Evaluation of "Guia para Dejar de Fumar," a Self-help Guide in Spanish to Quit Smoking

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Free copies of the "Guia para Dejar de Fumar" are available from the Cancer Information Service. Telephone 1-800-4-CANCER.

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Synopsis

Because of the absence of culturally appropriate self-help smoking cessation materials for Latinos, a new Spanish language cessation guide, "Guia para Dejar de Fumar," was developed and evaluated. It was distributed as part of a community-wide intervention to decrease the prevalence of smoking. The "Guia" is an attractive full-color booklet written in universal Spanish that uses simple text and numerous photographs. Motivation to quit smoking is emphasized, and graphic demonstrations of the adverse health effects of smoking are included. A menu of quitting and maintenance techniques is presented.

A total of 431 smokers were identified for evaluation at approximately 3, 6, and 12 months after receiving the "Guia." Self-reported quit rates declined from 21.1 percent at 2.5 months to 13.7 percent at 14 months; 8.4 percent of the sample had a validated quit status by saliva cotinine test at 1 year. Persons older than 44 years were more likely to remain nonsmokers, but sex, education, acculturation score, and cigarettes smoked per day did not predict smoking cessation.

The components of the "Guia" most mentioned by those who were surveyed were the graphic photographs, the health emphasis, and the overall format. The authors concluded that the "Guia" is an appropriate self-help smoking cessation booklet for Spanish-speaking Latinos in the United States.

CIGARETTE SMOKING is the leading cause of premature death and disability in the United States, and the effort to expand the availability of smoking cessation techniques is a public health priority. A recent report comparing three smoking cessation clinic programs found 1-year quit rates of 12 to 22 percent (*1*), but these techniques are expensive and are preferred by a small minority of smokers who want to quit (*2–4*). Although early evaluations of self-help smoking cessation materials showed that these have little effect in achieving nicotine abstinence (*5*), recent studies report a nonsmoking prevalence of 10 to 18 percent after a year of followup (*6–10*). Furthermore, self-help manuals are relatively inexpensive, easy to distribute, and have the potential to reach the majority of smokers interested in quitting on their own as part of a minimal contact intervention (*11*).

Although an unprecedented number of self-help smoking cessation manuals are commercially available, few materials have been developed in Spanish for Latino smokers in the United States. Smoking behavior among Latinos differs from that of whites who are not Latino, with a similar or higher smoking rate among Latino men and a lower rate among women (*12–15*). In regional and national surveys it was found that a substantial proportion of Latino smokers report consuming less than 10 cigarettes a day (*12–14*). Although differences in the way a cigarette is smoked may permit greater than usual nicotine absorption, the fact that Latino smokers report fewer cigarettes per day implies that

they are less dependent on nicotine. Thus Latinos may be more likely to quit smoking with an appropriate minimal contact intervention. Furthermore, Latino cultural characteristics that heighten the importance of the family (*16*) and the need for positive social interactions (*17*) are additional elements that may help promote smoking cessation by self-help methods.

As part of a community intervention to promote smoking cessation among Latinos, we developed and have used a Spanish language self-help guide to quit smoking. This report describes the steps followed in the development of the "Guia para Dejar de Fumar" (*18*) and the results of an evaluation of its effectiveness with Latino smokers.

Methods

The contents of the "Guia para Dejar de Fumar" (subsequently referred to as "Guia") was based on a simplified version of the theoretical phases of change in smoking behavior (preparation, quitting, and maintenance of abstinence) proposed by Prochaska and DiClemente (*19*). Reviews of existing English language manuals, our experience in working with Latino smokers both as individuals and in groups, and ethnic differences identified between Latino and non-Latino white smokers in a study of attitudes and expectancies of smoking and quitting (*20–24*) contributed important elements that were incorporated into the final draft of the "Guia."

Extensive pretesting of all aspects of the "Guia" was conducted at each stage of development. Volunteer Latino smokers and nonsmokers, recruited from community clinics and vocational schools, were engaged in individual or focus group discussions regarding specific content, design, photographs, and type font size. Pretesting with community members contributed to identifying those techniques that would be most appropriate, appealing, and credible, and this process complemented the authors' opinions. Pretesting the "Guia" also provided information on the relatively low-grade reading levels of the target population, the effectiveness of color photographs, the possible unwillingness of Latinos in pretest groups to follow a regimented quit-smoking program, and the importance of dealing with the social pressure to smoke.

