



JACC: Heart Failure

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CLINICAL RESEARCH

Prescribing Patterns of Heart Failure-Exacerbating Medications Following a Heart Failure Hospitalization

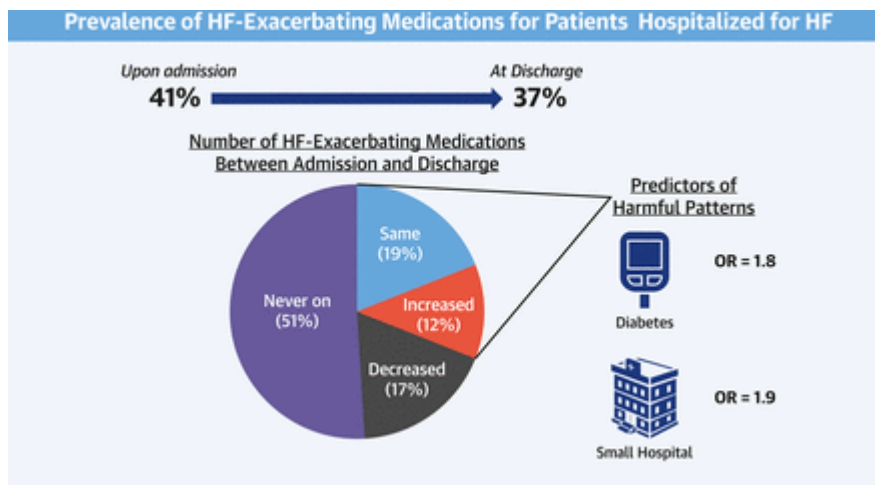
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Abstract

Objectives This study sought to describe the patterns of heart failure (HF)-exacerbating medications used among older adults hospitalized for HF and to examine determinants of HF-exacerbating medication use.

Background HF-exacerbating medications can potentially contribute to adverse outcomes and could represent an important target for future strategies to improve post-hospitalization outcomes.

Methods Medicare beneficiaries ≥ 65 years of age with an adjudicated HF hospitalization between 2003 and 2014 were derived from the geographically diverse REGARDS (Reasons for Geographic and Racial Difference in Stroke) cohort study. Major HF-exacerbating medications, defined as those listed on the 2016 American Heart Association Scientific Statement listing medications that can precipitate or induce HF, were examined. Patterns of prescribing medications at hospital admission and at discharge were examined, as well as changes that occurred between admission and discharge; and a multivariable logistic regression analysis was conducted to identify determinants of harmful prescribing practices following HF hospitalization (defined as either the continuation of an HF-exacerbating medications or an increase in the number of HF-exacerbating medications between hospital admission and discharge).

Results Among 558 unique individuals, 18% experienced a decrease in the number of HF-exacerbating medications between admission and discharge, 19% remained at the same number, and 12% experienced an increase. Multivariable logistic regression analysis revealed that diabetes (odds ratio [OR]: 1.80; 95% confidence interval [CI]: 1.18 to 2.75) and small hospital size (OR: 1.93; 95% CI: 1.18 to 3.16) were the strongest, independently associated determinants of harmful prescribing practices.

Conclusions HF-exacerbating medication regimens are often continued or started following an HF hospitalization. These findings highlight an ongoing need to develop strategies to improve safe prescribing practices in this vulnerable population.

Key Words

heart failure inappropriate prescribing medication reconciliation

Footnotes

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