

Preeclampsia in pregnancy from the perspective of women in the Northwest region of the State of Rio Grande do Sul, Brazil

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Abstract

Preeclampsia represents one of the main causes of maternal death in the world. The objective was to identify the women's knowledge about preeclampsia in pregnancy. This was a qualitative, exploratory, and descriptive study with 26 women linked to the Pastoral da Criança care service. In order to collect the data, a conversation circle was held in 2014 to discuss and apply a questionnaire with open and closed questions, the data being analyzed by thematic content analysis. The predominance of women of childbearing age who have already experienced motherhood was identified and, therefore, the possibility of complications during pregnancy was exposed. One of the respondents had the disease during pregnancy, seven had some knowledge about the subject, and 19 of them were unaware of the disease. Prenatal care is identified as a way of clarifying the disease and its risk factors. It is necessary to train prenatal and multiprofessional caregivers in assisting women, including health education actions that contribute to improving women's knowledge about the diseases that permeate the gestational period.

Keywords: Pregnancy. Prenatal care. Preeclampsia. Nursing. Qualitative research.

INTRODUCTION

Pregnancy represents a unique moment in the lives of families, however, there are changes in maternal and/or fetal health that can increase the risk of a negative outcome for both. In this context, preeclampsia represents one of the main causes of maternal death in the world¹⁻², being the second most common cause (14% of cases) preceded only by hemorrhagic causes (27%)³. In Brazil, preeclampsia is considered the main cause of morbidity and mortality among women, with an incidence of 10%⁴.

Preeclampsia is a change in blood pressure after 20 weeks of pregnancy associated with proteinuria. According to the International Society for the Study of Hypertension in Pregnancy, preeclampsia is the presence of systolic blood pressure greater than or equal to 140 mmHg and/or diastolic blood pressure greater than or equal to 90 mmHg, considering the 5th Korotkoff noise (disappearance of heart sound) and a loss of 300 mg or more of protein in urine over a 24-hour period⁵.

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INTRODUCTION

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Pregnancy represents a unique moment in the lives of families, however, there are changes in maternal and/or fetal health that can increase the risk of a negative outcome for both. In this context, preeclampsia represents one of the main causes of maternal death in the world^{1,2}, being the second most common cause (14% of cases) preceded only by hemorrhagic causes (27%)³. In Brazil, preeclampsia is considered the main cause of morbidity and mortality among women, with an incidence of 10%⁴.

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It is known that the presence of functioning trophoblastic tissue is necessary for this change, even in the absence of a fetus, as women with a hydatidiform mole can also display the disease. Other predisposing factors include chronic arterial hypertension, hypertension in a previous pregnancy, kidney disease, diabetes mellitus, and autoimmune disease^{6,7}.

Scientific advances have contributed to the management of preeclampsia cases; however, as it is a pathology with a sudden onset and, often, with a complex prognosis, it still requires a theoretical and practical development of the professionals. In this sense, there is a need for ongoing training in obstetrics and safe care and therapeutic behaviors that enable positive

repercussions on the life of the mother-child binomial⁸.

Prevention is the best way and informing women concerning the signs and symptoms that represent the warning to begin the treatment and the control of blood pressure during pregnancy, especially in the at-risk group. Preeclampsia that occurs during pregnancy should be a constant concern for pregnant women and health services and should be seen as a public health problem⁹.

Since this disease cannot be prevented during prenatal care, its signs can be recognized early and treatment can also minimize its effects on the woman and the fetus. The presence of a trained health team, based on current scientific knowledge, can provide an efficient care and therapeutic performance, based on a safe and detailed anamnesis of each case, listing the family history, especially with regard to changes in blood pressure¹⁰.

It is important that the pregnant woman is also attentive and in her prenatal consultation, clarifies doubts with the health professional who is monitoring her, since early diagnosis concerns the safety of the mother-child binomial¹¹. The complications of preeclampsia are preventable with the expansion of prenatal coverage and professional training, including primary care and early diagnosis of high-risk patients¹².

In this context, the present study aims to identify the gaps in women's knowledge in relation to preeclampsia in pregnancy, contributing to the performance of health professionals being established in a qualified manner and to clarify women's doubts, even in spaces outside the health service. Thus, the aim of this study is to identify women's knowledge about preeclampsia in pregnancy.

