1. Importance of self-care and evidence supporting the benefit of self-care program for heart failure patients

With an aging population and improved survival of heart disease patients, heart failure (HF) has become a growing epidemic worldwide.\(^1\) It was estimated that the prevalence of HF in Taiwan was ~5.5%, with a 5-year mortality rate ranging from 14.4% to 29.2%.\(^2\) It is thought that health care utilization by HF patients can be reduced significantly if these patients can engage in consistent self-care.\(^3\) As a consequence, self-care, defined as a real-life decision-making process that patients use in the choice of behaviors that maintain physiological stability and the response to symptoms when they occur,\(^4\) has been advocated as an important strategy,\(^4\) and recommended in the international guidelines for the management of HF.\(^5\)\(^,\)\(^6\)

To promote self-care as an important approach in the management of HF, various specific self-care behaviors and the corresponding benefits resulting from these skills have been identified and described clearly.\(^4\)\(^,\)\(^7\) Moreover, key drivers of a successful self-care program have also been recognized, which include integration of self-care with normal life patterns, timely symptom detection, recognition, and action, knowledgeable caregivers and reasonable range of self-care activities, and fostering patient independence by caregivers.\(^8\)

A previous systematic review and meta-analysis demonstrated that self-care instruction provided to transitional caregivers of HF patients, and reinforced by home-visiting, multidisciplinary, and structured telephone support programs, were associated with numerous beneficial clinical outcomes, including decreased all-cause admission.\(^9\)

In this issue, Liou et al\(^{10}\) have added to this growing body of evidence by designing a comprehensive self-care program for HF patients and evaluating its effects with high-validity questionnaires and by measuring several objective outcomes of interest. With a rigorous statistical analysis, they demonstrated that, compared with patients receiving customary care, not only the knowledge and skills in caring for their own diseases, but also their quality of life can improve significantly. A reduced readmission rate or decreased mortality was not seen in the self-care group, which may be related to a short follow-up period (3 months). The question now is: what is the next step?

2. Justification of routine application of the intensified educational program for HF patients

For any proposed strategy, its benefit must outweigh the possible risk and additional upfront cost. Providing self-care instructions may be a low-risk intervention, but these instructions and subsequent reinforcement strategies are not free of all costs. Even with the above-noted overwhelming body of evidence, routine use of the self-care program in daily care for HF patients should be scrutinized for its cost-effectiveness. However, with the current health care system in Taiwan, benefits of an effective self-care program for HF patients, such as improved quality of life, should far exceed the upfront investment in educational interventions.

3. Transitioning from fee-for-service to value-based reimbursement system

Fee-for-service insurers, such as Taiwan's National Health Insurance System, rarely reimburse or provide few incentives for patient education, counseling, and coordination of care. Although not necessarily linked directly to successful implementation of self-care programs, these reimbursement issues nevertheless influence the level of education provided in the clinical setting. The evidence-based strategies could be ignored or overlooked by health care professionals in the pursuit of higher quantity instead of higher quality of care. Consequently, transitioning to value-based payments, which rewards providers who deliver health care with better outcomes for patients and communities they serve at a lower cost, has been proposed as a useful solution to the above obstacle.\(^11\)\(^,\)\(^12\) Nonetheless, “Rome was not built in a day,” and the transition to a value-based system is not occurring in any sudden or immediate manner. Establishment of the quality or performance measures, appropriate use criteria,\(^13\) and trustworthy guidelines adapted to regional context are indispensable components of a successful value-based reimbursement system. Until that day arrives, however, evidence-based strategies, including an effective self-care program, cannot be widely implemented in routine practice.

In conclusion, in HF patients, having competent self-care skills is crucial to maintaining physiological stability and

---

http://dx.doi.org/10.1016/j.jcma.2015.07.007
1726-4901/© 2015 Elsevier Taiwan LLC and the Chinese Medical Association. All rights reserved.
improving health outcomes. Most readmissions for HF exacer-
bations are probably preventable through the improvement of self-care strategies. Optimal HF self-care requires effective educational interventions and reinforcement from health care professionals, who should be adequately reimbursed or motivated in a well-designed value-based health care system.

Conflicts of interest

The authors declare that there are no conflicts of interest related to the subject matter or materials discussed in this article.

References


Hao-Min Cheng*
Department of Medical Education, Taipei Veterans General Hospital, Taipei, Taiwan, ROC

Department of Medicine, National Yang-Ming University, Taipei, Taiwan, ROC

Department of Public Health, National Yang-Ming University, Taipei, Taiwan, ROC

Shih-Hsien Sung
Department of Medicine, National Yang-Ming University, Taipei, Taiwan, ROC

Department of Medicine, Taipei Veterans General Hospital, Taipei, Taiwan, ROC

*Corresponding author. Dr. Hao-Min Cheng, Department of Medical Education, Taipei Veterans General Hospital, 201, Section 2, Shih-Pai Road, Taipei 112, Taiwan, ROC.

E-mail address: hmcheng@vghtpe.gov.tw (H.-M. Cheng).