

Prenatal care in rural areas: from nurses' perspective

A assistência pré-natal em zonas rurais: sob a perspectiva dos enfermeiros

Atención prenatal en zonas rurales: desde la perspectiva de las enfermeras

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Abstract

Objective: To understand prenatal care based on nurses' experiences in the context of rural areas. **Methods:** An exploratory-descriptive study, with a qualitative approach, carried out with 12 nurses from ten Basic Health Units in the rural area of a capital in the North region of the country. Data were collected through semi-structured interviews from July 2022 to August 2023. For data analysis, Bardin's categorical content analysis was performed, with the aid of Atlas.ti® software. **Results:** Based on the analyses, three categories emerged: a) Implications of socioeconomic and demographic factors on access to services; b) Implications of culture on pregnancy monitoring; c) The importance of the multidisciplinary team's work in rural areas. **Conclusion:** Professionals are faced with users in a situation of socioeconomic vulnerability, in addition to an unfavorable geographic situation and care isolation, which makes it difficult to provide quality care.

Descriptors: Nursing Assistance; Health of the Rural Population; Prenatal Care.

Whats is already known on this?

Gaps in prenatal care are more pronounced in rural areas. Geographical implications, socioeconomic factors of its residents and structural issues of healthcare services are combined, making care difficult.

What this study adds?

It highlights strategies used by healthcare professionals in basic units to ensure continued care for pregnant women, in addition to highlighting the importance of community figures and professionals in rural areas.

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Resumo

Objetivo: Compreender a assistência pré-natal a partir das vivências de enfermeiros no contexto da zona rural. **Métodos:** Estudo do tipo exploratório-descritivo, com abordagem qualitativa, realizado com 12 enfermeiros de dez Unidades Básicas de Saúde da zona rural em uma capital da região Norte do país. Os dados foram coletados por meio de entrevista semiestruturada no período de julho de 2022 a agosto de 2023. Para análise dos dados, realizou-se a análise categorial de conteúdo de Bardin, com o auxílio do software Atlas.ti®. **Resultados:** Com base nas análises, emergiram três categorias: a) Implicações dos fatores socioeconômicos e demográficos no acesso aos serviços; b) Implicações da cultura no acompanhamento gestacional; c) A importância da atuação da equipe multidisciplinar na zona rural. **Conclusão:** Os profissionais se deparam com usuários em situação de vulnerabilidade socioeconômica, além de uma conjuntura geográfica desfavorável e isolamento assistencial, o que dificulta a prestação de uma assistência de qualidade.

Descritores: Assistência de Enfermagem; Saúde da População Rural; Cuidado Pré-Natal.

Resumen

Objetivo: Comprender la atención prenatal desde la perspectiva de las enfermeras en el contexto rural. **Métodos:** Estudio exploratorio-descriptivo, con enfoque cualitativo, realizado con 12 enfermeras de diez Unidades Básicas de Salud en la zona rural de una capital del norte del país. Los datos se recopilaron mediante entrevistas semiestructuradas entre julio de 2022 y agosto de 2023. Para el análisis de datos, se realizó el análisis de contenido categórico de Bardin con la ayuda del software Atlas.ti®. **Resultados:** Con base en los análisis, surgieron tres categorías: a) Implicaciones de los factores socioeconómicos y demográficos en el acceso a los servicios; b) Implicaciones de la cultura en el seguimiento del embarazo; c) La importancia del trabajo del equipo multidisciplinario en zonas rurales. **Conclusión:** Los profesionales se enfrentan a usuarias en situación de vulnerabilidad socioeconómica, además de una situación geográfica desfavorable y aislamiento asistencial, lo que dificulta la prestación de una atención de calidad.

Descriptores: Asistencia de Enfermería; Salud de la Población Rural; Cuidado Prenatal

INTRODUCTION

Care for low-risk pregnancies is provided at Basic Health Units (BHU), which are considered the preferred entry point for pregnant women into the Brazilian Healthcare system. In this service, pregnant women must be welcomed and assisted by a multidisciplinary team, with the guarantee of quality care.⁽¹⁾ Among the professionals in the health team who provide assistance to pregnant women, primary healthcare (PHC) nurses stand out, as they are trained and have autonomy, based on the Professional Practice Law, established by Law 7,498/86 and Decree 94,406/87, having legal support to carry out nursing consultations and fully conduct prenatal care (PN) for low-risk women.⁽²⁾

Nursing professionals are essential in the care of pregnant women, given their importance in carrying out health education actions during PN, providing strategies for health promotion and disease prevention during pregnancy, through nursing consultations.⁽³⁾ In view of this, the importance of nurses' role in assisting pregnant women and the benefits of performing PN are highlighted.

