Brief Report

African American Participation and Success in Telephone Counseling for Smoking Cessation

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Abstract

Introduction: Quitlines that provide telephone counseling for smoking cessation have been proved to be effective. All 50 states currently provide free quitline access to their residents; however, little research has been published on African American utilization of quitlines or their success rates.

Methods: This study evaluated how effectively African Americans are served by telephone counseling (quitline) for smoking cessation based on empirical data from 45,510 callers from Texas, Louisiana, Washington, and District of Columbia and randomized clinical trial data from 3,522 participants.

Results: African Americans tended to use a quitline in proportions greater than their proportional representation in the smoking communities in both states and the District. African American quit rates were equivalent to those of non-Hispanic “Whites” as were their levels of satisfaction with the service and the number of counseling sessions they completed. African Americans were more likely to request counseling than non-Hispanic Whites.

Conclusions: This study demonstrates that telephone counseling is a promising tool for addressing health disparities related to smoking among African Americans.

Introduction

Compared with other groups, light to moderate cigarette smoking greatly increases lung cancer risk among African Americans (Haiman et al., 2006). This group is also less likely to quit smoking or use medication to assist quitting, a difference linked to their lower socioeconomic status relative to non-Hispanic “White” smokers (King, Polednak, Bendel, Vilsaint, and Nahata, 2004). However, African Americans participate at high rates in California’s telephone counseling service (Zhu, Anderson,

Johnson, Tedeschi, and Roeseler, 2000; Zhu et al., in press) and have been found to benefit from cessation counseling and provision of nicotine replacement therapy to the same degree that other groups do (Maher et al., 2007; Velicer, Redding, Sun, and Prochaska, 2007; Tinkelman, Wilson, Willett, and Sweeney, 2007). From 2000 to 2010, the American Cancer Society (ACS) provided telephone counseling, including advice on medication use, in numerous states, the District of Columbia (DC), and to diverse other groups, with more than 500,000 smokers using the service. This report summarizes African American participation and success in telephone counseling in Texas, Louisiana, and DC.

Methods

State health departments contracted with ACS to make quitline counseling available to their residents free of charge. The counseling protocol was not targeted or tailored to gender, race, or ethnicity, although it was tailored to address the factors associated with difficulty in quitting and relapse risk for each client individually. In the areas involved in the empirical studies, Louisiana, Texas, Washington, and DC, advertising and promotional campaigns included media and community outreach activities developed specifically for African Americans (District of Columbia Department of Health, 2011; Louisiana Department of Health and Hospitals, 2011; Texas Department of State Health Services, 2011).

With data from 2001 to 2008 in Texas (28,599 clients), 2005 to 2008 in Louisiana (13,861 clients), and 2006 to 2008 in DC (3,050 clients), we counted the number of African American clients and calculated their participation rate as a proportion of their numbers within the state or district population of Quitline callers. Identification as African American was self-reported in standardized counseling intake interviews. The estimated number of smokers in each area and group was obtained using U.S. Census data and available data from behavioral risk surveys in each location.

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To investigate the effectiveness of quitline counseling among African Americans, data from a previously reported study were reanalyzed (Rabius, McAlister, Geiger, Huang, and Todd, 2004). There were 3,522 participants, of which 528 (15%) were African Americans. Data on effectiveness are gathered through telephone interviews in a standardized protocol reported elsewhere (Rabius et al.). Deriving quit rates as recommended by the North American Quitline Consortium (NAQC) (NAQC, 2009), the 30-day point prevalence of abstinence 7 months after program registration was calculated among African American and non-Hispanic White clients separately, with chi-square tests to determine the significance of differences in quitting rates.

To examine quitting success among African American smokers who used the service in the two states and the District, data from clients enrolled during 2006–2007 were analyzed. These included 1,237 African Americans and 3,972 non-Hispanic Whites in Texas, 1,679 African Americans and 3,275 non-Hispanic Whites in Louisiana, and 1,567 African Americans and 81 non-Hispanic Whites in DC. The NAQC-recommended (NAQC, 2009), 30-day point prevalence at 7-month follow-up as a proportion of followed clients was calculated for each of these groups, and chi-square tests were performed to determine whether differences in quitting rates were significant.

