

Integration of Screening for Syphilis, Hepatitis C, and Other Sexually Transmitted Infections with HIV Testing in a Community-Based HIV Prevention Program in Miami, Florida

Tanesha Moss, MPH,¹ Charles W. Martin, BS,² Jeffrey D. Klausner, MD, MPH,³ and Brandon J. Brown, MPH, PhD⁴

Abstract

The South Beach AIDS Project (SoBAP) in Miami, Florida, is a nonprofit community-based organization that recently began offering syphilis, chlamydia and gonorrhea, and hepatitis C screening along with confidential HIV screening to its clients. We retrospectively reviewed data from SoBAP collected from January 2011 to June 2012 to describe the prevalence of sexually transmitted infections (STIs) among persons seeking testing services. Our findings are in line with national data demonstrating that men who have sex with men (MSM) of color are disproportionately affected by STIs, especially Latino MSM. Integrating HIV, STI, and hepatitis C screening in community-based testing programs is feasible and an important means to identify infected persons.

Key words: community-based organization, HIV, integrated testing, men who have sex with men.

Introduction

RATES OF HIV INFECTION and other sexually transmitted infections (STIs) are increasing in the United States, with the burden of infection disproportionately impacting racial and ethnic minority men who have sex with men (MSM) and transgender women.^{1,2} Recent data show that approximately 1.1 million people in the United States are infected with HIV, with 1 out of 5 unaware of his or her status.¹ African Americans represent approximately 14% of the U.S. population but account for 46% of people living with HIV infection, and Latinos represent 16% of the U.S. population and account for 20% of new HIV cases.¹

MSM represented 73% of new syphilis cases in Florida in 2009, and approximately 60% of these men were coinfecting with HIV.³ Studies suggest that education, partner selection, income, lack of openness about sexual orientation, and unprotected sex increase risk among MSM for acquiring STIs.⁴⁻⁶ Provider practices, low income, and stigma are common barriers for both MSM and persons of color to receive health care.^{7,8} As a result, clinics that cater to particular minority communities are a potentially important way to

remove barriers for those individuals to learn about their STI status. Persons receiving services at community centers may feel safer compared with attending a public hospital or clinic.^{9,10} At a small community center, marginalized or underrepresented groups face less stigma among people who share similar personal experiences and have racial, ethnic, social, and cultural commonalities.⁷ Also, services are often performed at community-based sites in evenings and weekends, making them more accessible, and sometimes these are paired with activities that help people feel part of a community.^{9,10}

STI prevalence has been increasing in Miami, Florida.³ There are several potential reasons for this. South Florida is an international tourist destination, with a continued population growth and influx of foreign-born Caribbean and South Americans, who may have less access to prevention and screening services.¹¹ STI prevalence may be increasing specifically in Miami because of improvements in the economy and resources, access to screening, and increased testing that identifies positive cases.³ In particular, the distribution of HIV infection by race or ethnicity in Miami-Dade County is highest among minorities: 45% black, 40% Latino, and

¹David Gelfen School of Medicine, Drew/University of California–Los Angeles, Los Angeles, California.

²South Beach AIDS Program, Miami Beach, Florida.

³Program in Global Health, Division of Infectious Diseases, David Gelfen School of Medicine, University of California–Los Angeles, Los Angeles, California.

⁴Program in Public Health, Department of Population Health & Disease Prevention, University of California–Irvine, Irvine, California.

13% Caucasian.¹² Males have a higher burden of HIV infection in Miami-Dade county, which is likely because of the increased rates of infection among MSM.^{1,12}

Purpose

Studies have examined the effectiveness of HIV testing programs and found community-based testing to be an efficacious, culturally competent, and cost-effective approach to provide HIV screening to populations most at risk.^{9,10,13} Still, only a handful of community-based organizations (CBOs) are actively involved in STI testing. Fewer still if any provide integrated testing including chlamydia and gonorrhea screening and hepatitis C screening, an issue of high relevance to the Center for Disease Control and Prevention.¹⁴ A larger proportion of minority, MSM, and transgender individuals who may be unable or reluctant to access routine screening in standard health-care settings can be screened in CBOs.^{9,10}

We sought to describe the prevalence of STIs within various demographic groups of individuals served by the South Beach AIDS Project (SoBAP), a CBO in Miami, Florida. SoBAP is the only HIV prevention agency in Florida that caters to gay ethnic and racial minority men, and has been part of the community for 20 years. Anyone who seeks our services provided at SoBAP is welcomed. The wellness center is located in a CVS Pharmacy that provides anonymity and access to a sector of the community that health departments and health clinics cannot reach. SoBAP services are advertised in gay newspapers and on bus-stop signs, as well as word of mouth.

