

## HEALTH EDUCATION IN PRENATAL CARE: PERSPECTIVE OF PUERPERAL WOMEN AND HEALTH PROFESSIONALS

### EDUCACIÓN PARA LA SALUD EN LA ATENCIÓN PRENATAL: PERSPECTIVA DE LAS PUÉRPERAS Y LOS PROFESIONALES DE LA SALUD

#### EDUCAÇÃO EM SAÚDE NO PRÉ-NATAL: PERSPECTIVAS DE PUÉRPERAS E PROFISSIONAIS DE SAÚDE

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#### RESUMO

**Introdução:** A educação em saúde no pré-natal favorece experiências positivas à mulher na gestação, parto e puerpério, como forma de garantir a saúde materna e do recém-nascido. **Objetivo:** conhecer perspectivas de puérperas, médicos e enfermeiros da Atenção Primária acerca da educação em saúde no pré-natal. **Metodologia:** Estudo qualitativo, descritivo e exploratório realizado entre janeiro de 2021 e maio de 2022 com 30 participantes (16 puérperas e 14 profissionais) O tratamento dos dados ocorreu através da análise de conteúdo. **Resultados:** identificou-se que a educação em saúde no pré-natal ocorre durante as consultas, principalmente por médicos clínicos gerais. O foco de atenção desses profissionais é na avaliação clínica e obstétrica em que as orientações se baseiam nos “sinais de alarme” de trabalho de parto, complicações e na escolha da via de parto. Os enfermeiros frequentemente realizam a primeira consulta pré-natal enfatizando a detecção de doenças. A participação do parceiro(a) no pré-natal possui baixa adesão. **Considerações finais:** A educação em saúde no pré-natal mostrou ser insuficiente para suprir as necessidades de conhecimento das puérperas. Recomenda-se a participação de enfermeiros nas consultas pré-natal, estas consultas podem ser compartilhadas com médicos. Recomenda-se ainda a criação de grupos de gestantes e a elaboração de estratégias para adesão delas e de seus parceiros nas consultas e grupo educativos. **Palavras-chave:** Educação em Saúde; Cuidado Pré-Natal; Saúde Materna; Profissionais de Saúde.

#### ABSTRACT

**Introduction:** Prenatal Health education favors positive experiences for women during pregnancy, childbirth, and the puerperium, as a way of ensuring maternal and newborn health. **Objective:** To understand the perspectives of puerperal women, primary care physicians, and nurses regarding health education during prenatal care. **Methodology:** A qualitative, descriptive, and exploratory study was carried out between January 2021 and May 2022 with 30 participants (16 puerperal women and 14 health professionals). The data treatment was conducted using content analysis. **Results:** We observed that health education in prenatal care takes place during consultations, mainly provided by general practitioners. Their focus is on clinical and obstetric assessment, in which guidance is based on the "warning signs" of labor, complications, and the choice of route of delivery. Nurses often carry out the first prenatal consultation, emphasizing the detection of diseases. Partner participation in prenatal care has low adherence. **Final considerations:** Health education during prenatal care proved insufficient to meet the knowledge needs of puerperal women. We recommend the participation of nurses in prenatal consultations, which can be shared with physicians, creating groups of pregnant women, and developing strategies to encourage them and their partners to attend consultations and educational groups.

**Keywords:** Health Education; Prenatal Care; Maternal health; Health Professionals.

#### RESUMEN

**Introducción:** La educación sanitaria prenatal favorece experiencias positivas para las mujeres durante el embarazo, parto y puerperio, como forma de garantizar la salud materna y neonatal. **Objetivo:** Conocer las perspectivas de las puérperas, médicos y enfermeros de atención primaria sobre la educación sanitaria prenatal. **Metodología:** Estudio cualitativo, descriptivo y exploratorio, realizado entre enero de 2021 y mayo de 2022 con 30 participantes (16 puérperas y 14 profesionales). Los datos fueron procesados mediante análisis de contenido. **Resultados:** Se identificó que la educación para la salud en el control prenatal tiene lugar durante las consultas, principalmente por parte de los médicos generales. Estos profesionales se centran en la evaluación clínica y obstétrica, donde la orientación se basa en las "señales de alarma" del parto, las complicaciones y la elección de la vía de parto. Las enfermeras suelen realizar la primera consulta prenatal, haciendo hincapié en la detección de enfermedades. La participación de la pareja en la atención prenatal es escasa. **Consideraciones finales:** La educación sanitaria durante los cuidados prenatales resultó insuficiente para satisfacer las necesidades de conocimiento de las puérperas. Se recomienda que las enfermeras participen en las consultas prenatales, lo que puede compartirse con los médicos. También se recomienda crear grupos de mujeres embarazadas y diseñar estrategias para animarlas a ellas y a sus parejas a participar en las consultas y en los grupos educativos.

