

## **Reduced Opioid Prescriptions After Orthopaedic Trauma Surgery Maintain Perceived Pain and Return-to-Work Self-Efficacy**

Eve Rachel Glenn, Diane I Ghanem, Ysa Le, Jean Fleuriscar, Babar Shafiq

### **INTRODUCTION:**

In response to the opioid epidemic, substantial reductions in opioid prescriptions after fracture surgery have been implemented at our Level 1 trauma center. This study aimed to evaluate the effectiveness of a reduced opioid dosing regimen following surgery and assess patient-reported outcomes (PROMs) regarding pain control and satisfaction with the revised prescribing protocol.

### **METHODS:**

This prospective survey and retrospective chart review comprised 125 adult patients from a single level I trauma center. Patients underwent surgery for distal radius, proximal humerus, femoral neck, tibial shaft, or lateral malleolus fracture under a reduced-opioid protocol, with 25 patients per fracture location, evaluated at least 3 months postoperatively. PROMs were assessed via the Pain Self-Efficacy Questionnaire (PSEQ), which measures confidence in managing and functioning despite pain; the Return-to-Work Self-Efficacy (RTWSE) questionnaire, which assesses confidence in returning to work despite pain; and multimodal pain management practices. PROMs were cross-referenced with available chart data. Statistical comparisons were made using Kruskal-Wallis with post hoc analysis, chi-squared, and Fisher's exact tests.

### **RESULTS:**

Median pain scores for all five groups corresponded to the 'mild pain' classification on both the verbal rating scale (from 'no pain' to 'severe pain') and the numerical rating scale (0–10). Overall, PSEQ and RTWSE responses demonstrated high confidence levels, with median scores at or exceeding 4 on a 0–6 Likert scale. Statistically significant differences across surgical groups were found in two PSEQ questions regarding the ability to enjoy activities and gradually increase movement despite pain. Concordance was observed between patient-reported data and medical records for multimodal pain management.

**DISCUSSION AND CONCLUSION:** Reduced opioid prescribing effectively managed postoperative pain and aligned with high patient satisfaction. Consistency between PROMs and medical records supports these findings.