

# Socioepidemiology of Cigarette Smoking Among Cambodian Americans in Long Beach, California

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**Abstract** We examined the prevalence of cigarette smoking among Cambodian Americans in Long Beach, California. A stratified random sample of 1,414 adult respondents was selected from 15 census tracts with high concentrations of Cambodian Americans. The prevalence of current smokers was 13.0%; the sex-specific prevalence of smoking was 24.4% for men and 5.4% for women. The mean age of the sample was 50.5 years; about 60% of the respondents were women. The survey response rate was 90.5% among households in which respondents self-identified as Cambodian American, and at least one person completed the survey. Significant covariates of current smoking were gender, age, education, marital status, and health status. The prevalence of smoking among Cambodian men was higher than among other males in California.

Culturally-tailored interventions should consider demographic characteristics of the target population as well as the high level of respect given to religion, elders, and peers.

**Keywords** Cigarette smoking · Tobacco use · Cambodian Americans · Minority health · Refugees

## Introduction

Smoking is the leading cause of preventable death and years of potential life lost in the United States [1]. The prevalence of cigarette smoking in California has declined from 26.7% in 1985 to 14.3% in 2007 [2, 3]. Nevertheless, despite this decline among California's general population, some subgroups—notably Cambodian Americans—are thought to exhibit a high prevalence of smoking. The present study examined the prevalence and demographic correlates of cigarette smoking among Cambodian Americans in Long Beach, California, home to the largest community of Cambodians outside of Southeast Asia [4]. Comprising about 10% of the population of the city, approximately 50,000 Cambodian Americans reside in central Long Beach (estimated population as of July 1, 2007: 466,520) [5, 6]. Extant findings from research conducted in Cambodia and in the US have suggested that the prevalence of cigarette smoking is high among Cambodians as well as among Cambodian Americans [7, 8]. The prevalence of smoking varies considerably from one study to another, depending upon the data source.

The prevalence of smoking among Cambodian American men is higher than among Cambodian American women [8]. Cambodian American men tend to have one of the highest prevalences of current smoking among South-East Asian men (49.1%) [9]. A pilot study conducted in Long

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Beach and based on a convenience sample ( $n = 109$ ) found that a much higher percentage of Cambodian American men than women smoked [10]. This observation was consistent with findings that have reported that the prevalence of smoking among men in Cambodia (40.5%) is similar to that among Cambodian American men, [7] whose prevalence of smoking ranges from 32.8% to 71.0% in various studies [6, 11]. According to the REACH 2010, which surveyed 1,026 respondents of Lowell, Massachusetts, site of the second largest population of Cambodian Americans in the US, 50.4% of Cambodian men were current smokers [5]. In comparison, Cambodian women were reported to have a 10.9% prevalence of smoking, a 4.6 to 1 sex ratio [5].

In addition, Cambodian Americans are believed to demonstrate smoking levels that are substantially higher than those of other US Asian and Pacific Islander groups. The prevalences of cigarette smoking among the aggregate Asian population (men and women combined) in the US (2007) and in California (2005) were 9.6% and 12.1%, respectively [12, 13]. Often, national and state data combine Asian subpopulations into a single group resulting in a paucity of specific information on tobacco use prevalence in Asian subgroups such as Cambodian Americans [8, 14].

Even though Cambodian women have a low prevalence of current smoking in comparison with men, they have a high prevalence of other forms of tobacco use. However, this topic was not a focus of the present research. In Cambodia, about two-fifths of older women and about one-half of rural women chew betel quid, a mixture of chewing tobacco and betel nut [15]. Some Cambodian women use tobacco as a remedy to relieve pregnancy-related symptoms and as a female rite of passage into adulthood [15].

In summary, previous research suggested that the prevalence of cigarette smoking is high among Cambodian Americans, especially men, in comparison with the US general population, other Asian subpopulations, and Cambodian American women. **The purpose of the present research was to elucidate the occurrence and correlates of smoking among a large Cambodian American population that had not been examined previously. Influences that were hypothesized to affect smoking among Cambodian Americans were gender, marital status, age, education, and health status.**

## Methods

### Study Setting and Sample Design

The present research was set in Long Beach, which is located in Los Angeles County. **Stratified random sampling was employed to select participants from 15 census tracts that have high densities of Cambodian Americans** [16].

