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# ANALYSIS OF RISK FACTORS FOR PRE-ECLAMPSIA IN PREGNANT WOMEN FOLLOWED BY THE HEALTH STRATEGY OF FAMILY: ``*ALTO DA BOA VISTA I*``, ARARIPINA-PE

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**Abstract:** Prenatal care aims to provide women with care aimed at the mother-baby binomial, for a link that promotes a pregnancy free from complications or complications, in addition to preventing adverse events related to obstetric health. The literature shows significant findings about the importance of prenatal care in reducing maternal and child mortality rates. Data from the World Health Organization-WHO show that hypertensive syndromes lead the ranking of causes of maternal deaths in developing countries. Therefore, it is extremely important to screen pregnant women who present risk factors for the development of the problem in question, in order to reduce the prevalence through effective interventions, and, consequently, minimize adverse maternal-fetal occurrences. In summary, it is concluded that the risk factors for PE are related to: maternal age, ethnicity, smoking, physical activity, obesity, sexual cohabitation, partner change, family history, infections and recurrence.
**Keywords:** Prevention, Hypertension, Prenatal.

## INTRODUCTION

Pre-eclampsia is defined as a multisystem disease, characterized by the combination of high blood pressure (BP) (systolic BP ≥140mmHg or diastolic BP ≥90 mmHg), identified for the first time after 20 weeks of gestation, associated with proteinuria, which may be superimposed on another hypertensive state (PERAÇOLI, et al., 2018). Therefore, it appears to be a heterogeneous, multifactorial pathology, with no clear etiology and complex pathophysiology (AMARAL and PERAÇOLI, 2011).

Cases of pre-eclampsia are directly associated with the increasing risk of unfavorable events such as premature placental abruption with increased risks at birth, cerebral hemorrhage, acute renal

failure and inappropriate perinatal outcomes, such as fetal macrosomia, low birth weight, aspiration syndrome meconium, among others (OLIVEIRA, et al., 2017). It is necessary to screen pregnant women who present a severity score for pre-eclampsia, reducing the prevalence through pharmacological intervention, minimizing adverse maternal-fetal occurrences. The objective of the work was to: Identify the risk factors correlated with the development of pre-eclampsia in pregnant women monitored by the Family Health Strategy, Alto da Boa Vista I, Araripina-PE.

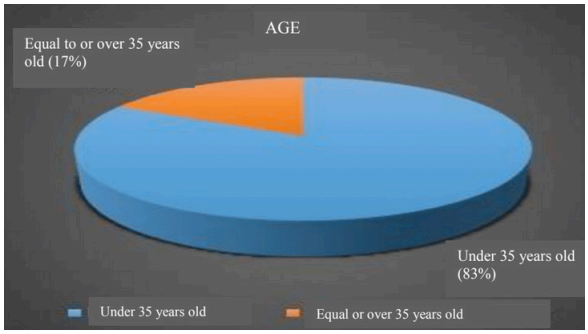
## METHODOLOGY

The study is characterized by explanatory field research, with quantitative applicability and a qualitative approach. First, a total of 43 pregnant women belonging to ESF Alto da Boa Vista I, located in Araripina-PE, were identified cross-sectionally through the Electronic Citizen Record-PEC. Therefore, the working sample consisted of pregnant women in the period from 01.09 to 01.12.2022. The research participation criteria with a theoretical basis on the risk factors for pre-eclampsia, constructing the interrogation questionnaire. Therefore, the inclusion criteria were: belonging to the territory of the Alto da Boa Vista 1 unit, > 15 years old, accompanied by a responsible person to authorize, undergoing prenatal care and willingly accepting to participate in the research. Therefore, the questionnaire was administered on the day of consultations and on visits to the unit. To verify the information, the data obtained was reproduced in a table, with observations, perceptions, as well as the crossing of information with theoretical evidence. It must be noted that patient identification data is duly protected, respecting the appropriate prerogatives for studies with human beings and terms of free and informed consent.

## RESULTS AND DISCUSSIONS

### VARIABLE: AGE

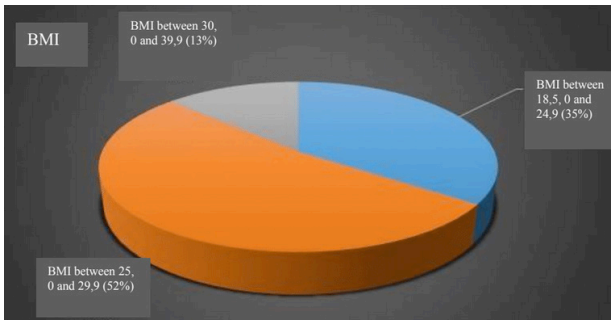
The first variable to be analyzed was age.




Picture 1: Graphic elaborated by the author

According to Amaral and Peraçoli, comparing pregnant adolescents with non-adolescents, a significant increase in the incidence of PE, eclampsia, intrauterine growth restriction and maternal death was observed. It also showed that in early adolescence (<15 years) morbidity was greater than in those >15 years. Women over the age of 40 are 2x more likely to develop PE than young women, with a similar risk among primiparous and multiparous women.