**Palabras clave:** Educación para la Salud; Atención Prenatal; Salud Materna; Profesionales de la Salud.

## INTRODUCTION

Multiprofessional care for women during prenatal care enables the experience of a healthy and successful pregnancy. Practices such as routine examinations, nutritional and dental monitoring, fetal health assessments, and educational activities help promote the health of the mother-child binomial. Some actions that can help avoid pregnancy-specific diseases, as well as obstetric and perinatal complications and even death involve the following: qualified prenatal care focused on early prevention, diagnosis, and treatment<sup>(1,2)</sup>.

In addition to clinical prenatal care, educational activities complement the strategies for preventing diseases and/or complications by providing guidance on identifying risks and improving women's preparation, knowledge, and autonomy during the pregnancy-puerperal cycle. These initiatives help reduce maternal and infant morbidity and mortality rates<sup>(1)</sup>.

Weaknesses related to prenatal care in Primary Health Care (PHC) are commonly linked to human resources, infrastructure, materials and availability of medicines, waiting times for appointments, as well as access to testing and specialized follow-up for pregnant women. However, what is also a weakness is insufficient health education in prenatal care that fails to meet women's knowledge needs about this period, childbirth, and the puerperium<sup>(3)</sup>.

The incipience of educational activities and guidance during prenatal consultations contributes to pregnant women's lack of knowledge about childbirth, especially

concerning their right to choose. Such incipience can make women vulnerable to obstetric violence, dissatisfaction during labor, and subjection to the model of obstetric care provided by the hospital healthcare team when it is focused on the biomedical model<sup>(4)</sup>.

Through health education, PHC professionals can provide timely knowledge to pregnant women so that they can achieve autonomy in their pregnancy and childbirth experience. This increases women's ability to face stressful situations and crises, enabling them to make decisions regarding the life and health of the mother-child binomial when necessary<sup>(5,6)</sup>. Above all, joint monitoring by physicians and nurses provides more appropriate guidance to pregnant women than just one of these professionals<sup>(2)</sup>.

In the state of Paraná, the program titled Rede Mãe Paranaense (Paraná Mother Network Program) is committed to improving the quality of prenatal care, childbirth, and the puerperium in its strategies and processes, through the training of health professionals in the maternal and child care network. The Rede Mãe Paranaense's Guidelines state that the improvement of health indicators through health promotion and disease prevention actions is related to access and quality of care, as well as health education<sup>(7,8)</sup>.

It is important to note that women have beliefs related to childbirth which are passed down from generation to generation, especially those based on negative experiences without adequate assistance. Therefore, younger women, following the advice of more experienced ones,

opt for surgical delivery to avoid the pain inherent in labor and childbirth, not knowing the possible risks related to this route of delivery. Thus, there is a need for professionals to provide more in-depth health education about labor and birth during prenatal consultations, emphasizing the risks and benefits as well as women's right to choose<sup>(9)</sup>.

Many women reach the end of their pregnancy and puerperium without adequate guidance on how to go through childbirth, how to take care of themselves in the postpartum period, and how to care for their newborn<sup>(10)</sup>. However, health professionals, especially nurses, have the skills to provide guidance based on the particularity of women, empowering and giving each of them the ability to make decisions. Qualified listening also provides a space for mutual learning, in which knowledge can be complemented without impositions, respecting women's beliefs<sup>(1)</sup>.

Bearing in mind the explored, this study aimed to understand the perspective of puerperal women, primary care physicians, and nurses regarding health education during prenatal care. We asked the following question considering that the lack of educational practices for pregnant women during prenatal care can compromise good obstetric practices: What is the perspective of puerperal women and primary health care professionals on prenatal health education?

## METHODS

This is a qualitative, descriptive, and exploratory study. It was conducted in a public

teaching hospital and the PHC in the municipality of Cascavel - PR. There were a total of 30 individuals participating in the research: 16 puerperal women and 14 health professionals (nine nurses and five physicians).

The inclusion criteria for the puerperal women participating in the study were: to have received complete prenatal care in the PHC, through the Unified Health System (SUS), and to have undergone labor at term. The inclusion criteria for health professionals were: to be a physician or nurse working in PHC in the municipality of Cascavel/PR and to have provided prenatal care for at least six months. During this period, the prenatal care provider should have monitored at least the second and third trimesters of pregnancy. Women who underwent prenatal care, even partially, in a private service were excluded, as were professionals who were on sick leave at the time of data collection.

Participants were selected by convenience. The women were personally contacted at the maternity ward of a public teaching hospital in Cascavel/PR. They were informed of the purpose of the study and invited to participate remotely (due to sanitary conditions related to COVID-19) twenty days after discharge from the hospital. After this period, the woman is considered better adapted to the puerperium. The invitation to health professionals was made through a written message via WhatsApp or in person, when possible, considering the restrictions of the pandemic period.