This project was an academic and community collaboration in which the Cambodian community was represented by the Cambodian Association of America (CAA), a service organization. A close working relationship between California State University, Long Beach, and CAA was essential for promoting the study, interviewing, and establishing a rapport with the Cambodian community. A total of **1,414 face-to-face interviews** were completed during the data collection period from January 2009 to April 2010. The California State University, Long Beach, Institutional Review Board approved the study protocol.

### Measures

The Cambodian Household Interview Survey, developed for this project, adapted questionnaire items from a previously validated instrument that was available from the Centers for Disease Control and Prevention's Question Inventory on Tobacco [17]. The survey and related materials were translated into the official Cambodian language, Khmer, by translators from the CAA. Pilot testing occurred after the survey was further validated by back translation [18].

In-person interviews were conducted in the participants' homes in either English or Khmer, depending upon language preference; **all eligible members of the household who were available at the time of the survey were invited to participate in the interview. Eligible individuals consisted of persons who self-identified as Cambodian, were at least 18 years of age, and resided in Long Beach.** A monetary incentive was provided upon completion of the interview.

As a result of close collaboration between the university and its community partner, several procedures enabled researchers to adhere to the cultural norms of the study participants. For example, key members of the Cambodian community were consulted during all phases of the development of the study and Buddhist monks blessed the study. Media releases in Khmer and English as well as presentations at community social events were used to increase awareness of the research. As part of their training, interviewers and other members of the research staff received instruction about the history of Cambodian American immigration to Long Beach as well as the traditions of the study population. Interviewer teams included at least one member who was fluent in Khmer.

**Questionnaire categories included demographic variables such as gender, age, marital status, employment status, and educational level.** Acculturation measures were based on place of birth (e.g., born in Cambodia or the US) and self-reported primary language spoken at home (English or Khmer). Health was measured by a single item, self-reported health status (five point scale: excellent, very good, good, fair, or poor). **Smoking status was classified**

into three categories: current smoker, former smoker, and never smoker. A current smoker was defined as someone who had smoked at least 100 or more cigarettes during his or her lifetime and currently smoked every day or some days; a former smoker had smoked 100 or more cigarettes during his or her lifetime, but was not a current smoker; and a never smoker did not smoke at the time of the interview nor had smoked 100 or more cigarettes during his or her lifetime [19].

Data Analysis Methods

Data were analyzed by using SPSS version 17.0 (Chicago, IL: SPSS, Inc.: 2006) and SAS version 9.2 (SAS Institute, Cary, NC). Descriptive statistics summarized demographic and other study variables. Bivariate and multivariate analyses explored the relationships among smoking status, demographic variables, and health status. In the bivariate analyses, the chi-square test for independence was used to determine the statistical significance of associations between outcome and other variables. Multivariate logistic regression analyses examined covariates of status as a

current smoker or a former smoker. Statistical significance was set at  $P \leq 0.05$ .

Results

Sample Characteristics

The survey response rate was 90.5% among households in which respondents self-identified as Cambodian American and at least one person completed the survey. Among all eligible individuals in all households, 39.6% completed the interview.

The sample consisted of 1,414 Cambodian adults (60.3% women). (Refer to Table 1.) The mean age of the sample was 50.5 years (range = 18–96 years; males = 49.8 years, females = 51.0 years) and did not differ significantly between men and women. Although the majority of participants had completed less than a high school education, men tended to be more educated than women ( $\chi^2 = 113.0$ ,  $P < 0.001$ ). A total of 72.4% of participants were unemployed. More women (78.0%) than men (64.0%) were

