RESEARCH HIGHLIGHT

Reducing Cigarette Smoking Among Unaccompanied Homeless Youth

Efforts to prevent and reduce smoking among adolescents and young adults have neglected a particularly at-risk population: homeless youth. As many as 70 percent of unaccompanied homeless youth smoke cigarettes, a rate that is several times higher than the national average for adolescents and young adults. The well-established health risks posed by smoking may be heightened among homeless youth to the extent that their health is already compromised by harsh living environments, poor nutrition, substance abuse, and limited access to health care and prevention services. Yet almost no information is available on the smoking behaviors of those who smoke, whether they are currently receiving services for smoking cessation, and how to best help them quit. To address this knowledge gap, a RAND team examined smoking among homeless youth in Los Angeles County. The goal of this research was to develop feasible recommendations for service providers who want to implement smoking cessation programs for homeless youth.

Key findings:

- **Among homeless youth smokers surveyed in Los Angeles County, most had tried to quit in the past and were currently interested in receiving assistance to help them quit.**
- **Providers in the area who currently offer services to homeless youth are interested in providing smoking cessation assistance but face barriers to doing so, including lack of resources and trained staff.**
- **Smoking cessation programs that required fewer resources were perceived by providers as more feasible to offer, but there were concerns that the lowest-cost, lowest-intensity option would be insufficient.**
- **Homeless youth are often surrounded by a culture of smoking, and thus changing smoking norms at service sites could contribute to program effectiveness.**

Most Homeless Youth Smoke Heavily and Engage in High-Risk Smoking Practices

The research team surveyed 292 homeless youth smokers between June and October 2013, randomly sampling youth from street sites in Hollywood and Venice Beach/Santa Monica.[1, 2] Youth were eligible for the survey if they were ages 13–25, had smoked in the past month, and had smoked at least 100 cigarettes in their lifetime. The survey indicated that in the past 30 days:

- 95 percent of homeless youth smokers had engaged in daily smoking.
- On average, these youth smoked 15 cigarettes per day (three-fourths of a pack).
- Nearly all youth had engaged in high-risk smoking practices that can increase their exposure to toxins and/or susceptibility to infectious diseases, such as sharing cigarettes and smoking discarded cigarettes ("sniping").

Most Homeless Youth Who Smoke Are Interested in Quitting, But They Need Assistance

The survey also asked youth about their current interest in quitting smoking, whether they had tried to quit in the past, and what methods they had used to help them quit. Results indicated the following:

- 66 percent had quit for at least 24 hours in the past year before relapsing, with most prior quit attempts being unassisted ("on their own").
- 59 percent were interested in accessing smoking cessation services (e.g., nicotine replacement products, counseling).
- Being asked by a service provider about smoking was associated with significantly higher motivation to quit and interest in smoking cessation services.

Service Providers in Los Angeles County Are Interested in Helping Homeless Youth Quit Smoking, But Few Programs Are Currently Offered

In September and October of 2012, the team conducted telephone interviews with service providers representing 23 shelters and drop-in centers for homeless youth in Los Angeles County.[3] These interviews asked about smoking cessation programming currently offered, interest in providing smok-

ing cessation services to clients, and barriers to providing services. Results were as follows:

- 65 percent of sites routinely asked youth whether they smoke, usually during the intake process.
- 99 percent of sites were interested in offering smoking cessation programming, but only one site had an ongoing policy for helping their smoking clients (referrals to the California Smokers' Helpline).
- Key barriers to implementing a formal smoking cessation program on site include lack of resources and staff training, as well as concern that youth were not very motivated to change their smoking behavior (although the team's survey found that most homeless youth are interested in quitting).

To identify what kinds of smoking cessation programs would be most easily integrated and sustainable in existing service contexts, the team described four specific smoking cessation programs to service providers. The programs had different levels of intensity, as defined by the amount of training required to deliver the program, as well as the amount of time involved for the site and the youth participants (see table). All of the programs promote smoking cessation in adult smokers, although smoking cessation rates are higher for more intensive programs (e.g., more sessions and more time).

Results from this part of the interview on smoking program preferences suggested the following:

- Service providers viewed a lack of resources (financial, personnel) as a significant barrier to offering a smoking cessation program on site. Programs that required fewer resources were perceived as somewhat more feasible to deliver. However, there was concern that the *lowest*-intensity option (Smokers' Helpline referral) would be insufficient to help youth quit smoking.
- Service providers indicated that changing smoking norms at their sites would be important both for establishing and sustaining a smoking cessation service and also for motivating young people to quit.

