Reducing 30 Day CHF Readmission Rates: Evaluating Medication Efficacy

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Purpose

To review the existing literature to compare effectiveness of Angiotensin Receptor-Neprilysin Inhibitors (ARNIs) versus Beta Blockers (BBs) in preventing 30-day hospital readmission rates in patients who are diagnosed with HFrEF ≤ 40%.

Specific Objectives

- Determine readmission rates within 30 days of discharge among patients with HFrEF ≤ 40% who received ARNIs.
- Determine readmission rates within 30 days of discharge among patients with HFrEF ≤ 40% who received BBs.

Background

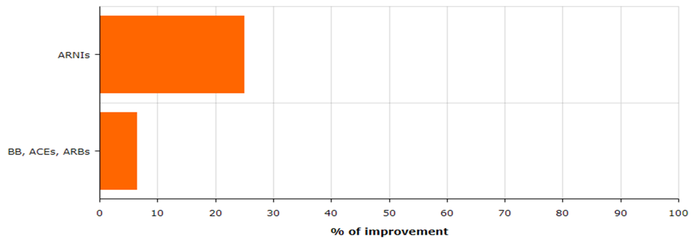
- Approximately 6.2 million adults are diagnosed with heart failure (HF) in the US.
- Approximately 50% of HF cases have a reduced ejection fraction of 40% or less.
- It is expected that approximately 8.5 million adults in the US will be diagnosed with HF by 2030.
- HF is one of the leading causes of hospitalizations and readmissions in the US.
- HF is expected to increase healthcare costs to $69.7 million in 2030.

Methods

- **Eligibility Criteria**
  - Articles published in a medical, nursing, or pharmacology journal
  - Considered scientific research
  - Research completed on human participants
- **Information sources**
  - Systematic search using the UTHSC Online Library
  - Literature search from August 2020-November 2021
  - Databases accessed included Google Scholar, PubMed, and CINAHL
- **Methods of results synthesis**
  - Compared two general studies
  - Discussed the effectiveness of each class

Results

- **Selection and characteristics of sources of evidence**
  - Ten articles met the search inclusion criteria.
  - Ten articles completed rapid critical appraisal.
  - Two articles chosen to be synthesized.
- **Results of individual sources of evidence**
  - BBs reduce 30-day readmission rates.
  - ARNIs vs. controls reduce readmissions and mortality.
  - ARNIs have positive impact on left ventricular remodeling.
- **Synthesis of results**
  - ARNIs and BBs improve readmission and mortality rates in patients with HFrEF



Implications for Practice

- This scoping review provides insight into the complexity of medication management for HFrEF and its role in reducing hospitalizations.
- Our review indicates a need for further research into the implementation of ARNIs as monotherapy in the treatment of HF compared to BBs.
- ARNIs are typically added in late stages of HF as part of combination therapy.

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