Examining Australian and United States user-reported opioid data on StreetRx, a crowdsourced, drug market surveillance website: 2015-20

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Introduction and Aims: Monitoring and surveillance of drug use markets can inform drug policy, market availability and demand, and potential harms. Alongside existing systems, a novel online platform, StreetRx, allows anonymous reporting of drug and medication purchases, including opioids. We examine user-reported opioid purchases on the StreetRx platform for Australia and the United States (US), including changes in reporting between 2015-2020.

Design and Methods: Australian and US user-submitted data for opioids on StreetRx, 2015-2020 were examined. The user-submitted information assessed included active ingredient(s), brand, medication strength, and purchase price.

Results: StreetRx received 2,473 Australian opioid entries between 2015-2020, representing 39.6% of all Australian platform submissions. Reported Australian opioids included oxycodone (45.2%) buprenorphine (29.0%), morphine (9.0%), codeine (4.6%), tramadol (4.4%), and tapentadol (2.0%). Comparatively, there were 133,833 US opioid entries, comprising 44.0% of US submissions. Reported opioids included oxycodone (35.2%) hydrocodone (31.9%), morphine (7.6%), hydromorphone (5.3%), buprenorphine (4.0%), and tramadol (3.7%).

Proportions of reported opioids in Australia decreased between 2015 and 2020 for buprenorphine (31.0% to 7.8%) and morphine (26.1% to 8.7%), while oxycodone (38.1% to 53.0%) and codeine (1.6% to 7.4%) increased. US reported proportions decreased between 2015-2020 for hydrocodone (33.3% to 18.0%) and oxycodone (43.3% to 28.2%), while morphine (5.4% to 14.3%) and buprenorphine (1.7% to 10.2%) increased. Fentanyl reports were comparatively low, with modest increases from 2015-2020 for Australia (0.3% to 2.4%) and US (0.5% to 3.6%).

Discussions and Conclusions: Our analysis found opioids comprise a large proportion of StreetRx reports in Australia and the US. However, the type of opioids and trends in reporting over time differed between the two countries.

Implications for Practice or Policy: StreetRx provides a novel approach to monitoring reported drug use and prices and could serve as an additional indicator, alongside other data of the impacts of opioid-related policies on illicit markets.

Disclosure of Interest Statement: The authors declare no competing interests.