Once the participants accepted the invitation, the interviews were scheduled. A final-year nursing student, trained by the lead researcher, conducted the interviews individually. The interviews lasted an average of 30 minutes and were guided by a semi-structured interview guide, starting with the following questions: for the puerperal women - comment on the guidance you received during prenatal care; and for the health professionals - comment on the health education provided during prenatal care.

All puerperal women were interviewed through voice calls via WhatsApp. Out of the 14 health professionals, 10 were interviewed via voice calls using the same application, and four were interviewed in person at the health units where they worked. The participants' privacy was ensured in both types of interviews. The professionals worked in PHC units located in nine different neighborhoods. Data were collected between January 2021 and May 2022.

The interviews were audio-recorded using a smartphone and later transcribed to guarantee content integrity. The transcript of the interviews was sent to the participants, but none returned. Data saturation made it possible to end data collection<sup>(11)</sup>.

The thematic content analysis of the data was carried out following three stages of analysis: pre-analysis, exploration of the material, and data treatment. In the pre-analysis stage, a floating reading was carried out as a first contact with the data, to get a general idea of the content of analysis. During the exploration of the material, it was possible to deepen the analysis

and break down the text, which was classified into units of analysis to identify categories. Finally, tables of results were developed based on the information obtained from the analysis in the treatment and interpretation of the data<sup>(11)</sup>.

This study is part of a larger project entitled "Rede Mãe Paranaense na perspectiva da usuária: o cuidado da mulher no pré-natal, parto, puerpério e da criança" (Rede Mãe Paranaense from the user's perspective: women's care during prenatal care, childbirth, puerperium, and child care). The research was carried out following the guidelines and regulatory standards for research involving human beings, with opinion no. 2.053.304 and CAAE no. 67574517.1.1001.5231 of the Human Research Ethics Committee of the State University of Londrina.

To ensure the anonymity of the participants, they were identified by letter(s) representing them, followed by an ordinal number, according to the order of the interviews. The letters MP were used for medical professionals, N for nurses, and W for women, for instance, MP1, MP2...MP5; N1, N2...N9; W1, W2, W16.

## RESULTS

Based on the content analysis of the interviews, three thematic categories were identified regarding prenatal health education strategies: a) health education concerning labor, birth, and breastfeeding, b) health education about newborn care and the puerperal woman,

and c) prenatal consultations for women and men.

### Health education about labor, birth, and breastfeeding

Prenatal health education takes place during consultations. Both nurses and physicians provide it, mainly orally and, in some situations, in written and printed form. It is worth noting that one of the interviewed nurses distributes printed guidelines on pregnancy care. This is a local strategy of that health unit and an individual strategy of a professional to provide health education in prenatal care.

Pregnant women's groups for health education did not exist during the data collection period due to the COVID-19 pandemic. However, the professionals pointed out that, prior to the pandemic, there were groups in some health units, but there was low adherence by pregnant women. In other units, there were no pregnant women's groups.

*"Usually during consultations [...]. Some I advise in writing, with material I prepare, and some I talk to in person." (MP1)*

*"[...] no guidance is given apart from of consultations [...] it is verbal, generally, and written, as necessary." (N8)*

*"I have a care plan that we have prepared for normal-risk, intermediate-risk, and high-risk prenatal care [...]. I give them a copy of this care plan. On one side of the care plan, there are some topics [...]*

*eight or ten topics. We always give them guidance on those topics and then they get this copy, which describes how to be careful of Aedes Aegypti, apply mosquito repellents, sunscreen, and the number of appointments. I follow this care plan." (N7)*

*"[...] I have never participated or even heard of it, I have had my three girls, I have never participated in a pregnancy group [about pregnancy groups]." (W16)*

We observed that nurses usually carry out women's first prenatal consultation after a diagnosis of pregnancy is confirmed by a laboratory test. This is when prenatal care begins. The other consultations are carried out by the general practitioner. Nurses' contact with women during prenatal care usually occurs at the first appointment, and they feel that this is not the right time to start health education about labor, birth, and breastfeeding.

During prenatal consultations, nurses and doctors provide advice on the "warning signs" of labor and/or complications that indicate the need to go to a referral maternity hospital. However, physicians are the ones who talk to women about labor, birth, and the route of delivery. Therefore, neither the professionals' nor the women's statements indicated that health education on labor and birth was specifically provided.

*"I do not even talk about it, really. Wow! There is not enough time! I barely discuss labor and birth with them. Wow! It is a long way off for them. It is their first appointment [with the nurse]." (N5)*

*"When it is close to 35 weeks, I already start talking about those training contractions, I explain when they have to go to the hospital, if there is fluid loss, if there is bleeding."* (MP2)

*"I was supposed to go to the hospital if I was in pain, if I had ruptured membranes, bleeding. If I was at 40 completed weeks, I had to go to the hospital to get an assessment. [...] About cesarean section, I did not think about it, I did not talk about it during prenatal care [about the route of delivery]." (W9)*

*"[...] I studied more, I studied about normal birth because I intended to have a normal birth, but on YouTube, on the internet."* (W10)

Regarding breastfeeding, we observed that there was a greater frequency of health education during childcare, particularly conducted by nurses. Some guidance on breastfeeding was provided during prenatal medical appointments, but only in the last few weeks of pregnancy.

