WOMEN WITH HYPERTENSIVE SYNDROMES
MULHERES COM SÍNDROMES HIPERTENSIVAS
MUJERES CON SÍNDROMES HIPERTENSIVAS

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ABSTRACT

Objective: to describe the obstetric profile of women with hypertensive syndrome. **Method:** a quantitative, exploratory, descriptive, retrospective and documental study, with 196 charts of patients with hypertensive syndromes, from November 2016 to May 2017. A form was used, to collect the data. Then they were grouped and organized into an Excel spreadsheet and then converted to a table. **Results:** the predominant age group was between 16 and 30 years old, with 68.88%; in relation to the number of births, 55.61% were multiparous; about prenatal follow-up, 87.76% of pregnant women had more than six consultations; 89.80% of pregnancies were single and 10.20% of twins; 57.27% of the newborns were male and 42.73% were female, presenting 0.45% of newborns with APGAR lower than seven in the fifth minute of life and 99.55% with APGAR greater than seven. **Conclusion:** the study was necessary to identify risk factors that help in the qualification of women's care. **Descriptors:** Pregnancy; Health Profile; Preeclampsia; Eclampsia; HELLP Syndrome; Nursing.

RESUMO

Objetivo: descrever o perfil obstétrico de mulheres com síndrome hipertensiva. **Método:** estudo quantitativo, exploratório, descritivo, retrospectivo e de delineamento documental, com 196 prontuários de pacientes com síndromes hipertensivas, no período de novembro de 2016 a maio de 2017. Para a coleta dos dados, foi utilizado um formulário. Em seguida, eles foram agrupados e organizados em uma planilha Excel e, posteriormente, convertidos em tabela. **Resultados:** a faixa etária predominante das pacientes estava entre os 16 aos 30 anos, com 68,88%; em relação ao número de partos, 55,61% eram multiparas; sobre o acompanhamento do pré-natal, 87,76% das gestantes tiveram acima de seis consultas; 89,80% das gestações eram únicas e 10,20%, gemelares; 57,27% dos recém-nascidos eram do sexo masculino e 42,73% eram do sexo feminino, apresentando 0,45% dos recém-nascidos com APGAR menor que sete no quinto minuto de vida e 99,55% com APGAR maior que sete. **Conclusão:** o estudo mostrou-se necessário para identificar fatores de risco que auxiliam na qualificação da assistência à mulher. **Descritores:** Gestação; Perfil de saúde; Pré-eclâmpsia; Eclâmpsia; Síndrome HELLP; Enfermagem.

RESUMEN

Objetivo: describir el perfil obstétrico de mujeres con síndrome hipertensivo. **Método:** estudio cuantitativo, exploratorio, descriptivo, retrospectivo y de delineamiento documental, con 196 prontuarios de pacientes con síndromes hipertensivos, en el período de noviembre de 2016 a mayo de 2017. Para la recolección de datos, se utilizó un formulario. A continuación, ellos fueron agrupados y organizados en una hoja de cálculo de Excel y, posteriormente, convertidos en la tabla. **Resultados:** el grupo de edad predominante de las pacientes estaba entre los 16 a los 30 años, con el 68,88%; en relación al número de partos, el 55,61% eran multiparas; sobre el seguimiento del prenatal, el 87,76% de las gestantes tuvieron más de seis consultas; El 89,80% de las gestaciones eran únicas y el 10,20%, gemelares; El 57,27% de los recién nacidos eran del sexo masculino y el 42,73% eran del sexo femenino, presentando el 0,45% de los recién nacidos con APGAR menor que siete en el quinto minuto de vida y el 99,55% com APGAR mayor que siete. **Conclusión:** el estudio se mostró necesario para identificar factores de riesgo que auxilian en la calificación de la asistencia a la mujer. **Descriptores:** Embarazo; Perfil de Salud; Pre-Eclampsia; Eclampsia; Síndrome HELLP; Enfermera.

