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Sociocultural determinants of tobacco use among Cambodian Americans

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Abstract

The objectives of this study included the following: obtaining qualitative information on tobacco use among Cambodian Americans, identifying cultural factors that influence tobacco use and acquiring information for the development of effective smoking prevention and cessation strategies. Data were collected by using demographic and behavioral questionnaires and focus group interviews. A total of 14 focus group interviews that covered cultural practices associated with smoking were administered. Statistical analyses included univariate frequency distributions and cross-tabulations. The subjects (*n* = 119) were Cambodian American volunteers who participated in social services programs offered by a community service organization. All subjects were 18 years of age or older and resided in the city of Long Beach. The principal outcomes measured were cigarette smoking and tobacco use. Other variables included reasons for smoking, traditional uses of tobacco, stress factors related to smoking and the perceived health effects of smoking. Predisposing, reinforcing and enabling factors associated with tobacco-use behaviors included peer group influences, smoking adopted as a coping method, tobacco used for medicinal purposes and smoking practiced within cultural traditions. The frequency of smoking was four times higher among males than among females. Smokers (*n* = 29) in comparison with non-smokers (*n* = 90) tended to be men (79% versus 33%), not married (68% versus 49%) and unemployed (79% versus 54%), and had attained somewhat lower levels of education. The role of cultural factors needs to be considered when designing appropriate smoking cessation strategies for Cambodian Americans.

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Introduction

The present study investigated tobacco-use practices among Long Beach Cambodian Americans, who form the most demographically significant group of Cambodians in the United States. During the 1970s, the first waves of Cambodian immigrants arrived in the United States. With the arrival of these immigrants, several Cambodian American communities developed throughout the nation. The largest population of Cambodian Americans, ~41%, was counted in California in 2000 [1]. More specifically, Long Beach has been noted to represent the largest Cambodian American community in the United States [1].

Estimates suggest that the smoking prevalence of Cambodian Americans far exceeds that of other California and US racial and ethnic groups. In Cambodia, smoking prevalence among males who live in urban areas is 67% [2]. For male Cambodian Americans, smoking prevalence (estimated at 71%) is similar to the prevalence of smoking among

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urban males in Cambodia [3]. The 2002 smoking prevalence figures by race in the United States were as follows: Native Americans (38.4%), whites (23.3%), blacks (21.7%), Hispanics (18.5%) and other Asians and Pacific Islanders (13.7%) [4]. The corresponding figures for California were as follows: Native Americans (no data), whites (16.8%), blacks (18.1%), Hispanics (16.3%) and other Asians and Pacific Islanders (10.3%) [4]. The average age for smoking initiation among Cambodian Americans has been reported to be 14 years [5]. A review of the literature suggests that further information is needed regarding the frequency of cigarette smoking (as well as other tobacco use) among the Cambodian American population as the prevalence has not been established definitively in other studies.

There is also a dearth of information concerning Cambodian Americans' attitudes toward tobacco use. Previous studies have tended to use small sample sizes that limit the scope of findings. Furthermore, factors such as traditional practices, politics and cultural beliefs have not been studied widely as possible influences that encourage tobacco use. This lack of relevant information limits the development of appropriate and culturally sensitive smoking cessation programs for smokers within the Cambodian American community. An in-depth examination of the factors that affect Cambodian Americans' smoking practices is needed.

Several factors have been suggested as reasons for the high smoking prevalence found among Cambodians. One is associated with the genocide campaign led by a group of communist insurgents known as the Khmer Rouge [6]. During their regime in Cambodia, the Khmer Rouge encouraged prisoners in work camps to use cigarettes as an appetite suppressant; smoking also provided the prisoners with the opportunity to rest [7].

Within the Cambodian culture, some practices and beliefs reinforce the role of smoking. Historically, Cambodians used tobacco to repel mosquitoes and other insects and to cure illnesses. Religion, a foundation of the country's culture and order, also strengthened the acceptance of tobacco use. In Cambodia, where 95% of the citizens are Buddhist, monks have a 44% smoking prevalence and hold considerable influence over the people [8, 9]. In addition, smoking is incorporated into religious ceremonies such as weddings, during which cigarettes are distributed to all guests [10]. With such strong traditions and practices, many Cambodian Americans regard tobacco use positively.

