

Prevalence and predictors of opioid use before orthopaedic surgery in an Australian setting: a multicentre, cross-sectional, observational study

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Abstract

Aim: This study aimed to examine the prevalence of any opioid use before elective orthopaedic surgery with a focus on regional and rural hospitals in New South Wales, Australia. **Methods:** This was a cross-sectional, observational study of patients undergoing orthopaedic surgery conducted between April 2017 and November 2019 across five hospitals that included a mix of capital city, regional, rural, private and public settings. Preoperative patient demographics, pain scores and analgesic use were collected during pre-admission clinic visits, held on average two to six weeks before surgery. **Results:** Of the 430 patients included (53.3% (229/430) women; mean age, 67.5 [standard deviation [SD] 10.1] years), the overall prevalence of any preoperative opioid use was 37.7% (162/430). Rates of preoperative opioid use ranged from 20.6% (13/63) at a capital city metropolitan hospital to 48.8% (21/43) at a regional metropolitan hospital. Multivariable logistic regression showed that the regional metropolitan setting was a significant predictor of opioid use before orthopaedic surgery (adjusted odds ratio [aOR], 2.6; 95% confidence interval [CI], 1.0 – 6.7) after adjusting for covariates. **Conclusion:** Opioid use prior to orthopaedic surgery is common and appears to vary by geographic location. Given its use is associated with worse postoperative outcomes, rigorous efficacy studies involving different geographic locations are required to determine whether opioid tapering prior to surgery can reduce harm.