Description of the "Guia"

The "Guia" is a 36-page booklet, 11 by 8 1/2 inches, printed in full color on glossy paper. The first section focuses on motivation to quit smoking and relies primarily on information about adverse health consequences. The graphic effects of smoking are shown by contrasting photographs of a lung with a malignant tumor and a normal lung, an artery diseased with atheromas and a normal artery, and a smoker's more wrinkled skin and a nonsmoker's less wrinkled skin. These photographs were included because in pretesting cessation techniques with groups and in our own research, Latino smokers requested demonstrations of what the adverse effects of smoking looked like (*24*). In addition, the "Guia" points out the immediate physical consequences of smoking, the effects of smoking on the family, the costs of continued smoking, and the benefits of quitting.

The second section summarizes potential quitting techniques using a menu format as opposed to a regimented program. Ways to use and enhance will power (*voluntad propia* in Spanish) to break the smoking habit are emphasized because we found that Latino smokers perceived will power as an effective and useful technique. Work with cessation groups and the pretests of techniques resulted in less emphasis on advance preparation and on setting a definite quit date. Latinos preferred to quit cold turkey and use *voluntad propia* almost exclusively, but other cessation techniques commonly recommended, such as self-monitoring, are also included. Physical activities and relaxation techniques to help smokers cope with nicotine withdrawal symptoms and to resist the urge to smoke are suggested.

Finally, the section on nonsmoking maintenance and relapse prevention illustrates techniques to resist the urge to smoke as a result of social situations and emotional stress. The text addresses the need for Latino former smokers to learn to say "no" to cigarettes in a culturally polite way. Advice on eating low-fat foods, avoiding sweets, moderating alcohol intake, and increasing exercise was included to help limit weight gain and to provide alternatives to smoking. Methods to cope with relapse episodes and avoiding the associated feeling of failure are also included.

To enhance the identification of the readers with the problems associated with smoking and the suggested techniques to quit, the "Guia" includes 20 testimonials from smokers to emphasize the principal ideas. Color photos of volunteer Latino community members giving their testimonials or engaged in the recommended activities are used throughout to illustrate the main concepts. The text is written using short and simple phrases in univer-

sal (broadcast) Spanish. The major points are in boldface followed by supporting ideas with bullets.

Because of the *familialismo* component of Latino culture (*24*), a strong emphasis on how smoking affects interpersonal relationships in the family as well as the health of nonsmokers was included. For example, these messages point out that smoking is a bad example for children, that not smoking is a great gift to give your family, and a diploma certifying nonsmoking status that is included in the manual is to be shared with the entire family. The "Guia" was designed as a booklet for the entire family, so that nonsmoking members are encouraged to give it to a smoker in the family.

Subjects

Between December 1987 and April 1988, 10,875 free copies of the booklet were distributed in the San Francisco Bay area through community clinics, hospitals, health fairs, churches, community meetings, and small businesses. Smokers were eligible to win a prize in a contest independent of their quit status by returning a completed postcard that was included in approximately 2,000 copies of the "Guia." Data collected included telephone number, age, sex, country of birth, and number of cigarettes smoked per day at the time that the "Guia" was received. The sample for this report consists of the 431 smokers who provided this information.

Evaluation

Three followup telephone interviews were planned for 3, 6, and 12 months after the return of the postcard. The questionnaires included standard demographic items, a 5-item acculturation scale (*25*), ascertainment of smoking status, past smoking behavior, and evaluation of the presentation of cessation techniques suggested in the "Guia." On the third evaluation, self-reported quitters were asked about withdrawal symptoms, and smokers who had quit for at least 7 days, but relapsed, were asked about the situations and feelings at the time of relapse. All interviews were conducted in Spanish.

Self-reported quitters at the third evaluation were asked to provide a sample of saliva to validate nonsmoking status (*26*). Saliva samples were collected in person using standard methodology, and cotinine was measured using the gas liquid chromatography method described in detail elsewhere (*27*). Persons with saliva cotinine levels of less than 0.057 micromole per liter (μM per 1) (10 nanograms per milliliter [ng per ml]) were considered to be valid nonsmokers. Continuous nonsmokers were defined as those who reported having quit at all three of the evaluations, and their status was confirmed by the saliva cotinine test.