Methods

Programmatic data were routinely collected from clients who utilized syphilis, hepatitis C, gonorrhea and chlamydia, and rapid HIV screening services at SoBAP. Demographics included age, sex/gender, sexual behavior, and race/ethnicity. Any positive rapid HIV test was verified with fourth-generation testing, and results were given in 2–3 weeks. Testing was provided to clients at no cost, and complete screening services were voluntary and opt-in. Clients who wanted to utilize SoBAP resources were encouraged to make an appointment, but walk-in services were also provided. Data were entered electronically and analyzed using SPSS 21 software (SPSS Inc., Cary, NC). We examined the descriptive statistics of all variables. Chi-square tests were then used to assess differences in HIV positivity by sexual risk and racial/ethnic groups. As public health practice, this evaluation of programmatic data is not considered research.

Results

A total of 2,988 tests were administered from January 2011 through June 2012, including rapid HIV (2,260), syphilis (384), chlamydia and gonorrhea (18), and hepatitis C (326) tests. The majority of clients received HIV screening, and demographic characteristics for individuals tested for HIV and syphilis are shown in Table 1. The majority of clients were male (77%) and nearly half were MSM (48.7%), with a mean age of 35 years and predominantly Latino (56.7%). Positivity for HIV infection and syphilis was 3.3% and 3.4%, respectively. Both MSM (2.8%) and men who have sex with men and women (4.9%) had a higher

TABLE 1. CHARACTERISTICS OF INDIVIDUALS RECEIVING HIV TESTING AND SYPHILIS SCREENING AT SOUTH BEACH AIDS PROJECT, MIAMI, FLORIDA, JANUARY 2011–JUNE 2012

	HIV testing (N = 2,260), n (%)	Syphilis testing (N = 384), n (%)
Mean age ± SD, years	35.0 ± 10.8	34.5 ± 10.1
Sex/gender		
Male	1,742 (77)	350 (82.2)
Female	393 (17.4)	73 (17.1)
Transgender women	126 (5.6)	3 (0.7)
Sexual behavior		
Men who have sex with men	1,084 (48.7)	206 (53.1)
Men who have sex with women	533 (23.9)	88 (22.7)
MSMW and transgender women	207 (9.3)	27 (7.0)
Women who have sex with men	361 (16.2)	65 (16.8)
Women who have sex with women and men	42 (1.9)	2 (0.5)
Race/ethnicity		
White	744 (33.1)	106 (27.4)
Latino	1,274 (56.7)	235 (60.7)
Black	180 (8.0)	40 (10.3)
Other	50 (2.2)	6 (1.6)
Result of test		
Negative	2,186 (96.7)	371 (96.6)
Positive	74 (3.3)	13 (3.4)

MSMW, men who have sex with men and women; SD, standard deviation.

HIV test positivity than other sexual risk behavior groups. Individuals who were either Latino (2.5%, 31/1,274, $p=0.07$) or black (1.7%, 3/180, $p=0.71$) were more likely than any other racial/ethnic group to have a positive HIV test (white 1.2%, 9/744). There were 5 (4%) HIV infections among 126 transgender women tested. All individuals who tested positive for syphilis were male, with Latinos having double the positivity of whites (4.3% vs. 2.2%). There were 4 cases (1.2%) of hepatitis C infection among 326 individuals tested. In addition, among 18 individuals screened for gonorrhea and chlamydia, 1 participant tested positive for *Neisseria gonorrhoeae* in urine, while no participant tested positive by rectal or oropharyngeal sampling.

