Epidemiological Profile of Pregnant Women with Eclampsia Admitted in Cuiabá Hospitals from 2008 to 2017

Perfíl de Internações de Gestantes Acometidas com Eclampsia no Município de Cuiabá no Período de 2008 a 2017

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Abstract

During pregnancy, women undergo several physiological body changes. However, there are some pathologies that can interfere in this period. In Brazil, the main cause of maternal mortality stems from hypertensive disorders. The increased blood pressure gestational period may be due to a preexisting chronic hypertension or Gestational hypertension. Therefore, the hypertension during pregnancy may evolve to preeclampsia, eclampsia or HELLP Syndrome. Each of these disorders has consequences for the mother and the fetus, which can be fatal, in the most serious cases. The objective of this study is to recognize the profile of pregnant women hospitalized with eclampsia, whereas the knowledge of the signs that the pathology presents and the most frequent epidemiological profile to help in the early diagnosis, which directly impacts on the efficacy of the treatment, reducing morbidity and mortality. This study aimed to evaluate the information available in the Sistema de Internações Hospitalares (SIH) of the Sistema de Informações da Secretaria do Estado de Saúde de Mato Grosso and to analyze the increase of pregnant women with eclampsia, in addition to the epidemiological profile of this group. After analyzing the data, it was verified that Afro-Brazilian women, aged between 20-24 years old, are the most affected by eclampsia. In addition, most cases have been reported by private hospitals and more than 50 percent remain hospitalized for up to 3 days. Despite the limitations in the database, the recognition of the most frequent conditions during hospitalization contributes to a better approach to these cases.

Keywords: Risk Factors. Pregnancy Hospital Information System – HIS/SUS.  

Resumo

Durante o período gestacional, a mulher passa por diversas mudanças fisiológicas. Entretanto, existem algumas patologias que podem interferir nesse período. No Brasil, a principal causa de mortalidade materna decorre das síndromes hipertensivas. O aumento dos níveis pressóricos na gravidez pode ser originada por hipertensão crônica prévia ou pela Doença Hipertensiva Específica da Gestação (DHEG). Sendo que, essa última pode evoluir para pré-eclâmpsia, eclampsia ou Síndrome HELLP. Cada uma dessas variações gera consequências para a mãe e o feto, podendo levar a morte, nos casos mais graves. O objetivo desse trabalho é reconhecer o perfil de internações das gestantes acometidas com eclampsia, uma vez que o conhecimento dos sinais que a patologia apresenta e o perfil epidemiológico mais frequente auxiliam na identificação precoce dos casos, o que impacta diretamente na eficácia do tratamento, reduzindo a morbimortalidade. Esse estudo, buscou avaliar informações disponíveis no Sistema de Internações Hospitalares (SIH) do Sistema de Informações da Secretaria do Estado de Saúde de Mato Grosso e analisar, por meio deste, a progressão das gestantes acometidas com eclampsia, além do perfil epidemiológico desse grupo. Após a análise das informações, verificou-se que as mulheres afro brasileiras, com idade entre 20 e 24 anos, são as mais acometidas pela patologia em estudo. Além disso, a maioria dos casos, foram notificados por hospitais particulares e mais da metade, permanece internada por até 3 dias. Apesar das limitações presentes no banco de dados, o reconhecimento das características mais frequentes durante a internação, contribui para uma melhor abordagem desses casos.

Palavras-chave: Fatores de Risco. Gravidez. Sistema de Informações Hospitalares.

1 Introduction

The hypertensive syndromes in pregnancy are in the scenario of public health, representing the third obstetric cause of death worldwide and the first in Brazil. In developed countries, approximately two to eight in every 100 pregnant women will develop the disease, whereas in Brazil it can reach 10% of the cases. Due to the severity of the disease, is considered one of the most significant health problems in pregnancy, resulting in high rates of hospitalization in intensive care unit and, sometimes, included as a criterion of severe maternal morbidity.

These syndromes, according to time of emergence and its relationship with the pregnancy, presence of proteinuria and severity of the condition, are classified as chronic hypertension, gestational hypertension, pre-eclampsia and eclampsia alone or superimposed. Chronic hypertension is characterized by high pressure before the 20th week of gestation, having no relationship with the state of pregnancy. The specific hypertensive disease of pregnancy (HDP) is an obstetrical pathology that comes after this gestational age, being more frequent in the third quarter and extending to the puerperium, which can evolve as pre-eclampsia.

Pre-eclampsia is described as a multisystemic disease of pregnancy and is characterized by clinical and laboratory
manifestations from the second half of pregnancy, due to the increase of blood pressure levels in a pregnant patient, previously normotensive, resulting in hypertension, edema and proteinuria. When accompanied by seizures is called eclampsia.

The present study aimed to carry out an analysis of the profile of admissions of pregnant women affected with eclampsia in the municipality of Cuiabá, in the period from 2008 to 2017, with the aim of assessing the interconnected characteristics, events related to the hospitalization and its particularities.

2 Material and Methods

Research of Quantitative and descriptive approach with data from the system of hospital admissions (SIH) available in the Information System of the Secretariat of the state of health of Mato Grosso (DwWebSES-MT). The inclusion criteria were pregnant women (ICD 10), ranging in age from 10 to 59 years, all ethnicities/races. The exclusion criterion was pregnant women with pre-eclampsia (ICD 10 O14). The research protocol used is presented in Table 1.

Table 1 - Research Protocol

| Selected Theme                  | Admissions                                      |
|--------------------------------|-------------------------------------------------|
| **Selected Filters**           |                                                 |
| Year of hospitalization        | 2007/2008/2009/2010/2011/2012/2013/2014/2015/2016/2017 |
| Code of the municipality       | 510340 (Cuiabá)                                 |
| **Selections defined**         |                                                 |
| Days of permanence             |                                                 |
| Complexity                     |                                                 |
| Diagnosis condition sensitive to primary health |                                                 |
| Main Diagnosis                 |                                                 |
| Main diagnosis ICD (Chapter)   |                                                 |
| Ethnicity                      |                                                 |
| Age Range                      |                                                 |
| Death                          |                                                 |
| Hospital Corporate Name        |                                                 |
| Age                            |                                                 |
| Permanence days                |                                                 |
| Race Color                     |                                                 |
| Sex                            |                                                 |
| Remained in ICU                |                                                 |
| STATE Residence                |                                                 |

The admissions with a diagnosis of eclampsia corresponded to less than 1%, being 95.5% Afro Brazilian, 91.4% of women with age below 34 years (mainly between 20-24; 34.4%) (Figure 1), 58% admitted until 3 days 12.1% with ICU admission and less than < 1% progressed to death.
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4 Conclusion

The study allowed us to characterize the profile of pregnant women with eclampsia hospitalized in the city of Cuiabá, in the period from 2008 to 2017, relating the racial characteristics and age with race characteristic and period of hospitalization. It can be concluded that there is a predominance in Afro-Brazilian women and in the age range from 20-29 years; and that the delineation of hospitalization is marked by particular hospital regime and period of stay for up to 3 days.

Certain limitations were found, because the data source is secondary, and the information collected is from a database provided by the Health Department of the state of Mato Grosso. Thus, some information that would complement the study, such as for example the beginning of the pre-natal, were not part of the data provided. Another point is due to the point that, in fact, our study was retrospective, thus hindering the direct contact of the researchers with the investigated women.

It is considered that characterizing the profile of pregnant women is of extreme relevance to diagnose and minimize the complications arising from eclampsia, because it contributes to the identification of risks and with that the elaboration of preventive strategies aiming at the reduction of injuries and enabling the provision of a quality care.

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