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RESEARCH PAPER

Non-smokers seeking help for smokers: a preliminary study

S-H Zhu, Q B Nguyen, S Cummins, S Wong, V Wightman

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2005**Objectives:** To examine the phenomenon of non-smokers spontaneously taking action to seek help for smokers; to provide profiles of non-smoking helpers by language and ethnic groups.**Setting:** A large, statewide tobacco quitline (California Smokers' Helpline) in operation since 1992 in California, providing free cessation services in English, Spanish, Mandarin, Cantonese, Korean, and Vietnamese.**Subjects:** Callers between August 1992 and September 2005 who identified themselves as either white, black, Hispanic, American Indian, or Asian (n = 349 110). A subset of these were "proxies": callers seeking help for someone else. For more detailed analysis, n = 2143 non-smoking proxies calling from October 2004 through September 2005.**Main outcome measures:** Proportions of proxies among all callers in each of seven language/ethnic groups; demographics of proxies; and proxies' relationships to smokers on whose behalf they called.**Results:** Over 22 000 non-smoking proxies called. Proportions differed dramatically across language/ethnic groups, from mean ($\pm$ 95% confidence interval) 2.7 (0.3)% among English-speaking American Indians through 9.3 (0.3)% among English-speaking Hispanics to 35.3 (0.7)% among Asian-speaking Asians. Beyond the differences in proportion, however, remarkable similarities emerged across all groups. Proxies were primarily women (79.2 (1.7)%), living in the same household as the smokers (65.0 (2.1)%), and having either explicit or implicit understandings with the smokers that calling on their behalf was acceptable (90.0 (1.3)%).**Conclusions:** The willingness of non-smokers to seek help for smokers holds promise for tobacco cessation and may help address ethnic and language disparities. Non-smoking women in smokers' households may be the first group to target.

It is well recognised that quitting smoking can reduce premature deaths and improve population health.^{1–3} However, quitting is difficult and success rates are low³ though they improve when smokers use formal assistance such as behavioural counselling or medications.⁴ Still, most smokers do not seek help in quitting,^{5–6} and efforts to increase help-seeking have had limited success.⁷ Some do not use help because they are unaware of its availability or do not believe cessation aids work.^{8–10} Others may avoid seeking help because signing up for a cessation programme suggests a commitment to quitting, for which they may have some ambivalence. Still others may feel that help-seeking indicates personal weakness and that they ought to be able to handle what they consider simply a behaviour problem.^{11–12}

Family members and friends of smokers, however, are generally less ambivalent about smokers' need to quit. They may also be less concerned about showing personal weakness, as they are not the ones having trouble quitting. These interested friends and family members sometimes go so far as to start the smokers' quitting process by procuring cessation pamphlets or nicotine patches for them. Not much is known about the frequency of this "help-seeking by proxy" behaviour. Even less is known about which non-smokers are likely to engage in it. With few exceptions,^{13–15} the public health campaign for cessation has not directly engaged non-smokers to help smokers quit. However, given that most people around smokers are non-smokers, and given that environmental factors such as social support help smokers quit,^{16–17} this unexplored field may hold promise.

Whereas the potential of non-smokers actively helping smokers quit has received only limited attention,¹⁴ the role of non-smokers in establishing public policies restricting smoking has been well recognised.¹⁸ From a theoretical perspective, both restriction of smoking and active assistance with

quitting can increase smokers' chances of permanent cessation, because health behaviour change occurs within a network of social influences.¹⁹ A change in the social environment will affect the likelihood of change in the individual's health behaviour. If non-smokers can be encouraged to increase their active cessation assistance, then the combination of active assistance and willingness to establish restrictions can create a synergistic effect, accelerating change.

Studies of voluntary bans on smoking in the home have already suggested the potential of working with non-smokers to improve population cessation. Home bans are associated with higher quit attempt rates and lower relapse rates.^{20–21} A recent California study²² found that home bans, a relatively new concept in tobacco control, were being adopted fastest by the group least expected to do so: recent immigrants from Asia, where smoking prevalence among men is very high and few restrictions exist.²³ One explanation for this group's quick adoption of home bans may be the high percentage of non-smoking women in the households. It appears that, even though these women accepted smoking in their homes in Asia, when they immigrated to California and encountered the new idea of home bans, they embraced it.²² These results suggest that non-smokers might be mobilised to do more. Previous studies of social support have examined a range of behaviours among non-smokers wanting to help smokers quit.^{16–17–24–25} The present study focuses on one behaviour: taking the initiative to seek formal cessation assistance for

Abbreviations: AA, Asian speaking Asian; EA, English speaking Asian; EAI, English speaking American Indian; EB, English speaking black; EH, English speaking Hispanic; EW, English speaking white; SH, Spanish speaking Hispanic; SHS, secondhand smoke

smokers. This study is one of the first attempts to document this phenomenon.