*"[...] we advise that breastfeeding should be more exclusive until six months of age, on-demand [...] if there is a nipple fissure, you can apply breast milk, let it get some air, ventilate the area, that is usually it [...] only after the baby is born [we give instructions]." (N6)*

*"We say that breastfeeding is good, it is the best food the baby can have. If she has any difficulties with the latch, we advise her on the latching technique, the positioning of the baby, how it should suckle the breast, and if she has any problems she should contact us [we give such*

*guidance in the postnatal period]." (MP3)*

*"None, none in the prenatal period, only afterward. [...] If they had said something beforehand, I could have learned. She is my first daughter, right, I could have done something and maybe I would have milk." (W1)*

*"That it was essential, that it is the child's first food, and before giving supplements I was supposed to breastfeed, which was essential for the child, the recommendation, right, that was said [in prenatal care]." (W14)*

*"Regarding breastfeeding [...] nothing during prenatal care, only after the baby was born. [...] The baby is exclusively breastfed, but not because of any information from prenatal care. It is because I read about it [...], but I was not told anything." (W15)*

*"Nothing, they did not tell me anything. The physician just told me to breastfeed him until he was at least six months old, which was essential, right?" (W7)*

### **Health education on newborn and postpartum care**

Concerning health education, the professionals interviewed addressed it superficially or did not address it at all during prenatal care. As a result, the puerperal women interviewed expressed their need for more information, especially on newborn care.

Health education was most needed among primiparous women. However, it seems that they are unaware of the importance of

postpartum care. Health education on newborn care happens particularly in the postnatal period and focuses on skincare, and umbilical stump hygiene, among other aspects.

*"During the last appointments we talk about it and some more specific things we know they talk about in the maternity ward, [...] we talk more when they come back. [...] Most of their doubts are when they come for their first appointment." (MP1)*

*"[...] when we are doing prenatal care, we hardly have time to talk about the baby, [...] we talk more about childcare later [...] because at the first appointment, there is a lot of information, and she is not thinking about the baby, she is still having symptoms. Some did not plan it, so we do not talk about that part." (N1)*

*"They should teach more about baby care [...] umbilical cord, they could teach, start much earlier [...] we, first-time mothers, do not know what to do with a newborn. [...] I cried, I cried because I did not know how to do anything." (W4)*

*"I had no guidance about this [newborn care], just as I told you, the physician was always very specific." (W13)*

*"[...] how to take care of the navel, how to bathe, breastfeeding [...], the follow-up that should be done, you know, once a month at the doctor's office, we had plenty of this guidance [in the postnatal period]." (W6)*

The physician is the one who advises on postpartum care at the first appointment after childbirth. Women seek information on the

internet because health education is incipient in prenatal care.

*"Postpartum care, I advise on fever, in the case of endometritis, mastitis, [...] infection [...], cesarean scar, monitoring the lochia, advising if it is fetid or in large volume, [...] in the final consultations I try to give more general orientation, but then I approach it better in the first one." (MP4)*

*"We usually talk later [in the postnatal period], she usually comes to remove stitches [...], we ask how their bleeding is." (N6)*

*"[...] It ends up being discussed at the post-pregnancy appointment. Because it does not take long [...] 10, 15 days they are already in the health unit. So we address it later because it is a lot of information." (MP2)*

*"[...] I was aware because I did a lot of research on the internet [about the postpartum consultation]." (W8)*

### **Prenatal consultations for women and men**

The actions carried out by nurses at the initial prenatal consultation included: performing the mother's test, rapid tests on the woman and her partner, and the collection of information for the pregnant woman's booklet. Nurses also request first-trimester tests and prescribe medication during prenatal care.

*"[...] We schedule a one hour and a half interview [...], do the mother's test, the rapid tests for HIV, syphilis, hepatitis B and C. [...] We request all the tests for the first trimester, including urine culture and the first obstetric ultrasound, we also request*

*the father's tests since there is prenatal care for men [...], we prescribe medication, there are four that are allowed for us, which are Paracetamol, Plasil, Folic Acid, and Ferrous Sulfate [...] we schedule the first appointment with the physician, dental assessment [...]."* (N2)

*"[...] the nurse carries out the first prenatal consultation [...] opens the system, [...] enters the patient information in spreadsheets, requests the first-trimester exams, ultrasound, mother's test, screening tests for HIV, syphilis, hepatitis B, provides prenatal guidance, the importance of the first consultations, guidance on dental care [...]."* (N4)

The partner's prenatal care has low adherence due to work demands and their low attendance at the women's prenatal care appointments. Thus, the partner's prenatal booklets are rarely used.

