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RESEARCH

Morbidade materna pela doença hipertensiva específica da gestação: estudo descritivo com abordagem quantitativa

Maternal morbidity by hypertensive disease specific of the pregnancy: a descriptive study of a quantitative approach

La morbilidad materna por la enfermedad hipertensiva específica del embarazo: un estudio descriptivo con un enfoque cuantitativo

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ABSTRACT

Objective: identifying the profile of women with Specific Hypertensive Disease of Pregnancy treated at the University Hospital Antonio Pedro (HUAP). **Method:** a descriptive, retrospective study of a quantitative approach held at HUAP. **Results:** in 2011, 8% of hospitalizations in maternity HUAP were due to preeclampsia. The average age of patients was of 29 years old. Regarding the race/color, the main were mulatto, 57%. Regarding the parity, 30% were primiparous. The predominant medical diagnoses were Hypertension Not Classified 30% and Pre-eclampsia by 28%. **Conclusion:** specific hypertension in pregnancy is a major cause of maternal mortality, and knowledge about the profile of the population allows midwifery can play a key role in helping reduce maternal mortality. **Descriptors:** Hypertension, Pregnant women, Morbidity, Women's health, Prevalence.

RESUMO

Objetivo: identificar o perfil das mulheres com Doença Hipertensiva Específica da Gestação (DHEG), atendidas no Hospital Universitário Antônio Pedro (HUAP). **Método:** estudo descritivo e retrospectivo com abordagem quantitativa realizado no HUAP. **Resultados:** no ano de 2011, 8% das internações na maternidade do HUAP foram decorrentes da DHEG. A idade média das pacientes foi de 29 anos. Referente à raça/cor houve predominância da cor parda, 57%. Quanto à paridade, 30% eram primigestas. Os diagnósticos médicos predominantes foram Hipertensão Arterial Não Classificada 30% e Pré-eclâmpsia, 28%. **Conclusão:** a DHEG é uma das principais causas de mortalidade materna, e o conhecimento do perfil da população permite que a enfermagem obstétrica possa exercer um papel fundamental no auxílio à redução da mortalidade materna. **Descritores:** Hipertensão, Gestantes, Morbidade, Saúde da mulher, Prevalência.

RESUMEN

Objetivo: identificar el perfil de las mujeres con enfermedad hipertensiva del embarazo tratadas en el Hospital Universitario Antonio Pedro (Huap). **Método:** un estudio descriptivo, retrospectivo, con enfoque cuantitativo celebrado en HUAP. **Resultados:** en 2011, el 8% de las hospitalizaciones en HUAP maternidad se debieron a la preeclampsia. La edad media de los pacientes fue de 29 años. Relacionados con la raza/color, predominaba el mulato, con 57%. En cuanto a la paridad, el 30% eran primíparas. Los diagnósticos médicos predominantes fueron hipertensión no clasificadas 30% y preeclampsia en un 28%. **Conclusión:** a HDP es una de las principales causas de la mortalidad materna, y el conocimiento acerca del perfil de la población permite la partería poder desempeñar un papel clave para ayudar a reducir la mortalidad materna. **Descriptor:** Hipertensión, Mujeres embarazadas, La morbilidad, Salud de la mujer, Predominio.

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INTRODUCTION

Maternal mortality is one of the most serious violations of human rights of women, as a preventable tragedy in 92% of cases, and occurs mainly in developing countries. Mortality rates in these countries are alarming. A study by the World Health Organization (WHO) estimated that in 1990, approximately 585.000 women worldwide died from complications related to pregnancy and childbirth. Only 5% of them living in developed countries.¹

Still, according to the WHO, maternal mortality is defined as the death of a woman during pregnancy or within a period of 42 days of termination of pregnancy, irrespective of the duration or location of the pregnancy, due to any cause related to or aggravated by pregnancy or by measures with respect to him, but not due to accidental or incidental causes.²

