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Addressing Therapeutic Inhibition in the Heart Failure Therapy

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DESCRIPTION

A survival rate of 50% for Heart Failure (HF) with decreased ejection fraction HFrEF five years following diagnosis is comparable to that of many malignancies. Fortunately, there are now a number of approved oral drugs that have been shown to lower the risk of death and HF hospitalization while also enhancing patient-reported quality of life. Angiotensin Receptor-Neprilysin Inhibitor (ARNI), beta-blocker, Mineralocorticoid Receptor Antagonist (MRA) and Sodium Glucose co-transporter-2 inhibitor SGT_2-i have been shown to have a cumulative effect on comprehensive disease-modifying quadruple therapy that includes a 73% relative reduction in risk of death over two years. Although fewer than 1 in 4 eligible patients are given triple therapy with ACEI/ARB/ARNI, beta-blocker, and MRA, and adoption of $SGLT_2$-i is anticipated to be delayed, there are significant gaps in the use of Guideline-Directed Medical Therapy (GDMT) in real-world US practice [1].

As we consider the reasons for the continued underuse and underdosing of GDMT, numerous lines of evidence point to a considerable clinical inertia toward pharmaceutical adjustments. Longitudinal investigations reveal that the majority of HFrEF patients who are eligible for therapy still take consistent sub-target dosages or no medication at all despite frequent outpatient clinic visits [2]. Other statistics show that the degree of underuse of GDMT is constant regardless of blood pressure, indicating that the main problem may be care quality rather than actual patent intolerance. In fact, the lack of medication modifications based on guidelines suggests that clinicians and patients may commonly underestimate the risk of death and mistake "stable" symptoms for "low risk-a correlation that is wildly at odds with the natural course of the disease. The Joint Commission Journal on Quality and Patient Safety has published a study on a pharmacy-led HF titration pilot programme that Aimed to identify patients who were suitable candidates for ACEI/ARB/ARNI and beta-blocker therapy [3].

The authors employed a provider-facing dashboard to find HFrEF patients in a Veterans Affairs (VA) Medical Center who were qualified for treatment. Then, in a single outpatient clinic, they started an HF Medication Titration Clinic. Without access to the titration clinic, the usual medical care was continued in the other 8 clinics [4]. Throughout the 14-month research, pharmacists at the titration clinic identified 12 patients. They followed algorithm-based protocols to conduct 103 in-person or telehealth visits for these patients (>85% of which were telemedicine visits; n=88).

Despite these drawbacks, this study provides additional evidence in favor of the viability of drug titration clinics that conduct the majority of their sessions virtually as a potentially efficient way to enhance the usage and titration of GDMT for HFrEF. An outpatient approach that is multidisciplinary, longitudinal, virtual, and algorithm-based may show promise even though a recent randomized trial intended to improve the implementation of GDMT using hospital-based quality improvement interventions revealed no significant effect of post-discharge care. Such an approach may suitably enhance the number of patient interactions with healthcare professionals, while balancing added standardization for pharmaceutical selections with practicality in terms of the burden on patients and healthcare professionals. Additionally, the disturbingly low rates of medication titration in the outpatient HFrEF care model should encourage us to carefully reevaluate the utility of many common clinic appointments [5].

The hospitalization and mortality rates for individuals with heart failure continue to be extremely high, despite a significant advance in heart failure management over the past few decades. An key underlying cause is clinical inertia, which is the failure to intensify treatment when a patient is not progressing toward evidence-based goals for care. Clinical inertia is well-documented in hypertension and type 2 diabetes mellitus, but it is now becoming more widely acknowledged in heart failure. Despite the fact that there are clear recommendations for the treatment of heart failure, clinical practice still does not follow these guidelines. Although the vast majority of patients were treated with heart failure medications that followed guidelines, very few of these patients received the correct target dose of angiotensin-converting enzyme inhibitors, angiotensin II receptor blockers, beta-blockers, mineralocorticoid receptor antagonists, and other medications that followed guidelines.

CONCLUSION

As we analyses the causes for GDMT's continuing underuse and underdosing, multiple lines of evidence suggest to a significant clinical inertia toward pharmacological changes. Longitudinal studies show that, despite many outpatient clinic visits, the majority of HFrEF patients who are eligible for therapy continue to take consistent sub-target dosages or no medication at all. Other statistics reveal that the degree of GDMT underuse is constant regardless of blood pressure, implying that the major issue may be care quality rather than true patent intolerance. Despite these limitations, this study adds to the evidence supporting the viability of drug titration clinics that conduct the majority of their sessions remotely as a potentially efficient strategy to improve GDMT utilization and titration for HFrEF. A multidisciplinary, longitudinal, virtual, and algorithm-based outpatient strategy may hold promise, despite the fact that a recent randomized trial aimed at improving GDMT implementation using hospital-based quality improvement interventions found no significant effect of post-discharge treatment. The hospitalization and mortality rates for individuals with heart failure continue to be extremely high, despite a significant advance in heart failure management over the past few decades. An key underlying cause is clinical inertia, which is the failure to intensify treatment when a patient is not progressing toward evidence-based goals for care. Clinical inertia is well-documented in hypertension and type 2 diabetes mellitus, but it is now becoming more widely acknowledged in heart failure.

REFERENCES

[1]. Rao V N., Greene S J. *Jt Comm J Qual Patient Saf,* **2022,** 148(1):3-4.

[2]. Pinto C., Cagnazzo C. *ESMO open*, **2020**, 15(2):6-9.

[3]. Rauh S., Mavroeidis L., Ntellas P.,et al., *ESMO open*, **2020**, 15(1):1-3.

[4]. Myers S R., Abbadessa M K., Gaines S.,et al., *Ann Emerg Med*, **2021**,77(1):110-6.

[5]. Kozek-Langenecker S., Fries D., Spahn D R., et al., *Br J Anaesth*, **2014**,112(5):784-794.