See article by Carpenter et al

A Comprehensive Approach to Tobacco Cessation for the Homeless

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Carpenter et al[1] report a study of contingency management (CM) as a potential modality for delivering tobacco cessation treatment to homeless smokers. Contingency management is an intensive behavioral intervention for difficult-to-treat smokers[2] and may be an effective model for delivery of care to this underserved population for whom little guidance exists for effective treatment approaches.

Problem

Cigarette smoking remains a major public health concern in the United States, with higher prevalence rates in several special populations. Tobacco use among homeless individuals represents a significant health disparity, as their smoking prevalence is estimated to be as high as 70%–80%.[3,4] Homeless smokers have higher risk for chronic diseases and greater potential for hospitalizations, indicating increased vulnerability to the health consequences of smoking.[3] Homeless smokers also represent a population likely to have greater difficulty quitting tobacco use and lacking resources to support cessation.[5–7] For example, homeless smokers commonly have psychiatric and substance use disorder comorbidities that are associated with higher nicotine dependence and confer additional barriers to quitting.[6,8,9] Although homeless smokers are found to have rates of quit attempts similar to those of other smokers, they may also report less readiness to make a quit attempt and be more difficult to engage in treatment.[5,10] Even when smokers are ready to make a quit attempt, a comparison of domiciled individuals to homeless patients at a free clinic indicated poorer outcomes for the homeless smokers.[9] It is clear that quitting smoking would have significant benefits for homeless individuals, including potential reductions in alcohol consumption, as well as other health and economic benefits.[11] The barriers to successful smoking cessation among the homeless indicate an urgent need for efforts to increase their motivation and engagement in cessation, as well as the need for development of specialized treatment modalities targeted to the needs of these smokers.

Providing effective tobacco cessation treatments to tobacco users has proven challenging. These challenges are amplified when targeting homeless smokers. A more appropriate and systematic approach may be to adopt a multidimensional approach to addressing this important issue.

Chronic Management

Tobacco use disorder is a chronic, relapsing disease for which a long-term approach to treatment is important.[11] For example, treatment of a chronic medical disorder such as diabetes typically includes ongoing monitoring to maintain target glycemic control. Tobacco use treatment may be best conceptualized as a chronic, long-term intervention with consistent follow-up.

Goal: Target tobacco use disorder as a chronic, relapsing disease.

Defining Success

A tobacco-free life is the ultimate goal of treatment for tobacco use disorder.[11] However, alternative or intermediate outcomes may be important to consider, especially in a difficult-to-treat population such as homeless smokers. Increasing quit attempts has been identified as a potential strategy for reducing population smoking prevalence, and is likely to be important for this population as well.[12] As highlighted in the literature, tobacco users typically require multiple attempts to quit tobacco use, sometimes exceeding 20 attempts before achieving prolonged abstinence.[11,13] Motivational interventions to increase quit attempts paired with engaging homeless smokers in evidence-based treatment may serve to increase successful outcomes. Smoking reduction may also be a viable intermediate outcome for homeless smokers. Although there is no direct health benefit for reduced tobacco use, reduction efforts may effect greater confidence in quitting, enhance skills for behavior change, and increase motivation to quit, ultimately yielding better cessation outcomes.[14]

Goal: Increase quit attempts, reduce cigarette smoking, and ultimately be tobacco free.

Evidence-Based Treatments

Consistent with research, providing behavioral treatment with pharmacotherapy provides the highest likelihood of successful abstinence.[11] Medications are widely available and generally consist of combination therapies with nicotine replacement (eg, nicotine patch and nicotine lozenge), bupropion combinations (eg, bupropion and nicotine lozenge), or varenicline.[11] However, cost and access to treatment may be issues for homeless smokers. A focus on long-term cost savings (eg, cigarette costs vs temporary cost of nicotine patch) may be a way to approach cost concerns. For behavioral treatment, greater intensity (eg, 30 minutes of

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behavioral treatment will yield better results than 5 minutes) and more sessions (eg, greater than 8 sessions generally yields better abstinence rates) can increase cessation rates.[11] Referral to free treatment programs, such as telephone quitlines that are available in most states in the United States, will be important to increase utilization of these services. Long-term treatment represents a model that may be particularly appropriate for this population given their greater difficulty quitting and maintaining abstinence from smoking. In the absence of resources for chronic care, an alternative is to provide more behavioral sessions early in the quit attempt, with fewer sessions during the maintenance phase.[11] Behavioral treatment for tobacco use disorder may also incorporate motivational interviewing strategies designed to increase motivation for change.[11] Research is still limited, but motivational interviewing is effective for increasing cessation attempts[15] and can also be useful for enhancing engagement in treatment and providing movement through the stages of change.[11,15]

Goal: To engage tobacco users, assisting them along the stages of change, and to provide medications and behavioral treatment to tobacco users who are ready to make a quit attempt.

Mechanisms of Treatment Delivery

Tobacco users may not be able to attend face-to-face or group appointments. Some may not own a telephone or computer to access quitlines or web-based materials. Given that one size does not fit all, providing choices and a variety of options for tobacco users is important. There is evidence for the effectiveness of employing multiple treatment modalities.[11] It is well established that behavioral treatment can be delivered by telephone, in person or in groups, and by diverse health care professionals.[11,16] More recently, technological advancements have been harnessed for tobacco cessation treatment including web-based interventions, smartphone applications, and text message services,[17–20] which may serve as supplemental tools for existing provider practices. Given the high rates of comorbidity and barriers to cessation, homeless tobacco users may likely need a combination of treatment modalities; successful cessation may require more intensive, ongoing treatment incorporating pharmacotherapy and behavioral counseling.

Goal: Provide evidence-based delivery options to tobacco users and supplement with treatment modalities that provide evidence-based information.

Evidence-Based Components of the Contingency Management Model

Highlighting the evidence-based practices employed by the contingency management model proposed by Carpenter et al,[1] including pharmacotherapy and behavioral counseling, is important. In addition to medications, there were a total of 13 contact points where participants' smoking status was assessed or biologically verified.[1,11] Four 20-minute sessions employed evidence-based cognitive-behavioral therapy—2 prior to quitting, 1 on the quit date, and one 2 weeks following the quit date. All of these are well-documented evidence-based practices that improve outcomes, supporting the value of this contingency management model as an effective approach for homeless smokers. [1,11]

Conclusion

There are no easy solutions to providing tobacco treatment to the homeless population. Understanding the chronic nature of tobacco use disorder and potential barriers to the patient population can assist in identifying appropriate treatment options. Initial goals of increasing quit attempts and engagement in treatment may be of particular importance for this population and may eventually help homeless smokers to be tobacco free. Evidence-based practices, use of multiple treatment modalities, and adoption of technological advances in treatment to the extent feasible should be provided for all homeless tobacco users. The contingency management model evaluated by Carpenter et al[1] represents a valuable and novel contribution to evidence-based tobacco use treatment for homeless tobacco users.

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