

# Public perceptions of the ban on tobacco sales in San Francisco pharmacies

Lisa A Kroon,<sup>1</sup> Robin L Corelli,<sup>1</sup> Andrew P Roth,<sup>2</sup> Karen Suchanek Hudmon<sup>1,2</sup>

<sup>1</sup>Department of Clinical Pharmacy, School of Pharmacy, University of California, San Francisco, California, USA  
<sup>2</sup>Department of Pharmacy Practice, College of Pharmacy, Purdue University, West Lafayette, Indiana, USA

## Correspondence to

Dr Lisa A Kroon  
 Department of Clinical Pharmacy, UCSF School of Pharmacy, University of California, 521 Parnassus Avenue, [C-152], San Francisco, CA 94143-0622, USA;  
[kroonl@pharmacy.ucsf.edu](mailto:kroonl@pharmacy.ucsf.edu)

Received 18 May 2012  
 Accepted 10 October 2012

## ABSTRACT

**Background** In October, 2008, legislation was implemented in the city and county of San Francisco, California, prohibiting the sale of tobacco products in pharmacies.

**Objective** To characterise public awareness and perceptions of the ban on tobacco sales in San Francisco community pharmacies.

**Methods** A brief, anonymous survey was used to assess public awareness and perceptions of a ban on tobacco sales approximately 1 year after implementation. Individuals were approached by researchers outside of chain pharmacies in San Francisco. Smokers and non-smokers were included, and participants did not have to be patrons of the pharmacy.

**Results** Of 198 participants, 56% were in favor of the ban, 27% opposed it and 17% were undecided. A greater proportion of current tobacco users (81%) than former/never users (48%) were aware of the ban ( $p < 0.001$ ), and a lesser proportion were supportive of the ban (21% of current users vs 66% of former/never users;  $p < 0.001$ ). Most current tobacco users (88% of  $n=43$ ) had not considered quitting smoking as a result of the ban. The majority of consumers indicated that the ban on cigarette sales did not influence their shopping behaviour at retail pharmacies.

**Conclusions** In the city and county of San Francisco, public support exists for prohibiting the sale of tobacco products in pharmacies.

## INTRODUCTION

Cigarette smoking is the leading known preventable cause of death in the USA.<sup>1</sup> As one of the most trusted professions,<sup>2</sup> pharmacists are charged with acting in the best interest of their patients' health as delineated by their code of ethics, which states 'A pharmacist promises to help individuals achieve optimum benefit from their medications, to be committed to their welfare, and ... avoids ... actions that compromise dedication to the best interests of patients'.<sup>3</sup> A substantial proportion of community pharmacies sell tobacco products however, and this practice is in direct violation of the pharmacist's code of ethics.

For more than four decades, the pharmacy profession has expressed opposition to tobacco sales in pharmacies. This opposition is evidenced by results from multiple research studies quantifying the opinions of individual pharmacists<sup>4-8</sup> and pharmacy students,<sup>4</sup> as well as resolutions or position statements issued by the International Pharmaceutical Federation<sup>9</sup> and the two largest professional pharmacy organisations in the USA (the American Pharmacists Association<sup>10</sup> and the American Society of Health-System Pharmacists<sup>11</sup>).

Furthermore, in 2009, the American Medical Association passed a resolution opposing the sale of tobacco products in pharmacies.<sup>12</sup>

On 1 October 2008, the San Francisco Board of Supervisors enacted legislation in the city and county of San Francisco, California, prohibiting pharmacies from selling tobacco products.<sup>13</sup> Supporters of the ordinance expressed the notion that a pharmacy is a place where healthcare services are rendered, and therefore, these facilities should not sell products known to contribute to morbidity and mortality.<sup>14</sup> Opponents of the ban have challenged the constitutionality of the ordinance, and have expressed concerns that the ban violates equal protection laws and would result in financial harm.<sup>15-17</sup> Indeed, cigarette sales in traditional drug stores approached US\$3.5 billion in 2009.<sup>18</sup> To characterise public awareness and perceptions of the ban, and to estimate the impact of the ban on changes in consumer shopping behaviour, we administered a cross-sectional convenience survey of San Francisco residents.

## METHODS

From December 2009 to February 2010, a brief anonymous survey was conducted to assess public awareness and perceptions of the ban on tobacco sales in San Francisco pharmacies. Individuals were approached by student researchers outside of chain pharmacies in San Francisco. To attain diversity in the respondent population (eg, age, race, sexual orientation, socioeconomic status, tobacco users), six high-volume pharmacies located in different areas of the city were targeted. Participants were at least 18 years of age, resided or worked in the city and county of San Francisco, and were able to read and answer survey questions in English. Both smokers and non-smokers were included, and participants did not have to be patrons of the pharmacy. The paper survey was self-administered, and respondents received a nominal gift (a pack of chewing gum) for their participation. The study was approved by the UCSF Committee on Human Research.