This paper describes non-smokers who have called a large-scale, statewide tobacco cessation programme, the California Smokers' Helpline, to seek help for smokers.²⁶ The Helpline has provided evidence-based telephone counselling to smokers since 1992.²⁷ Its services, free to all California residents, are advertised throughout the state in six languages: English, Spanish, Mandarin, Cantonese, Korean, and Vietnamese. The Helpline has been popular in California, having served over 350 000 people from diverse cultural communities. Thus, profiles of its callers offer a rare opportunity to examine the phenomenon of non-smokers seeking help for smokers in general as well as by specific language and ethnic groups.

METHODS

Participants and settings

Participants were Helpline callers requesting cessation assistance on behalf of someone else. In this paper they are referred to as "proxy callers" or "proxies". Some were smokers themselves, but most were non-smokers. This paper first presents data on proxies in general, then focuses in more detail on non-smoking proxies.

It is important to note that Helpline promotion targets smokers, not non-smokers. It utilises media, healthcare providers, and community groups. Its media advertisements are part of a larger, statewide campaign to de-normalise smoking.²⁸ One major element, awareness of the harm of secondhand smoke, encourages the establishment of smoking restrictions. Other elements are more cessation-oriented, and the toll-free Helpline numbers for all six languages are tagged onto the cessation-oriented advertisements.²⁶

From August 1992 through September 2005, the Helpline served 363 096 callers. The present study includes only those who identified themselves either as white, black, Hispanic, American Indian/Alaska native, or Asian ($n = 349\,110$). Those who declined to specify ethnicity or identified themselves as ethnically mixed were excluded (3.9% of total callers).

Procedures and measures

During normal operating hours (7 am to 9 pm weekdays), Helpline staff fluent in English, Spanish, Mandarin, Cantonese, Korean, or Vietnamese answer calls and do intake assessments. Outside these hours, voice mail picks up in each language, encouraging callers to leave contact information. Staff return calls the next working day.

Using a computer assisted intake protocol, staff assess callers' needs and follow up with a script introducing Helpline services. Smokers calling for themselves are offered the choice of self-help materials or telephone counselling. Proxies are offered materials, unconditionally, to be passed on to smokers and are encouraged to ask their smokers to call for counselling.

From August 1992 to October 2004, proxies were asked only their age, sex, and ethnicity. Since mid October 2004, proxies have been asked an additional set of questions at intake assessment. These questions elicit information about the proxy's own smoking history (Have you smoked at least 100 cigarettes in your life? Do you currently smoke?) and about the smoker (What is the smoker's relationship to you? How old is the smoker? Does the smoker live with you?). Proxies are also asked to estimate the smoker's readiness to change, using a modified 0–10 contemplation ladder scale,²⁹ with 0 as "not thinking at all about quitting" and 10 as "taking some action to quit right now". Other questions assess communication between proxies and smokers about the proxy's help-seeking behaviour. These questions were designed to let the Helpline assess the feasibility of

developing a future intervention training proxies to help smokers quit. The three communication questions are: (1) "Did your ___ ask you to seek outside help for him/her?"; (2) "Does your ___ know that you are seeking outside help for him/her?"; and (3) "Will your ___ object to your seeking outside help for him/her?".

Staff ask these intake questions at proxies' first contact with the Helpline, as part of a standard service evaluation. Callers are told that this is a state-funded programme with an ongoing assessment procedure involving all callers, to help determine who is using the services and what additional services might be needed in the future. Proxies can decline to answer the questions or to accept the services. All Helpline procedures are approved by the University of California, San Diego, Human Research Protections Program.

