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Development of an Online Smoking Cessation Curriculum for Pacific Islanders: A Community-Based Participatory Research Approach

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Abstract

Background—Pacific Islanders (PIs) have one of the highest rates of cigarette use, but evidence-based smoking cessation programs designed specifically for PIs are practically nonexistent.

Objectives—This paper reports on the development of a culturally tailored smoking cessation curriculum designed specifically for young adult PIs using a community-based participatory research (CBPR) approach. This paper demonstrates the shared leadership and equal contribution of community and academic partnerships.

Methods—Together community and academic partners conceptualized and developed a smoking cessation curriculum. Data from formative studies shaped the various components of the educational modules.

Results—Eight educational modules were developed through CBPR. Information on the dangers of cigarettes, benefits to cessation, and ways to cope with cravings and stress through cognitive behavioral therapy were offered in both narrative and non-narrative formats.

Conclusions—Use of CBPR is critical in the development of the curriculum because it allowed for the sharing of ideas and knowledge between academics and community members.

Keywords

Curriculum; health disparities; community health partnerships; community health research; health promotion; Southwestern United States; Pacific Islands; behavioral sciences

Individuals of Polynesian, Melanesian, and Micronesian descent (PIs), make up about 1% of the total U.S. population.¹ According to the 2010 U.S. Census data, 1.2 million people living in the U.S. identify themselves as Native Hawaiian or PI, either alone or in combination.² They are one of the fastest growing ethnic groups in the United States, increasing from about 281 million in 2000 to 309 million in 2010, a 9.7% change.¹

Despite their relatively small population size, smoking prevalence among PIs in the United States is nearly double the national rate but culturally tailored, evidence-based smoking cessation programs for PIs are practically nonexistent.³ Before 2000, data on PIs were aggregated with Asian Americans and lumped into the Asian American and PI category. This aggregation of data masked the many health problems that existed among the specific ethnic subgroups, especially PIs.⁴ Data from the 2009–2010 National Adult Tobacco Survey, showed that close to 50% of PIs had ever used cigarettes.³ The same report also found that 20% of PIs were current users of cigarettes as compared with 4.7% of Chinese, 13.6% of Filipinos and 18.8% of Japanese respondents. The National Survey on Drug Use and Health conducted from 2002 to 2010 revealed that, compared with Asian Americans, Native Hawaiians and PIs had greater odds of using cigarettes, cigars, and smokeless tobacco.⁵ The 2011 Behavioral Risk Factor Surveillance System found that 15.8% of adult Native Hawaiians and PIs living in California were current smokers as compared with the state's average of 13.7%.⁶ More recently in 2012, the National Survey on Drug Use and Health reported that 28.1% of PIs surveyed were current smokers compared with 10.9% of Asian Americans.⁷ Both the National Survey on Drug Use and Health and the Behavioral Risk Factor Surveillance System labeled Native Hawaiians and other PIs as separate groups, but in this paper we refer to PIs as Native Hawaiians and other PIs combined.

Although there are many smoking cessation curricula available, to our knowledge none exist for PIs and, more specifically, for young adult PIs. For decades, researchers have recognized the lack of prevention programs, be it in tobacco, alcohol, or substance abuse, specifically for PIs.⁸ Resources and leadership needed for strategic planning and implementation of tobacco cessation and prevention programs for PIs have also been limited.⁹ An exhaustive review of smoking cessation interventions revealed that, out of 36 intervention studies conducted between 1985 and 2001, only 3 focused on Asian Americans and none focused specifically on PIs.¹⁰ Young adult PIs face unique changes when it comes to smoking cessation. A combination of lifestyle factors, culture, stress, and social and environmental cues, plus a lack of knowledge about the benefits of smoking abstinence make it difficult for young adult PIs to quit smoking. In 2002, review of the Minnesota Tobacco Document Depository showed that, owing to factors such as lifestyle, culture, and social and environmental cues, the tobacco industries developed marketing strategies specifically targeting Asian American and PI populations.¹¹ This strategic marketing of tobacco products coupled with the lack of an equally strategic smoking prevention and cessation program for

PIs emphasizes the dire need for a culturally tailored, community-driven smoking cessation curriculum.

