

Gaps between guidelines and everyday clinical practice in the treatment of heart failure patients with reduced ejection fraction: we still have much to learn

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Introduction: Previous studies have shown that real-life patients with heart failure with reduced ejection fraction (HFrEF) often fail to reach the target doses of disease-modifying treatments that demonstrate benefits in randomized controlled trials, which form the basis of guideline recommendations. The reasons behind this appear to be multifactorial, leading to a gap between guideline recommendations and everyday clinical practice.¹⁻³ This study aimed to investigate the main reasons why are the patients with HFrEF not receiving the target doses of guideline-directed medical therapy (GDMT).

Patients and Methods: We conducted a registry-based study including patients with HFrEF hospitalized at our center between September 2021 and September 2023. Information was collected on therapy adherence, doses, and reasons for not achieving target doses. Follow-up data were obtained through clinical visits or phone interviews.

Results: This study analyzed 266 patients with newly diagnosed HFrEF, and GDMT was initiated according to the European Society of Cardiology guidelines. The mean age was 64 years (IQR 16), and 27.4% were female. Only 7.7% of the patients were on the maximal doses of all four pillars of GDMT. Most patients regularly took their prescribed medication, and adherence did not vary significantly between different groups of medications. The primary reasons for not achieving maximum doses included lack of dosage increase attempts, issues with kidney function and potassium levels, and low blood pressure.

Conclusion: The greatest challenges in achieving GDMT for HFrEF include clinical inertia, side effects, and patients' perceptions of the necessity of medication. Physicians may overestimate the quality of care they provide, contributing to clinical inertia. Other factors include time constraints during office visits, patient nonadherence, and reluctance to adjust therapy. Additionally, gaps in education, training, and organizational support are well-recognized causes of clinical inertia.

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LITERATURE

- Greene SJ, Bash LD, Tebbs KW, Hancock LN, Barlow SG, Coyle CR. Physician-Reported Reasons for Not Initiating Guideline-Directed Medical Therapy for Heart Failure. *JACC Heart Fail.* 2024 Sep 3:S2213-1779(24)00601-2. <https://doi.org/10.1016/j.jchf.2024.08.002>
- Biegus J, Pagnesi M, Davison B, Piotr Ponikowski, Mebazaa A, Cotter G. High-intensity care for GDMT titration. *Heart Fail Rev.* 2024 Sep;29(5):1065-1077. <https://doi.org/10.1007/s10741-024-10419-5>
- Verhestraeten C, Heggermont WA, Maris M. Clinical inertia in the treatment of heart failure: a major issue to tackle. *Heart Fail Rev.* 2021 Nov;26(6):1359-1370. <https://doi.org/10.1007/s10741-020-09979-z>