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

Vicki Myers-Griffin, MSN, APRN, FNP-BC, Deborah Behan PhD, RN-BC, Yolanda Munoz Maldonado, PhD

Problem Trigger
- Heart Failure identified by CDC as major health concern in the U.S.
- 5.7 million Americans with HF
- 500,000 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?

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

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

Framework

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.