

Patients' Experiences and Satisfaction with Postoperative Pain Management

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Abstract

Postoperative pain remains a clinical problem. Since pain management is an important quality indicator, assessment of pain management outcomes is a recommendation to improve pain management quality. Pain management outcomes of this study included: variation in pain intensity and frequency, emotional and physical impact, adverse effects related to pain or its treatment, and indicators of patient satisfaction. Postoperative pain management outcomes were assessed in 120 adult patients at a Lebanese tertiary care medical center. An Arabic version of the Revised American Pain Society Patient outcome questionnaire was used. Although the majority of patients (76.7%) experienced severe pain; 83.3% were satisfied with their pain management. In this study, identified deficiencies were related to knowledge, education, communication, standardization of pain treatment, and inappropriate choice of postoperative pain medications. Based on the results, the institution of education on pain for health care providers and patients as well was recommended.

Background

About two thirds of patients experience pain; this prevalence is higher in postoperative patients (Haller et al., 2011). Approximately 80% of adult patients experience postoperative pain, 86% of whom express moderate to severe pain (Apfelbaum, Chen, Mehta, & Gan, 2003).

Poorly managed postoperative pain is associated with deleterious physiologic changes, such as myocardial ischemia, atelectasis, pulmonary infection, reduced intestinal motility, urinary retention, oliguria, thromboembolism, impaired immune function, tumor spread or recurrence, and muscle atrophy. In addition, pain has some psychological consequences such as anxiety, depression, fear, anger and dissatisfaction. Besides, pain delays patient recovery, interferes with activities of daily living, prolongs hospital stay, and increases health care costs and resource utilization (Joshi & Oqunnaik, 2005). Moreover, uncontrolled acute pain can progress to chronicity (Spacek, 2006).



Study purpose

The purpose of this study was to assess postoperative pain management outcomes at Lebanese tertiary care medical center. Pain management outcomes include: variation in pain intensity and frequency, treatment of the underlying cause, emotional and physical impact, quality of life, adverse effects related to pain or its treatment, and indicators of patient satisfaction. This study assessed all these outcomes except the treatment of the underlying cause and the quality of life outcomes as it deals with postoperative patients. In this article, all the studied outcomes will be addressed except the emotional and physical impact and the adverse effects related to pain or its treatment.

Methods

Research design: A cross-sectional descriptive survey design was used.

Sample: A convenience sample of 120 postoperative patients was recruited. Patients were included in the study if they were: 1) 18 years of age or older, 2) having spent at least 24 hours and no more than 48 hours on the wards after surgery, 3) oriented to person, place and time, 4) able to communicate in Arabic, and 5) able to recall the postoperative period. Patients in the intensive care units and patients with postoperative delirium were excluded.

Instrument: The American Pain Society-Patient Outcome Questionnaire Revised Arabic version (APS-POQ-R),

translated by the American Pain Society was used. It includes six categories : 1) pain intensity and relief; 2) impact on activity, sleep, and emotions; 3) treatment adverse effects; 4) helpfulness of information about pain management; 5) patient's participation in management decisions; and 6) the use of non-pharmacological approaches. Psychometric evaluation support the internal consistency (Cronbach's alpha 0.86), construct validity and the clinical feasibility of the APS-POQ-R in assessing patient satisfaction (Gordon et al., 2010).

The study was approved by the institutional review board (IRB) of the university and the medical center administration.

Procedure: Potential participants were identified through the records of the operating room. Patients were recruited in their hospital rooms; those who agreed to participate signed a consent form. Patients were interviewed by the first author and results recorded on the questionnaire.

The results of this study showed that healthcare providers do not refer to standardized pain management protocols for patients undergoing similar surgeries. Pain was managed mostly according to physicians' preferences.

Results

Sample characteristics

The sample included 120 patients, 19-85 years of age, and thirty one of them only were followed by the pain team. The pain team is a mobile team, usually lead by an anesthesiologist and a pain nurse specialist who visit patients in their units to take care of their pain. Female patients (56.7%) predominated in the recruited sample that included mostly Lebanese (85%), married patients (79.2%), with a university level education (61.6%). The majority of patients (43.3%) underwent orthopedic surgeries.

Patients' experiences / satisfaction with postoperative pain management

The mean of the worst reported pain was 7.94 (SD 2.30) on an 11-point numeric pain rating scale (from 0 to 10). The majority (76.7%) of patients experienced severe postoperative pain. On the other hand, the mean score for patients' satisfaction with their pain treatment was 8.05 (SD 2.25). The majority of patients (83.3%) reported satisfaction scores > 5. Only 1.7% of patients were completely dissatisfied with their pain

management. The main reason for patients' satisfaction was considering pain as something normal and expected after surgery. Uncontrolled pain was the major reason for patients' dissatisfaction. In addition, patients did not have any chance to participate in decisions about their pain treatment in 86.7% of cases. The mean score of patients' participation in decision making was 0.69 (SD 1.92).

