Original Article

An Intervention to Enhance Goals-of-Care Communication Between Heart Failure Patients and Heart Failure Providers

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Abstract

Context. Heart failure patients contend with a markedly impaired quality of life, experiencing emotional distress and severe physical discomfort that increases in frequency in the last months of life. Improving communication between patients and providers about goals of care has the potential to improve patient-provider communication and patient outcomes.

Objectives. To determine the effects of a goals-of-care (GoC) intervention compared to usual care on the number of GoC conversations, quality of communication between patients and providers, referrals to palliative care services and completion of advance care directives.

Methods. A two-group randomized study ($n = 40$/group) compared a GoC intervention to usual care, conducted in an academic heart failure (HF) clinic. The GoC intervention was a previsit patient activation-education, telephone-based intervention delivered by a nurse. The primary outcome of the study was number of GoC conversations between HF patients and HF providers. Secondary outcomes were quality of communication, number of referrals to palliative care, and completion of advance directives.

Results. Patients averaged 58.15 ± 11.26 years of age, with mean left ventricular ejection fraction = 30.31 ± 9.72% and Seattle Heart Failure Model scores = 95.1 ± 1.60. There was a significant increase in goals-of-care conversations (58% vs. 2.6%, $P < 0.001$) and quality of end-of-life communication ($P = 0.03$) in the GoC group compared to usual care after the intervention. There were no differences between groups on the other outcomes.

Conclusion. The GoC intervention resulted in more GoC conversations and higher quality communication between HF patients and providers without increased anxiety or depression. Further studies are needed to assess impact on longer term quality of care and patient outcomes. J Pain Symptom Manage 2016;■:■−■.

Key Words

Goals of care, communication, palliative care, heart failure, end of life

Introduction

Heart failure (HF) affects more than 5 million people in the U.S., with 550,000 new cases diagnosed annually.[1] Among older adults, advanced HF accounts for more hospitalizations, more physician visits, and greater lengths of hospital stay than any other condition,[2,3] resulting in significant financial burden. In addition, HF patients experience a markedly impaired quality of life, including both physical and emotional distress that increases in the last months of life, and many HF patients and families do not access palliative care services early enough in the trajectory of illness to derive benefit.[4] Enhancing communication between patients and providers about goals of care (GoC) has the potential to align HF treatments received with

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patient and family desires and to reduce high cost care at the end of life.[4–6]

Although clinical practice guidelines recommend that cardiology providers engage in GoC conversations and refer patients to palliative care,[7,8] there are no specific strategies to determine when GoC conversations should occur.[9] Thus, HF patients and family caregivers report minimal communication with providers regarding expectations of illness trajectory, prognostic estimates, symptom management, implantable cardioverter-defibrillator deactivation, and advance care planning.[10,11] Providers often fail to initiate such discussions with patients,[12,13] and when they do, the prognostic estimates may not be well received by patients.[14] Common reasons for lack of GoC conversations include poor patient and family education regarding the progressive downward trajectory of HF, lack of willingness among both patients and providers to discuss end-of-life planning, and difficulty predicting prognosis in HF.[10,15–17]

Little has been written about GoC interventions in the HF population. A recent systematic review of patient-professional communication interventions for life-limiting conditions found 16 published studies over a 14-year period, only 1 of which was conducted in HF patients. In the study involving HF patients, an advance directive interview resulted in improved decision making for future medical treatments.[18] The review also suggested three types of interventions that are needed to effect outcomes in HF: 1) provider communication skills, 2) patient understanding of their condition, 3) advance care planning. Another study described use of an outpatient palliative care consultation to address attitudes about and completion of advance directives in 36 symptomatic HF patients, noting that the intervention increased the completion of advance directives that were discussed with the family, but not with the health care provider.[19] These studies suggest an important need for interventions that improve discussions about GoC and advance care planning between patients with advanced HF and their HF clinicians.

Many patients for whom palliative care could significantly improve quality of life do not have access to such care services.[16,20–22] Instead of palliative care, patients at end-of-life often receive intensive and costly care even when it may not contribute significantly to prolonging life.[12] Lack of GoC communication in advanced HF results in slow progression toward death with high symptom burden[23,24] and decreased quality of life,[25,26] increased length of stay in inpatient and intensive care units, and increased costs of care near the end of life.[5,27] Therefore, the purpose of the study was to determine if an intervention designed to assist patients in initiating GoC conversations with HF providers would result in increased numbers of GoC conversations, improved quality of communication with HF health care providers, referrals to palliative care services, and completion of advance directives. This small trial was designed as an efficacy study to examine impact on short-term processes of care, GoC discussions, and quality of communication.

Methods

Design

The study used a randomized two-group study design ($n = 40$/group), testing a GoC intervention against usual care (UC). The primary outcome was number of GoC conversations between HF patients and providers during the HF clinic visit that followed the intervention. Secondarily, we described the effect of the intervention on quality of communication, referrals to palliative care services, completion of advance care directives, anxiety, and depression. Relevant data were collected from each participant at two times: baseline study entry and approximately two weeks after a regularly scheduled HF clinic visit. The study was approved by the institutional review board at the University of Washington, and all participants provided written informed consent.

Setting and Participants

The study was conducted in an HF outpatient clinic in an academic medical center in the Pacific Northwest. The HF clinic is centered within an HF mechanical circulatory support and heart transplant center. This clinic has eight attending physicians, two nurse practitioners, 24 rotating cardiology and HF fellows, and three nurses who care for approximately 600 patients each year. Eighty ($N = 80$) HF patients were recruited at the HF Clinic. The inclusion criteria were as follows: 1) diagnosis of heart failure with reduced ejection fraction with ejection fraction (EF) $\leq$ 40% or heart failure with preserved ejection fraction with EF $<$50%, 2) completion of an outpatient HF visit within the past six months with a scheduled follow-up visit, 3) ability to read, write, and speak in English. The exclusion criteria were as follows: 1) Short BLESSED cognitive score $\geq$10 to rule out significant cognitive impairment,[28] 2) diagnosis of terminal illness with life expectancy of $\leq$1 year not related to heart disease, 3) psychiatric illness that required hospitalization in the past year, 4) age less than 18 years. Seattle Heart Failure Model (SHFM) scores were calculated using information from electronic health records (EHRs).

Intervention

The patient GoC intervention guided by the self-management for chronic conditions model[29] and a prior intervention[30] included the following: