

ALL NATIONS BREATH OF LIFE: USING COMMUNITY-BASED PARTICIPATORY RESEARCH TO ADDRESS HEALTH DISPARITIES IN CIGARETTE SMOKING AMONG AMERICAN INDIANS

Using a community-based participatory research (CBPR) approach, we developed the All Nations Breath of Life smoking cessation program and pilot-tested it in urban and reservation communities. The program combines weekly in-person group support sessions with individual telephone calls using motivational interviewing. All sessions include discussion of sacred tobacco and information about quitting and health. We have assessed the scientific validity, cultural-appropriateness, and readability of our program materials and found them to be adequate; participant satisfaction is high. The program shows promise for improving quit rates among American Indians, who have the highest smoking rates and lowest quit rates of any ethnic group. Our preliminary self-report data show quit rates of 65% at program completion and 25% at six months post-baseline. (*Ethn Dis.* 2010;20:334–338)

Key Words: American Indian, Smoking Cessation, Community-based Participatory Research

Christine Makosky Daley, PhD, MA, SM;
K. Allen Greiner, MD, MPH; Niaman Nazir, MPH, MBBS;
Sean M. Daley, PhD, MA; Cheree L. Solomon; Stacy L. Braiuca, MSW;
T. Edward Smith; Won S. Choi, PhD, MPH

INTRODUCTION

American Indians have the highest prevalence of cigarette smoking of all US ethnic groups (40.8%), followed by African Americans (24.3%) and Whites (23.6%). Additionally, American Indian women are the only group in whom smoking prevalence has increased over the past two decades, from 34.1% to 40.9%.¹ Smoking rates among American Indian smokers vary by region and are highest in the Northern Plains at 44.1%, and lowest in the Southwest 21.2%.^{2,3} American Indian smokers also have more difficulty quitting smoking compared to other ethnic groups,⁴ evidenced by their significantly lower quit ratios^{5,6} and are among the least successful in maintaining long-term abstinence. In 2000, 70% of American Indian smokers in one study said they wanted to quit, and 41% made a quit attempt of at least one day, but only 5% succeeded in quitting for three months.⁷ Furthermore, 41% of all American Indians who had ever smoked reported that they had successfully quit, compared with 51% of Whites.⁴ One of the main reasons for low success rates for smoking cessation among American Indians is a lack of culturally appropriate smoking cessation programs that acknowledge the traditional use of tobacco and discourage recreational use.

To date, effective smoking cessation programs designed specifically for a heterogeneous population of American Indians do not exist. A few attempts at the tribal level have proven effective and a few untested attempts have been made for diverse groups. The “It’s Your Life – It’s Our Future” project in Northern California used messages related to

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cultural identity, responsibility to family and tribe, and respect for tobacco products.⁶ The program was tailored to the California Native community and had a 5.7% quit rate at 18-month follow-up for the intervention group vs a 3.1% quit rate for the control group. The Giving American Indians No-smoking Strategies (GAINS) study was conducted to determine the feasibility and effectiveness of delivering a smoking cessation intervention through health clinics serving urban American Indians in Milwaukee, Minneapolis, Seattle, and Spokane.⁸ A major goal was to implement a culturally appropriate adaptation of the Doctors Helping Smokers (DHS) model.⁹ The GAINS intervention incorporated five major principles: 1) screening of patients for smoking status; 2) use of a smoke card as a reminder to providers; 3) discussion of smoking cessation with a clinician; 4) supportive reinforcement by clinic staff; and 5) monitoring of quit progress using the smoke cards. The 7-day point prevalence abstinence rates were no different between the intervention group (6.7%) and the control group (6.8%) at one year follow-up. Potential reasons for this null effect include:

From the Department of Preventive Medicine and Public Health, University of Kansas Medical Center (CMD, NN, SLB, WSC); Department of Family Medicine, University of Kansas Medical Center (KAG); Department of Anthropology, Johnson County Community College (SMD, TES); Kansas City Indian Center (CLS).

