

# **Antiretroviral therapy use, viral detectability and fear of onward transmission among people living with HIV in Australia: Changes between 1997 and 2018**

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## **Background:**

This study examines how antiretroviral therapy (ART) use and fears towards the onward transmission of HIV have changed among people living with HIV (PLHIV) in Australia between 1997 and 2018.

## **Methods:**

Participants were recruited as part of the HIV Futures study, a large cross-sectional survey of PLHIV in Australia, in 1997, 2003, 2012 and 2018 (total n=3,889). ART use, viral load detectability, and fear of onward HIV transmission were compared between years. Predictors of onward transmission fear were assessed among the 2018 subsample.

## **Results:**

While ART use within our sample decreased between 1997 and 2003, it subsequently increased to 97% in 2018. Self-reported viral load undetectability steadily increased over time, up to 88% in 2018. The percentage of participants reporting they were fearful of transmitting HIV to a sexual partner was consistent across all years, but reduced significantly between 2012 and 2018. Being unfamiliar with the Undetectable=Untransmissible health campaigns and related community messaging, and having a detectable or uncertain viral load at last test, were significant predictors of being fearful of onward HIV transmission.

## **Conclusion:**

These results suggest that U=U campaigns may play a critical role in attenuating burdens experienced by PLHIV in relation to stigma and fear of onward HIV transmission, and that such messaging, in tandem with support for ART use, should remain a salient feature of HIV-related public health messaging.

## **Disclosure of Interest Statement:**

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