

Novel Incentive Programs Wean Teens Off Cigarettes

ARTICLES BY
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ORLANDO — Adolescent smokers are a difficult population to reach, but researchers are trying some novel approaches to combat smoking in that group including reduction, instead of cessation, and financial incentives.

"To date the field has been frustrated by relatively low success rates," Robin Mermelstein, Ph.D., of the University of Illinois at Chicago, said at the annual meeting of the Society for Research on Nicotine and Tobacco.

With adolescents, researchers need to consider innovative approaches and target programs where the teens are—in schools, she said.

Some researchers are aiming to do just that. For example, Ping Sun, Ph.D., of the University of Southern California, Los Angeles, and his colleagues are examining the combination of a cessation and prevention curriculum in a single school-based program. In a recent study, Dr. Sun modified the existing Project EX program for application in the classroom.

The program targets at-risk, high school students in California and includes eight learning sessions over a 6-week period. The classroom sessions cover the effects of tobacco on lifestyle, the health impact of tobacco use, and how to avoid smoking relapses.

The intervention also includes unique aspects such as a mock talk show, yoga, and meditation.

More than 1,000 students were randomly assigned to either the cessation and prevention program or standard care, which is whatever curriculum would normally be taught in the students' health class.

Preliminary results show that the effects of the intervention on knowledge, weekly smoking, and daily smoking were all favorable, Dr. Sun said. A post-test survey also showed that most students liked the program and especially enjoyed the meditation component, he said.

These preliminary findings illustrate that it is possible to combine prevention and cessation in a single classroom program and that the approach works equally well for smokers and nonsmokers, Dr. Sun said.

Since smoking cessation is difficult to achieve with adolescent smokers, researchers are also considering ways to reduce smoking in individuals who don't want to quit.

Karen Hanson, Ph.D., and her colleagues at the University of Minnesota recruited teens from 14 high schools in the Minneapolis/St. Paul area who smoked five cigarettes a day and had no intention to quit.

As part of the pilot study, students received either the nicotine patch, nicotine gum, or a placebo. In addition, all the stu-

dents received cognitive-behavioral therapy sessions that lasted 10-15 minutes and focused on strategies including limiting smoking in certain situations and increasing intervals between cigarettes.

More than 100 adolescents with a mean age of 17 years completed the study. At baseline, participants smoked a mean of 12 cigarettes per day. By the study's completion, 58% of participants cut their smoking intake by at least half. The nicotine-patch group reduced smoking significantly, compared with the other treatment groups, she said.

The 7-day abstinence rates were 4% at the end of treatment, 9% at 3 months, and 7% at 6 months; there were no significant differences between treatment groups, she said.

"Reducing smoking is feasible but it's not an end goal because unless treatment is sustained, reduction was not maintained," Dr. Hanson said.

Another strategy that works well with adolescents is to offer them cash incentives to quit, according to Suchitra Krishnan-Sarin, Ph.D., of Yale University, New Haven, Conn.

Dr. Krishnan-Sarin tested the idea that contin-

gency management-based intervention—in this case money—could act as a nondrug reinforcer to bolster smoking cessation.

In the preliminary phase, Dr. Krishnan-Sarin and her colleagues recruited students from two high schools to participate in either weekly cognitive-behavioral therapy plus contingency management, or weekly cognitive-behavioral therapy alone.

Smoking abstinence was reinforced on an escalating scale. Participants could earn more than \$300 in 1 month plus vouchers for attendance. The control group received about \$120 in total for providing breath carbon monoxide (CO) samples plus vouchers for attendance. Both groups provided breath CO samples as evidence of abstinence.

A higher percentage of those students who received contingency management plus cognitive-behavioral therapy completed treatment. In the first week, there were significant differences between the groups. The contingency management plus cognitive-behavioral therapy group had achieved a 77% abstinence rate, compared with 7% for the therapy-only group.

At 1 month, 53% of the intervention group was abstinent, compared with 0% for the control group.