In all Southeast Asian countries, women smoke less frequently than men [11]. Because smoking among Asian women is generally unaccepted, a woman who smokes often is labeled a 'bad girl' [12]. As an alternative to smoking, a large percentage of elderly Cambodian women (in their native country) chew the areca nut, which is frequently consumed with cut tobacco [13]. The Cambodian women's choice of chew tobacco in preference to cigarettes demonstrates how the culture's negative attitude toward smoking by women influences their tobacco-use behaviors.

Smoking prevalence among Cambodian American women remains uncertain because of variations reported in prevalence surveys. For example, one study revealed a self-reported prevalence of 6.6% among Cambodian women; yet, the same study also demonstrated a prevalence of 21.5% when verified by cotinine tests [14]. Other data have indicated that 8% of the general Asian American female population smokes [15]. Fewer Cambodian women than men smoke, but even fewer are willing to admit that they smoke.

Regarding smoking, many Cambodian immigrants in the United States carry influential values and practices that are likely to be transmitted to the younger generation. For example, when male smokers give cigarettes as gifts to other males, Asian adolescent males perceive the gifts as an acceptance of smoking as well as a sign of affection and respect for others [3]. Additional factors such as education, employment status, income, marital status, acculturation and years living in the United States have been noted to affect smoking prevalence among Cambodian Americans [3]. Consequently, a complexity of factors influence a Cambodian American's decision to smoke.

Among the older generation of Cambodian Americans, smoking behaviors are affected particularly by the number of years spent in the United

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States and the degree of attained acculturation, a factor indicated to some degree by the level of acquisition of English. It has been suggested that when Vietnamese, Cambodians and Laotians first arrive in the United States, they smoke frequently, but when these immigrants become more acculturated, they smoke less frequently [16].

In the United States, advertising and media play a role in promoting smoking among racial and ethnic minorities and women. More billboards that advertise tobacco are placed in racial and ethnic minority communities than in predominantly white communities [17]. Among minority communities, the highest average number of tobacco displays was found in Asian American stores, followed by Hispanic stores and African American stores [17]. Tobacco advertising also targets young minority women; as these women assimilate to American culture, they become receptive to advertising messages that challenge traditional cultural restrictions [18].

The aims of the present study were to obtain qualitative data on the current patterns of tobacco use within the Cambodian community in Long Beach; identify predisposing, reinforcing and enabling factors that influence the smoking patterns of Cambodian youths and adults; and acquire information for the development of effective smoking prevention and cessation strategies.

Methods

Selection and description of participants

Data were collected from participants in focus group interviews, which were conducted in the offices of the Cambodian Association of America (CAA) in Long Beach and at sites where the CAA provided community services.

The sample design specified ~100–120 participants stratified according to age, gender and language preference. The selected sample size was constrained by the research budget; also, the investigators wanted to use small focus groups (i.e. 8–10 participants) to permit maximum interaction among subjects. At the same time, the number of subjects chosen was sufficient to permit a cross-section of gender, age and language preference and thus would be representative generally of these categories.

The sample design specified that focus groups should be segregated by age. Younger respondents were more likely than older respondents to have been born and educated in the Unites States, to have received their primary education in this country and therefore to be more acculturated to US norms. Older respondents were more likely to have been born in refugee camps or in Cambodia. Indications from the CAA's experience and from the literature review suggested that smoking behavior, reasons for smoking and attitudes toward media might vary among these age categories.

The sample design required that focus groups made up of younger respondents would combine men and women; among the older respondents, men and women would be separated. The rationale for this separation was that first-generation Cambodian American citizens would be less acculturated and hence more comfortable discussing issues in groups of the same gender. However, younger individuals would have had more experience in mixed group settings and thus be more comfortable in situations in which men and women openly discuss health beliefs and issues. In addition, the gender differences in smoking prevalence reported in previous research suggested that older Cambodian American men and women would have distinct perceptions of smoking, health issues and media.

