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# Multimodal Analgesia: Optimizing Perioperative Pain Management

Journal: Multimodal Analgesia: Optimizing Perioperative Pain Management

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## Introduction

Pain is defined as “whatever the experiencing person says it is, existing whenever the experiencing person says it does” (Arnstein, 2013). Multimodal pain management is the action of optimizing pain relief by using at least two medication classes that target different pain mechanisms as well as non-pharmacological measures (Manworren, 2015).

## Background

The opioid crisis is a growing epidemic within the United States:

- More than 600,000 people have died from drug overdoses between 2000 and 2016 mainly involving opioids (CDC, 2017).
- In 2016, the number of overdose deaths involving opioids was five times higher than in 1999 (CDC, 2017).
- According to the CDC (2017), the rate of opioid deaths has risen over the last 16 years with more than half of the overdoses leading to death are associated with opioid prescription drugs.
- The amount of prescription opioids sold to pharmacies, hospitals, and doctors’ offices nearly quadrupled from 1999 to 2010 without a reported increase in pain (CDC, 2017).
- “On average, 115 Americans die every day from an opioid overdose” (CDC, 2017, p. 2).



<https://www.gettyimages.com/detail/stock-photo/doctor-holding-a-pill-over-a-glass-of-water/119111111>

## Implementation

At Greenwich Hospital, the multimodal form of pain management should be implemented by communicating with and working *with* patients and physicians to discover which combination of multimodal regimens is most effective to control their pain. We should move away from the use of IV opioids and instead encourage the multimodal route for all those that underwent surgical procedures.

Patient education should include:

- The amount of pain expected following surgery
- Setting reasonable goals for pain management
- Encouraging the patient to stay ahead of pain by asking for medication prior to activity
- The use of oral analgesics prior to the use of IV opiates
- Instruct patients that pain, and therefore pain medication, should decrease as recovery progresses.

Nurses should advocate for oral pain management before intravenous opioids are administered as IV medications should be the last option for pain control.

## Purpose

The purpose of using multimodal pain management at Greenwich Hospital, is to provide patients with a controlled pain management option while limiting excessive use of opioids and minimizing opioid prescriptions at discharge.



<https://www.recoveryinmotion.com/guides/opioid-epidemic-terms-1212018/>

## Significance to Nursing

Nurses should support evidence-based practice and forms of pain management that bring about less risk for addiction, abuse, and overuse. Implementing the use of multimodal pain management within Greenwich Hospital will allow nurses to better control their patient’s pain via administration of individualized pharmaceutical combinations for each patient while also hoping to decrease the number of opioid crisis victims.

## Pain Across the Cultures

There is no single, simple experience of pain. People of all different cultures experience and display pain in different ways. Pain is defined as “whatever the experiencing person says it is, existing whenever the experiencing person says it does” (Arnstein, 2013, p.1). This is why it is important as nurses that we remember that pain is subjective. Nurses need to tailor the medication to the needs of that specific patient. Utilizing the multimodal approach to pain management is helpful in this regard because it will allow the nurse and patient to find a personalized pharmacological combination that work best for that patient.

## Multimodal Pain Management



<https://www.slideshare.net/cppaincenter/lower-back-pain-part-1>

## Evidence-Based Research

Evidence-Based Research has shown that using the multimodal approach is more effective than single-modal remedial treatment and is the recommended form of pain management following surgical procedures (Manworren, 2015). Multimodal analgesia optimizes pain relief because it is a surgery-specific, individualized approach that treats pain via multiple mechanisms among different areas of the nociceptive/pain-producing pathway (Manworren, 2015). As a result, this provides “more effective analgesia and less side effects with equivalent or reduced dosage of individual analgesics” (Kim et al., 2016).

Statistics show that the combination of NSAIDs and opioids result in a superior achievement of postoperative pain relief when compared with the use of both medications alone. A study has shown that:

- Those who were given NSAID, ketorolac, in addition to an opioid perioperatively reported significantly lower pain intensity all around within the first 24 hours after surgery when compared with those patients who did not receive both
- The patients who received ketorolac also received less morphine during the first 24 hours post operatively than those who did not.

This multimodal approach to managing postoperative pain after a surgical procedure resulted in improved pain management despite the use of less opioids (Manworren, 2015).

## Conclusion

In conclusion, “Multimodal analgesia is the approach of choice for relieving postsurgical pain” (Manworren, 2015). By incorporating other multimodal analgesic agents in the pain management regimen, nurses can minimize side effects associated with opioids while maintaining adequate pain control.

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