Behaviors Associated with Ongoing Transmission Risk among Recently Diagnosed and Chronically-Infected Persons Living with HIV in Washington, DC


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Background

Washington, D.C. has a generalized HIV epidemic with an HIV prevalence of 1.9% (12,964 people living with HIV, PLWH).

In 2016, men who have sex with men (MSM) and heterosexual men and women (HETM&W) accounted for 45% and 28% of the 347 new diagnoses, respectively.

37% of PLWH in DC were not virally suppressed at the end of 2016, and may be at risk of transmitting infection to others.

There is conflicting evidence as to whether PLWH curb their high-risk behaviors once diagnosed.

To understand which risk behaviors may be contributing to ongoing transmission risk among a cohort of PLWH who were either newly diagnosed or chronically-infected and viremic.

Objective

To understand which risk behaviors may be contributing to ongoing transmission risk among a cohort of PLWH who were either newly diagnosed or chronically-infected and viremic.

Methods

DC Cohort Study

A longitudinal observational cohort study of persons living with HIV receiving care at 15 clinical sites in DC.

Molecular Epidemiology Sub-Study

The objective of the sub-study is to characterize HIV transmission patterns in Washington, D.C.

This analysis focused on data from a cross-sectional risk behavioral survey conducted as part of the sub-study.

Recently diagnosed (past 12 months) and chronically-infected viremic (VL >1500 copies/ml) DC Cohort participants were eligible to participate.

Statistical methods

Male participants who identified as gay or bisexual were categorized as MSM; male and female participants who identified as heterosexual were categorized as HETM&W.

Behaviors that may have led to HIV infection were assessed for recently diagnosed participants; behaviors that may contribute to secondary transmission were assessed for chronically-infected viremic participants.

Calculated descriptive statistics and conducted univariate analyses using chi-square and Wilcoxon rank sum tests.

Results

Among 160 participants, 45 (28%) were recently diagnosed. The 115 (72%) chronically-infected viremic participants were diagnosed for a median of 14 years, and 96% were on ART with a median VL of 16,040 copies/ml.

Compared to those recently diagnosed, chronically-infected viremic participants were statistically significantly more likely to be:
- Older (50 vs. 34 years)
- Heterosexual (60% vs. 24%)
- Black (86% vs. 64%)

Conclusions

Despite being aware of their diagnoses and engaged in care, findings suggest PLWH, particularly MSM, continue to engage in high-risk behaviors that may lead to onward transmission.

Findings indicate the need for further engagement of high-risk persons in primary prevention services and reinforcement of secondary prevention and treatment among PLWH to reduce the risk of further transmission.

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