Participants in the focus groups constituted a sample of convenience drawn primarily from the CAA's target catchment area, which consists of three zip codes in the city of Long Beach that have the largest concentrations of Cambodians: 90804, 90806 and 90813. For 1 month prior to conducting the focus groups, we publicized the research in two local newspapers—one Cambodian and one English—announcing the need for focus group participants in an important study conducted by the CAA and the California State University, Long Beach, about the health of Cambodians from the three target zip codes. Non-monetary incentives were provided including gift certificates, movie

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tickets, bags of rice and fruit. We anticipated that not all the proposed participants would be identified through publicity releases. Consequently, CAA staff members used their extensive community contacts to recruit additional participants until the target levels of participation were met. Typically, CAA recruits through Khmer-language media, extensive client lists and word of mouth.

Data collection took place during normal business hours from January through April of 2004. The final sample consisted of a total of 119 subjects, aged 18 years or older, who participated in 14 focus groups.

Rationale for use of focus groups

Focus groups are a particularly appropriate method for research that focuses on a target immigrant community. Focus groups, an efficient, qualitative data collection technique for non-literate societies, can be used to gain valid and usable information in cross-cultural environments [19–21]. Members of the Long Beach Cambodian American community represent a range of literacy, which is associated with their immigration history. Some older Cambodian Americans, who were among the first wave of immigrants around 1979, were believed to be less literate than their younger, more recent counterparts. The older immigrants represent a generation in which many of the more educated Cambodians were exterminated by the Khmer Rouge. However, with more than a 20-year presence in the United States, second- and third-generation Cambodian Americans have had considerably more exposure to formal education. In addition, the Cambodian American community has a mixed literacy heritage; consequently, a written survey would not be appropriate for all members of this population. The focus group methodology, guided by semi-structured facilitation, provided a forum for exploring tobacco-related concepts without the potential for misinterpretations due to limited literacy.

Data collection instruments and methodology

In the initial phase of the project (during early fall 2003), the data collection instruments were pilot tested following approval by the local Institutional Review Board. There were two main data collection instruments: a demographic and behavioral questionnaire and a focus group interview questionnaire. The instruments used previously validated questions selected from the research literature, and also relied on input from community experts who had worked with the Cambodian population in Long Beach. Interview questions evolved through a series of 12 iterations until the final version was obtained. Prior to pilot testing, the research staff carefully edited the questionnaires for logic and completeness; the questionnaires also were reviewed by a university research methods class for further enhancements.

The demographic and behavioral questionnaire was administered as an individual interview and the focus group questionnaire as a group interview questionnaire. The demographic and behavioral questionnaire covered demographic characteristics, smoking history, uses of other forms of tobacco and behavioral practices related to smoking. Focus group interviews covered 11 additional topics, such as reasons for smoking, traditional uses of tobacco, stress factors and smoking and perceived health effects of smoking. Examples of focus group questionnaire items included the following: (i) What are some of the reasons why people smoke in your community? (ii) Do you have any ceremonies, festivals, family gatherings and religious ceremonies in which tobacco product use has any importance? (iii) Please identify three of the most common sources of stress in your life. What kinds of sources of stress contribute to smoking?

All instruments and related materials were translated into Khmer by a professional translator at the CAA and further verified by back translation. The CAA staff members received training in the recruitment of subjects and methods of conducting individual and group interviews. Each focus group session lasted ~2 h. During implementation of the project, it was found that an insufficient number of subjects were proficient in English. Thus, it was necessary to depart from the original sample design in which approximately equal numbers of focus groups would be conducted in English or Khmer.

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Consequently, most of the focus groups were conducted in Khmer only or in both English and Khmer at the same time (mixed-language groups); the distribution of the number of focus groups according to language preference was as follows: English only (two), Khmer only (four) and both English and Khmer (eight). During the focus groups conducted in Khmer or in both Khmer and English, the interviewer provided a running translation of responses to the focus group interview. These translations were then transcribed by the three members of the research team who were present during all focus group interviews. The resulting transcriptions then were compared for consistency.

The dynamics of the focus groups suggested that the participants were interested in health issues and in discussing the sociocultural factors associated with tobacco use among the Cambodian American community. Respondents were cooperative, polite and appeared to volunteer information without reservation. Interviewees seemed to appreciate the fact that their community had been selected as a site for a research study on tobacco use.

