Comparative Evaluation of American Cancer Society and American Lung Association Smoking Cessation Clinics

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Abstract: We compared the effectiveness of American Cancer Society, *FreshStart,* American Lung Association, *Freedom from Smoking,* and laboratory clinic methods in subjects (N = 1041) from three communities. Three-month follow-up results favored the laboratory method over the two public service approaches on both a prevalence and a sustained abstinence measure. At one-year follow-up, treatment effects for smoking prevalence were no longer significant. However, sustained abstinence results at one-year remained highly significant and favored the more intensive laboratory and *Freedom from Smoking* clinics over the *FreshStart* method. *FreshStart* fared less well than the other interventions both in producing initial quit attempts and in sustaining abstinence among initial quitters. It should be noted, however, that *FreshStart* requires considerably less facilitator contact than do the other approaches. Unexpected outcome effects occurred for treatment location. Future clinic programs should include a specific target date for quitting and should place more emphasis upon recycling participants who fail to sustain abstinence. (*Am J Public Health* 1990; 80:554–559.)

Introduction

Public service programs have been developed to assist chronic smokers to quit. Characteristics common to most of these programs include not only the use of behavioral principles, but also a focus on multiple program components, increasing emphasis on maintenance and relapse prevention, and a heightened appreciation of variables such as cognitive processes and social support.[1] As smoking cessation programs have become relatively more sophisticated, there has also been an increased awareness of the need for more cost-effective delivery methods.[2] Among the most widely offered public service programs are smoking cessation clinics developed by the American Cancer Society and the American Lung Association. Despite their widespread use, no evaluations of the effectiveness of these clinics have appeared to date in the literature.

The present study undertook a comparative evaluation of the American Cancer Society (ACS) *FreshStart* and American Lung Association (ALA) *Freedom from Smoking* clinic methods. These methods were assessed in a context that also included a laboratory-derived clinic approach.[3,4] The laboratory method was included to allow not only assessment of the effectiveness of the two public service clinics themselves, but of their effectiveness relative to that of a method systematically derived from a paradigmatic program of research[5] which has been systematically disseminated in community settings as part of a program of technology transfer. Costs have been kept to a minimum through the use of donated facilities and volunteer group leaders who receive only nominal fees.[6]

Methods

Subjects

Subjects were 1,041 smokers (57.2 percent women) who responded to newspaper advertisements announcing the availability of free smoking cessation clinics. The clinics were described as being part of a federally funded project. Subjects were recruited from three Iowa locations: Des Moines (N = 743), Iowa City (N = 173), and Waterloo-Cedar Falls (N = 125). Three study locations were used to ensure adequate subject enrollment and to allow a test of the major study hypotheses. The investigator in charge of administering treatment in Waterloo-Cedar Falls left after the first year of the study and recruitment efforts in the area were discontinued at that point.

Facilitators

Facilitators were 10 women and five men specifically recruited and trained to administer intervention for purposes of the current study. Although specific information on facilitator characteristics is not available, group leaders in Des Moines were older, ranging in age between 35 and 50, and most had previous experience in conducting group programs. In contrast, facilitators in Waterloo and Iowa City consisted primarily of undergraduate and graduate students less than 30 years old. Efforts were made to see that each facilitator conducted all three interventions. This was not always possible, however. It should be emphasized that we have no evidence of a facilitator effect upon treatment outcome.

All facilitators were formally trained in all three methods: the American Cancer Society *FreshStart* program, the American Lung Association *Freedom from Smoking* clinics, and the Lando laboratory derived approach. *FreshStart* training consisted of a four-hour program provided by the American Cancer Society. The smoking intervention coordinator for the American Lung Association of Iowa provided training in the *Freedom from Smoking* method. Project staff provided training in the Lando method. Formal instruction in the American Lung Association and Lando clinic procedures required approximately six to eight hours. Facilitators were provided copies of detailed treatment manuals for all three clinic approaches.