*"When we begin the prenatal care for men, we have the card, we give them the card, we assess their BMI, vital signs, we ask them to take routine exams and we do the rapid tests as well."* (N4)

*"When the man comes to the first prenatal consultation, we do the rapid test, if he doesn't come, we request the serology tests, right, hepatitis B, C, HIV and syphilis [...], I only deliver it when the man is at the health unit that begins his prenatal care [the partner's prenatal booklet]."* (N5)

*"Look, I have hardly ever seen a man at a consultation."* (MP5)

Medical consultations during prenatal care are focused on clinical and obstetric assessments, as can be observed in the women's statements.

*"In the prenatal care, he just asked me how I was, about nausea, if I was in pain, he measured my belly, gave me the right medication and that was it, and requested the tests. [...] When the baby is born, it is like a flood of information, there is a need to address all of it, you are not exactly prepared."* (W3)

*"During prenatal care, there was very little information, only what I asked in the appointment [...]."* (W2)

*"In the prenatal care, the physician measured the belly, did ultrasounds, listened to the heart, but guidance, there was none of that, you know. He just wanted to know if everything was okay and if the baby was moving, he measured the belly and listened to the heart, but there was no, like, guidance."* (W5)

The shortcomings of health education can be attributed to the workload of PHC health professionals, combined with an insufficient number of professionals to attend to women's obstetric health care and other health actions at this level of care.

The nurse only has contact with the woman at the first prenatal consultation, which focuses on detecting illnesses in her and her partner. These professionals point out the multiple tasks they carry out and that there is no schedule for health education in the health services.



*"[...] so the biggest difficulty we face at the moment is finding time within our overloaded schedule, right, within the high demand after the pandemic. Before the pandemic, it was already high, but now it is as if we were reorganizing, piecing the puzzle together." (N9)*

*"Time and lack of professionals, we are extremely overloaded, [...] everything that happens is the nursing staff responsibility, if the computer did not work, the pipe clogged, in the absence of the coordinator it is up to the nurse; if the pharmacy does not have a professional, it is up to the nurse; if the technician is off, it is up to the nurse; it is very complicated, it is very overloaded". (N4)*

*"I think it is structural because there is no schedule for long-term health education, we focus on the risks." (MP3)*

*"Lack of time, high demand, I think these are the main difficulties, we could do a lot here if we had the structure [...], we do not have rooms to do it and the demand is very high, we just put out fires, [...] we end up not doing our job as much as we should [...], we end up leaving it aside." (N5)*

## DISCUSSION

In prenatal care, a set of health actions monitors the progress of pregnancy to identify abnormalities early on, prevent problems, and promote the health of the mother-child binomial. Health education is one of such actions<sup>(12)</sup>. However, when these actions are carried out partially, they do not reach the at-risk

populations, nor meet the health needs of the PHC<sup>(6)</sup>.

It is the health professional's responsibility throughout prenatal care to inform, provide health education, and communicate the conditions of the pregnancy at every contact with the pregnant woman<sup>(8)</sup>. However, the existence of shortcomings in the health education process is confirmed. As a result, women reach the end of their pregnancy without the necessary knowledge to experience childbirth, breastfeeding, and puerperium<sup>(12)</sup>.

Some strategies for providing health education can be collective, such as lectures, educational approaches in waiting rooms, groups for pregnant women, as well as offering individual information. Among these strategies, holding groups for pregnant women has demonstrated the most satisfactory results, as it allows women to share experiences and reflections<sup>(13)</sup>.

A study conducted with 96 pregnant women in Southern Brazil confirmed the importance of group activities for pregnant women to acquire knowledge regarding pregnancy, labor, birth, and the puerperium, as well as the pregnant women's satisfaction with the information received so that they can experience these phases more safely<sup>(14)</sup>. However, the professionals participating in the study did not indicate any collective strategies due to the low adherence of women prior to the COVID-19 pandemic.

When pregnant women are unaware of the importance and benefits of collective meetings, they reduce their attendance or do not

participate at all. Pregnancy groups allow women to exchange experiences at meetings and obtain scientific knowledge about the pregnancy-puerperium cycle, empowering their decision-making. In addition to promoting safety and tranquility, and reducing the anxiety inherent in each stage of pregnancy up to the puerperium<sup>(14)</sup>.

During prenatal care, women have the opportunity to learn about their new reality by empowering themselves with knowledge. However, the topic that raises the most doubts and anxiety in women is childbirth. In addition, the many myths involved in this matter contribute to women making hasty decisions without proper knowledge<sup>(9)</sup>. Therefore, health professionals who provide care to pregnant women should be prepared to convey important information such as warning signs of labor; stages of labor; risks and benefits of vaginal delivery and cesarean section; the importance of skin-to-skin contact; and breastfeeding.