Data analysis methods

Data from the individual questionnaires were coded and entered into a statistical software program (Statistical Package for the Social Sciences—SPSS). Because the sample was not based on probability sampling techniques, quantitative data were analyzed by descriptive analyses, which included univariate frequency distributions and cross-tabulations. Qualitative analyses were used to analyze data collected from the open-ended questionnaires. The focus group questionnaire contained a total of 11 questions, which were read in sequence to the focus group participants. Khmer-speaking interviewers assisted with this process when the sessions were conducted in the Khmer language. After a focus group question was read, participants were asked to respond and each of the three research staff members transcribed their individual responses on separate data sheets. The participants, themselves, did not write down any information. During the interviews, the researchers would periodically summarize and restate to the focus group members their responses in order to verify that the researchers' perceptions of the responses were correct. After the focus group session was completed, the research staff compared their individual records for agreement and disagreement. This procedure was used to determine informally the inter-judge reliability in rating the responses to the questionnaire items, although inter-judge reliability was not quantified. The anonymity of the respondents was maintained by not recording any personally identifying information. All research data were stored in a protected area in the principal investigator's office.

The method for analyzing qualitative data was thematic coding. In applying this method, researchers reviewed qualitative information in order to ascertain unique and recurrent themes in the data. The researchers considered the unit of analysis to be a single discreet idea that was contained in a response. In some cases, respondents could reveal more than one concept in response to a single question. Each question was analyzed as a group; for example all responses to Question 1 were analyzed together, and then all responses to Question 2, and similarly for the remainder of the questionnaire items. Unique themes that were extracted from the data were tallied and matched to a theoretical framework, the 'precede–proceed' model. Here is an example of the thematic coding used in the research. Several of the respondents in some of the focus groups reported that tobacco was used in Cambodia as a medicine to repel leeches. This theme was noted by the researchers as well as many other themes that recurred during the focus group interviews.

Results

Demographic characteristics of the sample

The gender distribution of the sample was 66 females (56%) and 54 males (44%), and the age distribution was as follows: 29 years and younger, 37 (31%); 30–49 years, 45 (38%), and 50 years

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and older, 36 (31%). A total of 53 subjects (46%) were married. The number of employed persons was 47 (40%). With respect to annual income, 52 subjects (64%) reported an income of $19 000 or less. Regarding education, 28 subjects (25%) indicated that they had no schooling; 86 respondents (75%) had completed elementary school or higher level of education. The majority of the respondents, 105 (89%), was foreign born; of these foreign-born respondents, 64 (67%) immigrated to the United States between 1981 and 1989. US-born subjects (n = 13) constituted 11% of the sample. Most of the participants indicated that they were bilingual in English and Khmer. Finally, 85 (82.5%) of the subjects lived in rented homes (Table I).

Table I. *Demographic characteristics of focus group participants*

Demographic characteristics	Current smoker (n = 29)		Not a current smoker (n = 90)		Total sample (n = 119)	
	n	%*	*n*	%*	*n*	%*
Gender						
Male	23	79.3	30	33.3	53	44.5
Female	6	20.7	60	66.7	66	55.5
Age						
29 years and younger	9	31.0	28	31.5	37	31.4
30–49 years	7	24.1	38	42.7	45	38.0
50 years and older	13	44.8	23	25.8	36	30.8
Marital status						
Married	9	32.1	44	51.2	53	46.5
Not married	19	67.9	42	48.8	61	53.5
Country of birth						
United States	6	21.4	7	7.8	13	11.0
Cambodia	19	67.9	76	84.4	95	80.5
Others	3	10.7	7	7.8	10	8.5
Employment status						
Employed	6	20.7	41	46.1	47	39.8
Unemployed	23	79.3	48	53.9	71	60.2
Annual income						
$9999 and lower	10	47.6	29	47.5	39	47.6
$10 000–19 999	6	28.6	7	11.5	13	15.9
$20 000 and above	5	23.8	25	41.0	30	36.6
Level of education						
No schooling completed	8	28.6	20	23.3	28	24.6
Elementary and/or secondary school	18	64.3	34	39.5	52	45.6
Some college/college graduate	2	7.1	32	37.2	34	29.8
Year of immigrating to the United States						
1980 and earlier	6	27.3	7	9.6	13	13.7
1981–89	14	63.6	50	68.5	64	67.4
1990 and after	2	9.1	16	21.9	18	18.9
Preferred language						
English	16	55.2	40	44.9	56	47.5
Khmer	13	44.8	49	55.1	62	52.5
Type of housing						
Home-owner	0	0.0	18	22.2	18	17.5
Renter	22	100.0	63	77.8	85	82.5

*Percents refer to column percents.