The first interview was completed at an average of 2.5 months for 297 smokers (68.9 percent), the second interview was completed at an average of 8.2 months for 253 smokers (58.7 percent), and the third interview was completed at an average of 14 months for 253 smokers. Of the 431 smokers, 189 (43.9 percent) completed all three evaluations, and an additional 56 (13 percent) completed the third interview and either the first or second interview. Smokers who were not interviewed at a given interval were assumed to have continued smoking. Data were analyzed using standard techniques.

Results

Of the 431 smokers, 281 were men (65.2 percent) and the mean age for the entire sample was 36.5 years; standard deviation (SD) = 13.5. The national background of the sample was Mexican American 60.6 percent, Central American 22.7 percent, and other Latinos 7.7 percent, with only four subjects born in the United States. Country of origin was missing for 34 smokers (7.9 percent). Mean educational level for the sample was 10 years of formal education. Acculturation was measured in the 297 subjects responding to the first followup interview, with 96.6 percent scoring less than 3 on the 5-point scale and classified as less acculturated. At the time that the "Guia" was received, the 281 men reported an average of 14.9 (SD = 10.9) cigarettes per day, and the 150 women reported and average of 9.8 (SD = 8.2) cigarettes per day.

Self-reported quit rates by sex, age, and cigarette consumption at the three followup interviews are shown in table 1. Overall, self-reported quit rates declined from 21.1 percent at 2.5 months to 13.7 percent at 14 months. Of the 59 smokers who reported having quit at the third interview, 37 submitted saliva samples for cotinine measurement, 9 reported smoking when asked to submit a sample, 3 refused saliva examinations, and 10 had moved or were not able to be recontacted. A total of 36 self-reported quitters had cotinine levels $<$ 0.057 μM per 1 (10 ng per ml), and thus, 8.4 percent of smokers who received the "Guia" and returned postcards had a validated quit status at 14 months. There were 27 self-reported nonsmokers at all three interviews, and 19 (4.4 percent of the

Table 1. Self-reported and validated quit status of smokers receiving the Guia

Characteristic	Total number	Self-reported nonsmokers at— 2.5 months Number	2.5 months Percent	8.2 months Number	8.2 months Percent	14 months Number	14 months Percent	Saliva cotinine <0.057 μM per l Number	Saliva cotinine <0.057 μM per l Percent
Sex									
Men	281	58	20.6	49	17.4	35	12.5	19	6.8
Women	150	33	22.0	31	20.7	24	16.0	17	11.3
Age									
16–29 years	150	37	24.7	27	18.0	18	12.0	9	6.0
30–44 years	175	36	29.3	35	20.0	23	13.1	13	7.4
45–78 years	101	18	17.8	18	17.8	18	17.8	14	13.9
Smoked per day									
1–9 cigarettes	182	47	25.8	37	20.3	29	15.9	17	9.3
10–19 cigarettes	102	22	21.6	19	18.6	10	9.8	8	7.8
More than 20 cigarettes	145	22	15.2	24	16.6	20	13.8	11	7.6
Total	431	91	21.1	80	18.6	59	13.7	36	8.4

total) were confirmed as continuous nonsmokers by saliva cotinine.

Smokers older than 44 years of age were more likely to have a validated quit status after 1 year ($\chi^2 = 4.13$, $P = .04$), but sex, education, acculturation score, and cigarettes per day did not predict smoking cessation. Data on whether a smoking spouse or partner was in the home, self-assessed family support to quit, and whether the subject perceived that cigarettes help to "calm your nerves" were available for 253 participants. Although a smoking spouse resulted in 5 of 57 (9 percent) validated nonsmokers compared with 21 of 138 (15.4 percent) for those without a smoking spouse and 9 of 57 (16 percent) of those without a partner, this difference was not statistically significant ($\chi^2 = .95$, $P = .33$). In addition, self-assessed family support (strong, neutral, weak) and smokers' perception of whether cigarettes calm your nerves did not predict validated quit status ($\chi^2 = 1.66$, $P = .19$).

Among the self-reported smokers at the third evaluation, the mean number of cigarettes consumed per day was 6.5 (SD = 5.4) for the 121 men and 5.5 (SD = 4.8) for the 73 women. Of these smokers, 131 (30.4 percent of the total sample) reported quitting for at least 24 hours an average of 3.4 times during the preceding year.