Facilitators were informed that the study was intended to assess the relative effectiveness of different methods, that it was unclear whether any method would prove superior to the others, and that a major purpose of the study was to determine which methods might be more effective for different people. Emphasis was placed upon the point that a critical overriding study goal was to assist as many people as possible to quit across all conditions. Every effort was made to minimize bias on the part of group leaders. Facilitators were recruited from each of the communities and individuals were employed who had no prior identification with any of

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the programs. Strong emphasis was placed upon the need to conduct procedures exactly as described in the respective protocols.

Experimental Design

Subjects were randomly assigned to one of the three methods as a function of orientation sessions attended. Subjects were also informed that the study was comparing different methods and that while each of the methods was effective, the investigators believed that a particular method might be more effective for certain types of smokers. Treatment was offered free of charge.

Assigning all individuals attending a given orientation session to a single method minimized problems of self-selection to treatment. This was deemed important enough to outweigh any limitations arising from having different units of randomization and analysis. Only very general information that could apply to any of the three methods (e.g., small group format and a varying number of sessions) was released prior to the orientation. Friends and relatives who came together to orientation sessions were ensured the same treatment condition. A total of 70 orientation sessions were held and 97 treatment groups were eventually formed in the three intervention sites.

Preintervention Assessment

Subjects completed a brief demographic and smoking history questionnaire as well as an informed consent statement at the initial orientation session and provided the names and telephone numbers of three informants who could assist in locating them for purposes of follow-up data collection.

All subjects were informed that the programs would teach them skills to actively confront urges to smoke and enable them not only to stop smoking, but to remain nonsmokers. They were asked to verbalize a commitment to quitting that was intrinsic rather than a product of coercion from others. Emphasis was placed upon the premise that smoking is a learned habit and that it can be unlearned as well.

Attendance records allowed an indication of attrition *before* the fact (e.g., differential dropout subsequent to the orientation sessions as a function of anticipated treatment procedures). Details of the different interventions are contained in the Appendix.

Follow-up Data

A brief smoking status questionnaire was mailed to subjects at three-month, six-month, and 12-month follow-up intervals. Subjects who failed to respond to mailed questionnaires were contacted by telephone. Point prevalence was defined as complete abstinence from tobacco products on the day in question. Sustained abstinence was defined as the absence of relapse. Permitted slips were distinguished from relapses following guidelines recommended by the National Heart, Lung, and Blood Institute National Working Conference on Smoking Relapse[7] (a relapse was defined as seven consecutive days of smoking at least one puff per day). We specified an additional definition of relapse as seven consecutive slips within three months. Data were collected on whether subjects had made a quit attempt during the clinic they attended. A quit attempt was defined as at least 24 hours of continuous tobacco abstinence.[7]

Eighty subjects who claimed sustained abstinence through one-year follow-up (43.0 percent of the total claiming sustained abstinence) were asked to submit saliva samples about one month after their one-year follow-up had been completed. Saliva samples were collected in subjects' homes. All samples were analyzed for thiocyanate. Samples with borderline values (80–100 ng/ml) or higher (which appeared to contradict self-reported abstinence) were subsequently analyzed for cotinine (smoking was defined as a value of greater than 15 ng/ml). In the case of subjects who refused to submit to saliva testing, informants were telephoned and queried concerning the subjects' smoking status.

Results

Subject Characteristics

The average age of subjects was 42.4 years. Mean baseline cigarette consumption was 28.8 per day and the average number of years smoking was 23.6. Subjects had initiated a mean of 3.8 prior quit attempts with the longest abstinence period averaging 7.7 months. In an open-ended question asking about reasons for attempting to quit, 86 percent of subjects listed health concerns as one reason for quitting (Table 1).

Multivariate analysis of variance, performed to identify location differences, indicated that the Iowa City sample was on average 6.9 years younger and smoked 4.4 cigarettes less than their counterparts in the other two communities. Clinic size (i.e., the number of participants per clinic) was also considerably smaller in Iowa City.

