

## **nPEP prescriptions pre- and post- introduction of PrEP, and the changing characteristics of those accessing it; findings from a sexual health clinic in Melbourne, Australia, 2011-2021**

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**Background:** Non-occupational post-exposure prophylaxis (nPEP) has been recommended since 2005 as a primary prevention approach for HIV prevention. Since the commencement of the Victorian 'PrEPX' study on 26<sup>th</sup> July 2016, more recent attention has been placed on pre-exposure prophylaxis (PrEP). This study aimed to compare patients' characteristics of nPEP use before and after PrEP became available.

**Methods:** Data was gathered on all patients attending Melbourne Sexual Health Centre (MSHC) for nPEP between 2011 and 2021, including frequency of nPEP use, country of birth, year of arrival to Australia, and this was categorised into 'pre-PrEP' (01-Jan-2011 to 25-Jul-2016) and 'PrEP' (26-Jul-2016 to 31-Dec-2021) periods.

**Results:** Between 2011 and 2021, there were 8,890 nPEP prescriptions (3,282 in the pre-PrEP and 5,608 in the PrEP period). The annual number of nPEP prescriptions increased from 250 in 2011 to 1,181 in 2016; the number remained stable at 1,200 in 2017-2019 but dropped to 700-800 in 2020-2021. Men who have sex with men (MSM) accounted for the majority (93.4%,  $n=8,292$ ) of nPEP consultations. Most patients (73.3%) had one nPEP episode. There was a reduction in nPEP prescriptions among Oceania-born patients (from 59.1% [1,914/3,282] to 41.5% [2,327/5,608];  $p<0.001$ ) but an increase among Asian-born patients (from 20.2% [663/3,282] to 36.3% [2,035/5,608];  $p<0.001$ ) in the pre-PrEP versus PrEP period. Furthermore, there was an increase in the proportion of nPEP prescriptions among overseas-born individuals who arrived Australia within four years, from 43.0% (518/1,205) in the pre-PrEP to 57.6% (1,723/2,990) in the PrEP period ( $p<0.001$ ).

**Conclusion:** There was no reduction in nPEP prescriptions in 2017-2019 despite PrEP being available in Victoria. The reduction in nPEP in 2020-2021 can be attributed to the COVID-19 pandemic. Future research is required to understand the rise in nPEP use amongst newly arrived overseas-born individuals, and this may be due to the limited access to PrEP among Medicare-ineligible individuals.

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