Address correspondence to Christine Makosky Daley, PhD, MA, SM; Department of Preventive Medicine and Public Health, MS-1008; University of Kansas Medical Center; 3901 Rainbow Boulevard; Kansas City, KS 66160; 913.588.2477; cdaley@kumc.edu

incomplete implementation; a large proportion of subjects were not exposed to the intervention; early problems of delivery of the program by clinic staff, high non-response rates; and a need for further cultural-targeting. No formative research was conducted to determine acceptability of the intervention to the target population.

There is much diversity in tobacco use among American Indians throughout the country. Along with such plants as sage, cedar, sweet grass, and red willow bark, tobacco has long been a sacred plant for many Native people.¹⁰ Because tobacco was not native to all areas of the United States, a number of tribes did not use it historically for ceremonial or spiritual purposes. However, early use of tobacco in smoke offerings, pipe smoking, burial services, gift-giving, and for medicinal purposes is well-documented, particularly among tribes native to the Eastern seaboard and the Great Plains (eg, Six Nations of the Iroquois,¹⁰ Delaware, Nanticoke,¹⁰ Lakota¹¹). Many Native people believe that tobacco connects them to the spirit world through prayer (eg, Lenape¹²).¹³ Tobacco is also used at some American Indian ceremonies, such as a sweat lodge, Sun Dance, or *Yuwipi* (eg, Lakota¹⁴). It is considered a gift from the Creator (eg, Absarokas and Hidatsa¹³). Traditional tobacco use is common in the American Indian population and has diffused to many American Indians whose tribes did not historically use it, particularly at powwows, where it is often given as a gift to the host drum.¹⁵ When developing a smoking cessation program for a heterogeneous population, such as the one in Kansas where more than 200 different groups are represented, it is imperative to acknowledge the economic role, importance and diverse traditional, ritual, and spiritual uses of tobacco. It is also important to differentiate between traditional tobacco use and recreational smoking while acknowledging that conventional tobacco control messages that portray tobacco entirely negatively may

be ineffective and offensive to some Native people.¹⁶

PROGRAM DEVELOPMENT

The culturally tailored smoking cessation program, All Nations Breath of Life (ANBL), was developed using the principles of community-based participatory research¹⁷ that include: 1) tailoring to meet the needs of individuals and communities; and 2) providing the opportunity for the people for whom the program is developed to participate in the development, implementation, and evaluation. To address these principles and to ensure that the program met the needs of those it was designed to help, we involved American Indian community members as equal partners at all points of program development. We also recognized that our target population is not a community defined by geopolitical borders, but by a shared identity. This shared Native identity, however, has multiple manifestations that do not form one overarching culture (defined as a system of knowledge, beliefs, values, morals and symbols through which human groups interact among themselves, with other groups, and with their natural environment¹⁸). The "American Indian" designation is used to describe a heterogeneous group of people by the US government. Because of this heterogeneity, tailoring interventions to the community or "culture" becomes exceedingly difficult. We addressed this heterogeneity throughout our program by incorporating ideas and practices from many Native cultures.

We began development of ANBL with a series of focus groups with Native smokers, which taught us what people wanted in a program.^{19,20} We then developed an initial version of the program with accompanying educational materials and pilot-tested it with our first group of smokers. We asked participants for their input on the

program and made modifications as necessary; the program was again reviewed by an additional group of participants. This cooperative process continued through four iterations of the program, after which we finalized the program to be used in our initial studies by conducting a formal, three-part assessment of the educational materials for scientific accuracy, readability, and cultural-appropriateness.²¹ In general, we found that the program was scientifically accurate, at an appropriate reading level, and was culturally appropriate in the opinions of our pilot test participants. Here, we present the different components of the ANBL program, as well as preliminary results from the initial cessation groups.

PROGRAM COMPONENTS

The current version of ANBL has five primary components: group support sessions; individual telephone counseling using Motivational Interviewing (MI); an educational curriculum; pharmacotherapy; and participant incentives. Each component has been tailored specifically to a heterogeneous group of American Indians.