METHODS

This was an exploratory and descriptive study, with a qualitative approach. The study subjects were women, linked to the pastoral care of children in two municipalities in the Northwest region of the state of Rio Grande do Sul (Brazil). Pastoral da Criança is a social action organization of the National Conference of Bishops of Brazil (CNBB), linked to the Episcopal commission for the service of Charity, Justice and Peace, which aims to promote and fully develop children of 0 to 6 years old, having an ecumenical function, and serving all creeds and ethnicities.

The inclusion criterion of the study was being a woman (pregnant or not) linked to the Pastoral da Criança of the municipality in question, and the exclusion criteria were adolescents aged 12 to 18 years old, as provided in the Statute of the Child and Adolescent (ECA), and women who had cognitive limitations that prevented them from participating in the study.

The sample totaled 26 women listed for data collection. As for the quantification of women included in the study, it was certain that the objective of the study was met with this number of subjects. Thus, it was considered that the ideal number of participants met all the multiple dimensions of the study, through data saturation¹³.

Women were approached in a conversation circle in 2014, and data collection took place through a semi-structured questionnaire with open and closed questions, built from searches in the scientific literature, containing questions related to sociodemographic, obstetric data, and which reflect the knowledge

of the women in the study regarding the disease, its causes, and prevention. After the questionnaire was applied, a health education activity was carried out in order to clarify important points of preeclampsia during pregnancy.

The questionnaire was transcribed, and the data was analyzed using thematic content analysis¹⁴. In the first stage, called pre-analysis, the interviews were transcribed in Microsoft Word format and, afterwards, printed for fluctuating reading and identifying the units of meaning. Next, the material was explored through thematic categorization. Finally, the treatment of the results obtained, and their interpretation were developed, emerging three themes that will be addressed in the results.

The participants were identified by the letters of the alphabet consecutively, in order to preserve their identities. The women who agreed to participate in the study received the Informed Consent form, which was read and signed before starting the data collection, leaving one copy for the women and one for the researcher. In order to carry out this study, the ethical aspects established in Resolution No. 466 of 2012 were respected and approval from the Ethics Committee was obtained under number 559.271.

Part of the participants (n=8) did not answer the questions or reported "I don't know", justifying the presence of 18 statements in the results, with all women being present in the characterization of the study subjects. It is noteworthy that these women were not excluded from the study, they just do not appear in the statements, as they did not know how to give an opinion.

RESULTS

Regarding the profile of the participants, Table 1 shows the data on age, having been pregnant, the occurrence of preeclampsia and other complications during pregnancy. Given these data, there is a predominance of women of childbearing age, who have already experienced motherhood and who did not experience complications during pregnancy, including preeclampsia. All of them were not pregnant at the time of data collection.

When asked about their understanding of preeclampsia, most of them did not respond or did not know what it was about. Only six participants explained what the disease was, according to the statements:

When blood pressure increases, especially with pregnant women, some of the symptoms are headaches (Letter A)

It is when the pregnant woman becomes hypertensive during pregnancy (Letter J)

It's high blood pressure in pregnancy (Letter L)

It is when blood pressure rises a lot due to pregnancy, causing risk to the pregnant woman and the baby (Letter R)

When the pregnant woman has blood pressure above 140/90, swelling and protein in the urine (Letter S)

When blood pressure goes up (Letter U)

Thus, it is identified that only part of the women recognize what preeclampsia is or define it only as elevated blood pressure and, therefore, when they experienced pregnancy they were not prepared to identify the risk signs of a complication. Regarding the possible causes of preeclampsia, the study participants listed:

Occurs during pregnancy maybe due to the wrong diet (Letter A)

I knew that if the mother had it, daughters can have it (Letter M)

Generally, the pregnant woman abuses food and does not exercise (Letter R)

Blood pressure gets stronger with pregnancy and can cause bleeding (Letter T)

Various factors, some stress or a lot of everyday concerns (Letter V)

Caring for salt consumption (Letter Z)

The pregnant woman must tell the doctor about any different symptom in pregnancy, always be careful with food (Letter X)

It is possible to observe that women express some knowledge about the disease, considering the causes of pre-eclampsia in their daily lives and that, many times, they are associated only with high blood pressure. However, this disease has its onset and its underlying causes in the pregnancy process, and should be explained to women.

