

Impact of U.S. Antismoking TV Ads on Spanish-Language Quitline Calls



Lei Zhang, PhD,¹ Stephen Babb, MPH,¹ Michelle Johns, MA, MPH,¹ Nathan Mann, BA,² Jesse Thompson, BA,² Asma Shaikh, MPH,² Rene Lavinghouze, MA,¹ Robert Rodes, MS,¹ Ann Malarcher, PhD³

Introduction: Cigarette smoking is a major preventable cause of disease and death among U.S. Hispanics. Tobacco-cessation quitlines have been shown to increase quitting among Hispanics. However, the use of quitlines by this population remains low, especially among Spanish-speaking Hispanics. This study evaluates the promotion of 1-855-DÉJELO-YA (a quitline portal that routes callers to state-specific Spanish-language services) implemented as part of the Centers for Disease Control and Prevention's national *Tips From Former Smokers*[®] (*Tips*[®]) campaign. Additionally, this study examines how media content impacted calls to 1-855-DÉJELO-YA.

Methods: Using National Cancer Institute data on calls to 1-855-DÉJELO-YA from February 2013 to December 2014, multivariate linear regressions were conducted of weekly area code–level call volume as a function of media market–level Gross Rating Points for *Tips* Spanish-language TV ads tagged with 1-855-DÉJELO-YA. The models were adjusted for covariates, including market-level population characteristics and state fixed effects. The data were analyzed from October 2017 through April 2018.

Results: Greater exposure to *Tips* Spanish-language ads was associated with increased calls to 1-855-DÉJELO-YA ($p < 0.001$). On average, each additional 100 *Tips* Gross Rating Points per media market increased calls by 0.56 (95% CI=0.45, 0.67) calls/week/area code, representing \cong 974 additional calls beyond the baseline. Media messages highlighting health consequences of smoking had a greater effect size than messages highlighting health effects of secondhand smoke.

Conclusions: A national Spanish-language quitline number could be a useful cessation resource for Spanish-speaking cigarette smokers. Opportunities exist to increase use of this number through a national Spanish-language media campaign, particularly by focusing campaign messages on the health consequences of smoking.

Am J Prev Med 2018;55(4):480–487. © 2018 American Journal of Preventive Medicine. Published by Elsevier Inc. All rights reserved.

INTRODUCTION

Cigarette smoking is a major preventable cause of disease and death among U.S. Hispanics.¹ Given that 40% of U.S. Hispanics speak Spanish as their primary language, smoking cessation interventions and promotions for Hispanic tobacco smokers may be more effective if tailored to their language preferences and acculturation levels.^{2–5}

Quitlines are an effective tobacco cessation intervention that have the potential for broad reach and are effective with diverse populations, including Hispanics.⁶

From the ¹Office on Smoking and Health, National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention, Atlanta, Georgia; ²Center for Health Policy Science and Tobacco Research, RTI International, Research Triangle Park, North Carolina; and ³McKing Consulting Corporation, Atlanta, Georgia

Address correspondence to: Lei Zhang, PhD, Office on Smoking and Health, National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention, 4770 Buford Highway NE, Mailstop F-79, Atlanta GA 30341. E-mail: lzhang2@cdc.gov.
0749-3797/\$36.00

<https://doi.org/10.1016/j.amepre.2018.05.025>

Quitline use can be increased through mass media campaigns promoting cessation and the quitline telephone number.^{7–9} This appears to hold true for language-specific media campaigns. For example, in Texas, monthly Spanish-language smoking cessation–related calls to the National Cancer Institute’s Cancer Information Service increased from 0.39 to 17.8 calls during a paid media promotion, whereas calls from Latinos to the Colorado quitline increased by 57.6% during a Spanish-language media campaign.^{5,6}

In March 2012, the Centers for Disease Control and Prevention (CDC) launched the first federally funded national tobacco education campaign, *Tips From Former Smokers*® (*Tips*®), which features personal testimonials from former smokers who are living with smoking-related diseases that are intended to motivate adult smokers to quit.^{10–12} The majority of *Tips* ads were tagged with 1-800-QUIT-NOW, a national portal that connects callers to their states’ tobacco cessation quitlines. Because the phrase “1-800-QUIT-NOW” may not be meaningful or memorable to Hispanics who speak Spanish as their primary language, CDC worked with the National Cancer Institute, the North American Quitline Consortium, and the National Latino Council on Alcohol and Tobacco Prevention to establish 1-855-DÉJELO-YA (1-855-335-3569), which means “quit now.” This number routes Spanish-speaking callers to Spanish-language cessation services from their state quitlines. On February 11, 2013, the 1-855-DÉJELO-YA quitline became operational. Following the introduction of this number, CDC created and aired Spanish-language ads¹³ tagged with 1-855-DÉJELO-YA during the 2013 and 2014 *Tips* campaigns to promote the use of state Spanish-language quitline services.

