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Non-beneficial Interventions in Palliative Patients Treated at Intensive Care Units in South America: A Systematic Review

Intervenciones no beneficiosas en pacientes paliativos asistidos en unidades de cuidados intensivos en Sudamérica: artículo de revisión

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ABSTRACT

Introduction: Technological advances in critical care medicine have made it possible to prolong the lives of patients with serious illnesses, but they have also raised ethical dilemmas concerning the use of therapeutic interventions which, in the context of advanced or terminal illness, may be considered futile. In this scenario, palliative care has emerged as an alternative aimed at ensuring the dignity and quality of life of patients and their families. **Objective:** Analyze recent scientific literature on the approach to palliative care and non-beneficial therapeutic interventions at intensive care units in South America. **Method:** A review of peer-reviewed scientific articles published in the last five years, in Spanish and English, was conducted. The SciELO, Redalyc, PubMed, Dialnet, and Google Scholar databases were explored and the following descriptors were used: "palliative care," "non-beneficial therapeutic interventions," "intensive care units," "adjustment of therapeutic effort," and "South America," combined with the Boolean operators "AND" and "OR." Theses, non-peer-reviewed literature, and publications prior to 2021 were excluded. **Results:** Findings show that the lack of institutional protocols, insufficient training in bioethics, and communication barriers hinder care centered on patient dignity. The main limitation of this review is the unequal availability of scientific literature in some countries, which may introduce geographic bias and limit the generalizability of the findings. **Conclusions:** Early integration of palliative care and the application of therapeutic effort adjustment are essential to humanize critical care in South America.

Keywords: PPalliative care, Intensive Care Units, Clinical ethics, Limitation of therapeutic effort.

RESUMEN

Introducción: Los avances tecnológicos en medicina crítica han permitido prolongar la vida de pacientes con enfermedades graves, aunque también han generado dilemas éticos sobre el uso de intervenciones terapéuticas que, en contextos de enfermedad avanzada o terminal, pueden ser considerados fútiles. En este escenario, los cuidados paliativos se consolidan como una alternativa que busca garantizar la dignidad y la calidad de vida de los pacientes y sus familias. **Objetivo:** Analizar la literatura científica reciente sobre el abordaje de los cuidados paliativos y las intervenciones terapéuticas no beneficiosas en unidades de cuidados intensivos de Sudamérica. **Método:** Se realizó una revisión de artículos científicos arbitrados, publicados en los últimos cinco años en español e inglés. La búsqueda se efectuó en SciELO, Redalyc, PubMed, Dialnet y Google Scholar. Se emplearon como descriptores: "cuidados paliativos", "intervenciones terapéuticas no beneficiosas", "unidades de cuidados intensivos", "adecuación del esfuerzo terapéutico" y "Sudamérica", combinados con operadores booleanos AND y OR. Se excluyeron tesis, literatura no arbitrada y publicaciones previas a 2021. **Resultados:** Los hallazgos evidenciaron que la ausencia de protocolos institucionales, la insuficiente formación en bioética y las barreras comunicacionales dificultan una atención centrada en la dignidad del paciente. Como limitación principal de la revisión, se identificó la disponibilidad desigual de literatura científica en algunos países, lo que podría introducir un sesgo geográfico

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y limitar la generalización de los hallazgos. **Conclusiones:** La integración temprana de los cuidados paliativos y la aplicación de la adecuación del esfuerzo terapéutico son indispensables para humanizar la atención crítica en Sudamérica.

Palabras clave: cuidados paliativos, unidades de cuidados intensivos, ética clínica, limitación del esfuerzo terapéutico.

1. Introduction

In recent decades, technological advances in critical care medicine have made it possible to prolong the lives of patients whose prognoses were previously considered incompatible with survival. However, these advances have also raised complex ethical dilemmas, especially concerning medical interventions that, in the context of advanced or terminal illness, may be seen as futile or disproportionate. These practices, known as non-beneficial therapeutic interventions, do not offer significant improvement in the patient's prognosis or quality of life, which creates conflicts with the principles of autonomy, beneficence, non-maleficence, and justice [1].

