

Abstract 12

Change in Depressive Symptom Status Predicts Health-Related Quality of Life in Patients with Heart Failure

Rebecca L. Dekker, MSN, RN, PhD candidate;¹ Terry A. Lennie, PhD, RN;¹ Nancy Albert, PhD, CCNS;² Barbara Riegel, DNSc, RN;³ Misook L. Chung, PhD, RN;¹ Seongkum Heo, PhD, RN;⁴ Eun Kyeong Song, PhD, RN;¹ Jia-Rong Wu, PhD, RN;¹ and Debra K. Moser, DNSc, RN¹

¹University of Kentucky College of Nursing, Lexington, KY; ²Cleveland Clinic, Cleveland, OH; ³University of Pennsylvania School of Nursing, Philadelphia, PA; and ⁴Indiana University School of Nursing, Indianapolis, IN

Background: Depressive symptoms independently predict poor health outcomes in patients with heart failure (HF). It has been hypothesized that interventions that target depressive symptoms in patients with HF will improve health-related quality of life (HRQOL). Research is needed to determine whether a change in depressive symptom status over time translates into a subsequent improvement in HRQOL.

Purpose: To determine whether a change in depressive symptom status from baseline to 3 or 6 months predicts HRQOL at 1 year among patients with HF.

Methods: The sample consisted of 318 inpatients and outpatients with HF (36% female, 62 ± 12 years, 58% NYHA class III/IV) enrolled in a multicenter quality-of-life registry for patients with HF. HRQOL was measured at 1 year using the Minnesota Living with Heart Failure Questionnaire. Depressive symptom status was assessed at baseline and 3 or 6 months later using the Patient Health Questionnaire (PHQ-9); scores 10 and higher indicate depression. Based on baseline and 3- or 6-month PHQ-9 scores, patients were categorized as “remained nondepressed” (n = 201), “remitted from baseline depression” (n = 45), “became depressed” (n = 21), or “stayed depressed” (n = 51). One-way analysis of variance and the Bonferroni post-hoc test were used to compare differences among the four groups on HRQOL scores at 1 year. Multiple regression was used to determine whether change in depressive symptom status independently predicted subsequent HRQOL.

Results: Patients who were nondepressed or remitted from

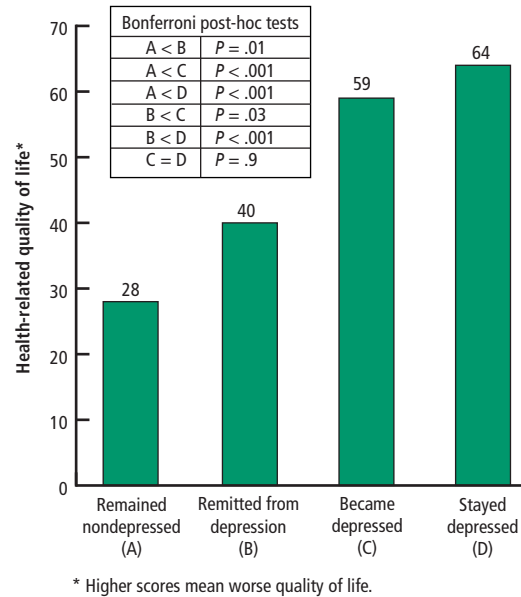


FIGURE 1. Comparison of health-related quality of life at 1 year among the four patient groups.

depression had better HRQOL scores compared with patients who became depressed or stayed depressed (F = 34, P < .001; **Figure 1**). A worsening in depressive symptom status from baseline to 3 to 6 months independently predicted poorer HRQOL at 1 year (β = 10.7, P < .001) after controlling for age, gender, ejection fraction, NYHA class, inpatient or outpatient status, and antidepressant use. Overall, the regression model explained 32% of the variance in HRQOL.

Conclusion: Our findings suggest that interventions that successfully reduce depressive symptoms may have a powerful impact on HRQOL in patients with HF.

The **Young Investigator Research Award** is a competition open to graduate students, postdoctoral fellows, residents, fellows, and junior faculty (within 2 years of their first appointment). It is made possible by the continued support of **Thomas F. Peterson, Jr.**, who also supports the Thomas F. Peterson Jr. Center for Heart-Brain Research within the Earl and Doris Bakken Heart-Brain Institute at Cleveland Clinic.

The 2009 recipient, **Rebecca L. Dekker, PhD, RN, CNS**, received a bachelor’s degree in nursing (with honors) from Calvin College in Grand Rapids, MI, as well as a master’s degree and doctor of philosophy degree in nursing from the University of Kentucky College of Nursing. Dr. Dekker’s research focuses on improving health outcomes of patients with heart failure who have symptoms of depression. During her doctoral studies she was the primary investigator in six studies examining the link between depression and heart failure outcomes. She recently completed a randomized controlled pilot study testing a brief cognitive therapy intervention for depressive symptoms in hospitalized patients with heart failure.