Title:
Feasibility Study of a Nurse-Led Heart Failure Standardized Education Program to Reduce 30-Day Readmission

Martha Sissay Awoke, MSN
Department of Case Management, Medstar Georgetown University Hospital, Washington, DC, DC, USA
Diana Lyn Baptiste, DNP, MSN, RN
Department of Acute and Chronic Care, Johns Hopkins University School of Nursing, Baltimore, MD, USA

Session Title:
Readmissions in Heart Failure Patients
Slot:
F 02: Monday, 30 October 2017: 9:30 AM-10:15 AM
Scheduled Time:
9:50 AM

Keywords:
Heart Failure, Knowledge and Self-Care and Readmissions

References:


Abstract Summary:
Standardized heart failure education programs focused on increasing knowledge and self-care behaviors are known to improve symptom management. In this presentation, we will discuss the implementation of a nurse-led education program that evaluated knowledge, self-care behaviors, and readmissions for individuals living with heart failure.
Learning Activity:

<table>
<thead>
<tr>
<th>LEARNING OBJECTIVES</th>
<th>EXPANDED CONTENT OUTLINE</th>
</tr>
</thead>
<tbody>
<tr>
<td>By the end of this session, the learner will be recognize 3 concepts of self-care behaviors related to heart failure.</td>
<td>Self-care of patients with HF is described as one’s naturalistic decision-making process that includes behaviors and activities to manage a chronic condition, maintain life and overall well-being. Common daily self-care activities for persons with HF are identified as self-weight measurement, fluid monitoring, and adherence with medication regimen, following a low-sodium diet, exercise and keeping regular doctor or clinic visits. Common behaviors associated with poor self-care include skipped medications, dietary indiscretions, lack of recognition of symptoms and symptom exacerbations such as shortness of breath, increased fluid volume, and peripheral edema. Frequent symptom exacerbation, disease progression, and hospital readmissions are often associated with poor.</td>
</tr>
<tr>
<td>By the end of this session the learner will describe three key concepts related to knowledge of heart failure.</td>
<td>Adequate knowledge about heart failure is an important factor for patients to recognize symptoms, understand disease process, and seek appropriate advice.</td>
</tr>
<tr>
<td>By the end of this session the learner will recognize two evidence-based instruments that can be used to quantify self-care and knowledge of heart failure.</td>
<td>The Self-care Heart Failure Index is a 22 item questionnaire that is divided into 3 subscales: self-care maintenance, self-care management, and self-care confidence. Self-care maintenance measures patients’ ability to maintain health by adhering to treatment advice and performing tasks such as daily weight, medication adherence and following a low salt diet. Self-care management measures patient’s ability to recognize symptoms and perform tasks to manage symptoms as they arise. Self-care confidence measures, patients perceived confidence in recognizing and managing symptoms to maintain health. The Dutch Heart Failure Knowledge Score is a 15 item multiple choice questionnaire that measures patients understanding and knowledge level about diet, activity, medication adherence, fluid restriction, and daily weight monitoring.</td>
</tr>
</tbody>
</table>
By the end of this session the learner will identify 3 factors that contribute to readmission.

Various reasons contribute to hospital readmission in heart failure patients. Research shows that patient’s lack of understanding about disease process, inadequate level of symptom recognition, inability to make appropriate decision to alleviate symptoms and the absence of timely follow-up once patient has transitioned from hospital to home contribute to the increased readmission rate for heart failure patients. Hence, it is important to provide adequate and efficient patient education by nurses during inpatient hospitalization, incorporated with a scheduled follow-up visit within seven days post discharge is essential to promote self-care and potentially reduce 30-day readmission.

Abstract Text:

**Purpose/Objectives:** Heart failure is a burdensome condition that affects more than 6 million Americans and an estimated 23 million people worldwide. Individuals living with heart failure often experience shortness of breath, edema, and fatigue leading to frequent hospital admission. Heart failure is the most common cause of hospital readmission. Studies show that nearly 24% of heart failure patients are readmitted within 30 days and 30% of heart failure patients are readmitted into an acute hospital within 60-90 days. Frequent readmission is a financial burden on patient families and the health care system. The cost of treating heart failure, including lost wages and lost productivity is estimated at $32 billion a year. Evidence suggests a nurse-led heart failure inpatient hospital education improves knowledge and self-care behavior and potentially reduce 30-day readmission. Knowledge addresses patients' understanding of the association between disease progression, symptoms, and treatment plan.

In this study, we implemented a nurse-led heart failure education to improve patients’ knowledge about the heart failure disease process. The purpose of this quality improvement program was to standardize a nurse-led heart failure patient education and evaluate its impact on knowledge, and all cause 30-day hospital readmission at a large urban academic medical center.

**Methods:** We implemented an evidence-based standardized heart failure patient education program with telephone follow-up. A convenience sample of (N=27) individuals diagnosed with heart failure were asked to complete the Dutch Heart Failure Knowledge Scale at baseline and 7 days post-discharge.

**Results:** Descriptive statistics were analyzed using SPSS® version 24 to provide demographic characteristics for the sample. The mean age for the sample (N=27) was 66.3, ranging from 54-90 years, almost evenly distributed gender, and most of the sample size reported they were either unemployed, retired, or disabled. Of the total participants, 61% had an ejection fraction less than 55% and 39% had a New York Heart Association IV classification. The mean baseline knowledge scores for (N=12) participants who completed the Dutch Heart Failure Knowledge Scale increased from 12.3 to 13.25 ($p=.005$) at 7 days post-discharge. The all-cause readmission rate after the intervention was 17.2%, a reduction from 22% previously reported prior to the intervention.

**Conclusion:** Implications from this study suggest the importance of implementing standardized education programs that are focused on improving knowledge for heart failure patients. Findings suggest that implementation of a nurse-led standardized heart failure education program that is focused on improving
knowledge may reduce 30-day readmission for individuals with heart failure. Nurses are uniquely qualified to implement standardized evidence-based patient education to promote positive health outcomes in local and global settings.