

Contemporary Weight Change Patterns for Hospitalized Heart Failure Patients: Comparison with the ADHERE Registry

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Background

- Despite new therapies aimed at treating chronic heart failure (HF), management of acute decompensated HF (hospitalized patients) remains largely unchanged.
- The primary goal in the management of acute exacerbation of chronic HF remains symptom relief, achieved via addressing comorbidities, volume removal, and evaluating for advanced therapies
- Despite broad focus on reducing readmissions after HF related hospitalizations, national data remains essentially unchanged over the past two decades.

Objective

To test the hypothesis that our center's low 30-day readmission rates post discharge from HF admissions (approximately 16%) are driven by a greater focus on volume removal, we studied consecutive hospitalized patients, in comparison to the ADHERE Registry.

Methods

- We performed a retrospective review of 685 patients who were admitted for or with heart failure with diuresis as a cornerstone of treatment strategy at a single site from December 2017 to May 2018 and March 2020 to August 2020.
- The exclusion criteria consisted of patients who:
 - 1. died during hospitalization
 - 2. were treated with dialysis
- 3. Underwent surgery of any kind during the hospitalization
- 4. Left hospital against medical advice
- We compared the distribution of weight change at our center (Figure 1) with the distribution of weight change in the ADHERE Registry from 2003 (Figure 2)

Results

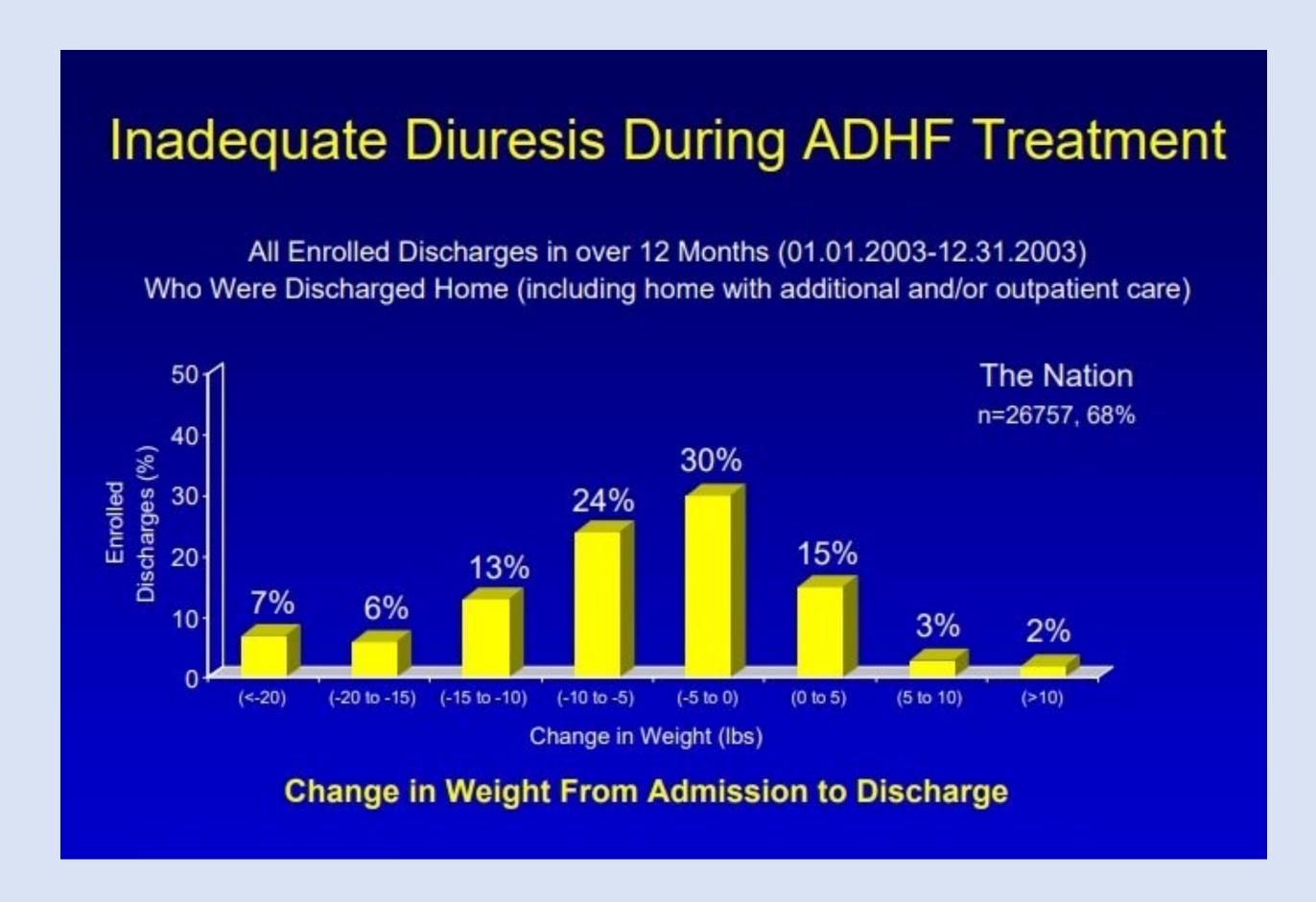


Figure 1: Chart from the Acute Decompensated Heart Failure National Registry (ADHERE) database, which enrolled non-selected patients admitted to the hospital for acute decompensated heart failure (ADHF). Negative values indicated weight loss and positive values indicate weight gain.

