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SHORT COMMUNICATION

Impact of HELLP Syndrome on Maternal Mortality and the Role of Nursing in Peru

Impacto del Síndrome de HELLP en la Mortalidad Materna y el Rol de la Enfermería en Perú

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ABSTRACT

In 2022, hypertensive disorders of pregnancy continued to be a global concern, affecting 10% of pregnant women, while HELLP syndrome (HS) complicated between 0.1% and 0.9% of pregnancies. In Latin America, approximately 27.6% of women with preeclampsia developed HS, with a maternal mortality rate of 14%. In Peru, maternal mortality increased significantly compared to previous years, with hypertensive disorders accounting for 30% of cases. HELLP syndrome, characterized by hemolysis, elevated liver enzymes, and thrombocytopenia, caused severe complications such as postpartum hemorrhage, pulmonary edema, and death. In rural areas of Peru, the lack of resources and specialized personnel hindered the timely management of this condition, exacerbating the risks for patients. The strategies implemented included improving prenatal care and training healthcare professionals. Nurses played a crucial role in the early identification of risk factors, continuous monitoring, and interdisciplinary management of critical patients. Additionally, the nursing care process ensured comprehensive care based on scientific and humanistic principles. Despite these efforts, inequity in access to healthcare services persisted, especially in remote areas. The need for public policies to strengthen healthcare infrastructure and promote equity was evident, being key to reducing maternal complications and improving health indicators in the country.

Keywords: HELLP Syndrome; Maternal Mortality; Obstetric Nursing; Gestational Complications; Comprehensive Care.

RESUMEN

En el año 2022, los estados hipertensivos del embarazo continuaron siendo una preocupación global, afectando al 10% de las gestantes, mientras que el síndrome de HELLP (SH) complicó entre el 0.1% y el

0.9% de los embarazos. En América Latina, cerca del 27.6% de las mujeres con preeclampsia desarrollaron SH, presentando una mortalidad materna del 14%. En Perú, la mortalidad materna aumentó significativamente en comparación con años anteriores, siendo los trastornos hipertensivos responsables del 30% de los casos. El síndrome de HELLP, caracterizado por hemólisis, elevación de enzimas hepáticas y plaquetopenia, provocó complicaciones graves como hemorragias postparto, edema pulmonar y muerte. En áreas rurales de Perú, la falta de recursos y personal especializado dificultó el manejo oportuno de esta condición, exacerbando los riesgos para las pacientes.

Las estrategias implementadas incluyeron la mejora del control prenatal y la capacitación de los profesionales de salud. La enfermera desempeñó un rol esencial en la identificación temprana de factores de riesgo, monitoreo continuo y manejo interdisciplinario de pacientes críticas. Además, el proceso de atención de enfermería permitió garantizar una atención integral basada en principios científicos y humanísticos. A pesar de estos esfuerzos, la inequidad en el acceso a servicios de salud persistió, especialmente en zonas alejadas. La necesidad de políticas públicas que fortalezcan la infraestructura sanitaria y promuevan la equidad fue evidente, siendo clave para reducir las complicaciones maternas y mejorar los indicadores de salud en el país.

Palabras clave: Síndrome de HELLP; Mortalidad materna; Enfermería obstétrica; Complicaciones gestacionales; Atención integral.

Worldwide, hypertensive states of pregnancy affect 10% of pregnancies, and between 0.1% and 0.9% develop HELLP syndrome (HS). This complication presents high rates of maternal mortality, between 1-24%, and fetal mortality, between 7-34%. In Latin America, about 27.6% of women with preeclampsia develop HS, with an estimated maternal mortality of 14%. In Peru, the picture is alarming; according to the Office of Epidemiology and Environmental Health, during 2021 and 2022, maternal mortality increased by 45% and 65% in 2019, with hypertensive disorders responsible for 30% of these deaths, followed by hemorrhage (21%). This context evidences the urgency of optimizing obstetric care in the country, especially in regions where access to health services remains limited.

