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Assessing gaps in the HIV care continuum in young men who have sex with men: The P18 Cohort Study

Richard E Greene, MD, FACP,

Associate Professor of Medicine, New York University School of Medicine; Director of Health Disparities Education, New York University School of Medicine; and Medical Director, Center of Health, Identity, Behavior and Prevention Studies, New York, New York, USA

Albert Luong, MD, MS,

Psychiatry Resident, Albert Einstein School of Medicine, New York, New York, USA

Staci C Barton, MPH,

Project Director, Center for Health, Identity, Behavior and Prevention Studies, New York University, New York, New York, USA

Farzana Kapadia, PhD, MPH*, and

Associate Professor of Public Health and Population Health, College of Global Public Health and Department of Population Health, New York University School of Medicine, New York, New York, USA

Perry N Halkitis, PhD, MS, MPH

Dean, School of Public Health, Rutgers University, Piscataway, New Jersey

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Recent advances in antiretroviral therapy (ART) have resulted in significant declines in HIV transmission and acquisition as well as HIV-related morbidity and mortality. These successes have made it evident that ensuring timely HIV testing, engagement in care, and access and adherence to ART to achieve viral suppression are key requirements to shift the curve of the HIV epidemic in the United States. These aforementioned steps, collectively known as the HIV Care Continuum, have also provided a framework for considering appropriate intervention strategies for groups at disproportionately higher risk for HIV acquisition and transmission (Bradley et al., 2014).

*Corresponding Author: Farzana Kapadia: farzana.kapadia@nyu.edu.

Disclosures

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According to a recent Centers for Disease Control and Prevention report, of the approximately 1.2 million people living with HIV (PLWH) in 2011, of those, 86% were aware of their diagnosis, 40% were engaged in care, 37% were prescribed ART, and 30% were virally suppressed. Of note, these rates were largely comparable for men who have sex with men (MSM). Alarming, when looking at PLWH ages 18 to 24, “drop-off” rates were much more pronounced. Only an estimated 49% of those infected with HIV were diagnosed, 22% were engaged in care, 18% were prescribed ART, and 13% were virally suppressed (Bradley et al., 2014). Compared to the rest of the country, New York State outperformed on all measures, with an estimated 92.5% of HIV-infected individuals diagnosed, 75.1% linked to care, 62.1% retained in care, and 51.3% virally suppressed (Centers for Disease Control and Prevention, 2016, 2017).

Efforts such as the National HIV/AIDS Strategy (NHAS) and the HIV Care Continuum Initiative have made it a priority to address the “drop-offs” along the care continuum that limit progress in improving health outcomes (White House Office of National AIDS Policy, 2013, 2015). A recent NHAS progress report in 2016 showed that annual targets had been met for the following parameters: knowledge of seropositive status, linkage to care, viral suppression across all ages, and viral suppression among youth (White House Office of National AIDS Policy, 2016). Although annual targets for retention in care have not been met, this measure has been trending in the expected direction. Despite overall progress, disparities in HIV diagnosis have worsened, namely among gay and bisexual men (White House Office of National AIDS Policy, 2016). These findings highlighted the importance of reducing disparity through future efforts. We sought to examine progress along the HIV care continuum in a sample of young men who have sex with men (YMSM) who are living with HIV infection.

Methods

Data presented here were collected as part of the Project 18 (P18) study, a prospective cohort study of health behaviors and outcomes among young gay, bisexual, and other men who have sex with men. Full study details were described in detail previously (Halkitis et al., 2013). Briefly, between June 2009 and May 2011, individuals were recruited via venue- and Internet-based strategies and enrolled, if eligible, into the P18 cohort study. Eligibility criteria included: being 18 to 19 years of age at screening, born biologically male, reporting sexual activity with another man in the 6 months preceding screening, residing in the New York City metropolitan area, and having an HIV-negative serostatus. HIV serostatus was self-reported and also confirmed via testing at the baseline visit. Of the 2,068 individuals screened, 600 were enrolled in the study. Biannual follow-up visits were scheduled for 6, 12, 18, 24, 30, and 36 months post participant baseline visits. HIV antibody testing as well as pre- and post-test counseling were conducted at each follow-up visit. Rapid HIV antibody testing was conducted using the OraQuick ADVANCE rapid HIV-1/2 antibody test. Pretest and post-test counseling was delivered by study staff certified in HIV counseling by the New York State Department of Health’s AIDS Institute. For participants completing online assessments, HIV status was ascertained via self-report and confirmed by obtaining information on HIV treatment uptake and HIV-related health care utilization at the 36-month visit (Halkitis, Kapadia, & Ompad, 2015). Cumulative HIV incidence in this sample over a

36-month follow-up period was 7.0% (42/594; (Halkitis et al., 2015). Among participants who seroconverted during the study follow-up period, 33 returned for a visit subsequent to the one at which they first tested HIV seropositive and were included in the present analysis. Information on key sociodemographic characteristics was collected via audio computer-assisted self-interview (ACASI) at all study visits. Descriptive analyses were conducted to examine key steps of the HIV care continuum in this sample of YMSM.

Results

Of the 33 study participants, more than 50% were between 19 and 20 years of age at the time of HIV seroconversion (Figure 1). Slightly less than 88% of this sample self-identified as Black, Hispanic/Latino, or mixed race/ethnicity, and more than half reported a low perceived family socioeconomic status. Approximately 60% of the participants received their first HIV seropositive test as part of the P18 study visit. In terms of retention in care, 81.8% of the participants with HIV infection reported seeing a health care provider for HIV care at least once following HIV seroconversion.