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Characteristics of smokers and non-smokers

There were 29 current smokers versus 90 non-smokers. The current smokers were defined as individuals who smoked at the time of the interview and who had smoked at least 100 cigarettes in their lifetime. The number of current male smokers (n = 23) exceeded the number of current female smokers (n = 6) by a ratio of 4 : 1. The age distribution of current smokers differed from that of non-smokers. Among smokers, almost half of all respondents were 50 years of age or older, while the remaining current smokers were evenly distributed between the other two age categories (i.e. 29 years of age and younger and 30–49 years old). The majority of non-smokers was 30–49 years of age; only 26% were 50 years of age or older.

Responses from focus group questionnaires

The present research found that men smoked more frequently than women. The focus group data suggested that this gender difference was due to the stigma that cigarette smoking among women carries in the Cambodian culture. In particular, young marriageable women do not smoke because of the likelihood that they will be perceived negatively by potential mates. Older women, however, prefer to chew tobacco, a behavior that has a venerable cultural heritage.

In addition to the stigma attached to smoking among women, the focus group results also indicated that smoking rates in Cambodia are high for several other possible reasons. First, there are no laws that prohibit or restrict cigarette smoking in any area of Cambodia. Second, people in rural areas tend to smoke due to cultural and traditional uses of tobacco that are not found in urban areas. People in urban areas, especially youths, begin smoking at an early age possibly because of the influence of role models such as parents, friends and celebrities.

Although doctors are highly esteemed by the Cambodian culture, the average Cambodian has limited access to health care. Participants reported that people in Cambodia do not participate in disease prevention activities such as regular health checkups because of their general lack of knowledge about health and lack of financial resources. Also, within Cambodia, there are virtually no accessible health programs to illustrate the harmful effects of smoking. As a result, focus group participants stated that Cambodians are unaware of the adverse health consequences of cigarette smoking.

Predisposing, reinforcing and enabling factors

The present research was premised on Green's precede–proceed theoretical model, which postulates predisposing, reinforcing and enabling factors that are associated with health-related behaviors [22]. The questions used in the focus group interviews corresponded approximately to these three factors. For example, one question addressed ceremonies, festivals, family gatherings and religious ceremonies in which tobacco products are used (considered to be a predisposing factor); another question asked respondents how difficult it was for them to tell a close family member, friend or another person not to smoke around them (considered to be a reinforcing factor) and finally a question queried who would be the most influential person to encourage you to quit smoking (considered to be an enabling factor). From these factors, four dimensions were distilled from the qualitative analyses: sociocultural factors, traditional factors, coping practices and medicinal purposes (Table II). The method for deriving these dimensions was thematic coding, which reflected the mutual consensus of the three researchers who had reviewed the interview transcripts. This procedure was used to maximize the reliability of the coding scheme. The dimensions were also reviewed by CAA staff who agreed with the results that were obtained.

The first two dimensions included sociocultural and traditional factors: Within the Cambodian society, cigarette smoking takes place during social gatherings, birthday parties, special occasions, major holidays and for personal enjoyment in group activities. In one focus group interview, a respondent

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Table II. *Factors that influence Cambodians to smoke*

Sociocultural and traditional factors	• Smoking occurs during social gatherings, birthday parties, special occasions, temple ceremonies, funeral ceremonies, offerings to ancestors and as part of religious practices • Youths start smoking due to the influence of role models including parents, friends and celebrities • Tobacco is grown at home for easy availability
Coping practices	• Smoking is used to manage stress due to financial problems, living in cramped quarters, immigrating to the United States and difficulties in family relationships
Medicinal purposes	• To repel leeches and mosquitoes • To stop bleeding from wounds • To aid in healing • To promote dental hygiene, e.g. cleaning teeth, preventing cavities and making teeth strong

stated, 'Cigarettes taste good; it's like a vegetable. I offer them to all my friends. It makes me happy and is a different feeling.' Some participants said that they generally enjoy the taste of smoking, particularly after eating. According to one participant, 'People smoke after meals as they want to get better taste in mouth.'

