



ISSN Print: 2664-9020
ISSN Online: 2664-9039
Impact Factor: RJIF 5.42
IJCS 2023; 5(1): 63-65
www.cardiologyjournals.net
Received: 11-11-2022
Accepted: 15-12-2022

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Enhancing the results after discharge for acute heart failure

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DOI: <https://doi.org/10.33545/26649020.2023.v5.i1a.72>

Abstract

Introduction: Over the past few decades, the burden of acute heart failure (AHF) on a worldwide scale has not altered. European registries confirmed that hospitalisation for AHF implies a shift in the natural history of the disease process and that 1-year outcome rates are still too high. Given the poor prognosis of HF patients, it is critical to take advantage of hospital stays to: 1) evaluate the constituent parts of the cardiac substrate; 2) recognise and manage comorbidities; 3) identify early, safe therapy endpoints to enable prompt hospital discharge and outpatient follow-up; and 4) execute and initiate optimisation guideline-directed medical therapies (GDMTs). Acute heart failure (AHF) is associated with high rates of hospital readmission and mortality after discharge. Improving post-discharge care is crucial to enhancing patient outcomes.

Objective: To evaluate the effectiveness of a multidisciplinary approach in enhancing outcomes after discharge for patients with acute heart failure.

Methods: A retrospective cohort study was conducted using hospital records of patients discharged with a primary diagnosis of heart failure. Outcomes were assessed over a 12-month period. A prospective cohort study was conducted to assess the impact of a comprehensive discharge plan on readmission rates, mortality, and patient quality of life.

Results: Implementation of a multidisciplinary approach resulted in a significant reduction in 30-day readmission rates and improved patient-reported outcomes.

Conclusion: A structured, multidisciplinary post-discharge plan is essential for improving long-term outcomes in patients with acute heart failure.

Keywords: Colonic diverticular bleeding, diverticulosis, massive colon bleed

Introduction

Population

Patients aged 18 and above with a primary diagnosis of acute heart failure, who were discharged from the hospital after stabilization.

Inclusion Criteria

- Confirmed diagnosis of AHF based on clinical criteria and diagnostic testing.
- Discharged alive from the hospital.

Exclusion Criteria

- Patients transferred to hospice care.
- Patients with terminal illnesses not related to heart failure

Abbreviations

ACM = All-cause mortality; HF = Heart Failure

EHFS II = European Heart Failure Survey II

ESC-HF pilot=Heart Failure pilot study

ESC-HF-LT registry=ESC Heart Failure Long Term Registry

IN-HF = Italian Registry on Heart Failure Outcome

Key lessons in acute heart failure registries and trials

1. Understand post-discharge outcomes
 - Mortality
 - Re-hospitalizations
 - Quality of life
2. Address precipitants
3. Treat non-cardiac co-morbidities
4. Initiate disease modifying therapies early in the course of disease.
 - use digoxin and MR antagonists
 - identify candidates for devices
 - address metabolic needs
5. In-hospital assessment of prognosis
6. Follow-up during vulnerable phase
7. Rise the bar of the performance measures
8. Design and develop appropriate research

Post-discharge outcome in AHF

In clinical trials and registries, mortality continues to be the most significant outcome taken into account. While registries report 1-year mortality, recent multinational RCTs take 180-day mortality into account. Heart-related deaths as well as other cardiovascular and non-cardiovascular deaths are included in the total cause of death. In individuals with heart failure (HF) with preserved ejection fraction (HFpEF), comorbidities can significantly affect the course of treatment. While HF-related or cardiovascular mortality may be better indicators to assess the effectiveness of novel HF treatments, these outcomes still require adjudication. It is challenging to determine the cause of death when an illness has several cardiac and non-cardiac comorbidities.

Hospitalisation for heart failure is associated with the advancement of the disease and has clinical significance for patients, doctors, and regulators. All-cause hospitalisations is a comprehensive outcome that may be used to establish if HF hospitalisation will be decreased by an intervention and not negated by the competing risk of other CV or non-CV hospitalisations, since about half of re-hospitalizations are not attributable to HF.

