Public opinions on tax and retail-based tobacco control strategies

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ABSTRACT

Background While tobacco taxes and smoke-free air regulations have significantly decreased tobacco use, tobacco-related illness accounts for hundreds of thousands of annual deaths. Experts are considering additional strategies to further reduce tobacco consumption.

Methods We investigated smokers’ (n=2118) and non-smokers’ (n=2210) opinions on existing and theoretical tobacco control strategies, including tax and retailer-based strategies in New York City, across three cross-sectional surveys.

Results Compared with smokers, non-smokers were significantly more likely (<0.05) to favour all tobacco control strategies. Overall, 25% of smokers surveyed favoured increasing taxes on cigarettes, climbing to 60% if taxes were used to fund healthcare programmes. Among non-smokers, 72% favoured raising taxes, increasing to 83% if taxes were used to fund healthcare programmes. 54% of non-smoking New Yorkers favoured limiting the number of tobacco retail licences, as did 30% of smokers. The most popular retail-based strategies were raising the minimum age to purchase cigarettes from 18 to 21, with 60% of smokers and 69% of non-smokers in favour, and prohibiting retailers near schools from selling tobacco, with 51% of smokers and 69% of non-smokers in favour. Keeping tobacco products out of customers’ view, prohibiting tobacco companies from paying retailers to display or advertise tobacco products and prohibiting price promotions were favoured by more than half of non-smokers surveyed, and almost half of smokers.

Conclusions While the support level varied between smokers and non-smokers, price and retail-based tobacco control strategies were consistently supported by the public, providing useful information for jurisdictions examining emerging tobacco control strategies.

INTRODUCTION

High US public support for tobacco control is coupled with low smoking prevalence. Tax increases and smoke-free air (SFA) laws are associated with increased quit attempts, reduced initiation and decreased consumption. In New York City (NYC), after a 2002 tax increase and comprehensive SFA Act, prevalence of smoking declined 31% by 2011. Yet declines have slowed, and additional strategies are needed.

The 2009 Family Smoking Prevention and Tobacco Control Act granted federal and local jurisdictions authority to regulate time, place and manner of retail tobacco advertising and promotion. Experts have proposed prohibiting point of sale advertisements and product displays, which have been successful strategies in Canada, England, Ireland, Australia and Thailand.

Worldwide, tobacco industry discounts and price promotions undermine tobacco control efforts aimed at discouraging tobacco use and encouraging cessation. Selling discounted packs prevents price increases from reducing the smoking prevalence.

Prohibiting coupons and 2-for-1 deals and setting minimum pack prices would combat industry price reductions. In Needham, Massachusetts, raising the legal tobacco product retail sales age from 18 to 21 was associated with declining youth smoking prevalence between 2006 and 2012. Experts have suggested further limiting tobacco availability by restricting, reducing or auctioning licences or prohibiting pharmacy sales.

Declines in smoking prevalence and expansion of ‘smoke-free’ legislation, can positively impact public opinions on tobacco control. Attitude changes are shown to lead to behaviour changes, including those related to smoking cessation and initiation prevention. We seek to understand public opinions on NYC tobacco control strategies by assessing differences between smokers and non-smokers, and attitude changes between 2010 and 2012. These public opinion survey results provide useful information for understanding attitudes among smokers and non-smokers for jurisdictions examining emerging tobacco control strategies.

METHODS

Design and population

Between August 2010 and February 2012, we conducted three Tobacco Behavior and Public Opinion Surveys (TBPOS). TBPOS was a citywide cross-sectional telephone survey conducted in English and Spanish. Participants were sampled using random-digit-dial methodology, 90% landlines and 10% cellphones. Each Wave surveyed 1440 adults, including 720 non-smokers and 720 smokers. Smoking status was determined by, and smoking status was obtained at the time of the interview, and smokers were oversampled to yield sufficient numbers for statistical comparisons. Combined smoker and non-smoker estimates were obtained by weighting observations to match smoking prevalence in NYC (Wave 1:15.8%; Waves 2 and 3:14%).

