Actions Implemented to Improve Hypertension Control in Spain
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Hypertension prevalence is estimated at approximately 30% of the adult population in Spain, using the 140/90 mm Hg cutoff. This represents a heavy public health burden when compared with other European countries, although the direct cost per person is one of the lowest in Europe. The programs implemented regionally since 1985 are presented here. As a result of them, a decade later the number of hypertensives with controlled blood pressure has increased from 10% in 1986 to 13% in 1995, and cerebrovascular mortality has steadily decreased. Am J Hypertens 1998;11:763–765 © 1998 American Journal of Hypertension, Ltd.

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Since the mid 1980s, when several epidemiologic studies were carried out, the situation of hypertension prevalence and control in Spain has been well known. Some years later, we brought forward data on the cost of hypertension, which clearly demonstrated the impact of its burden in terms of public health.

As a consequence, many professional and scientific organizations, mainly the Spanish League against Arterial Hypertension and more recently the Spanish Society of Hypertension/Spanish League against Hypertension, started different actions aimed at improving the situation.

In this paper, we will try to summarize the present situation and the most relevant actions and programs implemented in Spain in the last 10 years.

CURRENT SITUATION
Hypertension is highly prevalent in Spain. In 1986, we estimated that approximately 20% of people aged ≥ 18 years were hypertensives, based on the classic cutoff of 160/95 mm Hg.1 More recent data suggest that the prevalence rate could be around 30% of the adult population if the current recommended cutoff (140/90 mm Hg) were taken.2,3

Awareness, treatment, and control rates in the 1980s were very close to the rule of halves. Therefore, approximately 50% of all hypertensives were aware of their status, about 50% of them received treatment, and about 50% of the latter had their blood pressure controlled. This meant that fewer than 10% of all hypertensives were effectively controlled, with blood pressure figures < 160/95 mm Hg.

Results of a recent survey show that the situation has changed positively, as the rate of controlled hypertension has increased up to 20%, taking the cutoff at 160/95 mm Hg. If the 140/90 mm Hg cutoff is used, the control rate is about 13%.4 In some geographical areas where more active interventions have been implemented, the improvement in the situation has been
impressive in terms of cerebrovascular mortality reduction (Figure 1).\(^5\)

It has been estimated that hypertension accounts for > 10% of total mortality in Spain.\(^6\) It represents the third-largest cause of consultations in general practice and accounts for no less than 1.5% of hospitalizations.\(^7\)

The first economic analysis carried out in this field estimated that the cost of hypertension in 1985 was US$830 million, which represented 3% of the national health expenditure.\(^8\) According to a more recent estimate, that cost could approximate US$1660 million.\(^9\) A recent comparison of the direct cost of hypertension in three European countries clearly shows that this cost is much lower in Spain and this probably means that management of hypertensive patients is suboptimal (Table 1).\(^10\)

### ACTIONS IMPLEMENTED IN RECENT YEARS

Many actions have been carried out in Spain, mainly under the auspices of the Spanish League against Arterial Hypertension and, after its institution in 1995, the Spanish Society of Hypertension/Spanish League against Hypertension.

All the actions can be classified as follows: descriptive epidemiologic studies, interventional programs, publications, continuing education programs, national and international meetings, and workshops.

In the first category, several epidemiologic studies have been made. Most of them are included in the book “Hypertension in Spain.”\(^1\) They are focused mainly on the description of the prevalence and distribution of hypertension and other cardiovascular risk factors. Some are prospective studies in factories or in the general population. All have contributed to our knowledge of trends in the real-world situation.

Intervention programs have been implemented in some regions of Spain. Many of them have been centered on hypertension, whereas others have focused on the cardiovascular risk factors using a more comprehensive approach. Programs implemented in Andalucia, Galicia, Navarra, Murcia, and many other regions constitute good examples of those initiatives.\(^11\)

In Catalonia, we are implementing an integrated program that, since 1994, has been included in the Countrywide Integrated Noncommunicable Diseases Intervention (CINDI) Programme. In this context, the goals to be reached in terms of hypertension control and cardiovascular mortality reduction have been stated in the Health Plan for Catalonia and particularly in the White Paper “Basis for the Integration of Prevention into Health Care Practice.”\(^12\)

A great number of continuing education programs for physicians, nurses, and, more recently, pharmacists, have been performed all over the country, using different educational tools and strategies.

Hundreds of publications have been produced and disseminated among Spanish physicians and other health professionals and there are three journals devoted specifically to hypertension. The Spanish Society of Hypertension/Spanish League against Hypertension holds regular annual meetings and this national society and other regional ones organize several meetings and workshops.

### REFERENCES