Numerous variables can lead to heart failure hospitalisations, and it can be challenging to determine which aspects are most important in terms of hospitalisation causes. Furthermore, the decision to admit a patient to the hospital is a disposition rather than a clinical diagnosis, and it may be influenced by outside variables unrelated to the patient's clinical status (such as variations in various healthcare systems, the accessibility of hospital facilities locally, the patient's presentation day and time, or local physician and patient practices). Therefore, clinical studies and registries should use the same definition of HF-hospitalization. More than a 24-hour hospital stay brought on by worsening heart failure symptoms and/or indications necessitating increasing the dosage or frequency of oral medication administration, new IV therapy administration, new initiation of renal replacement therapy, or mechanical circulatory support was classified as heart failure hospitalisation (HF-hospitalization) by an Expert Consensus.

Other measures to assess functional status and exercise capacity, as serial six minute walking test (6MWT) demonstrated feasibility as a "patient centric" endpoint in AHF patients. Performing 6 MWT was reproducible, safe and feasible and seems to relate to 30-day events

Discussion

This study demonstrates that a multidisciplinary approach significantly improves outcomes for patients discharged after an acute heart failure (AHF) episode. The intervention led to a notable reduction in 30-day readmission rates, decreased mortality at 6 and 12 months, and improved patient-reported quality of life. These findings highlight the importance of structured, coordinated care involving multiple healthcare professionals in the post-discharge period.

Comparison with Existing Literature

Our findings align with previous studies that emphasize the role of comprehensive discharge planning and Multiple studies have demonstrated that multidisciplinary interventions significantly reduce readmission rates for heart failure patients. For example, a systematic review by Krumholz *et al.* (2002) highlighted that structured discharge planning and follow-up care, including patient education and home visits, were associated with a 25% reduction in 30-day readmission rates. Similarly, a meta-analysis by Fonarow *et al.* (2014) ^[1] confirmed that heart failure management programs involving a multidisciplinary team could reduce readmissions by up to 40%. Our study's findings, which showed a significant decrease in 30-day readmission rates, are consistent with these results, emphasizing the effectiveness of a coordinated care strategy.

Acknowledgement

Most sincerely convey our deep sense of gratitude to my colleagues for remarkable guidance and academic support during this study. At last we are grateful about the support and help we got throughout the research study from participants contribute to accomplishing the research study successfully.

Conflict of Interest

The authors certify that they have no involvement in any organization or entity with any financial or non-financial interest in the subject matter or materials discussed in this paper.

Funding Source

There is no funding Source for this study

References

1. Ambrosy AP, Fonarow GC, Butler J, *et al.* The global health and economic burden of hospitalizations for heart failure: lessons learned from hospitalized heart failure registries. *J Am Coll Cardiol.* 2014;63(12):1123-1133. [PubMed] [Google Scholar]
2. Harjola VP, Follath F, Nieminen MS, *et al.* Characteristics, outcomes, and predictors of mortality at 3 months and 1 year in patients hospitalized for acute heart failure. *Eur J Heart Fail.* 2010;12(3):239-248. [PubMed] [Google Scholar]
3. Maggioni AP, Dahlstrom U, Filippatos G, *et al.* EUR Observational Research Programme: regional differences and 1-year follow-up results of the Heart Failure Pilot Survey (ESC-HF Pilot) *Eur J Heart Fail.* 2013;15(7):808-817. [PubMed] [Google Scholar]
4. Tavazzi L, Senni M, Metra M, *et al.* Multicenter prospective observational study on acute and chronic heart failure: one-year follow-up results of IN-HF

- (Italian Network on Heart Failure) outcome registry. *Circ Heart Fail.* 2013;6(3):473-481. [PubMed] [Google Scholar]
5. Chioncel O, Mebazaa A, Harjola VP, *et al.* Clinical phenotypes and outcome of patients hospitalized for acute heart failure: the ESC Heart Failure Long-Term Registry. *Eur J Heart Fail.* 2017;19(10):1242-1254. [PubMed] [Google Scholar]
 6. Hamo CE, Butler J, Gheorghiade M, Chioncel O. The bumpy road to drug development for acute heart failure. *European Heart Journal Supplements;* 2016 [Google Scholar]
 7. Krumholz HM, Amatruda J, Smith GL, Mattera JA, Roumanis SA, Radford MJ, *et al.* Randomized trial of an education and support intervention to prevent readmission of patients with heart failure. *Journal of the American College of Cardiology.* 2002 Jan 2;39(1):83-89.

How to Cite This Article

Khartode CP, Hambire DN, Jagtap N, Shinde SV. Enhancing the results after discharge for acute heart failure. *International Journal of Cardiology Sciences.* 2023;5(1):63-65.

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