# Nurses' Knowledge of Evidence-Based Education for Heart Failure

Author: Margaret Smith, DNP, FNP-BC
Assistant Professor of Nursing
Moravian College
Bethlehem, PA 18018
DNP Scholarly Project

## Background

- •Healthcare organizations are strategically working to identify educational methods that may reduce the burden of heart failure (HF) in the adult population.
- •The Heart Failure Society of America (2010) and AHA (2009) assert that patient education and promotion of self-care that focuses on signs and symptoms of worsening condition, diet, weight, medications, and exercise are priorities for the self-management of HF.
- •Teaching HF self-care to patients underscores the importance of patient participation in daily self-care decisions and allows patients to perform self-management.
- •There is a lack of data and literature specific to the knowledge of nurses in the post-acute care healthcare setting regarding evidence-based HF self-management principles.

## Aim/Objectives

- Assess nurses' knowledge of five evidence-based practice HF self-management principles including diet, fluids/weight, signs and symptoms of worsening condition, medications, and activity level.
- Characterize knowledge scores of nurses regarding evidence- based practice HF self-management principles.
- Describe whether the level of HF knowledge varies by years of experience, educational preparation, or licensure.

## Methodology

- This descriptive, correlational study assessed nurses' knowledge of evidence-based practice HF self-management principles.
- •Knowledge of HF principles was assessed using the Nurses Knowledge of Heart Failure Principles (NKHFP) survey.
- •Descriptive statistics and graphical methods define the distributional characteristics of knowledge scores and sample's demographics including years of experience, educational preparation, and licensure.
- •Group differences for RN's and LPN's for scores was evaluated using a two group t-test. Group differences with selected demographics was be evaluated using analysis of variance (ANOVA).

#### **Theoretical Framework**

- The transitional care model (TCM), developed by Mary Naylor, addresses the vulnerable components of transition for patients while moving from one level of care to another (Naylor, 2011).
- •The TCM is designed to ensure health care continuity and prevent poor preventable outcomes for at risk populations, namely those with chronic illness (Naylor, 2011).
- •The model identifies five major issues that occur during care transitions, which include a high level of medication errors, serious unmet needs of patients, poor satisfaction with care, high rates of preventable readmissions, and tremendous human and cost burden (Naylor, 2011).
- •The theory focuses on eight distinct needs of patients during the transitional care period.
- •Those elements include screening, engaging elders and caregivers, managing symptoms, educating and promoting self-management, collaborating, assuring continuity, coordinating care, and maintaining relationships (Naylor, 2011).

#### Results

- A total of 45 RNs and 47 LPNs with varying educational degrees and nursing years of experience voluntarily completed the NKHFP survey within a four-week time frame.
- •The *t*-test comparison of RN and LPN knowledge scores identified no statistical significance t (90) = 1.54, (p > 0.05).
- •Analysis of variance results did not show statistical significance between knowledge scores and educational degree [F (4, 85) = 2.236, p > 0.072].
- •Analysis of variance results by knowledge scores and nursing years of experience did not show statistical significance [F (2, 89) = 1.030, p > 0.361].

#### **Practice Recommendations**

- Develop educational interventions inclusive of evidencebased HF self-management principles for post acute care nurses.
- •Develop and implement new knowledge tools that can assess nurses' knowledge level of HF self-management principles.
- •Multi-center study replicating this study to determine nurses' knowledge of HF self-management principles.
- •Incorporate advanced practice clinicians into curriculum development of educational interventions.
- •Evaluate education strategies throughout nursing homes to optimize HF education for nurses.

## References

Albert, N., Collier, S., Somali, V., Wilkinson, S., Hammel, J., Vopat, L.,...Bittel, B. (2002) Nurse's knowledge of heart failure education principles. *Heart and Lung*, 31, 102-112.

American Heart Association (2009). State of the science: Promoting self-care in persons with heart failure: A scientific statement from the American Heart Association. *Circulation: Heart Failure*, 120, 1141-1163. doi:10.1161/circulationaha.109.192628

Heart Failure Society of America (2010). Executive summary: HFSA 2010 comprehensive heart failure practice guidelines. *Journal of Cardiac Failure*, 16, 98-114.

Naylor, M., (2011). The transitional care model: Translating research into practice and policy. Agency for Healthcare Research and Quality. Retrieved from <a href="www.ahrg.org">www.ahrg.org</a>.