**Table 1** Distribution of the study population, by gender and selected characteristics

	Men (n = 564) no. (%)	Women (n = 850) no. (%)	Total (n = 1,414) no. (%)	$\chi^2$	df	P <sup>a</sup>
Age				18.5	2	<0.001
18–29	133 (23.6)	139 (16.4)	272 (19.2)			
30–64	290 (51.4)	531 (62.5)	821 (58.1)			
≥65	140 (24.8)	178 (21.1)	319 (22.6)			
Education				113.0	3	<0.001
No schooling	22 (3.9)	166 (19.5)	188 (13.3)			
Grades 1–9	237 (42.0)	420 (49.4)	657 (46.5)			
Grades 10–12	146 (25.9)	142 (16.7)	288 (20.4)			
College	159 (28.2)	122 (14.4)	281 (19.9)			
Employment status				35.3	1	<0.001
Employed	186 (33.0)	163 (19.2)	349 (24.7)			
Unemployed	361 (64.0)	663 (78.0)	1,024 (72.4)			
Marital status				1.3	1	0.255
Married/living together as married	340 (39.4)	486 (42.4)	826 (58.4)			
Unmarried	222 (60.3)	360 (57.2)	582 (41.2)			
Health status				4.8	1	0.028
Excellent/very good/good	242 (42.9)	314 (36.9)	556 (39.3)			
Fair/poor	317 (56.2)	525 (61.8)	842 (59.5)			
Place of birth				8.7	1	0.003
United States	85 (15.1)	84 (9.9)	169 (12.0)			
Cambodia and other (foreign born)	479 (84.9)	766 (90.1)	1,245 (88.0)			
What language do you primarily speak at home?				5.0	1	0.025
English	134 (23.8)	160 (18.8)	294 (20.8)			
Khmer	430 (76.2)	690 (81.2)	1,120 (79.2)			

<sup>a</sup> P values were calculated on valid percentages. df Degrees of freedom

unemployed ( $\chi^2 = 35.3$ ,  $P < 0.001$ ). Approximately 59% of respondents were married or living together as married; men and women did not differ significantly in marital status. Almost two-thirds of women indicated that they were in fair or poor health in comparison with about half of men ( $\chi^2 = 4.8$ ,  $P = 0.028$ ). The percentage of respondents who reported that they had been born in Cambodia was 88.0%; a larger percentage of women than men had been born in Cambodia ( $\chi^2 = 8.7$ ,  $P = 0.003$ ). A total of 79.2% of respondents spoke Khmer as their primary language at home. A larger percentage of men (23.8%) than women (18.8%) were proficient in English ( $\chi^2 = 5.0$ ,  $P = 0.025$ ).

#### Bivariate Analyses

**We examined bivariate associations among smoking status (current smokers, former smokers, and never smokers) and selected demographic and health-related characteristics.**

(Refer to Table 2.) The prevalence of current smokers in the overall study sample was 13.0% and was 24.4% among men and 5.4% among women. More men (15.7%) than women (2.8%) were former smokers; a larger percentage of women than men were never smokers (91.8% vs. 60.0%). The association between gender and smoking status was significant ( $\chi^2 = 207.1$ ,  $P < 0.001$ ), as were the relationships among smoking status and age, employment status, marital status, health status, and place of birth. The bivariate associations between smoking status and either primary language spoken at home or education were not statistically significant.

#### Multivariate Analyses

Two multiple logistic regression analyses were performed in order to examine associations among demographic and health-status variables and smoking status. (Refer to Table 3.)

**Table 2** Estimated percentages of Cambodian American current smokers, former smokers, and never smokers, by selected characteristics