Respondents were characterised by sociodemographics and smoking history. Awareness and support of the ban was assessed by asking, 'Are you aware that since 1 October 2008, San Francisco banned community pharmacies, such as Walgreens, from selling cigarettes?', and 'Do you support the ban of cigarette sales in San Francisco pharmacies?' (1=strongly favor, 2=somewhat favor, 3=not sure/don't know, 4=somewhat oppose, 5=strongly oppose). Participants reported the impact of the ban on their shopping behaviour at pharmacies by indicating whether (a) they shop at them more,

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(b) they shop at them less or (c) it makes no difference. Current smokers were asked to indicate whether they had considered quitting smoking because of the ban. Primary location of cigarette purchases prior to and after the ban was assessed to estimate the proportion of tobacco user respondents who purchased tobacco at a pharmacy. Current smokers also indicated the extent to which the ban has made it less convenient for them to purchase cigarettes. Finally, participants indicated whether they (a) were in favor of cigarette sales in pharmacies, (b) believed it was appropriate for the government to ban cigarette sales in pharmacies and (c) believed it was unethical for pharmacies to profit from the sale of cigarettes and the medicines used to treat diseases caused by smoking (1=strongly disagree, to 5=strongly agree).

Responses were summarised using descriptive statistics. Comparisons were made using  $\chi^2$  tests and t tests, as appropriate. Analyses were conducted using SPSS V.17.0 (SPSS, Inc, Chicago, Illinois, USA).

## RESULTS

Of 198 participants, most were men (60%) and non-Hispanic Caucasian (57%); 22% were Asian, 8% were non-Hispanic African-American and 6% were Hispanic/Latino. The average age was 43 years (SD, 16); 62% reported having a bachelor's degree or higher, 17% had some college education, 11% had an associate's degree and 10% had a high school diploma or less. Sixteen percent used tobacco one or more times a day, 6% used tobacco less than once a day, 22% had previously used tobacco but quit, 14% had experimented with tobacco a few times in the past and 42% had never used tobacco.

Fifty-six percent indicated that they were aware (prior to the survey) of the ban on tobacco sales in community pharmacies. Overall, 56% were in favor of the ban, 27% opposed it, and 17% were undecided. A greater proportion of current tobacco users (81%) than former/never users (48%) were aware of the ban ( $X^2=14.9$ ;  $p<0.001$ ), and a lesser proportion were supportive of the ban (21% of current users vs 66% of former/never users;  $X^2=28.0$ ;  $p<0.001$ ). Most current tobacco users (88% of  $n=43$ ) had not considered quitting smoking as a result of the ban.

Nineteen percent of current tobacco users reported that prior to the ban they purchased cigarettes primarily at a pharmacy. Of all respondents, most (76%) reported that the ban made no difference whether they shopped at pharmacies in San Francisco; 13% shopped at pharmacies less, and 12% shopped at pharmacies more. This differed by tobacco use status ( $X^2=35.8$ ;  $p<0.001$ ), with 13% of non-tobacco users and 7% of users shopping at pharmacies more often, and 5% of non-users and 40% of users shopping at pharmacies less often.

Among current tobacco users, 38% believed that the ban had made it less convenient for them to purchase cigarettes.

Fewer than one-fourth (23%) of respondents were in favor of cigarettes being sold in pharmacies, and 48% believed it was appropriate for the government to ban cigarette sales in pharmacies. When asked if it was unethical for pharmacies to profit from the sale of cigarettes and the medicines used to treat diseases caused by smoking, 47% agreed, 32% disagreed and 21% were undecided. Perceptions varied as a function of current tobacco use status (table 1).

## DISCUSSION

Most community pharmacies sell tobacco products despite the fact that they are licensed health facilities where healthcare services are provided. Research conducted in California showed that there is little professional or public support for tobacco sales in pharmacies,<sup>4</sup> and this research influenced the passage of legislation banning the sale of tobacco products in pharmacies in San Francisco county.<sup>13 14</sup> Because it was the first legislation of its type in the USA, this study aimed to characterise the perceptions and opinions of the general public approximately 1 year after the ban went into effect.

Of 198 individuals surveyed, 22% were current tobacco users, which is higher than the 13.5% smoking prevalence reported for San Francisco.<sup>19</sup> Overall, our data are contradictory of retailers' concern that implementation of such bans will result in decreased clientele in community pharmacies; furthermore, because tobacco users were oversampled, the potential effect of the ban to reduce shopping frequency at retail pharmacies is likely overestimated in this study. In examining the opinions of respondents who were not neutral on the issue, there appears to be consumer support for the ban and removal of tobacco products from pharmacies.

