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Transcreation of Validated Smoking Relapse-Prevention Booklets for use with Hispanic Populations

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Summary

This report describes the steps taken to develop an evidence-based series of current smoking relapse-prevention booklets for Hispanic smokers.

Keywords

Smoking relapse-prevention; Hispanic smokers; self-help materials

The development and dissemination of evidence-based smoking interventions for diverse audiences is paramount to reduce smoking prevalence rates. Hispanic smokers represent one subgroup of smokers that warrant greater attention with respect to smoking cessation as Hispanics constitute the fastest and largest growing minority group, and represent diverse cultures.¹ Although smoking prevalence among Hispanics in the United States (15.8%) is lower than the overall population prevalence (20.6%),² as acculturation increases, so too does smoking prevalence, eventually approaching the level of non-Hispanic Whites.³ Hispanic smokers face challenges associated with language and cultural barriers to preventative health care in the mainland and do not appear to have equal access to the full range of smoking cessation assistance. For example, Hispanics are less likely to receive tobacco screening and counseling from their physicians^{4, 5} and are less likely to have ever used nicotine replacement therapy as compared to non-Hispanic white smokers.^{6, 7} A recent survey of Hispanic smokers who attended a community health fair found that 81.3% had made at least one quit attempt, but none had received smoking cessation counseling, self-help materials, or medication.⁷

Hispanics smoke fewer cigarettes per day than other ethnic groups⁸ and report less nicotine dependence; therefore, they may especially benefit from behavioral skill-building.⁹ Research suggests that culturally tailored interventions can be efficacious,^{10, 11} yet there are few validated substance abuse intervention materials targeted to Hispanics.^{10, 12, 13} The United States Public Health Service's *Clinical Practice Guidelines for Treating Tobacco Use and Dependence* calls for research on the development and validation of interventions for racial and ethnic minority smokers, with attention to language and cultural factors.¹⁴ This recommendation is bolstered by evidence that Hispanic smokers are interested in smoking

cessation assistance,⁷ and that even low-intensity smoking-cessation interventions that are culturally appropriate can be effective with Hispanics.⁸

Smoking Relapse

Among self-quitting smokers, up to 98% resume smoking within one year, and efficacious treatments yield relapse rates of 60–70%.^{14–16} Although well-formulated theories and comprehensive approaches to prevent relapse exist,^{17–19} recent meta-analyses suggest that the efficacy of relapse-prevention interventions is modest at best.^{20,21} Moreover, relapse-prevention techniques were initially developed to be incorporated into intensive, face-to-face cessation counseling interventions. However, few smokers are willing to enroll in such intensive programs.²²

The purpose of this report is to describe the series of steps that led to the development of smoking-relapse prevention materials for Hispanic smokers and to promote these evidence-based tools.

Self-Help Relapse-Prevention

Over the past 15 years, our group has been developing and testing cost-effective, attractive, and easily disseminable approaches to deliver smoking relapse-prevention interventions. An initial needs assessment revealed two approaches acceptable to former smokers: a telephone hotline and receiving information through the mail.²³ A clinical trial comparing these approaches found that the hotline was poorly utilized and ineffective, whereas a series of eight relapse-prevention booklets (now titled *Forever Free*) was highly effective at reducing relapse among individuals who had three months or less of abstinence at the time of program enrollment.²⁴ By the 12-month follow-up, the booklets had reduced the smoking rate by nearly two-thirds (relapse rates for the relapse-prevention booklets condition and control condition were 12% vs. 35%, respectively). A subsequent clinical trial found reduced relapse through 24 months of follow-up; in addition, mailing the booklets as a single packet was as effective as distributing them over the course of one year.^{25,26}