	Current smokers ( <i>n</i> = 183) no. (%)	Former smokers ( <i>n</i> = 112) no. (%)	Never smokers ( <i>n</i> = 1,116) no. (%)	$\chi^2$	<i>df</i>	<i>P</i> <sup>a</sup>
Gender				207.1	2	<0.001
Men	137 (24.4)	88 (15.7)	337 (60.0)			
Women	46 (5.4)	24 (2.8)	779 (91.8)			
Age				45.4	4	<0.001
18–29	54 (19.9)	7 (2.6)	211 (77.6)			
30–64	94 (11.5)	57 (7.0)	667 (81.5)			
≥65	34 (10.7)	48 (15.0)	237 (74.3)			
Education				9.4	6	0.153
No schooling	17 (9.0)	17 (9.0)	154 (81.9)			
Grades 1–9	80 (12.2)	57 (8.7)	519 (79.1)			
Grades 10–12	50 (17.4)	19 (6.6)	218 (76.0)			
College	36 (12.9)	19 (6.8)	225 (80.4)			
Employment status				0.7	2	<0.001
Employed	43 (12.4)	25 (7.5)	279 (80.4)			
Unemployed	133 (13.0)	87 (8.5)	803 (78.5)			
Marital status				17.2	2	<0.001
Married/living together as married	92 (11.2)	83 (10.1)	649 (78.8)			
Unmarried	91 (15.7)	28 (4.8)	462 (79.5)			
Health status				8.8	2	0.013
Excellent/very good/good	64 (11.6)	31 (5.6)	459 (82.9)			
Fair/poor	117 (13.9)	78 (9.3)	646 (76.8)			
Place of birth				19.6	2	<0.001
United States	37 (21.9)	4 (2.4)	128 (75.7)			
Cambodia and foreign born	146 (11.8)	108 (8.7)	988 (79.5)			
What language do you primarily speak at home?				4.9	2	0.086
English	44 (15.1)	15 (5.1)	233 (79.8)			
Khmer	139 (12.4)	97 (8.7)	883 (78.9)			

Counts and percentages were adjusted for missing values. *df* Degrees of freedom

<sup>a</sup> *P* values were calculated on valid percentages

**Table 3** Adjusted odds ratios (ORs) for Cambodian American current smokers and former smokers, by selected characteristics

	Current smokers ( <i>n</i> = 183) OR (95% CI)	Former smokers ( <i>n</i> = 112) OR (95% CI)
Gender		
Men	6.81 (4.58, 10.12)	8.50 (4.96, 14.64)
Women (ref)	1.00	1.00
Age		
18–29	2.22 (1.04, 4.74)	1.00
30–64	1.66 (1.05, 2.63)	2.23 (0.68, 7.31)
≥65	1.00	4.02 (1.18, 13.67)
Education		NS
No schooling	2.29 (1.09, 4.82)	2.26 (0.98, 5.24)
Grades 1–9	1.75 (1.02, 3.00)	1.08 (0.57, 2.02)
Grades 10–12	1.84 (1.10, 3.08)	0.76 (0.37, 1.56)
College (ref)	1.00	1.00
Employment status	NS	NS
Unemployed	1.45 (0.94, 2.24)	1.10 (0.62, 1.98)
Employed (ref)	1.00	1.00
Marital status		NS
Unmarried	1.49 (1.01, 2.19)	0.66 (0.40, 1.10)
Married/living together as married (ref)	1.00	1.00
Health status		NS
Fair/poor	1.65 (1.09, 2.52)	0.09 (0.65, 1.83)
Excellent/very good/good (ref)	1.00	1.00
Place of birth	NS	NS
United States	1.63 (0.79, 3.34)	0.62 (0.13, 3.01)
Cambodia and foreign born (ref)	1.00	1.00
What language do you primarily speak at home?	NS	NS
English	1.01 (0.63, 1.62)	0.95 (0.49, 1.83)
Khmer (ref)	1.00	1.00

