

BMJ Open Attitudes towards smoking restrictions and tobacco advertisement bans in Georgia

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ABSTRACT

Objectives: This study aims to provide data on a public level of support for restricting smoking in public places and banning tobacco advertisements.

Design: A nationally representative multistage sampling design, with sampling strata defined by region (sampling quotas proportional to size) and substrata defined by urban/rural and mountainous/lowland settlement, within which census enumeration districts were randomly sampled, within which households were randomly sampled, within which a randomly selected respondent was interviewed.

Setting: The country of Georgia, population 4.7 million, located in the Caucasus region of Eurasia.

Participants: One household member aged between 13 and 70 was selected as interviewee. In households with more than one age-eligible person, selection was carried out at random. Of 1588 persons selected, 14 refused to participate and interviews were conducted with 915 women and 659 men.

Outcome measures: Respondents were interviewed about their level of agreement with eight possible smoking restrictions/bans, used to calculate a single dichotomous (agree/do not agree) opinion indicator. The level of agreement with restrictions was analysed in bivariate and multivariate analyses by age, gender, education, income and tobacco use status.

Results: Overall, 84.9% of respondents indicated support for smoking restrictions and tobacco advertisement bans. In all demographic segments, including tobacco users, the majority of respondents indicated agreement with restrictions, ranging from a low of 51% in the 13–25 age group to a high of 98% in the 56–70 age group. Logistic regression with all demographic variables entered showed that agreement with restrictions was higher with age, and was significantly higher among never smokers as compared to daily smokers.

Conclusions: Georgian public opinion is normatively supportive of more stringent tobacco-control measures in the form of smoking restrictions and tobacco advertisement bans.

BACKGROUND

The WHO *Framework Convention on Tobacco Control* (FCTC) emphasises the importance

Strengths and limitations of this study

- Internal consistency of attitudes towards smoking prohibition and tobacco ad ban is very high.
- In the period since the data of this study were collected (2008) and in this publication, it is possible that there have been shifts in public opinion that might affect our conclusions.

of combining tobacco demand reduction with tobacco supply restrictions. Article 8 of the FCTC addresses the need for protection from exposure to tobacco smoke and recognises the scientific evidence that exposure to tobacco smoke causes death, disease and disability. Article 13 calls for a comprehensive ban on advertising, promotion and sponsorship to stimulate reduction in the consumption of tobacco products.¹

Evidence from countries that have carried out well in reducing tobacco consumption suggests that a comprehensive approach to tobacco control should include (1) increased tobacco prices and taxes; (2) bans on tobacco advertising, promotion and sponsorship; (3) no sales to minors; and (4) the conduct of public awareness campaigns.^{1–4} In addition, clean indoor-air laws have been the focus of many of the tobacco-control efforts in North America, Western Europe and Australia, the lessons of which are instructive to those drafting tobacco-control policies in low-income and middle-income countries.^{5–7}

Regarding tobacco advertisement and promotional activities, a special concern is their influence on adolescent behaviour.⁸ Partial bans on tobacco advertisement are not effective, and WHO analyses suggest that comprehensive control programmes, including comprehensive advertising bans, are required to reduce cigarette consumption.^{5,9}

Tobacco use in Georgia and tobacco-control policies

Tobacco use in the former Soviet state of Georgia has increased to alarming proportions



since 1990, mostly due to the transition towards market economy and the arrival of the international tobacco industry. In 2001, the prevalence of tobacco use among men was 53.3% and rose to 59.8% in 2008.^{10 11} Among women, the prevalence increased from 6.3% to 14.9% in the same period (*ibid*). The tobacco use trend among youth is also worrying. The Global Youth Tobacco Survey conducted in 2000–2007 estimated that 19.2% of youth aged 13–15 years smoked cigarettes in European countries, while the prevalence was 23.7% in Georgia.¹²

Smoking restrictions in public places were implemented in Georgia in 2003, when the first Georgian Law on Tobacco Control was enacted.¹³ In 2004, changes in the Georgian Code of Administrative Offences established penalties for violations of tobacco-control law measures.¹⁴ Since May 2006, the FCTC entered into force in Georgia,¹⁵ following which several changes have been made to the Georgian tobacco-control law. As of this writing, the law prohibits tobacco smoking in educational institutions, enclosed sports buildings, in medical and pharmaceutical buildings and in public transport. In working places where smoking is restricted, smoking-allowed zones may be created.

