

Vertical vs horizontal HIV in young people aged 18 - 25

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Background

Of 77614 people accessing HIV care in the UK in 2012, 2516 (3.2%) were between 15-24 years old. 1603 (64%) of these were infected vertically¹. Well-established services and evidence exists to support transition from paediatric care, but less information is available to guide best practice for young people with non-vertical HIV.

Aims

To investigate HIV risk-factors, co-morbidities, HIV outcomes, retention in care and psycho-social issues in young adults (18-25 years) in an urban HIV clinic.

To describe and compare young patients with vertical or horizontal acquisition to facilitate appropriate service provision for these two groups.

Methods

We carried out a retrospective review of medical records of 18-25 year olds registered at Newham Hospital HIV department in 2013. Engagement in care is defined as having been seen in the preceding year.



Results

	Vertical transmission [n (%)]	Horizontal transmission [n (%)]
Number of patients registered 18-25 years	38 (63)	22 (37)
No of female patients	16 (43)	12 (56)
Ethnic group		
Afro-Caribbean	37 (97)	15 (68)
South Asian	1 (3)	0
Arab	0	1 (4.5)
Mixed black/white	0	1 (4.5)
Caucasian	0	5 (23)
Transmission route		
Vertical	38 (100)	-
Heterosexual sex	-	16 (73)
MSM	-	4 (18)
IVDU	-	1 (4.5)
Iatrogenic	-	1 (4.5)
Mean age at diagnosis (range)	7.7 (0-19)	21 (9-25)
Mean CD4 count cells/mm³ at time of analysis (range)	420.5 (8-781)	540.2 (167-1324)
Mean viral load at time of analysis(copies/ml)	16067	6770
Number of patients on ART	34 (89)	14 (64)
No of patients on ART with undetectable VL	14 (37)	11 (79)
Drug resistant HIV	23 (61)	6 (25)
Engagement in care	31 (82)	20 (91)
No of patients with current or previous AIDS-defining/chronic medical conditions	27 (71)	4 (18)
Documented STIs	3 (8)	6 (27)
Females with previous pregnancies	3 (19)	6 (50)
Psychiatric co-morbidity	10 (26)	4 (18)
Social issues	15 (40)	3 (14)

Conclusion

Young people with HIV are a diverse group. In our cohort, as expected, those with vertically acquired HIV have a higher HIV-related disease burden, with the ongoing effects of AIDS-defining and chronic conditions seen into adulthood. The incidence of sexually transmitted infections was higher in those infected with HIV by horizontal transmission. This may be due to successful prevention strategies in those with vertically acquired HIV, or to more sexual activity in the horizontal group. Social issues such as financial problems were higher in those young people with vertical HIV transmission, but both groups had comparable levels of housing insecurity and domestic violence. Despite the small numbers in this cohort, the differences between these two groups warrants further investigation. It is clear however that needs in both groups are high, and that HIV services for young people must be carefully individualised to support and engage these patients successfully.