TITLE: HEART CAMP: PROMOTING ADHERENCE TO EXERCISE IN PATIENTS WITH HEART FAILURE

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ABSTRACT
Adherence to the Heart Failure Society of America (HFSA) 2010 guidelines that recommend 30 minutes of supervised moderate intensity exercise five days per week is difficult for the 5.8 million patients with heart failure (HF) who experience shortness of breath and fatigue in regular daily activities. A majority of patients with HF do not engage in any regular exercise and they report adherence to exercise is more difficult than any of the other required behavioral changes for HF. Patients identify lack of skills and motivation as reasons for non-adherence. Therefore, innovative programs are needed to assist HF patients to gain the knowledge, skills and motivation to initiate and adhere to long-term exercise. The objective of this prospective randomized two-group repeated measures experimental design is to determine the efficacy of the HEART (Heart Failure Exercise and Resistance Training) Camp behavioral exercise training intervention on long-term adherence to exercise at 18 months in patients with HF. A sample size of 246 subjects with heart failure will be recruited over a 3 year period. All subjects will receive a cardiopulmonary exercise test and 9 supervised exercise training sessions during a 3 week run-in period prior to randomization. Subjects completing 6 of 9 training sessions will be randomized to the HEART Camp Intervention group (HC) or to a standard care (SC) exercise group. The HC intervention group will receive cognitive-behavioral strategies that address the intervention components of knowledge, attitudes, self-efficacy, behavioral self-management skills and social support. The SC group is provided access to the exercise facility and regular facility staff for the 18 month study period. Our central hypothesis is that the HC group will have significantly better adherence to exercise at 18 months. We will test our hypothesis with the following Specific Aims: Aim 1. To evaluate the effect of HEART Camp on adherence to exercise (measured by accelerometry and self-report); Aim 2. To evaluate which components of the HEART Camp intervention mediate the effects of the intervention on adherence; Aim 3. To evaluate the effect of HEART Camp on specific health outcomes; Aim 4. To explore selected demographic variables (race, gender, age) as potential moderators of the effect of the HEART Camp intervention on adherence; and Aim 5. To explore the perceptions and experiences that contextualize exercise adherence. The HEART Camp intervention is innovative because it is the first to
test a multi-component intervention designed to improve long-term adherence to exercise behavior in patients with HF. It uses a creative, camp atmosphere with the motto: “Choose to Move for Heart Improvement”. Interactive group sessions (six camp topics) and a coach are used to deliver intervention components. This study will impact the management of heart failure by investigating the challenging problem of adherence to exercise. Improving long-term adherence to exercise is the logical first step to ensure the required dose of exercise that is necessary to realize beneficial health outcomes and reduce costs in this burdensome chronic illness.