The Ministry of Health (MOH) released data on 2011 that suggest the largest reduction in absolute terms in maternal mortality rates in Brazil since 2002. The first half fell by 19% compared to 2010.³ Although several policies have been created to improve women's quality of life during their pregnancy and puerperal period, and to detect early pathological changes that occur in this stage also noted that the statistics do not indicate satisfactory reduction of these complications.⁴

The Specific Hypertensive Disease Pregnancy or hypertensive disorders remains a leading cause of direct maternal death in Brazil, presenting high proportion in the North and Northeast compared to the Southeast, South and Midwest.⁵

Classification of Specific Hypertensive disorders of pregnancy (HDP) with respect to etiology can be divided into: Hypertension Chronic; Preeclampsia, mild preeclampsia, severe preeclampsia, eclampsia; superimposed preeclampsia and gestational hypertension.⁶

Chronic hypertension (CH) is observed before pregnancy, or 20 weeks before pregnancy, or first diagnosed before pregnancy and is not solved up to 12 weeks after birth. It may be defined by the persistence of blood pressure equal to or greater than 140/90 mm Hg. In the gestational hypertension, blood pressure returned to normal by 12 weeks postpartum.⁷

Preeclampsia is a very peculiar disease as it occurs mainly in first pregnancy. In developed countries it is seen in about 6% of pregnant women being 2 or 3 times greater in developing countries. This disease manifests after 20 weeks disappearing days after birth. Their clinical presentations can be defined by the gradual development of hypertension, proteinuria and generalized edema. While the classification can be considered in mild and severe, according to the level of impairment.⁸

Eclampsia is one of the most severe developments of preeclampsia is characterized by the presence of tonic-clonic seizures or coma in hypertensive women with any frame, not caused by epilepsy or other seizure disorder. May occur in pregnancy, childbirth and the postpartum.⁹

Preeclampsia classified as overlaid or superimposed on chronic hypertension, occurs in chronic hypertensive women or kidney disease. These pregnant women, the condition worsens, and proteinuria appears or worsens in the last quarter, with an unfavorable diagnosis in relation to other conditions found in isolation.¹⁰

Complications arising from the HDP are associated with an increased maternal risk, increased fetal and neonatal morbidity induced prematurity, low birth weight and fetal distress.¹¹

This study aims to identify the characteristics of women treated at one year in the maternity ward of the University Hospital Antônio Pedro, Fluminense Federal University, suffering from Hypertension Disease Specifies the pregnancy; as well as the relationship of this condition with the following variables: age, race/color, parity, medical diagnosis, medical history, previous pregnancies and medical complications.

METHOD

It is a descriptive and retrospective study of a quantitative approach, performed in the medical file sector of the University Hospital Antônio Pedro (HUAP), under the Fluminense Federal University, located in the Metropolitan Region II of the State of Rio de Janeiro, in the municipality of Niterói. The study in question used to document research through the book's analysis of the maternity hospital and the identification of relevant records research.

The study population consisted of 61 women diagnosed with preeclampsia. As the inclusion criteria were selected records from January to December 2011, women admitted to the maternity sector diagnosed with preeclampsia and an exclusion criterion the records that did not meet the defined study period, the established hospital sector, the studied pathology and did not have the complete record of the variables of interest search.

Data collection took place in July 2013. For this, we used a specific instrument for identifying the variables: age, race/color, parity, medical diagnosis, medical history and clinical complications. Information for each medical record was transcribed for the instrument after the evaluation.

Data were compiled in a spreadsheet application Microsoft Office Excel 12.0 (Office 2007), and treated through simple quantitative analysis, seeking to identify the frequency of hospitalizations in maternity HDP, within the stipulated time frame, as well as the crossing of variables. After identifying the data were compared to the literature on the subject.

Given the bioethical criteria governing research on human subjects, he underwent the study to the Ethics Committee of the Medical School of the Fluminense Federal University, which issued the authorization and release for the start of data collection in July 2013, under the protocol number 337.178.