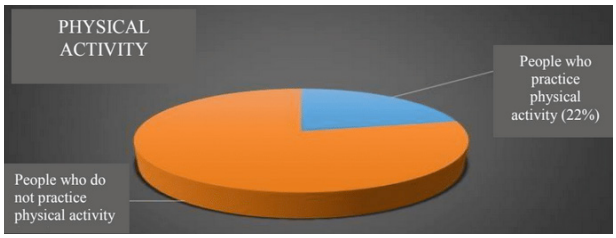
### CORRELATED VARIABLE BETWEEN OBESITY, BMI AND PHYSICAL ACTIVITY PRACTICE




Picture 2: Graphic elaborated by the author

In view of the literature prepared by Amaral and Peraçoli (2011), obesity is an important risk factor for PE, the rate of which increases

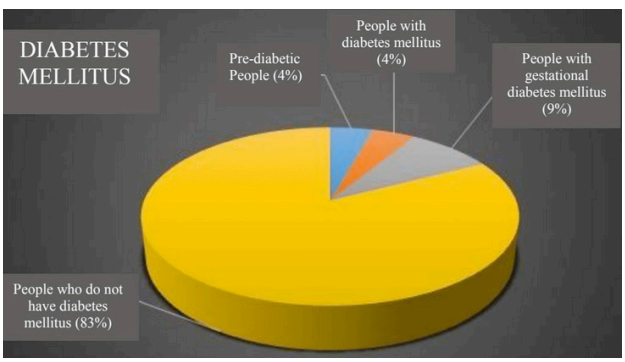
the higher the body mass index (BMI). This morbidity is closely related to increased insulin resistance, a risk factor for PE, arising from increased oxidative stress associated with hyperdynamic circulation.




Picture 3: Graphic elaborated by the author

According to Amaral and Peraçoli (2011), regular physical activity produces beneficial effects on the cardiovascular system, in addition to reducing peripheral insulin resistance, it is believed that it can also reduce the incidence of PE or its severity in women at risk; it was noted that women with regular physical activity and adequate calorie intake, unemployed or with non-sedentary work activity had a lower incidence of the disease when compared to the control group.

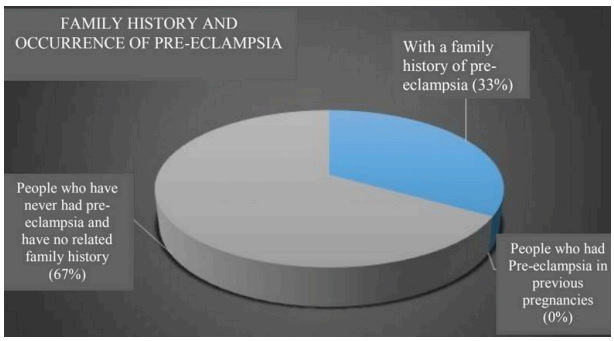
## DIABETES VARIABLE AND ITS TYPES




Picture 6: Graphic elaborated by the author.

The occurrence of diabetes in gestation in the course or condition already pre-existing to gestation, configures two main factors of risk correlates to the emergence of PE, complications associated with negative maternal-infant disorders and increased rates of morbidity and mortality. Note significant values in pregnant women.

## FAMILY HISTORICAL VARIABLE AND PE




Picture 7: Graphic elaborated by the author

Studies show a high incidence of PE among family members, seen as a strong influence on the pathology of the antecedent mother/sister in the development of the problem in question. Furthermore, women from complicated pregnancies have a considerably high risk of developing such a pathology throughout their own pregnancies. (FEBRASGO, 2017)

Furthermore, you will vary the analysis in your work, to present a proven relationship in literature with PE, were: ethnicity, marital status and socioeconomic profile.

## CONCLUSION

Prenatal care contributes to reducing the incidence of preeclampsia by providing the pregnant woman with an environment conducive to a safe pregnancy. This way, an investigation must be carried out into the family history and people of the pregnant women, and the greater the number of these histories, the greater the risk of pregnancy. Maternal death is defined as the death of a woman who does not undergo pregnancy or within 42 days of childbirth.

Therefore, an inadequate pre-natal by a low-quality assistance, considerably increases the

risk of mortality for pre-eclampsia. However, it can be inferred from the rates of maternal mortality that infectious causes also constitute the majority of these deaths. Such a fact can be attributed to the large number of cesarean deliveries that end up being performed with the objective of solving maternal hypertensive problems. However, women with pre-eclampsia can give birth vaginally, as long as she is monitored correctly, as well as the fetus. This way, the association of high rates of maternal mortality with the main causes of Brazil itself becomes easy, given that the country offers low-quality assistance and high numbers of unsuccessful births by high birth control. Therefore, it is necessary to carry out all the consultations recommended by the Ministry of Health, including postpartum consultation where the maternal-fetal binomial must not be neglected. Furthermore, the socioeconomic factors have a great impact on the development of the field, as well as on our dissatisfaction, reinforcing the need to review public policies and regulations in the country.

It is extremely relevant to highlight the measures considered protective in view of the context of PE. Being them a regular practice of physical activity, as well as smoking, or that is linked to a controversial and conflicting scenario I tend to have in view of all the health harms offered by the use of tobacco. Given that, studies demonstrate an inverse association between smoking and PE, with reports of a remaining 30% in the incidence of pathology in smoking women; On the other hand, doctors who develop PE present worse perinatal results, encompassing problems such as: greater occurrence of intrauterine growth restriction, premature placental separation, low birth weight and prematurity. (AMARAL AND PERAÇOLI, 2011)

Finally, it is crucial to justify that two and three pregnant women were interrogated, comprising a quantity not consistent with the total public, such a fact is due to the convergence of the limitation of the time foreseen for the term of work in the field, as well as the absence of Some pregnant women in the Family Health Strategy do not have the planned period for unique reasons.

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