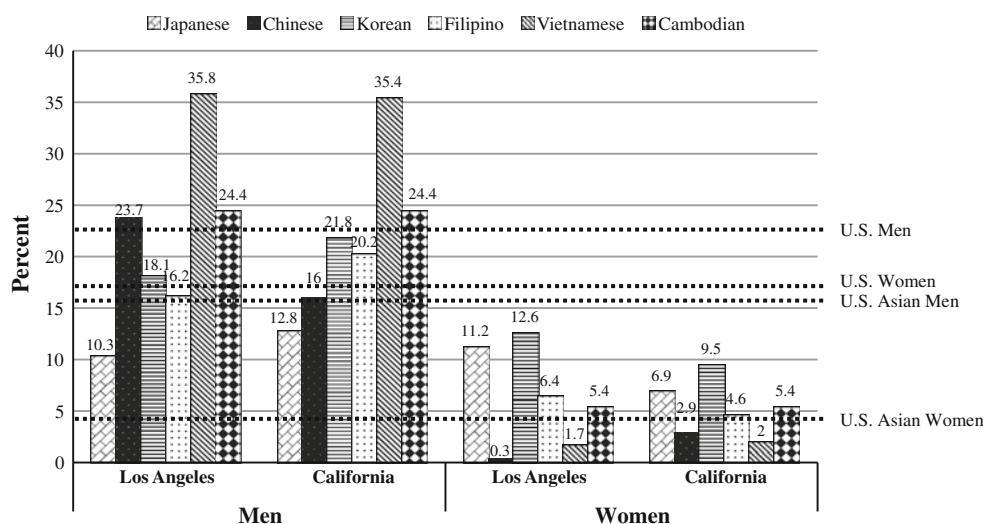
CI confidence interval,  
NS not significant

The odds of being a current smoker were 6.81 times (95% CI = 4.58, 10.12) higher among men than among women. Age, education, marital status, and health status were statistically significant predictors of status as a current smoker. The odds of being a current smoker were 2.22 times (95% CI = 1.04, 4.74) higher among persons aged 18–29 years than among persons aged 65 years and older. Similarly, the odds of current smoking were 1.66 times (95% CI = 1.05, 2.63) higher among persons aged 30–64 years than among persons aged 65 years and older. Among persons who had no formal education, the odds of being a current smoker were 2.29 times (95% CI = 1.09, 4.82) higher than among persons who had some college education or more. In addition, the odds of being a current smoker were higher among persons with less than a high school education than among persons who had some college education; higher among married persons than among unmarried persons; and higher among persons who self-reported fair or poor health in comparison with persons who self-reported good to excellent health.

With respect to former smokers, the odds ratios for being a former smoker were significant for gender and age. The odds of being a former smoker were 8.50 times (95% CI = 4.96, 14.64) higher among men than among women. In comparison with persons aged 18–29 years, the odds of being a former smoker were 2.23 times (95% CI = 0.68, 7.31) higher among persons aged 30–64 years. Similarly, the odds of being a former smoker were 4.02 times (95% CI = 1.18, 13.67) higher among persons aged 65 years and older than among persons aged 18–29 years.

#### Comparisons with Other Prevalence Data

We found that Long Beach Cambodian American men had a higher smoking prevalence (24.4%) than levels reported in other studies for Asian men and men of all races combined in the US and in the general population of California. In the US and California, the respective smoking frequencies were 15.9% and 19.4% among Asian men and 23.3% and 18.1% for men of all races combined [12, 20]. (Refer to Fig. 1.)



**Fig. 1** Estimated percentages of Asian current smokers in Los Angeles County and California, 2007, by gender. *Source:* California Health Interview Survey (CHIS), 2007: Current Smoking Status Asian Ethnicity Groups. Los Angeles, CA: UCLA Center for Health Policy Research; January 2007. CDC: Cigarette Smoking among

Adults—United States, 2007. *MMWR* 2008; 57 1221–1226. BRFSS: Prevalence and Trends Data—Tobacco Use, California 2007. Los Angeles County Health Survey, 2007: Office of Health Assessment and Epidemiology, Los Angeles County Department of Public Health. Data for Cambodians are from the present research

In comparison with other Asian American subgroups in California, Cambodian American men in our research had the highest prevalence of smoking with the exception of Vietnamese men (35.4%) [20]. Despite the fact that the prevalence of smoking may be lower among Long Beach Cambodian American men than among those from other geographic areas of the United States, their frequency of smoking exceeds that of the general California population (14.3% current smoking prevalence) [3].

