hepatitis B/HBsAg Done 7 Not done 22 No record 32 Syphilis/VDRL Done 9	17.39 26.09 44.93	18 42 0	30 70
Done 12 Not done 18 No record 31 . Anti-HIV Done 8 Not done 22 No record 31 . Hepatitis B/HBsAg Done 7 Not done 22 No record 32 . Syphilis/VDRL Done 9	26.09 44.93	0	70
Not done 18 No record 31 . Anti-HIV Done 8 Not done 22 No record 31 . Hepatitis B/HBsAg Done 7 Not done 22 No record 32 . Syphilis/VDRL Done 9	26.09 44.93	0	70
No record 31 . Anti-HIV Done 8 Not done 22 No record 31 . Hepatitis B/HBsAg Done 7 Not done 22 No record 32 . Syphilis/VDRL Done 9	44.93	0	
. Anti-HIV Done 8 Not done 22 No record 31 . Hepatitis B/HBsAg Done 7 Not done 22 No record 32 . Syphilis/VDRL Done 9			0
Done 8 Not done 22 No record 31 . Hepatitis B/HBsAg Done 7 Not done 22 No record 32 . Syphilis/VDRL Done 9	11.59	51	
Not done 22 No record 31 . Hepatitis B/HBsAg Done 7 Not done 22 No record 32 . Syphilis/VDRL Done 9	11.59	51	
No record 31 . Hepatitis B/HBsAg Done 7 Not done 22 No record 32 . Syphilis/VDRL Done 9			85
Done 7 Not done 22 No record 32 Syphilis/VDRL Done 9	31.88	9	15
Done 7 Not done 22 No record 32 Syphilis/VDRL Done 9	44.93	0	0
Not done 22 No record 32 Syphilis/VDRL Done 9			
No record 32 Syphilis/VDRL Done 9	10.14	7	11.67
Done 9	31.88	53	88.33
Done 9	46.38	0	0
	13.04	12	20
Not done 21	30.43	48	80
No record 31	44.93	0	0
. Toxoplasmosis			
Done 6	8.70	5	8.33
Not done 23	33.33	55	91.67
No record 32	46.38	0	0
. Urinalysis			
Done 12	17.39	12	20
Not done 18	26.09	48	80
No record 31		0	0

^{*} The addition to N (69) is equivalent to the participants who had not yet concluded the third trimester of pregnancy, and so they could still be registered after the data collection period, which resulted in 8 women (11.59%).

With regard to education, high school was predominant, an education level considered good to contribute to the development of prenatal medical care due to a greater comprehension about the provided information⁽¹⁴⁾.

It was not possible to obtain enough data regarding the participants' race in the medical records: 89.86% of them did not have this information. Previous research, on the completion of race/color information in eight national systems/modules of health information, has shown that there is an abrupt decline in completing this field, which can make unfeasible the calculation of indicators related to an ethno-racial approach, as well as the identification of differences and women's real needs, making it difficult to achieve the promotion of better equity policies⁽¹⁵⁾.

According to the occupation, 50.72% of women worked in agriculture (which is associated with

their residence in the rural area) followed by activities linked to domestic duties. In the Brazilian labor market, the distinction between tasks carried out by women and men is evident, leading to a scenario in which women work in feminine occupations, characterized by low wages and social discredit, reflecting their position in society⁽¹⁶⁾.

Most participants had one to two pregnancies. Another study also found a higher prevalence of women in their first or second pregnancies⁽¹⁷⁾. Considering the number of children, there was a predominance of one child, which is explained by the decline in the total Brazilian fertility rate. In 2000 it reached 2.39 and in 2015 it felt to $1.72^{(18)}$.

On the type of childbirth, most of the deliveries were vaginal/normal in both previous and current pregnancies. Women that decided to have babies in public hospitals had a high proportion of vaginal deliveries compared with those that chose private hospitals, dominated by cesarean sections⁽¹⁹⁾.

Regarding prenatal care, which contributes to the evaluation of accessibility to healthcare services, the quality criteria oriented by the Brazilian Ministry of Health in the Rede Cegonha program was adopted⁽²⁰⁾.