Group Support Sessions

During our initial discussions with community members about what they would like to see in a smoking cessation program, nearly everyone wanted group support led by a community member. Therefore, the primary component of ANBL is a series of group-based support sessions. We discussed who would lead the sessions at length, particularly whether they needed to be trained counselors or have certain educational degrees. We decided the most important factor when choosing individuals to lead the groups was their ties to the Native community. Due to low rates of educational attainment in the Native community, we decided it would be best to not limit our session leaders to

individuals with counseling degrees and/or experience. Instead we decided to train community members in group support and counseling skills. We also decided not to call our group leaders “counselors” due to a reticence on the part of community members to trust providers trained in Western counseling techniques. In addition, the term “counselor” implies the group leader is above group members and is the most qualified to give advice. We chose the term “facilitator” because we see this role as facilitating discussion and creating positive group interaction. The group members themselves provide the majority of support and advice, with help from the facilitator and educational materials. All group sessions begin with team building exercises and personal discussion among members about things they might be experiencing in their lives, both those related directly to smoking and other things that may come up that help or hinder quit attempts. Our first group session is devoted largely to forming a cohesive group and learning all members’ personal stories about their life-long journeys with tobacco, both sacred and recreational.

Individual Telephone Counseling

Our participants and community partners have stressed the need for some individual counseling, particularly for people who are uncomfortable talking about certain things in our mixed-gender, mixed-age, and mixed-tribe groups. Therefore, ANBL includes telephone calls that go beyond a reminder about the next group session (the original purpose of the calls). Between group sessions facilitators call participants to see how they are doing, provide counseling for personal issues, and to remind them of the next group session. Facilitators also ask about side effects of medication and any adverse events. During these calls, facilitators use Motivational Interviewing (MI) counseling, which has been found to be effective among American Indians.²² The goal of

MI is to increase an individual’s motivation to change by developing a discrepancy between current behavior and goals and/or values. Our team has developed culturally sensitive semi-structured MI counseling scripts to conduct telephone sessions exploring positive and negative aspects of participants’ ambivalence about and motivation and confidence for quitting smoking, as well as the pros and cons of behavior change and concrete plans for change. Participants are asked to identify their key values and to explore potential connections between smoking and their ability to live out these values.

Educational Curriculum

Our educational curriculum is divided into 11 brochures, given out throughout the program, and combines the latest smoking cessation methods with culturally specific elements. (Table 1) Community members have stressed throughout development of the program that cultural issues must be ingrained within the program and its accompanying education materials, not given “lip service” by putting pictures of Native people on otherwise “White” materials. Our materials have evolved through several iterations over time, and our current materials were created by our research team and Community Advisory Board members, with input from pilot test participants, and then sent to an American Indian graphic artist for final layout.

Pharmacotherapy

Current treatment guidelines suggest pharmacotherapy be offered to all smokers attempting to quit. Consequently, we provide participants with their choice of free pharmacotherapy, including Chantix®, Zyban®, Nicotine Replacement Therapy (NRT, patches, gum, or lozenges), or a combination of the latter two. Participants can also choose no pharmacotherapy, which approximately one-half of our participants choose. All facilitators are trained

in providing advice and addressing questions related to pharmacotherapy and will discuss the options with participants, also asking about medical history to determine if there is any reason the individual should not be taking medication. Participants are also given educational brochures about the options and have the option of talking with a physician privately.

CONCLUSIONS

We used principles of community-based participatory research to create a culturally tailored smoking cessation program for the Native community. Our collaboration involved the Native community and more importantly, treated community members as equal partners in the development, implementation, and evaluation of ANBL. We began with formative and qualitative research because, according to our community advisors, these data collection strategies are less intimidating and more culturally appropriate. These initial efforts resulted in our first collaborative publication from focus groups that we conducted with participants from the Native community. Throughout the collaborative process, we have also used culturally appropriate measures to obtain information related to the traditional uses of tobacco.

Our preliminary results are promising, showing self-report quit rates at 65% at program completion...25% at six months post-baseline for our first 108 participants, compared to the 5%–8% reported elsewhere in the literature.

