

Editorial



Heart Failure Awareness in the General Population: What Should We Do Next?

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► See the article “Factors Associated with Low Awareness of Heart Failure in the General Population of Korea” in volume 50 on page 586.

OPEN ACCESS

Received: Apr 20, 2020

Accepted: Apr 23, 2020

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Conflict of Interest

The author has no financial conflicts of interest.

The contents of the report are the author's own views and do not necessarily reflect the views of the *Korean Circulation Journal*.

Heart failure (HF) is the end stage of all heart diseases. Recently prevalence of HF is getting higher worldwide due to the increase of cardiovascular diseases and longer life expectancy of such patients. Heart failure imposes additional socioeconomic burdens on the system with high mortality and re-admission rate.

Even with all the medical importance of HF and socioeconomic burdens, awareness of HF is unexpectedly low in general public. Awareness of HF is very important because controlling risk factors would significantly reduce progression to HF; reduce readmission rate and premature mortality in HF. In SHAPE study of 2005 with general public in 9 European countries, it was reported that HF awareness was very low.¹⁾ Only 3% understood the symptoms of HF, which was much lower than those of angina (31%) and ischemic stroke (51%). European studies in 2010s also showed no improvement of HF awareness.²⁾³⁾ HF awareness survey in Korea was done in 2019.⁴⁾ Even though it was recent study, awareness was not that high compared with other studies. But 4 European country survey showed improved awareness of HF symptoms compared with that of SHAPE (**Table 1**).⁵⁾ It is influenced and caused by European HF awareness day initiative, which indicated the importance of education.

Readmission rate and premature mortality can be reduced by improving HF awareness. Canadian cardiovascular health awareness study well explained the effect of HF awareness. It compared 10 weeks Cardiovascular Health Awareness Program (CHAP) educated group with control in mid-sized community.⁶⁾⁷⁾ According to the report, HF admission rate decreased significantly in educated group.

Whom should we educate? Kim et al.⁸⁾ reported that risk factors for low HF awareness in Korean study with general public were older age, female sex, and lower level education. Thus dedicated education for the vulnerable subjects is more important than for general population. However, the subjects that requires urgent attention is especially the patients with HF at any stage. Studies of HF awareness with HF patients showed low awareness.⁹⁾¹⁰⁾ These indicate that HF patients is primary target of immediate education. And family members and care giver should also be educated with HF patients as prevalence of HF is much higher in old age and proper self-care at this age is difficult.

Table 1. Awareness of HF in various studies

| Country (published year) | SHAPE: 9 European countries (2005) | Slovenia (2013) | 4 European countries (2016) | Germany (2017) | Korea (2019) | |
|--|------------------------------------|-----------------|-----------------------------|--------------------------------|--------------|-------|
| Number (years) | 7,958 | 850 | 2,438 | 2,513 (2007) | 1,032 | |
| Age (years) | 25–45 vs. 65–85 | 56±15 | | Median 54 | 58.2±14.5 | |
| Have you ever heard of HF? | 86% | 83% | 82% | 73% | 79% | 80.1% |
| What are the typical symptoms or sign of HF? | 3% | 30% | SOB 71% | SOB 79% | 3 all 35% | |
| | | | Tiredness 61% | Reduced exercise tolerance 74% | | |
| | | | Leg or feet swelling 51% | Leg edema 52% | 3 all 40% | |
| What is the meaning of HF? | 52% | Not mentioned | Not mentioned | 68% | 47.3% | |
| HF is a normal aging condition. | 33% | 35% | 31% | | 35.3% | |
| Reference | 1) | 2) | 5) | 3) | 4) | |

HF = heart failure; SHAPE = Supreme Headquarters Allied Powers Europe; SOB = short ness of breath.

Contents and methods of education are also very important. Small group lectures, symposia, health fairs, campaign, using broadcast (public advertisement) or internet could be helpful. Many countries are adopting heart failure awareness day (or week) and recently Korea also adopted HF awareness week for education and public relations effort. A study reported that subject who attended the HF awareness day showed higher HF awareness compared with those who did not, which suggested positive effect of HF campaign.¹¹⁾ And CPHAP studies showed that intervention which reduced HF risks lowered CV related mortality and morbidity.^{6,7)} The effect is valid in any form of education. Development of proper education methods for each subject and performance measures are necessary.

This paper merits that large scale survey of HF awareness in Korea. It would have been wonderful if investigators include other factors which can affect in the results; if respondent is HF patient; if he or she has (a) family member(s) with HF; if he or she or (a) family member(s) work in health care; if he or she has HF risk factors (hypertension, diabetes, CAD and etc.); or he or she is taking medical services for such conditions. With results of this paper, additional study for the specific groups dedicated education as well as education contents would enable progress in HF awareness. And education plan for educators (mostly nurses) should be established as well.

REFERENCES

1. Remme WJ, McMurray JJ, Rauch B, et al. Public awareness of heart failure in Europe: first results from SHAPE. *Eur Heart J* 2005;26:2413-21.
[PUBMED](#) | [CROSSREF](#)
2. Lainscak M, Letonja M, Kovacic D, et al. General public awareness of heart failure: results of questionnaire survey during Heart Failure Awareness Day 2011. *Arch Med Sci* 2014;10:355-60.
[PUBMED](#) | [CROSSREF](#)
3. Zelenak C, Radenovic S, Musial-Bright L, et al. Heart failure awareness survey in Germany: general knowledge on heart failure remains poor. *ESC Heart Fail* 2017;4:224-31.
[PUBMED](#) | [CROSSREF](#)
4. Jung MH, Kim HL, Choi JH, et al. Heart failure awareness in the Korean general population: Results from the nationwide survey. *PLoS One* 2019;14:e0222264.
[PUBMED](#) | [CROSSREF](#)
5. Störk S, Kavoliumiene A, Vinereanu D, et al. What does the lay public know about heart failure? Findings from the Heart Failure Awareness Day Initiative. *Eur J Heart Fail* 2016;18:66-70.
[PUBMED](#) | [CROSSREF](#)

6. Dahrouge S, Kaczorowski J, Dolovich L, et al. Long term outcomes of cluster randomized trial to improve cardiovascular health at population level: the Cardiovascular Health Awareness Program (CHAP). *PLoS One* 2018;13:e0201802.
[PUBMED](#) | [CROSSREF](#)
7. Kaczorowski J, Chambers LW, Dolovich L, et al. Improving cardiovascular health at population level: 39 community cluster randomised trial of Cardiovascular Health Awareness Program (CHAP). *BMJ* 2011;342:d442.
[PUBMED](#) | [CROSSREF](#)
8. Kim HL, Jung MH, Choi JH, et al. Factors associated with low awareness of heart failure in the general population of Korea. *Korean Circ J* 2020;50:586-95.
[PUBMED](#) | [CROSSREF](#)
9. Plotka A, Prokop E, Migaj J, Straburzyńska-Migaj E, Grajek S. Patients' knowledge of heart failure and their perception of the disease. *Patient Prefer Adherence* 2017;11:1459-67.
[PUBMED](#) | [CROSSREF](#)
10. Samsky MD, Lin L, Greene SJ, et al. Patient perceptions and familiarity with medical therapy for heart failure. *JAMA Cardiol*. Forthcoming 2019.
[PUBMED](#) | [CROSSREF](#)
11. Nowak K, Stępień K, Furczyńska P, et al. The awareness and knowledge about heart failure in Poland - lessons from the Heart Failure Awareness Day and internet surveys. *Folia Med Cracov* 2019;59:93-109.
[PUBMED](#) | [CROSSREF](#)