In this context, palliative care emerges as an ethical, humanistic, and scientific response. According to the World Health Organization, this approach aims at alleviating suffering and improving the quality of life for patients with incurable or terminal illnesses, as well as for their families [2]. However, in intensive care units (ICUs) in South America, there is a constant tension between using all available technological resources and the need to ensure the principles of therapeutic proportionality and human dignity, which generates ethical dilemmas and challenges in care practices [3,4].

Despite its international recognition as an essential component of healthcare, the integration of palliative care in South American ICUs continues to be limited and uneven. Recent reports from the Pan American Health Organization and various regional studies show that institutional, cultural, and educational factors hinder the adoption of practices that prioritize the integral well-being of patients at the end of life [5–9]. Additionally, healthcare professionals face clinical uncertainty, family pressures, fear of litigation, and a prevailing curative approach, all of which limit the implementation of shared and ethically justified decisions in critical contexts [10–12].

Evidence indicates that training in clinical ethics and the application of strategies such as limitation of therapeutic effort (LTE) are fundamental tools to prevent therapeutic obstinacy in critical care contexts [13,14]. Nevertheless, a better understanding of how these strategies are implemented in everyday practice is still needed, especially in public hospitals and among oncology patients or those with poor vital prognosis, where ethical decisions tend to be more complex and are influenced by structural and cultural limitations.

In light of this issue, the present study is justified by the need to understand and reflect upon non-beneficial therapeutic interventions in palliative patients treated at ICUs in South America. These practices not only undermine the quality of care but also conflict with fundamental principles of bioethics and the recognition of palliative care as a human right [15]. Similarly, the limited incorporation of palliative care in critical care settings in the region reflects a knowledge and action gap that, according to international recommendations, should be addressed through implementation guidelines adapted to the local context [16].

Furthermore, it is essential to promote patient- and family-centered care processes based on care ethics and bioethical reflection that integrate interdisciplinary support and respect for human dignity [17,18]. Training healthcare professionals in palliative care is key to ensuring clinical decisions grounded in evidence and in the patient's values [19]. In this regard, tools such as limitation of therapeutic effort (LTE) and do-not-resuscitate orders have been identified as ethically necessary resources to address end-of-life dilemmas [20].

This review aims at analyzing recent scientific literature on the approach to palliative care and non-beneficial therapeutic interventions at intensive care units in South America, identifying factors that contribute to the persistence of such interventions in palliative patients, exploring the degree of integration of palliative care into ICUs and its relationship with clinical decision-making, and examining the ethical and clinical competencies of healthcare professionals when facing end-of-life situations in critical care settings.

2. Methodology

A literature review with a qualitative approach was conducted.

2.1 Search strategy and study selection

The literature search was carried out in the PubMed, SciELO, Redalyc, Dialnet, and Google Scholar databases. The search strategy focused on combining the DeCS/MeSH descriptors “palliative care,” “intensive care units,” “appropriateness of therapeutic effort,” “non-beneficial therapeutic interventions,” and “South America,” using the Boolean operators “AND” and “OR.”

2.2 Inclusion criteria

- Peer-reviewed scientific articles published in the last five years.
- Original articles and articles relevant to the objective of the research.
- Literature in Spanish and English.

2.3 Exclusion criteria

- Theses, non-peer-reviewed works, or essays without a clear methodology.
- Articles focused on home or out-of-hospital palliative care.
- Publications prior to 2021.

2.4 Selection process

Initially, 94 potentially relevant articles were identified. After applying the inclusion and exclusion criteria, 30 articles that met the required thematic relevance were selected and are shown in a PRISMA flow diagram.

2.5 Methodological quality assessment instruments

To ensure the transparency and rigor of the review, the following instruments were applied:

- Enhancing Transparency in Reporting the Synthesis of Qualitative Research (ENTREQ) checklist: compliance with 18 out of 21 items.
- PRISMA 2020 checklist: compliance with 26 out of 27 items. No registration was performed in the International Prospective Register of Systematic Reviews (PROSPERO).
- Critical Appraisal Skills Programme (CASP): the ten criteria for qualitative studies were applied, it must comply with nine of them. The main limitation was the scarce explicit reflexivity of the researchers in some studies.