PURPOSE

The purpose of this paper is to describe the development of a smoking cessation curriculum designed specifically for young adult PIs titled MPACT (Motivating Pasifikas Against Cigarette and Tobacco). Guided by CBPR frameworks, this eight-module curriculum addressed a highly prevalent health issue among a small population which has been understudied. The lack of culturally appropriate tobacco cessation programs for PIs served as the impetus for this curriculum. The research conducted was approved by the Institutional Review Board at both Claremont Graduate University and California State University Fullerton.

METHODS

Conceptual Model

The conceptual model used as the basis for MPACT is derived from key behavioral and neurocognitive theories and models. MPACT relies on behavioral constructs from the theory of planned behavior,¹² social cognitive theory,¹³ social learning theory¹⁴ and self-regulation theory.¹⁵ MPACT theorized that smoking is a product of several interrelated components, such as social norms, negative and positive reinforcing factors, goal setting, self-monitoring, and self-evaluation, all of which are linked to personal self-efficacy and intentions around smoking. These beliefs are potentially moderated by culture, ethnicity, acculturation, dispositional characteristics, and nicotine dependence. Thus, changing these factors through peer modeling, positive reinforcements, stress management, and skills development that is framed upon a culturally tailored cessation curriculum will lead to increased intentions to quit smoking and smoking cessation (Figure 1).

CBPR Approach

MPACT is a product of partnerships between community leaders representing Chamorros, Marshallese, Native Hawaiians, Samoans, Tongans, and other PIs and academic researchers in Southern California who have come together under the WINCART (Weaving an Islander Network for Cancer Awareness and Training) Center, a Community Network Program funded by the National Cancer Institute's Center to Reduce Cancer Health Disparities. WINCART began in 2005 as a CBPR network focused on reducing gaps in cancer health disparities among PIs in Southern California.¹⁶ Funded by National Cancer Institute over two funding cycles (2005–2010 and 2010–2015), WINCART has been involved in efforts to raise cancer-related awareness, develop community capacity, and increase research among PIs. Based on discussions among community and academic partners and existing data, one of WINCART's tasks in the 2010 to 2015 cycle was to develop a smoking cessation intervention for PIs. Community leaders from five community-based organizations (the Tongan Community Service Center, Samoan National Nurses Association and Guam Communications Network in Los Angeles County, Pacific Islander Health Partnership in Orange County, and Union of Pan Asian Communities in San Diego County) and academic

partners (from Claremont Graduate University, California State University Fullerton and the University of Southern California) helped to conceptualize and develop the curriculum that is presented in this paper. Whereas academics provided the scientific basis and ensured reliability of research methodologies, building on theories and empirical evidence, community partners ensured that the curriculum met community priority needs, education components were culturally relevant, and messages were clear. As Minkler¹⁷ described, CBPR is not a research method, but an orientation of research that involves components such as a community-driven health issue, community-defined barriers, community relevance, scientific merit, and community ownership and empowerment. It is these main components that serve as the foundation for the MPACT curriculum.

Table 1 depicts the CBPR approach used to develop MPACT via a logic model through discussion of inputs, activities, and outputs. Inputs and activities are broken further down to the inputs and activities of community partners and the input and activities of academic partners while the output is shown collectively. Community partners provided ideas and insights into the factors that hindered smoking cessation (e.g., having family and friends who smoked) as well as factors that might facilitate smoking cessation (e.g., having information about health benefits). Academic partners provided inputs such as grant funding and staff support, and community partners provided ideas and delivery approaches for a cessation program. For example, community partners specifically requested a program that could be conducted online and over mobile phones because many young adult PIs prefer technology over the more traditional approach of multiple in-person visits to a clinic. Academic partners helped community partners to focus on issues that were most changeable with behavioral interventions, and community partners provided their input by identifying underlying barriers to behavior change. Community partners identified social smoking as a major barrier to smoking cessation. Many people might want to quit but cannot because others around them smoke. Academic partners suggested a social support approach in which we teach participants to work with their friends and family about setting a quit date and asking for understanding during this time. For example, Module #7 suggested “Tell them about your goal in trying to quit. If they smoke, ask them to not smoke around you, ask them to hide cigarettes from you so you don’t get tempted and tell them why it’s important for you.”