For the analysis and discussion of the data, it was used as a basis the presentation of the Ministry of Health¹² that identifies the Hypertensive Disease Specifies the pregnancy (HDP) as: Chronic hypertension; Pre-eclampsia, eclampsia, pre-eclampsia superimposed on chronic hypertension, gestational hypertension and Hypertension Not Classified.¹³

RESULTS AND DISCUSSION

In the period January-December 2011 there were admitted to the maternity HUAP, 802 women, of that number was identified 75 charts of patients treated with the diagnosis of preeclampsia. But after analysis it worked with 61 records, which accounted for 8% of hospitalizations in the delimited period established in the search.

Regarding the age of the women there was identified 3 cases of women hospitalized for preeclampsia in the age group of 12-18 years old (5%), 17 between 19-25 years old (28%), 26 between 26-32 (43 %) representing the greatest number of cases this regard, between 33-39 years old 10 (16,4%), 5 between 40-46 (8%).

Regarding the race/color there was identified 35 brown women (57%), 15 white (25%), and 11 black (18%), noting the predominance of brown color.

In relation to the rate of the patients, 18 were primiparous (30%), 16 second pregnancy (26%), 12 third (20%), 12 fourth (20%), 2 fifth (3%) and 1 (2%) multiparous.

According to each age group it identified that among the patients of 12-18 years old the average was 1,3 pregnancies among 19-25 was 2 pregnancies of 26-32 years old was 2,5 pregnancies among 33 -39 years old increased to 3,5 pregnancies and 40-46 the average was two pregnancies.

Referring to parity by race/color, the 61 women of the survey, 57,4% are brown and have an average parity of 2,5. The 24,6% white and had an average of 2,6. Among the 18% black, the average parity was 2. Since the exchange rates of white and black women, respectively, the most and least significant in relation to preeclampsia. It found no relationship between the intersection of variables parity and race/color.

Regarding the medical diagnosis (Figure 1), it was found in records related to preeclampsia, the were identified: Pre-eclampsia, Chronic hypertension, Pre-eclampsia superimposed on chronic hypertension, gestational hypertension and Hypertension Not Classified (HANC).

Figure 1: Medical diagnoses of Maternity Hospital Antônio Pedro

Medical Diagnoses	N	(%)
HANC	18	29,5
Chronic Hypertension	16	26,2
Gestational Hypertension	5	8,2
Preeclampsia	17	27,9
Preeclampsia Overposed to Chronic Hypertension	5	8,2
Total	61	100,0

Source: Book of hospitalization of maternity HUAP/UFF, years 2011, 2013.

There were found diagnostic HANS 18 (29,5%), 16 chronic hypertension (26,2%), preeclampsia 17 (27,9%) 5 preeclampsia superimposed on chronic hypertension (8,2%) and 5 of gestational hypertension (8,2%). Among the 17 patients who received the diagnosis of preeclampsia, 9 were classified with severe pre-eclampsia, ie 53% of cases.

The analysis of medical diagnostics in relation to age of the patients shows that the age group of 12-18 years old HANC means 100% of cases. The diagnosis of chronic hypertension is prevalent in the age group of 19-25, accounting for 24% of cases, increase from 26-32 to 31% and in the age group of 33-39 years old means 30% of cases. The diagnosis of preeclampsia is significant in the age group of 33-39 years old, as well as in the 40-46, 40% in both age groups.

Regarding the diagnosis with respect to race/color there was observed predominance of HANC in white, 47%, followed by preeclampsia, 27%. In mulatto diagnosis of preeclampsia increases to 31% and chronic hypertension is 29%. In blacks is prevalent diagnosis of chronic hypertension 28% and pre-eclampsia in 18% of cases.