2.6 Analysis procedures

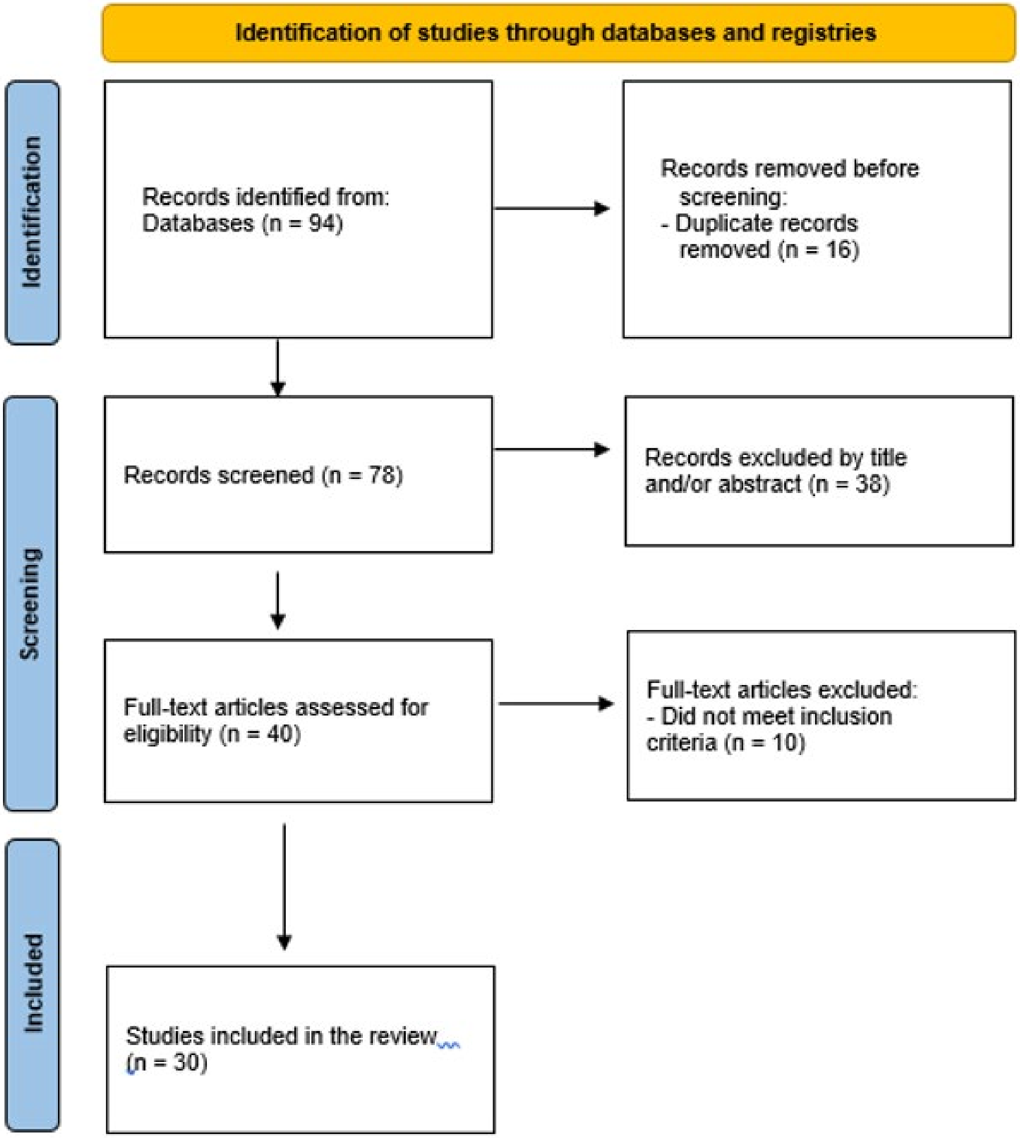
Studies underwent an individual critical appraisal using the qualitative version of CASP, taking into consideration design, data collection methods, clarity in presenting results, clinical implications, and methodological rigor.