Response Rates at Follow-Up

There was a 93.8 percent response rate at one-year follow-up. Response rates at three-month and six-month follow-ups were 98.2 percent and 93.0 percent, respectively. Forty-two people were not successfully contacted, 15 were lost to follow-up, five refused the follow-up interview, and three died. Those not reached, lost to follow-up, and refusers

TABLE 1—Mean Values on Baseline Variables for Total Sample and by Each Location Separately

Measure	Total	Des Moines	Iowa City	Waterloo
Sample Size	1041	743	173	125
Age	42.4 (±12.7)	43.7 (±13.1)	36.3 (±10.4)	43.1 (±10.4)
% Females	57.3	58.5	57.8	48.8
Cigarette consumption	28.8 (±12.2)	29.4 (±12.4)	25.3 (±10.9)	30.4 (±12.3)
Cigarette nicotine level	0.75 (±.30)	0.76 (±.31)	0.72 (±.26)	0.72 (±.30)
Years smoking	23.6 (±12.0)	24.7 (±12.5)	18.2 (±9.6)	25.2 (±10.4)
Previous quit attempts*	2	2	2	3
Longest quit attempt (months)*	1.1	1.1	1.3	1.2
% giving health reason to quit	86.1	86.7	81.7	88.4
Self-efficacy (0–100)	53.4 (±19.2)	52.4 (±19.1)	54.5 (±19.3)	57.4 (±19.2)
Clinic Size	10.7 (±4.0)	11.8 (±3.6)	7.2 (±2.2)	12.5 (±5.0)

*The median is reported for this variable because of the substantial skewness of responses.

were counted as smokers for purposes of data analysis. There were no differences between the treatment groups or locations in attrition rates at one-year.

Return to Treatment

For 62 of 70 informational meetings, data were available on the number attending the meeting as well as the number who returned to participate in treatment. A weighted least squares ANOVA indicated that the proportion returning was not a significant function of the treatment being offered.

Group size did not differ significantly as a function of the intervention method. Mean group sizes were 10.0, 11.7, and 10.5 for the ACS, ALA, and Lando methods, respectively.

Abstinence

The effects of method and location (and their interaction) on abstinence outcome were evaluated using logit analysis.[8] Lack of independence of outcome within treatment groups was expected due to individuals receiving treatment together in groups and having correlated outcomes, and related individuals (e.g., spouses) entering the same treatment group. A group effect was observed on one-year abstinence prevalence after method and location effects were taken into account ($\chi^2(92) = 123.32, p = .016$). Thus, an estimate of the design effect[9] due to clustering was computed (= 1.469), and the original chi-square test statistics were divided by the design effect to correct for this within group dependence.[10] Corrected chi-square statistics and confidence intervals are reported below.

Location effects did not interact with those due to treatment classification in any of the analyses reported. Also there were neither facilitator nor sex of subject effects on abstinence outcome.

Abstinence outcomes are illustrated in Figure 1; mean levels are presented in Table 2. While point prevalence differences are no longer statistically significant after the three-month follow-up interval, sustained abstinence differences are significant at all follow-up points. The ACS *FreshStart* program fared most poorly, and the Lando program achieved better outcome than the ALA *Freedom from Smoking* method.

Ninety-five percent confidence intervals comparing the ACS *FreshStart* treatment with the average of the two more intensive programs, and the Lando with the ALA *Freedom from Smoking* program on various follow-up measures are presented in Table 3. The *FreshStart* program fared less well than the other two methods on all measures.

Point prevalence abstinence rates at three months were highest in Waterloo (41.6 percent), followed by Des Moines (29.7 percent) and Iowa City (23.7 percent). These differences no longer held at six months and one year. However, at one-year follow-up, sustained abstinence rates were 27.2 percent, 17.0 percent, and 15.0 percent in Waterloo, Des Moines, and Iowa City, respectively ($\chi^2(2) = 6.05, p = .048$).

Quit Attempts

There were significant differences in the proportion of subjects in the different treatment groups making quit attempts (Table 4). Subjects in the ACS *FreshStart* program were again less likely to make a quit attempt than those in the other two programs.