With respect to Los Angeles County—in which Long Beach is located—the frequency of smoking among Cambodian American males in our research fell within the ranges for Asian sub-groups reported by other surveys of the county and exceeded the smoking prevalence for all Asian groups combined (20.0%) [21]. Among Asian sub-populations, only Vietnamese American men had a higher smoking prevalence (35.0%) [20].

Gender differences (i.e., lower frequencies of current smoking among Asian women than among Asian men) were reported by prevalence surveys for Asian sub-populations in the US, the state, and Los Angeles County. Cambodian American women in our study had a higher smoking prevalence than other Asian women nationally and in the state, but a lower prevalence than women of all races combined. The smoking prevalence reported for Cambodian American women (5.4% in the present study) ranked as the fourth highest frequency among Los Angeles County female Asian sub-populations, which had a combined prevalence of 4.6% [20].

## Discussion

This study examined the prevalence of cigarette smoking among Cambodian Americans in Long Beach, California. Previous research had suggested that Cambodians have a high prevalence of smoking. A community survey interviewed 1,414 randomly selected participants who resided in geographic units with high densities of Cambodian American residents. We found that the prevalence of current smoking among Cambodian Americans was 13.0%; the respective figures for men and women were 24.4% and 5.4%. The prevalence of smoking tended to decline with age.

The prevalence of smoking among Cambodian American men in Long Beach was lower than that reported for Cambodian American men in other studies such as those conducted in Lowell, MA [8, 22]. The prevalence of smoking reported in Lowell was 50.4% for men and 10.9% for women. Other reports have indicated that smoking prevalence among Cambodian men ranges from 30% to 70%. The lower smoking prevalence among Long Beach Cambodian American men may reflect the successful effect of California's tobacco control programs such as those funded by Proposition 99 [23]. Nonetheless, the higher levels of smoking among Cambodian American men in Long Beach in comparison with other populations suggests the continuing need for targeted smoking cessation programs for this group.

Among current smokers, the male to female ratio of smoking prevalence was 4.5 to 1 and was similar to the sex ratios found in other research. Many Asian groups regard



women's smoking as socially unacceptable; consequently, women in almost all Southeast Asian countries smoke less frequently than do men [24]. Apparently, these gender differences carry over to women of Asian heritage in the US. Only 4.0% of Asian American women in the general US population smoke (2007 data), a prevalence figure that is close to that for Asian American women in California [12, 20].

Because smoking is regarded as culturally unacceptable for women, some groups of Asian women, particularly older Cambodian women, tend to prefer chewing tobacco, an example being betel quid [25]. Even though the present study did not focus on use of chewing tobacco among Cambodian Americans, our previous focus group research revealed that more Cambodian American women chew tobacco than do women from other Asian subgroups.

Social and cultural dimensions are hypothesized to be linked with smoking among Cambodian men. **In the present research, we found that age, gender, education, marital status, and health status were significant covariates of current smoking.** These factors have been noted in other research to affect the prevalence of smoking among Cambodian Americans [9, 11, 8, 15, 26].

Our data indicated that Cambodians who immigrated to the United States were older than those born in the United States and were hypothesized to be less acculturated to Western norms than native born Cambodian Americans. Thus, older age overlapped with foreign-born status (birth in Cambodia) and preference for speaking Khmer at home. Our findings suggested that younger persons were more likely to smoke than older persons and older persons were more likely to be former smokers. Apparently, Cambodians who immigrate to Long Beach stop smoking over time.

Participants in a focus group study among Cambodian Americans in Long Beach stated that youths start smoking due to the influence of role models including parents, friends and celebrities [10]. Given that the odds of current smoking are higher among younger than older adults, cessation interventions should focus on younger Cambodian American men and the possible roles of parents and friends in influencing smoking behaviors.