However, gaps in this care have been identified, which are influenced by socioeconomic, racial, educational and territorial inequalities, which result in difficulty in access, late start of pregnancy monitoring, inadequate number of consultations and evasion of PN. Moreover, structural factors of healthcare services in Brazil are cited, such as the insufficient number of professionals who provide PN care and precarious infrastructure of healthcare services.⁽⁴⁾

This scenario is aggravated when analyzing the situational context of PN in rural areas (RA), where these difficulties are accentuated, mainly, by geographical factors, represented by difficult access to transportation, large territorial extensions and road conditions affected by climate variations that make access to BHU impossible.⁽⁵⁾

The geographical implications that permeate RAs are compounded by the low economic power of their residents, given that travel to healthcare services in these areas lacks land or river transportation and demands long hours, interfering with the performance of income-generating activities, which generally come from agriculture and fishing. The combination of these factors contributes to the fact that the search for healthcare services is delayed even when necessary, increasing the chance of complications in the presence of diseases.⁽⁶⁻⁷⁾

Furthermore, the population residing in the RA has public healthcare services as their only access option, since supplementary health plans are beyond their economic reach.⁽⁶⁾ The inhabitants of these territories are characterized by a low level of education, which makes it difficult to understand the health-disease process, prevent comorbidities and promote health. Therefore, the educational level of these individuals directly impacts the way in which healthcare is provided.⁽⁸⁾

The different elements and contexts mentioned that involve RAs can impose different impacts on PN services available in these areas, mainly related to adherence to this service.⁽⁵⁾ Therefore, it is necessary

to know the reality of PN services present in RAs to understand the magnitude of the possible implications that the particularities of this territory can influence in the care offered to pregnant women by nursing professionals. Therefore, the present study aims to understand PN care based on nurses' experiences in the context of the RA.

METHODS

This is an exploratory-descriptive study, with a qualitative approach, carried out in the regional area of a capital city in the North region of the country. The state of this capital, according to the Brazilian Institute of Geography and Statistics, in 2022, had an area of 142,470,62 km² and an estimated population of 733,759 people; of these, 442,933 are people residing in the capital.⁽⁹⁾ The Brazilian National Registry of Health Establishments states that the capital under study has a total of 35 BHUs in its territory, of which ten are located in the RA.

To ensure methodological rigor appropriate for qualitative research, the study was conducted following the COnsolidated criteria for REporting Qualitative research checklist. Study participants were 12 intentionally chosen nurses responsible for PN care in the ten BHUs located in the RA. Nurses who provided PN care at BHUs were included. Nurses who were away from their duties for any reason were excluded.

Visits were made to these BHUs. Data collection was carried out from July 2022 to August 2023. A socio-professional questionnaire and a semi-structured interview with nurses were used for data collection. The interviews were conducted by the main author, a nursing undergraduate student trained to conduct the interviews, who was part of a larger research project. These interviews took place according to participants' availability individually and in person at the BHUs or remotely (video call application), recorded with prior authorization (lasting between 20 and 50 minutes), in addition to being transcribed (reviewed), stored in documents in Microsoft Word® 2010 and, later, analyzed.

The interviews addressed questions about nursing care during PN consultations, such as the management of pregnant women during PN and the difficulties faced by professionals and pregnant women during care. These were only asked after explanation and signing of the Informed Consent Form.

Qualitative data analysis was performed using Bardin's categorical analysis. There are three phases in the content analysis process, namely: pre-analysis; material exploration; and treatment of results, inference and interpretation. In the first phase, the material was organized to make it operational, structuring the initial ideas. The second phase consisted of categorizing the material and identifying the recording units and context units in the documents. Finally, the third phase, treatment of results, inference and interpretation, was intended to process the results in order to condense and highlight information for reflective and critical inferential analysis and interpretation.⁽¹¹⁾

The ATLAS.ti® Qualitative Data Analysis version 8.0 was used to store, encode and analyze qualitative data to facilitate the organization of the encoded data to be interpreted. ATLAS.ti® is composed of several elements, including the hermeneutic unit (a folder for storing data), primary documents, codes and analysis notes. Therefore, the data in this study were organized using the hermeneutic unit, which is the expanded project, composed of 12 primary documents (forms) and 17 codes (recording units). Based on coding, three categories were created to discuss the results.