The results show that contingency-management techniques can increase retention and abstinence, Dr. Krishnan-Sarin said, and can be implemented in a school-based setting.

In the second phase of the study, the researchers plan to waive parental consent since in many cases parents don't know that their teens are smoking. They are also considering a briefer version of the cognitive-behavioral therapy component, Dr. Krishnan-Sarin said. ■

Cotinine Testing of Children Sends a Powerful Smoke Signal

ORLANDO — The availability of urine cotinine results may prompt physicians to counsel families about the risks of secondhand smoke.

Physicians were more likely to offer smoking cessation counseling to parents and to give other advice about reducing tobacco smoke exposure at home if they had access to urine cotinine results from their pediatric patients, according to a poster presented at the annual meeting of the Society for Research on Nicotine and Tobacco.

Dr. Michael S. McLemore, who was at the University of California, San Diego at the time of the study, and his colleagues recruited 102 low-income families from health clinics around San Diego County.

Families were eligible if they had at least one household member who smoked and a child under age 5 years who was exposed to secondhand smoke at home.

The families were randomized to receive either usual clinical care or counseling. Family counseling included 12 sessions on limiting a child's exposure to secondhand smoke, biofeedback of the child's cotinine levels, and small financial incentives to initiate conversations with pediatricians about the cotinine results.

In addition, the pediatricians whose patients were in the counseling group received the child's urine cotinine lab results.

Of the 28 pediatricians whose patients were in the counseling group, 7 reported that they saw the cotinine results and 21 did not see results. Of those who saw the cotinine results, 86% reported recommending home smoking bans, 71% recommended car smoking bans, and all recommended smoking cessation.

The remaining 21 pediatricians who did not see the cotinine results, but whose patients participated in the counseling sessions, also reported providing counseling to families.

Forty-three percent reported recommending home bans, 26% recommended car bans, and 43% recommended smoking cessation.

The numbers fell even more among the 29 pediatricians whose patients were in the control group. In that group, 38% recommended home bans, 17% recommended car bans, and 24% recommended smoking cessation.

Despite the risks associated with secondhand smoke, the researchers reported that very few pediatricians provide smoking cessation counseling. The research was supported by a grant from the American Heart Association. ■

Chronic Care Approach Improves Counseling of Pregnant Smokers

ORLANDO — Family and ob.gyn. practices in Maine improved their identification of pregnant smokers and improved their assessment of cessation after remodeling their office systems based on a chronic care team approach.

The goal of the project was to increase the smoking cessation treatments offered to pregnant women, Dr. Susan Swartz, of the Center for Tobacco Independence at the Maine Medical Center in Portland, said at the annual meeting of the Society for Research on Nicotine and Tobacco.

Dr. Swartz and her colleagues recruited ob.gyn. and family practices across Maine who delivered prenatal care. Each practice was asked to form a team of at least three staff members, including a nurse midwife, nurse, and medical assistant or practice manager, who would focus on making office changes that would make it easier to assess and treat smokers.

Practice members were asked to identify pregnant smokers and recent quitters, advise smokers to quit, assess interest in quitting, and offer help with quitting. "The goal was to categorize every woman who came into their practice for prenatal care and routinely address smoking risk," Dr. Swartz said. ■

The 15 practices that completed the office overhaul exceeded the target for assessing interest in quitting.

The researchers had set a goal of 70%, but the practices averaged nearly 80% by month 8 of the study, compared with less than 50% during the first month.

Likewise, during the first month of the investigation only about half of the practices had documented that they assisted patients with quitting, compared with 70% at the end of the eighth month of the study.

Most practices significantly increased the number of pregnant women who were referred to Maine's telephone quit line.

Although some practices fell short of prespecified goals, all the practices showed improvement, according to Dr. Swartz.

The investigation was limited by the lack of a control group and no established baseline before the study began, Dr. Swartz noted. However, the findings did show that team-based quality improvement can enhance the performance in the counseling of smokers.

The project was funded by the Smoke-Free Families National Dissemination Office of the Robert Wood Johnson Foundation. ■