The specific educational content of MPACT went through several rounds of reviews. Revisions were made by the academic partners after each development meeting and shared with the community partners via emails and/or in-person at the next meeting. For example, because our formative studies showed that PIs smoked to reduce stress and deal with their anger, we included two case scenarios on how to deal with stress and anger without smoking. Community partners suggested that we limit written text in our modules so we formatted these scenarios into short video clips. One clip showed a young PI man who became frustrated when asked by his mother to leave work early to drive her to visit a friend. The clip demonstrated his use of stress reduction techniques to deal with the situation instead of smoking. Although the original script was written by an academic researcher, community partners provided further suggestions, such as names of the characters and dialogue between mother and son. The voiceovers for this clip were provided by PIs to add authenticity. Colors and fonts used in the curriculum were changed based on partner inputs

and community feedback results. The final MPACT logo used a fish hook drawn in a style reminiscent of a *tatau*, a traditional Samoan tattoo. The output of this community–academic partnership was a culturally tailored curriculum that used PI images, stress reduction tips involving use of guided imagery and PI snacks (known as “crack seeds”), and messages that spoke directly to young adult PIs.

Data-Driven Curriculum

The WINCART Center conducted a few, smaller scale, self-contained studies that were used as additional formative data for the curriculum. These formative studies included (1) a survey and semistructured interview of young adult PIs which asked about their tobacco use behavior, depression, stress and decision making skills via the Iowa Gambling Test, (2) an ecological momentary assessment (EMA) study that aimed to collect real-time smoking data, and (3) three community discussion and feedback sessions conducted specifically to collect qualitative data about the opinions and attitudes towards a smoking cessation program (Figure 2). Using recruitment strategies used by previous community-based studies among minority populations,¹⁸ PI community leaders and community research staff recruited participants who self-identified as PI, 18 to 30 years of age, for all three small studies mentioned below.

Survey and Semistructured Interview—Data from the survey and interview, conducted between September 2010 and August 2012, confirmed that young adult PIs were intermittent smokers. Generally, they had low scores on the Fagerstrom test for nicotine dependence, meaning that they might be more amenable to and successful in a smoking cessation program than those with higher levels of addiction.¹⁹ Out of the 71 people who completed the survey, 64 were current smokers who shared that smoking helped them to relax (82%), reduced their stress level (78%), and helped them to deal with their anger (67%). When asked about secondhand smoking, 86% expressed concerns about others breathing in secondhand smoke and more than one-half do not smoke around certain family members, children, or pregnant women (Table 2). We specifically asked questions about secondhand smoke because family and friends are very important to the PI community. We wanted to learn about potential reinforcements of positive behavior change, as is consistent with our conceptual model.

EMA—The EMA study was conducted among a subset of 20 participants who took part in the survey mentioned and during the same time period. Specific details about the EMA study have been published elsewhere, but in summary, the purpose of the EMA was to use smartphones to gather real-time data about the factors associated with cigarette use among young adult PIs.²⁰ Participants completed six text message-based surveys administered every 2 hours each day for a period of 7 days. The survey included measures of cigarette use, social environment, mood, and rationale for deciding whether or not to smoke. Data indicated that participants smoked when they felt happy and were around others who smoked or were drinking alcohol. Data also showed that participants tended to smoke less or not smoke when they were home or around people who were not smoking.

Community Discussion and Feedback Sessions—Three separate discussion and feedback sessions were conducted among various young adult PI smokers, who were recruited by the WINCART community partners. Conducted between October 2012 and January 2013, these discussion sessions collected information about general smoking behavior, potential recruitment strategies, incentives to join the study, initial MPACT materials (i.e., logo, modules), and the types of information they wanted to see in the modules.