The research was conducted in accordance with Resolution 466/12 of the Brazilian National Health Council. The project was approved by the Universidade Federal do Amapá Research Ethics Committee, under Certificate of Presentation for Ethical Consideration 37153220.9.0000.0003. To ensure participant confidentiality and anonymity, they were identified by alphanumeric codes (e.g., NUR 001, NUR 002, etc.).

RESULTS

Concerning the socio-professional profile of nurses in the BHUs of the RA, the following stands out: 75% (n=9) were female; 58% (n=7) were up to 35 years of age; 75% (n=9) had worked for up to three years in the BHUs of study. Nurses linked to the Family Health Strategy (FHS) accounted for 91% (n=11), while 8% (n=1) were from the BHU. As for qualifications of professionals, 58% (n=7) had a specialization; 33% (n=4) had only a bachelor's degree; and 8% (n=1) had a master's degree. Among nurses with specialization, 71% (n=5) had a degree in obstetrics.

Based on the analyses, three categories were formulated: a) Implications of socioeconomic and demographic factors on access to services; b) Implications of culture on pregnancy monitoring; c) The importance of the multidisciplinary team's work in rural areas.

a) Implications of socioeconomic and demographic factors on access to services

In the interviews analyzed, there was a predominance of discourses related to the difficulties in accessing healthcare services marked by the lack of transportation to go to health units, extensive distances between homes and services, and roads with poor traffic conditions, caused by climate change. There were even greater difficulties in river areas. The aspects mentioned impact pregnant women, creating obstacles in accessing basic PN care services, such as laboratory tests and consultations, and/or even more complex services, such as specialized care for high-risk pregnancies and childbirth, significantly interfering with the population coverage of the assigned area, as we can see in the narratives:

[...] from the distance that a pregnant woman travels to get to the BHU (Basic Health Unit), to the difficult access to laboratories and clinics to carry out tests and ultrasounds. [...] the difficulty in carrying out high-risk prenatal care and even her going to the maternity ward to give birth (NUR 001).

[...] sometimes due to lack of transportation for both the pregnant woman and the unit, because the road is not so good for traffic when winter arrives. The communities are far from each other (NUR 007).

My service is daily. To tell the truth, I had to be in the area, but then, if I go, I'll see the pregnant woman. Today I'll see a pregnant woman here, one there, from here 5, 10 km into the woods, then the morning is over, it's not possible (NUR 004).

Inland, we have a greater difficulty, because as it is a river area, many times these pregnant women do not have transportation to get to the unit with us. We also do not have transportation to do an active search, when necessary (NUR 010).

Among the healthcare services available in RAs, laboratory tests are highlighted as one of the main deficiencies. Nurses report that pregnant women need to travel to the capital to undergo tests, and some end up abandoning their PN care in RAs to undergo tests in the city, due to the availability of tests. Those who do not have the purchasing power to travel to the city go through the entire pregnancy cycle without completing the minimum tests that should be performed during PN care. This situation is exposed in the following statements:

[...] the difficulty involves everyone, because in my region we do not have laboratories. They have to travel to the capital to collect the sample and return later to get the results (NUR 001).

Many people abandon their homes. There are many people here who have a house, who live here, a small piece of land, but they have their homes in the city. Because of the difficulty in getting the test, they prefer to go to the city (NUR 003).

Insecurity in making decisions regarding complications during pregnancy is another effect that affects the care provided by nurses, due to the lack of laboratory tests. This has generated conflicting feelings and indecision regarding the prescription of care procedures, with the only alternative for professionals being to prescribe empirical treatments for pregnant women, without real confirmation of diagnosis, as expressed in the following statements:

[...] comes in saying, "Oh, nurse, I have symptoms of a urinary tract infection". Even though we don't have the test to prove it, we go and treat the urinary tract infection in the dark, because we don't have the test (NUR 002).

[...] sometimes, the person has an infection or some type of illness and does not take care of it. They will only find out at the maternity ward, because we ask for the test and the person does not go to the city (a place where there are basic units with laboratory tests). So, when I see that the pregnant woman already has a urinary infection, that she already has the symptoms, I already prescribe the medicine (NUR 004).

Based on nurses' reports, it is possible to visualize the socioeconomic configuration of pregnant women in the RA, characterized as a low-income group, which comes from family farming activities, in

addition to receiving social assistance. This economic dimension directly influences the diet of these women, composed of low-cost and low-nutrition foods, causing nutrient deficiencies and, consequently, physiological imbalances that manifest themselves through the symptoms of unbalanced nutrition, impacting pregnancy.

Many complaints of weakness, due to lack of nutrients due to poor diet. Extreme poverty even in the countryside. [...] they (rural population) have no jobs, they depend on work in the fields, fishing, hunting, etc. (NUR 006).