Cambodian Americans tend to smoke cigarettes as a method for coping with stress, a practice that was adopted in their country of origin and was influenced by previous experiences in Cambodia [10]. During the 1970s, an impetus for Cambodians to flee to the US was the genocide campaign led by the Khmer Rouge, a group of communist insurgents and their leader, Pol Pot [4]. Many Cambodians were either killed or placed into forced labor camps, where the Khmer Rouge encouraged workers to smoke in order to suppress hunger [10]. Cambodians were confronted with a government that betrayed them as well as with an educational and religious system that was in disarray [27]. As a result,

Cambodian refugees were challenged by socioeconomic and language difficulties that were different from those experienced by other Asian immigrant sub-populations [8]. Because of extreme stresses and deprivation in their home country, many Cambodian Americans are reported to have a high prevalence of mental disorders, low levels of education, and a mistrust of the government [28, 29].

Also, religion, a central aspect of the Cambodian culture, may strengthen the acceptance of tobacco use [30]. In Cambodia, where 95% of the citizens are Buddhists, the prevalence of smoking among monks is similar to that of Cambodian men in general [30]. Smoking is often incorporated into Buddhist religious ceremonies. Following a wedding, cigarettes are sometimes distributed to all guests who then are obligated to accept the gift [31]. Cambodian immigrants to the US maintain values and practices regarding smoking that are likely to be modeled by the younger generation. For example, the average age for smoking initiation among Cambodian Americans is 14 [8]. Cambodian youth, especially young men, may perceive gifts of cigarettes as an acceptance of smoking as well as a form of respect [10].

Cambodian Americans tend to have lower educational attainment than the general US population. For example, one study reported that only 47% of Cambodian Americans had completed a high school education as opposed to 80% of the general population [32]. In our research, fewer than 40% of Cambodian Americans who reside in Long Beach had finished a high school education. Lower educational attainment is associated with a higher prevalence of smoking.

In Long Beach, smoking becomes less common among Cambodian American men as they age, despite the adverse impact of the traumas experienced in Cambodia and the influence of religious and other cultural norms. It would not have been possible to gain insight into tobacco use among Cambodian Americans without having access to study participants. This research has demonstrated that community-academic partnerships are essential to obtaining information about populations such as Cambodian Americans that experience health disparities. Further research with this population should address culturally appropriate smoking cessation interventions directed toward younger, unmarried Cambodian American men who are less educated and who are in fair or poor health.

**In this research, we learned about the importance of demographic variables including education, gender, and age and cultural factors such as religion in cigarette smoking among Cambodian Americans.** Given the high levels of respect accorded to religion, Buddhist monks could be asked to take responsibility for publicizing and promoting a smoking cessation program. In addition, the Cambodian culture emphasizes respect for elders and, consequently, elderly persons could serve as role models in smoking cessation programs. Involving a peer support group would

also enhance program effectiveness because community members tend to hold the opinions of their peers in higher regard than the opinions of professionals. Finally, entertainment opportunities including music, variety skits, and plays are a favorite mode of communication among community members and could incorporate anti-smoking messages. Other topics to include in a smoking cessation intervention are stress management techniques and alternatives to smoking as a means of coping with stress.

### Limitations

Among the limitations of this research was the restricted time of day when the interviews were conducted. Because of concerns about the safety of interviewers, data were gathered during normal working hours (9:00 a.m. to 5:00 p.m.). Consequently, respondents who were employed would have been missed. This bias is not likely to be substantial, as rates of unemployment are high in the study population. A second limitation was lack of access to some households; gated communities and households with dogs were not approached. Only a small percentage of such households were encountered. A third limitation was the use of a **cross-sectional study design**, which does not permit the assessment of causal associations. Finally, it was not feasible to employ a simple random sample design, as a list of all Cambodian households was not available; we believe that the use of a geographically defined stratified sample overcame this limitation.

### Conclusions

Findings from our study were consistent with other research studies that confirm a **high prevalence of smoking among Cambodian Americans, especially among males**. Based on our findings, current smokers tended to be younger, unmarried Cambodian American men; have less than a college education; and were in fair or poor health. Smoking cessation programs should be directed toward Cambodian American adults who have these characteristics. Sociocultural factors should be taken into consideration when developing smoking cessation programs for Cambodian Americans.

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