Conducted in October 2012, the first session collected general information about colors and themes young adult PIs found attractive, what they thought about smoking and what they would like to see in a smoking cessation program. Participants indicated that the cost of smoking was among the main reasons why they wanted to quit. As a result, the academic team created a module that specifically addressed the monetary cost of cigarettes and potential savings upon cessation. The second discussion group was conducted in December 2012 during which participants suggested including a module about stress and how to handle it without smoking. Through the third discussion group conducted in January 2013, a section on social support and social smoking was developed for the curriculum because participants indicated how difficult it was to quit smoking amid the robust social smoking norm in their community. All three of the groups indicated that family and friends' smoking were major contributors to their smoking, especially at parties or social events. They liked the idea of accessing MPACT from Facebook and appreciated the island-themed logo used by MPACT.

Working synchronously and through feedback loops over a period of one year, the collective efforts of community and academic partners plus the three formative data sources resulted in the MPACT curriculum (Figure 2). The combined input of community and academic researchers shaped MPACT's content, look, and overall message about smoking cessation and community support for a healthy lifestyle.

RESULTS

The MPACT curriculum consisted of one module per week over the course of 8 weeks, each module having its own theme and tone. The purpose of these modules was to provide a smoking cessation curriculum that was relevant (culturally tailored) and accessible (Facebook application) to study participants.

Stylized as "islands," each module was a 5- to 10-minute, self-directed educational session conducted solely on Facebook (Figure 3). Participants who signed up for the study could either use their existing Facebook account or sign up for a new account. Treatment groups were able to add MPACT's Facebook application through a sign-in process and wait-list controls received a smoking cessation fact sheet. Once signed on, treatment participants received an introductory learning module (titled "Module 0") that acquainted them to the various "islands" in the MPACT curriculum. At the end of this introductory module, participants committed to quit smoking and this was considered their start date. Information in each module built on the other and, thus, participants had to complete the modules in order. Each module consisted of information that was set in the following order: (1) an inspirational quote, (2) an introductory portion with a set of learning objectives for the

“island,” (3) two short educational segments, (4) a short quiz, (5) additional educational segments, (6) another short quiz, (7) a summary of what was discussed, and (8) a brief prelude to introduce the next “island.” These components are consistent with the recommended components of a typical health education curriculum.²¹ For example, the island of “Change” discussed what happens when one quits smoking. Participants were introduced to the module and taken to the first segment of the educational components where they learned about improvements to their health 12 hours, 2 weeks, 1 year, and so on, after cessation. This section was then followed by a short quiz, another educational segment on withdrawal symptoms with an attached quiz and, finally, a conclusion section where the entire module was briefly summarized (Table 2).

Table 2 describes in detail the different modules of the curriculum. Each module was named after a noun or verb that best described the main theme of the module. For example, the island of “Love” discussed social support from family, friends and the community. Table 2 also includes information about the learning objectives, learning components and linkages with the conceptual model (Figure 1).

DISCUSSION

The past two decades have seen a growth and improvement in the number of smoking cessation programs.²² These programs have relied on intervention methods such as drug therapy, quitlines, communication technologies, behavioral interventions, or a combination of these methods. Some technology-based programs are associated with improvements in smoking cessations and abstinence rates,^{23–25} although others have been less successful.^{26,27} A 2010 review of Internet-based smoking cessation programs found approximately 20 programs with varying results and effectiveness.²⁸ A recent review of smoking cessation programs, however, has found that despite the improved methodologies used today, cessation rates have not improved in the past two decades.²² Despite the number of evidence-based smoking cessation programs, none have specifically focused on young adult PIs. Smoking cessation programs such as those provided by the American Lung Association or those at www.smokefree.gov have not addressed the unique needs of the PI community. The MPACT curriculum is distinctive because it integrates PI cultural values, group norms, and presents information in a narrative format found to be effective among minority populations.²⁹

Community and academic researchers’ involvement in each phase of the curriculum development was crucial. We followed in the footsteps of other curricula framed by CBPR principles such as the church-based cancer education curriculum among African Americans in Wisconsin,³⁰ the “Live Well” nutrition and physical activity curriculum among recent immigrants from Haiti, Brazil, and other Spanish-speaking Latin American countries,³¹ and the HIV Prevention Research Literacy Curriculum developed for African Americans.³² Like MPACT, these curricula were developed via CBPR frameworks for minority communities, which speaks to the value of community involvement.