Another difficulty is the diet of these pregnant women from the countryside. It is often a restrictive diet. Only fried fish, açaí and flour or sausages, which riverside communities consume a lot, a lot of sausages, thus causing eating disorders and providing this low intake of vitamins and nutrients (NUR 010).

b) Implications of culture in pregnancy monitoring

The second category highlights cultural aspects related to common practices during pregnancy among women in the RA mentioned by nurses. It was observed that midwives play a prominent social role in rural communities, and are seen by pregnant women as a supportive figure during the gestational process. When pregnant women discover they are pregnant and experience changes or complications, seeking out a midwife is the most common course of action, and this is the point of contact for women in this region, making the services of BHUs unnecessary, according to professionals. Practices performed and encouraged by midwives are also described, such as pulling the belly (abdominal massage to align the baby with the birth canal, a popular practice among midwives in the North region) and home birth, respectively. This situation is exposed in the following statements:

Our biggest challenge is really with the culture of midwives, a culture that doesn't need to do prenatal care, and they don't know the importance of prenatal care (NUR 002).

One of the main things in rural areas is custom. Custom is a social construct. In that region where there are midwives, when the midwife says something, it is true. Many people do not go to the capital (where the state's maternity hospitals are located) because the midwife said it could be done at home or the person only receives the first consultation at the BHU (Basic Health Unit) and then follows the midwife. [...] oh, was there a problem? Take them to the midwife and pull them out as they say. Many times, pregnant patients arrive there, pregnant women at 37, 39 weeks, who have never been to the BHU, but have been to midwives. So, this has been the case since the beginning. It is a reason why pregnant women do not want to go to the BHU as much (NUR 009).

Intergenerational experience is an aspect present in RAs, where the multiparity of mothers and grandmothers who were monitored by midwives during their pregnancies did not result in negative obstetric outcomes, thus reducing the recognition of care for pregnant women in the BHU as something essential. Furthermore, resistance and absenteeism during PN of rural pregnant women are reported, being seen as a challenge for the initiation and continuation of care provided by nurses. Another factor that hinders the early capture of pregnant women is the fear and shame that young people feel due to repercussions resulting from early pregnancy, as observed in the following statements:

The cultural issue of mothers and grandmothers, who say they gave birth to ten children and never needed to do these things (prenatal), or take them to the midwife to pull (NUR 001).

We have a lot of difficulty in continuing prenatal care, because women in rural areas are more resistant to prenatal care, to continuing prenatal care. [...] we have this difficulty in capturing pregnant women up until the sixteenth week. We can already capture them late, when we are already on top of the patient, "Look, let's do prenatal care". They don't take it so seriously, it's a culture of the countryside, of rural areas (NUR 002).

We have a lot of difficulty in capturing these pregnant women in the first 12 weeks of pregnancy, due to a whole culture. Sometimes, they are young girls, so they don't want to tell people that they are pregnant (NUR 010).

Starting pregnancy monitoring at the BHU to have access to the PN card is a common practice in the RA, and is seen by pregnant women as a means of entering the maternity ward to give birth. There is also an expectation of receiving better care when the document is present, as it demonstrates PN monitoring, as highlighted in the following statements:

Most of them arrive when their pregnancy is advanced, because there is a great lack of information. They come more to get the card, according to them (pregnant women) so that when they arrive at the maternity ward they will be well looked after, because, in their minds, they will be very poorly looked after without the card (NUR 004).

Generally, those who have more than six months only look to open the card to go to the capital (NUR 007).

c) The importance of multidisciplinary team work in rural areas

In this category, it is clear that when there is effective action by a multidisciplinary team, the service becomes more fluid and aims to overcome the difficulties faced. Adaptations were identified in the work routine carried out by professionals to improve care provision, as evidenced in the following statements:

[...] we performed at least rapid tests, listen to the baby's fetal heartbeat, and perform physical examinations. [...] our appointments are held every day, from Monday to Friday, morning and afternoon. We have doctors in our unit, we have a dentist (NUR 002).

[...] here we work on the issue of vaccinations, they are all vaccinated. All pregnant women, when they leave here (consultation), go to the dentist. We already refer them to Wednesday, the dentist is already exclusively to see pregnant women. [...] when they arrive, we have to see them, we don't send them away, because the person came from far away, sometimes they came hitchhiking, they came spending what they didn't have (NUR 004).

Among the professionals on the RA health team, the community health worker (CHW) plays a prominent role in recruiting pregnant women. The CHW coordinates and plans care, and works on tracking and monitoring pregnant women in RAs. According to one of the nurses from a unit located in a quilombola area, already delimited as a RA, the rescue of absent pregnant women is also carried out by the CHW.