These tools and procedures ensured the reproducibility, transparency, and methodological validity of this study. They also provided a solid foundation for analysis and formulation of clinical and ethical recommendations.

3. Results

Initially, 94 records were identified in the SciELO, Redalyc, PubMed, Dialnet, and Google Scholar databases. After removing 16 duplicates, 78 titles and abstracts were reviewed. Out of those, 40 were considered potentially relevant for full-text reading. Finally, 30 studies met the inclusion criteria and were incorporated into the qualitative synthesis of the review (Figure 1).

Figure 1. Flow diagram of article selection according to the PRISMA model.



Source: Own elaboration based on the PRISMA 2020 flowchart.

Findings were organized around the three specific objectives defined in the review, as detailed below.

3.1 Factors favoring the persistence of non-beneficial interventions in the ICU

Findings confirm that the persistence of non-beneficial interventions in critically ill patients is linked to multiple structural, cultural, and legal factors. Among the most significant are the absence of institutional protocols, family pressure, and fear of legal repercussions. These lead to the prolongation of life with invasive treatments in situations where recovery is not possible [1, 3, 4, 6, 7, 11-14, 21].

Additionally, other studies have highlighted the impact of the digitalization of medicine and the increasing technification of critical care, where dependence on medical devices reinforces the practice of therapeutic obstinacy [22]. Recent research also shows that the biomedical culture in Latin America, which is strongly cure-oriented, makes it difficult to recognize therapeutic futility and limits the development of ethical deliberation spaces [23-25].

The humanization of care, understood as a fundamental axis of clinical practice, is presented as a mechanism that can counteract therapeutic persistence by promoting empathetic communication and respect for patient dignity [26].

3.2 Degree of integration of palliative care in the ICU and its relationship to decision-making

The integration of palliative care into ICUs continues to be insufficient and uneven in Latin America. While countries such as Brazil and Chile have developed institutional initiatives that show a positive impact, in other cases, the lack of regulatory frameworks and structured programs is a significant barrier [2, 4, 5, 8, 9, 15, 16, 27, 28, 29].

When compared with other regions, it is evident that even in consolidated health systems, difficulties in integrating palliative programs early within critical care units persist, which results in organizational barriers and cultural resistance [30]. Interprofessional studies demonstrate that factors such as team coordination and ongoing education are key determinants in the quality of end-of-life decisions [31].

Likewise, humanization strategies applied in pediatric ICUs confirm that the incorporation of palliative care not only improves communication with families but also strengthens shared decision-making [32].

Clinical experiences in palliative extubation, in turn, show that this practice—in addition to its technical demands—requires ethical and structural support for its proper implementation [33].

All of this reinforces the need to consolidate regional policies that guarantee equitable and effective access to palliative care in critical care settings.

3.3 Ethical and clinical competencies of healthcare professionals at the end of life

Significant deficiencies were identified in the ethical, clinical, and communication training of healthcare personnel, which limits their ability to handle end-of-life situations at the ICU. Among the most frequent challenges, there are limited experience with the application of advanced directives, lack of training in the adjustment of therapeutic effort, and fear of moral deliberation [17-20, 23-26, 34, 35].

Moreover, it is necessary to strengthen empathetic communication, assertiveness, and interdisciplinary teamwork skills—areas that have been highlighted as essential to ensure humanized, person-centered care [27, 34, 36]. Recent studies show that deficits in bioethics and palliative care training in undergraduate and postgraduate programs limit professionals' ability to make decisions based on values and clinical evidence [37, 38].

Systematic reviews confirm that the implementation processes of palliative care in the ICU must include institutional protocols and training programs that strengthen clinical ethics and reduce variability in practice [30, 31, 39].

Literature also notes that clinical experiences in terminal weaning and extubation at ICUs in Europe and North America reinforce the importance of ethical and communication training as key elements in providing support to families [40, 41].

Taken together, the results show that therapeutic obstinacy in South American ICUs stems from both structural and cultural factors, while the limited integration of palliative care and the training gap in ethical-clinical competencies perpetuate this phenomenon.

This analysis reaffirms the need to reform critical care models towards approaches centered on dignity, ethical reflection, and the early integration of palliative care.

