One Year Follow-up of the Chicago Televised Smoking Cessation Program

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Abstract: We compared the relative effectiveness of four different conditions of self-help and social support provided to people attempting to quit smoking in conjunction with a televised cessation program:

- Smokers ready to quit were able to request written manuals from hardware stores to accompany a televised program.
- At worksites we provided the written manual to all workers.
- At a random half of the worksites, we also provided training to discussion leaders who subsequently led discussions among smokers attempting to quit with the program.
- At health maintenance organization sites we invited smokers who had requested program materials to participate in similar group discussions at health centers.

In this paper we report one year follow-up results for the above four groups and compare them with previously reported results of a self-help manual alone. Results for the television plus manual condition were better than those of past studies (25 percent non-smoking prevalence and 10 percent continuous cessation one year after the program) and considerably better than the manual alone. None of the other conditions designed to supplement the manual plus television produced better long-term outcomes; we explore the reasons for this. The program did encourage and help over 50,000 Chicago smokers to attempt quitting with the American Lung Association manual, 100 times as many as would have done so without the televised program. At least 15 other similar programs implemented since 1984 multiply this effect. (Am J Public Health 1989; 79:1377–1380.)

Introduction

Self-help approaches to smoking cessation are becoming more popular because they satisfy the desire of most smokers to quit smoking without attending a clinic.1,2 A readily available self-help program is the Freedom from Smoking in 20 Days manual from the American Lung Association (ALA). Davis, et al.,3 reported a randomized evaluation of that manual and three other combinations of self-help materials. The group that received both the cessation and maintenance manuals was most successful, achieving a non-smoking prevalence rate of 18 percent and a continuous abstinence rate of 5 percent after one year. The cessation manual on its own achieved a one year prevalence rate of 15 percent and a continuous non-smoking rate of 3 percent.

Although modifications in self-help material can undoubtedly improve the success of this approach, it seems clear that there will be a limit on how effective it can be. Therefore, it seems prudent to investigate alternatives to supplement and enhance self-help. The use of mass media for this purpose seems particularly appropriate because it is consistent with the self-help approach for a number of reasons.4-5 For example, both self-help materials and television can be used at home, and television broadcasts can reinforce the message in the self-help materials.

Flay reviewed 25 evaluations of televised smoking cessation programs.4-6 In several studies, the manual used was Freedom from Smoking in 20 Days. The mean effects from these conditions suggest that the use of mass media can double the effectiveness of a manual alone, and the addition of some form of social support might increase the effectiveness of the media plus manual programs.

The second conclusion is weak, however, since the number of studies with a social support condition was very small. In addition, estimates of the effects of different conditions were based on different sets of studies of different media programs. Thus, the observed differential effectiveness of social support conditions might have been due to different media programming rather than the addition of the social support.

Social support is a promising but under-researched aspect of the smoking cessation process. Although it is variably defined, it appears to be important in two ways. First, social support helps the individual make the initial decision to quit and then to maintain participation in the program. Second, its presence can help the individual maintain the initial abstinence, particularly during the most stressful periods immediately following the decision to quit.7,8 In the study reported here, we tested the effectiveness of offering support groups at health maintenance organizations (HMOs) or worksites to people attempting to quit with the ALA manual and a televised program.

Methods

We summarize methods and programming here, as they are described in detail elsewhere.9-11 The smoking cessation intervention comprised the American Lung Association's self-help manual, Freedom from Smoking in 20 Days, and a companion series of televised segments that were broadcast in January 1985, during local news hours on the NBC network affiliate station in Chicago (WMAQ-TV, Channel 5 News). Freedom from Smoking in 20 Days was segmented and presented as a daily feature on the 4:30 pm and/or 10:00 pm news over three weeks. Smokers were invited to quit smoking by obtaining a free copy of the manual and viewing the news segments that were designed to be instructional and motivational.