[...] we can capture pregnant women when they are well monitored by the worker in the area. If they detect that they are pregnant, they come, they schedule the appointment themselves, put it on the agenda and they are seen (NUR 003).

Yes, we have health workers who cover the entire quilombola area. Before, we didn't have this coverage of the entire area, so when there's a pregnant woman who doesn't come for a consultation, they do an active search, tracking, and bring the pregnant woman back to us (NUR 005).

Regarding one of the greatest difficulties reported by nurses, the tests, with the support of the municipal health management, a date is set each month for performing ultrasounds on pregnant women in the rural community. Some of the units studied were responsible for covering many communities, some of which can only be reached by river transport. In these cases, the service is provided during a certain period of the month, with advance notice to residents. To this end, professionals also count on the local population's support, who are willing to transport them to the location to provide care, as observed in the following statements:

We have managed, through the municipality, to perform ultrasounds on our pregnant women once a month. This is helping us to provide quality prenatal care more quickly (NUR 002).

[...] we do this by scheduling appointments with them (pregnant women) during the period we are there, when we spend the week. We notify the communities we assist,

where neighbors or other people who have boats are available to take these pregnant women to us (NUR 010).

DISCUSSION

The municipality under study is located in a territory bathed by the Amazon River, which is marked by several areas of streams and lakes, with a population with low purchasing power and difficulty in accessing health facilities. The locations mentioned include RAs, which are characterized by a large territorial extension, marked by barriers that include difficult access to healthcare services, with roads, unpaved rural roads, and lack of signage, in addition to places where access is only possible by river transport.⁽¹²⁾

Regarding the "Implications of socioeconomic and demographic factors on access to services" category, geographic isolation in some territories of the Brazilian Amazon region culminates in social exclusion and significantly limits access to healthcare services, which represents a major challenge for public health interventions, especially for healthcare professionals in RAs.⁽¹³⁾ Supporting the results of this research, a study carried out in a municipality in northern Brazil presented factors such as distance between housing and the health unit, delay in scheduling appointments and difficulty in carrying out tests, with pregnant women often having to travel to the capital, representing obstacles to pregnant women's adherence to healthcare services and following up on appointments.⁽¹²⁾

Research conducted in a municipality in the Southeast region, with a population and territorial extension larger than the research site of this study, demonstrated the disparity in distance between home and healthcare services among pregnant women in the city and in RAs. While women in the city traveled an average of 4 km to a health unit, those in RAs lived in places with a distance of 1 km to 14 km from services.⁽¹⁴⁾ Added to this, there are physiological changes in pregnant women that make it difficult for them to move, such as weight gain and lower limb swelling.⁽¹⁵⁾

One of the tools used to monitor the health of the mother-child pair is routine PN laboratory tests, which are essential to identify and correct abnormalities that could harm the pregnancy. The absence of this service during this period makes early diagnosis impossible for healthcare professionals, leaving pregnant women susceptible to complications and deaths from diseases considered preventable.⁽¹⁶⁾

Given the lack of laboratories in RAs and the difficulty of traveling to the city to undergo tests, taking services to the community on scheduled dates is a viable alternative, facilitating access to tests for pregnant women. Moreover, it improves the care provided by nurses, since it provides elements for a qualified assessment of these women's clinical condition.

Another aggravating factor in the assistance offered by PN assistance services in this territory is the non-performance of laboratory tests, given that, due to the lack of tests available in their location, it is necessary to travel to the capital or the nearest municipality where the service is available, which, in most cases, is not done due to these pregnant women's income conditions.⁽¹⁷⁾

Pregnant women in the RA, in addition to constituting a population with low purchasing power, are more exposed to rural work and, consequently, become more susceptible to illness due to the long working hours and the presence of environmental risks, such as accidents with venomous animals, exposure to pathogens, among others.⁽¹⁸⁾

Socioeconomic adversities of pregnant women can have an impact on their PN care; among these, difficulty in accessing the service is cited. For this reason, studies show that the aforementioned impact is a preponderant factor for the greater probability of women in the RA having children with low birth weight, given that the lack of monitoring does not allow for the identification of changes in growth and development, making it impossible to take the necessary measures.⁽¹⁹⁾

The lack of coverage of the areas in the RA is also observed, justified by the configuration of the territory, which does not allow for the dynamic and agile movement of professionals, making it necessary to travel to a location more than once to meet the demand, leaving other areas without service or postponing it. In addition, nurses serve several units and micro-areas of the territory, resulting in an overload of work assigned to an insufficient number of nurses. Health teams have difficulty in developing strategies to streamline and optimize access to services for the RA inhabitants.⁽²⁰⁻²¹⁾