Data analysis

Data from August 1992 through September 2005 were analysed to determine percentages of total proxy calls for each of seven language/ethnic groups: English speaking white (EW), English speaking black (EB), English speaking American Indian (EAI), English speaking Hispanic (EH), Spanish speaking Hispanic (SH), English speaking Asian (EA), and Asian speaking Asian (AA). Initial analyses showed that proxy rates for speakers of Cantonese, Mandarin, Korean, and Vietnamese were all significantly higher than for other language/ethnic groups. Thus this study has grouped all proxies calling the Chinese, Korean, and Vietnamese lines as AA, in order to simplify the tables. Percentages of proxies among all callers were calculated for each group along with 95% confidence intervals. Odds ratios comparing these groups, using EW as the reference group, were also calculated.³⁰

Data from October 2004 through September 2005 were further analysed on demographics and communication factors. Repeat calls ($n = 2$) were excluded, as was one proxy who declined to give an address to receive materials. For the rest of the proxies, frequency distribution tables were constructed based on responses to the demographic and communication variables by the overall group ($n = 2143$) and by each of the seven language/ethnic groups. Responses to the demographic and communication variables were categorised for the analyses. Proxy relationship to smoker was classified as spouse/significant other, child, parent, or friend/other relative. On the modified contemplation ladder question, responses were coded as low (0–3), medium (4–6), and high (7–10). For each percentage, the 95% confidence interval is reported.³⁰

RESULTS

Figure 1 shows the percentage of proxies among all Helpline callers from August 1992 through September 2005. They are graphed by the seven language/ethnic groups. The total sample size for fig 1 is 349 110. Because of the large sample sizes for all groups, as shown in fig 1, the difference between any two is easily significant, as indicated by the small error bars. Averaged over the seven groups, proxies made up 7.0% of all Helpline callers.

Proxy percentages for the individual language/ethnic groups in fig 1 fall into four broader groupings. If EW, with 4.8% proxies, is the reference grouping, then EB, with 3.2% proxies, and EAI, with 2.7% proxies, form a second grouping with lower proxy percentages. EH, with 9.3% proxies, SH, with 9.4% proxies, and EA, with 10.0% proxies, form a third grouping with higher proxy percentages. AA becomes a fourth grouping with the dramatically high proxy percentage of 35.3%. With EW as the reference group, odds ratios for the other language/ethnic groups are 0.7, 0.5, 2.0, 2.1, 2.2, and 10.8, respectively.