There are shortcomings in the health professionals' guidance on labor and birth provided to women during prenatal care, which is mainly related to biomedical approaches, highly focused on the transmission and reproduction of information<sup>(15)</sup>. It is important to emphasize that health professionals should assess the educational levels of women undergoing prenatal care to ensure their comprehension of the information and support those who may have difficulties understanding it<sup>(10)</sup>.

Successful prenatal care strategies that could be implemented in the reality studied are the following: promoting maternal autonomy,

encouraging breastfeeding, strengthening the bond between health professional and pregnant woman, guidance based on individual needs, family support network and counseling<sup>(16)</sup>, having more than six prenatal appointments, shared prenatal care, most of which is carried out by nurses, and providing health education focusing on good obstetric practices<sup>(4)</sup>.

Alternating appointments between physicians and nurses offers pregnant women better opportunities for health education, because consultations with nurses are usually more educational, while those carried out by physicians are more focused on clinical assessments<sup>(17)</sup>. Nurses are allowed to carry out regular risk prenatal care under Brazilian professional practice law no. 7.498/86<sup>(18)</sup>. This highlights the importance of such professionals in providing prenatal care and promoting health education<sup>(19)</sup>.

The puerperium, which begins after the placenta is expelled, is characterized by changes in women's bodies, as well as emotional and self-esteem changes. Cultural factors influence women's knowledge and self-care, for instance, personal hygiene and hair washing. Similarly, caring for the newborn (NB) leads to many doubts and difficulties in the postpartum period<sup>(1)</sup>.

Health education about puerperium is neglected during prenatal care, such as concerning the care of the newborn, hygiene of the umbilical stump, changing diapers, sleeping position, and breastfeeding. Health education is also insufficient in this regard<sup>(1)</sup>, and when it is addressed, it happens in the postpartum/post-

birth period. This task is entrusted to maternity professionals or, afterward, it is addressed during puerperium and childcare consultations, usually carried out by physicians.

It is worth mentioning that educational actions on postpartum care help to improve women's knowledge regarding self-care in the puerperium. Such guidance results in changes in women's practices and actions<sup>(20)</sup>. However, a study that analyzed the impact of medical guidance during prenatal care indicated the inadequacy of the health education process for this public<sup>(21)</sup>. This is in line with the findings of the present study, in which the medical consultations were focused on clinical and obstetric evaluation and did not provide health education to prepare pregnant women for labor, postpartum self-care, newborn care, and breastfeeding.

In addition, another study points out that nurses play a key role since prenatal care by educating pregnant women about the importance of postpartum care until they understand the significance of this moment in their lives<sup>(5)</sup>. However, both physicians and nurses who participated in the study associated the fragility of health education with work demands and the number of professionals in health services.

Easy access and a welcoming health service foster the beginning of prenatal care and the woman's adherence to it. On the other hand, long waiting times, lack of organization of the service, unsatisfactory infrastructure, difficulties in performing tests, and lack of essential medicines used in pregnancy compromise prenatal care<sup>(3)</sup> for both women and men. This

may explain the low adherence of partners to prenatal care.

Partner prenatal care, which was implemented in 2007, encourages caring and active fatherhood, preventing pathologies and providing support before, during, and after birth. At the consultation, the partner is subjected to rapid tests, assessment, and update of the vaccination card, as well as other tests such as serology for hepatitis B and C, HIV, and syphilis, in addition to laboratory tests related to diabetes, cholesterol, and high blood pressure. The consultation, however, can be adapted to each situation<sup>(22)</sup>.

Finally, the presence of the partner in prenatal care is beneficial for the health of the mother-child binomial and contributes to a better understanding of the guidelines, as well as reducing negative feelings during pregnancy and childbirth, and sharing responsibilities during this period to build the bond between father and child. However, many partners have no information regarding partner prenatal care or know that there is a public health policy focused on men, which gives them the right to accompany the woman's prenatal care. This explains the absence of men from the Basic Health Unit during prenatal care<sup>(22,23)</sup>.

Regarding health education, it is worth noting that there was no mention of the birth plan by any of the professionals in the study. The use of a birth plan promotes good obstetric practices and can be carried out by the PHC nurse. It is also a right unknown to pregnant women who undergo prenatal care<sup>(4)</sup>. The birth plan offers pregnant women guidance on pain

relief methods and the importance of nutrition and hydration during labor. In addition, the birth plan grants the woman autonomy to choose the place and position to give birth, the use of induction methods, and, if necessary, it fosters a positive outcome in labor, as well as skin-to-skin contact in the first hour of the newborn's life, among others<sup>(24)</sup>.

## FINAL CONSIDERATIONS

The findings indicate that prenatal health education in PHC does not sufficiently meet women's knowledge needs, even though this practice is recommended to ensure quality prenatal care. Puerperal women, especially primiparous women, use the Internet to acquire more knowledge and are unaware of the importance of health care in the puerperium. The partner prenatal care has low adherence.

