Cash Incentives Encourage Smoking Cessation

BY HEIDI SPLETE

Paying people to quit smoking significantly increased smoking-cessation rates, compared with a control strategy that had no financial incentives, according to a workplace-based study.

Previous studies of workplace-based financial incentives to help people quit smoking have used small sample sizes and small payments, wrote Dr. Kevin G. Volpp of the University of Pennsylvania in Philadelphia, and colleagues.

Payments are unbundled from health insurance premiums and thus may have a greater influence on behavior.

DR. VOLPP

The researchers randomized 442 adult smokers to receive information about smoking-cessation programs and 436 to receive information about smoking-cessation programs plus a financial incentive. The participants volunteered for the study after being identified through a survey about smoking habits. Those who used tobacco products other than cigarettes were excluded.

The financial incentive was $100 to complete a smoking-cessation program, plus $250 for confirmed cessation of smoking at 3 or 6 months after entering the study. In addition, participants received $400 for smoking cessation 6 months after the previous date of confirmed smoking cessation (9 months or 12 months). They were also assessed for smoking status (but were not paid) after another 6 months (15 or 18 months after study enrollment). The smoking-cessation program was not based at the workplace; instead, participants were advised to use existing programs in the community.

The study population included adults aged 18 years and older who reported smoking at least five cigarettes daily. Demographic traits were similar between the two groups. The participants were followed for at least 12 months, and the study's primary end point was smoking cessation 9 or 12 months after study enrollment.

Overall, the rate of confirmed smoking cessation (based on a cotinine test) at 9 months or 12 months was about 3 times greater in the financial incentive group, compared with the control group (15% vs. 5%). The smoking-cessation rate within 6 months of starting the study was significantly higher in the financial incentive group, compared with the control group (21% vs. 12%). And the cessation rate remained significantly higher in the financial incentive group, compared with the control group at 15 or 18 months (9% vs. 4%).

Significantly more individuals in the financial incentive group than in the control group enrolled in (15% vs. 5%) and completed (11% vs. 3%) a smoking-cessation education program. Those in the financial incentive group who took part in the smoking-cessation program had higher smoking-cessation rates, compared with controls who took part in the program (46% vs. 21%).

"Targeted payments for smoking cessation have the advantage of being unbundled from health insurance premiums and thus may be more salient to people, thereby having a greater influence on behavior," the researchers said (N. Engl. J. Med. 2009;360:699-709).

The relapse rates between the 9- or 12-month follow-up and the 15- or 18-month follow-up were 36% in the financial incentive group and 27% in the control group. Although those results were higher than those found in other studies, the difference may be negligible compared with other studies, the researchers noted, because so few participants in the current study quit smoking.

The study was limited by its majority of white adults (90%) with high levels of income and education, the researchers noted. More research is needed to assess the effect of financial incentives on employees with lower socioeconomic status and on those of different ethnicities, they added.

The study was supported in part by grants from the Centers for Disease Control and Prevention and the Pennsylvania Department of Health. Dr. Volpp has received lecture fees from Aetna Inc. and grant support from Aetna and Pfizer Inc. ■

All States Except Oklahoma See Dip in Smoking Deaths

BY MIRIAM E. TUCKER

Overall rates of smoking-attributable mortality declined in 49 states and the District of Columbia from 1996-1999 to 2000-2004, with the greatest drops occurring in Nevada, California, and Virginia.

New state-specific data on smoking-attributable mortality (SAM) and years of potential life lost (YPLL) from the Centers for Disease Control and Prevention show that average annual overall SAM rates decreased during the two time periods by 44.4/100,000 population older than 35 years of age in Nevada, by 37.8/100,000 in California, and by 33.4/100,000 in Virginia. Oklahoma was the only state that experienced an increase in SAM, by 26.9/100,000 (MMWR 2009;58:29-33).

Sex- and age-specific SAMs were calculated by multiplying the total number of deaths among adults older than 35 years from 19 diseases caused by cigarette smoking by estimates of the smoking-attributable fraction of preventable deaths for each disease.

