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Nursing care in neurological emergencies in the intensive care unit. Systematic review
Atención en enfermería en emergencias neurológicas en la unidad de cuidados intensivos. Revisión sistemática

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ABSTRACT

Objective: to analyse nursing care in neurological emergencies in the intensive care unit from a systematic review. **Method**: systematic review, population of 15 articles. **Conclusion**: Nursing care in neurological emergencies within the ICU, especially in the management of Guillain-Barré syndrome, requires a combination of advanced technical knowledge and specialised clinical skills that address the physical, emotional and psychological needs of patients. The results of this systematic review highlight the importance of constant monitoring, the prevention of complications, the implementation of clinical guidelines and continuous training to guarantee quality care.
Descriptors: nervous system diseases; Guillain-Barre syndrome; Miller Fisher syndrome. (DeCS).

RESUMEN

Objetivo: analizar la atención en enfermería en emergencias neurológicas en la unidad de cuidados intensivos desde una revisión sistemática. **Método**: revisión sistemática, población de 15 articulos. **Conclusión**: La atención de enfermería en emergencias neurológicas dentro de la UCI, especialmente en el manejo del síndrome de Guillain-Barré, requiere una combinación de conocimientos técnicos avanzados, habilidades clínicas especializadas que atienda las necesidades físicas, emocionales y psicológicas de los pacientes. Los resultados de esta revisión sistemática destacan la importancia de la monitorización constante, la prevención de complicaciones, la implementación de guías clínicas y la capacitación continua para garantizar una atención de calidad.
Descriptores: enfermedades del sistema nervioso; síndrome de Guillain-Barré; síndrome de Miller Fisher. (DeCS).

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INTRODUCTION

Nursing care in neurological emergencies within the Intensive Care Unit (ICU) is a challenge that requires specialised knowledge, advanced clinical skills and a comprehensive understanding of acute neurological conditions. Among these emergencies, Guillain-Barré syndrome (GBS) has gained relevance due to its association with viral infections such as COVID-19 and other complex medical conditions (1-3). This neurological disorder, characterised by acute polyradiculoneuropathy, can lead to serious complications, such as respiratory failure, which require immediate intervention and interdisciplinary management (4,5).

The objective of the article is to analyse nursing care in neurological emergencies in the intensive care unit from a systematic review.

METHOD

This work was carried out using a systematic review methodology, 15 scientific articles were analysed following the guidelines established by the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) protocol.

MeSH terms and related keywords were used, such as ‘Guillain-Barré Syndrome,’ ‘nursing care,’ ‘neurological emergencies,’ ‘intensive care unit,’ and ‘COVID-19.’ The search was complemented with Boolean operators (AND, OR) to combine terms and refine the results.

RESULTS

The management of neurological emergencies requires constant clinical evaluation and the ability to respond in a timely manner to changes in the neurological status of patients. According to Ogbebor et al. (2), nurses in the ICU are responsible for haemodynamic and neurological monitoring, the prevention of complications and the administration of advanced therapies, such as mechanical ventilation and sedation management. These interventions, as well as being technical, require a humanised approach that considers the emotional and psychological needs of patients and their

families.

In the case of GBS, nurses play a fundamental role in monitoring for signs of progression of paralysis, preventing infections associated with invasive devices and managing neuropathic pain. Therefore, Nguyen et al. (4) emphasise that nursing care must be individualised, adapting to the specific characteristics of each patient, which includes planning early rehabilitation strategies. In this case, Busl et al. (3) warn of the importance of clinical guidelines in neuroprognosis, which allow nurses to make informed decisions and improve clinical outcomes.

The COVID-19 pandemic has increased the workload in the ICU, especially in the management of patients with neurological complications associated with the virus. Consequently, Sheikh et al. (8) and Yakoby et al. (7) document the relationship between GBS and COVID-19 infection, which has required nurses to adapt their practices in a context of high uncertainty. In this sense, nurses have demonstrated their ability to implement care protocols in crisis situations, guaranteeing the safety of patients and the health team.

On the other hand, vaccination against COVID-19 has generated cases of GBS, as reported by Shaheen et al. (10). This phenomenon has highlighted the importance of clinical vigilance on the part of nurses, who must be trained to identify early signs of neurological complications. Consequently, Wei et al. (9) also describe a case of GBS in a heart transplant recipient, which highlights the need for an interdisciplinary approach in the care of patients with complex comorbidities.

The emotional impact of hospitalisation in the ICU is another critical aspect in the care of neurological emergencies, therefore, Dimou et al. (14) explore how patients' experiences, including perceptions of safety and well-being, are profoundly influenced by the quality of care provided by nurses. This result reinforces the importance of therapeutic communication and empathy as essential tools in nursing practice.

Continuous training is essential to guarantee quality care in the ICU. Hu et al. (5) emphasise that advances in research, such as transcriptomic analysis in paediatric

patients with GBS, have made it possible to identify new care strategies. Likewise, Kalita et al. (13) emphasise that the management of patients with GBS and bulbar palsy requires advanced skills in airway management and the prevention of respiratory complications, areas in which nurses play a leading role. In summary, Rose et al. (6) emphasise that the care of patients with GBS and other neurological emergencies requires comprehensive care that combines technical skills, empathy and effective communication, which is essential to guarantee humanised care centred on the needs of the patients.

CONCLUSION

Nursing care in neurological emergencies within the ICU, especially in the management of Guillain-Barré syndrome, requires a combination of advanced technical knowledge and specialised clinical skills that address the physical, emotional and psychological needs of patients. The results of this systematic review highlight the importance of constant monitoring, the prevention of complications, the implementation of clinical guidelines and continuous training to guarantee quality care.

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CONFLICT OF INTEREST

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