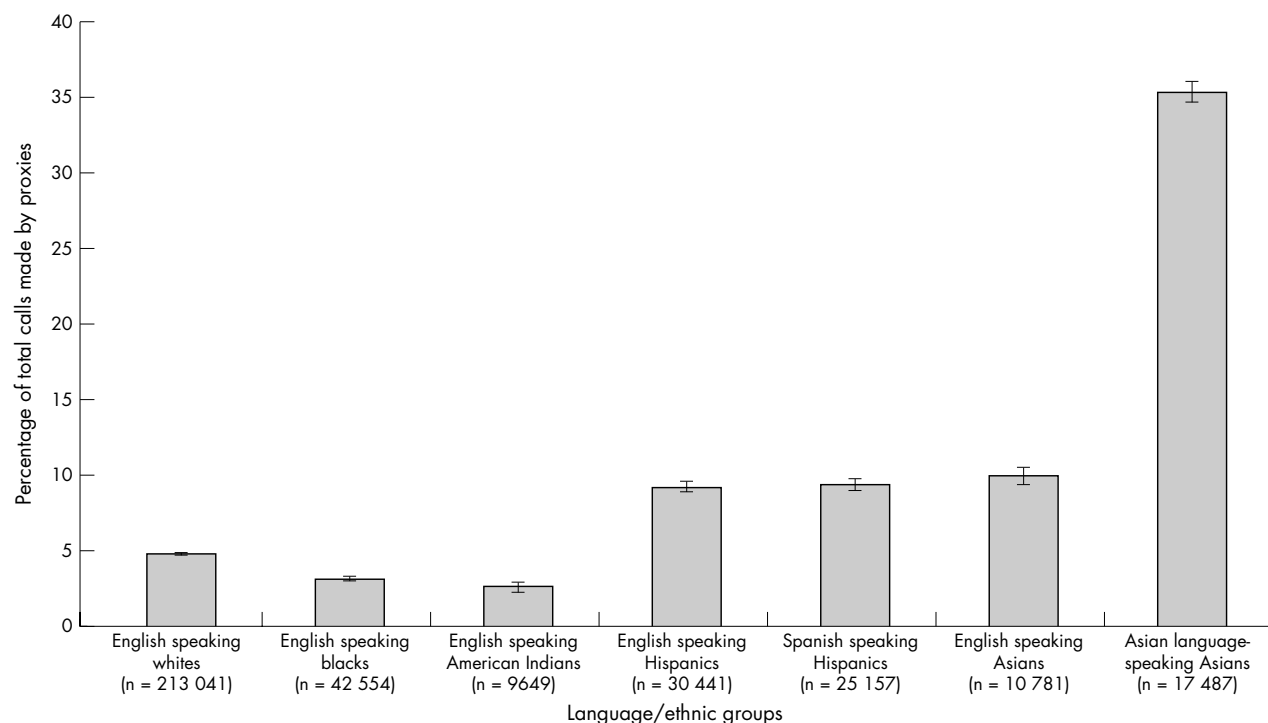


Figure 1 Percentage of proxy calls by language/ethnic group, August 1992 to September 2005.

Of all proxies calling from October 2004 through September 2005 ($n = 2531$), 7.0% did not respond to the smoking status question(s) and were excluded. Of the remaining proxies ($n = 2355$), 6.0% were current smokers. Proxy smoking percentages for language/ethnic groups were 8.1% EW, 6.2% EB, 17.9% EAI, 6.4% EH, 1.6% SH, 6.0% EA, and 2.8% AA. While it is interesting that some smokers call

for other smokers, examination of that phenomenon falls beyond the scope of the present study. Note that all the following analyses, therefore, focus only on non-smokers calling for smokers. These analyses use data on callers from October 2004 through September 2005, a total sample size of 2143, about 6.1% of all Helpline callers ($n = 35\,278$) during this period.

Table 1 Proxy caller demographics by language and ethnicity (October 2004 through September 2005)

	EW (n = 906) % (CI)*	EB (n = 152) % (CI)	EAI (n = 23) % (CI)	EH (n = 263) % (CI)	SH (n = 252) % (CI)	EA (n = 94) % (CI)	AA (n = 453) % (CI)	Overall (n = 2143) % (CI)
Sex								
Female	78.6 (2.7)	79.6 (6.4)	65.2 (19.5)	77.6 (5.0)	81.8 (4.8)	78.7 (8.3)	80.5 (3.6)	79.2 (1.7)
Proxy age								
<18	0.8 (0.6)	0	0	0.8 (1.1)	0	0	0	0.5 (0.3)
18–24	11.8 (2.2)	19.4 (6.5)	13.6 (14.3)	35.6 (5.9)	22.4 (5.2)	16.1 (7.7)	1.7 (1.2)	14.7 (1.5)
25–44	37.7 (3.3)	39.6 (8.0)	40.9 (20.5)	42.3 (6.1)	62.4 (6.0)	58.6 (10.4)	41.4 (4.7)	43.2 (2.2)
45–64	34.6 (3.2)	34.7 (7.8)	31.8 (19.5)	18.6 (4.8)	12.0 (4.0)	20.7 (8.5)	46.4 (4.8)	31.7 (2.0)
≥65	15.0 (2.4)	6.3 (4.0)	13.6 (14.3)	2.8 (2.0)	3.2 (2.2)	4.6 (4.4)	10.5 (2.9)	10.0 (1.3)
Smoker age								
<18	7.0 (1.7)	5.3 (3.6)	8.7 (11.5)	4.2 (2.4)	1.2 (1.3)	9.6 (6.0)	2.9 (1.6)	5.1 (0.9)
18–24	13.1 (2.2)	14.7 (5.7)	4.4 (8.4)	18.9 (4.8)	12.7 (4.1)	12.8 (6.8)	6.0 (2.2)	12.2 (1.4)
25–44	41.4 (3.2)	32.0 (7.5)	26.1 (17.9)	45.4 (6.1)	55.2 (6.1)	47.9 (10.1)	42.5 (4.6)	43.2 (2.1)
45–64	32.1 (3.1)	40.0 (7.8)	52.2 (20.4)	26.2 (5.3)	25.0 (5.3)	26.6 (8.9)	40.3 (4.5)	32.8 (2.0)
≥65	6.4 (1.6)	8.0 (4.3)	8.7 (11.5)	5.4 (2.7)	6.0 (2.9)	3.2 (3.6)	8.2 (2.5)	6.6 (1.1)
Relationship								
Spouse/SO	39.2 (3.3)	38.3 (8.0)	13.0 (13.7)	48.0 (6.2)	53.8 (6.2)	47.8 (10.3)	44.2 (4.6)	43.2 (2.1)
Child	24.5 (2.9)	10.6 (5.1)	21.7 (16.8)	8.9 (3.5)	6.0 (2.9)	16.7 (7.7)	19.6 (3.7)	17.9 (1.7)
Parent	9.7 (2.0)	18.4 (6.4)	30.4 (18.8)	15.7 (4.5)	17.9 (4.7)	12.2 (6.8)	7.5 (2.5)	11.9 (1.4)
Friend/other relative	26.5 (3.0)	32.6 (7.7)	34.8 (19.5)	27.4 (5.6)	22.3 (5.1)	23.3 (8.7)	28.7 (4.2)	27.0 (1.9)
Same household	61.7 (3.4)	56.2 (8.3)	36.4 (20.1)	70.4 (5.9)	74.6 (5.7)	62.1 (10.2)	68.0 (4.3)	65.0 (2.1)
Smoking status								
Former	36.3 (3.1)	32.2 (7.4)	39.1 (19.9)	21.3 (4.9)	15.9 (4.5)	12.8 (6.8)	6.8 (2.3)	24.6 (1.8)
Never	63.7 (3.1)	67.8 (7.4)	60.9 (19.9)	78.7 (4.9)	84.1 (4.5)	87.2 (6.8)	93.2 (2.3)	75.5 (1.8)