Table 1 presents the characteristics of the 30 studies sourced from five international and regional databases.

Table 1. Description of the main characteristics and results of the studies

Specific objective	Relevant findings	References
1. Factors that favor the persistence of non-beneficial interventions in the ICU.	Absence of protocols, fear of legal repercussions, family pressure, and biomedical hegemony make it difficult to recognize therapeutic futility and favor clinical obstinacy.	[1, 3, 4, 6, 7, 11-14, 21]
2. Degree of palliative care integration in the ICU and its relationship with decision-making.	Integration of palliative care in the ICU is low and uneven across the region; although there are successful experiences, regulatory gaps and institutional and cultural barriers that limit its consolidation persist.	[2, 4, 5, 8, 9, 15, 16, 27, 28, 29]
3. Ethical and clinical competencies of healthcare professionals at the end of life.	There are evident gaps in bioethics training, clinical communication, and the application of AET, which hinders shared and ethically grounded decision-making at the end of life.	[17-20, 23-26, 34, 35]

Source: Own elaboration.

4. Discussion

Our findings suggest that the persistence of non-beneficial interventions in South American ICUs is due to a complex interplay of structural, cultural, and educational factors. This scenario not only reflects shortcomings in protocols and clinical guidelines, but also a biomedical approach focused on prolonging life that hinders the recognition of therapeutic futility.

This panorama partially coincides with what has been described in Europe and North America, where ethical tensions have also been documented, but the implementation of standardized protocols, robust regulatory frameworks, and training programs has reduced variability and promoted AET practices [42, 43].

4.1 What do these findings mean in the South American context?

Results confirm that therapeutic obstinacy in South America is sustained by the absence of institutional guidelines, fear of legal consequences, and family pressure. This leads to fragmented decisions that are often far from therapeutic proportionality. From a bioethical perspective, this phenomenon reveals a tension between the principles of beneficence and non-maleficence, in which the continuation of invasive treatments can increase suffering without delivering real benefit [44].

In addition, the predominantly curative medical culture delays the recognition of the terminal nature of illness and limits the implementation of advanced care plans. Studies in long-term care settings have shown that decision planning, including advanced directives and early conversations, reduces family anxiety and enables choices consistent with the patient's values [45].

In this scenario, therapeutic obstinacy is upheld by the absence of institutional protocols, fear of legal repercussions, family pressure, and a biomedical culture centered on curing. This shows that the bioethical debate has not yet translated into clear policies or sufficient clinical training, resulting in fragmented decisions that are often far from therapeutic proportionality and patient dignity.

4.2 How does this compare to international experiences?

In Europe, the application of the European Society of Intensive Care Medicine's guidelines proposes clear algorithms for assessing futility, withdrawing life support, and ensuring structured communication with family. Those tools could be adapted to South American health systems to reduce clinical variability [40].

Meanwhile, in North America, recommendations of the American College of Critical Care Medicine emphasize shared decision-making and comprehensive family support. Such practices could be replicated in our region through training in clinical communication and psychosocial support [38].

4.3 Response to the review objectives

Findings address the first specific objective of this research by confirming that the persistence of non-beneficial interventions is based on the lack of protocols, dominance of the curative culture, and legal fears, which perpetuate therapeutic obstinacy.

Regarding the second objective, there is evidence of low integration of palliative care into ICUs. Isolated experiences in some countries highlight the need for mandatorily incorporated palliative programs from the moment critically ill patients are admitted.

Finally, regarding the third objective, the review shows a training gap in bioethics, communication, and clinical skills for end-of-life management. It confirms that not strengthening these areas will make it difficult to systematically implement therapeutic adjustments [46, 47].

4.4 Implications for clinical practice and health policy

These findings have direct implications for clinical practice: there is an urgent need to implement standardized protocols for limiting therapeutic effort, structured communication plans, and continuous education programs in bioethics and palliative care.

At the public policy level, PAHO and WHO recommend integrating palliative care as an essential part of universal health coverage; therefore, ensuring its availability at all levels of care including ICUs [2, 5]. In the region, these recommendations could be turned into regulations requiring the interdisciplinary and documented assessment of therapeutic proportionality, protecting both patients and healthcare teams.

