TIME BETWEEN ARRIVAL IN AUSTRALIA AND HIV DIAGNOSIS AMONG PEOPLE NEWLY DIAGNOSED: A CASE SERIES OF CLINIC DATA

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Background:
Reducing the time between arrival in Australia and HIV diagnosis in overseas-born (OSB) people is a target in the NSW HIV Strategy, however there are few data to measure progress towards this target.

Methods:
We undertook a retrospective case series of new HIV-1 diagnoses at Sydney Sexual Health Centre, the largest publicly funded sexual health service in central Sydney and a[TEST], a free peer-led testing service, between 2010-2021. We included OSB people newly diagnosed with HIV, who arrived after the age for 17. Date of arrival was recorded in years and centred on June 30. Date of diagnosis was the date of confirmatory HIV test. Cox regression was used to assess time to event data using Stata 18.

Results:
There were 438 new HIV diagnoses in OSB people; median year of arrival was 2013 (range 1988-2021) and mean age of diagnosis was 32 years (range 20-74 years). 396/416 cis-men identified as MSM (95%) and there were 15 cis-women and 9 transwomen. There were 59(14%) people with CD4 counts <200, 207(47%) between 200-500 and 130(29%) >500 and 44 unknown. 222(50%) were born in Asia, 97(22%) in the Americas, 88(20%) in Europe, 14 in Oceania, 7 in Africa, and 12 unknown. The median duration between arrival and diagnosis before 2016 was 2.09 years [95%CI 1.62-2.83] and after, 1.86 years [95%CI 1.45-2.37], log-rank P=0.07.
In Cox regression, increasing age (HR 0.90 [95%CI 0.88-0.91]), people born in Asia (HR 0.55 [95%CI 0.42-0.74]) and Africa (HR 0.71 [95%CI 0.32-1.55]), and HIV Subtype B (HR 0.78 [95%CI 0.62-0.98]) were associated with a longer duration between arrival and diagnosis. Diagnosis after 2016 (HR 1.25 [1.01-1.53]) and language groups were associated with faster diagnosis time (English ref; Thai HR 1.75 [1.24-2.46]; Mandarin HR 1.33 [0.83-2.14]; Spanish HR 1.42 [0.92-2.21]; Others HR 1.44 [1.03-1.99]).

Conclusion:
These data give the first time to event insight between arrival and HIV diagnosis in Australia. There are significant differences between age and language groups for duration between arrival and HIV diagnosis that should be explored to inform ending HIV strategies.