Regarding the diagnosis parity noticed the predominance of HANC in the first pregnancy. From the second parity it remains high the diagnosis of HANC, 37% of the cases with preeclampsia and chronic hypertension indicating 25%, respectively. In the third parity it increases to 42% of cases of chronic hypertension and 33% pre-eclampsia. In the fourth parity chronic hypertension is 50%, followed by pre-eclampsia, 25% of cases. Preeclampsia in the fifth parity and HANC represent 50% of cases respectively. Gestational hypertension represents 100% of cases in the sixth parity.

It sought to identify the personal background in the medical records of patients, tracking developments through the medical, nursing and prenatal data. The antecedents were: diabetes mellitus, high blood pressure (hypertension), chronic hypertension (HC), heart disease, obesity and preeclampsia in previous pregnancies.

The absence of personal history was predominant, 42% of cases. SH appeared in 16% alone and in conjunction with other diseases such as obesity, 2% of cases, obesity and heart disease with 2% and preeclampsia in previous pregnancies also 2%. Pre-eclampsia in previous pregnancies made in 16% of the cases, is combined with the HAS, 2%, and HC 2% of the cases. The conical Hypertension and obesity appear associated with other preceedings by 8% and 6% of cases respectively.

Regarding the crossing of variables personal background and age, 100% of women hospitalized aged 12-18 years old did not have a history of hypertensive framework. Between 19-25 years old, it was found that 18% had hypertension and preeclampsia in previous pregnancies respectively.

However aged between 26-32 years old, there has been an increase in women who have pre-eclampsia in previous pregnancies, 23% of cases individually, and in together with SAH and HC. Aged 33-39 years old, 30% was prevalent hypertension, alone and associated with obesity and 10% of HC and obesity respectively. Between 40-46 years old there were 20% of the cases of diabetes mellitus and 20% HC.

Regarding the personal history related to race/color, white women, 33% had no hypertensive chart history, 27% of these were diagnosed with preeclampsia in previous pregnancies and 20% were obese. The mulatto, 43% had no previous frame of hypertensive, 23% had hypertension and 11% suffered from pre-eclampsia in previous pregnancies alone and in conjunction with HC. Black race 18% of patients manifested preeclampsia in previous pregnancies alone and in conjunction with SAH.

A total of 61 records of women admitted affected by preeclampsia, only 4 cases (7%) were reported with the development of complications.

Studies show that the incidence of hypertensive syndromes ranges from 2 to 8% of pregnancies in the developed countries, in Brazil it can reach 10% or more. Lying among the leading causes of maternal death in Brazil and the third leading cause in the world, also studying with high perinatal mortality rate.¹⁰

The percentage of hospitalization for HDP identified in 2011 in HUAP maternity amounted to 8%, which is consistent with the aforementioned literature.

Regarding the characteristics of the Specific Hypertensive Pregnancy Disease, the women attended at the maternity ward of HUAP/UFF identified the frequency of the variables: age, race/color, parity, medical diagnosis, medical history, previous pregnancies, clinical complications and their inter-relations.

With regard to age it was found that the average age of patients seen diagnosed with preeclampsia was approximately 29 years old. This result agrees with the childbearing age and reproductive Brazilian women established by the Ministry of Health, being 10 to 49 years old.¹⁴

There are studies that link maternal age as a risk factor crucial to the development of preeclampsia, highlighting their extreme, ie women aged below 18 and above 35, 40 years old.¹⁵

In this context, the age of the study group varies between 15 and 46, ie, pregnancies that occur in the reproductive age extremes contributed to the risk of developing preeclampsia in pregnancy and childbirth.

In relation to the rate most women is primiparous, representing 30% of cases. When was related to parity with maternal age, it was found that the age group of 12-18 years old, patients had an average of 1,33 parity.

With regard to reproductive history, although any pregnant woman can develop hypertensive disorders, some are more at risk, such as first pregnancy, young women, or older than 35, 40 years old.¹⁶

Related to race/color there was the predominance of fat women. It should take into account that this issue in Brazil suffers from cultural influences, where the population calls itself a particular race/color as well as being marked by large miscegenation.