We recommend the participation of nurses in prenatal and puerperium consultations and that these consultations can be shared with physicians; and the creation of groups for pregnant women involving attractive, creative, and welcoming strategies to increase their

adherence to meetings. Moreover, it is also recommended to actively seek out partners and offer alternative appointment times.

Health managers and coordinators need to develop strategies to ensure that nurses are more involved in prenatal and postnatal consultations, so as to guarantee quality care and health education. In this study, the pandemic period did not justify the insufficiency of the practice of health education since prenatal consultations continued in person, and groups for pregnant women did not exist or were inoperative prior to the pandemic period.

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## REFERENCES

1. Mota JF, Almeida MS, Magalhães GC, Souza VC, Silva JM, Anjos KF. Saberes e experiências de gestantes sobre o autocuidado do/a recém-nascido/a mediante práticas educativas. *Rev. Baiana Enferm* [Internet]. 2021 [citado 2021 Out 19]; 35:1-12. doi:10.18471/rbe.v35.41929
2. Marques BL, Tomasi YT, Saraiva SS, Boing AF, Geremia DS. Orientações às gestantes no pré-natal: a importância do cuidado compartilhado na atenção primária em saúde. *Esc. Anna Nery* [Internet]. 2021 [citado 2021 Out 19]; 25(1):1-8. doi: <https://doi.org/10.1590/2177-9465-EAN-2020-0098>
3. Silva AA, Jardim MJA, Rios CTF, Fonseca LMB, Coimbra LC. Pré-natal da gestante de risco habitual: potencialidades e fragilidades. *Rev. Enferm. UFSM* [Internet]. 2019 [citado 2023 Feb 28]; 9(15):1-20. doi: <https://doi.org/10.5902/21797692323336>.

5. Monteiro BR, Souza NL, Silva PP, Pinto ESG, França DF, Andrade ACA, et al. Atenção à saúde no contexto do pré-natal e parto na perspectiva de puérperas. *Rev. Bras. Enferm* [Internet]. 2020 [citado 2023 Jan 10]; 73(4):e20190222. doi: <http://dx.doi.org/10.1590/0034-7167-2019-0222>.
6. Oliveira RL, Ferrari AP, Parada CM. Processo e resultado do pré-natal segundo os modelos de atenção primária: um estudo de coorte. *Rev Lat Am Enfermagem* [Internet]. 2019 [citado 2023 Jan 10];27:e3058. doi: <http://dx.doi.org/10.1590/1518-8345.2806.3058>.
7. Soucy NL, Terrell RM, Chedid RA, Phillips KP. Best practices in prenatal health promotion: Perceptions, experiences, and recommendations of Ottawa, Canada, prenatal key informants. *Women's Health* [Internet]. 2023 [citado 2023 Mar 09]; 19:1-12. doi: 10.1177/17455057231158223
8. Paraná. Secretaria da Saúde. Linha Guia Rede Mãe Paranaense, 2012. Disponível em: [https://crianca.mppr.mp.br/arquivos/File/publi/se\\_sa\\_pr/mae\\_paranaense\\_linha\\_guiia.pdf](https://crianca.mppr.mp.br/arquivos/File/publi/se_sa_pr/mae_paranaense_linha_guiia.pdf)
9. Paraná. Secretaria da Saúde. Divisão de Atenção à Saúde da Mulher. Linha Guia: Atenção Materno Infantil; 2022. [citado 2022 Jul 03]. Disponível em: [https://www.saude.pr.gov.br/sites/default/arquivos\\_restritos/files/documento/2022-03/linha\\_guiia\\_mi\\_gestacao\\_8a\\_ed\\_em\\_28.03.22.pdf](https://www.saude.pr.gov.br/sites/default/arquivos_restritos/files/documento/2022-03/linha_guiia_mi_gestacao_8a_ed_em_28.03.22.pdf)
10. Albuquerque NLA, Mendonça EF, Guerra MCG, Silva JCB, Lins HNS. Representações Sociais de Enfermeiras da Atenção Básica Sobre o Parto Normal. *Rev. Ciênc. Plur.* [Internet]. 2019 [citado 2013 Fev 28]; 5(1):34-51. doi: <https://doi.org/10.21680/2446-7286.2019v5n1ID17944>.
11. Lungu GG, Chodzaza E, Kamanga M, Chikazinga W, Jere D. Status of information, education, and communication as perceived by clients receiving antenatal care at Chiradzulu District Hospital in Malawi. *BMC Womens Health* [Internet]. 2023 [citado 2022 Mar 09]; 23:53. doi: <https://doi.org/10.1186/s12905-023-02209-2>
12. Minayo MC. Amostragem e saturação em pesquisa qualitativa: consensos e controvérsias. *Rev. Pesq. Qualit.* [Internet]. 2017; 5(7): 1-12. Disponível em: <http://editora.sepq.org.br/rpq/article/view/82>
13. Carvalho TB, Ferreira HC, Santos LR. Importância das orientações sobre trabalho de parto nas consultas de pré-natal: revisão de literatura. *Rev. Educ. Saúde* [Internet]. 2019 [citado 2022 Jul 03]; 9(4):1-21. doi: <https://doi.org/10.29237/2358-9868.2019v7i1.p142-150>
14. Rickli EM, Marandola CMR, Pinha APM. Educação em Saúde como Estratégia de Empoderamento das Gestantes na Atenção Primária: Relato de Experiência. *Saúde Redes* [Internet]. 2021 [citado 2023 Fev 28]; 7 (2). doi: <https://doi.org/10.18310/2446-4813.2021v7n2p25-33>.
15. Lima MM, Dutra S, Estácio JR, Costa R, Roque AT, Maia CC. Contribuições de um grupo de gestantes e casais para seus participantes. *Cogitare enferm* [Internet]. 2020 [citado 2022 Jun 26]; 25:1-11. doi: <http://dx.doi.org/10.5380/ce.v25i0.66280>.
16. Soares CS, Santos NO, Diaz CMG, Pereira SB, Bãr KA, Backes DS. Consulta de enfermagem no pré-natal na perspectiva de puérperas: estudo exploratório-descritivo. *Online Braz. J. Nurs* [Internet]. 2021 [citado 2021 Fev 28]; 20:e20216518. doi: <https://doi.org/10.17665/1676-4285.20216518>.
17. Viana MDZ, Donaduzzi DSS, Souza MDZS, Rosa AB, Fettermann FA. Estratégias e ações do enfermeiro no incentivo ao aleitamento materno: revisão integrativa. *Rev. Pesq. Cuid. Fundam.* [Internet]. 2021 [citado 2023 Fev 28]; 13:1199-1204. doi: 10.9789/2175-5361.rpcfo.v13.9236.
18. Silva AB, Alves BP, Sá BA, Souza TG, Andrade ME, Fernandes MC. Ações educativas como estratégia de intervenção nas atitudes das gestantes frente ao aleitamento materno. *Enferm. Foco* [Internet]. 2021 [citado 2022 Jul 02];