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INTRODUCTION

Gestation is a physiological phenomenon, usually a healthy life experience for women. However, in certain situations, with defined risks, there may be variations that favor unfavorable outcomes for the mother and fetus.¹ Thus, the World Health Organization (WHO) determines maternal death as that which occurred during pregnancy or up to 42 days after regardless of location or duration.² During the year 2015, around 300 thousand maternal deaths occurred worldwide, most of them in sub-Saharan Africa.³

Similarly, in the database of the Department of Informatics of the Unified Health System (DATASUS), during the years 1996 to 2012, 28,713 maternal deaths were identified, the main cause being Pregnancy-Specific Hypertensive Syndrome (PSHS).⁴ It should be noted that 10% of all pregnancies in the world present some type of hypertensive syndrome such as pre-eclampsia, eclampsia, chronic hypertension or gestational hypertension.²

Thus, hypertensive syndromes can present as chronic hypertension, when their occurrence precedes gestation or presents before 20 weeks gestation; pre-eclampsia, when hypertension and proteinuria occur after the 20th week; eclampsia, characterized by tonic-clonic seizures or coma in a woman with no epilepsy or other convulsive causes; pre-eclampsia with overlapping hypertension, defined as pre-eclampsia in chronic hypertensive or with renal disease and gestational hypertension without proteinuria.^{1,5}

In addition to these types, the hypertensive syndrome may present as a multisystem clinical manifestation, involving several organs, in the form of HELLP syndrome, derived from the English Hemolysis, Elevated Liver enzymes. Low Platelets. It is characterized by hemolysis, thrombocytopenia and elevation of liver enzymes and can affect approximately 4-12% of cases of severe preeclampsia, with a high maternal and perinatal mortality of 24% and 40% respectively.⁶

In this context, hypertensive syndromes are among the main causes of maternal death, and the reduction of maternal mortality by 75%, by the year 2015, was one of the objectives established in the Millennium Development Goals, which has not materialized in several countries, among them, Brazil.⁴

Pre-eclampsia is considered a major cause of maternal and perinatal morbidity and

mortality, complicating about 5-7% of pregnancies worldwide, with an increased risk of eclampsia, pulmonary edema, stroke, renal and hepatic dysfunction, and death, in the absence of interventions.^{7,8} In Brazil, it reaches incidence levels of 7.5%.⁶

In addition, the highest number of cases of maternal near miss, occur in hypertensive syndromes, as documented in a study conducted in an intensive care unit (ICU) of Recife-PE hospital, which presented a rate of 62.7%, 42.3% of severe preeclampsia, 13.7% of eclampsia, 6.7% of chronic hypertension aggravated during pregnancy and 41.2% of HELLP syndrome.⁹

In addition to maternal complications, adverse events to the fetus, such as prematurity, fetal anomalies, decreased intrauterine growth, intrauterine fetal death and small gestational age (SGA) are described as being associated with pre-eclamptic conditions.¹⁰ In the meantime, several risk factors associated with PSHS have been described in the literature, such as primiparity, extremes of reproductive age, inadequate pre-gestational or gestational nutritional status, inadequate weight gain, unfavorable socioeconomic conditions, presence of chronic diseases, and family and/or personal history of hypertension, among others. According to some authors, the incidence of the disease deserves better investigation, considering the multiplicity of factors that modify their risk according to the region, since some factors are similar between populations and others are related to specific areas.¹¹

It should be noted that the Brazilian Ministry of Health highlights the need for an expanded approach and management of women's vulnerabilities in their health-disease process, with adequate access to health services and the availability of professional information. With this objective, the Stork Network Program was launched, consisting of a model of attention to childbirth, birth, growth and development of the child from zero to 24 months, ensuring access to pregnant women, foster care and resolution, through good practices and safety in childbirth and birth, aiming to reduce maternal and infant mortality, especially in its neonatal component.¹²

In this context, it is verified the importance of Nursing's performance in the prevention and early identification of hypertensive syndromes by means of the correct accompaniment of the pregnant woman and the quality in the accomplishment of prenatal consultations. Prenatal care

consists of a method of promoting maternal and fetal safety through the provision of educational and preventive means and the identification of complications.¹³ Even with the clinical setting, Nursing plays an essential role in an in-hospital environment, since it is in close contact with the patient, where she can manage the chosen ducts for each case, administering care processes and conducting clinical case management appropriately, such as the blood pressure curve, administration of the necessary antihypertensive agents, fetal heart rate (FHR) and early identification of changes and possible complications of the pathology, favoring interventions in advance.