*Number in parentheses represents $\pm 95\%$ confidence interval for the percentage.

Missing data 0.05% for proxy sex question, 5.6% for proxy age question, 1.3% for smoker age question, 4.8% for relationship question, 9.4% for same household question.

AA, Asian speaking Asian; EA, English speaking Asian; EAI, English speaking American Indian; EB, English speaking black; EH, English speaking Hispanic; EW, English speaking white; SH, Spanish speaking Hispanic.

The majority (63.8%) of these proxies heard of the Helpline through the media campaign (television or radio). The rest heard either from a health clinic/provider (9.9%) or from a family member or friend (5.4%).

Table 1 shows demographics of these 2143 non-smoking proxies and their relationships to the smokers they called for, by the seven language/ethnic groups. It is striking that across all seven groups, most non-smoking proxies were women: the average is 79.2%.

Overall, most non-smoking proxies and the smokers they called for were in the 25–44 age bracket. The mean (SD) age for non-smoking proxies was 42.1 (16.2) years; for the smokers they called for, it was 40.2 (15.2) years. Despite variations across the seven groups, the age distribution for proxies and smokers remained quite close.

Most proxies, on average, called for spouses/significant others (mean 43.2%). The exception was the AI group, with most calling for friends/other relatives.

An average 65% of non-smoking proxies called for someone living in the same household. However, there were differences across the seven groups. EH, SH, and AA had the highest percentages; EB and EAI had the lowest; EW and EA were in the middle.

Across the seven groups, non-smoking proxies showed distinct differences in their history of smoking. Only 6.8% of AA and 12.8% of EA were former smokers. By contrast, almost 40% of EW, EB, and EAI were former smokers. EH (21.3%), SH (15.9%) and EA (12.8%) fell in the middle.

Table 2 shows responses to the communication questions. The data pattern showed general agreement across the seven groups. Overall, 42.2% of non-smoking proxies reported that smokers had asked them to call. Of proxies not asked to call, almost 28% said the smokers knew they were calling. Of proxies who said the smokers did not know, most (75.9% on average) said that the smoker would not object. In other words, 90.0 (1.3)% of proxies reported either explicit or implicit understandings with the smokers that calling on their behalf was acceptable.

The last rows of table 2 show non-smoking proxies' estimates of the smokers' readiness to change. On average, over 50% estimated that their smokers were quite ready (7–10 points on the 0–10 scale). Another third placed their smokers in the medium range (4–6), with only 16% placing their smokers at the low end of the scale (0–3). Again, there was general agreement across language/ethnic groups.

DISCUSSION

This is, to our knowledge, the first large scale report on the "help-seeking by proxy" phenomenon in the field of tobacco cessation. Three main results stand out. First, a significant number of non-smokers call to seek help for smokers. Second, the proportion of non-smokers calling for smokers differs significantly across language/ethnic groups, from about 3% among English speaking American Indians to over 35% among Asian speaking Asians. Third, there is remarkable similarity across seven language/ethnic groups in terms of sex, relationship to the smoker, and level of understanding between the two concerning the call to the Helpline. These results have several implications.

