

The increase of sepsis-related mortality in Italy: a nationwide study, 2003-2015

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ABSTRACT

The true burden of sepsis is largely unknown. Conventional underlying cause of death (UCoD) statistics largely underestimates sepsis-related mortality. This study aims to analyze all the conditions mentioned in the death certificates (multiple causes of death-MCoD) to estimate the nationwide burden of sepsis-related mortality in Italy, to investigate time trends and main comorbidities in sepsis-related deaths. All death certificates mentioning sepsis from 2003 to 2015 were analyzed. Age-standardized mortality rates were calculated for sepsis as both UCoD and MCoD, by gender and broad age groups. The ratio of the age-standardized proportions of any mention of sepsis in the presence/absence of associated chronic diseases (ASPR) was computed. The number of certificates reporting sepsis increased from 18,939 in 2003 to 49,010 in 2015 (from 3 to 8% of all deaths). The increase in sepsis mortality rates was larger for UCoD (males, + 200%; females, + 175%) than for MCoD-based figures (+ 100%; + 90%); MCoD rates remained noticeably higher than UCoD rates (2015, 87.3 per 100,000 vs. 16.3 for males; 54.9 vs. 11.8 for females). The largest increase was observed among the very elderly. The association between sepsis and chronic diseases was stronger for subjects aged less than 75 years. The increased awareness within the medical community in addition to the growing susceptible elderly population and the spread of antimicrobial resistance could have contributed to the sepsis-related mortality increase. MCoD statistics could help in recognizing sepsis not only as a clinical challenge, but also as a major public health issue.

FULL TEXT PER GLI UTENTI REGISTRATI ALLA RIVISTA

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