A more recent project aimed to extend the success of the *Forever Free* booklets to a population of smokers who are particularly prone to relapse, pregnant, and *postpartum* women. Women in general face additional barriers to long-term cessation (e.g., less confidence, fear of weight gain, higher levels of negative mood), but the risk of smoking relapse following childbirth is exceptionally high—up to 85% resume smoking *postpartum*.^{27,28} The original booklet series covered topics such as smoking urges, managing stress, and social support. However, following a formative evaluation,²⁹ the booklets were targeted for this population by adding a booklet intended for the smoker's partner (titled *Partner Support*); adding a new booklet on the transition from pre- to *postpartum* tobacco abstinence (titled *A Time for Change*); and modifying the content of the other booklets. Initial findings indicated that the effectiveness of the booklets at extending abstinence, compared with a control condition, was dependent on the level of reported partner support at baseline. For women above the median in perceived partner support, the *Forever Free for Baby and Me* booklets increased abstinence rates at 8 and 12 months *postpartum* by approximately 15%.³⁰

After these studies, the National Cancer Institute (NCI) disseminated the *Forever Free* booklets *via* the Cancer Information Service and two Websites (cancercontrolplanet.cancer.gov and smokefree.gov), and they were adopted by health departments, medical centers, and tobacco quit-lines throughout the country. Seeking to extend the availability of this low-cost intervention to Hispanic smokers, we undertook

creating Spanish versions of the *Forever Free* and the *Forever Free for Baby and Me* booklets.

Transcreation of *Forever Free* Interventions

We felt a literal translation of the *Forever Free* booklets would not suffice. First, patterns of tobacco use among Hispanics differ from those among non-Hispanic Whites.^{31–33} Second, it would be necessary to adapt and validate the smoking relapse-prevention materials for Hispanic smokers culturally and linguistically,^{34,35} thus we employed methods of transcreation, in which the text is reconstructed to meet the health literacy and informational needs of the group, as well as being translated and culturally adapted.^{36–38} Parallel processes were initiated to create Spanish versions of the *Forever Free* (*Libres para Siempre*) and *Forever Free for Baby and Me* (*Libres Para Siempre Por Mi Beb y Por M*) smoking relapse-prevention booklets.

The NCI outlines a four-stage systematic and iterative model for the development of a health communication/education program.³⁹ In the Planning and Strategy Development stage, our goal was to learn more about our intended audience (i.e., Hispanic smokers) *via* literature reviews and to develop a plan for a culturally appropriate version of the booklets.

Developing and Pretesting Concepts, Messages, and Materials

A certified bilingual translator began by completing the direct text translation from English to Spanish. Differences exist in Spanish vocabulary and tone depending on the country of origin,³⁴ necessitating a multiple review process. To improve clarity of the text, four bilingual professionals from diverse countries independently reviewed the booklets to ensure: the Spanish used in the booklets was understandable to individuals from different Spanish-speaking backgrounds; the 6th grade literacy level was maintained; and any difficult-to-translate concepts and words were identified.

Formative work continued in two distinct phases. For *Phase I*, our goal was to conduct a series of qualitative interviews to generate key themes that reflected the information, skill, social support needs, and cultural values of our intended populations. This goal was accomplished by asking bilingual participants to review the existing *Forever Free* booklets and suggest changes for Spanish-speaking smokers. Areas of discussion included barriers and benefits to quitting, role of support people, and sources of stress and relaxation.

Prior research has proposed methods to enhance the cultural relevance and acceptability of a health intervention.^{40–42} Our findings supported and extended previous studies and are consistent with the conceptualization of cultural sensitivity guided adaptations made at both deep and surface levels as outlined by Resnicow *et al.*⁴³ For example, *familismo*, an important value often reported in Hispanic cultures,^{43,44} was also supported in our formative work. *Familismo* is defined by a strong identification and attachment to the nuclear and extended family.⁴⁴ In the current study, *familismo* (deep level) was reflected in participants' concerns for how their smoking behavior negatively affects family members and how quitting could benefit their family. As a result, the vignettes (stories designed to illustrate the key messages) in the booklets were modified to reflect these themes, thereby increasing the cultural relevance.

