
Center Personnel

Principal Investigator

Debra K. Moser

Administrative Core

Director: Debra K. Moser

Assistant Director: Ellen J. Hahn

Self-Management Pilot/Feasibility and Biobehavioral Outcomes Core

Director: Terry A. Lennie

Assistant Director: Susan K. Frazier

Research Program Development, Data Analysis and Dissemination Core

Director: Lynne A. Hall

Assistant Director: Mary Kay Rayens

For information, contact
dmoser@uky.edu

Visit our web site at:
<http://www.mc.uky.edu/nursing/P20Center>

Center Mission

The mission of the Center for Biobehavioral Research on Self-Management of Cardiopulmonary Disease is to advance the science of self-care by supporting the development of nurse scientists in conducting collaborative biobehavioral self-care research and maintaining sustained programs of productive research.

Funded by the National Institutes of Health/
National Institute of Nursing Research
#1P20 NR010679-01



Center for Biobehavioral Research on Self-Management of Cardiopulmonary Disease



UKHealthCare
College of Nursing

Center for Biobehavioral Research
on Self-Management

Center Overview

Chronic cardiac or pulmonary diseases are among the top four causes of death worldwide. In most developed countries, cardiovascular disease (CVD) is the single largest health care expenditure.

At least one in three Americans lives with chronic CVD. This percentage increases with age; ultimately, one in two people die of CVD, usually after living years with the challenge of managing their condition.

The World Health Organization (WHO) estimates that chronic lower respiratory disease (CLRD) is the 4th leading cause of death. More than 3 million deaths worldwide (5%) were attributed to chronic obstructive pulmonary disease in 2005. Most patients with CLRD live years with the challenge of self-management.

As people accumulate CVD and pulmonary risk factors, develop chronic CVD and pulmonary illnesses, or grow older, the process of self-management becomes exponentially more complex, demanding and time-consuming. At a time when people could benefit most from self-management, their efforts often fail, are abandoned, or are not even attempted. Thus research aimed at improving self-management skills and efforts should have a measurable impact on the public and personal burden from cardiac and pulmonary conditions.

To address this significant problem, we have established the ***Center for Biobehavioral Research on Self-Management of Cardiopulmonary Disease*** at the University of Kentucky College of Nursing.

The short-term goal of the Center is to provide new and experienced investigators with the support and resources necessary to conduct pilot studies using biobehavioral measures to investigate self-management related to cardiopulmonary conditions.

The long-term goal of the Center is to facilitate faculty use of data from these studies to develop sustained interdisciplinary programs of self-management research and to support more established investigators in the continuation, expansion or redirection of current research programs.

The Center is guided by the WHO definition of self-management (also called self-care) as “activities individuals, families, and communities undertake with the intention of enhancing health, preventing disease, limiting illness, and restoring health. These activities are derived from knowledge and skills from the pool of both professional and lay experience. They are undertaken by lay people on their own behalf, either separately or in participative collaboration with professionals.” Thus, we view self-management as a process that can be undertaken at the individual, family and community levels.

Center Resources

- Expertise in biobehavioral intervention research and conduct of clinical trials
- Nutrition Data Systems software, diet entry and nutrition data analysis and interpretation
- Collection, analysis and interpretation of hospitalization and mortality data

- Proposal development
- Multiple statistical methods
- Manuscript review/critique
- Equipment, measurement expertise, analysis and interpretation
 - o Holter monitors, heart rate variability analysis
 - o Functional assessment and body composition core
 - o Medication Event Monitoring System
 - o 24-hour urinary sodium excretion
 - o Actigraphy
 - o Pulmonary function tests
 - o Point of care testing for B-type natriuretic peptide (BNP) and other blood assays
 - o Air quality monitoring
 - o Salivary, hair and urinary cotinine

Pilot Studies Funded by the Center

Theory-Based Intervention to Improve Dietary Self-Management in Heart Failure

Darlene Welsh, PI

Effects of a Cognitive-Educational Therapy on Outcomes in Patient-Spouse Dyads in Heart Failure

Misook Chung, PI

Cognitive Restructuring to Decrease Depressive Symptoms and Improve Self-Management of Patients with Heart Failure

Ann Peden, PI