

Opioid use before orthopaedic surgery is reported in two in every five patients, with significant variation between metropolitan, regional or rural settings in Australia.

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

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Background

Opioids are commonly used before orthopaedic surgery. Preoperative opioid use is associated with worse surgical outcomes, postoperative pain and higher healthcare costs.

Objective

To examine the prevalence and predictors of opioid use before elective orthopaedic surgery with a focus on regional and rural hospitals in Australia.

Methods

Cross-sectional, observational study of patients undergoing orthopaedic surgery.

- Study dates: Apr 2017 to Nov 2019
- Sites: 5 hospitals in New South Wales
- Data collected at pre-admission clinic 2 to 6 weeks before surgery:
 - Demographics
 - Pain scores
 - Analgesic use

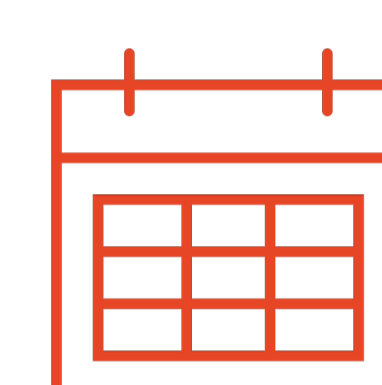
Results

Of the 430 patients included, 229 (53%) were female and mean age was 67.5 (standard deviation 10.1) years.



38% (162/430)

patients taking opioids before surgery



25% (108/430)

patients taking opioids daily before surgery

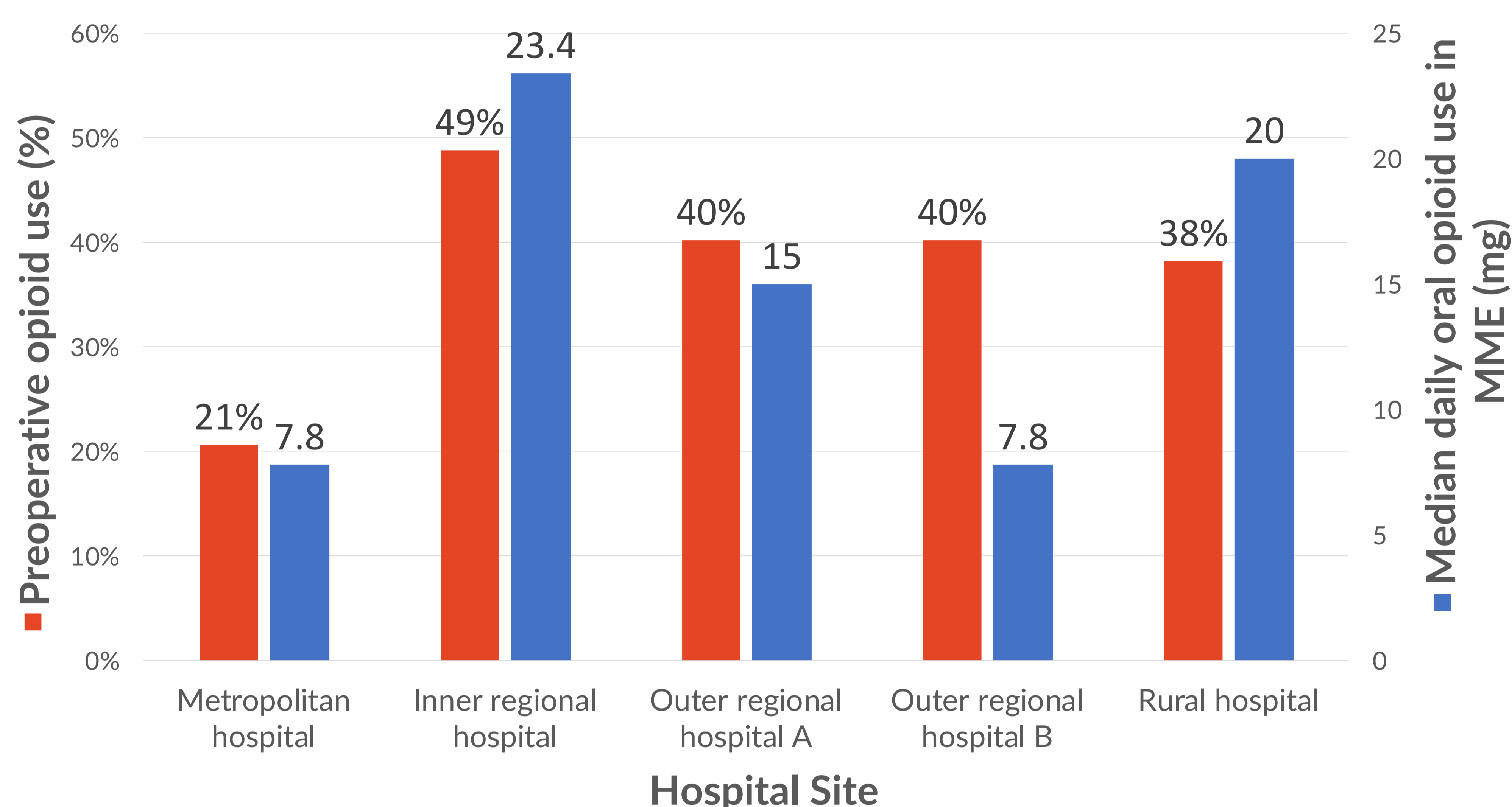


Figure 1. Rates and quantities of preoperative opioid use by hospital site

MME, morphine milligram equivalents.



2.6 higher odds

of being on an opioid before surgery if attending inner regional hospital

Conclusion

Nearly 40% of patients presenting for elective orthopaedic surgery were using some opioid medication, with significant variation between metropolitan and regional or rural settings.

Table 2. Multivariable logistic regression analyses for opioid use before elective orthopaedic surgery.

Hospital Location	Adjusted OR (95% CI)
Metropolitan hospital	[Reference]
Inner regional hospital	2.6 (1.0 - 6.7)*
Outer regional hospital A	1.6 (0.7 - 3.5)
Outer regional hospital B	2.2 (0.9 - 5.1)
Rural hospital	1.9 (0.9 - 4.2)

OR, odds ratio; CI, confidence interval; * P < 0.05 using Wald test
Adjusted for age, sex, history of chronic pain, depression, education and tobacco use.



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