Measures

Demographics and smoking behaviours were based on NYC Community Health Survey (CHS) questions. Smoking status was determined by, “Have you smoked at least 100 cigarettes in your entire life?” and “Do you now smoke cigarettes every day, some days or not at all?”
Wave 1 (2010) asked if respondents favoured not granting new licences to sell tobacco. Waves 1 and 2 (2011) asked if respondents favoured increasing cigarette taxes in general or if all the money raised were used for programmes to prevent and treat smoking or for healthcare programmes, and if they favoured increasing taxes on tobacco products other than cigarettes. All three Waves asked if they favoured: requiring retailers to keep tobacco products out of customers’ view; prohibiting tobacco companies from paying NYC retailers to display their products and advertisements; prohibiting price promotions; raising the legal minimum age to purchase cigarettes from 18 to 21; limiting the number of licences issued that allow retailers to sell tobacco; prohibiting pharmacies, grocery stores or stores located near schools from selling tobacco and requiring that tobacco be sold only in stores that sell nothing but tobacco products.

Analysis
We assessed support for tobacco control strategies by smoking status and for smokers and non-smokers combined across Waves using SAS V.9.2. Trends across Waves 1–3 were assessed using the general linear contrast procedure in SUDAAN V.11.0.

Survey response
Wave 1 surveyed 685 smokers and 762 non-smokers; Wave 2 surveyed 715 smokers and 721 non-smokers and Wave 3 surveyed 718 smokers and 727 non-smokers. Response rates were 21.3% for landlines and 8.6% for cellphones in Wave 1; 23.7% for landlines and 3.3% for cellphones in Wave 2 and 21.1% for landlines and 2.9% for cellphones in Wave 3. Cooperation rates were 50.6% for landlines and 10.1% for cellphones in Wave 1; 59.0% for landlines and 3.9% for cellphones in Wave 2 and 54.1% for landlines and 3.4% for cellphones in Wave 3. We restricted our use of post-stratification weights to adjust for smoking status only. Compared with the CHS, TBPOS had fewer men (37% vs 46%) and 18–24-year-olds (7% vs 13%) and more college graduates (53% vs 35%) and whites (55% vs 36%).

RESULTS
As public opinions were generally stable across survey Waves, data presented in the text are from the most recent survey Wave. Statistically significant changes across Waves are highlighted in table 1.

Sixty-six per cent of respondents favoured increasing taxes on cigarettes, while 75% supported increases if taxes were earmarked for smoking prevention and treatment (increasing from 71% in Wave 1) or to fund healthcare programmes (80%). Only 25% of smokers favoured increasing cigarette taxes, yet support more than doubled if taxes were earmarked for smoking prevention and treatment (56%; increasing from 48% in Wave 1) or

<table>
<thead>
<tr>
<th>Question and Responses</th>
<th>Overall</th>
<th>Smokers</th>
<th>Non-smokers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increasing state or city taxes on a pack of cigarettes</td>
<td>59 (56 to 62)</td>
<td>61 (58 to 64)</td>
<td>57 (54 to 60)</td>
</tr>
<tr>
<td>Prohibiting tobacco companies from paying NYC retailers to display their products and advertisements</td>
<td>55 (52 to 58)</td>
<td>53 (50 to 56)</td>
<td>54 (51 to 57)</td>
</tr>
<tr>
<td>Prohibiting price promotions such as coupons and 2-for-1 deals on cigarette packs</td>
<td>55 (52 to 58)</td>
<td>49 (46 to 52)</td>
<td>53 (50 to 56)</td>
</tr>
<tr>
<td>Raising the minimum age to purchase cigarettes from 18 to 21</td>
<td>67 (64 to 70)</td>
<td>71 (68 to 74)</td>
<td>67 (64 to 70)</td>
</tr>
<tr>
<td>Limiting the number of licences issued that allow retailers to sell tobacco</td>
<td>54 (51 to 57)</td>
<td>55 (51 to 58)</td>
<td>51 (48 to 54)</td>
</tr>
<tr>
<td>Not granting new licences to sell tobacco</td>
<td>46 (43 to 49)</td>
<td>25 (22 to 28)</td>
<td>25 (22 to 28)</td>
</tr>
</tbody>
</table>

All comparisons between smokers and non-smokers in favour of policies in each Wave were significantly different, p<0.05; Bold: significant trend across Waves (p<0.05).

used to fund healthcare programmes (60%). Among non-smokers, 72% favoured increasing taxes, while 83% were in favour if money were used for healthcare. Smokers were less likely to support tax increases on other tobacco products than non-smokers (39% vs 75%).

