Opioid prescribing in Australia: too much and not enough

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A comprehensive and coordinated approach to overdose prevention by national and state governments and professional groups is needed

Opioid prescribing in Australia has increased steadily over the past three decades.[1,2] Each time a new opioid formulation becomes available, it is enthusiastically prescribed. Ten opioids are currently approved by the Therapeutic Goods Administration for pain management, and there are more than 126 different formulations.[3]

In this issue of the *MJA*, Adewumi and colleagues[4] describe changes in the prescribing of strong opioid prescriptions in Queensland during 1997–2018, as reflected in the Queensland drugs of dependence database. During this time, the number of patients prescribed strong opioids increased 11-fold (from 28 299 to 332 307) and the number of medical practitioners prescribing opioids quadrupled (from 4537 to 20 226). Throughout the study period, most patients were prescribed relatively low doses of standard release opioids (less than 20 mg morphine milligram equivalents [MME] per day); most patients prescribed modified release opioids were prescribed 20 to less than 50 mg MME/day.

More broadly, concerns about the harmful effects of opioids in Australia remain. Opioids comprise the drug class most frequently involved in drug overdoses, the number of overdoses has increased markedly over the past 15 years, and prescription opioids are implicated in more than 70% of opioid-related overdoses, with only a minority linked to heroin or other illicit opioids.[5,6] Adewumi and colleagues[4] found that 90% of opioid prescriptions were for doses of less than 50 MME/day, corresponding to lower risk of overdose. A recent meta-analysis found that, compared with people taking less than 20 MME daily, unintentional overdose was 1.7 times as likely for those taking 20 to less than 50 MME/day, 3.1 times as likely for those taking 50–100 MME/day, and 5.2 times as likely for people taking more than 100 MME/day.[7] While the proportion of patients in Queensland prescribed high dose opioids (more than 50 MME) is low (less than 10% in the study by Adewumi and colleagues[4]), the marked increase in the total number of patients prescribed opioids is driving an increase in the number of opioid-related deaths.[8]

Nevertheless, concerns about opioid-related harms are not at the same level in Australia as in North America. Restrictions on direct advertising of pharmaceuticals to patients, as well as regulatory and professional actions, have resulted in different patterns of prescribing and outcomes in Australia. Internationally, Australia ranks number eight in opioid use (in terms of defined daily doses per million population), but the level of use is one-third of that in the United States.[9]

However, the harms associated with non-medical opioid use could also increase in Australia. There has been no comprehensive and coordinated approach to overdose prevention by national and state governments and professional groups. Take home naloxone formulations have been available to patients and carers for more than five years, but uptake has been limited.[10,11] The federal pilot program for providing free take home naloxone through pharmacies, hospitals, and harm reduction centres in New South Wales, South Australia and Western Australia is currently being evaluated, with hopes that it will eventually become permanent and be extended across Australia.[12]

Another approach has been the progressive introduction across Australia of real time prescription monitoring,[13] with the aim of providing medical practitioners and pharmacists individualised prescription data on the dispensing of opioids and other psychoactive medications, to help them better identify cases of overprescribing or overuse. However, inappropriate prescription refusal, unplanned or unsupported drug withdrawal, and patients shifting to black market drug sources are among the problems reported for real time prescription monitoring systems in the US.[14] Indeed, such monitoring may cause a paradoxic increase in the number of opioid-related deaths by shifting patients to illicit sources of opioid drugs or greater polypharmacy.[15] Its impact on opioid mortality in Australia has not been evaluated, and real time prescription monitoring should not be implemented without adequate access for patients to comprehensive pain and addiction treatment services, including timely clinical review.

Providing safe and effective treatment for patients with chronic pain is of fundamental importance. Opioid medications are only one option, but they are overused because of limited access to multidisciplinary services incorporating evidence-based interventions, including psychological and physical therapies. While most patients prescribed opioids do not experience major harms, the marked increase in the total number of people using them will ultimately increase the number who do. We need a combination of strategies, including improving the uptake of take home naloxone, real time prescription monitoring, regulatory changes, better access to specialist multidisciplinary

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• doi: 10.5694/mja2.51180 • See Research (Adewumi).

services, and education for health professionals and the general public. Importantly, these strategies should be coordinated within a national overdose avoidance strategy.

Our health system is struggling to adequately respond to the increasing number of patients with complex chronic pain together with mental health and addiction conditions. Relying on general practitioners without adequate support from specialist services contributes to excessive use of interventions that can be delivered in short general practice consultations, and this is driving a marked increase in opioid prescribing and the consequent harms.

Acknowledgements: Buddhima Lokuge holds a Hunter New England Local Health District/University of Newcastle General Research Fellowship.

Competing interests: Nicholas Lintzeris has served on the advisory boards for GW Pharmaceuticals, Indivior, and Mundipharma, received speaker's honoraria from Chiesi Pharmaceuticals and Mundipharma, and received research-related funding from Braeburn Pharmaceuticals/Camurus.

Adrian Dunlop has served (in an honorary capacity) on the advisory board for Mundipharma; his organisation has received research-related funding from Braeburn Pharmaceuticals/Camurus (manufacturers of buprenorphine), and he served as an honorary investigator in an Indivior-funded study of buprenorphine–naloxone products.

Provenance: Commissioned; externally peer reviewed. ■

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