4.5 Knowledge gaps and future research lines

The review shows uneven scientific production in South America that limits the generalization of findings. Multicenter studies are needed to assess the impact of early palliative care integration programs on clinical indicators, family satisfaction, and staff well-being.

It is also recommended to investigate educational models to strengthen ethical and communication skills in undergraduate and graduate programs in Medicine and Nursing. Experiences such as reviews on palliative extubation in pediatric settings demonstrate the importance of protocols that include emotional support for families and healthcare teams [48, 49].

4.6 Strengths and limitations

One of the strengths of this work is the inclusion of recent and diverse literature, which allowed for a contextualized and up-to-date analysis of the phenomenon in South America. Additionally, the use of rigorous evaluation tools (PRISMA, ENTREQ, CASP) [50] contributed to methodological robustness. However, the uneven availability of publications in some countries may have introduced a geographic bias and limited the generalizability of the findings.

Likewise, the methodological heterogeneity of the included studies poses a challenge for the direct comparison of results.

4.7 Key message

The early and systematic integration of palliative care in the ICU—along with AET protocols and ethical training for teams—is essential to reduce therapeutic obstinacy and ensure patient-centered care focused on dignity and family involvement. South America has the opportunity to adapt successful international models and turn them into public policies that transform critical care into a more ethical, humane, and sustainable practice.

5. Conclusions

The persistence of non-beneficial therapeutic interventions in palliative patients assisted in South American ICUs reflects structural, educational, and cultural limitations that hinder care centered on patient dignity. The integration of palliative care in critical contexts is not only possible but necessary to guarantee more ethical, humane, and sustainable medicine.

End-of-life decision-making must be based on bioethical principles, interdisciplinary dialogue, and respect for patient values. In the long term, strengthening public policies, institutional protocols, and professional training will be key to reducing therapeutic relentlessness and improving the quality of care at ICUs in the region.

6. Abbreviations

AET: Adjustment of Therapeutic Effort

CASP: Critical Appraisal Skills Programme

CP: Palliative Care

DeCS: Health Sciences Descriptors

ENTREQ: Enhancing Transparency in Reporting the Synthesis of Qualitative Research

MeSH: Medical Subject Headings

OMS: World Health Organization

OPS: Pan American Health Organization

PRISMA: Preferred Reporting Items for Systematic Reviews and Meta-Analyses

PROSPERO: International Prospective Register of Systematic Reviews

UCI: Intensive Care Unit

7. Administrative Information

7.1 Acknowledgments

None.

7.2 Authors' Contributions

- **Conceptualization:** Leonel Durán Cañarte / Ericka Parra Gavilanes
- **Methodology:** Leonel Durán Cañarte / Ericka Parra Gavilanes
- **Validation:** Ericka Parra Gavilanes
- **Data Curation:** Leonel Durán Cañarte
- **Project Administration:** Leonel Durán Cañarte / Ericka Parra Gavilanes
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- **Formal Analysis:** Leonel Durán Cañarte
- **Resources:** Leonel Durán Cañarte
- **Original Draft Writing:** Leonel Durán Cañarte
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- **Software:** Leonel Durán Cañarte
- **Writing, Review, and Editing:** Leonel Durán Cañarte / Ericka Parra Gavilanes
- **Investigation:** Leonel Durán Cañarte / Ericka Parra Gavilanes
- **Supervision:** Ericka Parra Gavilanes

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This study did not receive specific funding from public agencies, commercial, or not-for-profit organizations.

7.4 Availability of Materials

None.

8. Declarations

8.1 Conflict of Interest Statement

The authors declare that there are no conflicts of interest that could influence the preparation or publication of this manuscript.

8.2 Disclaimer

The authors assume sole responsibility for the content and opinions expressed in this article, which do not necessarily reflect the institutional position of their affiliated entities. The information provided is based on peer-reviewed scientific sources and rigorous methodological criteria.

8.3 Ethical Considerations

This work corresponds to a critical review of scientific literature and did not directly involve the participation of human subjects or the collection of personal data.

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