- 12(5):880-6. doi: <https://doi.org/10.21675/2357-707X.2021.v12.n5.4225>.
19. Brasil. Lei nº 7.498, de 25 de Junho de 1986. Lei do Exercício Profissional de Enfermagem. Diário Oficial da República Federativa do Brasil.1986.
20. Chaves IS, Rodrigues IDCV, Freitas CKAC, Barreiro MSC. Consulta de Pré-Natal de enfermagem: satisfação das gestantes. Rev. Pesq. Cuid. Fundam. [Internet]. 2020 [citado 2022 Jul 03]; 12:814-819. doi: <http://dx.doi.org/0.9789/2175-5361.rpcfo.v12.7555>.
21. Carrera S. Intervención educativa para mejorar los conocimientos del autocuidado en puérperas. Revista de Investigación y Casos en Salud - CASUS [Internet]. 2018 [citado 2022 Jul 02]; 3(3):161-166. Disponível em: <https://casus.ucss.edu.pe/index.php/casus/article/view/91/88>.
22. Brega CB, Coelho LS, Geha YF, Seabra IM. Conhecimento de gestantes e puérperas sobre o atendimento na atenção primária do município de Ananindeua, estado do Pará. Femina [Internet]. 2021 [citado 2022 Jul 03]; 50(2):121-8. Disponível em: <https://docs.bvsalud.org/biblioref/2022/04/1366127/femina-2022-502-121-128.pdf>.
23. Bueno AC, Gomes ENF, Souza AS, Silva JSLG, Silva GSV, Silva TASM. Ausência do homem no Pré-Natal da Parceira e no Pré-Natal do pai. Rev. Pró-UniverSUS [Internet]. 2021 [citado 2023 Mai 31]; 12 (2): 39-46. doi: <https://doi.org/10.21727/rpu.v12i2.2690>.
24. Santos RMS, Marquete VF, Vieira VCL, Goes HLF, Moura DRO, Marcon SS. Percepção e participação do parceiro na assistência pré-natal e nascimento. Rev. Pesq. Cuid. Fundam [Internet]. 2022 [citado 2023 Maio 31]; 14: e10616. doi: <https://doi.org/10.9789/2175-5361.rpcfo.v14.10616>.
25. Franzon AC, Oliveira-Ciabati L, Bonifácio LP, Vieira EM, Andrade MS, Sanchez Já, et al. Uma estratégia de comunicação e informação em saúde e preparação para o parto: um ensaio clínico randomizado (PRENACEL). Cad. Saúde Pública [Internet]. 2019 [citado 2023 Jan 10]; 35(10). doi: <https://doi.org/10.1590/0102-311X00111218>.

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#### Declaration of conflict of interest

"Nothing to declare".