Over 70% of pregnant women attended to six or more medical appointments. This finding indicates the possibility of pregnant women receiving preventive health care and promotion during the consultations⁽²¹⁾.

Nurses prevailed among the professionals who performed prenatal appointments. However, the Brazilian Ministry of Health proposes that for good care of pregnant women prenatal consultations should be performed by both nurses and by physicians, alternatively⁽¹⁰⁾. Obviously, a nursing consultation does not replace a medical appointment and vice versa, so the follow-up by these two professionals is extremely important.

In relation to the start of prenatal care, there was a prevalence of early visits, however, a significant percentage of delayed initial visits was also observed. For the initiation of women's health care, early consultation is very important as it provides a more reliable estimation of the gestational age, with better monitoring of fetal growth and allowing access to diagnostics and therapies for various diseases that have a serious impact on women's and baby's health, such as anemia, syphilis and HIV infection, chronic hypertension and diabetes⁽²²⁾.

Considering the activities performed during the consultations, the actions attributed to technical nursing professionals (blood pressure check, vaccinations, collection of anthropometric data) had more records than those carried out by professionals with a higher education level (breast inspection, gynecological exam, dentist appointment). A previous study explained similar findings with the fact that technical-level professionals are trained to act more technically, performing restricted tasks⁽²³⁾.

Neglected records were evident throughout all the prenatal care period, generating doubts about the incomplete fields, which suggests the practices were not complied with or professional fault. The research also revealed that the gynecological examination and breasts inspection were the most neglected procedures, indicating that these practices are hard to be incorporated into the prenatal care routine, because of the time required for their performance or the ability required from professionals to perform them⁽²⁴⁾.

In this study, gaps in the development of exams and their professional records were also identified. The most frequent diagnostic tests were blood count, testing for syphilis, Rh factor; and the least frequent were serology for hepatitis B and toxoplasmosis. These findings may be related to the organization of the internal flow from the two analyzed services, which reflected a delay in scheduling the appointments and in the results delivery, among other factors inherent to the local reality.

The serology findings, which are essential to the screening success during the prenatal period, make up challenges to be faced in the analyzed services. The non-repetition of the tests increases the risk of children being born with an infection, because it eliminates the opportunity to identify acute infections during pregnancy⁽²⁴⁾.

Hence, the municipal care program is essential for planning pregnant women's prenatal examinations. Some authors explain that the availability of the municipal laboratory and the creation

of an organized schedule following a flowchart, with communication among the different levels of healthcare procedures, enable the rapid development of exams⁽⁴⁾.

Concerning home visits, this study identified a barrier that needs to be revised: FHUs have a low number of professionals for postpartum home visit. A previous study also reported few visits and those that were carried out found women at high risk⁽²⁵⁾.

After analyzing the pregnancy cards and medical records, it is possible to see the existence of gaps on prenatal care in the investigated units, which is evidenced by the lack of records in all the fields requested in both sources of data collection. These findings reflect the quality of healthcare services, since the notes on these documents show the performed procedures in the appointments, but underreporting is common⁽²³⁾.

CONCLUSION

On the evaluation of prenatal care, this study identified gaps in medical services that evidence a deficiency in accessibility regarding the organizational dimension, namely: deficiency in the completion of medical records and pregnancy cards; pregnant women who had no prenatal consultation with medical professionals; a low number of breast inspection procedures, gynecological examination and dentist consultation; and low compliance with the tests recommended in the Rede Cegonha program, linked to the municipality.

The study limitation consists of the absence of information on the data collection sources, especially those related to socio-demographic and obstetric conditions. Thus, it was not possible to draw a more representative profile of tasks performed by professionals and to analyze the implications of these activities on women's care. Further studies that can use methodological procedures to seek information from pregnant women, professionals and managers are recommended, enabling informational crossover and comprehension of the different parts of services related to women accessibility.

This study is expected to support managers, professionals and users to understand the performance of the current actions, to recognize the existence of accessibility barriers at FHU, and to develop strategies to improve the care provided during pregnancy and postpartum.

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