AN mHEALTH SELF-MANAGEMENT PROGRAM TO DECREASE POSTOPERATIVE SYMPTOM DISTRESS IN ORTHOPAEDIC PATIENTS

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Introduction/Identification of the problem: Approximately 60% of all surgeries in the United States are performed in the ambulatory setting, involving over 53 million procedures in 34 million patients annually. The most common distressing symptoms in ambulatory surgery (AS) are pain and nausea. Other distressing symptoms are fatigue, sore throat, problems in wound healing and mobility. Patients' experience of symptoms at home during recovery is more profound than clinicians expect, lasts longer, and interferes with the ability to return to normal activities. The concept of a mobile application that can be accessed by the patient or caregiver has received positive feedback from recent AS patients.

Purpose: To determine the feasibility of an mHealth self-management program, the Postoperative Care at Home (POCAH), to decrease postoperative symptom distress.

Methodology: This is a single-blind, two-group randomized, controlled trial stratified by knee and shoulder surgical procedures (N=40). Patients completed baseline information at enrollment and completed a patient diary for 5 days including an evaluation of the use of an iPad for information delivery to access the PoCAH app. Phone interviews at 2 and 4 weeks assessed the recovery trajectory and outcomes using previously validated questionnaires. With a significance level of .05 and 20 subjects per group, the power of the repeated measures analysis of variance F test to detect significant group or interaction effects will be at least 80%, assuming a large effect size.

Results: Data analysis is in process. We will report demographics and clinical characteristics as well as an assessment of differences between groups on symptoms, quality of life, perceived self-efficacy, and healthcare resource use to determine feasibility of the mHealth app.

Discussion: We are very interested in the delivery of information to patients after surgery via mobile app and whether that affects symptoms, quality of life, perceived self efficacy, and healthcare use.

Conclusion/Implications for perianesthesia nurses and future research: Gaps in knowledge of the home trajectory of care for ambulatory patients still exists. We recommend further research to develop appropriate intervention strategies for this population including the use of mHealth apps.