CALIFORNIA HIV/AIDS POLICY RESEARCH CENTERS

TOBACCO-RELATED DISEASE RESEARCH PROGRAM

People Living With HIV who Smoke Face Barriers to Accessing Smoking Cessation Services in Southern California HIV Safety Nets

Sabrina L. Smiley, PhD, MPH, MCHES and Nichelle Brown, MPH

Background and Significance

Combustible tobacco smoking has many adverse health consequences. **Among people living with HIV/AIDS** (**PLWHA**), **the prevalence of cigarette smoking, the leading preventable cause of death in the United States**[1], **is estimated to be at least two times higher than in the general population (34%-47% vs. 12.5%, respectively)**.[2-4] PLWHA who smoke have high nicotine dependency, consuming up to 28 cigarettes per day.[5-9] Research has shown that in settings where antiretroviral therapy (ART) is available, smoking decreases life expectancy among PLWHA more than HIV-infection.[10] Additionally, cigarette smoking increases the risk of developing cancers, cardiovascular diseases, and chronic obstructive pulmonary disease, particularly in PLWHA.[11-12] Therefore, smoking cessation should be considered as a high priority by HIV care and treatment providers.

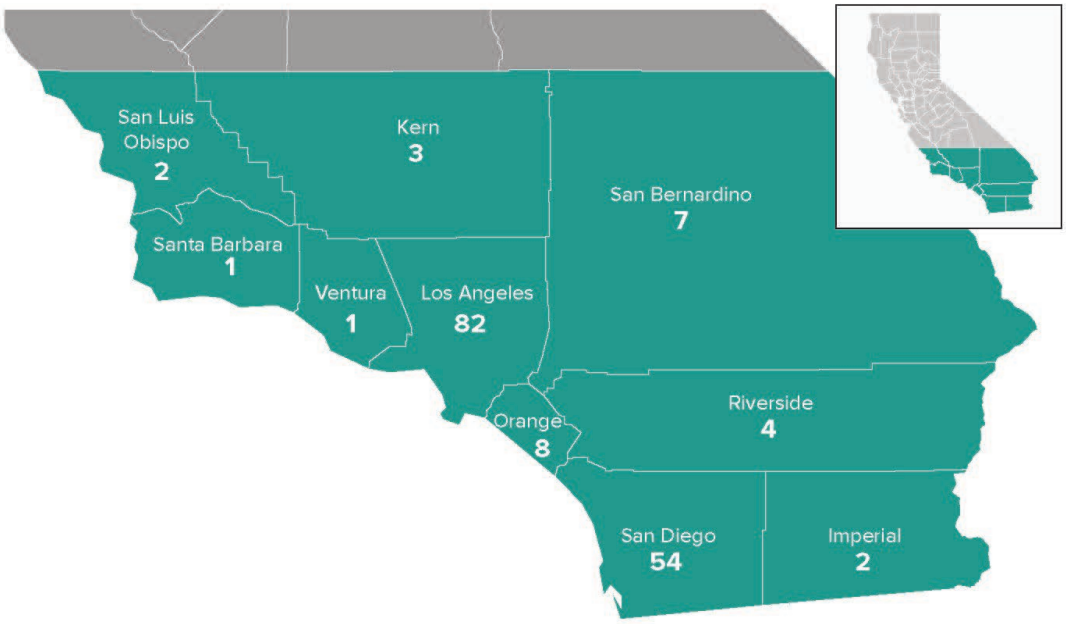
HIV care and treatment safety nets are key settings for delivery of smoking cessation services to PLWH. As the largest federal program focused on HIV, the Health Resources and Services Administration's (HRSA) Ryan White HIV/AIDS Program (RWHAP) was developed as a public safety-net for people who could not afford to access HIV care and treatment.[13] RWHAP serves predominately low-income PLWH.[13] HRSA data show that 60% of RWHAP clients have a family income less than 100% of the federal poverty level.[14] Additionally, nearly 50% of clients are Black/African American, and more than 20% of clients are Hispanic—racial/ethnic populations disproportionately affected by cigarette smoking.[14-16] In California, just over 40% of RWHAP clients in California identify as Hispanic, and up to 30% are aged 50 years and older. As the population of PLWH is ageing[17-20], it is increasingly important to understand access to smoking cessation in HIV care and treatment.

In response to this significant public health issue, the California HIV/AIDS Policy Research Center initiated a project to characterize the real-world availability of smoking cessation in RWHAP-funded providers in California. This first policy brief documents methods and results of analyses to characterize current access to smoking cessation services in Southern California and to identify potential strategies for increasing access.