OBJECTIVE

- To describe the obstetric profile of pregnant women with hypertensive syndromes treated in a hospital of high complexity in the State of Ceará.

METHOD

A quantitative, exploratory, descriptive, retrospective study and of documentary design, carried out in the obstetrics sector of a high complexity public hospital, located in the city of Sobral - CE. It should be noted that the hospital is a reference for 55 municipalities in the State, which encompasses five health regions. Data were collected through 196 records of patients admitted to the hospital with diagnosis of hypertensive syndrome between November

2016 and May 2017. For data collection, a form containing seven variables was used to guide the results and profile construction women's obstetrics. Data collection took place in June 2017.

Initially, 225 medical records were selected, however, 29 were excluded because they did not have all the required data required in the survey form, with the final selection of 196 records that composed the sample.

The data were organized in the Microsoft Excel program, grouped by the analyzed variables. The data collected by each variable was calculated, which allowed the construction of statistical data converted into a table. Subsequently, it was possible to compare them with the scientific literature in order to verify if the obstetric profile found was convergent or divergent from the existing studies.

The research followed the ethical norms according to Resolution 466/12 of the National Health Council (NHC) and was approved by the Research Ethics Committee of the Institute of Health and Hospital Management (IHHM), through Opinion 68415017.9.0000.5684.

RESULTS

The analysis of the sample allowed the construction of the following table:

Table 1. Variables identified in pregnant women with SHEG hospitalized at the obstetric clinic from November 2016 to May 2017, Sobral-CE, Brazil.

Age group		
Less than 15 years 2,04%	Age group Between 16 and 30 years 68.88%	Between 31 and 45 years 29.08%
Type of gestation		
Single Gestation 89.80%	Gemelar Gestation 10.20%	
Number of deliveries		
Primiparous 44.39%	Multiparous 55.61%	
N° of pregnancies		
1 Gestation 44.39%	2 to 4 Gestations 50.51%	Over 4 Gestations 5.10%
Sex of the newborn		
Male 57.27%	Female 42.73%	
Fetal vitality		
Apgar <7 in the 5th Minute 0.45%	Apgar> 7 in the 5th Minute 99.55%	
No. of prenatal visits		
0 to 3 Consultations 0.51%	4 to 6 Consultations 11.73%	Over 6 Consultations 87.76%

In the characterization of the sample as the first variable of the age group of women diagnosed with hypertensive syndromes in the analyzed period, it was observed that only

2.04% were under fifteen years, 68.88% were between 16 and 30 years and 29.08 % were between 31 and 45 years old. It is observed

the predominance of women of childbearing age and more prone to fertilization.

The second item analyzed is related to the obstetric history of the pregnant women investigated. Regarding the number of pregnancies, 44.39% were in their first gestation, 50.51% were between the second and the fourth gestation, and only 5.10% had had more than four pregnancies.

Next, the third item investigated addresses the obstetric history of pregnant women, related to the number of deliveries. When evaluating the charts, it was noticed that 44.39% were primiparous, that is, they were in their first gestation and, consequently, had no birth, and 55.61% were multiparous, since they had been through the experience of childbirth.

In relation to the number of single and multiple pregnancies, all multiple pregnancies were twins, totaling 220 births. The evaluation of this item allowed to discover that 89.80% of pregnancies were of the single type and 10.20% were twin pregnancies.

Regarding the sex of the neonate, a relative difference between the sexes was observed, where 57.27% of the newborns were males and 42.73% were females and, in the neonatal vitality variable, according to the index of APGAR, it was possible to obtain that only 0.45% of the newborns presented APGAR less than seven in the fifth minute of life and that 99.55% presented APGAR greater than seven, in the fifth minute in deliveries of women with hypertensive syndromes.

