Heart Failure: the Commonest Reason for Hospitalization in Germany—Medical and Economic Perspectives

by PD Dr. med. Till Neumann, Janine Bierrmann, Dr. med. Dr. rer. pol. Anja Neumann, Prof. Dr. rer. pol. Jürgen Wasem, Prof. Dr. med. Georg Ertl, Prof. Dr. med. Rainer Dietz, Prof. Dr. med. Raimund Erbel in volume 16/2009

Primary Diseases Need to Be Considered

Neumann et al., worried by data from the Federal Statistical Office, report on "diagnoses, mortality, and costs" of heart failure, which, they say, "is currently one of the most common and most cost-intensive of the chronic diseases."

The authors reflect generally on the costs associated with heart failure in Germany in 2006 and thinking about future trends. However, we wish to point out that heart failure is not a chronic disease but a clinical syndrome with characteristic symptoms that can have very diverse underlying disease causes. "Heart failure" should not be the general term used when writing about a chronic form of heart failure and if a concrete nosological classification of the presented heterogeneous statistical columns of figures is not possible.

Acute and chronic left heart failure as well as acute and chronic right heart failure have different symptoms, although they all comprise classic symptoms. These indicate manifold changes and diseases of the right and left heart and the pericardium, which constitute the three groups of causes of heart failure: decompensated cardiac hypertrophy, myogenic heart failure, and pericardial changes.

If "new concepts for prevention and treatment [of heart failure] will be needed in the near future" (1) because the population is ageing, the manifold etiologies of heart failure will have to be borne in mind. Non-smoking prevents chronic obstructive pulmonary disease (COPD) with right heart failure due to decompensated cor pulmonale. Blood pressure control and physical exercise prevent myocardial infarction and infarction related scarring as a result of coronary heart disease (2, 3). Fighting chronic alcoholism prevents some of the cardiomyopathies. These and many other diseases result in "heart failure," which is not obvious from the reported global statistic for this individual diagnosis (1). Considering the primary diseases for heart failure seems indicated when medical and economic aspects of the most common reason for hospitalization are being discussed.

REFERENCES


Limitations of the Between-Sex Comparison

We read the important article on the epidemiology of heart failure in Germany with great interest. The conclusions resulting from figures 1 to 3 and the discussion with regard to how the risk of morbidity and mortality differ by sex are misleading, however (1). The data source used by the authors (2) reveals that for almost all categories the morbidity and mortality rates are higher in men than in women up to a very old age. Up to the age of 70, women have a 50–56% lower risk of death or hospitalization than men. This difference even out slowly by about the age of 90. Women are slightly more affected only at an older age.

The reason for the apparent discrepancy in findings is that the use of the standard population of Germany 1987 for age standardization leads to different reference groups for men and women:

The age standardized rates for men derived from federal health monitoring data (2) were applied to the male population of 1987 and the female rates to the female population of 1987 (3). The rates for men and women are therefore suitable for comparisons within the sexes (for example, between federal states or over time) but not between them. A correct analysis of sex differences would therefore require the use of a standard population with identical age structure in men and women (for example, the Old European Standard Population). Alternatively, it is possible to use the same reference population for both sexes. Correct age standardization reveals that the standardized death and hospitalization rates of women, shown by the authors in figures 1 to 3, are not higher but lower than those in men.

REFERENCES


Dr. med. Frank Andersohn
Sylvia Binting
Prof. Dr. med. Stefan N. Willich, MPH, MBA

Dr. med. Frank Andersohn
Institut für Sozialmedizin, Epidemiologie und Gesundheitsökonomie Charité – Universitätsmedizin Berlin
10098 Berlin
E-Mail: frank.andersohn@charite.de