Conclusions

This report is the first description of an integrated community-based infectious disease screening program in Miami, Florida. A comprehensive STI screening program that includes HIV, syphilis, hepatitis C, and chlamydia and gonorrhea screening at all exposed anatomic sites is important to identify prevalent STIs. Several hundred clients at SoBAP accepted voluntary opt-in STI and hepatitis C screening along with rapid HIV testing, illustrating the utility of integrated testing at a CBO. Additional efforts to facilitate education on and uptake of STI testing apart from HIV may increase its utility. Strategies to increase uptake of combination testing,

including encouragement by staff and availability of combination testing platforms, should be pursued.

The distribution of positive tests among racial and sexual minorities parallels national data. The Miami-Dade County department of public health reported an increase in syphilis cases by 53% from 204 to 313 cases in 2009, an important increase but still a modest prevalence matching the results found at SoBAP.¹² Nationwide, there were 13,970 cases of syphilis in 2011, with MSM accounting for 72% of cases.¹⁵ As data from previous years were not routinely entered into an electronic database, past syphilis positivity among SoBAP clients is unknown. Though hepatitis C is increased among MSM and certain minority groups, the positivity in our population was similar to national trends.¹⁶ A recent study has indicated that the overall prevalence of hepatitis C is in the decline, but a total of 16,020 new cases of hepatitis C were reported in 2010 in the United States, with the majority of individuals infected being Native Americans/Alaskans or whites.¹⁷⁻¹⁹

Our report presents data on a novel approach to administering HIV and other infectious disease screening (syphilis, hepatitis C, and chlamydia and gonorrhea) to individuals who might not otherwise be tested through traditional health services. Additional community-based testing activities and programs are needed to address the ongoing STI epidemic among MSM in Florida. The recruitment of transgender women and black MSM by SoBAP should be increased to identify further those with undiagnosed infection. Future analysis is needed to understand the trends in syphilis infection in the population of clients receiving testing through the SoBAP program. Hepatitis C screening should continue with strong linkage to care and treatment services. Ongoing program monitoring and evaluation are instrumental in the performance of any testing program. Strengthening the capacity of CBOs to conduct their own monitoring and evaluation should be a public health priority, so prevention activities can become tailored to the needs of the community and be more effective.

Acknowledgments

The authors would like to acknowledge Ms. Sandra M. Perez, CAO of Global Health Research, Education and Translation, for administrative support in manuscript preparation. Thanks to Manh T. Nguyen at SoBAP for assistance.

Author Disclosure Statement

No competing financial interests exist.

References

- Centers for Disease Control and Prevention: HIV in the United States: At a glance. July 2012. Available at www.cdc.gov/hiv/resources/factsheets/PDF/HIV_at_a_glance.pdf (accessed June 20, 2013).
- Centers for Disease Control and Prevention: Sexually Transmitted Disease Surveillance 2010. November 2011. Available at www.cdc.gov/std/stats10/surv2010.pdf (accessed June 20, 2013).
- Florida Department of Health: Critical advisory letter, April 2010: STDs on the rise in Miami-Dade County. 2010. Available at www.dadehealth.org/downloads/Critical%20Advisory%20Letter-STD%200410.pdf (accessed June 20, 2013).
- Marcus U, Bremer V, Hamouda O, Kramer MH, Freiwald M, Jessen H, Rausch M, Reinhardt B, Rothaar A, Schmidt

