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721 - UNDERLYING AND CONTRIBUTING CAUSES OF DEATH IN SPAIN IN 2023: A MULTIPLE-CAUSE-OF-DEATH ANALYSIS

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Resumen

Background/Objectives: Medical certificate of cause of death is the document fulfilled by a registered physician to record the diseases and conditions that contributed to death. All this information is coded using ICD-10. The underlying cause of death is assigned according to WHO international standardized algorithms. Frequently only this underlying cause of death is considered in epidemiological studies. In order to better understand to what extent this approach is valid to assess mortality burden of different diseases, this study aimed to quantify and characterize underlying cause of death and contributing causes in our context, Spain in 2023.

Methods: This cross-sectional study included information from the 436,124 deaths occurring in Spain in 2023. Mortality data were sourced from the official cause-of-death statistics, provided by the National Institute of Statistics. Causes of death were categorized in 19 major groups, mainly corresponding to ICD-10 chapters, and used to calculate the proportion of underlying and of contributing causes of death attributed to each major group, and the probability that a major group listed as contributing cause was also selected as the underlying cause.

Results: Circulatory diseases and neoplasm accounted for the largest proportion of underlying causes of death (27% each), followed by respiratory (11%) and neurological (6%) diseases. As contributing causes, circulatory conditions were the most frequently mentioned (65%), followed by respiratory diseases and ill-defined symptoms (41% each), and neoplasm (29%). The remaining major groups were less common (< 20%).

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The probability that a contributing condition was selected as the underlying cause varied markedly, ranging from very high for neoplasms (92%) and perinatal causes (77%) to moderate for congenital, neurological, digestive, mental, infectious and circulatory diseases (39-60%), and low for respiratory, endocrine, genitourinary, skin and blood diseases and ill-defined symptoms (< 30%).

Conclusions/Recommendations: These preliminary findings suggest that relying solely on underlying cause of death underestimates the weight of several diseases, supporting the benefit of a multiple-cause-of-death approach for mortality analysis.

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