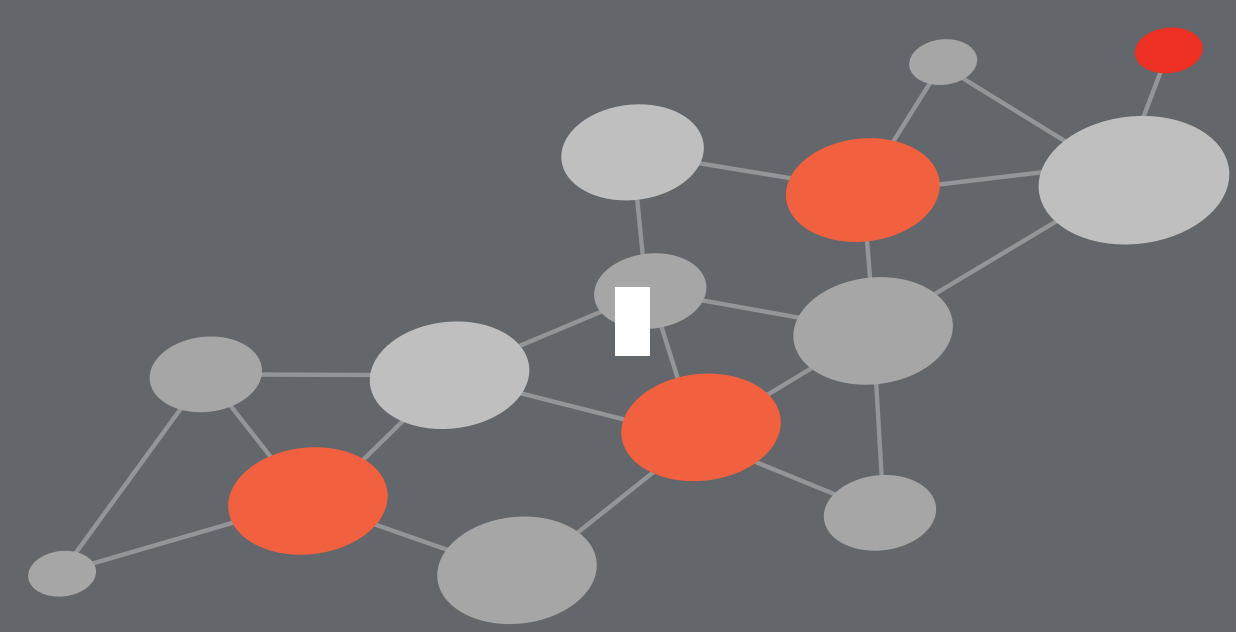




FACILITATING PATIENT EDUCATION OF NURSES UTILIZING PATIENT EDUCATION HANDOUT

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INTRODUCTION

Intravenous patient-controlled analgesia (IV PCA) has been an effective modality for pain management since it's introduction in the 1970s (2). Opioid medications are commonly used for IVPCA and are administered via an infusion pump with a patient-controlled dose, with or without a basal continuous dose.

For optimal use of IVPCA, it is crucial for patients to understand how the pump delivers medication and the proper method for it's use. **The Acute Pain Medicine team (APM) often encounters incidences where patients initially over-use the PCA pump, but after given proper education (both to patient and family), use significantly lower amounts of medication.**

Educational tools are know to be effective in facilitating patient education, thus the aim of this project was to facilitate patient education on IVPCA use by implementing a standardized nursing-directed educational handout (3).

METHODS

To identify the knowledge gap on IVPCA patient education, we surveyed 20 nurses in post-surgical inpatient unite with a series of 8 questions.

Initial survey:

- 98% reported adequate knowledge of IVPCA and optimal utilization
- **Barriers to patient education, including limitation of time (50%), language barrier (85%) and staff knowledge (50%).**
- Majority (19 out of 20) of the survey participants indicated that a patient education handout would facilitate the process of educating patients.

APM team created patient education handout on correct IVPCA use and made it available to the nurses as a tool to educate patients.

The overall effectiveness of these educational tool was assessed with a post-survey of 20 nurses one month after the handout was made available. If the post survey revealed > 50% positive change in nursing satisfaction from baseline, the handout would be deemed beneficial for continued clinical use.

Patient-Controlled Analgesia Pump Use

A Tool for Nurses on How to Instruct Patients

Facilitating Patient Education of Nurses Utilizing Patient Education Handout

Patient-Controlled Analgesia Pump Use How to Instruct Patients

Patient-controlled analgesia pump is a device used to safely provide IV (intravenous) opioid pain medicines, such as morphine, hydromorphone, or fentanyl to patients for pain control.

How it Works

Your doctor has ordered pain medicine for you to use as needed with or without a continuous dose. The nurse will set up the PCA pump with medicine as directed by your doctor. The nurse will attach the pump to tubing that is connected to an IV in your vein. The pump has a button and when you press it, the medicine is released into your vein. The button also has an indicator that lets you know when the medicine is ready for you to use (when needed).

When to Push the Button

The goal of the pain medicine is not to make you pain free. It is to help you rest and provide you with enough pain control so you can heal and slowly resume movement and activities. You may push the button when you are having pain or a few minutes before doing activities that may cause more pain for you. Tell your nurse if your pain is not controlled with the pain medicine.

Who Can Press the Button

Only the patient can press the pain button due to safety reasons. This medicine can cause your breathing to slow down or become shallow, also known as respiratory depression. Tell the nurse if you are sleepy or have trouble breathing with this medicine.

Common Side Effects of Opioid Pain Medicines

Side effects include nausea, vomiting, itching, feeling drowsy, constipation and slowed breathing.



Figure 1. PCA Pump



Figure 2. PCA Button

RESULTS

Following implementation of IVPCA educational handout, post-survey results were collected. The post-survey questionnaire consisted of 5 questions.

- Out of 20 participants, 4 did not get a chance to use the handout tool
- **Remaining 16 participants all positively responded that the tool was very useful, increased patient awareness on PCA use, facilitated patient education from nurses, and would be something they would promote for use by other colleagues.**

Based on these findings, the educational aid was deemed beneficial with post-survey results revealing more than a 50% positive change from baseline with the use of this new educational aid.

DISCUSSION

Concise, thorough, and uniform patient education handouts are great tools in educating patients (1). This was evident with our project to standardize and optimize patient education of IVPCA in the perioperative setting. Of note, a study evaluating the effects various types of educational tool (verbal, brochure, video) found no significant difference between each modality (3).

Patient education handouts are an effective teaching aid to educate patients on health-related topics. ***Our findings confirm that an IVPCA educational aid serves as an effective teaching tool used by nurses in facilitating patient awareness of proper IVPCA utilization.***