Regarding the "Implications of culture in pregnancy monitoring" category, it is clear that midwives play a central role in assisting pregnant women and carry out activities before, during and after childbirth, providing continuous monitoring to women in certain social territories, becoming a reference in care. Their practices are linked to traditional techniques and knowledge, and are influenced by religion. In rural

communities, relationships between pregnant women and midwives are formed by trust and solidarity, due to kinship and compaternity networks.⁽²¹⁾ Even in the presence of health units offering support to pregnant women, midwives are sought out, demonstrating the respect and authority that the community attributes to them.⁽²²⁾

The transmission of traditional knowledge about midwives' actions during childbirth is generational, learned mainly from mothers, grandmothers, great-grandmothers and aunts, commonly developed in rural and peripheral areas. Women's immersion in this role, in many cases, initially occurs in support of unusual situations that lead women to give birth, usually by relatives. The need for support and the situation of women in places with a lack of healthcare services stand out, factors that often motivate women to support each other, especially during the birth process.⁽²²⁾

Regarding the "The importance of multidisciplinary team work in rural areas" category, it is argued that, although in Brazil the configuration of health work in multidisciplinary teams dates back to the 1970s, it is with the spread of FHS that occurred in the last decade that the multidisciplinary team became essential in multiprofessional teamwork. Advocating the articulation of different knowledge and practices, the multidisciplinary team is structured between different backgrounds and levels of education, with active and continuous participation of the team in the search for possibilities to overcome challenges and contemplate better care.⁽²³⁾

A study conducted in a municipality in the Northeast region, which analyzed the perspective of FHS nurses in the care of populations in the RA, identified the PHC health team as the only way for residents to have access to healthcare services. When referrals to more complex segments of care are needed, users must travel to the urban area, which is not done by the population due to their socioeconomic conditions, highlighting the difficulty in establishing flow in the Healthcare Network.⁽²⁴⁾ The findings are similar to the results of this study, since there is a predominance of nurses who are part of FHS working in PHC, the only segment of healthcare service available in the RA studied.

In remote locations with difficult access to PHC services, FHS is one of the ways to make services available so that team performance and composition provide better coverage for the population in these areas.⁽²⁵⁾ With regard to pregnant women, the assistance offered to pregnant women by the professionals who make up FHS provides comprehensive care, in a way that minimizes the weaknesses imposed by the rural context.

In the RA, the role of CHWs stands out, who, in the absence of other professionals, is generally the first professional to be sought, thus being the closest contact with inhabitants, developing a bond with the community.⁽²⁶⁾ In this research, CHWs were identified as protagonists in the identification and monitoring of pregnant women, being essential in the coordination of care, in addition to enabling an increase in care coverage in RAs.

This study has the limitation of being conducted in a specific rural location, not including rural territories from other states in the North region, not allowing generalization of the findings, due to the variability existing in RAs of Brazil. However, the research provides a situational overview of potentialities and weaknesses of nursing care in rural PN. In addition, it addresses strategies used by professionals in health units to overcome the difficulties imposed by the particularities of rural territory, which facilitate access to healthcare services and improve the continued care of rural pregnant women.

This study provides support for health managers in the development of new public policies. It also contributes to healthcare professionals' practice in these territories, since the adaptations identified in this study can be replicated in other health units located in rural or peripheral areas.

CONCLUSION

The recognition of nurses' experience in the RA through PN care made it possible to identify the obstacles in care provision, due to geographic, socioeconomic and cultural factors present in the RA. Professionals are faced with users in a situation of socioeconomic vulnerability, in addition to an unfavorable geographic situation and care isolation, which makes it difficult to provide quality care. Associated with the factors mentioned, there is absenteeism and resistance of pregnant women to PN, together with a preference for community midwives, while the relevance of pregnancy monitoring in the BHU is not properly recognized. The cultural obstacles raised by nurses attributed to pregnant women's preference for midwives propose the opportunity to build a relationship with pregnant women in the RA, with midwives as intermediaries, which can be achieved through their insertion in BHUs, making them instruments of support, awareness and rescue of pregnant women to PN services.

CONTRIBUTIONS

Contributed to the conception or design of the study/research: Santos ML, Nemer CRB. Contributed to data collection: Santos ML, Côrrea MLN, Santana PP, Nemer CRB. Contributed to the analysis and/or interpretation of data: Santos ML, Côrrea MLN, Santana PP, Nemer CRB. Contributed to article writing or critical review: Santos ML, Côrrea MLN, Santana PP, Calandrini TSS, Mata NDS, Nemer CRB. Final approval of the version to be published: Santos ML, Côrrea MLN, Santana PP, Calandrini TSS, Mata NDS, Nemer CRB.

