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The Evolving Epidemiological Landscape of Venous Thromboembolism.

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Venous thromboembolism (VTE) currently ranks as the third most common cause of cardiovascular disease, following acute myocardial infarction and stroke [1-3]. However, the true epidemiology of VTE remains challenging to assess due to its often asymptomatic nature and frequent misdiagnosis in clinical practice [5]. In this issue of *Archivos de Bronconeumología*, *Cayuela et al.* present a comprehensive analysis of VTE mortality trends across Spain's Autonomous Communities from 1999 to 2022 [5]. Their findings reveal an overall decline in VTE-related mortality yet highlight persistent regional disparities and an alarming increase in mortality rates among younger individuals.

The observed decrease in VTE-related mortality likely reflects advancements in diagnostic capabilities, improved treatment strategies, and heightened awareness of VTE risk factors among healthcare professionals [6]. However, the rising mortality rates among younger individuals warrant immediate attention. In their manuscript, *Cayuela et al.* [5] were unable to identify specific contributors to this trend, as their analysis was based on mortality registry data. This limitation underscores the need for further nationwide studies aimed at uncovering the underlying reasons for this increase, including potential lifestyle changes, occupational hazards, and disparities in access to healthcare services. The study also identifies significant regional disparities in VTE mortality, with higher rates observed in Extremadura, Aragon, Navarre, and Andalusia, particularly among women. Further investigations are essential to understand variations in healthcare resources, specialist availability, diagnostic practices, and preventive measures across these regions.

Cayuela et al.'s [5] findings align with a larger European analysis indicating that while age-adjusted VTE-related mortality has been declining in most EU Member States, disparities persist between Western and Eastern Europe [4]. To further reduce VTE-related mortality and its impact on healthcare systems, it is crucial to intensify public health initiatives that promote healthy lifestyles—such as balanced diets, regular physical activity, moderation of alcohol consumption, and smoking cessation [7]. Moreover, continuous monitoring of VTE-related mortality trends is essential for

evaluating emerging risk factors and identifying vulnerable populations. Addressing regional disparities in healthcare resources and specialist availability must be prioritized to ensure equitable access to VTE prevention and care.

In conclusion, the study by *Cayuela et al.* [5] serves as a critical reminder that while progress has been made in reducing VTE mortality, vigilance and targeted action are necessary to ensure that all individuals—regardless of age, sex, or geographical location—have equal access to optimal prevention and care. By addressing the challenges highlighted in this study, Spain can further mitigate the burden of VTE and enhance the health and well-being of its population.

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Ethics in publishing

1. Does your research involve experimentation on animals?:

No

2. Does your study include human subjects?:

No

3. Does your study include a clinical trial?:

No

4. Are all data shown in the figures and tables also shown in the text of the Results section and discussed in the Conclusions?:

No

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