When asked if they knew someone who had preeclampsia during pregnancy, they reported that:

At about 8 months, she had no pressure control, started prenatal care, after the first trimester, the baby was dead for five days in the belly (Letter C)

Yes, aborted several times (Letter L)

My daughter had preeclampsia, it was necessary to have a cesarean section to save the baby and the mother at 8 months of gestation (Letter N)

I met (name), she was fine in the morning, had soup on a Sunday, got worse in the afternoon, she and her baby died the next day, it was very fast and sad (Letter J)

A friend who died in childbirth, since it was many years ago people did not comment (Letter P)

The reports of extremely serious situations with maternal and fetal losses reflect the complexity of this disease in the gestational and parturition process. The knowledge about preeclampsia in at-risk groups is essential and the report of people who experienced the problem becomes an important reflection on the serious cases that occur resulting in fatality.

In addition, prenatal care is indicated by women as a way to clarify and inform pregnant women about the risk of preeclampsia. The

quality of prenatal care and health education actions depends on, above all, professionals trained and engaged in promoting women's health. In this scope, when asked about the importance of prenatal care, they reported:

Primordial for the development of the fetus and for the health of the mother and baby (Letter D)

It is where we take our questions to and we are preventing ourselves from any type of disease (Letter J)

In addition to taking care of the mother's health, it is important, since prenatal care can diagnose any problem that the child may have (Letter S)

It is possible that multiprofessional knowledge in the prenatal space can promote necessary actions and reflections, since there may be erroneous knowledge about the disease, its

causes, and forms of prevention. When asked how to prevent the disease, they indicated:

Good food, healthy, physical exercises, etc (Letter B)

Eat little salt or foods with a lot of sodium. Do the tests to see how your kidneys are working. Monitor swelling of feet, hands, and face (Letter H)

Control blood pressure if it is high at rest (Letter O)

According to the statements, it was possible to identify that they have the basic knowledge of the care that must be performed during pregnancy to prevent diseases associated with hypertension. In this context, health education represents a care strategy for health professionals in order to bring scientific knowledge closer to the lay population, contributing to health promotion and disease prevention.

Table 1 – Profile of women participating in the study. Rio Grande do Sul, 2014 (n = 26).

Variables	n	%
Age	15-20 years	2 7.7
	21-40 years	12 46.2
	Above 41 years	9 34.6
	Did not respond	3 1.5
Has been pregnant	Yes	25 96.2
	No	1 3.8
Preeclampsia	No	25 96.2
	Yes	1 3.8
Other complications	No	25 96.2
	Depression	1 3.8

Source: Author.

DISCUSSION

From the statements, it is possible to state that women are unaware of what preeclampsia is and that they do not know how to exactly identify the early signs that this disease may display. Understanding what the disease is, the risk factors associated with it, and the necessary demand for care in health services contribute to the reduction of maternal and fetal/neonatal morbidity and mortality that are impacted by this disease.

Some signs may be indicative of this condition, such as: presence of edema (mainly on the face, around the eyes, and hands), marked weight gain, nausea and/or vomiting, pain in the epigastric region that radiates to the upper limbs, headache and visual changes (hazy and/or blurred vision), hyperreflexia, tachypnea, and anxiety. However, many times, the disease can progress silently, with no indicative signs of its occurrence¹⁵.

A study that sought to identify women at cardiovascular risk, five years after preeclampsia, showed that family history for cardiovascular disease was associated with genetic predisposition and environmental factors in the development of preeclampsia. However, the women who participated in the study were unaware of these risk factors¹⁶. It was also identified that although they were informed that they had hypertension during pregnancy, they were not informed about the possible consequences of the disease and the need for late monitoring and changes in lifestyle, such as healthy eating, physical activity and regular control of blood pressure¹⁶.

It is also important to highlight its long-term implications that can be irreparable. After a pregnancy that was complicated due to preeclampsia, about 20% of women will develop hypertension or microalbuminuria in seven years, and the same occurs with only 2% of women who have had uncomplicated pregnancies. In addition, the risk of acute myocardial infarction, stroke, and thromboembolism is substantially

higher in women with a history of preeclampsia³.

The fact that the women in the present study report serious facts that they heard or followed related to preeclampsia shows that the search for care or the identification of risk factors occurred late, since the changes associated with hypertension usually evolve slowly. Thus, the lack of knowledge may contribute to the fact that the demand for health services is infrequent, especially among women with a history of preeclampsia.

The maintenance of a structured referral and counter-referral system contributes to the quality of care provided to these women. In addition to a competent and trained interdisciplinary team to diagnose these women early and to promote follow-ups, the late complications of this disease and the importance of long-term outpatient monitoring stand out¹⁵⁻¹⁶.

