

Preliminary analyses of opioid prescribing patterns following prescription drug monitoring program implementation in Victoria: A time series analysis

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Introduction: Internationally, prescription drug monitoring programs (PDMPs) have had varied outcomes on opioid prescribing. In Victoria, PDMP use became mandatory in April 2020. The aim of this study was to examine the impact of Victoria's PDMP on opioid prescribing patterns in general practices.

Methods: Population Level Analysis and Reporting (POLAR) data were used to examine Victorian GPs' opioid prescribing patterns between 01/04/2018 and 31/12/2020. A 90-day rolling average daily oral morphine equivalent daily dose (OMEDD) was calculated. Interrupted time series analysis was used to examine changes in the number of patients receiving opioid prescriptions, and the prescribing rates per 1000 people before and after mandatory PDMP use.

Results: In the first month following mandatory PDMP use, there was a significant reduction in the number of patients/1000 prescribed an opioid (-3.8, 95%CI:-5.4 to -2.1), but this was not sustained in the subsequent seven months (-0.22, 95%CI:-0.63 to 0.18). There was also a small but significant reduction in prescribing doses of 50-100mg OMEDD (-0.3, 95%CI:-0.5 to -0.1) and >100mg OMEDD (-0.17, 95%CI -0.32 to -.01) in the first month following mandatory use, which contrasted with the following 7-month trend of increased prescriptions of both 50-100mg (0.12, 95%CI:0.09 to 0.15) and >100mg (0.05, 95%CI:0.03 to 0.07) doses.

Discussion and Conclusions: Victoria's mandatory PDMP use was associated with small immediate effects on opioid prescribing at the higher dose levels. Longer term prescribing of higher opioid doses however appeared to increase above the levels seen prior to mandatory PDMP use.

Implications for Policy: These results suggest mandatory PDMP use may not be reducing overall high-dose opioid prescribing at the population level. Further analysis examining impacts of this policy on higher-risk patients is needed to determine if the PDMP is having targeted effects on higher risk prescribing and patients.

Disclosure of interest:

This work is funded by an NHMRC Ideas Grant (#20029193), SN is the recipient of a National Health and Medical Research Council (NHMRC) Career Development Fellowship (#1163961), LP is the recipient of an NHMRC Postgraduate Scholarship (#1189975) SN and TX have received untied research funding from Seqirus unrelated to this work. SN is a named investigator on a buprenorphine depot trial (Indivior).