Active vs Passive Recruitment to Quitline Studies: Public Health Implications

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Substantial decreases in the prevalence of cigarette smoking have been observed over the past several decades (1). However, smoking remains the leading cause of preventable morbidity and mortality in the United States and accounts for billions of dollars in medical care and loss of productivity (2). Thus, dissemination of effective smoking cessation programs remains a vital public health priority. One frequently adopted treatment approach is proactive telephone counseling delivered via state quitlines (http://www.naquitline.org). Several key features of quitline-delivered treatment have led to the widespread adoption of this approach. Among these features is the potential of tremendous reach. Quitline-delivered treatment offers the potential to reach a large proportion of the smoking population. By minimizing transportation barriers and allowing for the delivery of intensive counseling intervention at home, proactive counseling also offers the benefit of reduced resource requirements compared with in-person visits. Finally, and perhaps most importantly, proactive telephone counseling delivered via quitlines is efficacious, as supported by several meta-analyses (3–6). Despite these strengths, quitlines are grossly underutilized, and methods to boost utilization are critically needed. Quitlines currently reach only about 1%–2% of smokers annually, although they have the capacity to treat a much larger population of smokers than those who are currently served (7).

The series of meta-analyses by Tzelepis et al. (8) appearing in this issue of the Journal provides an in-depth evaluation of the efficacy of proactive counseling delivered via quitlines. Specifically, the authors looked not only at an overall effect of proactive counseling on cessation outcomes but they also grouped studies by methodological quality and by recruitment approach (passive vs active). Similar to previous meta-analyses, the findings suggest that proactive counseling results in substantially higher cessation rates compared with less intensive (eg, self-help) control interventions. Although this overall finding is not surprising, the other meta-analyses do provide new insight about the impact of proactive counseling. The finding that the treatment effect was relatively unaffected by the methodological quality of the studies supports the robustness of quitline-delivered counseling. The most important contribution of the work of Tzelepis et al. (8), however, may be their consideration of recruitment method. A larger proportion of participants recruited passively (vs actively) were ready to set a quit date in the next month, which suggests that these individuals were more motivated to quit. Despite motivational differences, both approaches resulted in similar cessation rates that were statistically significantly higher than those associated with less intensive control interventions. The fact that active recruitment methods such as telephone recruitment and targeted mailings can achieve point estimates almost as high as passive recruitment has enormous implications for the public health impact of quitline-delivered cessation treatment.

Quitlines represent a highly valuable resource for smokers interested in quitting and for health-care providers in need of efficacious treatment referral options for smokers under their care. Although passive recruitment is effective in reaching smokers highly motivated to quit, it is associated with very low treatment enrollment rates. The finding that active recruitment can result in point estimates of treatment effects essentially equivalent to those of passive recruitment strongly supports the importance of efforts to expand reach. Active recruitment strategies such as nationally promoted “Ask—Advise—Refer” initiatives represent the currently recommended standard of care. “Ask-Advise-Refer” is an abbreviated version of the “5 As” (Ask—Advise—Assess—Assist—Arrange) and is intended to reduce time demands of health-care providers by referring smokers to evidence-based cessation programs such as quitlines (3–6). Furthermore, the “Refer” element sometimes includes a faxed referral from the provider to the quitline, allowing the quitline to proactively contact the patient (9). Unfortunately, even when directly promoted, the utilization of fax referral programs on the part of providers is low. A recent study found that less than 4% of physicians who had received promotional materials about a fax referral program reported referring even a single patient for treatment using the service (10). Thus, the reach and impact of Ask-Advise-Refer approaches are limited by critically important barriers at both the provider and patient levels. A new approach called Ask-Advise-Connect was designed to address these barriers and is currently being evaluated in a group-randomized trial. The approach is intended to streamline the burden of connecting smokers with cessation treatment through the implementation of an automated referral system that provides smokers’ contact information directly to the quitline (11). The finding of Tzelepis et al. (8) regarding the equivalent impact of passive and active recruitment on cessation outcomes highlights the potential public health impact of active recruitment.

Tzelepis et al. (8) correctly describe several questions that should be addressed. Among these questions is the seemingly contradictory finding concerning motivation to quit. Although not conclusive, a comparison of active vs passive recruitment suggests that passive (vs active) recruitment studies enrolled smokers who were more motivated to quit. However, cessation outcomes were equivalent between the two groups. As a potential explanation,
Tzelepis et al. (8) suggested that passively recruited participants may have indeed been more motivated, yet also more dependent on nicotine, as evidenced by a higher smoking rate. Thus, they posited that motivation and dependence effects may have cancelled out each other. It is also possible that the apparent differences in motivation and dependence may simply be an artifact of the specific recruitment strategies and target populations of the trials included in the meta-analysis. Nonetheless, more research is needed.

Tzelepis et al. (8) correctly identify the need for more in-depth cost-effectiveness analyses. Although active (vs passive) recruitment is more resource intensive, the expansion in reach is likely to offset any upfront differences in cost. Such data would prove extremely valuable to state health departments and policy makers in determining the best use of diminishing public health funding.

An important caveat is that neither passive nor active recruitment approaches will be successful in reaching all smokers. Because only 10% of smokers are ready to quit at any single point in time (12), and at least half of all quit attempts are unplanned (13,14), it is important to offer referrals for treatment over multiple time points. Doing so should increase the likelihood that smokers are referred for treatment at a time when they are receptive to quitting. Active recruitment could also have a potential downstream effect, whereby smokers not ready to accept referrals at the time they are offered draw upon referral information at a later date to contact quitlines on their own when they are ready to quit. An important direction for future research will be to develop and evaluate innovative active recruitment approaches designed to maximize the reach of quitlines.

References


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