## **Effectiveness of Multi-Modal Analgesia**

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**Background Information:** Despite many advances in health care, managing pain in the postanesthetic period continues to be a challenge. With more procedures being performed on an outpatient basis, shorter lengths of stay and drive to improve patient satisfaction, providers are looking for ways to enhance the surgical care experience and reduce opioid use. In addition, the increase burden of obesity in society has contributed to a rise in co-morbidities such as diabetes, cardiovascular, and gallbladder disease making laparoscopic cholecystectomies the second most frequently performed general surgery procedure in the United States.

**Objectives of Project:** The purpose of this study was to examine if using multi-modal analgesia prior to incision time effectively reduces post-operative narcotic requirements for pain management in the laparoscopic cholecystectomy patient population. Current search of literature suggests that utilizing multi-modal therapy has shown to significantly reduce pain scores and continual research into this topic is necessary. Pain is a universal phenomenon and nurses must be familiar with the essential concepts of pain and methods of pain management. The concept of multi-modal analgesia is to reduce pain through targeting multiple receptor sites at peripheral and central nociception pathways to reduce the inflammatory response and pain sensation while simultaneously reducing narcotic utilization and their related adverse effects.

**Process of Implementation:** Utilizing a quantitative, non-experimental research design this particular project retrospectively analyzed 200 elective laparoscopic cholecystectomy patient records from 2015 to 2018 in a specific recovery room unit.

**Statement of Successful Practice:** The results demonstrated there was a rise in the number of multi-modal agents given with a decrease in the number of narcotics utilized over the course of implementing an enhanced recovery after surgery improvement program.

**Implications for Advancing the Practice of Perianesthesia Nursing:** The outcome of this project reinforces using multi-modal analgesia and provides a foundation for further research to maximize the benefit of these modalities to manage pain after surgical intervention.