At the first followup interview, subjects were asked to assess the "Guia." Of the quitting techniques the booklet suggests, will power or *voluntad propia* was mentioned most frequently, but cutting down consumption and use of the cigarette butt jar were also cited. The most frequently liked element (by 177 persons or 41.1 percent of the entire sample) was the photograph contrasting a normal lung and a lung with a cancer. Other elements mentioned by the respondents to this question were the overall format (*presentacion*) of the "Guia" (70 or 16.2 percent), general information about the adverse health effects of smoking (61 persons or 14.2 percent), the family emphasis (32 or 7.4 percent), and the photograph showing a smoker's wrinkles (28 or 6.5 percent). Of the 253 subjects responding to the third interview, 197, or 78 percent, reported having the "Guia" in their home or that they had given it to a friend. Only 56 subjects (22 percent) stated that it was lost or discarded.

A total of 73 smokers were able to quit for at least 1 week and subsequently relapsed. Data on reasons for starting again, feelings at the time of relapse, and where the first cigarette was obtained are presented in table 2. Relapse occurred at 1 week for 32 percent, between 8 and 21 days for 20 percent, and after 21 days for 48 percent. Two-thirds relapsed in the company of a smoker, usually at work (22 percent) or at a social event (24 percent).

Discussion

The results need to be considered in light of the study's limitations. First, it was not an experiment comparing different self-help methods, and thus the validated quit rate found may be spontaneous and unrelated to the "Guia." A similar cohort of smokers who did not receive the "Guia" were not studied, and thus our survey's responses may reflect the natural history of smoking cessation in a

Table 2. Relapse behavior among 73 Latino smokers

Circumstances of relapse	Number	Percent
Feelings at time of relapse:		
Relaxed or rested	43	59
Nervous or worried	40	55
Angry or aggressive	9	12
Depressed	33	45
First cigarette obtained from?		
Offered	28	38
Purchased	18	25
Asked from a friend	15	21
Had it	12	16
Why did you start again?		
Desire to smoke	22	29
Family problems or nerves	14	19
Party or work	13	17
Accident	7	9
Other	19	25

self-selected population. Second, more than 40 percent of the sample was lost to followup interviews after the initial response. However, we assumed that all nonrespondents continued to smoke and, as a result, we may have actually underestimated the effectiveness of the "Guia." Third, the "Guia" was distributed and evaluated within the context of a community-wide smoking cessation intervention, which may have further enhanced its effectiveness. Similar results may not be obtained in the absence of additional smoking cessation efforts. Finally, the "Guia" was developed and evaluated with Latinos of Mexican and Central American background, and it may not be as acceptable and effective among other Latino subgroups.

Despite these limitations, the validated quit rate of 8.4 percent at a mean followup of 14 months and a continuous nonsmoking rate of 4.4 percent among 431 Latino smokers who received the "Guia" suggests that a culturally appropriate, self-help smoking cessation manual may be an effective approach to promoting nonsmoking among this population. Although the reported nonsmoking prevalence at 1 year is higher in recent studies that used English language materials (*6–9*), none of these studies confirmed quit status with a biochemical measure. For example, averaging across four experimental groups, Davis and colleagues (*6*) reported a nonsmoking prevalence rate at 1 year of 16 percent even though the continuous nonsmoking rate was only 3 percent. If these self-reported nonsmokers were tested for saliva cotinine, the confirmed nonsmoking rate would be expected to decrease somewhat as in other studies evaluating cessation techniques (*28–30*). Although we were unable to achieve this high level of nonsmoking prevalence at 1 year even by self-report, this study is only the first efficacy evaluation of a Spanish language smoking cessation booklet in the United States. Improvement in the self-help materials and combining the booklet with appropriate minimal contact interventions (for example, physician counseling) may further enhance the "Guia's" effectiveness.

Our approach to developing the "Guia" was similar to the experience described by Strecher and colleagues (*31*) in developing the new American Lung Association self-help guide. By writing a Spanish language guide our target audience was well-defined, but the relatively low-grade reading levels in Spanish and the importance of visual evidence with color photographs only became evident during the pretesting. The fact that a majority of smokers, even those who were unable to quit, have kept the "Guia" or given it to a friend would imply that an attractive booklet is more likely to be used. Pretesting results also led us away from presenting a regimented day-by-day plan for quitting with emphasis on setting a quit date. We chose to recommend a menu of quitting strategies without a structured time frame and maintained a longer section on motivation.