Other Considerations for Adopting Smoking Cessation

Use of Other Substances. Despite cigarette smoking being the leading cause of preventable disease and death in the United States, there is sometimes concern that quitting smoking will have unintended negative consequences for homeless youth, such as increasing their use of other substances. Research on homeless adults has found that this is not the case,[4] and other research shows that receiving smoking cessation treatment does not negatively affect alcohol recovery.[5] In fact, there is evidence across several studies that smoking cessation treatment is associated with less alcohol and drug use.[6–8]

Types of Smoking Cessation Programs

Program	Description	Intensity Level
Smokers' Helpline referral	Routinely screen for smoking and hand smokers a card about the California Smokers' Helpline (a toll-free number that smokers can call to get various services to help them quit).	**Lowest:** Takes 1 minute. Can be delivered by any staff person, with virtually no training.
Brief cessation counseling	Routinely screen for smoking and immediately offer smokers brief advice to quit, following a script that asks youth about prior quit attempts, asks youth whether they are willing to make a quit attempt now, and offers brief recommendations of strategies that can help them quit.	**Lower:** Takes 3 minutes. Can be delivered by any staff person, with minimal training on script.
Extended cessation counseling	Routinely screen for smoking and refer smokers to an in-house cessation counselor. The counselor follows a script that asks youth about prior quit attempts and whether they are willing to make a quit attempt now, offers more detailed strategies that can help them quit, and focuses on boosting confidence to quit.	**Moderate:** Takes 15–20 minutes. Requires half-day training in smoking cessation counseling. Youth access to program is dependent on when a counselor is available.
Multisession group counseling	Routinely screen for smoking and refer smokers to an in-house weekly smoking cessation program that is offered on a regular basis.	**Higher:** Typically 4–7 sessions. Requires half-day training in smoking cessation counseling. Ideally, staff would have counseling background or experience facilitating groups. Youth access to program is dependent on when program is offered.

Mental Health Problems. Smokers often report that they smoke to cope with negative affective states, raising the question of whether quitting smoking will exacerbate existing mental health problems among homeless youth. Again, existing research suggests that this is not the case. Although studies have not been conducted with homeless smokers specifically, a number of studies show that smoking cessation is actually associated with lower rates of mood/anxiety disorders and perceived stress, including among individuals with a history of mental disorders.[6, 7, 9, 10]

Treatment Effectiveness. In general, "more is better" when it comes to smoking cessation treatment.[11] Routinely screening for smoking and offering brief (three-minute) advice to quit may be a good option for agencies interested in offering a low-cost, evidence-based program. But the more intensive option of a 15-minute counseling session is likely to be even more effective, and a multisession program will be more effective than a single counseling session. Providing pharmacotherapy (e.g., nicotine patch) in combination with any type of cessation counseling will increase the likelihood of quitting even more. Ultimately, a program that incorporates multiple components will be the most beneficial.

Implementing Smoking Cessation Programs in Service Settings. Homeless youth are embedded in a culture of smoking, sometimes even in the settings where they seek services. In addition to offering smoking cessation counseling to homeless youth who smoke, it is important to create an environment within these settings that is supportive of quitting. Routinely screening youth for smoking during intake, providing ongoing education on smoking cessation to staff, having reading materials on quitting smoking available in waiting rooms, and establishing a smoke-free outdoor area are relatively small changes that can have a potentially big impact on preventing and reducing tobacco use among homeless youth.

Recommendations for Reducing Smoking Among Homeless Youth

Based on results from the RAND study and informed by general practice guidelines for treating tobacco use and dependence[11] and addressing tobacco use in homeless adults,[12] the following are recommendations for service providers working with homeless youth to implement programming to reduce smoking within this population:

- Identify one or two staff members at the site to oversee cessation programming.
- Maintain an environment conducive to quitting. Free resources are available to assist with implementing a smoke-free environment (smokingcessationleadership.ucsf.edu/sites/smokingcessationleadership.ucsf.edu/files/Downloads/Toolkits/dtf_2013_toolkit.pdf). These environmental changes could include creating outdoor smoke-free zones, having reading materials on smoking cessation easily available to clients, and providing staff who are tobacco dependent assistance to quit.
- Train all staff in delivering three-minute and 15-minute smoking cessation counseling, based on best practices, so they can better assist youth who want to quit; provide staff with continuing education on smoking cessation (free training resources are available; for example, see Rx for Change: http://rxforchange.ucsf.edu/).
- Provide youth who are interested in quitting with at least three-minute cessation counseling and information on how to get free or low-cost pharmacotherapy (e.g., a nicotine patch or possibly bupropion); provide up to 15 minutes of one-on-one counseling as time permits.
- If sufficient resources are available to support a more intensive program, an onsite group-based smoking cessation program that also provides clients with nicotine replacement is recommended. Several no- to low-cost provider-centered resources and treatment manuals exist for both training (http://www.umassmed.edu/tobacco/training/basicskills_online/) and provision of these more intensive services.[11, 13]
- If resources are more limited, one option is to consider partnering with an outside vendor, physician practice, or academic institution to leverage its resources to provide a more intensive treatment option. Alternatively, after providing brief advice to quit, clients can be connected with national quitlines that provide multisession counseling and sometimes free nicotine replacement (for the national quitline: 1-877-448-7848; for a local state quitline: 1-800-784-8669).