Considering only those who made a quit attempt, there was no significant difference in one-year point prevalence

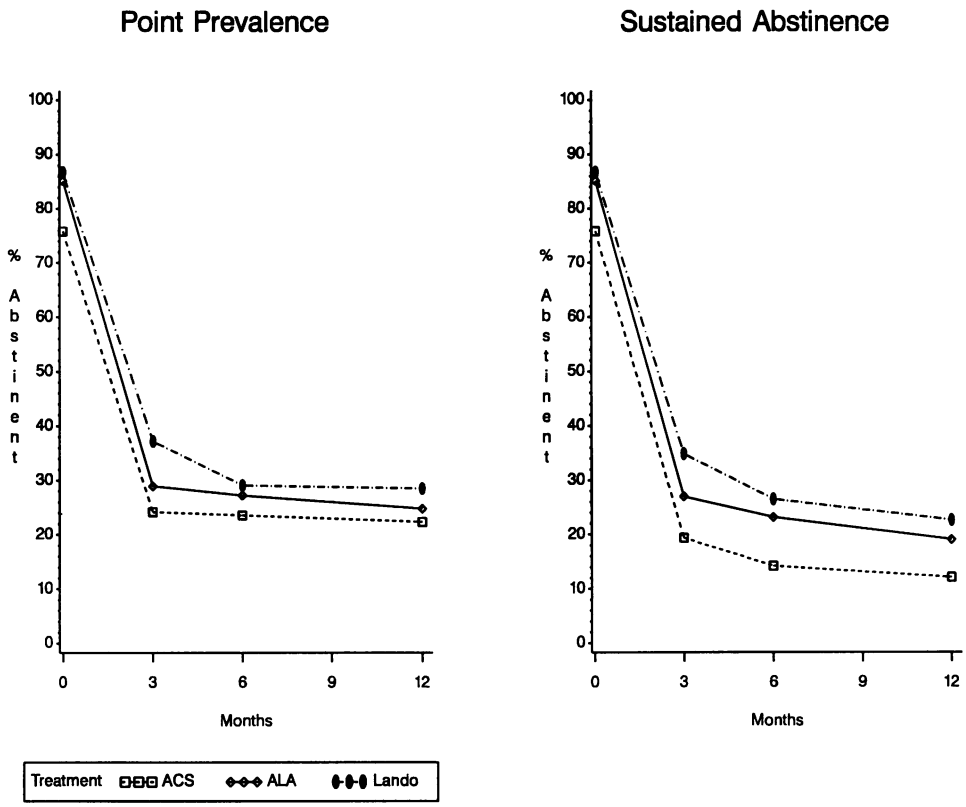

FIGURE 1—Abstinence Outcome at Three Follow-up Times Using Two Abstinence Criteria (Initial abstinence rates (at months = 0) represent initial quitting rates, i.e., those who remained abstinent for 24 hours after quitting.)

TABLE 2—Outcome Rates (expressed in percent) at Three Follow-up Intervals

Outcome Measure	ACS	ALA	Lando	Total	P*
3M Point Prevalence	24.17	28.93	37.18	30.16	.005
6M Point Prevalence	23.56	27.27	29.11	26.71	.38
1 Yr Point Prevalence	22.36	24.79	28.53	25.26	.28
3M Sustained Abstinence	19.34	27.00	34.87	27.19	<.001
6M Sustained Abstinence	14.20	23.14	26.51	21.42	.004
1 Yr Sustained Abstinence	12.08	19.01	22.19	17.87	.014
Total N	331	363	347	1041	

*P value is derived from χ^2 statistic with 2 degrees of freedom corrected for DEFF = 1.469.

TABLE 3—Percentage Differences and 95% Confidence Intervals for Percentage Differences in Outcome Measures among the Treatment Conditions

	ACS vs Others		Lando vs ALA	
Outcome Measure	Difference*	95% CI	Difference	95% CI
3M Point Prevalence	−8.76	(−16.02, −1.51)	10.37	(1.61, 19.14)
6M Point Prevalence	−4.45	(−11.41, 2.51)	2.73	(−5.51, 10.98)
1 Yr Point Prevalence	−4.20	(−11.00, 2.60)	4.33	(−3.76, 12.42)
3M Sustained Abstinence	−11.68	(−18.56, −4.80)	9.70	(1.07, 18.33)
6M Sustained Abstinence	−10.90	(−17.25, −4.56)	4.82	(−3.36, 13.00)
1 Yr Sustained Abstinence	−8.85	(−14.92, −2.79)	4.94	(−2.90, 12.78)

*Estimates of differences and confidence intervals are adjusted for location effects.

