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# Palliative care and end-of-life care for polypathological patients☆

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**KEYWORDS**
End of life;
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**Abstract** Patients with advanced chronic diseases receive fragmented care, which entails high resource consumption and a poor quality of life. Uncertainty in the prognosis and scarce investigation into the importance of symptomatic control in this patient group hinders a proper therapeutic approach.

Palliative care teams optimize the use of resources through comprehensive patient care, the optimization of the patient's environment, communication, the preparation of early care plans and the creation of coordinated healthcare circuits, which improve the quality of the patient's care in advanced stages of the disease.

In the end-of-life phase, the therapeutic approach is focused on symptomatic control, selecting treatments according to the cause, comorbidities and the patient's wishes. To control refractory symptoms, palliative sedation is considered an indispensable option.


**PALABRAS CLAVE**
Final de vida;
Atención paliativa;
Enfermedad crónica avanzada

**Cuidados paliativos y atención al final de la vida en los pacientes pluripatológicos**

**Resumen** Los pacientes con enfermedades crónicas en fase avanzada reciben una atención sanitaria fragmentada, que conlleva un alto consumo de recursos y una calidad de vida deficiente. La incertidumbre en el pronóstico y la escasa investigación sobre la importancia del control sintomático en este grupo de pacientes dificultan una adecuada actitud terapéutica.

Los equipos de cuidados paliativos optimizan el uso de recursos mediante la atención integral del paciente y de su entorno, la comunicación, la elaboración del plan anticipado de cuidados y la creación de circuitos asistenciales coordinados, que mejoran la calidad asistencial del paciente en estadios avanzados de la enfermedad.

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En la fase de final de vida, el enfoque terapéutico se centra en el control sintomático, seleccionando el tratamiento según la causa, comorbilidades y deseos del paciente. Para el control de los síntomas refractarios la sedación paliativa se considera como una opción indispensable.


## Background

Patients afflicted with several chronic diseases in advanced phases have unique healthcare characteristics, which overlap with the physiological changes of aging. Not only are they afflicted with incurable diseases, but these patients also routinely experience pain and other symptoms such as asthenia, insomnia, dyspnea, anxiety, depression, nausea and anorexia, which affect quality of life and survival. Studies on treating these manifestations are scarce, which limits the information for guiding treatment and achieving good symptomatic control.[1]

Consequently, these patients consume significant healthcare resources. For example, the elderly population, which frequently experiences chronic concomitant processes, are responsible for 40–50% of healthcare expenditures, 30–40% of total drug expenditures and 75% of expenditures for long-term treatments in Spain.[2,3]

However, patients with multiple diseases in advanced phases receive fragmented health care of deficient quality that decreases their quality of life.[4] Few patients with multiple diseases receive palliative care when necessary, despite the fact that this type of care has shown improvements in the patients' quality of life, through the planning of care with a comprehensive and multidisciplinary approach.[5]

According to the World Health Organization, palliative care is an approach for managing any life-threatening process that seeks, beyond healing, to improve the quality of life through the early identification of suffering, with an impeccable assessment and treatment of pain and other physical, psychosocial and spiritual problems.[6]

According to data from the National Health System Palliative Care Strategy, approximately 30% of patients who die due to nononcologic causes would be eligible for palliative care.[7] According to this strategy, the palliative action framework for patients with multiple diseases should be interdisciplinary, and the decision making and administration of care should be shared with the patient, considering both the patient's disease severity and overall impairment.[8]

## Prognostic assessment of patients with advanced nononcologic diseases

Having 3 or more concomitant diseases significantly increases the risk of death.[9] Some cardiometabolic comorbidities such as diabetes, stroke and acute myocardial infarction can increase the mortality rate by 8 fold and reduce life expectancy by up to 15 years.[9]

Multimorbidity also physically debilitates patients, reducing their autonomy and increasing their risk of cognitive impairment.[10] The consequences of multimorbidity are frailty,[11] disability and reduced quality of life. In addition, we have the potential effects resulting from interactions between the prescribed drugs, between the drugs and the underlying diseases and between the diseases,[12] as well as the deleterious effects of inappropriate prescriptions.[13]

To decrease uncertainty when addressing patients with multimorbidity, various published studies have developed prognostic and survival indices.[14–18] To date, only the assessment of functional impairment associated with multimorbidity has shown independent prognostic value for mortality.[19] It should be emphasized that functional impairment is not always associated with advanced age.

The PALIAR study was designed with this complex scenario in mind,[20] with the objective of validating the suitability of the defining criteria for terminal-phase nononcologic medical disease as prognostic predictors of mortality risk at 6 months.[21–23] The study evaluated a cohort of 1847 patients and developed a simple tool with the following 6 items: age >85 years, presence of anorexia, dyspnea at rest, pressure ulcers, albumin <2.5 mg/dL and an Eastern Cooperative Oncology Group Performance Status $\geq$3.[23] The resulting score, known as the PALIAR index, classifies patients into 4 groups with a different mortality risk at 6 months. This index achieved a notably higher calibration and discriminative power than the Charlson score[24] and slightly higher than the Palliative Prognostic Index[22] and National Hospice Organization criteria.[21]

The PALIAR index has also contributed to the external and internal validation of the question ''Would you be surprised if this patient died in the next 6–12 months?''[25] of the terminal illness criteria of the National Hospice Organization. When the PALIAR index is applied along with the question, the positive predictive value is improved because it eliminates interference resulting from the physician's empathy toward the patient, which induces an overestimation of survival.[25]

Identifying which polypathological patients are candidates for active and early palliative care is a real challenge, especially considering that progression toward the final phase of nononcologic diseases often fluctuates.[26] Pursuing an exact prognostic stratification can therefore hinder the patient's therapeutic approach toward more reasonable objectives, such as those focused on improving the quality of life and preparing the patient's end of life.

In advanced disease stages, the border between risk and benefit for a number of diagnostic and therapeutic