Table 1. All Nations Breath of Life program components

Week #	Type of Session	Topics Covered	Brochures/ Other Handouts	Incentives
	Telephone intake (may be done in-person)	Current smoking levels Smoking history Readiness to quit	NA	NA
1	Individual in-person meeting with facilitator	Program start date Quit date information Questions about program Personal history with smoking	NRT Pharmacotherapy	Binder for educational materials
2	Group in-person QUIT DATE	Personal histories with smoking Team building Social support I Facts about pharmacotherapy Personal issues	Why people smoke Preparing to quit Quit contract Quit reasons card NA	Quit kits NRT Stress balls Photo magnet NA
	Telephone MI	Next session		
3	Group in-person	Discussion of current personal issues with quitting or other Facts about smoking Coping with withdrawal Personal issues	Cigarette smoking and Native people Coping with withdrawal Things instead card NA	Quit kit refills NRT Water bottles NA
	Telephone MI	Next session		
4	Group in-person	Discussion of current personal issues with quitting or other Traditional use of tobacco Personal issues	Traditional use of tobacco NA	Quit kit refills NRT Traditional Use DVD NA
	Telephone MI	Next session		
5	Group in-person	Discussion of current personal issues with quitting or other Stress management Personal issues	Stress reduction and management NA	Quit kit refills NRT Flute music CD NA
	Telephone MI	Next session		
6	Group in-person	Discussion of current personal issues with quitting or other Weight management	Weight management during smoking cessation	Quit kit refills NRT Rez-robics DVD or VHS Healthy snacks NA
	Telephone MI	Personal issues Next session	NA	NA
7	Group in-person	Discussion of current personal issues with quitting or other Social support II	Friends and family and quitting smoking	Quit kit refills NRT Potluck meal with family member/friend NA
	Telephone MI	Personal issues Next session	NA	NA
8	Group in-person	Discussion of current personal issues with quitting or other Staying quit	Staying quit	Quit kit refills NRT
	Telephone MI	Personal issues Next session	NA	NA
9	Telephone MI	Personal issues	NA	NA
10	Telephone MI	Personal issues	NA	NA
11	Telephone MI	Personal issues	NA	NA
12	Group in-person Post-program focus group	Celebration Discussion of how traditional worldview and behaviors helped in the quitting process	NA	Certificate of Achievement Celebratory potluck meal \$20 gift card for participation in post- program focus group
6-month	Group in-person	Discussion of program Current smoking status Personal issues	NA	\$20 gift card
12-month	Telephone MI	Current smoking status Personal issues	NA	\$10 gift card mailed

NRT=nicotine replacement therapy; MI = motivational interviewing.

ADDRESSING SMOKING AMONG AMERICAN INDIANS - Daley et al

Our program was developed with the understanding of the diversity of American Indian cultures and tribes. Just as an intervention that may be effective for one racial/ethnic group may not be effective for another group, an effective intervention for one tribe may not be effective in another. The creation of ANBL involved American Indians from reservations, rural communities, and urban areas to increase generalizability of the program. Currently, we are delivering the ANBL smoking cessation program at urban American Indian health centers as well as reservation-based health clinics in Kansas. Our preliminary results are promising, showing self-report quit rates at 65% at program completion (three months post-baseline) and 25% at six months post-baseline for our first 108 participants, compared to the 5%–8% reported elsewhere in the literature.

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AUTHOR CONTRIBUTIONS

Design concept of study: Makosky Daley, Greiner, Daley, Solomon, Braiuca, Choi
Acquisition of data: Makosky Daley, Greiner, Nazir, Daley, Solomon, Braiuca, Smith, Choi
Data analysis and interpretation: Makosky Daley, Greiner, Nazir, Daley, Solomon, Braiuca, Smith, Choi
Manuscript draft: Makosky Daley, Daley, Choi
Statistical expertise: Nazir
Acquisition of funding: Makosky Daley, Choi
Administrative, technical, or material assistance: Makosky Daley, Greiner, Nazir, Daley, Solomon, Braiuca, Smith, Choi
Supervision: Makosky Daley, Choi