TABLE 4—Quit Attempts and One-Year Outcome among Those Making a Quit Attempt

Outcome Measure	ACS	ALA	Lando	Total	P*
Making quit attempt	75.83	85.12	86.74	82.90	.004
1 Yr Point Prevalence	27.09	28.48	31.56	29.15	.59
1 Yr Sustained Abstinence	15.94	22.33	25.58	21.60	.068

*P value is derived from χ^2 statistic with 2 degrees of freedom corrected for DEFF = 1.469.

outcome between the methods but persons in the ACS *FreshStart* program were less likely to sustain abstinence than were those in the other two treatment groups [difference = −8.02%; 95% confidence interval = (−15.37, −0.67)].

Clinic location did not affect the number making quit attempts but did influence one-year sustained abstinence outcome among those attempting cessation (data available on request to author).

Biochemical Validation

Results of biochemical validations performed at one-year tended to be consistent with self-reported abstinence. Of the 80 persons selected for biochemical validation, 73 provided saliva samples. No samples exceeded the cutoff for disconfirmation. Six of the remaining seven persons, while claiming abstinence, refused biochemical validation while one person had returned to smoking between the one-year follow-up and testing. One of those who refused was identified as a smoker by an informant and three additional refusers either did not list or we were unable to contact their informants. If all four of these subjects are counted as smokers (which appears to be an appropriate, albeit conservative, practice) the lie rate would be 5.1 percent (= 4/79). Adjusting the reported outcome data by this factor would not markedly affect absolute abstinence levels and would have little impact upon interpretation of results.

Discussion

The present study represented the first comparative evaluation of the American Cancer Society *FreshStart* and the American Lung Association *Freedom from Smoking* clinic methods. Results indicated relatively modest outcomes for both clinics. The disappointing outcome for the *FreshStart* method on the sustained abstinence measure (12.1 percent sustained abstinence at 12 months) appears noteworthy. This figure would be even lower (10.9 percent) if more rigorous continuous abstinence guidelines had been used (i.e., absolutely no use of tobacco in any form whatsoever).

The reduced number of initial quit attempts with the *FreshStart* method would appear to be largely a function of the absence of a set quit date. However, the present study design does not permit unequivocally eliminating other possible explanations including the lesser total clinic contact. Even so, it should be noted that intensity of clinic contact prior to quit attempts was fairly comparable for the *FreshStart* and *Freedom from Smoking* methods. The major difference in scheduling between the two public service approaches occurred during the maintenance phase rather than in preparation for quitting. Although the results for *FreshStart* are disappointing, it should be remembered that the *FreshStart* method also requires considerably less facilitator contact.

The fact that these programs were offered totally free to participants may have been partially responsible for overall modest abstinence rates. The absence of a fee may also have reduced participants' commitment.

Facilitator bias cannot be dismissed as a possible factor mediating differences between methods. However, every effort had been made to eliminate this bias. Facilitators had no a priori commitment to a given approach. They had been specifically instructed to work within the confines of each method to produce the best possible outcomes. Furthermore, the larger differences occurred between the two public service methods. Differences between *Freedom from Smoking* and the laboratory program (in which the investigators would have been expected to have a vested interest) were less pronounced and were no longer significant at the one-year follow-up.

Differential enrollment in treatment conditions was not a factor in mediating outcome. There were no differences in enrollment in the three clinic programs following the initial informational meeting. It is possible that a limitation inherent in the interpretation of these results may arise from the fact that the unit of randomization and the unit of analysis in this study are different. However, the large sample size provides a measure of confidence in the results.

The location effects were unanticipated. Although no obvious explanation is apparent for the superior outcome in Waterloo, clinics were relatively new to this community. Numerous cessation programs had been offered in both Des Moines and Iowa City. Perhaps smokers in Waterloo responded to the novelty of the clinic programs. Des Moines and Iowa City subjects would have had many previous opportunities to enroll in cessation clinics and these subjects may have been more resistant to quitting. It should be noted that at no point did location effects interact with intervention. The order of outcomes was comparable across all three study communities despite the main effects for location. The fact

that the study results were replicated in three separate communities with a relatively large total subject pool lends increased confidence in their generalizability. Ironically, the Iowa City sample which fared most poorly was younger and apparently less habituated (as indicated by lower daily cigarette consumption) than were the other subject samples.