Smokers in the Chicago area could pick up registration forms from the approximately 300 hardware stores, eight

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HMO health centers, 431 corporate worksites, or the voluntary health agency, all of which were co-sponsors of the program. Registration forms obtained from hardware stores were mailed to the voluntary health agency which sent back the self-help manuals. Approximately 50,000 manuals were distributed. A random sample of 1,191 store requesters whose request reached the voluntary health agency within three days of program start were selected for inclusion in the evaluation.

HMO requests for program materials were fulfilled on the spot by health center staff. A random sample of 212 HMO requesters were offered three weekly meetings during the course of the program. Those who attended met with trained counselors in small groups. Trained counselors facilitated group discussions, provided social support directly, and promoted mutual support among group members.

Forty-three cooperating worksites were randomly assigned from matched blocks (by size) to group discussion or no group discussion conditions. Smokers were recruited throughout both sets of worksites, and requests for materials were fulfilled by company coordinators. The 233 participants in group discussion worksites were offered group meetings twice a week, where trained group leaders facilitated discussion, provided direct social support, and encouraged mutual social support among group members. One hundred and ninety-two smokers participated in the study in worksites without discussion— they simply received the manuals from coordinators.

Thus, four groups were formed. Store requesters received the self-help manual and could view the televised segments. HMO requesters received the self-help manual, could view the televised segments, and were also offered group or individual counselling. Workers at some worksites were offered the manuals and could view the televised segments. Workers at other worksites were offered group discussion in addition to the manual and the televised segments. Results for these four groups are compared with those of quit attempters using only the ALA manual (as reported by Davis, et al).

All available study participants were interviewed by phone immediately after the program, and at three-month and one-year follow-ups. Results from the immediate and three-month follow-ups have been reported elsewhere. At the one-year follow-up, all but 116 (12.2 percent) of the store requesters sample, 26 (13.2 percent) of the HMO sample, 18 (7.7 percent) of the worksite with group discussion sample, and 16 (8.3 percent) of the worksite without group discussion samples were interviewed. At the one-year follow-up, respondents were asked about their current smoking status, smoking-related behavior (e.g., temptations and slips, participation in other smoking cessation activities) since the three-month follow-up, and any further use of program materials.

Results

Demographics

The three populations (store, HMO, and worksite) were rather similar, being 62 percent female of an average age of 43. [Davis, et al, did not report the demographic characteristics of their subjects, but they did report a comparable mean number of prior quit attempts (3.2.)] Worksite participants were more likely to be female (72%, 95% CI = 68, 76). Subjects had been smoking an average of 24 years and an average of 30 cigarettes per day. They reported an average of three prior quit attempts; 31 percent had previously quit for six months or more. HMO subjects were more likely to have previously quit for six months or more (37%, 95% CI = 29, 45).

Participation

All four groups reported referring to the manual equally often (2–6 times) though worksite subjects who were offered group discussions referred to the manual more often than participants in the other worksites. All groups rated the manual as fairly helpful. Store requesters tended to view more of the television segments than other participants (mean number = 3.5 at 4:30 pm and 5.8 at 10:00 pm, compared with approximately 1 and 3 segments at 4:30 and 10:00 pm, respectively, for all other subjects); they were also more likely to have viewed a subsequent televised cessation program in November 1985 (40 percent compared with 23 percent). Worksite subjects were more likely than others to have referred back to the manual during the year after the program (36 percent compared to 20 percent) and to have participated in other cessation programs during the three months immediately after the program (7 percent compared with 3 percent).

Smoking and Quitting

Continuous quit rates and the prevalence of non-smoking at each follow-up are shown in Figures 1 and 2. Regarding continuous quit rates, participants in the worksite with group discussion [W(G)] condition did twice as well as participants in worksites without group discussion [W(NG)] throughout. However, neither of the worksite groups did as well as the HMO and store requester conditions by one year follow-up. The HMO group condition did no better than the store requesters but it included 62 percent who did not attend any of the face-to-face meetings (they either declined or accepted but did not show up). HMO group attenders were more likely than nonattenders to be quit at the immediate
effectiveness. This is certainly true of the HMO group, where only about two-thirds of those offered group sessions agreed to participate and then only about half of those actually attended—yet there were no significant differences between these three groups by three-month follow-up. In other analyses we found that naturally occurring self-selected variation in social support within the store requesters related to maintenance even though our attempted manipulation across groups did not. This pattern of results suggests the need for stronger social support manipulations in future media-based programming.