The large number of non-smokers calling to seek help for smokers is interesting given that the Helpline campaign targets smokers, as almost all quit-smoking campaigns do. Not surprisingly, most Helpline callers are smokers. Non-smoking proxies represented only 6.1% of the total for the study period. However, even this small percentage would mean that over 22 000 non-smokers have called the Helpline in a 13 year period. Such a number would be quite respectable even if it represented all smokers seeking help from any single cessation programme. These numbers raise a tantalising question: if a campaign were to target non-smokers directly, how many more non-smokers might call? In most previous studies of social support, smokers have been directed to recruit buddies to support their quitting efforts.^{13 31 32} In some cases, these buddies were non-smokers (in others, they were fellow smokers also trying to quit). But such buddies represent only a minor subset of all non-smokers potentially interested in taking an active role to help smokers quit. If a campaign targeted non-smokers, how much more would it mobilise them, and how much more would their mobilisation impel smokers to speed their quitting process? These are open questions whose answers will have broad implications for tobacco cessation, since any given population includes many more non-smokers than smokers.

One might argue that the Helpline is a special case because California's tobacco control programme emphasises reducing secondhand smoke (SHS) exposure. Thus, California non-smokers may be particularly willing to take action, including action to help smokers quit. However, even if this tendency were specific only to Californians, it could be expected to become more widespread in the near future, as reduction of SHS exposure moves to the forefront of the international

Table 2 Communication and understandings between proxies and smokers, by language and ethnicity, October 2004 through September 2005

	EW (n=896) % (CI)	EB (n=152) % (CI)	EAI (n=23) % (CI)	EH (n=261) % (CI)	SH (n=251) % (CI)	EA (n=94) % (CI)	AA (n=453) % (CI)	Overall (n=2130) % (CI)
Smoker asks proxy to seek outside help (n=2130)†	40.7 (3.2)	43.4 (7.9)	52.2 (20.4)	47.5 (6.1)	48.6 (6.2)	39.4 (9.9)	38.2 (4.5)	42.2(2.1)
Smoker knows that proxy seeks outside help (n=1235)‡	28.0 (3.8)	36.1 (10.2)	27.3 (26.3)	33.6 (7.9)	31.8 (7.9)	29.8 (11.9)	19.0 (4.6)	27.6(2.5)
Smoker would not object that proxy seek outside help (n=892)	74.6 (4.4)	82.1 (10.0)	87.5 (22.9)	83.5 (7.6)	79.8 (8.3)	61.5 (15.3)	74.0 (5.7)	75.9(2.8)
Smoker thinking of quitting (n=1987)§								
Low (0–3)	13.9 (2.4)	16.9 (6.0)	30.4 (18.8)	16.2 (4.7)	15.3 (4.5)	12.4 (6.8)	20.0 (3.8)	16.0(1.6)
Medium (4–6)	30.0 (3.1)	28.4 (7.3)	4.4 (8.4)	31.1 (5.8)	31.4 (5.8)	41.6 (10.2)	33.0 (4.4)	31.0(2.0)
High (7–10)	54.4 (3.4)	54.7 (8.0)	65.2 (19.5)	51.9 (6.3)	53.3 (6.3)	46.1 (10.4)	44.4 (4.7)	51.6(2.2)

* Number in parentheses represents $\pm 95\%$ confidence interval for the percentage.

†If proxy said that smoker did not ask him/her to seek outside help, then follow-up question was asked: Does smoker know proxy is seeking outside help?; 0.6% missing data (n=13).

‡If proxy said that smoker did not know, then follow-up question was asked: Would smoker object?; 0.0% missing data.

§0.9% missing data (n=18).