Cambodian American adolescents, as noted by respondents, start smoking due to the influence of role models including parents, friends and celebrities. In addition, these young adults attribute their smoking behaviors to boredom, addiction and peer group influences, which include smoking for fun, looking cool and fitting in with their social environment.

Cigarettes and tobacco are used within religious practices and temple ceremonies including funeral ceremonies, offerings to ancestors and prayer offerings where cigarettes are kept in fruit trays. In Cambodia, most residents plant tobacco in their backyards because it is used so frequently. Also, cigarettes are offered commonly to guests and as a means of showing respect. One focus group participant said, 'In Cambodia smoking is a trend that is passed from one generation to another. It is our culture to give cigarettes.' In Cambodian wedding ceremonies, newlyweds greet their party guests with cigarettes. This tradition involves the groom giving cigarettes to male guests while the bride lights the cigarettes. Although this tradition is practiced in Cambodia, it is losing favor among the US Cambodians.

The third dimension identified smoking used as a coping practice. Cigarette smoking was cited as a method for coping with stress, and is practiced as a substitution activity to forget problems. Respondents mentioned that they felt compelled to begin smoking, or increase their frequency of smoking, when under stress. Participants indicated that the most common sources of stress in their lives were financial problems or difficulties with their businesses. Moreover, less economically advantaged respondents reported higher levels of stress due to financial burdens than did respondents from a higher socioeconomic status.

Other sources of stress were family related, including living in cramped quarters among many family members, and tensions arising from the generational, cultural and language-related discrepancies between parents and their children. Two respondents noted their worries about their children as reasons for smoking cigarettes. Additional stress factors included relationship difficulties and the process of immigrating to the United States. One subject said, 'I started smoking more than one pack a day after having a heartache or breakup; I cannot quit smoking.'

The fourth dimension reflected the use of tobacco for medicinal purposes. Results from focus group interviews revealed that western medical care is not readily accessible in Cambodia; hence, alternatives such as tobacco have long been used medicinally to stop wounds from bleeding or aid in healing. Also, while farming in marshy areas, Cambodians chew tobacco for its instant availability when needed to repel leeches. Other medicinal uses of tobacco include teeth cleaning, cavity prevention, teeth strengthening and prevention of bad breath.

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Smoking cessation strategies

Focus group interview questions investigated subjects' perceptions of optimal methods to design smoking cessation programs for the Cambodian American population. The themes that emerged were related to the influences of medical professionals, family members and anti-smoking legislation. Respondents suggested that doctors, who are highly regarded within the culture, have the most influence in smoking prevention and cessation strategies, especially among the older population. Family members and loved ones were noted as the next most influential factor. Children were reported to be a potentially powerful factor in smoking cessation among parents; many participants indicated that they would be willing to stop smoking if their children asked them to do so. Anti-smoking policies, such as smoke-free bars and restaurants in California, also were mentioned as factors that encouraged participants, especially elderly Cambodians, to attempt to quit smoking. Many respondents felt that being required to go outside to smoke has deterred them from smoking.

Discussion

This research addressed three major issues with respect to tobacco use among the Cambodian American population in Long Beach, CA: (i) patterns of tobacco use, (ii) factors that influence smoking patterns and (iii) smoking prevention strategies. Regarding patterns of tobacco use, the results of this investigation suggested that cigarette smoking is prevalent among Cambodian Americans. We found that men smoked more frequently than women and that older individuals smoked more frequently than younger individuals. Older women who used tobacco preferred chew tobacco over cigarettes. This finding agrees with the high smoking prevalence rates and gender differences reported in other studies such as those conducted in Cambodia and prevalence surveys carried out in the United States, including California [3, 4].