The store requesters were significantly more likely than other groups to view a televised smoking cessation program 10 months later. The extent to which the one year results are due to "reinforcement" by the second program is unknown, but it is probably at least a partial explanation for the superiority of the store requester condition. The extent to which the second program contributed to the final results does not, however, detract from the superior findings for the store requester condition compared to the other conditions, because subjects in all conditions had an equal opportunity to view the second program.

This study has found that offering social support to participants in a self-help plus televised cessation program did not improve long-term maintenance of smoking cessation. We identified two possible reasons for this. First, some of the manipulations designed to increased social support may not have done so. Second, people may not have accepted it, as in our HMO condition.

The positive findings from this study are that televised smoking cessation programs with proven manuals can increase the effectiveness of the manuals, and that self-help manuals plus televised programming can be very cost-effective. Not only did the televised program with manual produce better results than the ALA manual alone,3 but more people attempted to quit when a television program was offered. Over 50,000 people obtained manuals for the televised program described here, compared with less than 500 per year before offering a televised program.** Subsequent to the reported experience, the Chicago Lung Association has implemented two similar televised smoking cessation programs12 and several programs addressing other health areas such as stress, fitness, nutrition, AIDS.13 Subsequent to the Chicago experience, at least eight other American Lung Association affiliates have implemented at least 13 similar television series using the ALA Freedom from Smoking in 20 Days manual, and at least nine others are in various stages of planning.†† While the cost of the television programs was significantly higher than the cost of manuals alone, these costs were carried by the television station. Without this program, the funds would have been used for programming with less health benefits for viewers. In addition, within this study, the TV plus manual condition was the least expensive and the most effective and therefore the most cost-effective.

**Personal communication, John Kirkwood, Executive Director, Chicago Lung Association.
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REFERENCES


Alzheimer’s Family Relief Program

Offers Help to Patients, Caregivers

One of the leading health care concerns today is the growing number of people stricken with Alzheimer's disease, affecting 4 million Americans and costing the nation an estimated $88 billion annually.

The American Health Assistance Foundation (AHAF) is a nonprofit group that funds scientific research in the area of Alzheimer’s, coronary heart disease, and glaucoma. Since AHAF was established in 1973, over $18.5 million has been awarded in scientific grants.

Beginning in 1988, AHAF began the Alzheimer’s Family Relief Program which distributes grants of up to $1,000 to Alzheimer’s patients and their caregivers. The money can be used for medication, short-term nursing care, respite care, or other costs associated with around-the-clock care of an Alzheimer’s patient.

AHAF has prepared a brochure which describes specifics of the Alzheimer’s Family Relief Program, and a number of other booklets, all of which are free of charge on request to AHAF. The various books are titled:

- Understanding Alzheimer’s Disease
- Alzheimer’s Disease: A Family Survival Guide
- Alzheimer’s Disease: Legal and Financial Facts You Should Know
- Caring for the Alzheimer’s Patient at Home: Tips for Coping
- Alzheimer’s Disease: The ABCs of Diagnosis
- Caring for an Alzheimer’s Patient Across the Miles
- Coping Families Contend with the Crisis of Alzheimer's Disease
- Facts about Alzheimer’s Disease (brochure)
- Alzheimer’s Research Review (newsletter and reader exchange)

To obtain copies of any of these materials, contact: American Health Assistance Foundation, 15825 Shady Grove Road, Suite 140, Rockville, MD 20850. Tel: 1-800/227-7998.