AA, Asian speaking Asian; EA, English speaking Asian; EAI, English speaking American Indian; EB, English speaking black; EH, English speaking Hispanic; EW, English speaking white; SH, Spanish speaking Hispanic.

tobacco control movement.^{33 34} More and more states and nations are instituting smoke-free policies as a primary tobacco control strategy.^{23 35} At the same time, more and more states and nations are setting up centralised quitlines.³⁶ This suggests that, in the future, quitlines might well put extra emphasis on augmenting anti-SHS campaigns. Such combined efforts may be particularly effective for language/ethnic groups whose non-smokers are most actively involved with smokers' quitting processes, such as Asian-speaking Asians—groups traditionally underserved by cessation programmes.^{3 37 38}

The proportion of proxy callers differed greatly across language/ethnic groups, and it should be mentioned that the difference across these groups has remained quite consistent over the 13 years of Helpline operation. For example, we reported in 2000 that Asian-speaking callers to the Helpline seemed to include a surprisingly high number of proxies,²⁶ and this pattern has held over the years. The large sample size (almost 350 000 callers) for the proportions reported in fig 1 also suggests that the pattern is likely to remain stable, barring a major change of focus in future campaigns. Given that media promotion for the Helpline has always targeted smokers, across all language/ethnic groups, the large difference in the proportions of non-smoking proxies across linguistic and ethnic lines suggests that some stable underlying factors might be responsible.

The first explanation for the large difference might be that it reflects the cultural backgrounds of these language/ethnic groups. For a non-smoker to take action to obtain formal cessation assistance for a smoker, there is likely an implicit understanding between the two that the help-seeking is acceptable. While the acceptability may be chiefly dependent on the relationship between the two individuals, the cultural norm may affect it also. More specifically, a collectivist culture places greater emphasis on community, family, interdependence, and roles/relationships than does an individualistic culture, which values independence and the self.^{39 40} Thus, the more collectivist a group is, the more acceptable for its members to involve themselves in one another's personal affairs^{41 42}—in this case, for non-smokers to involve themselves in smokers' quitting process. Thus, it is conceivable that help-seeking by proxy will occur more frequently in a group considered more collectivist than in a group considered less collectivist and more individualistic.

In the United States, Asian-American and Hispanic ethnic groups are considered more collectivist than the white group.^{11 43} Furthermore, Asian Americans who usually use Asian languages are considered less acculturated, and thus more collectivist, than Asian Americans who usually use English.⁴⁴ The same is true for Hispanics who usually use Spanish.^{45 46} This difference in cultures would account for the difference in proxy call rates between the two Asian groups and between the Asian groups and the English speaking whites. It also would explain the difference between the two Hispanic groups and the whites. However, it does not explain why there is no difference between Spanish speaking and English speaking Hispanics. The former group is considered more collectivistic than the latter and thus should have a higher proxy call rate. It also does not quite explain why American Indians, whose cultures are certainly not more individualistic than English speaking whites,⁴⁶ have the lowest proxy call rate.

The second explanation might be that the different proportions are simply a reflection of the differential rates of women's smoking prevalence in the households of these language/ethnic groups. As table 1 shows, most proxy callers are non-smoking women. Thus one might predict that the rate of non-smokers calling on behalf of smokers will be inversely proportional to women's smoking prevalence rates

in these groups. In other words, the less likely that women in a given group smoke, the more likely that there will be non-smoking women who will attempt to assist smokers in quitting (for example, by calling the Helpline). An examination of the most recent California population survey with data for all these ethnic and linguistic groups shows women's smoking prevalence rates as follows: Asian speaking Asian women 2.0%; English speaking Asian women 7.6%, Spanish speaking Hispanic women 6.2%, English speaking Hispanic women 9.1%, English speaking white women 16.0%, English speaking black women 18.3%, and American Indian women 30.2%.⁴⁷ This order agrees quite well with the data in fig 1; the group with the lowest smoking prevalence among women has the highest proxy call rate (Asian speaking Asian) and the group with the highest smoking prevalence among women has the lowest proxy call rate (American Indians). In other words, the prevalence of non-smoking women may be the key to the level of proxy activities, beyond any group's cultural tendencies toward collectivism.

These two explanations need not be mutually exclusive. Both have implications for future campaigns to increase tobacco cessation at the population level.

