

Patterns of opioid doses to compensated Australian workers with low back pain

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Introduction

This study aims to identify patterns of opioid prescription to compensated workers in Victoria and examine the characteristics of injured workers who are at risk of high dose and persistent opioid use.

Method

We included workers with accepted workers' compensation time loss claims for low back pain with at least one day of scheme-funded income replacement, received by an insurer between 01 January 2010 and 30 June 2016 across Victoria. Trajectory modelling was used to identify different opioid dispensing patterns. Descriptive statistics and logistic regression were used to report the proportion of worker sociodemographic characteristics and compare sociodemographic characteristics between each opioid dispensing pattern group.

Results

Among 14,703 accepted claims, 33.1% reported receiving any opioid medications as part of their claims. Six opioid dispensing patterns were identified. Individuals in the highest socioeconomic status (SES) quintile were less likely to receive long-term, high-dose opioids (OR 0.57, 99%CI 0.33 to 0.97) compared to other quintiles. Workers who were ever dispensed gabapentinoids and antidepressants showed an increased risk of persistent high-dose opioid use (OR: 7.93, 99%CI 5.39 to 11.67; OR: 22.29, 99%CI 14.61 to 34.00) relative to workers with a single opioid dispensing. Those who had surgery were 1.69 (99%CI 1.20 to 2.37) times as likely to use long-term high-dose opioids compared to non-surgery group.

Conclusion

Lower socioeconomic status, having ever taken gabapentinoids or antidepressants or having had surgery are all associated with persistent opioid use among compensated workers. Regulation on opioid prescriptions, strengthening clinician oversight of patients' medication histories, and promoting non-opioid treatments within the workers' compensation system may represent crucial directions for future implications.

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