

Giving Smoking Cessation the Attention That It Deserves

The article by Canga et al. (1) in this issue of *Diabetes Care* presents some important and encouraging news regarding the feasibility of effectively reaching primary care patients with diabetes who smoke and helping them to stop. Given the numerous increased health risks associated with the combination of having diabetes and smoking, ranging from macrovascular to microvascular disease (2), it is a major public health concern. Approximately 22% of the population of U.S. adults with diabetes continue to smoke, according to recent National Health Interview Study data (3).

Given the health consequences of diabetes and smoking and the well-established cost-effectiveness of smoking cessation in general, it is surprising that there has not been more attention given to smoking cessation in diabetes research and practice. Although diabetes patients have been included in many successful large-scale trials of smoking cessation, the recent American Diabetes Association (ADA) Technical Review on this topic was able to identify very few well-controlled studies that dealt solely with diabetes patients or reported results separately for this subgroup (2). It is also troubling that diabetes patients appear to be counseled to stop smoking less often than they receive many other aspects of preventive care (4).

Thus, it is encouraging to see this well-designed study by Canga et al. (1), which has importance for both research and practice. The intervention illustrated several of the characteristics recommended in both the Agency for Health Care Policy and Research guidelines for smoking cessation (5) and the recent ADA recommendations on smoking (6). The intervention focused on behavior therapy techniques, was tailored to individual needs and preferences, included relapse prevention follow-up contacts, and offered heavy smokers the option of nicotine replacement therapy.

Generally, this study can serve as a model for the delivery of health behavior change interventions for diabetes. Intervention was conducted by a trained nurse, who functioned essentially as a case manager

such as has been used in diabetes disease management programs that have shown high levels of intervention implementation and large outcome improvements (7,8). Canga et al. found it possible for a single nurse to provide services to a wide variety of primary care and hospital practices. This is consistent with the results of a recently reported hospital-based smoking cessation program (9), which found smoking cessation to be more effective when delivered by trained experienced smoking counselors rather than when delivered by respiratory therapists who had many other responsibilities. It would be informative to know more about how Canga et al. handled the linkage to primary care, kept the practices informed, and used them to reinforce patient success.

The Canga et al. study also illustrates some important evaluation principles and procedures that can help close the gap between research and practice. First, the study reported the percent of patients who participated in the intervention. The study was encouraging to learn that using a population-based sample with few exclusion criteria, ~80% of smokers were willing to participate (~10% of eligible smokers refused, and it was not possible to contact another 10%). Such data increase our confidence in the generalizability of results and add a counterpoint to the discouraging participation results reported in some earlier reports (10). Additional replications are necessary to identify patient, intervention, and recruitment procedure variations associated with higher participation rates.

Canga, et al. (1) also reported implementation results on the extent to which different components of the intervention were delivered and drew patients from 15 different clinics and 2 hospitals. Such a broad sample of clinical settings is seldom seen in diabetes self-management research and also lends confidence to the conclusions. Finally, the authors report long- or at least medium-term 6-month follow-up results, use objective biochemical measures to confirm self-reports of quitting, and use intent to treat analyses, in which partici-

pants who are lost to follow-up or who decline to provide biochemical samples are assumed to be smoking.

In light of these conservative procedures, the 6-month cessation rate for the intervention condition (17%), which is a seven-fold increase over usual care (2.3%), is impressive. Although this rate may not seem high to those who have not treated recalcitrant addictions such as smoking, these results have important public health benefits and are impressive given the conservative reporting procedures and the close to population-based sample. It is also interesting that continuing smokers in the intervention condition reported significant reductions in smoking rate compared with randomized controls, and may well be more prepared to quit in the future, because many people will make multiple attempts before they succeed in permanently stopping smoking. The one omission in the Canga et al. (1) study, on which I hope they can report in the future, is some type of economic analysis. I would expect, based on the relatively low intensity of the intervention that as has been shown in the general outpatient literature (11), smoking cessation may prove to be one of, if not the single most, cost-effective health care intervention for people with diabetes.

In conclusion, the authors are to be commended for presenting a well-controlled study that provides an excellent example of the type of practical program and evaluation that can help to translate research into practice. It is hoped that the recent increased attention to cardiovascular risk factors among individuals with diabetes (12), the publication of guidelines pertaining to smoking cessation (2,5), and this encouraging report will prompt increased attention to this relatively neglected but critically important risk factor.

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