



## Challenges in the clinical practice of intensive care nursing. Systematic review

### Retos en la práctica clínica de cuidados intensivos en enfermería. Revisión sistemática

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#### ABSTRACT

**Objective:** to analyse the challenges in clinical intensive care nursing practice through a systematic review. **Method:** systematic review, population of 15 articles. **Conclusion:** the analysis of the main challenges in clinical intensive care nursing practice highlights critical issues that affect both the quality of care and the well-being of staff. Among the most relevant are work overload, burnout syndrome and the omission of essential care, problems that derive from the high complexity of the environment and the insufficiency of resources. Likewise, frequent complications such as delirium and acquired weakness in the ICU require evidence-based interventions and greater staff training. **Descriptors:** intensive care units; intensive care units neonatal; critical illness. (DeCS).

#### RESUMEN

**Objetivo:** analizar los retos en la práctica clínica de cuidados intensivos en enfermería desde una revisión sistemática. **Método:** revisión sistemática, población de 15 artículos. **Conclusión:** El análisis de los principales retos en la práctica clínica de cuidados intensivos en enfermería evidencia desafíos críticos que afectan tanto la calidad del cuidado como el bienestar del personal. Entre los más relevantes se encuentran la sobrecarga laboral, el síndrome de burnout y la omisión de cuidados esenciales, problemas que derivan de la alta complejidad del entorno y la insuficiencia de recursos. Asimismo, complicaciones frecuentes como el delirium y la debilidad adquirida en la UCI requieren intervenciones basadas en evidencia y una mayor capacitación del personal. **Descriptor:** unidades de cuidados intensivos; unidades de cuidado intensivo neonatal; enfermedad crítica. (DeCS).

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Original brief



## INTRODUCTION

Nursing in intensive care units (ICUs) faces complex challenges arising from the high criticality of the patients and the demands inherent to the clinical environment. Nursing professionals play an essential role in the comprehensive care of critical patients, taking on responsibilities that include the prevention of complications such as delirium and ICU-acquired weakness, the implementation of specialised care and the management of safe transitions between the ICU and other hospital units (1,2,3,5).

However, these functions are conditioned by factors such as work overload, insufficient resources and the need for continuous training, which can lead to problems such as burnout syndrome, job dissatisfaction and the omission of essential care (1,12,15). Therefore, the complexity of care in the ICU not only requires advanced technical skills, but also emotional and ethical competencies to address the needs of patients and their families, which increases the pressure on nursing staff (4,7).

The objective is to analyse the challenges in the clinical practice of intensive care nursing from a systematic review.

## METHOD

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

The search was carried out in recognised scientific databases, such as PubMed, Scopus, CINAHL and Web of Science, using MeSH terms and keywords related to 'intensive care nursing', 'challenges in clinical practice', 'burnout', 'delirium', 'ICU-acquired weakness', 'omission of care' and 'intervention strategies'. Filters were applied to limit the results to studies published in English and Spanish between January 2020 and October 2024.



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## **RESULTS**

Clinical practice in intensive care nursing faces numerous challenges that affect both the quality of care provided to patients and the well-being of nursing staff. One of the main problems is burnout syndrome and job dissatisfaction among nurses working in intensive care units (ICUs). According to Quesada-Puga et al. (1), these conditions not only affect the mental health of professionals, but also have an impact on the quality of care received by patients. For this reason, it is essential to implement strategies that reduce work-related stress and promote a healthier and more satisfying work environment.

Another important challenge is the management of delirium in critically ill patients. Gómez Tovar & Henao Castaño (2) comment that nursing interventions can be effective in reducing this condition, but they warn that the lack of standardised protocols and the variability in staff training make its application difficult. Likewise, Alcaraz & Ángeles Saz Roy (13) mention that adequate management of delirium begins with an accurate assessment, which highlights the need for accessible and reliable diagnostic tools for nursing staff.

Weakness acquired in the ICU is another problem that requires attention. Xu et al. (3) explain that this complication, which affects patient recovery, demands a multidisciplinary approach and greater training of nursing staff to prevent it. Evidence-based interventions are essential to address this problem and improve clinical outcomes. On the other hand, the complexity of care in the ICU is also associated with an increased risk of adverse events, especially during patient transitions to other hospital units. According to Güven et al. (5), improving communication and ensuring continuity of care are key aspects in reducing these risks. In this sense, excessive workload also plays an important role. Stojakovic et al. (12) and Vincelette et al. (15) point out that this overload contributes to the omission of essential care in the ICU, while the validation of tools such as the ICU-ONC instrument can be useful for identifying areas for improvement and optimising



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the allocation of resources.

Specific interventions and continuous education are fundamental to improving clinical practice. Li et al. (8) highlight the effectiveness of the anchored instruction method in training nursing staff in cardiac surgery intensive care units, while Zhang et al. (9) demonstrate that cluster care is effective in preventing complications such as pressure ulcers. However, the implementation of these strategies requires institutional commitment and constant staff training.

The emotional and ethical aspects of care also represent a significant challenge. Piredda et al. (4) explore the experiences of nurses caring for highly dependent patients, highlighting the ethical dilemmas and emotional burden they face. In this sense, it is important to create spaces for emotional support and ethical reflection for nursing staff, in this order, Yan et al. (11) analyse the care of patients with neurodegenerative diseases, such as Alzheimer's, in the ICU, which adds a layer of complexity to care due to the specific needs of these patients.

Innovations in clinical practice have also proven to be effective tools for improving outcomes, while Bosco et al. (7) highlight the use of diaries written by nurses as a strategy for improving the patient experience and facilitating communication with their families. For their part, Wenger et al. (14) present a protocol based on pain management, breathing and coughing, which has been shown to reduce unplanned admissions in patients with traumatic rib fractures. These innovative practices must be promoted and adapted to different contexts to maximise their impact.

Finally, workload and documentation in the ICU also represent a significant challenge. Choi et al. (10) developed a mapping table for nursing notes based on the concerns of professionals, which could facilitate documentation and improve the efficiency of care. Likewise, Altimier (6) emphasises the importance of clinical concepts in neonatal nursing, an area that also faces specific challenges within intensive care units.



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## **CONCLUSION**

An analysis of the main challenges in the clinical practice of intensive care nursing reveals critical issues that affect both the quality of care and the well-being of staff. Among the most relevant are work overload, burnout syndrome and the omission of essential care, problems that stem from the high complexity of the environment and insufficient resources. Likewise, frequent complications such as delirium and acquired weakness in the ICU require evidence-based interventions and greater staff training. Insecure transitions between the ICU and other hospital units, together with the lack of standardised protocols, increase the risk of adverse events, which highlights the need to improve continuity of care.

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## **CONFLICT OF INTEREST**

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