The quality of prenatal care is essential for pregnant women to initiate and continue it, as it is at this time that, often, the professional identifies these changes. In this sense, some factors contribute to the quality of care highlighted, where beginning from the easy access a pregnant woman has to these services that should prepare her for childbirth and puerperium, at that moment she feels protected, maintaining her physical and emotional well-being, preventing complications¹⁷.

During prenatal care, the values obtained by measuring blood pressure, starting from the twentieth week of gestation, consist of one of the most important diagnostic criteria for the definition of cases and, associated with the presence of proteinuria, elucidates the diagnosis of preeclampsia. A review study recommends that blood pressure measurement should be performed using a cuff appropriate to the diameter of the pregnant woman's arm, identifying and carrying out early drug treatments of the hypertensive crisis, through institutional protocols so that the diagnosis is more accurate and reliable¹⁷. The measurement

should be performed with the patient seated, where one forearm is raised to the height of the atrium (half of the external bone) and should be repeated in one or two five-minute intervals⁵.

In this context, the training of professionals involved in assisting pregnant women at different levels of care contributes to the quality of this care and has a positive impact on the health of the mother-child binomial. This fact is corroborated when there is a guarantee of the quality of care provided to pregnant women with preeclampsia and eclampsia, where the risk of mortality may be reduced by 50%¹⁵.

In the monitoring of prenatal care for pregnant women at usual risk, the identification of warning signs and symptoms that turn them into high-risk contributes to referring these pregnant women to specialized centers, such as the High Risk Pregnancy Outpatient Clinic (HRPOC), ensuring more qualified attention. This service offers multidisciplinary and outpatient care to pregnant women at a high risk or who need periodic follow-up due to previous or gestational diseases¹⁸.

In addition to the referral service, there are protocols to prevent these hypertensive diseases, including behavioral and medicinal. Studies indicate that the use of low-dose acetylsalicylic acid (ASA) to prevent preeclampsia is beneficial when used as a preventive medication in women at risk of preeclampsia, with clear evidence of its contribution to high-risk women^{3,19}. However, for women who do not have this risk, the use of medication has not been shown to be significant in preventing hypertensive diseases during pregnancy¹⁹.

CONCLUSION

As a result, it was observed that women's lack of knowledge about what preeclampsia is and its prevention, especially in at-risk groups, can contribute to complications of the disease. The recognition of prenatal care as a way of clarifying the subject among the women surveyed was also identified.

The prevention, diagnosis, and early treatment of conditions related to preeclampsia involve a number of factors, in addition to the multidisciplinary team working at different levels of care. Care after childbirth is also essential so that new diseases do not occur and that, in a new pregnancy, the woman can experience it in a trained and assisted manner.

Therefore, it is necessary to carry out health education aimed at this specific population, prioritizing activities during the pregnancy-puerperal cycle, with an approach compatible with the educational level of the target audience. Rethinking the role of health professionals with a focus on health education is important, bringing information closer to women exposed to risk who need a unique and comprehensive look, considering different health situations, as well as cultural, social, and economic aspects.

Health education actions for women can contribute to the readjustment of inappropriate habits and lifestyles, as they can increase the level of recognition of signs and symptoms of changes in blood pressure and benefit from early diagnosis, preventing complications related to the disease²⁰.

Even with these proofs, a limitation of the study was the selection of the sample only in a collection space, which in this case was the Pastoral da Criança, which makes the expansion to other study scenarios important. Moreover, conducting similar studies with the pregnant population is important since the sample did not have the reports of women who were experiencing pregnancy at the time of data collection.

However, there is a concern with the quality of prenatal care and with the emerging effective multiprofessional activity in women's health care, establishing their reception in discussion groups and clarifying the health problems of women.

It is believed that this study can contribute

to health actions being better implemented, contributing to the quality of life of pregnant women, mothers and newborns, especially in spaces such as the Pastoral da Criança, where health education activities can be optimized. The importance of immediately identifying cases of high-risk pregnancies is emphasized, referring the pregnant woman to the reference

service, in order to establish comprehensive, individualized and humanized care. Thus, it is necessary to train prenatal caregivers and multiprofessional caregivers in assisting women, including health education actions that contribute to improving the knowledge of women concerning the diseases that permeate the gestational period.

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