The management of patients with heart failure in Sweden: a survey conducted among physicians in Sweden

G. Ferrannini1, M.E. Biber2, S. Abdi3, M. Stalberg3, L.H. Lund1, G. Savarese1
1Karolinska Institute, Stockholm, Sweden
2University of Trieste, Trieste, Italy
3Karolinska University Hospital, Stockholm, Sweden

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Background: Guideline-directed medical therapy (GDMT) improves outcomes in patients with heart failure (HF) with reduced ejection fraction (HFrEF). However, real-world studies highlight underutilization of GDMT.

Purpose: To describe physicians’ general knowledge and opinions on GDMT use, diagnostic workup, and follow-up care in HF in Sweden.

Methods: A survey comprising 42 multiple-choice questions about HF and its management was sent by mail to a random sample of 828 physicians including any specialist, general practitioners (GP) and interns in Sweden during 2021 and 2022. Answers were reported as percentages and comparisons were made by specialty (general practitioners vs specialists) by the chi-square test.

Results: 168 physicians (60% males, median age 43) responded to the survey (response rate: 20%), of whom 41% GPs, 18% cardiologists and 13% internists, 24% specialists in training, and 4% other specialists; 72% of participants report to meet less than 10 HF patients per week. Electrocardiography and a New York Heart Association class evaluation are mostly performed once a year by GPs (46%) and at every outpatient visit by other specialists (40%). Echocardiography is mostly requested if there is clinical deterioration (60%). 85% of the participants reported to never assess patient-reported parameters and outcomes with questionnaires. One-third of participants screen for iron deficiency only if there is anemia, and 45% do it every year.

Figure 1 reports the major measured obstacles to implementation of GDMT in HFrEF; there were no significant differences according to specialty or age of participants. Implantable cardioverter defibrillation (ICD) implantation for primary prevention of sudden death is deemed appropriate by most responders regardless of aetiology (69%) and patient age (74%). ICD or cardiac resynchronization therapy is considered by most after the three months from optimization of GDMT (61%). Specialists answered correctly to questions to test knowledge on GDMT more often than GPs. 86% of participants think that GDMT should be implemented as much as possible, but only 7% estimate that full optimization is reached in more than 75% of their patients. The main reasons why patients with HFrEF do not receive optimal HF medical therapy (Figure 2) reflect the concern about side effects as well as possible knowledge deficiencies. To maximize the adherence to guidelines, 27% reported that patients should be regularly evaluated in tertiary care and 50% in nurse-led clinics, although for 29% of respondents such facilities are not present.

Conclusion: Obstacles to GDMT implementation according to physicians in Sweden are mainly related to potential side effects, lack of knowledge and structural aspects, including the lack of availability of nurse-led clinics. Improving implementation may require novel strategies, such as improved access to cardiology specialists, more generalizable trials, and potentially screening for GDMT indications.

Figure 1: Major obstacles to implementation of guideline-directed medical therapy in heart failure with reduced ejection fraction for starting/up-titrating A) renin-angiotensin system blockers (including a renin converting enzyme inhibitors, a angiotensin receptor blockers and a angiotensin receptor/neprilysin inhibitors; B) mineralocorticoid receptor antagonists; C) sodium-glucose co-transporter 2 inhibitors.
**Figure 2:** Main reasons why patients with heart failure with reduced ejection fraction do not receive optimal heart failure medical therapy according to physicians included in the survey, divided by specialty.