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Impact of Resident & Student Pharmacist Intervention on Readmission Rates in Patients with Heart Failure with Reduced Ejection Fraction in the Internal Medicine Setting

Arlet Artoonian (aartooni@usc.edu), Tahereh Sadeghi Sina (taherehs@usc.edu), Azar Habibvand (habibvan@usc.edu), Saba Moradian (sabamora@usc.edu)

Background/ Purpose

Heart failure (HF) impacts millions of Americans, with rising prevalence rates. Untreated HF poses severe risks, including hospitalization and death. Guideline-Directed Medication Therapy (GDMT), incorporating ACE inhibitors, ARBs, ARNIs, beta-blockers, and MRAs, significantly reduces morbidity and mortality in HFrEF patients. However, challenges such as medication adherence and patient understanding hinder optimal GDMT utilization. While involving pharmacists in multidisciplinary teams has yielded positive outcomes, data on the impact of student and resident pharmacists in LA County's internal medicine hospital setting is scarce. Our study at LA General Hospital aims to determine whether bedside counseling by student and resident pharmacists can mitigate HFrEF patients' hospitalization rates in internal medicine teams.

Method

This study targets adults diagnosed with Heart Failure with Reduced Ejection Fraction (HFrEF), having an ejection fraction (EF) of ≤40%, NYHA class II-IV, and admitted to the internal medicine team, excluding recent surgery within 30 days. It aims to gather an HFrEF patient cohort, providing educational bedside counseling on GDMT. A control group without counseling will be established, with data stored securely in the HIPAA-compliant Research Electronic Data Capture system to assess counseling's impact on hospitalization rates and outcomes.

Results

1 out of the 7 patients in the intervention group, were readmitted to the hospital within 30 days of being discharged. In the control group, 4 out of 17 patients were readmitted within the same timeframe. Three of the four patients in the control group were readmitted due to heart failure-related issues. On the other hand, the only patient readmitted in the intervention group was due to problems with picking up their medications. The control group also showed a higher rate of emergency department (29%) than the intervention group (0%).

Conclusion

The pharmacist intervention, including GDMT-focused counseling, referral to HF PharmD for outpatient GDMT titration, and addressing medication queries before discharge may improve overall patient care.