Addressing HIV and Homelessness During COVID-19: A Community-Based Demonstration Project

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People experiencing homelessness are at increased risk for HIV, and people with HIV (PWH) experiencing homelessness are more likely to experience suboptimal HIV health outcomes than PWH with stable housing. Within Alabama, a state prioritized in the Ending the HIV Epidemic initiative, Jefferson County consistently has the highest number of new HIV diagnoses as well as a high percentage of the state’s homeless population. To address the twin epidemics of both HIV and homelessness within the high-priority setting of Jefferson County, Alabama, this 1-year community-based project, Ending the HIV Epidemic: Addressing HIV Health and Homelessness (AH3), sought to increase HIV testing and linkage to care among this population by placing a full-time case manager trained in HIV testing and case management at a homeless shelter. Results demonstrated that HIV testing was highly acceptable: 733 individuals were offered a test, and only 2.7% (n = 20) declined. Nine previously diagnosed, out of care PWH and one newly diagnosed PWH were identified through AH3 testing efforts. Of these, five (50%) were linked to care at a local HIV clinic. The remaining five PWH left the shelter before they could be linked to care. Just 10 shelter guests expressed interest in taking PrEP (just 1.4% of guests who tested negative for HIV), and only one of these linked to PrEP care. Future health promotion programs are needed to address mental health and other ancillary needs among this population, as well as programs that provide access to PrEP and other HIV prevention services.

Keywords: HIV/AIDS; health promotion; access to health care; community organization

Linkage to HIV care (LTC) and receipt of antiretroviral therapy (ART), in addition to ongoing retention in care, are necessary for people with HIV (PWH) to achieve viral suppression, the principal indicator of HIV health and ultimate goal of HIV medical treatment. However, PWH who lack stable housing are significantly less likely than stably housed PWH to achieve optimal health HIV outcomes, including lower likelihood of ART adherence, retention in care, and viral suppression (Wainwright et al., 2019).

The Southern United States, a region prioritized in the EHE (Ending the HIV Epidemic) initiative, has the highest rates of HIV incidence and HIV-related mortality in the nation. Within the State of Alabama (AL), one of the seven Southern states prioritized in the EHE...
initiative, Jefferson County consistently has the highest number of new HIV diagnoses in the state as well as a high percentage of the state’s homeless population. On any given day, 3,351 individuals experienced homelessness in AL in 2020, as reported by the Department of Housing and Urban Development (HUD)’s annual count of both sheltered and unsheltered homeless persons (U.S. Interagency Council on Homelessness, 2019), while one-fourth (n = 848; 25%) of these individuals were in the Birmingham area (U.S. Department of Housing and Urban Development, 2021b), the area which also accounted for 24% of all new state HIV infections in 2021 (Alabama Department of Public Health, 2021).

Given that people experiencing homelessness are at increased risk for HIV and PWH experiencing homelessness are more likely to experience suboptimal HIV health outcomes than PWH not experiencing homelessness, it is imperative to increase access to testing and HIV care for this vulnerable population. To address the twin epidemics of both HIV and homelessness within the high-priority setting of Jefferson County, AL, this 1-year community-based project, funded by the University of Alabama at Birmingham (UAB)’s Center for AIDS Research (CFAR) and the UAB 1917 Clinic’s 340B funds earned through the Ryan White Part C Grant, Ending the HIV Epidemic: Addressing HIV Health and Homelessness (AH3), had three primary objectives that aligned with the broader goals of the EHE initiative while explicitly focusing on persons experiencing homelessness: (a) increase access to HIV testing for adults experiencing homelessness; (b) facilitate LTC for PWH experiencing homelessness; and (c) facilitate linkage to pre-exposure prophylaxis (PrEP) for those at increased risk for HIV. This article describes the formation of the community-based partnerships and shelter-based HIV services, HIV testing and LTC rates, lessons learned, and implications for health promotion practice.