Compared with 1996-1999, the average annual SAM rates declined in 2000-2004 among men in all states except Oklahoma, but increased among women in several states (Alabama, Arizona, Arkansas, Georgia, Indiana, Kansas, Kentucky, Louisiana, Mississippi, Michigan, North Carolina, Ohio, Oklahoma, South Carolina, South Dakota, Tennessee, Texas) and D.C. For every state, the annual number of smoking-related deaths was higher among males than among females, the CDC said.

The release of these state-specific data follow a 2008 report that cigarette smoking and exposure to secondhand smoke resulted in an estimated 443,000 deaths and 5.1 million YPLL annually in the United States during 2000-2004 (MMWR 2008;57:1226-8).

During 2000-2004, overall average annual SAM rates per 100,000 population were lowest in Utah (138.3), Hawaii (167.6), and Minnesota (215.1), and highest in Kentucky (370.6), West Virginia (344.3), and Nevada (343.7). Median SAM rates per 100,000 population overall were 288.1 for 1996-1999 and 263.3 for 2000-2004.

Smoking-attributable YPLL were estimated by multiplying sex- and age-specific SAM by remaining life expectancy at the time of death. The average annual YPLL estimates ranged from 7,762 (Alaska) to 481,529 (California). The YPLL estimates for males ranged from 4,586 (Alaska) to 288,823 (California), and from 3,176 (Alaska) to 192,706 (California) for females.

To reduce SAM rates further, the CDC said, comprehensive evidence-based approaches for preventing smoking initiation and increasing cessation need to be implemented fully, and states should fund tobacco control activities at the level recommended by CDC. The CDC's guide on tobacco control activities can be found on the Web at (www.cdc.gov/tobacco/tobacco_control_programs/stateandcommunity/best_practices). ■

Internet-Based Substance Abuse Screening, Self-Help Come of Age

BY ALICIA AULT

WASHINGTON — Internet-based brief screening and self-help interventions for addictions provide an option for people who otherwise might not make it in to see a clinician in person, according to an addiction specialist who has been piloting such programs for alcohol and tobacco abuse.

Studies have shown that problem drinkers and gamblers, for instance, have ready access to the Internet and may be more likely to first seek help online rather than in a face-to-face encounter, said John A. Cunningham, Ph.D., a senior scientist at the Centre for Addiction and Mental Health, teaching hospital affiliated with the University of Toronto.

Dr. Cunningham, who spoke at the Association for Medical Education and Research in Substance Abuse, has worked as a consultant with Toronto-based V-CC Systems Inc., a company that develops and supports community-based interactive disease management programs.

One such tool can be found at www.checkyourdrinking.net. People using this brief screen can compare their drinking habits with normative data for their age and gender. This can be a "motivational surprise," Dr. Cunningham said. Users are also provided with an Alcohol Use Disorders Identification Test (AUDIT) score and an explanation of what the score means. Ways to reduce risk are also suggested.

V-CC Systems has tried to evaluate whether using the screen changes behavior. It recruited study participants through random dialing, from which 185 people were selected. They were contacted 3 and 6 months after taking the brief screen. It was determined that those who had access to the Web site had reduced the number of drinks by 6 to 7 a week. It seemed that the screen was effective for people who had a drinking problem, but not as much so for other [addictions], said Dr. Cunningham.

Another V-CC site, www.alcoholhelpcenter.net, has background information, screening, counseling, and other support, such as online chat rooms and participant diaries that help keep track of drinking. Users can also set up reward programs and participants can register to receive motivational e-mail and text messages.

This site has not yet been evaluated in a formal study, but 650 posts to the online support groups have been analyzed, said Dr. Cunningham. A third of those were greetings and messages of support from support specialists, which is important because participants often are isolated and in need of such support. The support specialists are given specific instructions on how to "seed" discussions and respond to posts.

At the Stop Smoking Center (www.stopsmokingcenter.net), 75% of the posts are answered within an hour, and 25% within 12 minutes, said Dr. Cunningham. The Alcohol Help Center, based on the Stop Smoking Center, also provides motivational messages and screeners.

The Internet-based sites can be targeted to various audiences. For example, V-CC (www.v-cc.com) has created a Check Your Drinking screen for college students and an alcohol screening and support site for people of Finnish heritage, he said. Web-based tools provide access to professional help around the clock. ■