LIMITATIONS AND LESSONS LEARNED

The authors hope this paper can serve as an example for others and opens up more opportunities for similar partnerships between academics and minority groups. However, limitations to these efforts do exist including the fact that the curriculum developers (community and academic) were working off of very limited data and have little or no previous examples of cessation curricula for PIs. In addition, data from the formative studies were collected among PIs living in Southern California and thus, information gathered may not be generalizable to PIs living in other areas.

Table 3 presents the lessons learned from development of MPACT with some suggestions for future projects. Community organizing and collaboration through the use of effective communication strategies and flexible project timelines were key. Although we initially agreed to use various forms of communication, we found that in-person meetings were the most effective. In-person meetings between community and academic partners allowed for open discussions and group decision making in a manner that was customary in PI culture. Through trial and error, we learned that being flexible with time, meeting during nonbusiness hours and/or on weekends also helped to move the project along. Despite budget limitations, we were able to produce several short video clips used in the curriculum. We suggest future projects plan the curriculum with the budget and related limitations in mind. Being able to work with existing resources and garnering support from both community and academic partners is key to the success of any project.

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Figure 1.
MPACT Conceptual Model

Figure 2. The Sources of Data Driving the Mpact Curriculum and Timeline
EMA, ecological momentary assessment; PI, Pacific Islander.

Figure 3.
MPACT Curriculum Islands

Table 1

Use of CBPR in MPACT Curriculum Development

CBPR Components	Inputs			Activities		Outputs	
	AP	CP	CP	AP	CP	MPACT Curriculum	
Community-driven health issue	Grant funding, institutional and staff support	Ideas and needs for a cessation program (i.e., use of technology as the intervention platform)	Identified existing quantitative data to justify need for smoking cessation programs among PIs	Developed tools/instruments to measure barriers to smoking cessation (stress, income, IGT, technology use)	Identified barriers to behavior change Collected information to quantify barriers Validated information collected	Curriculum designed for people who want to quit smoking but did not know how to do so	
Community-defined barriers	Assisted CP in focusing on changeable health issues (e.g., focus on those ready to quit)	Identified underlying barriers to behavior change (e.g., stress, family/friends who smoked)	Developed evidence-based learning modules	Identified key individuals to take part in training Made decisions about the type of skills needed Facilitated the community discussion and feedback sessions, collected data	Aligned community needs with science	Curriculum that is culturally tailored (use of PI images, stress reduction tips involved PI snacks and way of life) Curriculum that is conducted with the use of technology (Facebook and mobile text messages)	
Scientific merit	Provided theoretical framework and data-driven methods	Provided input on social norms				Information presented in curriculum such as statistics on PI smoking rates	
Community empowerment	Knowledge and skills on data collection and analysis protocol	Structural support Personnel support	Provided skills training on data collection, analysis, manuscript preparation, community discussion and feedback sessions			PI health educators recruited participants and implemented the program within their communities Community leaders equipped with smoking cessation tools	
Involves a cyclical and iterative process	Staff and research personnel to develop and revise the MPACT curriculum	Inputs on information that is relevant to PI communities Input on culturally appropriate materials	Made several revisions to the curriculum (content and look)	Provided sound suggestions for all revisions		Educational modules that reflect community input	
Addresses health from both positive and ecological perspectives	Evidence-based research and theoretical foundation	Advise on PI way of life (e.g., family dynamics)	Developed educational modules that integrated community	Served as actors and voice of educational videos around social support		Modules integrated family and friends as core social support systems for PI young adults	
Builds on strengths and resources within the community	Staff and research personnel Funding	Organizational staff Community health educators Structural support	Provided skills training Connected individuals from various organizations	Community partners took part in all phases of the development using their strengths and knowledge to improve what academic partners developed		PI health educators recruited participants and implemented the program within their communities	

Abbreviations: AP, academic partner; CP, community partner; IGT, Iowa Gambling Task; PI, Pacific Islander.

