

1. Introduction

Global magnitude of the problem

Cerebrovascular diseases or stroke, understood as circulatory brain disorders that momentarily or permanently alter the functioning of the brain, are one of the leading causes of morbimortality in the world. They are also a leading cause of permanent disability, which greatly impacts families and the community¹. Cerebrovascular diseases or stroke are ranked third worldwide as the most frequent causes of death in developed countries, following coronary disease and cancer. They are also the most important cause of long-term morbidity and disability in Europe, leading to significant economic burden².

It is calculated that in 2007, 59 million people died worldwide and that cerebrovascular diseases were the cause of death in 10% of these cases and the cause of disability in many other millions of cases^{3,4}. Hence, prevention is preferable to treatment⁵. The implementation of interventions that reduce hypertension, promote a healthier diet and encourage smoking cessation could avoid more deaths than all thrombolytic, antiaggregant and neuroprotective treatments combined⁵.

Magnitude of the problem in our setting

There are few studies on the incidence of stroke in Spain and those that do exist present some limitations. Similarly to what has been observed in Europe⁶, studies demonstrate geographic variability⁷⁻¹⁰. In a study conducted in Catalonia in the year 2002, the cerebrovascular mortality rate for every 100,000 inhabitants aged 24 years and older was 92 in men and 119 in women. Age-adjusted mortality rates were 58 (95% CI: 56 to 128) and 43 (95% CI: 41 to 44), respectively¹¹. Accumulated incidence (fatal and non-fatal cases) per 100,000 inhabitants was 218 (95% CI: 214 to 221) in men and 127 (95% CI: 125 to 128) in women. Previous data derived from a study conducted in Segovia (150 new cases per 100,000 inhabitants)¹² reported somewhat lower incidences.

75% of strokes affect patients over the age of 65, which, due to the ageing population in our setting, predicts increased incidence and prevalence of this health problem in the upcoming years. According to data from the hospital morbidity survey, there has been a constant increase of the total number of patients admitted to hospital with the main diagnosis of cerebrovascular disease, reaching 114,498 cases in 2003. However, this increase does not seem to be explained solely by population growth¹³.

The distribution of mortality due to cerebrovascular disease in the different autonomous communities during the period spanning from 1999-2002 shows that it was higher in women than in men. In contrast, age-standardised rates were similar for both sexes, although they were higher in women in Extremadura and Galicia. The highest mortality rates due to cerebrovascular disease, both in men and women, were reported in Andalusia and Murcia¹⁴. In both cerebrovascular diseases and ischemic cardiopathy, a pronounced North-South gradient is observed (Figure 1)¹⁶. In the southern part of Spain the mortality rate due to these diseases is greater than the country's total average, whereas the northern regions are below this average.

However, Spain is one of the countries with the lowest mortality in both men and women when compared with northern European countries such as the Netherlands, Switzerland, Ireland, Iceland and Nordic countries¹.

Population strategies

The most prevalent pathologies that entail a significant health care, family and social burden are receiving special attention from specialised international organisations in all countries. In developed countries, particularly in the case of chronic pathologies, they are affecting an increasing number of people over increasingly longer periods of time, and, if not properly prevented and treated, they can lead to significant losses in patient autonomy, resulting in a considerable burden for care givers¹⁵.

The experience in several developed countries shows that by performing of a small number of interventions maintained over time it is possible to reduce the risk of death due to stroke. For example, during the 90s death rates due to stroke in our setting decreased 4% annually, as occurred in Australia, Germany, Italy or South Korea³.

At present, the Ministry of Health and Consumer Affairs (MSC) has launched a campaign on healthy habits with the aim of promoting lifestyles and eating habits that favour citizens' health and well-being. The main objective of this campaign is to encourage healthy habits and lifestyles to prevent the development of vascular diseases. This campaign includes, amongst its main objectives: to increase society's awareness and mobilisation to generate a culture that works to prevent vascular diseases via the management of the main risk factors; to promote healthy lifestyles and manage risk factors with the aim of significantly reducing the incidence of vascular diseases in the general population, in healthy people as well as in those who have suffered some type of vascular disease; to increase awareness of the population with vascular disease and risk factors on the importance of becoming involved and being responsible for the management of their disease, following the recommendations and monitoring provided by health care professionals and follow-up of pharmacological treatment and, finally, promoting a culture of healthy habits: physical exercise, a low-fat, low-salt diet low and smoking cessation.

