PREDICTORS OF LATE DIAGNOSIS FOR PEOPLE NEWLY DIAGNOSED WITH HIV INFECTION IN NSW

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Background: Late HIV diagnosis remains a local and global individual and public health problem, as it results in delayed initiation of antiretroviral therapy (ART), poorer health outcomes, premature death, ongoing transmission of HIV and other costs. We conducted a cross-sectional study using surveillance data to identify predictors of late diagnosis of HIV in NSW.

Methods: Univariate and multivariate analysis were conducted using HIV notification data on NSW residents newly diagnosed with HIV from 1 January 2011 to 30 June 2016. Late diagnosis was defined as a CD4 count less than 350 or an AIDS defining illness or death due to AIDS within three months of diagnosis, in the absence of a laboratory confirmed negative HIV test within 12 months of diagnosis. Potential risk factors examined were year of and age at diagnosis, gender, Aboriginal or Torres Strait Islander person status, country of birth, primary language spoken at home, postcode of residence at diagnosis, country most likely acquired HIV and HIV risk exposure.

Results: Of 1960 new diagnoses, 1890 (96%) were included in the analysis, of which 664 (35%) were diagnosed late. Seventy (4%) of new diagnoses were excluded due to missing data to assign 'late' status. In the multivariable model, predictors of late diagnosis were being 50 years of age or over (adjusted odds ratio [AOR] 2.49, 95% confidence interval [CI] 1.85-3.34; p value <.0001) compared with being 30-39 years of age, being female (AOR 1.63, CI 1.14-2.35; p=0.008), being born in a country other than Australia (AOR 2.02, CI 1.64-2.48; p<.0001), and residing in regional or rural NSW (AOR 1.59, CI 1.16-2.35, p=0.004) compared with inner metro Sydney.

Conclusion: More work is needed to improve the timeliness of detection of HIV infection in women and in people who are older, of culturally and linguistically diverse backgrounds, and living in regional and rural NSW.

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