The Effect of a Home Health Heart Failure Specialist RN on 30-day Hospital Readmissions

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INTRODUCTION
Heart Failure
Most frequent medical diagnosis in older Americans
- Currently almost 6 million with HF
- AHA estimates 8 million by 2030
- 20% of all hospital admissions
Most common diagnosis associated with 30-day readmission of Medicare patients
- BRRH HF readmissions: 22.5%
- US average HF readmissions: 21.6%
- CMS will hold back increasing % of US average HF readmissions: 21.6%

READMISSION RESULTS
Hospital Readmissions within 30 days:
- Control group: 6 Readmissions of 21 participants (one non-HF related)
- Intervention group: 3 Readmissions of 19 participants (one non-HF related)
- Participants in the Control group were 2.22 times more likely to be readmitted than those participants in the Intervention group
- \[ x^2 = 9.35, p = .334, O.R. = 2.219 \]

METHODS
Sequential mixed method:
- Experimental randomized study of the effect of the Heart Failure Nurse Specialist on 30-day readmissions, HF knowledge, Self-care & QOL
- Qualitative interviews with Intervention patients explored their experience with Home Health HF Specialist nursing care.

PARTICIPANTS
Quantitative Participant
- Sample drawn from patients hospitalized with a primary or secondary diagnosis of HF
- 40 participants: 21 control, 19 intervention

Qualitative Participant
- Sample drawn from intervention patients who consented to be interviewed, either in person or by telephone: 14 participants

DATA ANALYSIS
Quantitative measures:
- 30-day readmissions: Chi Square analysis
- Pre-post Dutch HF Knowledge Scale, Self-Care of Heart Failure Index, Minnesota Living with Heart Failure Questionnaire: RM- ANOVA

QUALITATIVE RESULTS
Qualitative data analysis identified two themes:
- Personal clarification of patient education, especially related to diet, exercise, and medications
  “I really liked that RF knew that cheap Indian food was my downfall, and she looked for information on the internet on salt content of different Indian dishes and other spices to use – that was above and beyond.” (#4)
- Feelings of support, reassurance, and safety
  “It made me feel so much safer. Knowing she was coming made me feel secure. You feel so vulnerable when you go home – walking on eggs. This heart failure makes you want to be checked out all the time and BS was so comforting…(#25)

DISCUSSION
The Home Health HF Specialist RN delivered a caring intervention assessing and providing for individual patient needs, with an emphasis on education and self-care strategies. Results supported that the relationship the nurse achieved with each participant contributed to improved
- Self-care confidence
- Quality of life
- Knowledge and behavior change

Cost Analysis
- Cost less compared to readmission costs
- Home Health Specialist one-time training: $200
- Intervention for each patient: $200
- Readmission cost: $8000-10,000 each event

Limitations
- Small, single-center study
- Homogeneous sample, limited generalizability

Implications for Nursing Practice
- There is a need for dedicated time or personnel for discharge education
- This role may be an effective option for hospitals without robust disease management programs

Implications for Nursing Research
- Larger, multisite study
- Qualitative study of meeting home health RN in hospital & first home visit

Implications for Nursing Education
- Include D/C education time management strategies in study of disease processes
- Stress that D/C teaching begins at admission and continues through community

SUPPORT
- Graduate Research and Inquiry Program Grant
- FAU Dissertation Year Award
- Sigma Theta Tau International Honor Society of Nursing Research Grant
- BRRH Foundation Population Health Grant provided HFNN salaries