Results

In the two states and the District, African American smokers utilized the service at rates exceeding their proportion in the smoking population. In Texas, 18% of the clients were African Americans, from a smoking population in which only 9% are African Americans. The corresponding proportions are 33% and 26% in Louisiana, and 89% and 63% in DC. In all three locations, African Americans were significantly more likely than non-Hispanic Whites to request counseling: 74% versus 67% in Texas, $p < .01$; 79% versus 74% in Louisiana, $p < .01$; and 92% versus 85% in DC, $p < .05$. There were no significant differences in the average number of counseling sessions completed: 1.2 versus 1.2 in Texas, 1.1 versus 1.2 in Louisiana, and 2.1 versus 2.4 in DC.

In the randomized trial, the quitting rates were 10% and 12% among African Americans and non-Hispanic Whites in the groups that received only self-help materials through the mail. The corresponding rates among those who received counseling were 17% and 21%. The treatment effect was statistically significant in both groups ($p < .05$ among African Americans; $p < .001$ among non-Hispanic Whites). The trend toward lower quitting rates among African Americans in both treatment groups was not significant.

In the 7-month follow-up of smokers from the two states and district who enrolled in counseling during 2006–2007, there were no significant differences between African Americans and non-Hispanic Whites in reported 30-day point prevalence of abstinence from smoking among respondents: 24% versus 27% in Texas, 29% versus 27% in Louisiana, and 23% versus 23% in DC. Among African Americans in all three locations, there were no significant differences in reported abstinence as a function of gender; 30%–36% of the African Americans were male.

Further analyses examined satisfaction with the service. The mean satisfaction levels among African Americans on a 4-point

scale were 3.5 in Texas, 3.3 in Louisiana, and 3.3 in DC. Corresponding means among non-Hispanic Whites were 3.4, 3.3, and 3.2. None of the differences between locations or groups were significant.

Discussion

In examining disparities in smoking cessation outcomes from 1990 to 2000 between Whites and African Americans, King et al. (2004) found lower cessation rates for African Americans. The current data do not show a difference and should be distinguished in important respects. King et al. looked at data from National Health Interview Surveys across all modalities of cessation assistance available at that time. From 1990 to 2000, only a few states offered quitline services, so quitlines did not substantially contribute to the findings of King et al. The current data are based on quitline data collected after 2000. Quitlines provide individually tailored cessation assistance, which may contribute to the equivalence of cessation rates across groups in the current data.

This paper presents empirical data from Texas, Louisiana, and DC that demonstrate that telephone counseling for smoking cessation is as effective for African Americans as it is for non-Hispanic Whites. Finding similar patterns of results for effectiveness, utilization, and satisfaction across all three areas studied strengthens the generalizability of those findings. Data from a randomized trial were included to show that the equivalence of effectiveness was found in a randomized sample as well as among self-selected empirical populations, further strengthening confidence in that finding.

Governmental health agencies in Texas, Louisiana, and DC recruited high proportions of African American smokers to the quitlines. Targeted promotional strategies were used by the two states and the District to encourage African Americans to call the quitlines, which provided individually tailored telephone counseling. The counseling protocols were not targeted by race or ethnicity. The service increased African American smokers' odds of quitting, and their success rates were equivalent to those of non-Hispanic White participants. They selected and utilized counseling at an equal or greater rate than non-Hispanic Whites and were comparably satisfied with their experience. Telephone counseling is an effective tool for reducing tobacco-related health disparities among African Americans. While their success rates were equivalent to those of non-Hispanic White participants in all three areas studied, their utilization, as a proportion of their representation among smokers, was significantly higher.

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Declaration of Interests

V.R., D.W., and A.L.M., do not have any competing interests. Dr. V.R. works for the University of Texas MD Anderson Cancer Center, Dr. D.W. works for the American Cancer Society, and

Dr. A.L.M. works for the University of Texas School of Public Health, Austin Regional Campus. Therefore, there are no competing interests related to this research.

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