As those found medical diagnostics, noticed the predominance of HANC, preeclampsia and chronic hypertension.

The HANC is serious where the first prenatal consultation is more than 20 weeks gestational age is dubious or ignored, but clinically superior to 20 weeks, there is existence of clinical history with inconclusive information for the diagnosis of Chronic Hypertension.¹⁷

The prevalence of HANC in relation to age in the study took place at the end of the ages, ie 12-18 and 40-46 years old.

The diagnosis of HANC is not aimed between the classifications of HDP by the Health Ministry in current literature. But the study chose to use the classification of the Ministry of Health in 2000 and 2010; since women admitted to the maternity HUAP significantly obtained the said diagnostic.¹⁸

Regarding the medical diagnosis and age group identified the preeclampsia in women aged 33-46 years old. The HC appeared significantly in patients aged 19 to 39 years old.

Regarding the relationship of medical diagnoses by race/color was the prevalence of HANC in white women, followed by the diagnosis of preeclampsia, 47% and 27% respectively. In mulatto diagnosis of preeclampsia increased to 31% of cases and 29% HC represented. Referring to blacks HC meant 28% of cases and 18% pre-eclampsia. Even the blacks in lower absolute number, a total of 11 women identified, it was noted the significant quantity of cases of HC.

Studies show that the main cause of death in Brazil in 2010 were diseases of the circulatory system, including high blood pressure, cardiovascular diseases resulting from this, kidney disease and stroke. In this group are the leading causes of death for black women (black and brown) and indigenous peoples, and between major gynecological and obstetric diseases are preeclampsia and eclampsia.^{18,19}

Regarding the relationship of the variables medical diagnosis and parity, it is observed on the first parity the prevalence of diagnosis of HANC and the emergence of chronic hypertension and preeclampsia from the second parity, which increases the multiparous. The personal history of women admitted to the maternity HUAP found in accordance with the literature used in the study, being predominant preeclampsia in previous pregnancies.²⁰

When was related to personal experiences with the age of patients, there was the significant quantity of preeclampsia in previous pregnancies in the age group of 26-32 years old. The presence of hypertension was found predominantly in women between 33-39 years old.

Regarding the personal background and race/color it was observed that among the brown and black women, both have respectively 9% of cases of chronic hypertension alone, though this figure rises when it relates to other records. The white race this number is less than 7% of cases. What about pre-eclampsia in previous pregnancies race/color black has more cases in relation to brown, but lower than the white race.

Women affected by complications 50% were over 40 years old. Regarding the race/color, 50% were white. Only one was primiparous. Regarding personal antecedents of obesity has been identified. Complications each received their diagnosis: eclampsia, postpartum preeclampsia, HELLP syndrome and acute pulmonary edema.

The quantitative clinical complications were not significant for further correlation with the other variables, but are in line with the theoretical framework used to guide this study. The finding may also have been masked by the lack of adequate records in the record.

CONCLUSION

Given the findings it could be presented the amount of women suffering from preeclampsia met within one year old, as well as the profile of the same. It showed that the amount of women hospitalized with a diagnosis of Hypertensive Disease Specifies the pregnancy in 2011 in the studied public health institution was 8% of cases.

According to the analysis of the variables of interest in the study met the following data: the average age of patients was 29 years old; predominance of mulatto (57%); primiparous the majority (30%); and the predominant medical diagnoses were not classified with hypertension (30%), preeclampsia (28%) and chronic hypertension (26%).

HANC as already mentioned in the text, not in current literature in the Ministry of Health regarding the classification of HDP. But before the expressiveness of this medical diagnosis, it is still commonly used in clinical practice.

Thus, the study shows its importance within a public service, especially in a federal hospital, where displays its relevance as the variables found to hypertensive disease specific of pregnancy, requiring effective strategies in public policies for monitoring women even in the prenatal period.

So has the need for new scientific studies to build a knowledge base and bring relevant data so that it can contribute to the population, and changes in care practices in women's health.

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