Postoperative pain medications

The use of post-operative pain medications varied among patients, even those who underwent the same surgery. In the pain team patients, where all patients were receiving pain medication through an advanced analgesia technique [Patient Controlled Analgesia (PCA), or Patient Controlled Epidural Analgesia (PCEA)], six patients out of thirty-one had some additional pain medications to those administered via PCA or PCEA prescribed

on as needed basis or PRN, while the others had their additional pain medications on standing basis. However, the majority (56.17%) of non-pain team patients including post open heart surgery had all their pain medication prescribed as PRN. Besides, 47.56% of non-pain team received Mepiridijne IM.

Patients' beliefs regarding pain management

As this topic was not studied in Lebanese patients, we selected the Lebanese patients who constituted the majority (85%) of our sample to know their beliefs about pain management. Contrary to common beliefs, the majority (86%) of Lebanese patients do not believe that pain medications are addictive. Waiting until pain is severe to request pain medication was the most frequently reported belief among patients (48%).

Patients' barriers to request pain medication

Some patients (20.8%) suffered pain without requesting pain medications. The most reported reason that led patients not to request pain medication was waiting for pain to be more severe. In other cases patients waited for nurses to intervene as they know more about the timing of pain medication.

Discussion

Patients have the right to have their pain properly managed. However, despite the widely available evidence-based pain management guidelines, hospitalized patients are still suffering uncontrolled pain (Binhas et al., 2011).

The majority of patients (76.7%) experienced severe pain; similar prevalence is reported in the literature (Apfelbaum et al, 2003), proving that uncontrolled postoperative pain is still a universal problem. However, in spite of this, 83.3% of patients were satisfied with their pain management. This highlights the high pain intensity-high satisfaction paradox reported in the literature (Gordon et al, 2002). When patients were asked if they were informed during hospitalization about their pain and its management, they reported that they were not. This study showed that patient education on pain management is highly needed and should be an important entity of quality improvement. Patients in this study seemed not to be participating in decisions about their pain treatment. Involving patients in decisions regarding their pain management plan contributes to their satisfaction (Gordon et al, 2010). The high pain intensity – high satisfaction paradox in combination with the lack of patient education on pain management leads to wondering if patients are satisfied with the pain management they are receiving because they do not know about a better one (Gordon et al, 2002).

The majority of patients (76.7%) experienced severe postoperative pain. Despite many efforts, the current applied strategies are still inadequate to properly control postoperative patients' pain.

The results of this study showed that healthcare providers do not refer to standardized pain management protocols for patients undergoing similar surgeries. Pain was managed mostly according to physicians' preferences, as shown by the wide variation in analgesic prescription in the sample. The evidence shows that postoperative pain is best controlled using multimodal analgesia including advanced analgesic techniques, along with systemic administration of NSAIDs, and opioids, and non-pharmacologic methods (Kehlet, 2002). It is recommended that postoperative patients should

receive an around-the-clock regimen of NSAIDs, or acetaminophen, unless contraindicated (American Society of Anesthesiologists Task Force on Acute Pain Management, 2012). Non-pain team patients were prescribed standing analgesics but less frequently than pain team patients; they were more often prescribed PRN medications. Ideally, for moderate or severe postoperative pain, patients should receive their pain medications through the IV route (Veterans health administration- department of defense, 2002). In addition, avoidance of the use of intramuscular (IM) injections and Mepiridine (Demerol) is also recommended by practice guidelines (American Society of Anesthesiologists Task Force on Acute Pain Management, 2012). Our results show that physicians are still non compliant with the related guidelines.

This study, which is the first to address the topic of Lebanese patients' beliefs regarding pain, revealed that the most encountered belief (48%) about pain was that of waiting until pain is severe to request pain medication. In order to benefit from an optimal pain relief, avoid moments of suffering and the deleterious consequences of unrelieved pain, patients should be educated to request pain medication when their pain is still minimal to moderate. This belief constituted the main barrier that prevented some patients from requesting pain medication while they were in pain.

Conclusion

The majority of patients (76.7%) experienced severe postoperative pain. Despite many efforts, the current applied strategies are still inadequate to properly control postoperative patients' pain. Pain management processes should be reviewed and made evidence-based. Regarding the high pain intensity-high satisfaction paradox, educating patients and involving them in their pain management contribute to solving this paradox and making of patient's satisfaction a more reliable quality indicator in terms of pain management.

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