

Changes in the health of the Spanish population over the last 20 years: an approach analysing the evolution of healthy life expectancy.

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Introduction

As in most high income countries, life expectancy in southern Europe has increased substantially in recent years (Eurostat, 2009). The onset of the economic crisis of 2008, which was especially pronounced in southern European countries, could affect this favourable trend.

However, mortality trends do not in themselves imply an improvement in the general health of the population. To study this, we would need to determine whether increased life expectancy has been accompanied by an increase in the years of life with disability (Gruenberg, 1977), or if, on the contrary, there has been an increase in the years of good health (Fries, 1980).

The goal of this paper is to analyse the evolution of the health of the Spanish population, using a measurement which integrates mortality and health: healthy life expectancy over the last 20 years.

Methods

Life expectancy and healthy life expectancy at birth were calculated for the 1993 - 2009 period in Spain. Various data sources were combined: mortality data obtained from the Spanish National Institute of Statistics; and health data from the Spanish National Health Surveys (NHS) of 1993, 1995, 1997, 2001 2003, 2007 and 2012 and the European Health Survey (EHS) of 2009. Both surveys use national-level representative samples of the population living in households. The detailed methodology of the NHS and the EHS can be consulted on the website of the Ministry of Health, Social Services and Equality.¹

Good health was calculated based on self-reported health, which reflects the subjective perception of individuals regarding their own health. Self-reported health is a widely used indicator, with an established association with mortality, diagnosed morbidity and the use of health services. In the health surveys used, self-reported health was measured by the following question: In the last twelve months, would you say that your health has been very good, good, fair, poor or very poor? Good health was categorised as the sum of good and very good health.

For calculating life expectancy, Chiang's abridged life table (last age interval was 85 years or more) was used (Chiang, 1984), and for healthy life expectancy we used the Sullivan method

¹ <http://www.msc.es/estadEstudios/estadisticas/encuestaNacional/home.htm>

(Sullivan, 1971). Unhealthy life expectancy was calculated by subtracting one from the other, and the proportion of healthy life by dividing healthy life expectancy by total life expectancy.

Results

Life expectancy has increased in men and women over the total period (graph 1). There was a greater increase in men (5.1 years) than in women (3.8). In both genders, the greatest gains in years of life were produced in the 2003 - 2006 period, when life expectancy increased by 1.4 years for both men and women. Except for 2001 - 2003, when it fell slightly for women, life expectancy rose throughout the period.

Healthy life expectancy increased for men and women, but more for men (6.9 years) than for women (5.7 years). In both genders the increase was greater than that of life expectancy. The greatest increase was found in the second half of the 1990s and the early 2000s.

Unhealthy life expectancy fell in the period studied by 1.7 years for men and 1.9 years for women (graph 3). This reduction took place over the total period, except for the 2001 - 2006 sub-period, in which the expected years of life with bad health increased for both men and women.

The percentage of life expectancy expected to be lived in good health increased in the 1993 - 2012 period for both men and women (graph 4). While in 1993 a man could expect to live 74.5% of his life in good health, in 2012 that percentage was 78.4%. In the case of women, the percentage in 1993 was 66.0%, and in 2012 it was 69.8%.

Finally, the differences between the genders decreased in life expectancy during the period studied, while it increased in the case of healthy life expectancy. This was due to both health and mortality improving more for men (graph 5). In unhealthy life expectancy, the differences also increased, as more years in bad health were lost for women.

Conclusions

The evolution of the health of the Spanish population in the 1993 - 2012 periods is close to a scenario of compression of morbidity for both men and women. However, the most unfavourable changes took place in the 1993 - 1995 and 2001 - 2006 periods, when the evolution of health approached an expansion of morbidity in which healthy life expectancy decreases, increasing the expected number of years of life with bad health. The economic crisis, which was especially pronounced in southern European countries, could be having a slight effect on the health of the population, as both life expectancy and healthy life expectancy rose less than in the preceding period. However, in the 2009 - 2012 period the evolution of the health of the Spanish population continued to be favourable.

References

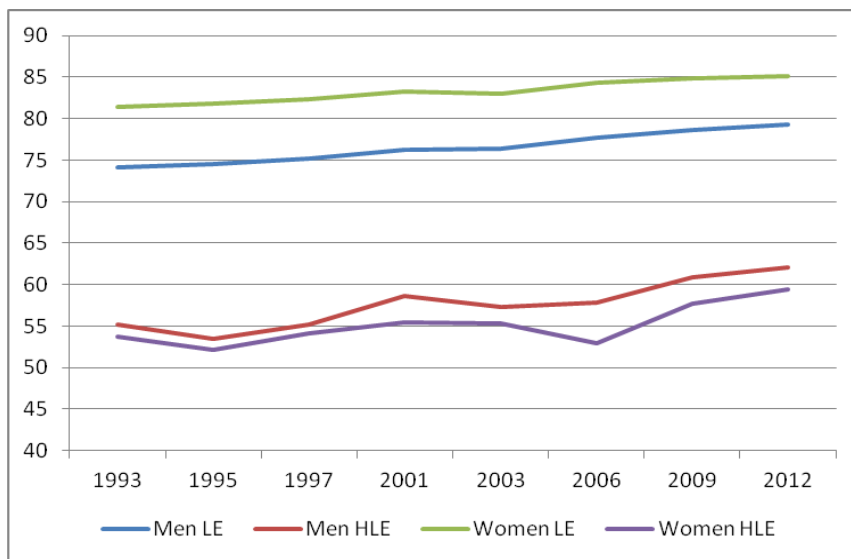
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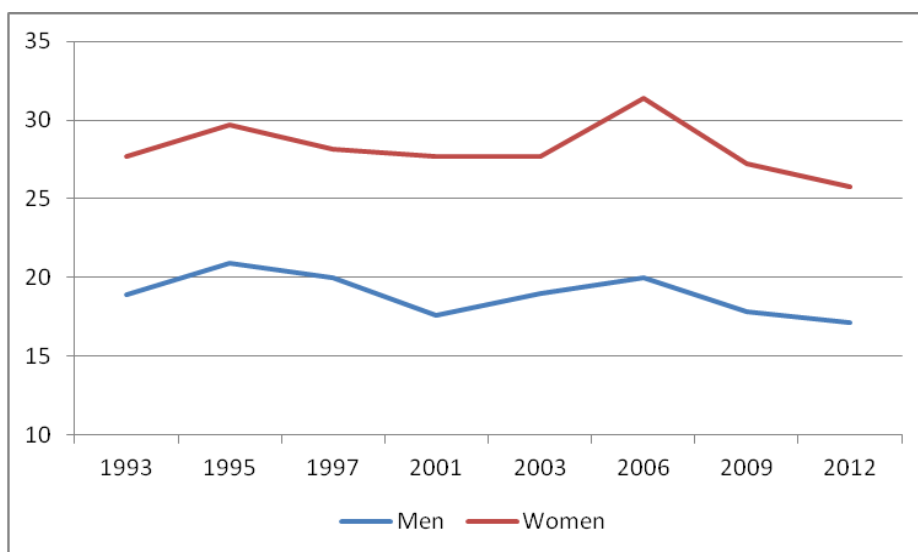
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Graph 1. Evolution of life expectancy and healthy life expectancy by gender. Spain 1993-2012