Methods

Employing an audit or "secret shopper" study design[21], we addressed the gap in available data on smoking cessation services in RWHAP-funded providers in Southern California. In October 2022, we compiled, from HRSA's Ryan White HIV/AIDS Program Medical Provider Locator (https://findhivcare.hrsa.gov/)[22], a list of all providers in Southern California and their contact information, including phone number and website. We updated this list in December 2022 to include providers that had been added to the Locator since our initial compilation. **In total**, **we identified 161 providers** (**Figure 1**.) distributed across 10 urban and suburban counties (i.e., Imperial, Kern, Los Angeles, Orange, Santa Barbara, San Bernardino, San Diego, San Luis Obispo, Riverside, Ventura).

Figure 1.



Between October 26, 2022 and February 17, 2023, a research assistant attempted to contact all 161 providers by telephone during weekday working hours. If the research assistant was unable to reach a provider, they repeated the protocol a second and third time to secure information on each provider. The final disposition for each provider was coded as (a.) answered – direct interview and (b.) no answer. When the research assistant successfully contacted a provider, they posed as a potential client seeking to quit smoking, specifically asking about the availability of smoking cessation services. We coded the availability of smoking cessation services as: "Yes," "No," and "No, but referral offered" and recorded additional information about which services

were offered. The San Diego State University Institutional Review Board did not deem this study to be human subjects research.

Results

We were able to obtain partial or complete answers from 78 (48.4%) of the 161 RWHAP-funded clinics and CBOs. Of the 78 providers successfully contacted, 23 offered smoking cessation services directly, 5 said they provide referrals for smoking cessation services, and 45 said they did not offer smoking cessation services or referrals. Substance use counselors, clinicians, and mental health therapists were regularly engaged in delivery of smoking cessation services and offered most services (43.2%) in Spanish. Of the 17 providing smoking cessation medications, 12 said the potential client would receive a prescription, not direct medication. Most providers' websites did not list any smoking cessation information. Furthermore, call process barriers included difficulty navigating the call system.

Policy Recommendations

This study employed a secret shopper method to characterize in real-time, lived experiences of PLWH attempting to access smoking cessation services in Southern California HIV safety nets. Findings suggest significant barriers in access, potential gaps in uptake, and directions for future public health efforts:

- Enact regulations ensuring the adoption of smoking cessation services, including access to smoking cessation medications on-site, and not just a prescription, which may support treatment uptake

- Enact regulations ensuring training programs for RWHAP-funded providers delivering smoking cessation services

- Enact regulations ensuring funding for effective and tailored strategies to reach combustible tobacco users living with HIV/AIDS, including website development. Staff/receptionist training may also be a cost-effective investment

- Develop resources to collect information on combustible tobacco use among PLWHA in conjunction with assessing the capacity of RWHAP-funded providers to deliver smoking cessation services – will help to track access to smoking cessation services and facilitate the implementation, dissemination, and evaluation of smoking cessation services and commercial tobacco policies

Limitations

This study has limitations. The first-contact respondent may not have known which smoking cessation services were available at their RWHAP-funded provider location. Yet, as we were attempting to simulate the real-world experience of PLWH who smoke cigarettes, this limitation does not impact the accuracy of our characterization of smoking cessation availability. Additionally, we note that we did not obtain responses from 51.6% of providers; however, three call attempts were made to contact each provider during working hours, and the inability to contact a provider likely mirrors the experience of PLWHA who smoke cigarettes.

Conclusions

This study offers important insights into the lived experience of PLWHA who attempt to access smoking cessation services in HIV care and treatment safety nets in Southern California. We found that more than 50% of the RWHAP-funded providers contacted do not offer smoking cessation services, and less than 30% confirmed the availability of services. Our findings indicate that PLWHA face barriers to smoking cessation access in this safety net sample of HIV care and treatment providers in Southern California. Failure to address the barriers that hinder PLWHA from accessing smoking cessation services will result in more preventable combustible tobacco-related disease and death.

About the Authors

Sabrina L. Smiley, PhD, MPH, MCHES (contact: ssmiley@sdsu.edu), San Diego State University, School of Public Health, Division of Health Promotion and Behavioral Science.

Nichelle Brown, MPH (contact: nbrown9583@sdsu.edu), San Diego State University, School of Public Health, Division of Health Promotion and Behavioral Science.

Acknowledgments

This study was conducted by California HIV/AIDS Research Program and California Tobacco-Related Disease Research Program (H21PC3601).