Although cost-effectiveness analyses were not a formal part of the present study, cost considerations are obviously important.[11-12] Costs of programs can be sharply reduced by use of lay volunteers and donated facilities.[6] Training requirements are minimal. Each of the three methods can be learned in a few hours of formal instruction. Costs that are incurred can be largely defrayed by relatively modest fees to participants (the maximum fee per participant in public service applications of the laboratory-derived clinic method is $75.00). Costs should be lower for the ACS method given the requirement of only four hours of participant contact. These lower costs must be weighed against the reduced effectiveness of this method.

It has proven possible to achieve low-cost technology transfer of the laboratory method. Collaboration between laboratory researchers and a voluntary agency (the American Lung Association of Iowa) has proven critical in effecting this transfer. Especially encouraging is the apparent lack of decay in outcome in the transfer between the laboratory and field settings. There have been virtually no net costs to field sites (often community hospitals). Participant fees have defrayed costs of facilitators and promotion (often promotion has occurred through public service messages).

The American Lung Association of Iowa in the 1988–89 fiscal year reported total expenses of $32,438.70 in overseeing the statewide implementation of 111 laboratory-derived public service clinics reaching approximately 1,000 smokers. Expenses included research and evaluation, travel, facilitator training and updates, printing, postage, computer and software, telephone, personnel, advertising and audiovisuals. These expenses were largely offset by income ($18,235.00), fees charged for facilitator training and updates ($2,982.08), and a grant from an insurance company ($3,187.34). Net expenses were $8,034.28 or approximately $8.03 for each smoker who went through the program. Cost per abstinent smoker at 12 months was $26.77. Considerable public health impact might be achieved through widespread application of this type of collaborative model involving voluntary agency dissemination of validated cessation clinic programs.

The disappointing overall success rates suggest the need for further intervention among non-abstinent subjects. Prevalence outcomes at one year considerably exceeded sustained abstinence figures. Of those subjects who reported abstinence at one year, 41 percent had relapsed during the follow-up period. Schachter[13] has noted that cumulative success rates in self-initiated quitting substantially exceed commonly reported clinical findings for single quit attempts.

Perhaps the spontaneous initiation of renewed quit attempts observed in the present study can be facilitated through systematic intervention. Little research has been devoted to recycling individuals who fail to sustain abstinence. Too much emphasis may have been devoted to one-shot (albeit relatively intensive) treatment approaches. The need for recycling is underscored by the fact that outcomes in our more recent studies have been generally less successful than was true for studies that we undertook five to 10 years ago. This is true despite the fact that smoking history and demographic characteristics of our clinic enrollees have remained remarkably similar over time. More emphasis should be placed on viewing cessation as a process rather than as a discrete event.[14] Given that most quit attempts end in failure, the importance of eliciting multiple attempts over extended periods of time becomes obvious.

APPENDIX

American Lung Association Clinics

The basic American Lung Association clinic format consists of an orientation session and seven additional 90 minute to two-hour sessions over a seven-week period. The first session provided an in-depth discussion of the general health effects of smoking. Emphasis was placed upon the fact that subjects can quit and that help and encouragement to do so would be available in the program. The second session introduced coping strategies for confronting urges to smoke. By the third session, subjects were expected to make a personal commitment to quitting and to state this commitment publicly at the session. Quit Day occurred at this third session. At a fourth session held two days later benefits of quitting were reiterated and possible withdrawal symptoms were discussed.

The remaining sessions were focused upon maintenance and included a consideration of healthier, more enjoyable nonsmoking life-styles. Discussion included relaxation techniques, exercise or physical fitness programs, avoiding weight gain, and coping with tension. Session 7 was a celebration in which subjects elected options such as a wine and cheese party or dinner at a restaurant. This event was intended to emphasize enjoyment of their new life-style (and also to provide practice in confronting what for many might be a difficult situation). At this time awards were given to everyone who completed the program. Although the American Lung Association clinic has approximately one-half the sessions of the Lando clinic, total clinic contact hours for the two methods are approximately equal. Twelve of 31 American Lung Association clinics followed a modified format adopted by the American Lung Association as an alternative for worksite settings. This modified format entailed 10 one-hour sessions. No significant differences in outcome were found between the traditional and modified formats.