The Asian speaking Asian group may be the best case in point. This group's large proportion (35%) of non-smoking proxies suggests a direction for tobacco cessation intervention that is very different from most current efforts with this group. Current efforts strive to get more Asian speaking smokers to use formal treatment. These efforts represent a response to this group's lower acculturation level, which is assumed to make smokers less inclined to seek or use formal assistance.^{11 12 48} However, since this group's cultural tendencies may make non-smokers quite willing to get involved in smokers' quitting process, and since the overwhelming proportion of women in this group are non-smokers, then targeting non-smokers rather than smokers might be more effective with this group. This argument, of course, is predicated on assumptions that campaigns can target Asian speaking proxies successfully and that proxies' help-seeking will lead to significant benefits for Asian speaking smokers. Both remain to be confirmed in future studies. However, as mentioned, this least acculturated group has already proven quick to adopt home bans.²² If the trend holds, it may be among the least acculturated Asian immigrants to Western countries that we first see the effect of targeting non-smokers. Such a result not only will have strong implications for states such as California with large Asian populations, but also will be significant for Asian countries where smoking prevalence is high among men and low among women. An intervention project for proxies, comparing effects on Asian speaking Asians and English speaking whites, is currently underway.

The present study has several limitations. First, it is based on self-report. Proxy callers were asked if they smoked, but their reports were not verified. It is possible that some self-identified non-smoking proxies might actually be smokers. Also, proxies' estimation of smokers' readiness to quit was a guess on their part. Similarly, it is possible that smokers might not have known that proxies were calling, or might have objected, even when proxies reported otherwise. All these issues need to be examined in future studies. It should also be pointed out that data reported for language/ethnic groups do not show probability (which would give a true measure of how many non-smokers in the general population engage in this kind of behaviour). Rather, they show proportion among those who called the Helpline—a self-selected group. While it is true that the Helpline has very large sample sizes for all seven groups, we cannot be certain of each group's real probability. That can be ascertained only through large population surveys based on random sampling.

What this paper adds

Past studies show that, despite the proven effectiveness of medications and behavioural counselling, most smokers do not seek help with quitting. Help-seeking may be hindered by lack of knowledge, by ambivalence about quitting, or by a perception that help-seeking signifies weakness. Smokers' reluctance to seek help varies by culture.

This study examines the phenomenon of non-smokers seeking formal assistance to help smokers quit and shows that these non-smokers represent a promising, untapped resource in tobacco cessation. Across ethnic groups, the majority of help-seeking non-smokers are women living in the same households as smokers, and they appear to have explicit or implicit understandings with the smokers that seeking help for them is acceptable. The results suggest that targeting the non-smoking women in smokers' households may be an especially useful way to intervene with cultural groups in which smokers are least likely to seek help with quitting.

The California Tobacco Survey, an influential instrument in use for the last 15 years, will add new questions to assess this behaviour starting in 2005, in response to a preliminary report of the phenomenon discussed in the present study.

This study, however, has already found that amid the large differences in the proportions of non-smokers seeking help across language/ethnic groups, there are also certain remarkable similarities. The most striking commonality was that non-smoking proxies were mostly women. While this may not surprise readers with insights into issues involving sex roles,^{49–50} it does have implications in terms of whom to target in future campaigns aiming to mobilise non-smokers to help smokers quit.

The remarkable similarities across groups suggest some basic conditions for the occurrence of help-seeking by proxy. Examples may be the roles that non-smoking women play in their families, the smokers' readiness to quit at the time, and an understanding between non-smoker and smoker that it is acceptable for the non-smoker to seek help. These basic conditions probably need to be met, regardless of ethnic or language background, before non-smokers will take action on behalf of smokers. The present study has barely scratched the surface of this interesting phenomenon. Future studies will be needed to examine how help-seeking by proxy affects quitting. If help-seeking by proxy proves effective, further studies should determine which measures might increase the frequency and impact of this behaviour.

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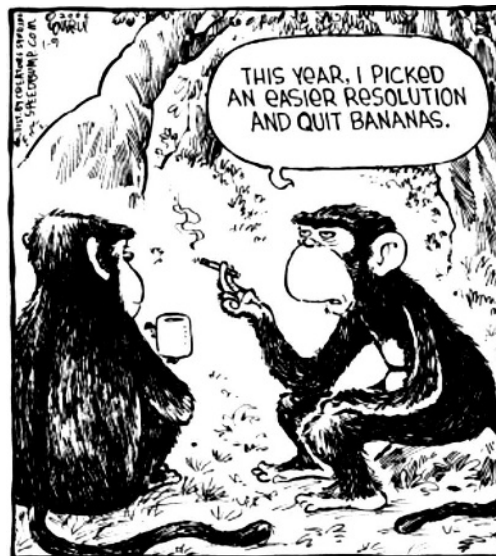
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