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REFERENCES

1. Walter E, Baiocco GG, Lohmann PM, Faller GSG. The importance of prenatal follow-up in basic care in the vision of pregnant women. *Res Soc Dev*. [Internet]. 2023;12(1):e9712139431. doi: <https://doi.org/10.33448/rsd-v12i1.39431>.
2. Ministério da Saúde (BR). Portaria N° 569, de 1° de junho de 2000. Institui o Programa de Humanização no Pré-natal e Nascimento (PHPN). Brasília: Ministério da Saúde; 2000.
3. Cá AB, Dabo C, Maciel NS, Monte AS, Sousa LB, Chaves AFL, Costa CC. Lacunas da assistência pré-natal que influenciam na mortalidade materna: uma revisão integrativa. *Ver Enferm Atual in Derme*. [Internet]. 2022;96(38):e-021257. doi: <https://doi.org/10.31011/>
4. Silva SR, Luz JLF, Floriani DTGC, Rosa T. Lacunas no conhecimentos das gestantes: falhas na assistência pré-natal e o papel do enfermeiro. *Rev Contemp*. [Internet]. 2023;3(1):299-329. doi: <https://doi.org/10.56083/RCV3N1-019>.
5. Luz JAB, Ravelli APX, Maciel MAS. Educação em saúde para gestantes da zona rural: um relato de experiência. *Rev Ext Foco*. [Internet]. 2021;(24):273-293. doi: <http://dx.doi.org/10.5380/ef.v0i24.77492>.
6. Garnelo L, Lima JG, Rocha ESC, Herkrath FJ. Acesso e cobertura da Atenção Primária à Saúde para populações rurais e urbanas na região norte do Brasil. *Saúde Debate*. [Internet]. 2018;42(spe1):81-99. doi: <https://doi.org/10.1590/0103-11042018S106>.
7. Kessler M, Bertasi LM, Trindade LL, Erdtmann BK, Soares RRA, Lima SBS. Morbidities of the rural population and the use of health services. *Rev Enferm UFPI*. [Internet]. 2016;5(3):24-29. doi: <https://doi.org/10.26694/reufpi.v5i3.5421>.
8. Guimarães AF, Barbosa VLM, Silva MP, Portugal JKA, Reis MHS, Gama ASM. Acesso a serviços de saúde por ribeirinhos de um município no interior do estado do Amazonas, Brasil. *Rev Pan Amaz Saúde*. [Internet]. 2020;11:e202000178. doi: <http://dx.doi.org/10.5123/s2176-6223202000178>.
9. Instituto Brasileiro de Geografia e Estatística – IBGE [Internet]. 2022 [cited 11 ago 2023]. Available from: <https://www.ibge.gov.br/estatisticas/sociais/populacao.html>.
10. Instituto Brasileiro de Geografia e Estatística – IBGE [Internet]. 2010 [cited 12 ago 2023]. Available from: <https://www.ibge.gov.br/estatisticas/sociais/rendimento-despesa-e-consumo/9662-censo-demografico-2010.html>.
11. Bardim, L. *Análise de conteúdo*. São Paulo (SP): Edições 70; 2016.

