Title:
Evidence-Based Pain Management Solutions

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Abstract Summary:

Pain is a frequent, complex, important clinical condition with established practice recommendations. EBP is an expected standard for care, yet is not consistently provided. Provision of evidence-based pain management requires nurses to balance numerous factors, including patient preferences, individual responses to interventions, and coordination with colleagues.

Learning Activity:

LEARNING OBJECTIVES	EXPANDED CONTENT OUTLINE
The learner will be able to discuss evidence-based pain management solutions.	Complex EBP pain guideline recommendations
The learner will be able to describe application of evidence-based pain management recommendations through evidence-based practice exemplars.	Three exemplars of evidence-based pain management

Abstract Text:

Provision of evidence-based practice (EBP) is a global priority, yet EBP is not consistently provided. The complexity of EBP recommendations and clinician workload present significant challenges related to integration of practice changes into day-to-day routines and workflow. Since 2001, pain has been recognized by The Joint Commission as a right of all patients, but pain assessment and management were recognized as organizational priorities at one large academic medical center in the United States well ahead of that time.

Pain remains a prevalent global health concern, and one of the most common reasons people seek health care.

Ineffectively treated pain negative impacts overall health care costs, of which the annual estimate is $261-$300

billion, not including the immeasurable suffering experienced by patients in pain.

Since pain is a frequent, complex, important clinical condition, there have been many evidence-based guidelines developed for different types of pain (e.g., acute, chronic, procedural), different types of clinicians (e.g., anesthesiologists, primary care clinicians), and different pain components (e.g., assessment, treatment, monitoring).

Regardless of setting, integration of evidence-based pain management (EBPM) recommendations is complex and require nurses to balance patient preferences, individual responses to interventions, risks

associated with both undertreatment and over treatment of pain, expectations outlined in hospital policies, patient's other needs, needs of their other patients, and coordination with colleagues.

A clinical practice guideline (CPG) focused on management of postoperative pain was published in 2016 from the American Pain Society, the American Society of Regional Anesthesia and Pain Medicine, and the American Society of Anesthesiologists' Committee on Regional Anesthesia. This guideline includes 32 recommendations, many of which have additional subcomponents and details aimed at helping clinicians provide evidence-based pain management to surgical patients.

Accurate pain assessment is an essential first step if effective management is to occur. Pain management on medical-surgical units is complex, and acute care nurses use pain assessment scales inconsistently. The purpose of one EBP project was to offer reliable and valid pain assessment scales to hospitalized adult cardiothoracic patients on a medical-surgical step-down unit so the patients could pick their preferred pain assessment scale. Using patients' preferred pain assessment scale improves the accuracy, trending, and evaluation of pain treatment effectiveness. This EBP project aligns with recommendation #5 from the CPG related to use of a validated pain assessment tool by clinicians to reassess postoperative pain and determine effectiveness of treatment interventions. Incorporating use of the patients' preferred evidence-based pain assessment scale improved nurses' care processes and patient satisfaction as measured by the institutional patient satisfaction questionnaire.

The use of intravenous ketamine for select adult patients, as part of multimodal analgesia, was another recommendation included in the 2016 CPG. The purpose of a staff nurse-led EBP project was to improve postoperative pain for opioid-tolerant orthopedic spine surgery patients through expanded use of low-dose ketamine infusions. Opioid-tolerant patients have complex pain management needs, and untreated acute pain may lead to the development of persistent pain. The potential benefits of using ketamine as an analgesic in low doses include resetting opioid receptors, need for less opioid postoperatively and decreased opioid side effects. Results from the EBP project included proactive identification of opioid-tolerant orthopedic spine surgery patients who may benefit from ketamine infusions, as part of a comprehensive approach to postoperative pain management, in addition to development of an individualized pain treatment plan. Clinician knowledge regarding ketamine for pain, communication among the interprofessional health care team and collaboration also improved as a result of the EBP change.

As a precaution, global attention is focused on opioid side effects and safety. Patient monitoring needs to occur after administration of systemic opioid medications. Crucial monitoring components include sedation, respiratory status and other adverse events as outlined in recommendation #14 from the guideline. The purpose of an institutional EBP project was to standardize monitoring of sedation in adult and pediatric patients receiving opioid analgesia in general care areas. Standardization of monitoring was necessary to help nurses identify excessive, unintended sedation early in order to prevent patients from progressing to respiratory depression while at the same time providing the best possible pain management. Implementation of the Pasero Opioid-Induced Sedation Scale and respiratory monitoring allowed bedside nurses to improve their ability to identify patients at risk for unintended sedation when administering opioid medications. After the project was complete, the bedside nurses reported providing safer care to these patients as a result of the new sedation and respiratory monitoring policy.

Application of evidence-based recommendations through these exemplars provides some direction and solutions for addressing important clinical issues related to pain management. However, continued research is still needed to address the gaps that remain with regards to effective, efficient ways to integrate practice change recommendations into complex care environments.