Regarding Nursing care in the pregnancy cycle in relation to prenatal consultations, it was found that 0.51% of the women had had only one to three consultations. From four to six consultations, a total of 11.73% of the women were observed. The number of women who received more than six consultations during the prenatal period totaled 87.76% of the pregnant women investigated.

DISCUSSION

The results regarding the variable age range were divergent from many studies already performed, which point out the extremes of age as risk factors for the development of hypertensive syndromes in pregnant women.^{1,4,14} Thus, the age group is considered an associated risk factor but not less important for the onset of the syndrome in pregnant women, being more predisposing in women under the age of 18 (adolescents) 15 or older than 35 years.^{13,16}

According to research data, the age group with the highest peak incidence is between 16

and 30 years old, which would not be a risk factor for the onset of the disease according to the majority of authors.^{1,4,14}

Concomitantly, a study of 250 pregnant women carried out at a maternity hospital in the Northern Region of the State of Ceará, which evaluated factors associated with the delivery route in patients with preeclampsia, found a higher incidence of pre-eclampsia in the sample aged 20-34 years of age with 63.2%, expressing significant difference in relation to extremes of reproductive age. This study was convergent with the results obtained in this research.¹⁷

Therefore, the results found in this variable are not similar with other studies found in the scientific literature.^{1,4,14} As the etiology of PSHS is not fully understood, many risk factors are considered as triggers,¹⁵ but it is noticed, by the results, that this syndrome also affects the age group that is not considered risk.⁷

Regarding the number of pregnancies, the highest incidence of hypertensive syndromes observed in this study was concentrated in multigesters. It is evidenced that a greater number of pregnancies, mainly above five, is related to the increased risk of maternal morbidity and mortality.^{1,13} In addition, according to a study conducted in the United States, pre-eclamptic pregnancies increase the risk of developing gestations of the offspring, linked to the genetic inheritance of susceptibility.¹⁸

Correlatively, several authors emphasize primiparity as a risk factor for the development of PSHS,^{2,11,19} being an irreversible factor for the development of the syndrome.¹⁹ Some studies emphasize its association with the development of preeclampsia only, while others associate its presence with the onset also of gestational hypertension.²⁰⁻²¹ However, its manifestation is also evident in primiparous and multiparous pregnancies.¹

In this context, a study conducted in João Pessoa-PB ordered the incidence of types of hypertensive syndromes, with a higher frequency of severe preeclampsia (42%), followed by chronic hypertension with overexposed preeclampsia (22%), gestational hypertension (17%) and mild preeclampsia (15%).¹

Similarly, a survey of the incidence of preeclampsia conducted in Switzerland 2008-2011, with 1330 pregnant women, showed an increase in nulliparous women.¹⁶ This occurrence would be justified because the maternal organism was in contact with fetal antigens for the first time, which would cause

an exacerbated effect on immunological reactions resulting from low production of blocking antibodies.¹⁷

Regarding this study, the result found differs from most of the scientific literature, since the incidence of SHEG was higher in multiparous than in primiparous, with a considerable difference of more than 10%.

Regarding the way of delivery, in the study, all the patients investigated evolved to cesarean delivery. Some studies indicate that the most common type of delivery, in cases of hypertensive syndromes, is emergency cesarean section.^{11,17} In a study conducted in Campina Grande, PB, about 68.6% of the deliveries were delivered by caesarean section and 31.4% by vaginal route, corroborating with the data of this research.¹⁷

However, a study conducted in a teaching hospital in the Paulista Interior showed a higher prevalence of adverse events such as postpartum hemorrhage in cesarean sections.⁴ Another study emphasized other complications in cesarean delivery such as infections, hypertensive peaks, longer hospitalization, hemorrhagic manifestations.¹¹ Regarding the way of delivery, evidence emphasizes that the cesarean route will not always be specific for high-risk pregnancies such as hypertensive syndromes.^{11,22-23}

In the variable on the number of prenatal consultations, the results obtained mean that most of the pregnant women presented more than six consultations, opening space for reflections about the data. A study conducted in Maceió-AL revealed the relevance of prenatal and multiprofessional follow-up to identify inherent risks, treatment of diseases and reduction of maternal and neonatal morbidity and mortality.¹¹

At the same time, a survey carried out in a teaching hospital in São Paulo, in 2012, with women with PSHS brought a variation from two to 16 consultations, with a mean of 9.15 to 3.67,⁴ showing a considerable variation in the number of prenatal consultations.

