Abstract

Principal Investigator: Kristy S. Chunta

Research Title: An interventional pilot study to provide telephone follow-up support to open-heart surgery patients during recovery.

Background: There are approximately half a million open-heart surgical procedures performed each year in the United States. Research has suggested that recovery may be long and difficult and present physical and psychosocial challenges that continue after hospital discharge. Recovery may be further complicated by anxiety, depression, patient expectations, and physical health status (PHS) limitations.

Purpose: The proposed study will be designed as a pilot study to evaluate the effectiveness of a bi-weekly telephone intervention. It will also allow the principal investigator to address any potential recruitment and attrition problems. The study builds on initial work that examined preoperative and postoperative predictors of recovery after OH surgery. The purpose of this pilot study is to provide OH surgery patients support via telephone follow-up calls during recovery.

Methods: A convenience sample (N = 150) will be recruited from a medical center in Pennsylvania. The sample will include participants who are undergoing coronary artery bypass graft (CABG) or valve replacement surgery. The study will use an experimental design and longitudinal approach to examine anxiety, depression, expectations, and PHS preoperatively and postoperatively three days after discharge, and at 4 weeks and 3 months. Participants will be interviewed preoperatively at the hospital or cardiac surgeon’s office, and postoperatively by phone interviews. Participants will be asked to complete 3 questionnaires: The Medical Outcomes Study 36-Item Short Form Health Survey (SF-36), The Future Expectations Regarding Life with Heart Disease Scale, and The Hospital Anxiety and Depression (HAD) Scale. Participants will be randomly assigned to an experimental or control group. The experimental group will receive bi-weekly telephone follow-up calls to provide support and monitor recovery. Participants in the experimental group will be called the day after discharge and bi-weekly after surgery (weeks 2, 4, 6, 8, and 10).

Analysis: Statistical Packaging for the Social Sciences (SPSS) will be used to run descriptive statistics, repeated measure Analysis of Variance (ANOVA), and paired sample t-tests. A repeated measure ANOVA will be used to compare preoperative and postoperative variable means. Paired sample t-tests will be used to compare preoperative and postoperative means for the four subscales used to compute the Physical Component Summary (PCS) scale, which is the measurement of PHS. A mixed between-within ANOVA will be used to compare preoperative and postoperative means of anxiety, depression, expectations, and PHS. An alpha level of 0.05 will be used to determine statistical significance.