

Heart Failure Education Bundle to Improve Self-care and Reduce Hospital Readmission

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Problem Trigger

- Heart Failure identified by CDC as major health concern in the U.S.
- 5.7 million Americans with HF
- 500,00 cases annually
- Prevalence rate predicted to exceed 8.1 million
- Total cost prediction of \$69.5 billion
- 30 day hospital readmission greatest financial expenditure.
- Work with patients being readmitted

PICOT Question

What is the effectiveness of a HF education bundle, in an out-patient clinic classroom setting, with adults who have a diagnosis of HF and their caregivers, in improving self-care behaviors and management of HF and reducing hospital readmission, as compared with patients who receive education as usual?

Framework

Iowa Model Revised: Evidence Based Practice to Promote Excellence in Health Care:
1.trigger 2.PICOT 3. Team 4.Search and grade evidence. 5. Pilot practice change 6. Integrate and sustain change 6.Disseminate results

Methods

Design: Pre and post education bundle using Iowa Model for guidance

Population: Convenience sampling

Measures:

- Self-care heart failure behavior index(SCHFI v. 6.2) prior to and 90 days post HF education bundle
- Daily weight log sheet
- Hospital readmission monitored at 30, 60 and 90 days

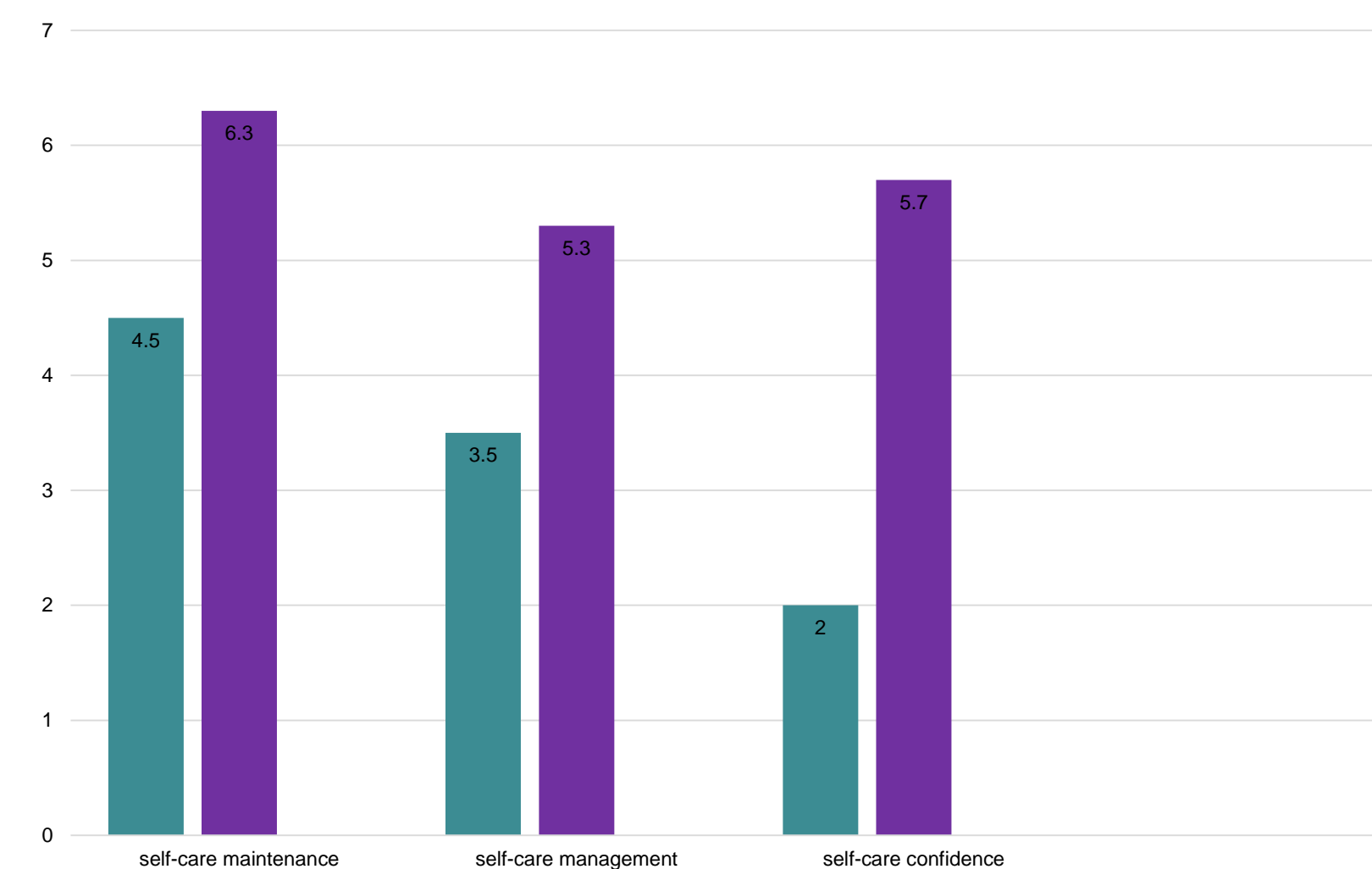
Procedure: Four 1 - hour HF education bundle by lead project NP, pharmacist, dietician and cardiac –REHAB nurse with follow up at 30, 60 and 90 days

Statistical Analysis: Descriptive statistics

Results

- 60% males and all participants had High school education
- Household income less than \$25,000
- Insurance: Medicare, Medicaid, Private
- After the educational bundle, all participants avoided hospital readmission at 30, 60 and 90 days and improved in self care maintenance, management and self-care confidence.

Heart Failure Pre and Post Intervention Overall scores of the 3 main sections of the SCHFI V6.2



■ Before HF education
■ After HF education

- Improved self-care maintenance (increase 6.3 points)
- Improved Self-care management (increase 5.3 points)
- Improved Self-care confidence (increase 5.7 points)
- Improved daily weight and B/P and pulse monitoring.

Conclusions

- HF education is an effective non-pharmacological intervention to improve self-care and reduce 30 day hospital readmission

Practice Implications

- Education Bundle for HF patients can improve self-care
- HF telemonitoring for an education bundle can benefit patients in rural areas

Limitations

- Small sample
- Transportation issues to classes
- No bilingual instructor