Concerning factors that influence tobacco use, little information was found in the literature for Cambodians. Previous research suggests that tobacco use is integral to the Cambodian culture and is related to acculturation to the American society. The present research breaks new ground by identifying a more complete set of factors that predispose, reinforce and enable the use of tobacco. For example, the researchers found that in Cambodia, it is common for residents to grow tobacco at home for their personal use. In addition, smoking is a means for coping with societal and family stresses and was promoted by the Khmer Rouge as a method for suppressing hunger. Finally, tobacco is perceived as having useful medicinal purposes including the promotion of dental hygiene and as an aid in healing. Some of these beliefs (e.g. promotion of dental hygiene) are contrary to current western medical practice.

Finally, regarding the third research question, the present study concluded that cultural factors need to be considered in designing an effective cessation strategy for the Cambodian American community. The results of this study contribute to the progress in identifying culturally appropriate, effective and efficient strategies that can be implemented within smoking prevention programs for the Cambodian American community. Many older Cambodians are unaware of the harmful effects of smoking; older Cambodian women believe that cancer is a western disease that is not likely to affect them. Thus, an educational program about the harmful health effects of smoking targeted toward older Cambodian women would be an appropriate prevention and smoking cessation strategy. Additional smoking cessation and intervention efforts can be developed among Cambodian communities through community-based tobacco education programs, particularly within apartment buildings where a majority of Cambodians reside. A supportive holistic approach that involves family members, children, Buddhist monks and esteemed medical professionals may increase compliance with smoking cessation programs. For example, the credibility of medical practitioners is much higher in the Cambodian American community than in the general community. Thus, medical professionals should be accorded a significant role in smoking cessation programs.

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Cessation and prevention activities should counter the influences of advertisements and peer pressure by educating adolescents on the health consequences of smoking and by changing the perception of smoking as a positive social norm.

In the Cambodian society, elders are held in high regard by younger persons. Also, there is a close association and residential proximity of younger and older persons. Elders are significant role models for younger persons in the community. The high prevalence of smoking among older adults provides a negative role model for the youth in the community. Thus, prevention programs should be cross-generational.

Opportunities to achieve progress toward these goals can be found by integrating age-appropriate and culturally appropriate tobacco cessation and prevention lessons within the curricula of middle school and high school health education classes and school-affiliated clubs and activities. Health education approaches to the Cambodian American population should take a comprehensive perspective as smoking and other forms of tobacco use often occur at the same time as other adverse health behaviors—particularly alcohol consumption and gambling.

One of the limitations of the present research was the sample design, which was based on a sample of convenience. Consequently, it was not possible to infer prevalence estimates of smoking and tobacco use. In this sample of convenience, some population subgroups may have been overrepresented, e.g. Cambodian-born, unemployed and low-income groups. The possible overrepresentation of these groups would tend to limit the generalizability of the findings. However, the frequency of smokers identified in the focus groups was similar to prevalence estimates reported in other population-based surveys, as was the difference in levels of smoking reported for men and women. Previous surveys of smoking prevalence generally have relied on small subpopulations of Cambodian Americans who were included in the overall sample of a general population.

Directions for future research on tobacco use among Cambodian Americans should include prevalence surveys with probability-based samples in order to ascertain the prevalence of smoking and verify male–female differences in tobacco-use prevalence. Other efforts should be directed at the design of community interventions that employ physicians and other role models for the community who are portrayed in smoking cessation literature and take part in smoking cessation interventions. The methodology of focus groups used in the present research may prove to be efficacious in the design of culturally appropriate smoking cessation literature and interventions for the Cambodian American population.

What this paper adds

A review of the current literature indicates that the smoking prevalence of Cambodian Americans exceeds the smoking prevalence of other California and US racial and ethnic groups; the prevalence of smoking among Cambodian men also exceeds that of Cambodian women. Factors that might predispose, enable or reinforce the use of tobacco among Cambodian Americans have been suggested, but few studies have been conducted to examine these factors extensively.

The present research provided an in-depth examination of the influences that affect Cambodian Americans' tobacco-use practices. Three main sociocultural factors were identified: traditions and practices that integrate smoking with the Cambodian American social environment, smoking as a coping mechanism and tobacco used for medicinal purposes. The identification of these factors contributes to the planning and development of strategies that can be used in smoking prevention programs for the Cambodian American community.

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Conflict of interest statement

The authors declare that they have no competing interests.

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