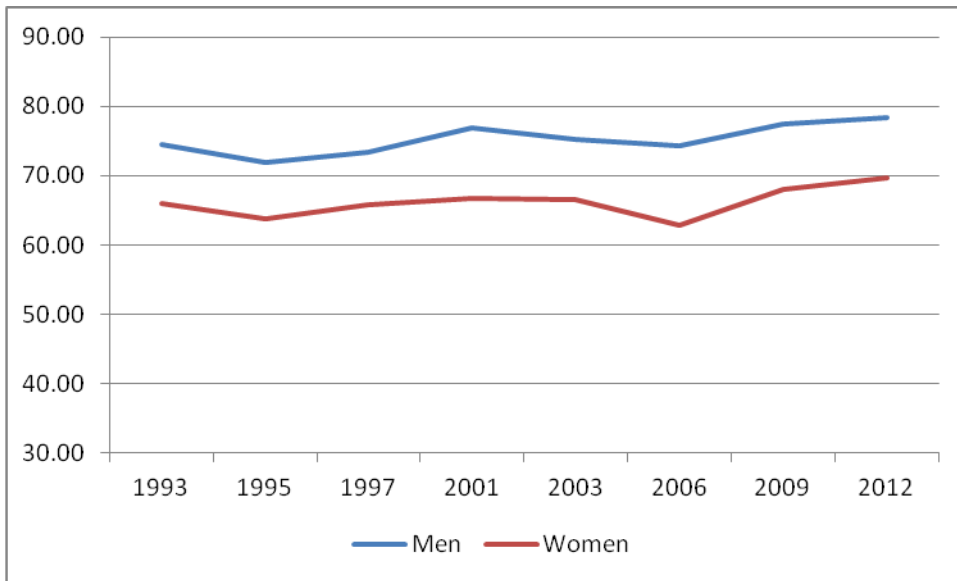
Source: Our own work

Graph 2. Evolution of unhealthy life expectancy by gender. Spain 1993-2013



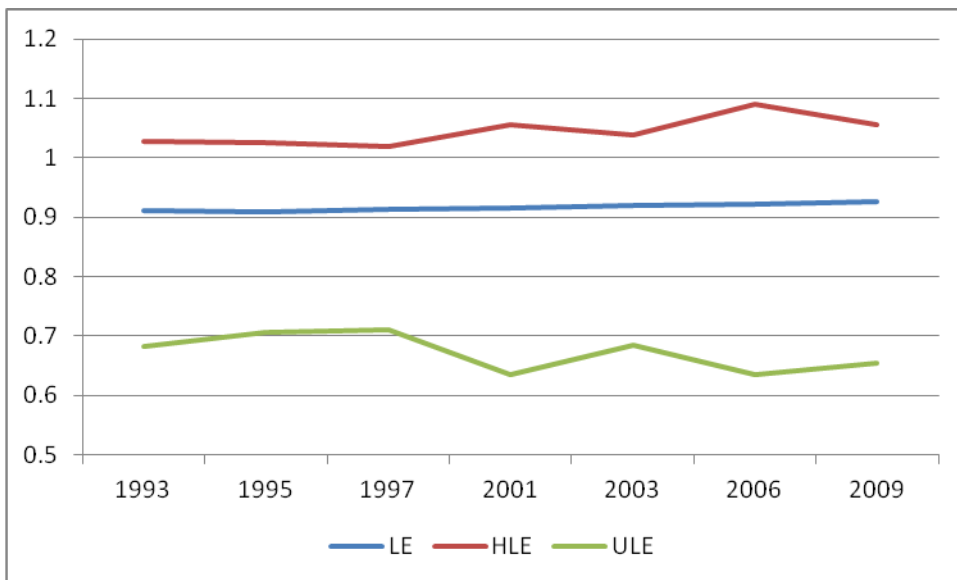
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Graph 3. Evolution of the percentage of life expected to be lived in good health. Spain 1993-2013



Source: Our own work

Graph 4. Evolution of the ratio by gender (men/women) in life expectancy, healthy life expectancy and unhealthy life expectancy. Spain 1993-2013



Source: Our own work