Table 2

The Eight Educational Modules (“Islands”)

Module	Educational Topic	Learning Objectives	Objective Components	Linkage With Conceptual Model
0. Introduction	Introduction to MPACT	To initiate the familiarity of the cessation program.	Familiarize participants to our curriculum (discuss the 4 different components, etc.) Help participants prepare for their quit date (cleaning, buy snacks, etc.) Participants set a quit date	Not applicable in this module.
I. Island of Hope	What happens when you smoke?	To provide relevant information to participants on the major effects of smoking. To allow reflection on the impact of cigarette use on the person as a whole.	PI mortality statistics owing to smoking Smoking and cancer Cigarette chemical components/ secondhand smoke Morbidity information	<i>Social influence:</i> (PBT, SCT, SLT): Social norms, normative beliefs, attitude leads to motivation to quit smoking <i>Other moderators:</i> Cultural influence
II. Island of Change	What happens when you quit?	To reveal the benefits of quitting. To introduce the concept of withdrawal symptoms. To encourage participants to see pass the difficult few days of quitting.	Immediate benefits of quitting timeline Long-term benefits of quitting Other advantages of quitting: physical appearance and saving money Cancer.gov smoking cost calculator link provided Thinking about withdrawal symptoms Motivation to continue onto the next islands for managing withdrawal symptom tips	<i>Learning:</i> (SCT/SLT) goal setting and cue appraisal (SRT) self-evaluation and self-reinforcement leads to increased self-efficacy
III. Island of Power	Strategies to remain quit	To recommend ways in dealing with cravings and other withdrawal symptoms. To identify personal trigger objects and/or situations.	Trigger situations/causes Ideas on what to do when craving occur Ideas on what to do during situations of high anxiety or hostility	<i>Learning:</i> (SCT/SLT) Cue appraisal and positive reinforcement (SRT) Self-monitoring, self-evaluation, self-reinforcement Leads to increased self-efficacy <i>Other moderators:</i> Dispositional characteristics; nicotine dependence
IV. Island of Peace	Stress reduction	To present ways to relieve stress and anxiety To expand the lessons of the Island of Power (Module 3).	Tips on things to do to relieve stress and anxiety such as talking to others, do something they enjoy, try a new hobby/activity, inner peace rituals (e.g., meditation, prayer, relaxation techniques) Deep breathing exercise CBT	<i>Learning:</i> (SCT/SLT) Cue appraisal and support/ positive reinforcement (SRT) Self-monitoring, self-evaluation, self-reinforcement Leads to increased self-efficacy <i>Other moderators:</i> Dispositional characteristics; nicotine dependence
V. Island of Strength	Scenario 1: Party Temptation	To provide real-life scenario where smoking temptation can occur. To provide information on how to combat smoking cravings in possible situations.	Weekend scenario/situation where people smoke at a party or get together Reflection and suggestions on what to do if someone offers a cigarette	<i>Learning:</i> (SCT/SLT) Modeling, goal setting, and cue appraisal (SRT) Self-evaluation, self-reinforcement Leads to increased self-efficacy <i>Other moderators:</i>