Cummings and colleagues (*7*) compared format (more structured to a less structured menu) and quitting instructions ("cold turkey" compared with gradual reduction) in 1,534 smokers and found no effect on smoking cessation rates at 6 months. These authors recommend, and the results of this evaluation would support, including information aimed at motivating cessation and use of a less structured menu offering the smoker a variety of quitting strategies.

The photographs contrasting a normal lung with one with a malignant tumor were the most frequently cited components of the "Guia." Although subjects may have simply remembered the graphic photograph over all other elements, the importance of including realistic and concrete visual depictions of the adverse health effects of smoking should not be overlooked. An abstract drawing pointing out the multiple body sites affected by cigarette smoking may be less offensive to some but, at least in this study, it was remembered by few. Although smokers who are precontemplators and not motivated to quit may not have reacted as favorably to the photograph of lung cancer, avoiding a graphic type of photograph because "scare tactics" alone are not effective may need to be reconsidered. Within a culturally appropriate context that pro-

vides specific guidelines on how to change a behavior or where to obtain additional information, graphic photographs may have a potential role in the development of health education materials for Latinos.

Maintenance of nonsmoking status among smokers who are able to quit will need greater emphasis in a future revision of the "Guia." The fact that an additional 73 smokers (17 percent) were able to quit but relapsed emphasized this point. These Latino smokers who relapsed were unlikely to have done so as a result of withdrawal symptoms since nearly half spent at least 3 weeks without smoking.

The importance of smoking in social settings is shown by the fact that two-thirds were in the company of another smoker at the time of relapse and that 38 percent were offered their first cigarette. Although a majority of smokers felt relaxed at the time of relapse, negative emotions were also associated with returning to cigarettes. Further study of relapse behavior among Latinos compared with whites who are not Latino is needed.

The experience of developing and evaluating the "Guia" can be applied to other health promotion and disease prevention materials targeting Latinos. Common points of importance include starting with the language to be used in the materials, extensive pretesting of all aspects of the intervention materials, and providing culturally appropriate examples that include familiar faces and settings. It is our experience that printed health education materials for Latinos need to be attractive, full-color, and use high-quality paper and many photographs. Although this is a more expensive approach, potential users are less likely to discard an attractive manual such as the "Guia," thus maintaining the possibility that it will be read in the future.

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Tobacco Advertising in Retail Stores

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Synopsis.

Recent studies have described tobacco advertising in the print media, on billboards, and through sponsorship of cultural and sporting events. However, little attention has been given to another common and unavoidable source of tobacco advertising, that which is encountered in retail stores. In July 1987, we conducted a survey of 61 packaged goods retail stores in Buffalo, NY, to assess the prevalence and type of point-of-sale tobacco advertising. In addition, store owners or managers were surveyed to determine their store's policy regarding tobacco advertising, receipt of monetary incentives from distributors for displaying tobacco ads, and willingness to display antitobacco ads. Six types of stores were involved in the study: 10 supermarkets, 10 privately owned grocery stores, 9 chain convenience food stores that do not sell gasoline, 11 chain convenience food stores that sell gasoline, 11 chain pharmacies, and 10 private pharmacies.

Two-thirds of the stores displayed tobacco posters, and 87 percent had promotional items advertising tobacco products, primarily cigarettes. Larger stores, and those that were privately owned, tended to display more posters and promotional items. Eighty percent of tobacco product displays were for cigarettes, 16 percent for smokeless tobacco products, and 4 percent for cigars and pipe tobacco. Convenience stores selling gasoline had the most separate tobacco product displays. Of tobacco product displays, 24 percent were located adjacent to candy and snack displays. Twenty-nine of the 61 store owners or managers indicated that their store had a policy regulating the display of tobacco ads and tobacco product displays. Policies dealt primarily with the location of tobacco posters (for example, no ads in the window) and number of product displays. Only 14 shop owners or managers indicated that they had previously displayed antitobacco information; more than half (31 of 61) said that they would be willing to display antitobacco ads.

In many stores space availability is a barrier to displaying antitobacco information. Materials should be designed that have some utility for the store, such as posters that list store hours or directional information (that is, in and out signs). Antitobacco messages could also be displayed on checkout dividers, checkout mats, shopping carts, shopping bags, and milk cartons. In chain stores, decisions regarding the display of antitobacco information are likely to be made at the corporate level. Standards encouraging retailers to adopt more responsible policies related to advertising and sale of tobacco products should be established.