During the 2013 *Tips* campaign, which aired from March 4 through June 23, the Spanish-language *Tips* ads were pulsed (i.e., aired on certain weeks, rather than continuously). In 2014, the *Tips* campaign aired in two phases. During Phase 1 of the campaign, which lasted from February 3 through April 6, the Spanish-language ads (which were the same as the 2013 Spanish-language ads) aired continuously. During Phase 2 of the campaign, which lasted from July 7 through September 7, the Spanish-language ads (which were new) were pulsed, with the ads on air for 6 weeks and off air for 3 weeks. The 2013 and 2014 Phase 1 Spanish-language ads focused on the health effects of secondhand smoke exposure, whereas the 2014 Phase 2 ads focused on the health consequences of tobacco use (e.g., heart disease, cancer, gum disease).

To date, only two studies have assessed the impact of statewide Spanish-language media campaigns on quitline call volume.^{5,6} Neither of these studies were national

in scale or examined the effect of the content of ads. To address this gap in the scientific literature, this study assesses the impact of national Spanish-language *Tips* TV ads, including the content of these ads, on calls to 1-855-DÉJELO-YA. Additionally, this study estimates the dose-response between a standardized measure of media exposure and calls to the Spanish-language quitline. This estimated dose–response relationship could be compared with other media-related studies and may provide critical information for media buy strategies.

METHODS

Study Sample

Data on the number of calls to 1-855-DÉJELO-YA were obtained from the National Cancer Institute for all 50 U.S. states and the District of Columbia from February 22, 2013, through December 28, 2014 (the last full week of 2014). The data represent total call volume (i.e., the total number of incoming calls), rather than the number of unique callers. Each incoming call from the 237 parent area codes was assigned to its corresponding designated market area (DMA), which geographically defines each TV media market. Calls from area codes that overlapped multiple DMAs were assigned to the DMA that contained the largest proportion of Hispanic adult population.

Measures

Exposure to the 2013 and 2014 *Tips* campaigns’ Spanish ads was measured using weekly TV Gross Rating Points (GRPs) in each DMA. GRPs, a measure of media exposure, were defined as the product of reach (i.e., the proportion of the audience that is exposed to a given ad) and frequency (i.e., the number of times the audience is exposed to an ad) during a given period.⁷

Statistical Analysis

To better understand where calls originated, a map was created of the total number of calls to 1-855-DÉJELO-YA by state, from February 22, 2013, through December 28, 2014. In the map, call volumes were categorized into four intervals (<100, 100–300, 301–500, >500), based on the distribution of the call data, where each interval contained at least one observation.

Next, to provide a basic description of the relationship between Spanish-language ad GRPs and calls, a line graph was created of weekly total calls to 1-855-DÉJELO-YA nationwide from 2013 through 2014 and average national weekly TV GRPs across DMAs. To reflect average national GRPs for the Hispanic population, these GRPs were weighted by the Hispanic population in each DMA using 2012–2013 Nielsen data on DMA-level demographics for households with a TV.¹⁴

Finally, four multivariable linear regression models were estimated of calls as a function of DMA-level weekly GRPs for Spanish-language TV ads tagged with 1-855-DÉJELO-YA and several control variables as described below. The GRP variable was scaled to provide coefficients that yielded the increase in weekly calls from a given area code associated with an increase of 100 weekly GRPs in its corresponding DMA. The first three models estimated the effect of *Tips* Spanish-language TV ads on call volume to 1-855-DÉJELO-YA separately for the 2013 (237 area codes × 21

Download English Version:

<https://daneshyari.com/en/article/10222448>

Download Persian Version:

<https://daneshyari.com/article/10222448>

[Daneshyari.com](https://daneshyari.com)