

Editorial



Economic Burden of Heart Failure in Asian Countries Based on Real-world Data

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Conflict of Interest

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► See the article “Economic Burden of Heart Failure in Asian Countries with Different Healthcare Systems” in volume 51 on page 681.

Heart failure (HF) is an established major contributor to morbidity and mortality worldwide, with an estimated prevalence of more than 37.7 million individuals globally.¹⁾ The number of patients with HF is increasing due to the aging of the society.²⁾ Asian countries are experiencing a rapidly aging population. In South Korea, the prevalence of HF increased approximately 2 times from 2002 to 2013 (0.75% to 1.53%), and is expected to increase by 2-fold, from 1.60% in 2015 to 3.35% in 2040.³⁾ The increasing prevalence of HF is directly related to an increase in economic burden. Moreover, HF incurs high economic costs. Cho et al.⁴⁾ reported that the annual economic burden of an HF patient was \$6,601 in 2014, while that of a non-HF patient was \$1,952, showing the incremental burden of healthcare costs for an HF patient.

Yingchoncharoen et al.⁵⁾ investigated the economic burden of HF among Asian populations in 4 countries with different healthcare systems—South Korea, Taiwan, Thailand, and Malaysia. There are relatively few reports of HF-related economic costs in Asian countries compared to the United States or Europe. This paper is an analysis using real-world data, and not the National Health Insurance or Health Insurance Review. Although there is a limitation in the small number of patients, access to total costs, including out-of-pocket costs, at a validated institution would have been possible. This study revealed that the HF-related economic burden was higher in Asian countries than in the USA.⁶⁾ In addition, this real-world data confirmed once again that hospitalization was a key driver of overall costs associated with HF. The total cost of HF differed among the 4 countries, and the cost of medical therapy/device/surgery also differed. Various factors may have played a role, but the difference in insurance systems in each country is also thought to have influenced these results. It is important to understand the factors that contribute significantly to the cost of HF. In Korea and Thailand, cost of device/surgery accounted for a larger proportion than the cost of medication, whereas in Taiwan and Malaysia, cost of medication accounted for more than the cost of device/surgery. The fact that Malaysia showed such a trend despite the high rate of patients with HF with reduced ejection fraction indicates that social factors are also important. It is well known that medical therapies/devices such as implantable cardioverter defibrillators and cardiac resynchronization therapy in HF have been confirmed to greatly improve the survival rate, which will contribute to the reduction of HF-related economic burden.⁷⁾ Although the cost of the device increases the cost of HF in the short term, it can reduce the cost by improving the prognosis in the long term. This study used data from 2014 before the widespread clinical use of angiotensin receptor-neprilysin inhibitor or sodium

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glucose co-transporter 2 inhibitors HF.⁸⁾ The impact of increased cost of these drugs and cost savings due to improved prognosis with new drugs will be major determinants of HF costs in the future. In addition, interventions/surgery such as transcatheter edge-to-edge mitral valve repair or left ventricular assist device will be more widely implemented, contributing to changes in the prognosis and economic cost of HF in the future.⁹⁾¹⁰⁾ These treatments will be more affected by a country's economic level and insurance system, resulting in differences in economic costs between countries.

The report by Yingchoncharoen et al.⁵⁾ contextualizes the high economic burden of HF in Asian countries based on real-world data. The cost of HF in the future is expected to be determined according to the progress of the aging society, the insurance system, and the degree of optimal therapy based on guidelines.

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