A limitation of this study is its small sample size. Additionally, our study population was highly educated, with nearly two-thirds possessing a bachelor's degree or higher. Because people with a higher education level are less likely to smoke, the ban would likely have had less of an impact on respondents who did not smoke. As a result, the generalisability of our findings to the population of San Francisco and beyond is unknown.

San Francisco was the first city to implement a ban, and it has not been without controversy.<sup>15-17</sup> While nearly all independently owned pharmacies in California have long since voluntarily ceased sales of tobacco products,<sup>20-22</sup> tobacco sales remain ubiquitous in chain pharmacies. For decades, pharmacy chain corporations have ignored the pharmacy profession's policies on removing tobacco from the pharmacy practice environment. Ironically, many pharmacies are now promoting health and wellness programmes, including the provision of tobacco

**Table 1** Perceptions of cigarette sales in pharmacies: current ( $n=43$ ) and former or never ( $n=155$ ) tobacco users

| Survey item*   | Tobacco use status | Extent of agreement n (%) |                   |          |                |                | Mean (SD) | t Statistic and p value |
|--|--------------------|---------------------------|-------------------|----------|----------------|----------------|-----------|-------------------------|
|  |                    | Strongly disagree         | Somewhat disagree | Not sure | Somewhat agree | Strongly agree |           |                         |
| I am in favor of cigarettes being sold in pharmacies.  | Current            | 7 (16)                    | 4 (9)             | 11 (26)  | 8 (19)         | 13 (30)        | 3.4 (1.4) | -5.4                    |
|  | Former or never    | 73 (47)                   | 26 (17)           | 31 (20)  | 13 (8)         | 12 (8)         | 2.1 (1.3) | <0.001                  |
| It is appropriate for the government to ban cigarette sales in pharmacies.   | Current            | 17 (40)                   | 4 (9)             | 7 (16)   | 6 (14)         | 9 (21)         | 2.7 (1.6) | 2.8                     |
|  | Former or never    | 27 (17)                   | 11 (7)            | 38 (25)  | 33 (21)        | 46 (30)        | 3.4 (1.4) | 0.005                   |
| It is unethical for pharmacies to profit from the sale of cigarettes and the medicines used to treat diseases caused by smoking. | Current            | 14 (33)                   | 6 (14)            | 10 (23)  | 9 (21)         | 4 (9)          | 2.6 (1.4) | 2.9                     |
|  | Former or never    | 27 (17)                   | 17 (11)           | 32 (21)  | 39 (25)        | 40 (26)        | 3.3 (1.4) | 0.004                   |

\*Strongly disagree=1, somewhat disagree=2, not sure=3, somewhat agree=4, strongly agree=5.

cessation counselling. Pharmacy licensing bodies, charged with protecting consumers and public health,<sup>23</sup> should consider the inherent conflict of interest that exists between the provision of healthcare services and tobacco sales, and administer pharmacy licenses only to those pharmacies that are dedicated to the health and welfare of their patients and, thus, do not sell tobacco products. Furthermore, pharmacy licensing bodies should prohibit pharmacies that sell tobacco products from using advertising language that states or suggests that the business cares about the health of its customers. It is time for pharmacy chains to decide whether they want to be classified as (a) a convenience store that sells tobacco products or (b) a licensed healthcare establishment. In our view, and in the view of the profession and its professional organisations, the two are mutually exclusive.

## CONCLUSION

Public support exists in the city and county of San Francisco for prohibiting the sale of tobacco products in pharmacies. These findings can be used as support for similar efforts in other locations.

### What this study adds

- San Francisco was the first city and county within the USA to enact legislation banning the sale of tobacco products in pharmacies. Prior to implementation of the ban, significant concern was expressed by retailers that the ban would lead to reductions in the number of clientele. In this report, we characterised public perceptions of the ban and its effect on self-reported shopping behaviour at community pharmacies. The positive public support of this ban and lack of an effect on self-reported shopping behaviour can serve as evidence for the creation of policies that prohibit the sale of tobacco in pharmacies globally.

**Acknowledgements** The authors thank Drs Bennett Bain, Charlene Joe, Angie Phong, Stephanie Phong and Evelyn Sugihto, for conducting data collection and contributing to earlier versions of this manuscript.

**Contributors** LAK and RLC conceived the idea for this study. LAK oversaw the data collection. LAK and RLC contributed to the data analyses, interpretation of study findings and writing and revisions of the manuscript. APR and KSH conducted the statistical analyses of the data, and contributed to the interpretation of study findings and writing and revisions of the manuscript.

**Funding** Analysis and writing for this report were supported in part by National Cancer Institute grant R01 CA 129312 to K Hudmon.

**Competing interests** None.

**Ethics approval** National Cancer Institute.

**Data sharing statement** We hereby provide permission for Tobacco Control to share the data/information provided in this brief report.

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*Tob Control* published online November 21, 2012  
doi: 10.1136/tobaccocontrol-2012-050602

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