

The Effect of Self-Reported Marijuana Use on Post-Operative Opiate Needs in The Spinal Fusion Surgery Patient

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Introduction: Legalization of recreational and medical marijuana is on the rise across the United States. As the popularity of cannabis is growing, more patients with a history of use are being seen in the hospital setting.

Identification of the problem: As nurses in the PACU and inpatient Orthopedic setting, we felt there was a correlation between patients' history of marijuana use and increased narcotic requirements. When we started to search for information on this topic, we found research was limited due to the federal illegality of marijuana.

Purpose of the Study: The purpose of this study was to determine if marijuana usage prior to spinal surgery affected post-operative opiate needs. We measured the usage of opiates by self-reported marijuana users postoperatively.

Methodology: The study design is correlational, investigating the relationship between the pre-operative marijuana use and post-operative narcotic need. We attended our Orthopedic Academy-Spinal Class to introduce our study. If the patients were willing to participate, they were asked to sign an informed consent and complete a survey regarding pain scores and at home pain management, which included marijuana use. Post operatively the EMR was reviewed, and all narcotic usage was documented and converted into milliequivalents of morphine.

Results: Once the conversions were complete, we studied the correlation between those who reported marijuana use (comparison group) with those who denied use (control group). Except for post op day 2, the comparison group received more narcotic than the control group.

Discussion and Implications: Now knowing that a patient's history of marijuana use does play a role in narcotic requirements post operatively, it can help nurses better plan their care. When a patient reports marijuana use during the preoperative assessment, the nurse can advocate for multi-modal pain control to start preoperatively. Postoperatively, this knowledge can reinforce the importance of finding an appropriate pain management regimen. Personalized and detailed education on pain management after discharge may decrease risk of readmission for pain control.

Conclusion: With our finding we can better educate staff and patients to help optimize their post-operative pain management. More research is needed on this topic to help better understand the correlation and the implication marijuana use has on nursing care.