

Evaluating Postoperative Patient Education and Related Outcomes

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Background

We conducted the project based on the importance of adequate postoperative teaching and the need to constantly re-evaluate and improve it. In addressing possible complications after surgery, postoperative education is essential to provide patients with the following information: (1) appropriate self-management at home after discharge, (2) reducing the occurrence of symptoms and complications after discharge, and (3) enhancing recovery and overall quality of life (Fredricks, Guruge, Sidani, Wan, 2010). Given that postoperative education has a substantial impact on improving the general state of surgical patients after discharge, it is important to explore existing gaps and areas of improvement within our area of study – the Short Stay Surgical Unit (1S) at UBC hospital.

With regards to the National Surgical Quality Improvement Program (NSQIP) survey that was administered within 1S from October 2011 to March 2012, several components related to discharge education were rated within the Lowest Percent Positive Scores (ie. areas for improvements). According to the patients who participated in the NSQIP survey, topics that seemed to warrant the need for reinforcement included the following discussions: when to resume normal activities, medication side effects, and danger signals to watch for. Similarly, another study which involved total hip replacement (THR) and total knee replacement (TKR) surgeries identified unexpected challenges for which patients felt inadequately prepared for: sleep disturbance and psychological concerns such as mood changes and increased stress (Westby, & Backman, 2010).

Thus, we aimed to create and administer a patient satisfaction survey which addressed the gaps from NSQIP survey, while examining topics which are currently not part of discharge education at S1: sleep disturbance and psychological issues. The satisfaction survey was conducted using post-op total hip and knee replacement surgery patients from the Short Stay Surgical Unit (1S) at the UBC Hospital.

Project Purpose

Administer the satisfaction survey with the following goals:

1. Obtain information relating to post discharge complications and challenges experienced by patients.
2. Examine the, “areas of improvement”, category as outlined in the NSQIP survey.
3. Examine topics not currently covered under the discharge teaching at 1S.

Survey Overview

The patient satisfaction survey explored the following topics (and patient education associated with each one): pain management and medications, incision management, infections, cardiovascular complications, constipation, sleep disturbance, psychological issues, and general recovery.

The format and content of the survey was a result of a literature review on post-surgical patient education, current discharge forms on the unit, NSQIP survey, input from the clinical nurse educator, a nurse practitioner, and nurse manager on the surgical unit of 1S at UBCH. The survey included 42 questions and sub questions, and was administered once written permission to conduct the project was approved by a NSQIP auditor and Vancouver Coastal Health (VCH) Privacy Office.

Survey Demographics

We surveyed total knee and hip replacement patients, both bilateral or single joint replacement, exclusively. Patients who fell within a post discharge time of 8 weeks were considered eligible for the survey. Our census included 35 patients. 18 were contacted, 13 completed the survey, five provided incomplete data, and 17 could not be reached.

Survey Administration

Patients were contacted between the hours of 1230 and 1830 on weekdays by home, work, or cell phone. Average survey length was 12 minutes with an 8 minute and 20 minute extreme for survey length.

Survey Results: Patient Challenges

- Pain: 8% sought medical help for pain
- Deep Vein Thrombosis (DVT) and Pulmonary Embolism (PE): 15% sought medical help for suspected DVT or PE. There were no diagnosed cases of DVT or PE.
- Sleep: 77% experienced sleep disturbances related to the surgery. Sleep, in these cases, were characterized as hard to initiate and maintain. Sleep disturbances were reported to be due to position-related or general uncontrolled pain.
- Mood and Stress: 31% experienced changes to mood or stress that was concerning to them. Irritability and increased stress were most common. Those with concurrent sleep disturbances expressed this as a primary reason for mood changes and stress.

Survey Results: Areas for Education Improvement

- Pain medication side-effects: 8% reported not understanding common side-effects of pain medication.
- Blood clots: 15% reported not having received teaching on blood clots.
- DVT and PE: 31% reported not being adequately informed of the signs and symptoms of DVT and PE.
- Sleep Disturbance: 54% reported not being aware of sleep disturbance as a possible occurrence after surgery.
- Psychological issues: 77% reported not being aware of mood changes as a possible occurrence after surgery.
- Constipation: 15% reported not being adequately informed by nursing staff on how to prevent constipation after discharge

Recommendations for Future Practice

Currently, the design of discharge education at UBCH - 1S involves teaching from various professionals (RN, OT, PT etc.), primarily delivered through verbal means, accompanied by teaching booklets and pamphlets. As well, patient teaching usually done over 1 or 2 days.

A systematic review on postoperative patient education suggests that the individualization of educational content, use of multiple means for delivering education, and use of multiple sessions produces moderate improvement in self-care knowledge and performance of self-care behaviour, and decline in the number of postoperative symptoms experienced (Fredricks et. al., 2010). Thus, we are making the following recommendations:

Recommendations for Future Practice

- Individualize education content by creating interventions that would address individual patients' learning needs. (ie. Patients selecting the topics that they deem to be relevant to their current health situation)
- Use of multiple modalities enhances the likelihood for retention, recall, and application. Patients at UBCH may benefit if education is presented in written format in combination with audio and/or video materials to further enhance knowledge, behavior performance, and health-related outcomes (Fredricks et. al., 2010).
- Currently, discharge education at UBCH does not include information regarding sleep disturbance and mood changes as possible occurrences after discharge. Including information on these topics may improve the knowledge of patients regarding “what to expect after surgery” and help in coping with the aforementioned difficulties.

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