

## Epidemiology of Heart Failure in Spain: Toward a More Global Perspective

### To the Editor:

The PRICE<sup>1</sup> study reported a prevalence of heart failure of 6.8% in the Spanish population aged 45 years or more, a figure close to the 5% found in a previous study conducted in Asturias (Spain),<sup>2</sup> and that rose to 16% when only taking into account the population aged more than 75 years. These results confirm the striking increase in the number of cases of heart failure in the last 20 years in western countries, that has led to an ever-growing need for healthcare and an increased consumption of resources for its treatment.

However, to more accurately assess the total burden involved in a specific health problem, we need to know, in addition to prevalence, the number of hospitalizations that it generates. Thus, the Diagnosis-Related Group 127 includes heart failure and shock, which, at 2.68%, are the second most frequent causes of hospital admission in Spain and are the first cause among patients older than 65 years.<sup>3</sup>

From our standpoint, a measure that could complement the number of hospitalizations in the assessment of health costs would be the number of urgent cases, since on many occasions patient admission depends on the healthcare system resources in each center or region. For example, the observation areas that have recently become widespread within hospital emergency services (HES) are excellent places where, within 24 hours and without admission, disorders can be resolved that until a short time ago would have required admission.<sup>4</sup> Thus, the EAHFE study<sup>5</sup> (a cross-sectional descriptive study conducted in 10 Spanish HES and that collected information on 1017 consecutive heart failure patients treated over a 1-month period) showed that 70% of the patients were hospitalized (more than half in emergency service short-stay units) and, of the 30% discharged from the emergency service, 17% passed through these observation units. These data indicate the high healthcare burden that heart failure currently places on the HES. Another relevant aspect highlighted by the EAHFE study is that 1 of 4 patients with heart failure treated in the HES did not have a previous

diagnosis of heart failure and in almost half the patients ventricular function remained unknown. On the other hand, if we compare comorbidity in the patient with heart failure in need of urgent treatment in the EAHFE study to that of the general population obtained in the PRICE study, we would see that in the first there is a greater percentage of hypertension, diabetes, ischemic heart disease, and systolic dysfunction, as well as a high percentage of patients with atrial fibrillation. An important aspect where both studies coincide is the enormous importance of age in this disease. The PRICE study<sup>1</sup> reported that the prevalence of heart failure in patients 65-74 years of age was half that in patients 75 years of age or more (8% in the first group and 16.1% in the second) and the EAHFE<sup>5</sup> study reported that patients had a mean age of 77 (10) years.

All this reflects an attempt to explore the relevance of creating interdisciplinary groups made up of cardiologists, internists, geriatricians, primary care physicians, and emergency care physicians that would provide more integrated patient management, and which would lead to better understanding of this genuine 21st century epidemic<sup>6</sup> and, in the end, to an improvement in patient care and healthcare systems in the context of heart failure.

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## Response

### To the Editor:

We would like to thank Martín et al for their interest in our article and their pertinent observations. Indeed, not only is the prevalence of heart failure increasing in Spain, as reported by the PRICE study<sup>1</sup> and when compared to the work of Cortin et al<sup>2</sup> in Asturias several years previously, but it is also important to emphasize that this disorder is the second most frequent cause of admission in Spain and the first cause among people more than 65 years of age. Thus, we are facing a problem of enormous and growing magnitude, that affects the vital prognosis of the patients who suffer from it, their quality of life and consumption of healthcare resources, with the consequent increase in economic costs.

The authors draw attention to other data of interest. The EAHFE study,<sup>3</sup> a cross-sectional registry conducted in 10 Spanish hospitals on the characteristics of 1017 heart failure patients consecutively treated in the emergency services, found that 75% of the patients attending the emergency service for this problem had already been previously diagnosed with heart failure, although the state of ventricular function remained unknown in half of them. The PRICE study, that followed a totally different methodology, found that the prevalence of heart failure was 6.8%, but 5.8% of the total of the cases had also been previously diagnosed with heart failure. That is, de novo heart failure was diagnosed only in an additional 1% of people, in absolute terms. This means that, in relative terms, 85% of all the cases were already previously diagnosed and that only in 15% was there a new diagnosis of heart failure.

These data can be of great help when assessing the reliability of registries conducted at outpatient departments, emergency services, or after admitting patients with heart failure to hospital. Because most cases are diagnosed after examination in emergency services or after hospital admission, the characteristics of the patients found in these types of registries should be very similar to those of the general population of patients with heart failure. Finally, we fully agree with the authors for whom the integrated treatment and management of heart failure is extremely important. Correct treatment in emergency services can prevent a large number of admissions and improve the quality of life of patients.

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