We also enhanced the cultural relevance by identifying specific stressors and methods for coping with stress. Stress and negative affect are high smoking relapse risks;⁴⁷ thus it was important the stressors mentioned in the booklets resonated with participants. Because Hispanics are disproportionately represented in lower SES groups, financial strain was cited as a barrier to accessing health care and smoking resources. Additional unique issues not

represented in the English booklets included difficulties with the immigration experience, feelings of loneliness/isolation, and lack of understanding of the health care system. These specific stressors were incorporated into the vignettes. Important cultural values were also reflected in the manner that participants coped with stressors. Therefore, the list of behavioral and mental coping strategies for combating smoking urges were adapted to fit the audience needs (e.g., praying, spending time with family, cooking, dancing).

During *Phase II*, the cultural suitability of the adaptations were evaluated through a series of learner verification interviews that entailed verifying the content for comprehension, attractiveness of the booklet, efficacy, acceptability, and persuasion.^{48, 49} Data collected from this phase resulted in substantial layout, graphic, and visual modifications. Research suggests that health materials lack a sufficient number of Hispanics represented in photos and illustrations,⁴⁰ a concern echoed by our participants. We included a greater number of photos of extended families (e.g., images of children with their parents and grandparents) to reflect *familismo*. In addition, photos were also chosen to reflect the diversity among Hispanic individuals from different countries of origin. Specifically, modifying the images in the booklets enabled diverse individual to see that the intervention was targeted for them.⁴³ More details regarding the transcreation process and additional qualitative findings for this phase of the research and illustrative quotations are described in a separate publication.⁵⁰

Implementing the Program

Consistent with the NCI model described above, our current focus includes continued dissemination, implementation, and evaluation. In addition to placing our materials on NCI websites and regional dissemination of the booklets (throughout Florida), we have distributed the booklets at community health events and health clinics in Puerto Rico. Dissemination efforts are part of an ongoing collaboration between the Moffitt Cancer Center and the Ponce School of Medicine (supported by an NCI Minority Institution/Cancer Center Partnership award).

Assessing Effectiveness and Making Refinements: Adaptation Validation

To close the gap between research and practice, the dissemination of evidence-based information and interventions for use in Hispanic communities must be conducted in a culturally acceptable manner. As an initial step to assess the cultural acceptability of the pregnancy booklets in Puerto Rico, we interviewed health care providers to obtain feedback on the booklets and gain suggestions for culturally appropriate dissemination and implementation.⁵¹ Providers praised the overall quality of the booklets, including the interactive activities, vignettes, and the partner booklet. One key issue raised was the importance and value of interpersonal contact and personal relationships for delivering health information. Participants recommended that the booklets be distributed in person, rather than by mail as done with the original English booklets. For example, they suggested distributing the booklets following *charlas* (health-related themed presentations open to the community), a widely-used medium for providing health information in Puerto Rico.

Current Status and Future Directions

Both the general *Libres Para Siempre* and the *Libres Para Siempre Por Mi Bebé y Por Mí* booklets for pregnant women are now available from the corresponding author. In addition, the *Libres Para Siempre Por Mi Bebé y Por Mí* booklets are available *via* the NCI Website (smokefree.gov). We believe that the process we undertook to transcreate our original *Forever Free* booklets for Hispanic smokers increases the likelihood that our materials are culturally relevant and efficacious. However, it will be necessary to verify, *via* a randomized

controlled trial, whether these booklets indeed retained the efficacy of the original English versions for reducing smoking relapse. Due to the many commonalities in Hispanic subcultures and the need to develop health interventions that can readily be disseminated in a cost-effective manner, we elected to transcreate our materials to be targeted to, and representative of, Hispanic smokers as a group. Future research is needed to investigate whether there is any value of tailoring the materials by sub-group.⁵² Further exploration of possible sub-ethnic differences (i.e., by country of origin) is warranted on topics such as perspectives of smoking relapse and preferred dissemination channels.

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