Module	Educational Topic	Learning Objectives	Objective Components	Linkage With Conceptual Model
				Cultural influence; dispositional characteristics; nicotine dependence
VI. Island of Chill	Scenario 2: Stress Stress	To offer another real-life scenario they may face when smoking temptation can occur. To reassure on how to approach stressful environments or compound stress (combined external stress, e.g., family responsibilities, work, and school).	Work-related stress scenario with thoughts of other life stressors Encouragement to reflect upon helpful stress relieving tips	<i>Learning:</i> (SCT/SLT) Modeling and goal setting, cue appraisal (SRT) Self-evaluation, self-reinforcement Leads to increased self-efficacy <i>Other moderators:</i> Cultural influence; dispositional characteristics; nicotine dependence
VII. Island of Love	Social support	To engage participants in thinking about their social networks and how to use them for smoking cessation.	Social support data from survey Suggestions of talking with friends/family about current goal, moral support, and participation	<i>Learning:</i> (SCT/SLT) Goal setting, support reinforcement (SRT) Self-monitoring, self-evaluation Leads to increased self-efficacy Leads to protection against likelihood of relapse <i>Other moderators:</i> Cultural influence; dispositional characteristics
VIII. Island of Freedom	Maintenance	To discuss relapse and maintenance. To provide options for handling relapse situations and maintaining smoke free.	Commonality of relapse Reflection on why and how relapse can occur Maintenance of nonsmoker status How to actively avoid relapse situations	<i>Learning:</i> (SCT/SLT) Goal setting and positive reinforcement (SRT) Self-monitoring and Self-reinforcement Leads to increased self-efficacy Leads to protection against likelihood of relapse

Abbreviations: CBT, cognitive-behavioral therapy; PBT, problem behavior theory; PI, Pacific Islander; SCT, social cognitive theory; SLT, social learning theory; SRT, self-regulation theory.

Table 3**Lessons Learned From the Curriculum Development**

Project Elements	Specifics	Suggestions for Future Projects
Communication strategies	Although community and academic partners initially agreed to use a combination of in-person meetings and a sophisticated system of communication technologies (e.g., management software, online meetings, and email) to collaborate on curriculum development, in-person meetings were by far the most productive in terms of achieving objectives and team building. Given the multiple activities and responsibilities of the community partners, in-person meetings (customary in PI culture) allowed for more focused attention on the project, promoted open discussion and enhanced group decision making. For researchers, in-person meetings provided an opportunity to learn about aspects of PI culture and lifestyle that could not be conveyed via technology. Over time, the management software and most online meetings were dropped in favor of face-to-face meetings.	Understanding preferred, effective methods of communication among research collaborators should be addressed early on to promote work efficiency and team cohesiveness.
Flexible timelines for CBPR projects	Because multiple academic institutions and community organizations representing a variety of PI subgroups worked closely together on each phase of the curriculum development via the CBPR approach, tasks and decisions took longer to finalize than initially anticipated. Coordination of curriculum development activities with representation from each contributing institution/organization was often challenging.	Timelines with CBPR projects should build in cushion room to help offset the additional time it will take to complete tasks and make decisions. Being able to meet or connect during nonbusiness hours (i.e., evenings and weekends) can often help to move projects along.
Budget planning	Although we had not decided on specific curricular components (e.g., multiple short video clips) until the curriculum development phase, the budget had already been established. We were somewhat limited in terms of what we could realistically produce. Despite budget limitations, we were able to create a few short video clips in-house with simple software like Camtasia and produce one professionally (i.e., "Party Temptation") working with a PI film maker.	To the extent possible, create a draft of the proposed curriculum with specific components in the form of lesson plans before requesting or allocating funds so that an appropriate amount can be dedicated to each component of the curriculum. Changes to the components can be made but the cost related to developing the components can be set.
Curriculum content	Through the community discussion and feedback sessions, we learned that PIs wanted more smoking-related statistics that pertain to the PI community. However, during the time of curriculum development, PI-specific smoking data were very limited and, thus, we were not able to provide as much data as we had wanted. Given the high community interest in PI tobacco use data, the MPACT team subsequently developed an information sheet for distribution in paper and online formats to disseminate findings of our pilot data.	Projects working with understudied populations where specific and/or relevant data is sparse should consider alternative ways to present data. Consider conducting focus groups aimed specifically at collecting relevant information to present in the curriculum. In addition, broad dissemination of study findings to community members in their preferred formats and in language, if necessary, is encouraged.

Abbreviations: CBPR, community-based participatory research; PI, Pacific Islander.