Finally, 69.7% reported being prescribed ART, and the same proportion reported taking it without stopping. For participants who had initiated ART, the majority (54.5%) reported that their most recent HIV viral load was undetectable, with 60.6% reporting that their most recent viral load was less than 500 copies/ml. Only 6% reported having their most recent CD4+ T cell count less than 250 cells/mm³.

Discussion

The findings presented here suggest that gaps in the HIV continuum of care may be mitigated in sub-groups of YMSM. There are several key reasons that explain these findings. First, because 60% of the participants tested HIV positive as part of the P18 study, it is important to acknowledge that this may be one reason why participants were less likely to seek testing outside of the study. Given this, it is important to acknowledge that participants who tested HIV seropositive as part of the testing protocol for this prospective cohort study, received comprehensive risk reduction-based pre- and post-test counseling by trained study staff. Second, recognizing that testing was occurring outside of a clinical setting, as per study protocol, participants were linked to facilities that provided HIV care, including some where participants without insurance were seen and provided HIV treatment at little or no cost. Due to the young age (19 to 20 years) at seroconversion for the majority of participants, study staff helped to facilitate appointments to initiate care. This, in itself, was likely to serve as an intervention for participants and explained why 81.8% of participants who seroconverted reported seeing a health care provider for HIV care at least once, a significantly higher proportion compared to the U.S. national average. Third, the proportion of participants who reported initiating and adhering to ART (69.7%) was significantly higher than the national average. Factors influencing this high proportion were likely related to the higher success in linking participants to care and higher rates of insurance coverage that facilitated retention into care. Specifically, 30.3% of participants reported having private insurance, including through parental coverage, which was common given that they were all

younger than 26 years, and 36.4% reported a government sponsored insurance (Metroplus, HealthFirst, etc.), with 9.1% using the AIDS Drug Assistance Program in New York.

Prior to drawing final conclusions, key limitations must be considered. First, the sample was limited to those who returned for follow-up visits following HIV seroconversion. This may have led to a volunteer bias whereby individuals who were more likely to initiate and be retained in care and HIV treatment were over represented in this sample. Also, these individuals were linked to care by study staff, which should be the case at other testing venues, but may be more effective in this case because it was occurring in a study setting and followed comprehensive post-test counseling.

Conclusion

Our findings suggest that while gaps persist between the key steps of the HIV care continuum, these gaps may be diminished among YMSM if concerted efforts were made to link and retain YMSM into care and HIV treatment. This is particularly important, as recent HIV estimates suggest that despite substantial reductions in HIV incidence among all at-risk groups in the United States, YMSM between 13 and 24 years of age are still at increased risk for HIV. Therefore, understanding the points at which to intervene are warranted.

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References

- Bradley H, Hall HI, Wolitski RJ, Van Handel MM, Stone AE, LaFlam M, ... Valleroy LA. Vital Signs: HIV diagnosis, care, and treatment among persons living with HIV--United States, 2011. MMWR Morb Mortal Wkly Rep. 2014; 63(47):1113–1117. [PubMed: 25426654]
- Centers for Disease Control and Prevention. Monitoring selected national HIV prevention and care objectives by using HIV surveillance data--United States and 6 dependent areas, 2014. HIV Surveillance Supplemental Report. 2016. Retrieved from <https://www.cdc.gov/hiv/pdf/library/reports/surveillance/cdc-hiv-surveillance-supplemental-report-vol-21-4.pdf>
- Centers for Disease Control and Prevention. New HIV Infections Drop 18% in 6 Years. 2017. [Press release]. Retrieved from <https://www.cdc.gov/nchhstp/newsroom/2017/croi-hiv-incidence-press-release.html>
- Halkitis PN, Kapadia F, Ompad D. Incidence of HIV Infection in Young Gay, Bisexual, and Other YMSM: The P18 Cohort Study. J Acquir Immune Defic Syndr. 2015; 69(4):466–473. DOI: 10.1097/qai.0000000000000616 [PubMed: 26115438]
- Halkitis PN, Moeller RW, Siconolfi DE, Storholm ED, Solomon TM, Bub KL. Measurement model exploring a syndemic in emerging adult gay and bisexual men. AIDS Behav. 2013; 17(2):662–673. DOI: 10.1007/s10461-012-0273-3 [PubMed: 22843250]
- White House Office of National AIDS Policy. National HIV/AIDS Strategy. Improving Outcomes: Accelerating Progress Along the HIV Care Continuum. 2013. Retrieved from https://obamawhitehouse.archives.gov/sites/default/files/onap_nhas_improving_outcomes_dec-2013.pdf
- White House Office of National AIDS Policy. National HIV/AIDS Strategy for the United States: Updated to 2020 Federal Action Plan. 2015. Retrieved from <https://files.hiv.gov/s3fs-public/nhas-2020-action-plan.pdf>

White House Office of National AIDS Policy. National HIV/AIDS Strategy for the United States: Updated to 2020. 2016 Progress Report. 2016. Retrieved from <https://www.aids.gov/federal-resources/national-hiv-aids-strategy/nhas-2016-progress-report>

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Figure 1.

HIV care continuum comparison of 2011 Centers for Disease Control and Prevention (CDC) report and P18 data.

Note. 2011 CDC (Total) $n = 1.2$ million; 2011 CDC (Ages 18–24) $n = 62,400$; P18 Data $n = 33$; ART = antiretroviral therapy.