



Response to Letter to the Editor

We Should Agree to Disagree

Our research appears to have stimulated a discussion around medication safety and prescribing by dental prescribers. Medication safety is a national health priority in Australia because there is substantial public health harm because of medicines. The quality use of medicines is a pillar of our national medicines policy. Medications may be initiated by the consumer or by a prescriber. The emphasis of research often focuses on medicines prescribed by medical professionals or hospitals, whereas our study is highlighting the use of medications by dental practitioners. The authors of the letter addressed several points that they made about our research. We appreciate this opportunity to address the issues that they raised.

The Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) reporting guideline is well-accepted and utilised. Studies that assessed the rates of dental opioid prescribing after the up-scheduling of codeine in Australia also used the STROBE reporting guideline.¹

Our research used the aggregated Pharmaceutical Benefits Scheme (PBS), which is a national data set of medicine use. This data set captures medicines subsidised by the Australian government. It captures medicines that have been subsidised by the Australian government based on the decision of the Pharmaceutical Benefits Advisory Committee (PBAC) rather than the scheduling. An unscheduled medicine, schedule 2, or schedule 3 are all available without a prescription. If a medicine is prescribed for a patient privately, it is not captured by the PBS. Similarly, any medicine prescribed before July 2012 that was under the patient co-contribution amount was not captured by the PBS data.² These limitations are addressed by Teoh et al¹ in their letter as criticisms of our research. These limitations are broadly and routinely acknowledged limitations of the PBS data set for research purposes. However, it is generally acknowledged that there are limitations to every data set. These limitations do not and, should not, preclude research being conducted with these data sets but rather require researchers to consider, acknowledge, and communicate the limitations to their readership to allow clear interpretation and understanding of the presented data.

We want to address directly the point about naloxone prescribing. It is widely acknowledged that the PBS data have not captured much naloxone use because it has been sourced through other channels.³ We agree with Teoh et al¹ that the public health messaging and education is an essential component of reducing harm. Further, we agree with them that the emphasis needs to be placed on judicious and appropriate prescribing. These issues do not preclude the risk associated with the use of prescription opioids and the significant public harm that has occurred because of opioid use. Overdose, morbidity, and mortality has occurred even when appropriate

opioid use has been prescribed. Because it is plausible that many people experiencing dental pain may be opioid naive, they may represent a high-risk category. It is for this reason that advocates for the introduction of widespread take-home naloxone have worked to have this implemented. It is for an emphasis on harm minimisation and medicines safety. The issue is not that we believe opioid use focus should not remain on judicious and appropriate prescribing, but that even when medicines are prescribed judiciously and for an appropriate indication, that it is still possible for these medicines to cause harm. Recently, naloxone nasal spray has now become available under dental PBS.⁴ This emphasises the importance of our findings.

Our research value is to provide credit when it is due and accept criticisms graciously. We appreciate Teoh et al¹ and their concerns in relation to the historical PBS codes. Our methodology was based on that of previous studies, which did not seem to have included them either.^{5,6} Because it was suggested, we searched for the historical codes for naloxone and used the adopted equation, dispensing count per 1000 population days (DPD), as utilised in our work.⁷ For all years (per year), no differences were found in dispensing count per 1000 population days when historical data were included as numbers were very low.

Even with the criticism that Teoh et al¹ have directed at our work, we believe that the use of the PBS data set is a valid research data set to undertake this research, albeit one that has acknowledged limitations.⁸ It is useful to be having this conversation about safety and appropriateness of medicines use from dentists, which is an area that is often overlooked in the discussions about medicines safety.

There are always two sides to each story. We should agree to disagree.

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Conflicts of interest

None disclosed.

REFERENCES

1. Teoh L, Hollingworth S, Marino R, McCullough MJ. Dental opioid prescribing rates after the up-scheduling of codeine in Australia. *Sci Rep* 2020;10:8463.

2. Page AT, Falster MO, Litchfield M, Pearson S, Etherton-Beer C. Polypharmacy among older Australians, 2006–2017: a population-based study. *Med J Aust* 2019;211:71–5.
3. Lintzeris N. Providing take home naloxone needs to be improved to prevent opioid overdose deaths. *Med J Aust* 2020;212:307–8.
4. Australian Government Department of Health. Pharmaceutical benefits scheme. Dental items. Available from: <https://www.pbs.gov.au/browse/dental>. Accessed 9 July 2020.
5. Ford PJ, Saladine C, Zhang K, Hollingworth SA. Prescribing patterns of dental practitioners in Australia from 2001 to 2012. *Antimicrobials. Aust Dent J* 2017;62:52–7.
6. Hollingworth SA, Chan R, Pham J, Shi S, Ford PJ. Prescribing patterns of analgesics and other medicines by dental practitioners in Australia from 2001 to 2012. *Community Dent Oral Epidemiol* 2017;45:303–9.
7. Park JS, Page A, Kruger E, Tennant M. Dispensing patterns of medicines prescribed by Australian dentists from 2006 to 2018 - a pharmacoepidemiological study. *Int Dent J* 2020;70:254–8. doi: 10.1111/idj.12605.
8. Mellish L, Karanges EA, Litchfield MJ, et al. The Australian Pharmaceutical Benefits Scheme data collection: a practical guide for researchers. *BMC Res Notes* 2015;8:634.

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