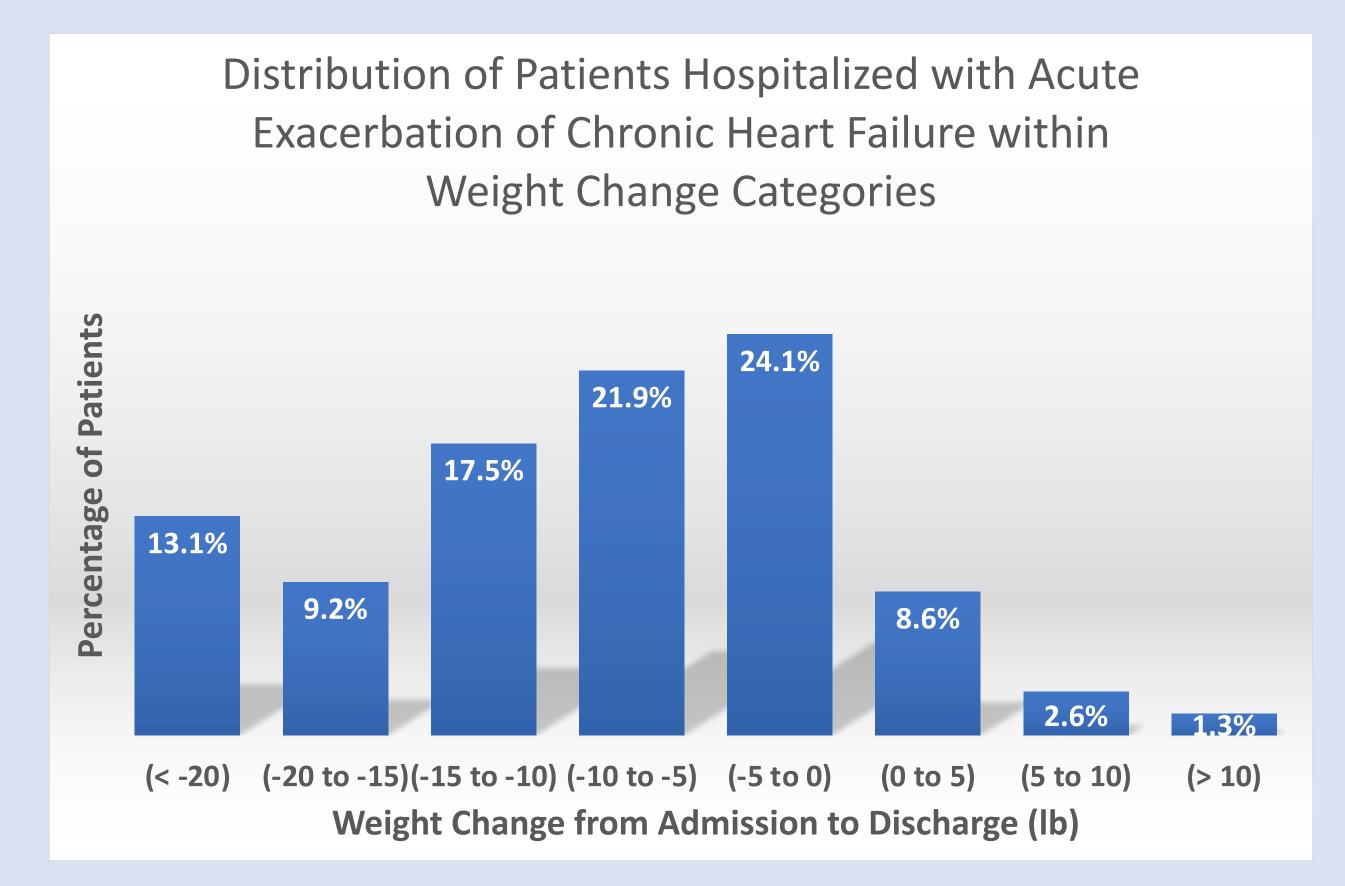


Figure 2: Negative values indicate weight loss while positive values indicate weight gain. The number of patients within each weight loss category was divided by the total number of patients (685).

Results (Continued)

- The average age of patients included in this review was 71.
- The average length of stay of patients included in this review was 5.5.
- The average admission weight of patients included in this review was 209.9 lbs.
- The average ejection fraction of patients included in this study was 41%
- The percentage of patients who gained weight during hospitalization decreased from 25% to 12.8% at our center compared to the ADHERE Registry.
- The percentage of patients losing more than 10 lbs.
 was 40.4% in the current study, compared to 26% in the ADHERE Registry.

Conclusions

- Compared with the ADHERE Registry from two decades ago, pattern of weight loss in a contemporary program with a low 30-day readmission rate per national hospital data, is associated with a pattern of greater weight loss.
- Whether there is a causal relationship remains to be further studied.