

of preventive and health care policies adapted to each population setting.⁶

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Analysis of Hospitalization Trends for Heart Failure in the Health Registries of Different Autonomous Communities. Response

Análisis de los ingresos hospitalarios por insuficiencia cardiaca en registros sanitarios de diferentes comunidades autónomas. Respuesta

To the Editor,

Rate adjustment is a technique to control for the effect that the various age structures of different populations¹ may have on morbidity and mortality rates over time, while providing a summary index of age-specific mortality rates.²

However, the choice of the reference population to use when standardizing rates by age can change the trends of the adjusted rates. For example, a study on cancer mortality in the United States indicated that between 1980 and 1988 age-adjusted mortality decreased by 0.1% when the 1940 population was used as the reference, increased by 1.5% when the 1980 population was used, and increased by 2.5% when the projected 2050 population was used.³

Another limitation of age adjustment is that it is not appropriate when the specific rates in the populations being compared do not show a consistent relationship.²

When 2 populations are compared, the specific case rates occurring in advanced ages have a much higher value than those occurring in young ages.⁴ That is, it may not be correct to compare age-adjusted rates if the specific rates by age of one population are concentrated in a single group (very elderly persons), whereas in the other population mortality stratified by age is more evenly distributed or affects younger age groups.

In the case of the autonomous region of Castilla and León, the distribution by age groups did not change substantially from 2001 to 2015, and at the same time, hospitalization rates for heart failure over the entire period were concentrated in persons older than 80 years (median 82 years). Therefore, standardized age rates were not presented so as not to provide information that would confuse more than clarify, particularly when the aim was to



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evaluate changes in the trends of hospitalization rates and in-hospital mortality.

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