American Cancer Society Clinics

Treatment consisted of an orientation session plus four, one-hour group sessions over a two-week period. Emphasis was placed upon individualization of program content by the facilitator and eliciting the active involvement of group members. The focus of treatment was again upon coping strategies and a positive smoke-free life-style. However, instructions to clinic leaders placed relatively more weight upon individual situations as opposed to group process. Subjects were informed that smokers who take two weeks to quit smoking are as likely to be successful as are smokers who take two months to quit. Quitting is again described as a two-part process: 1) stopping, and 2) staying stopped. Unlike the other clinic methods there is no set target date for abstinence, although participants are expected to quit during the latter half of the program.

Laboratory Clinics

Treatment consisted of 16 sessions (approximately 45 minutes to one hour in length) over a nine-week period. The first three weeks were devoted to preparation for quitting and the final six weeks to maintenance. A specific preparation technique involved a nicotine fading procedure adapted from that originally described by Foxx and Brown.[15] Subjects switched brands on a 30–60–90 percent weekly reduction schedule. They were free to choose any cigarette that provided the required nicotine dosage. Subjects also underwent a smokeholding technique similar to that described in 1979 by Kopel, Suckerman, and Baksht* during two clinic sessions held the week prior to the quit date. Smokeholding consisted of two sets of 10 trials separated by a five-minute break.

Subjects attended eight maintenance sessions over a six-week period following the quit date. Considerable emphasis was placed upon relatively unstructured group discussion. In addition, subjects signed contracts calling for specific rewards for abstinence. Group discussion tended to emphasize problem-solving. Subjects were encouraged both to discuss their own problems and to suggest possible strategies for other group members. The laboratory clinics are described in greater detail elsewhere.[6,16]

*Kopel S, Suckerman K, Baksht A: Smoke holding: an evaluation of physiological effects and treatment efficacy of a new nonhazardous aversive smoking procedure. Paper presented at a meeting of the Association for Advancement of Behavior Therapy, November 1979

ACKNOWLEDGMENTS

The current work was supported by Grant #RO1 DA03950 from the National Institute on Drug Abuse.

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National Nursing Shortage Commission Announced

A 15-member Commission on the National Nursing Shortage has been established, as announced in the February 23 *Federal Register*. The Commission will advise federal officials—including the DHHS Secretary, the Assistant Secretary for Health, and the HRSA Administrator—on projects implementing the recommendations of the Secretary's Commission on Nursing. The projects should attempt to make optimal use of available resources from federal, state, and local government and private organizations. The recommended projects will focus on five areas:

- Recruitment and the educational pathway;
- Retention and career development;
- Restructuring nursing services and effective utilization of nursing personnel;
- Data collection and analysis requirements; and
- Information systems and related technology in nursing.

The Commission will consist of four ex-officio members and 11 members appointed by the Secretary. The ex-officio members will be:

- A Health Care Financing Administration representative;
- The Chief Nurse Officer of the Public Health Service;
- The Director of the Division of Nursing, HRSA; and
- The Director of the National Center for Nursing Research, National Institutes of Health.

The appointed members will be selected as follows:

- Four from the nursing community;
- Four from health care providers and other nurse employers;
- One from third party payers;
- One representing economics and data policy fields; and
- One from the general public.

Caroline Bagley Burnett, MSN, ScD, a registered nurse and health researcher, was selected Executive Director of the new Commission on the National Nursing Shortage. Formerly she was a research consultant and clinical researcher at the National Cancer Institute and, earlier, assistant professor and oncology program director at the Catholic University of America's School of Nursing.

For further information, contact Frank Sis, HRSA, USPHS, DHHS, 5600 Fishers Lane, Room 14-43, Rockville, MD 20857; (301) 443-3377.