Methods

Formation of a Community Partnership

AH3 was the result of a partnership between two well-established nonprofit organizations in Jefferson County that serve low-income community members. The first community partner, which provides temporary shelter, housing, case management, and crisis intervention to those who identify as homeless, upholds a Housing First model based on the principles of harm reduction and serves approximately 5,000 people per year. People who are eligible to receive services from the shelter are defined as “literally homeless,” which, according to HUD’s definition, is an “individual or family who lacks a fixed, regular, and adequate nighttime residence” (U.S. Department of Housing and Urban Development, 2021a). Men can stay in the shelter overnight, while anyone (including men, women, and children) can access day program services, including meals, showers, and clothing services.

The other community partner, an AIDS service organization (ASO), serves more than 1,000 PWH per year and provides HIV testing, LTC, and multiple ancillary services for PWH (e.g., case management, transportation, food boxes, and counseling). The shelter partner is a vital touchpoint for people experiencing homelessness locally and, by leveraging the ASO partner’s experience in serving PWH, can identify and serve homeless persons not previously diagnosed with HIV or those with previous diagnoses who are not in care. An additional organization involved in this project, a university-affiliated HIV clinic with more than 4,000 active PWH patients, provides in-house LTC support and HIV primary-care services.

The project was reviewed by UAB’s Institutional Review Board and was determined to be program evaluation and, therefore, not human subjects research.

Procedures

Building Rapport. Since the shelter had not previously provided HIV-related services to persons experiencing homelessness, the project leveraged the ASO partner’s expertise in community-based HIV testing and outreach by placing a full-time case manager at the shelter with this requisite extensive experience. It was important to build rapport slowly and intentionally with shelter clients (“guests”) so that they would feel more comfortable once the project began. Therefore, the ASO case manager (hereafter referred to as the “AH3 Health Coordinator”) began working at the shelter about 2 months before the program officially started, allowing the guests to get accustomed to her presence and slowly warm-up to the idea of a shelter-based HIV testing initiative. This strategy proved fruitful, as the AH3 Health Coordinator reported anecdotally that, throughout the project period, many of the guests would come sit in her office to simply talk. All adults accessing shelter services, whether this included overnight shelter or daytime services, were eligible to participate in AH3.

HIV Testing Procedure. All new guests met with the AH3 Health Coordinator in a private office upon entry into the shelter, who administered a COVID-19 test and provided a brief discussion on HIV 101, PrEP, and condom use. If the guest agreed to be tested for HIV, they were given a rapid test and testing form (with signed
The remaining five PWH left the shelter before they had previously been diagnosed with HIV but had been out of care, the AH3 Health Coordinator immediately initiated the LTC process using Anti-Retroviral Treatment and Access to Services (ARTAS), a Centers for Disease Control and Prevention (CDC)-recognized, evidence-based intervention that draws on strength-based case management to link PWH to care (Gardner et al., 2005). The AH3 Health Coordinator worked with the guest to make an appointment with an HIV primary-care provider at the university-affiliated HIV clinic within 30 days of diagnosis, the CDC-recognized metric for successful LTC (within 30 days of initial contact, for previously diagnosed PWH). The AH3 Health Coordinator continues to provide intensive case management up to the day of the appointment; is available to provide transportation to the appointment, if needed; and checks in periodically with the guest thereafter.

RESULTS

During the project period, AH3 facilitated HIV testing, LTC, and linkage to ancillary services for persons experiencing homelessness in Jefferson County. Between 26 January 2021 and 22 December 2021, 100% of shelter guests were offered an HIV test, such that \( n = 713 \) unique individuals received an HIV test. Only 2.7% (\( n = 20 \)) declined an HIV test, the most common reason for which was that the guest already knew their status (\( n = 14; \) 70% of people who refused HIV tests). A total of nine previously diagnosed, out-of-care PWH and one newly diagnosed PWH were identified through project HIV testing efforts, for a positivity rate of 1.4% among newly and previously diagnosed, out-of-care PWH. An additional four PWH were identified through testing, all of whom were already aware of their diagnosis and care. Based on these data, which illustrate a 2% HIV positivity rate among all persons who received an HIV test through program efforts, AH3 has the potential to identify up to 16 newly or previously diagnosed PWH out of the 848 individuals experiencing homelessness on any given night in the Birmingham area.

