A Multimodal Telehealth Heart Failure Patient Behavior Change Intervention to Promote Self-Care and Reduce Readmissions

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Purpose

• The primary purpose is to determine if older adult Heart Failure (HF) patients discharged from the hospital will experience a reduction in readmissions when participating in a multimodal telehealth (TH) Motivational Interviewing (MI) HF self-care educational intervention.

• The secondary purpose is to determine if the TH MI HF patients experience a reduction in readmissions when compared to:
  - older adult HF patients who have a MI HF self-care educational intervention.
  - older adult HF patients who have a health promotion educational intervention.

Background

• HF affects more than 5.7 million people in the US causing 300,000 deaths and costing $37.2 billion annually.(1)
• HF hospitalizations are currently estimated at 1 million annually in the US, and 30-day readmission rates are at 27% which is the highest among all medical conditions.(2)
• HF readmission rates are now the target of publicly reported performance measures, national improvement initiatives, & government incentives.(3)
• Patient self-care plays a critical role in HF management including monitoring weight, restricting salt, exercising, adhering to medications, & recognizing S/S of decompensation.(4)
• The Self-Care of Heart Failure Model illustrates that self-care management requires the ability to recognize symptoms, evaluate those symptoms, implement an appropriate self-help remedy, & evaluate the effectiveness of that treatment’s effect.(5)
• TH offers additional patient data that may detect earlier HF decompensation and allow prompt intervention.(6)
• MI is an evidence-based treatment in which asking, listening, & informing are used to help patients talk about, commit to, & make health behavior change(s).(7)

Research Questions

• Primary:
  - Is there a difference between older adult HF patients participating in a TH MI HF self-care educational intervention and those patients who participate in a non-TH MI HF self-care educational intervention &/or those patients who participate in a non-TH, non-MI health promotion educational intervention within a 4-month time period regarding:
    - Readmission rates?
    - Emergency room visits?
    - Clinical measurements (BP, HR, weight)?

• Secondary:
  - Is there a difference between these three groups with patterns of monitoring and resource utilization (readmissions, ER visits) within a 4-month time period regarding:
    - Incidence of depression?
    - Health literacy?
    - What is the feasibility of older adult HF patients using TH devices to monitor their BP, HR, and weight?
    - What are older adult HF patient perceptions regarding HF self-care and TH?

Methods

• Sample: 30 male and female HF patients

• Inclusion Criteria:
  - Primary or secondary diagnosis of HF
  - 60 years or older
  - Fluent in English
  - Telephone landline in home
  - SPMSQ score 2 or less

• Exclusion Criteria:
  - Renal failure requiring dialysis
  - Severe visual or dexterity impairment
  - Inability to provide self-care

• Setting: Hospital & Home Health

Nursing Implications

• Providers must utilize various interactive teaching strategies to empower HF patients with the knowledge and skills needed for effective self-care management.

• The epidemic proportion of HF necessitates more innovative, creative approaches such as TH to facilitate patient self-care knowledge and skills resulting in reduction of readmissions.

• Given the proliferation of technology in all aspects of healthcare, a foundational knowledge base and skill set in health care informatics is essential for all providers in order to successfully practice.

References Available on Handout