This research highlight summarizes RAND Health research reported in the following publications:

[1] Tucker JS, Shadel WG, Golinelli D, Ewing B, and Mullins L, "Motivation to Quit and Interest in Cessation Treatment Among Homeless Youth Smokers," *Nicotine & Tobacco Research*, Vol. 17, No. 8, August 2015, pp. 990–995, EP-51903 (www.rand.org/t/EP51903).

[2] Tucker JS, Shadel WG, Golinelli D, Mullins L, and Ewing B, "Sniping and Other High-Risk Smoking Practices Among Homeless Youth," *Drug and Alcohol Dependence*, Vol. 154, September 1, 2015, pp. 105–110, EP-51886 (www.rand.org/t/EP51886).

[3] Shadel WG, Tucker JS, Mullins L, and Staplefoote BL, "Providing Smoking Cessation Programs to Homeless Youth: The Perspective of Service Providers," *Journal of Substance Abuse Treatment*, Vol. 47, No. 4, October 2014, pp. 251–257, EP-50524 (www.rand.org/t/EP50524).

Other cited publications:

[4] Reitzel L, Nguyen N, Eischen S, Thomas J, and Okuyemi KS, "Is Smoking Cessation Associated with Worse Comorbid Substance Use Outcomes Among Homeless Adults?" *Addiction*, Vol. 109, No. 12, December 2014, pp. 2098–2104.

[5] Bobo JK, McIlvain HE, Lando HA, Walker RD, and Leed-Kelly A, "Effect of Smoking Cessation Counseling on Recovery from Alcoholism: Findings from a Randomized Community Intervention Trial," *Addiction*, Vol. 93, No. 6, June 1998, pp. 877–887.

[6] Cavazos-Rehg PA, Breslau N, Hatsukami D, Krauss MJ, Spitznagel EL, Grucza RA, Salyer P, Hartz SM, and Bierut LJ, "Smoking Cessation Is Associated with Lower Rates of Mood/Anxiety and Alcohol Use Disorders," *Psychological Medicine*, Vol. 44, No. 12, September 2014, pp. 2523–2535.

[7] Donald S, Chartrand H, and Bolton JM, "The Relationship Between Nicotine Cessation and Mental Disorders in a Nationally Representative Sample," *Journal of Psychiatric Research*, Vol. 47, No. 11, November 2013, pp. 1673–1679.

[8] Prochaska JJ, Delucchi K, and Hall SM, "A Meta-Analysis of Smoking Cessation Interventions with Individuals in Substance Abuse Treatment or Recovery," *Journal of Consulting and Clinical Psychology*, Vol. 72, No. 6, December 2004, pp. 1144–1156.

[9] Hajek P, Taylor T, and McRobbie H, "The Effect of Stopping Smoking on Perceived Stress Levels," *Addiction*, Vol. 105, No. 8, August 2010, pp. 1466–1471.

[10] Ragg M, Gordon R, Ahmed T, and Allan J, "The Impact of Smoking Cessation on Schizophrenia and Major Depression," *Australasian Psychiatry*, Vol. 21, No. 3, June 2013, pp. 238–245.

[11] Fiore MC, Jaén CR, Baker TB, et al., *Treating Tobacco Use and Dependence: 2008 Update—Clinical Practice Guideline*, Rockville, Md.: U.S. Department of Health and Human Services, May 2008.

[12] Porter J, Houston L, Anderson RH, and Maryman K, "Addressing Tobacco Use in Homeless Populations: Recommendations of an Expert Panel," *Health Promotion Practice*, Vol. 12, No. 6, Supplement 2, November 2011, pp. 144S–151S.

[13] Abrams DB and Niaura R, "Planning Evidence-Based Treatment for Nicotine Dependence," in Abrams DB, Niaura R, Brown R, Emmons K, Goldstein MG, and Monti PM, eds., *The Tobacco Dependence Treatment Handbook*, New York: Guilford Press, 2003, pp. 1–26.

This research was supported by funds from the California Tobacco-Related Disease Research Grants Program Office of the University of California, Grant Number 21RT-0118 (Principal Investigator: Joan Tucker).