HELLP syndrome, a multisystemic complication, is characterized by hemolysis, elevated liver enzymes, and plateletopenia. Symptoms include proteinuria, edema, nausea, vomiting, headache, abdominal pain, blurred vision, seizures, and bleeding, among others. Although its exact etiology is unknown, the influence of genetic, immunological, and environmental factors is recognized. In Peru, the lack of early detection and timely management aggravates the complications of this condition. These include postpartum hemorrhage, pulmonary edema, cerebral edema, subarachnoid hemorrhage, and, in severe cases, death. In rural regions, where gaps in care are more significant, these complications are even more frequent and devastating.

The management of SH and its complications requires a multidisciplinary approach. In Peru, access to procedures such as blood transfusions, blood products, and emergency surgery remains unequal. In severe cases, such as hemoperitoneum associated with retroperitoneal hematomas, surgical management includes evacuation of the hematoma, compression with compresses, embolization, and exploratory laparotomy. These complex procedures require specialized personnel, adequate resources, and prompt intervention, which is not always possible in rural areas or hospitals with limited resources.

In 2022, preventive measures implemented in Peru included strengthening prenatal care and continuous training of health personnel in managing obstetric emergencies. These strategies aim to reduce maternal morbidity and mortality rates by identifying risk factors early and providing specialized care. The role of the nursing professional is crucial in this context. In primary care, nurses play a key role in identifying pregnant women at risk of developing HS, ensuring that they are referred to specialized

centers promptly. In addition, in hospitals, nurses monitor patients, manage immediate interventions, and collaborate with other professionals to stabilize critically ill patients.

The specific case of a patient with SH in Peru illustrates the challenges of this management. An emergency cesarean section was necessary due to complications such as gestational hepatopathy, coagulation profile alterations, and cholestatic syndrome. Subsequently, the patient was transferred to the postpartum intensive care unit (PICU) and then to the obstetrics and gynecology service. However, she presented with hemoperitoneum requiring emergency surgery. This scenario highlights the need for continuous and specialized care. The care provided by the nursing staff included not only hemodynamic monitoring and transfusion management but also emotional and educational support, thus ensuring comprehensive care.

The challenges in rural Peru are amplified by the scarcity of infrastructure and trained personnel. Community nurses play a crucial role in promoting maternal health and preventing complications. Their work includes home visits, education on warning signs, and coordination with health services to ensure timely access to specialized care. However, increasing investment in specialized training and health infrastructure is imperative, particularly in remote regions.

In 2022, government efforts focused on reducing the gap in access to obstetric care by implementing strategies such as telemedicine for monitoring high-risk pregnancies, providing medical supplies in rural health centers, and training personnel in obstetric emergency management. However, the effectiveness of these measures is conditioned by factors such as continuity of funding, adequate supervision, and inter-institutional cooperation.

The nursing care process (NCP) is a fundamental tool for ensuring the quality of care in patients with SH. This process allows nurses to perform comprehensive assessments, identify potential complications, plan specific interventions, and continuously evaluate outcomes. In addition, it promotes a humanistic and comprehensive approach, ensuring that patients receive technical care and emotional and educational support.

In conclusion, HELLP syndrome represents a critical challenge for maternal health in Peru, particularly in the context of increased maternal mortality in 2022. Although preventive measures and strategies to strengthen obstetric care have been implemented, significant gaps in access to health services persist, especially in rural areas. The performance of the nursing professional, with his or her technical training and humanistic approach, is key to ensuring comprehensive and quality care. However, to achieve a sustainable impact, it is essential that these interventions are complemented by public policies that strengthen equity in access to health care, promote continuing education, and ensure an adequate distribution of resources throughout Peru. Only through a coordinated effort between the health, education, and government sectors will it be possible to reduce the burden of this condition and improve maternal health in the country.

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FINANCING

None.

CONFLICT OF INTEREST

None.