Requiring retailers to keep tobacco products from customers’ view was favoured by 57% of respondents (39% of smokers, 60% of non-smokers). Fifty-four per cent supported prohibiting tobacco companies from paying NYC retailers to display products and advertisements (40% of smokers, 56% of non-smokers). Prohibiting price promotions was favoured by 53% of respondents (44% of smokers, 53% of non-smokers). Sixty-seven per cent of respondents favoured raising the legal minimum age to purchase cigarettes from 18 to 21 (60% of smokers; down from 66% in Waves 1 and 2, and 69% of non-smokers).

Overall, 51% of respondents favoured limiting the number of tobacco retail licences (30% of smokers, 54% of non-smokers). Forty-six per cent of respondents favoured not granting new retail licences to sell tobacco (25% of smokers, 50% of non-smokers). More than half of New Yorkers surveyed (57%) supported prohibiting pharmacies from selling tobacco (39% of smokers, 60% of non-smokers). Prohibiting grocery stores from selling tobacco was favoured by half of New Yorkers (31% of smokers, 54% of non-smokers). Two-thirds of respondents supported prohibiting stores located near schools from selling tobacco (51% smokers, 69% non-smokers). Requiring tobacco sales to be limited to stores that sell only tobacco products was favoured by 47% of respondents (25% smokers, 50% of non-smokers).

DISCUSSION
Tax increases are credited with reducing cigarette consumption. With state and local excise taxes, NYC has the highest cigarette pack price (NYC: $5.85 vs national average: $1.53). Still, TBPOS data showed that support for tax increases remained consistent, especially if revenue were used for smoking prevention and cessation or healthcare.

At the time of submission, the NYC Council had passed two bills to prohibit coupon and other discounts and set a minimum pack price for cigarettes and little cigars, and raise the legal sales age from 18 to 21. TBPOS showed that support for raising the minimum age to purchase tobacco is substantial. International evidence shows significant declines in youth smoking prevalence when minimum purchase age increases, ultimately reducing adult prevalence and improving health outcomes.

Keeping tobacco products from customers’ view, prohibiting payments to retailers and prohibiting price promotions were also supported. Research shows that stores frequented by teens display more tobacco products and market tobacco more heavily. While many retailers receive payments from the tobacco industry to display their products, prohibiting product displays in Ireland has had high retailer compliance (97%) and public support (66%), as has Norway and Australia. In the USA, the grocery chain Price Chopper voluntarily prohibited tobacco product displays.

More than half of smokers and over two-thirds of non-smokers consistently supported prohibiting stores near schools from selling tobacco. Teen smoking prevalence is higher in schools with more tobacco retailers located near the school, and prohibiting stores near schools from selling tobacco has been suggested in California and Massachusetts.

Half or more non-smokers were in favour of limiting retail licences and prohibiting or limiting stores that sell tobacco. Laws prohibiting tobacco product sales in pharmacies have upheld legal challenge in San Francisco and Boston, and survey data show support from the public and pharmacists. Chain grocery stores, like Wegmans, have voluntarily stopped selling tobacco products.

CONCLUSION
Tobacco control strategy development is a complex and dynamic process dependent on potential impact, social context, legal authority, scientific evidence and public support. Public opinion data alone cannot direct strategy, but can be used for understanding consumer attitudes and social norms. Favourable attitudes towards progressive tobacco control strategies like prohibiting the use of coupons and 2-for-1 deals and raising the minimum age to purchase tobacco from 18 to 21 may indicate a shift in social norms over time.

What this article adds
- Smoking leads to premature death and adverse health outcomes for both smokers and non-smokers. Raising taxes and expanding smoke-free air regulations have successfully reduced both smoking prevalence and environmental tobacco smoke exposure, yet smoking remains a leading cause of preventable death. Countries, states and cities worldwide continually strive to find innovative strategies to reduce both exposure and prevalence.

This article investigates public opinions over time about existing and untested tobacco control strategies among a large, representative, urban sample of smokers and non-smokers. Tax increases, raising the minimum age to purchase cigarettes from 18 to 21, prohibiting retailers near schools from selling tobacco, keeping tobacco products from customers’ view, prohibiting tobacco companies from paying retailers to display or advertise tobacco products and prohibiting price promotions were favoured by more than half of those surveyed. These public opinion results provide useful information for understanding attitudes among smokers and non-smokers for jurisdictions examining upcoming tobacco control strategies.

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Data sharing statement With appropriate review and approval, data from the New York City Department of Health and Mental Hygiene Tobacco Behavior and Opinion Surveys are available upon request.

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