References

1. U.S. Department of Health and Human Services. The Health Consequences of Smoking-50 Years of Progress: A Report of the Surgeon General. Atlanta; 2014. Available at: https://www.ncbi.nlm.nih.gov/books/NBK179276/pdf/Bookshelf_NBK179276.pdf. Accessed February 14, 2023.
2. National Cancer Institute. Division of Cancer Control & Population Sciences. (2022, September 1). Tobacco and HIV. https://cancercontrol.cancer.gov/brp/tcrb/tobacco-hiv.
3. Burkhalter JE, Springer CM, Chhabra R, Ostroff JS, Rapkin BD. Tobacco use and readiness to quit smoking in low-income HIV-infected persons. Nicotine & Tobacco Research. 2005;7(4):511-522.
4. Tesoriero JM, Gieryic SM, Carrascal A, Lavigne HE. Smoking among HIV positive New Yorkers: prevalence, frequency, and opportunities for cessation. *AIDS and Behavior*. 2010;14(4):824-835.
5. O'Cleirigh C, Valentine SE, Pinkston M, Herman D, Bedoya CA, Gordon JR, Safren SA. The unique challenges facing HIV-positive patients who smoke cigarettes: HIV viremia, ART adherence, engagement in HIV care, and concurrent substance use. *AIDS and Behavior*. 2015;19:178–185.
6. Batista J, Militao de Albuquerque Mde F, Ximenes RA, Miranda-Filho Dde B, Lacerda de Melo HR, Maruza M, Moura LV, Pinto da Costa Ferraz EJ, Rodrigues LC. Prevalence and socioeconomic factors associated with smoking in people living with HIV by sex, in Recife, Brazil. *Revista Brasileira de Epidemiologia*. 2013;16:432–443.
7. Park LS, Hernandez-Ramirez RU, Silverberg MJ, Crothers K, Dubrow R. Prevalence of non-HIV cancer risk factors in persons living with HIV/AIDS: a meta-analysis. AIDS. 2016;30:273–291.
8. Weinberger AH, Smith PH, Funk AP, Rabin S, Shuter J. Sex Differences in Tobacco Use Among Persons Living With HIV/AIDS: A Systematic Review and Meta-Analysis. *Journal of Acquired Immune Deficiency Syndrome*. 2017;74:439–453.
9. Moscou-Jackson G, Commodore-Mensah Y, Farley J, DiGiacomo M. Smoking-cessation interventions in people living with HIV infection: a systematic review. *Journal of the Association of Nurses in AIDS Care*. 2014;25:32–45.
10. Helleberg M, Afzal S, Kronborg G, Larsen CS, Pedersen G, Pedersen C, Gerstoft J, Nordestgaard BG, Obel N. Mortality attributable to smoking among HIV-1-infected individuals: a nationwide, population-based cohort study. *Clinical Infectious Diseases*. 2013;56:727–734.
11. Calvo M, Laguno M, Martinez M, Martinez E. Effects of tobacco smoking on HIV-infected individuals. *AIDS Reviews*. 2015;17:47–55.
12. Shirley DK, Kaner RJ, Glesby MJ. Effects of smoking on non-AIDS-related morbidity in HIV-infected patients. *Clinical Infectious Diseases*. 2013;57:275–282.
13. Health Resources and Services Administration. (n.d.). Ryan White HIV/AIDS Program. https://ryanwhite.hrsa.gov/about/parts-and-initiatives.
14. Health Resources and Services Administration. (2020). Overview of Clients: HRSA's Ryan White HIV/AIDS Program, 2020 [Factsheet]. https://ryanwhite.hrsa.gov/sites/default/files/ryanwhite/resources/population-factsheet-overview.pdf.
15. Centers for Disease Control and Prevention, Office on Smoking and Health, National Center for Chronic Disease Prevention and Health Promotion. June 27, 2022. African American People and

Commercial Tobacco: Health Disparities and Ways to Advance Health Equity. https://www.cdc.gov/tobacco/health-equity/african-american/index.html.

16. Centers for Disease Control and Prevention, Office on Smoking and Health, National Center for Chronic Disease Prevention and Health Promotion. June 27, 2022. Hispanic and Latino People and Commercial Tobacco Use: Health Disparities and Ways to Advance Health Equity. https://www.cdc.gov/tobacco/health-equity/hispanic-latino/index.htm#print.
17. Wing EJ. The aging population with HIV infection. *Transactions of the American Clinical and Climatological Association*. 2017;128:131-144.
18. Panel on Antiretroviral Guidelines for Adults and Adolescents. Guidelines for the use of antiretroviral agents in adults and adolescents with HIV. Department of Health and Human Services. Updated January 20, 2022. Accessed February 14, 2022. https://clinicalinfo.hiv.gov/sites/default/files/guidelines/documents/adult-adolescent-arv/guidelines-adult-adolescent-arv.pdf.
19. Nabatanzi R, Cose S, Joloba M, Rowland Jones S, Nakanjako D. Effects of HIV infection and ART on phenotype and function of circulating monocytes, natural killer, and innate lymphoid cells. *AIDS Research and Therapy*. 2018;15(7):1-8.
20. Guaraldi G, Orlando G, Zona S, et al. Premature age-related comorbidities among HIV-infected persons compared with the general population. *Clinical Infectious Diseases*. 2011;53(11):1120-1126.
21. Rankin KA, Mosier-Mills A, Hsiang W, Wiznia DH. Secret shopper studies: an unorthodox design that measures inequities in healthcare access. *Archives of Public Health*. 2022;80(226).
22. HRSA Data Warehouse. (2022). Find a Ryan White HIV/AIDS Program Medical Provider. https://findhivcare.hrsa.gov/.