Of the nine previously diagnosed but out of care and one newly diagnosed PWH identified in AH3, four attended their primary-care appointment at the university-affiliated HIV clinic partner within 30 days, and one PWH attended their primary-care appointment after 42 days of meeting with the AH3 Health Coordinator. The remaining five PWH left the shelter before they could be linked to HIV primary care. Figure 1 illustrates guests’ passage through the HIV care continuum during the project period.

Finally, 100% of shelter guests who tested negative for HIV and who met criteria for PrEP were counseled on PrEP services and offered a referral to the local health department, but only 10 expressed interest in taking PrEP (just 1.4% of guests who tested negative for HIV), and only one actually linked to PrEP care.

IMPLICATIONS FOR PRACTICE

Shelter-based HIV testing and LTC has the potential to positively impact regional EHE efforts to diagnose and re-link PWH to care, particularly for PWH with limited resources, such as those experiencing homelessness. Almost all guests approached for testing in AH3 agreed to take an HIV test, with under a 3% opt-out rate. While LTC was more challenging and only 50% of PWH identified in the project were linked to HIV primary care, the lessons learned in our first year of this project will inform future efforts. For example, mental health and substance use disorders are common among PWH experiencing homelessness (Marcus et al., 2018), and we found that this was the case for PWH in AH3, as well. A recent systematic review found that the odds of maintaining retention in HIV care are significantly less likely for PWH with mental health challenges, underscoring the need for mental health care and services that take all health needs into account (Rooks-Peck et al., 2018).

We also found that knowledge of and interest in PrEP was extremely low among persons experiencing homelessness. Just over 1% of the HIV-negative individuals approached for HIV testing were interested in PrEP, and, among those referred, only one attended their PrEP appointment at a local health department. This finding is supported by the literature, which shows that PrEP knowledge among persons experiencing homelessness is extremely low, especially in the U.S. South. To our knowledge, there are just two published studies on providing PrEP services to persons experiencing homelessness (Biello et al., 2021; Gregg et al., 2020). Thus, future iterations of AH3 will also focus on expanding PrEP care to persons experiencing homelessness.

Finally, we learned that the provision of COVID-19 testing alongside HIV testing helped minimize potential stigma around HIV testing. Since AH3 launched during the COVID-19 pandemic, all incoming shelter guests had to obtain a COVID-19 test as standard protocol. This operating procedure proved fruitful in several different ways. First, since all incoming guests had to meet with the AH3 Health Coordinator at least once to get their COVID-19 test, all guests also had the opportunity...
to be asked about whether they would like to receive an HIV test. Second, the fact that all incoming guests met with the AH3 Health Coordinator whether or not they received HIV testing served to protect privacy and reduce potential stigma around HIV testing.

**IMPLICATIONS FOR PRACTICE AND RESEARCH**

Shelter-based HIV testing and LTC programs, such as AH3, have the potential to increase successful passage through the HIV care continuum for people experiencing homelessness. In particular, the high rate of HIV testing acceptability (over 97%) demonstrates the success of this shelter-based HIV testing and LTC model. Providing testing services other than HIV (e.g., COVID-19) is an acceptable and feasible way to destigmatize HIV testing for persons in high-proximity, low-privacy settings such as homeless shelters. Future health promotion programs are needed that help address mental health and other ancillary needs among this population, as well as those that provide access to PrEP and other HIV prevention services.
services, to ensure that PWH are successfully linked to care and that people experiencing homelessness who would benefit from PrEP are able to access these services. In addition, the paucity of extant literature on HIV and homelessness underscores the need for additional research that explores the intersection between homelessness and HIV-related health outcomes.

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