Editorial

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Toward a New Heart Failure Registry in Korea

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Heart failure (HF) is an important cardiovascular disease because of its increasing prevalence, significant morbidity, high mortality, and rapidly expanding health care costs.1) Acute heart failure (AHF) refers to rapid onset or worsening of symptoms and/or signs of HF. It is a life-threatening medical condition requiring urgent evaluation and treatment, typically leading to urgent hospital admission.2) Estimates of the clinical characteristics, treatment, and prognosis of AHF are central to our understanding of health-care utilization and to efforts to improve patient care and reduce health care costs. In this edition of the journal, Lee et al.3) reported the clinical profiles, management and outcome of the KorAHF registry in a well-organized article with detailed information regarding recent Korean AHF patients.

The KorAHF registry prospectively enrolled a total of 5625 consecutive subjects hospitalized for AHF in 10 tertiary university hospitals from March 2011 to February 2014. The mean age was 68.5±14.5 years, and 53.2% were male; 52.2% had de novo heart failure. The KorAHF registry revealed that Korean AHF patients have lower blood pressure and lower prevalence of left bundle branch block at admission, possibly affecting the clinical practice pattern of lower prescription rate for angiotensin-converting enzyme inhibitors/angiotensin receptor blockers and beta-blockers and of underutilization of cardiac resynchronization therapy. To demonstrate the temporal trends of demographic characteristics, clinical profiles, management, and outcome of AHF in Korea, the authors compared their results with previous data from the KorHF,4) which also had enrolled patients hospitalized for AHF in Korea. They concluded that, while the quality of acute clinical care and its outcome in AHF have been improved over the last decade, its long-term prognosis is still poor in Korea. Even though authors extracted the relevant clinical data from the same 10 hospitals involved in both KorHF and KorAHF, it is necessary to interpret the results carefully because there is still a potential for referral bias in terms of mortality and medical cost. Especially, it is worth mentioning that hypertension as an etiology of HF was significantly lower in the KorAHF registry compared with other registries, possibly due to the different initial evaluation protocol of the KorAHF registry or the limited number of participating tertiary hospitals with higher rates of hypertension awareness, diagnosis, and control.5) It is sometimes difficult to determine whether hypertension is an accompanying disease or an etiology of HF hospitalization. For the proper analysis of long-term clinical outcomes, more detailed analysis such as propensity score matching analysis is necessary.

Continuing research is essential if we are to address unmet needs in caring for patients with HF. Among them, well-designed and highly representative HF registries are the major source of real-world data on severity, causes, treatment, long-term management, and clinical outcomes for HF patients. The new HF registry should have standardized protocols of clinical assessment, management, and follow-up evaluation and also should document predefined outcomes for causes of in-hospital or post-discharge mortality and causes of re-hospitalization. For better representation of the general population of HF, more centers should participate based on statistical measures according to the spread of the population. Laboratory examination and cardiovascular imaging data should be harmonized from the beginning. Finally, a specialized HF registry for patients with implantable cardioverter defibrillator, cardiac resynchronization, and rare cardiomyopathies might be considered as well.

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To prevent increasing HF burdens, it is essential to set up long-term effective prevention strategies for better control of ischemic heart disease, hypertension, and diabetes, which might be risk factors for the development of HF.1) Moreover, proper HF guidelines, performance measures, performance improvement programs, and change at the health policy level, as well as a new HF registry, might be necessary for limiting the HF burden in Korea.

References

1. Youn JC, Han S, Ryu KH. Temporal trends of hospitalized patients with heart failure in Korea. *Korean Circ J* 2017;47:16-24.
2. Ponikowski P, Voors AA, Anker SD, et al. 2016 ESC guidelines for the diagnosis and treatment of acute and chronic heart failure: the task force for the diagnosis and treatment of acute and chronic heart failure of the European Society of Cardiology (ESC) developed with the special contribution of the Heart Failure Association (HFA) of the ESC. *Eur Heart J* 2016;37:2129-200.
3. Lee SE, Lee HY, Cho HJ, et al. Clinical characteristics and outcome of acute heart failure in Korea: results from the Korean acute heart failure registry (KorAHF). *Korean Circ J* 2017;47:341-53.
4. Choi DJ, Han S, Jeon ES, et al. Characteristics, outcomes and predictors of long-term mortality for patients hospitalized for acute heart failure: a report from the Korean heart failure registry. *Korean Circ J* 2011;41:363-71.
5. Lee SE, Cho HJ, Lee HY, et al. A multicentre cohort study of acute heart failure syndromes in Korea: rationale, design, and interim observations of the Korean Acute Heart Failure (KorAHF) registry. *Eur J Heart Fail* 2014;16:700-8.

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