Abstract

Background: The decrease of breast cancer (BC) mortality rates has been attributed to early detection programs and therapeutic advances. The objective is to compare BC mortality trend in health regions of Catalonia during the period 1993-2007. In parallel, dissemination of periodic mammography in the health regions has been analyzed. Methods: Mortality and health surveys data were used. Poisson and «joinpoint» regression analyses were used to compare regional BC mortality rates and quantify their temporal evolution. Mixed effects models were used to compare the rates and their evolution by region. Results: The BC mortality rate decreased 3% annually in Catalonia. Between 1993 and 2007, the standard mortality rate changed from 34.8 to 23.3 per 100,000 women. Barcelona showed higher mortality rates than the Centre (rate ratio (RR)=0.873), Costa de Ponent (RR=0.885), Tarragona (RR=0.9) and Lleida regions (RR=0.915), but these differences tend to disappear over time. There were no observed trend changes in the evolution of the regional mortality rates, except in the Centre region. The use of periodic mammography was similar across health regions. During the 90s, Barcelona had a 36.1% utilization of periodic mammography in women aged 40-74, in the 1994 survey, the Centre 23.7 and Costa de Ponent 25.2%. Conclusions: The progressive increase in the use of periodic mammography and the decrease of BC mortality were similar in the eight health regions of Catalonia.

Keywords

Breast cancer, Mortality, Early detection of cancer, Trends.