## **Abstract 24**

## Trajectory of Depressive Symptoms in Patients With Heart Failure: Influence on Cardiac Event-Free Survival

Rebecca L. Dekker, PhD, ARNP¹; Terry A. Lennie, PhD, RN¹; Nancy M. Albert, PhD, CCNS²; Mary K. Rayens, PhD¹; Misook L. Chung, PhD, RN¹; Jia-Rong Wu, PhD, RN³; and Debra K. Moser, DNSc, RN¹

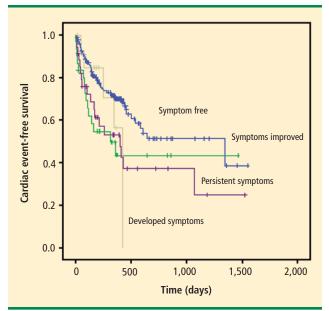
<sup>1</sup>University of Kentucky College of Nursing, Lexington, KY, <sup>2</sup>Cleveland Clinic, Cleveland, OH; and <sup>3</sup>University of North Carolina, Chapel Hill, School of Nursing, NC

**Background:** Patients with heart failure (HF) experience depressive symptoms that adversely affect mortality and morbidity. Little is known about whether a change in depressive symptoms over time influences cardiac events.

**Purpose:** To determine whether a change in depressive symptom status is associated with cardiac event-free survival in patients with HF.

**Methods:** We used a prospective, longitudinal design with repeated measures. The sample consisted of 250 patients with HF (35% female, 61 ± 12 years, 57% New York Heart Association class III/IV, 32% inpatient) enrolled in a multicenter quality of life registry. Depressive symptoms were measured with the Patient Health Questionnaire-9 at baseline, 3, or 6 months; scores 10 or higher indicate depressive symptoms. Patients were categorized into four groups based on change in depressive symptoms from baseline to 3 to 6 months: symptom free, symptoms improved, developed symptoms, and persistent symptoms. Patients were followed for a median of 12 months to determine cardiac event-free survival. Survival curves were computed using the Kaplan-Meier method; groups were compared using log rank test.

**Results:** Patients who remained symptom free (n = 173) had the best cardiac event-free survival (**Figure**, P = .02), followed



**FIGURE.** Relationship between depressive symptoms and event-free survival.

by patients whose symptoms improved (n = 29), patients with persistent symptoms (n = 34), and patients who developed symptoms (n = 14).

**Conclusion:** Patients with HF and persistent or developing depressive symptoms had shorter cardiac event-free survival. Research is needed to test whether interventions that prevent new onset of or reduce depressive symptoms also improve event-free survival.