Changes In Pre-Exposure Prophylaxis Prescribing Across Australian Primary Care
And Sexual Health Services Following Covid-19 Social Restrictions

Authors
Traeger M1,2, Patel P3, Asselin J1, Vickers T3, EI-Hayek C1,2, Carter A3, Ryan K1, Wright E1,4,10, Fairley C5, McNulty A6, Roth N7, Finlayson R8, Bell C9, Donovan B3,6, Guy R3, Hellard M1,2,4, Stoové M1,2 on behalf of the Australian Collaboration for Coordinated Enhanced Sentinel Surveillance of Blood-borne Viruses and Sexually Transmitted Infections (ACCESS)

1Disease Elimination, Burnet Institute, Melbourne, Australia; 2School of Public Health and Preventive Medicine, Monash University, Melbourne Australia; 3Kirby Institute, UNSW Sydney, Sydney, Australia; 4Department of Infectious Diseases, Alfred Health, Central Clinical School, Monash University, Melbourne, Australia; 5Melbourne Sexual Health Centre, Melbourne, Melbourne Australia; 6Sydney Sexual Health Centre, Sydney, Australia; 7Prahran Market Clinic, Melbourne, Australia; 8Taylor Square Private Clinic, Sydney, Australia; 9Adelaide Sexual Health Centre, Adelaide, Australia; 10Peter Doherty Institute, Melbourne Australia;

Background:
The first case of COVID-19 in Australia was diagnosed on 25th January 2020. In response, the Australian government announced staged restrictions, including the closure of non-essential services implemented between 23rd-29th March. To explore the impact of lockdown restrictions on HIV prevention, we used sentinel surveillance data to estimate trends in PrEP prescribing across Australia before and after the implementation of COVID-19-related restrictions.

Methods:
Data were extracted from 42 GP and sexual health services across each state and territory (except NT). Tenofovir/emtricitabine prescriptions (excluding PEP) among HIV-negative individuals between 1st January 2019 and 31st July 2020 were included. We performed an interrupted time-series analysis of weekly PrEP prescriptions before and after the week starting April 1st 2020 (week following lockdown announcements). We report the mean number of weekly PrEP prescriptions in each period, trend for change in weekly PrEP prescriptions pre-restrictions (β1), the immediate decline in predicted weekly PrEP prescriptions at 1st April 2020 (β2), and trend for change in weekly PrEP prescriptions post-restrictions (β3).

Results:
53,596 PrEP prescriptions among 19,876 individuals (96.3% male) were included. The mean number of weekly prescriptions was 718 and 543 in the pre- and post-restrictions periods, respectively (24.4% decline between periods). The weekly number of prescriptions was stable pre-restrictions (β1=-0.2; P=0.734). At April 1st, there was an immediate 33.3% decline in predicted weekly PrEP prescriptions (β2=-236; P=0.001), followed by a non-significant increasing trend post-restrictions (β3=+10.6; P=0.178). The largest absolute decreases were observed in Victoria (β2=-106 [-36.0%]; P<0.001) and NSW (β2=-85 [-33.9%]; P=0.002). Significant declines were observed in ACT (P=0.001), Tasmania (P=0.002) and SA (P=0.005), but not in WA (P=0.806) or Queensland (P=0.404).

Conclusion:
Reducions in PrEP prescribing were observed following lockdown restrictions. Further understanding of how social restrictions are impacting sexual behaviours, access to HIV prevention and testing practices will be crucial in ascertaining how COVID-19 will affect trends in HIV/STIs.
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