COMMENTARY

Pharmaceutical opioid use and harm in Australia: The need for proactive and preventative responses

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Abstract

There are parallels between the North American experience of escalating pharmaceutical opioid utilisation and harm, and the trends being observed in Australia. In Australia, opioid utilisation has increased dramatically over the past two decades. There have been significant shifts away from the predominant prescribing of “weak” and short-acting opioids, to “strong” and long-acting opioids, for an increasing range of chronic pain indications. In concordance with escalating use, Australia is experiencing increases in opioid-related hospital admissions and overdose, as well as opioid dependence and treatment-seeking. Despite increasing concern regarding pharmaceutical opioid use and harms in Australia, responses have been limited. There have been no recent changes in regulatory systems for prescription-only pharmaceutical opioids, opioid prescribing guidelines, limits on doctors’ prescribing, monitoring of patient or doctor access to opioids, or in access to medicines via public subsidy. Potentially abuse-deterrent opioid formulations have entered the Australian market, with studies suggesting that these formulations are less likely to be tampered with by people who inject drugs, but to date, there have been limited impacts on opioid utilisation and harm. Additional strategies may include enhancing access to effective approaches to pain management and opioid dependence, and scaling-up naloxone provision. There is a unique opportunity for a proactive and preventative response to pharmaceutical opioids in Australia, to avoid experiencing the scale of problems seen elsewhere.

The North American experience of escalating pharmaceutical opioid use and harm is sobering. Fischer and Rehm (2017) describe an unprecedented “public health crisis” of pharmaceutical opioid use and dependence [1], with substantial increases in opioid-related deaths [2], transition to heroin use [3], and strain upon the health and drug treatment system [4]. The problems observed across North America appear to have been driven by widespread prescribing of controlled-release and “strong opioids”, such as oxycodone and fentanyl [5].

Increasing opioid exposure across the general population in these countries has continued, despite implementation of various initiatives that have limited evidence of effectiveness [6]. Strategies to address over-prescribing of riskier opioids have included tighter regulation [6], legislation addressing rogue pain management clinics where opioids were inappropriately prescribed and dispensed on a large scale [7], targeting prescribing behaviour [8], and development of “abuse deterrent” formulations [9]. Furthering the crisis, new opioid dependent populations have been transitioning from pharmaceutical opioid use to heroin use and injecting [3]. In 2016, the United States (US) government responded by providing an additional USD\$1.1billion to expand opioid dependence treatment. This is one step in addressing the harms of risky opioid use and dependence, but recent media reports indicate that continued funding at this level by the Trump administration is uncertain [e.g. 10].

There are serious concerns that Australia is experiencing similar trends in increasing use and harm [11]. Pharmaceutical opioid use increased 15-fold in Australia over the last two decades [12], and there is considerable utilisation of over-the-counter codeine [13]. Originally registered to manage cancer and acute pain, opioids have been approved to treat an increasing number of chronic non-cancer pain conditions [14]. There has also been a shift in the types of opioids prescribed. In 1990, 90% of opioid dispensings were for “weak” opioids and almost all (96%) were short-acting [14]. By 2011, 40% of all dispensings were for “strong” and 50% were for long-acting opioids [14]. In concordance with escalating use, there is evidence of increased opioid-related hospital admissions, overdose, dependence

and treatment-seeking [15-19]. Pharmaceutical opioid cause over 70% of opioid overdose fatalities in Australia, which is similar in the US [19].

Despite increasing concern regarding pharmaceutical opioid use and harms in Australia, no recent changes have occurred in regulations for prescription-only pharmaceutical opioids, prescribing guidelines, limits on prescribing, monitoring of patient or doctor access, or in access to medicines via public subsidy (Australians have government-subsidy for many medicines). Implementation of a real-time opioid prescription monitoring system in one jurisdiction (Tasmania) is an exception (Note: Legislation for real time prescription monitoring in Victoria was introduced into the Victorian Parliament in August 2017); however, participation is voluntary, uptake by pharmacies and prescribers has been limited and the initiative is yet to undergo a formal evaluation [20].

Australia is also approving an increasing array of potentially abuse-deterrent opioid formulations [21]. In Australia, available evidence from convenience samples suggests most individuals tampering with pharmaceutical opioids (i.e. physically manipulating tablets to prepare them for unintended routes of administration, such as snorting or injecting) take these drugs via injection, on an infrequent basis, and use a variety of pharmaceutical opioids and heroin [21]. In contrast, tampering for non-injecting routes of administration is more common in North America [22]. Australian post-marketing surveillance studies show reductions in use and tampering amongst people who inject drugs following introduction of abuse-deterrent formulations, with no evidence of switching to other pharmaceutical opioids or heroin [21,23]. However, these formulations have not eradicated tampering and injection, and have had limited impacts on opioid utilisation and population-level harm [21].

Socioeconomic disadvantage and mental health comorbidity appear strongly correlated with higher opioid utilisation rates [24] and problematic opioid use and dependence [25]. Mirroring US studies [e.g. 26], there is substantial geographic variation in opioid use and related mortality and morbidity in Australia, with higher utilisation rates observed in areas

outside of major cities for all types of opioids [13,15,24,27]. This may be in part related to a lack of alternative pain treatment options in geographically remote areas. Australian studies indicate that people living with chronic non-cancer pain in rural and remote areas report a lack of access to pain specialists and financial barriers to pain treatment, compared with people from urban areas [28].

Given increased prescribing, lack of regulatory change to prescription-only pharmaceutical opioids, and potentially limited impact of abuse-deterrent products, we are led to question why Australia has not experienced the same rapid escalation in opioid-related harms evident in North America. A number of factors are likely to be important. Australia's universal healthcare system provides some protection; there are wide and significant disparities in healthcare access between US adults with above and below-average incomes, which persist after controlling for insurance coverage, race/ethnicity, immigration status and other important factors [29]. There is a long history of direct-to-consumer advertising of pharmaceuticals in the US, whereas advertising in Australia is more restricted [30]. There are also differences in harm reduction and drug treatment responses: both opioid substitution therapy and needle and syringe programme coverage are far higher in Australia relative to the US [31].

Nonetheless, there are multiple lessons to be learnt from the North American experience. Despite escalating rates of use and repeated calls for concern, with the exception that codeine will no longer be available over-the-counter from 2018 [32], we have not yet seen any subsequent regulatory, policy or programmatic shifts in Australia. Given the abundance of data sources on pharmaceutical and illicit drug use and harms within Australia, there is a unique opportunity to maximise the utility of existing administrative and routinely-collected data, and monitor changes in pharmaceutical opioid use and harms, as well as other drugs more broadly [e.g. 33]. Regulatory controls on prescribing are likely to be one part of the solution, but it is clear that a more comprehensive and multi-faceted approach is needed. Additional strategies include enhancing access to effective, multidisciplinary approaches to

pain management and comorbidity, developing more attractive and accessible options for the treatment of opioid dependence [31], and scaling-up the provision of take-home naloxone for people using prescribed and illicit opioids. Australia is in a fortunate position; we have the opportunity for a proactive and preventative response to pharmaceutical opioids, to avoid experiencing the scale of problems seen elsewhere.

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