- W, Zimmer Y: MSM-STD-Sentinel Network: Understanding recent increases in the incidence of sexually transmitted infections in men having sex with men: Changes in risk behavior from risk avoidance to risk reduction. *Sex Transm Dis* 2006;33:11-17.
- Heckman TG, Kelly JA, Bogart LM, Kalichman SC, Rompa DJ: HIV risk differences between African-American and white men who have sex with men. *J Natl Med Assoc* 1999;91:92-100.
- Yaphe S, Bozinoff N, Kyle R, Shivkumar S, Pai NP, Klein M: Incidence of acute hepatitis C virus infection among men who have sex with men with and without HIV infection: A systematic review. *Sex Transm Infect* 2012;88:558-564.
- Klausner JD, Bernstein KT, Pandori M, Hall C, Gibson S, Ryan T, *et al.*: Clinic-based testing for rectal and pharyngeal *Neisseria gonorrhoeae* and *Chlamydia trachomatis* infections by community-based organizations—five cities, United States, 2007. *MMWR Morb Mortal Wkly Rep* 2009;58:716-719.
- Mimiaga MH, Reisner SL, Bland S, Skeer M, Cranston K, Isenberg D, Vega BA, Mayer KH: Health system and personal barriers resulting in decreased utilization of HIV and STD testing services among at-risk black men who have sex with men in Massachusetts. *AIDS Patient Care STDS* 2009;23:825-835.
- Schulden JD, Song B, Barros A, Mares-DelGrasso A, Martin CW, Ramirez R, Smith LC, Wheeler DP, Oster AM, Sullivan PS, Heffelfinger JD: Rapid HIV testing in transgender communities by community-based organizations in three cities. *Public Health Rep* 2008;123 Suppl 3:101-114.
- Bowles KE, Clark HA, Tai E, Sullivan PS, Song B, Tsang J, Dietz CA, Mir J, Mares-DelGrasso A, Calhoun C, Aguirre D, Emerson C, Heffelfinger JD: Implementing rapid HIV testing in outreach and community settings: Results from an advancing HIV prevention demonstration project conducted in seven U.S. cities. *Public Health Rep* 2008;123 Suppl 3:78-85.
- Saint-Jean G, Crandall LA: Utilization of preventive care by Haitian immigrants in Miami, Florida. *J Immigr Health* 2005;7:283-292.
- Miami Dade County Health Department: HIV/AIDS in Miami-Dade County—fact sheet. 2012. Available at www.dadehealth.org/downloads/FS-2011%20MIAMI-DADE-New.pdf (accessed June 20, 2013).
- Shrestha RK, Clark HA, Sansom SL, Song B, Buckendahl H, Calhoun CB, Hutchinson AB, Heffelfinger JD: Cost-effectiveness of finding new HIV diagnoses using rapid HIV testing in community-based organizations. *Public Health Rep* 2008;123 Suppl 3:94-100.
- Belani H, Chorba T, Fletcher F, Hennessey K, Kroeger K, *et al.*: Integrated prevention services for HIV infection, viral hepatitis, sexually transmitted diseases, and tuberculosis for persons who use drugs illicitly: Summary guidance from CDC and the U.S. Department of Health and Human Services. *MMWR Morb Mortal Wkly Rep Recomm Rep* 2012;61 (rr05):1-40.
- Centers for Disease Control and Prevention: *Sexually Transmitted Disease Surveillance 2011*. Atlanta, GA: U.S. Department of Health and Human Services, 2012.
- Ly KN, Xing J, Klevens RM, Jiles RB, Ward JW, Holmberg SD: The increasing burden of mortality from viral hepatitis in the United States between 1999 and 2007. *Ann Intern Med* 2012;156:271-278.
- Razavi H, El Khoury A, Elbasha E, Estes C, Pasini K, Poy-nard T, Kumar R: Chronic hepatitis C virus (HCV) disease

- burden and cost in the United States. *Hepatology* 2013; 57:2164–2170.
18. Centers for Disease Control and Prevention: Viral Hepatitis Surveillance—United States, 2009. 2011. Available at www.cdc.gov/hepatitis/Statistics/2009Surveillance/PDFs/2009HepSurveillanceRpt.pdf (accessed June 20, 2013).
 19. Armstrong GL, Wasley A, Simard EP, McQuillan GM, Kuhnert WL, Alter MJ: The prevalence of hepatitis C virus infection in the United States, 1999 through 2002. *Ann Intern Med* 2006;144:705–714.

Address correspondence to:
Brandon J. Brown, MPH, PhD
Program in Public Health
Department of Population Health & Disease Prevention
University of California–Irvine
653 E. Peltason Drive, 2024 AIRB
Irvine, CA 92697-3957

E-mail: brandon.brown@uci.edu