12. Mendes LMC, Sudré GA, Oliveira JV, Barbosa NG, Monteiro JCS, Gomes-Sponholz FA. Adesão tardia e as representações sociais relacionadas à assistência pré-natal. *Rev Bras Promoc Saúde*. [Internet]. 2021;34:1-7. doi: <https://doi.org/10.5020/18061230.2021.13431>.
13. Reis MHS, Portugal JKA, Barros WS, Albuquerque FHS, Gama ASM. Ações de saúde em populações ribeirinhas no interior do estado do Amazonas: relato de experiência. In: Franco TB, coordenação-geral. Schkweickardt JC, El Kadri MR, Sousa RT, organizadores. *Atenção Básica na região amazônica: saberes e práticas para o fortalecimento do SUS*. 8ª ed. Série Saúde & Amazônia – Porto Alegre (RS): Editora Rede Unida; 2019. 170-181.
14. Martinelli KG, Neto ETS, Gama SGN, Oliveira AE. Access to prenatal care: inequalities in a region with high maternal mortality in southeastern Brazil. *Ciênc Saúde Colet*. [Internet]. 2016;21(5):1647-1658. doi: <https://doi.org/10.1590/1413-81232015215.23222015>.
15. Brito JPS. Adaptações fisiológicas da gestação e repercussões no puerpério. *Rev Cient Mult*. [Internet]. 2022[cited 2024 fev 10];5:46-63. Available from: <https://www.nucleodoconhecimento.com.br/saude/adaptacoes-fisiologicas#>.
16. Cavalcante KOR, Santos AA, Lúcio IML, Silva JMO, Melo DSA, Jacintho KS. Exames de rotina no pré-natal: solução ou problema?. *Rev enferm UFPE on line*. [Internet]. 2016;10(3):1415-1422. doi: [10.5205/reuol.7057-60979-3-SM-1.1003sup201609](https://doi.org/10.5205/reuol.7057-60979-3-SM-1.1003sup201609).
17. Rodrigues CB, Thomaz EBAF, Batista RFL, Riggirozzi P, Moreira DSO, Gonçalves LLM, Lamy ZC. Prenatal care and human rights: Addressing the gap between medical and legal frameworks and the experience of women in Brazil. *PLoS One*. [Internet]. 2023;18(2):e0281581. doi: <https://doi.org/10.1371/journal.pone.0281581>.
18. Marchiori PM, Ferraz L. Pregnant rural worker: occupational harms and risks. *Rev Ter Ocup Univ São Paulo*. [Internet]. 2016;27(2):190-198. doi: <http://dx.doi.org/10.11606/issn.2238-6149.v27i2p190-198>.
19. Coelho JMF, Galvão CR, Rodrigues RM, Carvalho SS, Santos BM, Miranda SS, Silva CS, Porto ECL, Galvão LR. Associação entre qualidade do pré-natal e baixo peso ao nascer em uma instituição hospitalar em Feira de Santana. *Revista Epidemiol Control Infect*. [Internet]. 2018;8(2):129-135. doi: <https://doi.org/10.17058/reci.v1i2.10406>.
20. Oliveira AR, Sousa YG, Diniz IVA, Medeiros SM, Martiniano C, Alves M. The daily routine of nurses in rural areas in the Family Health Strategy. *Rev Bras Enferm*. [Internet]. 2019;72(4): 918-925. doi: <https://doi.org/10.1590/0034-7167-2018-0243>.
21. Dias LF, Oliveira GF, Lima CA, Araújo DMT, Theodoro PHN, Dias NG. Self-classification of the health of residents belonging to rural settlements and their evaluation of the healthcare received. *Mundo Saúde*. [Internet]. 2021;45:452-462. doi: [10.15343/0104-7809.202145452462](https://doi.org/10.15343/0104-7809.202145452462).
21. Oliveira RS, Peralta N, Sousa MJS. As parteiras tradicionais e a medicalização do parto na região rural do Amazonas. *Sex Salud Soc*. [Internet]. 2019;35:79-100. doi: <https://doi.org/10.1590/1984-6487.sess.2019.33.05.a>.
22. Silva SC, Dias-Scopel R, Schweickardt J. Gestação e parto em uma comunidade rural amazônica: reflexões sobre o papel da parteira tradicional. *Interface*. [Internet]. 2020;24:e190030. doi: <https://doi.org/10.1590/interface.190030>.
23. Silva MVS, Miranda GBN, Andrade MA. Sentidos atribuídos à integralidade: entre o que é preconizado e vivido na equipe multidisciplinar. *Interface*. [Internet]. 2017;21(62):589-599. doi: <https://doi.org/10.1590/1807-57622016.0420>.

24. Oliveira AR, Sousa YG, Silva DM, Alves JP, Diniz IVA, Medeiros SM, Martiniano CS, Alves M. A Atenção Primária à Saúde no contexto rural: visão de enfermeiros. *Rev Gaúcha Enferm.* [Internet]. 2020;41:e20190328. doi: <https://doi.org/10.1590/1983-1447.2020.20190328>.
25. Fausto MCR, Giovanella L, Lima JG, Cabral LMS, Seidi H. Sustentabilidade da Atenção Primária à Saúde em territórios rurais remotos na Amazônia fluvial: organização, estratégias e desafios. *Ciênc Saúde Colet.* [Internet]. 2022;27(4):1605-1618. doi: <https://doi.org/10.1590/1413-81232022274.01112021>.
26. Sousa JO, Almeida PF. Atuação do agente comunitário de saúde em municípios rurais remotos do Semiárido: um olhar a partir dos atributos da Atenção Primária à Saúde. *Physys.* [Internet]. 2023;33:e33044. doi: <https://doi.org/10.1590/S0103-7331202333044>.

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