

TRENDS AND ASSOCIATED FACTORS FOR LATE AND ADVANCED HIV DIAGNOSES IN 2011-2023 IN MELBOURNE, AUSTRALIA

Authors:

Ong JJ^{1,2}, Tieosapjaroen W^{1,2}, Tran A^{2,3}, Maisano M², Kim C^{2,3}

¹School of Translational Medicine, Monash University, Melbourne, Australia, ²Melbourne Sexual Health Centre, Alfred Health, Melbourne, Australia, ³Melbourne Medical School, The University of Melbourne, Faculty of Medicine Dentistry and Health Sciences, Melbourne, Australia

Background:

Most HIV transmission in Australia is attributed to individuals who have partners with undiagnosed HIV. We investigated trends of late- and advanced diagnosis of HIV and factors associated with delayed HIV diagnosis at Melbourne Sexual Health Centre (MSHC), Melbourne, Australia.

Methods:

This retrospective cohort study used data extracted from the electronic medical records at MSHC between 2011 and 2023. We described the demographic and clinical characteristics and calculated the proportion of late- (CD4 count <350 cells/ μ L) and advanced HIV diagnoses (CD4 count <200 cells/ μ L). Univariable and multivariable logistic regression analyses were performed to identify the factors associated with late and advanced HIV diagnosis.

Results:

Among 637 individuals, 210 (33%) had a late HIV diagnosis, and 63 (9.8%) had an advanced diagnosis. Characteristics of those with late HIV diagnosis included a median age of 29 (IQR 26,38), 98% being men who have sex with men (MSM), 71% born overseas, 49% newly arrived in Australia (<5 years), 46% Medicare-ineligible, 69% reporting more than one sexual partner in the past three months and 59% diagnosed with a co-sexually transmitted infection. The proportion of late HIV diagnoses increased from 17% (8/47) in 2011 to 37% (7/19) in 2022 (Ptrend=0.0007), while advanced HIV diagnoses increased from 4% (2/47) in 2011 to 11% (2/19) in 2022 (Ptrend=0.0078). Factors associated with late HIV diagnosis included being born overseas (adjusted odd ratio (aOR) 1.93, 95% confidence interval (CI) 1.20-3.08, P=0.006), lack of recent HIV testing (aOR 2.30, 95%CI 1.29-4.49, P=0.006), low risk of HIV infection (aOR 1.66, 95%CI 1.02-2.69, P=0.041). Factors associated with advanced HIV diagnosis included being older (aOR 1.045, 95%CI 1.011-1.079, P=0.008), low perceived risk of HIV infection (aOR= 1.904, 95%CI 1.063-3.412, P=0.03), and having one (aOR 0.151, 95%CI 0.049-0.465, P=0.001) or more than one sexual partner (aOR 0.135, 95%CI 0.048-0.378, P<0.001) in the past three months, compared to those without sexual partners.

Conclusion:

Our findings highlight local challenges in HIV diagnosis and care among overseas-born MSM. Low perceived HIV risk contributes to late and advanced diagnoses, impeding timely antiretroviral therapy initiation and increasing the risk of HIV transmission within the community.

Disclosure of Interest Statement:

No author reported interest statement.