



Repercussions of severe preeclampsia in neonatal outcomes: a cross-sectional study

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ABSTRACT

Aim: to analyze the factors associated with the neonatal outcomes of pregnant women diagnosed with severe preeclampsia. **Method:** This is a cross-sectional study developed in a maternity school, whose population corresponded to the fetuses/neonates of pregnant women diagnosed with severe pre-eclampsia. The sample corresponded to 157 charts, in a 12-month cut-off. For descriptive analysis, frequency and percentage values were used, while the results of the inferential analysis were presented by mean and standard deviation values. Data analysis was performed using SPSS 2.0. The research followed Resolution 466/2012 of the National Health Council. **Expected results:** Evidence is expected to signal the repercussions of severe preeclampsia on perinatal outcomes.

Descriptors: Hypertension, Pregnancy-Induced; Perinatal care; Obstetric Nursing; Neonatal Nursing.

INTRODUCTION

The analysis of neonatal and maternal health indicators is globally used as a marker of the effectiveness of health services in a country⁽¹⁾. These periods require special attention from public policies and health professionals, given the vulnerability to which the fetus and the neonate are exposed, in the face of obstetric pathologies capable of influencing neonatal health, such as severe preeclampsia (pré-eclâmpsia grave – PEG).

Since the evolution of preeclampsia is related to worse maternal-fetal prognoses, knowledge on the consequences of the pathology for the unborn child becomes relevant, in order to draw the attention of professionals, physicians and nurses, regarding the importance of their early identification during prenatal care, as well as their adequate post-diagnosis management⁽²⁾. Likewise, the need for investments in strategies to promote, prevent and assist women with hypertensive syndromes is evidenced⁽³⁾.

In view of the problems raised, this study presents the following research question: What are the factors associated with the neonatal outcomes of pregnant women diagnosed with PEG?

AIMS

Overall objective: to analyze the factors associated with the neonatal outcomes of pregnant women diagnosed with PEG.

Specific objectives: to investigate the neonatal outcomes of pregnant women diagnosed with PEG; to characterize the socio-obstetric profile of pregnant women diagnosed with PEG, and; to identify the fac-

tors associated with the neonatal outcomes of pregnant women diagnosed with PEG.

METHOD

This is a cross-sectional and analytical study developed at the Januário Cicco Maternity School (Maternidade Escola Januário Cicco - MEJC), specifically at the Maternal Intensive Care Unit (Unidade de Terapia Intensiva Materna – UTIM) and at the Medical Archives Service (Serviço de Arquivos Médicos – SAME), located in the city of Natal, Rio Grande do Norte, Brazil. Fetal/neonatal data were collected from pregnant women diagnosed with PEG. These pregnant women were admitted to the UTIM from September 2016 to September 2017, obtaining a total sample of 157 medical charts. A temporal cut was chosen because PEG presented a low incidence, a fact that makes it difficult to collect a sample number based on the value of its prevalence.

The fetuses/neonates of pregnant women diagnosed with PEG, with delivery between 23 and 42 weeks of gestation, regardless of the route (vaginal, forceps or cesarean section) and fetal vitality (intrauterine fetal death, live birth or neonatal death) were included in the study. Fetuses of pregnant women admitted to the UTIM with diagnosis of other hypertensive syndromes, pregnant women of twins, fetuses of pregnant women who had undergone abortion (spontaneous or induced interruption of pregnancy up to the 22nd week) and pregnant women whose records were not located or were incomplete, inconclusive or illegible were excluded.

The independent variables corresponded to the socioeconomic and obstetric characteristics of the pregnant women diagnosed with PEG, such as age, schooling, marital status, income, race, type of previous delivery, fetal vitality of last childbirth, gestational age at admission, number of prenatal consultations, weight at the last visit, smoking, alcohol or other drug use, current delivery method, and therapy used to treat gestational hypertension during prenatal and PEG. The following conditions are considered as dependent variables: fetal vitality, gestational age (GA) of the newborn, sex of the fetus/neonate, eradication at 1 and 5 minutes of life, need for neonatal resuscitation, birth weight, admission to the UTIM and early neonatal morbidity.

Data were collected through a three--axis structured instrument. The first contains questions regarding the sociodemographic characteristics and obstetric history of pregnant women; the second is composed of data related to the current obstetric history; and the third by the dependent variables of the study.

For the descriptive analysis, the frequency and percentage values of the nominal variables were used, whereas for the inferential analysis the results were presented by mean values and standard deviation. Perinatal outcomes will be associated with data on the socio-obstetric profile using $\chi 2$ (chi-square) or Fischer, Mann-whithey, Kruskal Wallis or T student, depending on the nature and normality of the data. A 95% confidence interval, a statistical significance level of 5% for all tests performed, and p value equal to or lower than 0.05 were considered.

The study follows the recommendations of Resolution 466/2012 of the National Health Council (NHC) and its complementary. The pre-project had approved opinion with opinion No. 2,013,851 and CAAE 64881817.5.0000.5537.

EXPECTED RESULTS

It is expected that the results will produce evidence that indicates the repercussions of PEG on perinatal outcomes, such as perinatal mortality, prematurity, low birth weight, among others, in order to demonstrate its impact as a public health problem and to support actions that minimize these diseases and, consequently, the perinatal and maternal morbidity and mortality.

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Received: 09/29/2017 Revised: 09/21/2018 Approved: 09/24/2018