In this context, prenatal care consists of a fundamental strategy for the prevention and treatment of diseases and care during pregnancy, delivery and puerperium, with a positive impact on maternal and neonatal indicators; this situation involves access to quality health services, skilled care, basic, outpatient and high-risk actions, as well as avoiding unavoidable interventions.¹³ Thus, humanized, sensitive and effective knowledge, demonstrating support and guidance for pregnant women and the family,

is essential to assist in the progress of treatment.¹

Regarding the type of gestation, it is noticed that the percentage of twin pregnancies, even though well below the number of single pregnancies, is a very expressive quantity. The literature reports that twin pregnancy is a risk factor for the development of the hypertensive syndrome, since it is related to the increase in the trophoblastic mass, which is considered a relevant factor for the onset of the pathophysiology.²⁴

Although multiple pregnancies are more prone to the development of PSHS, it is important to identify other associated factors that contribute to its development such as the previous or family history of hypertensive syndrome, chronic hypertension, diabetes mellitus, primiparity, gestation molar ratio, fetal hydrops and new paternity.¹³

Regarding the sex of the fetus, no studies are known that indicate its influence on the pathological process of the hypertensive syndrome. The pathology still has unknown causes, and some processes are considered as triggering factors mainly related to genetic polymorphisms, immunological maladaptation and poor placental implantation.¹⁸

However, a study carried out in 2012 on fetal deaths and male sex in the Mortality Information System (MIS) highlighted the male fragility related to the male innate vulnerability theory, including its association in the response to stressors and release of corticosteroids and related to histocompatibility to maternal antigens.²⁵

Finally, in the variable referring to the index of APGAR of the neonate, despite the seriousness of the hypertensive syndrome and its possible complications for the mother and the baby, in the sample observed there were no considerable cases of impairment of the health of the NB, since the great majority was born with good evaluation of the general condition. The good vitality presented by the neonates in this research reveals that, despite the hypertensive syndrome in pregnant women, the pathology was well conducted by attending professionals at the time of delivery, preventing or minimizing the resulting systemic complications, without affecting the well-being of the newborn.

In parallel, a survey conducted in Macéio-AL in 2014, obtained similar results, with APGAR indexes at the 1st and 5th minutes above the cutoff point. However, the same study emphasizes the increased risk of low

APGAR in patients with preeclampsia, for example.¹¹

Similarly, a cohort study developed for the prediction of risk of perinatal death from hypertensive syndromes, developed from 2008 to 2012, listed 110 perinatal deaths out of a total of 1688 births, related to maternal factors such as gestational age of hospital admission, pressure systolic and diastolic, proteinuria and symptoms of complications.¹⁴

It is important to conduct more in-depth studies, with a larger sample and for a longer time, to discover the profile of women more subject to pathology, since it is observed that risk factors change depending on population, geographic region, ethnicity, among others.¹¹

CONCLUSION

The realization of this research made it possible to gather theoretical subsidies that add value to the studies carried out, reinforcing previously researched data. However, some variables found diverged from other studies, such as the predominant age group of pregnant women with PSHS and primiparity as a risk factor. These results are not contradictory to the existing research, but also cannot be disregarded, and external factors such as geographic region, ethnicity, study scenario, sample and collection which may have made it possible to analyze differently existing subsidies.

This study reinforces the importance of the construction of the obstetric profile of pregnant women with PSHS, allowing professionals to be more attentive to the predisposing and triggering signs of the pathologies, so that they can be identified early and conducted more precisely, minimizing or avoiding complications maternal and neonatal.

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