Regarding tobacco advertisement regulation, the 1999 Georgian Law on Advertisement only bans tobacco ads on TV and radio.¹⁶ After entering into the FCTC, Georgia had 5 years to achieve full implementation of a total ban on tobacco advertisement and promotion. However, as of this writing, the ban is still only a partial one, with outdoor advertising and other advertising forms (except TV and radio) still being permitted.

Despite the existing restrictions, tobacco use is ubiquitous even in places where it is prohibited, due to lax enforcement of the law. Thus Georgian tobacco-control law requires revision to emphasise enforcement measures. This calls for policy-makers to revisit the present structure of tobacco-control law. In this context, public opinion about the appropriateness and acceptability of tobacco-control measures may have an important role to play in informing the policy-making process.

Influence of public opinion on policy-making

'Public opinion' refers to citizen's attitudes, perspectives and viewpoints on policy issues that decision makers may take into account in policy-making processes.¹⁷ Policy-makers are influenced by public opinion through a range of 'barometers' including election results, what elected officials sense that people want, what powerful constituents have to say, how the media reflect public sentiment, public demonstrations, public opinion polls and survey research.¹⁸

In democracies, a key factor that determines the power of the public opinion's political influence is how close the coming election is.¹⁹ That public policy is responsive to public opinion is a core expectation of democratic theory, under the principle that political actors should be alert to changes in public opinion and adjust their behaviour accordingly.²⁰ However, public

opinion influences policy even where there is no democracy, through informal pressure from dissatisfied publics.^{21–25}

Indeed, there is some concern that policy-makers may pay too much attention to the public's opinion, and that policy researchers underestimate this source of influence because the study of public opinion is emphasised less than other policy determinants.²¹ Worried that public opinion has too much influence, Brooks and Manza²⁵ point out that the wishes and preferences of the public are often not sufficiently informed or reflective about the trade-offs and risks involved in policy decisions. For complex and/or highly targeted policy issues, the public may simply not be sufficiently informed to express meaningful opinions.^{24 26–28} Regardless, research shows that the impact of public opinion on policy is substantial, and remains strong even when the influence of organised interests is taken into account.²⁹ Not only is the broad shape of policy responsive to public opinion²²; but can also be the proximal cause of a policy.³⁰

The relationship between public opinion and policy-making may often operate as a self-tuning system, the way a thermostat interacts with a machine to keep it within operating temperature.^{31 32} Public opinion sends signals to policy-makers that can help in fine-tuning policy, and policy sends signals to the public, which can help shape public opinion.

Public's support for tobacco control

Data from several countries indicate that smoking bans in workplaces, public transport and in public spaces such as shopping malls are widely supported by the public.^{2 3 33–39} Significant support for tobacco control is evident even among smokers.^{33 40} An opinion poll in New South Wales, Australia, showed that 89% supports smoke-free policy for children's playgrounds, 77% for sports facilities, 72% for bars, 69% for outdoor dings, 55% for beaches and 77% for autos carrying children.^{41 42} Perhaps the highest ever levels of support for tobacco bans were reported in a study in Lausanne, Switzerland, with 87% supporting smoking bans in public places.⁴³

Some studies about internal tobacco industry documents revealed a strategy using international scientific consultants to influence public opinion on environmental tobacco smoke.^{44 45}

In summary, there is good evidence from Anglo-Saxon countries that the public supports legislation restricting the use of tobacco, and that public opinion matters in tobacco policy-making. However, there are no similar studies in Georgia. This prompted the present study, which aimed to collect, analyse and disseminate data on the Georgian public's attitudes towards smoking restrictions and tobacco advertisement bans.

The precise degree to which public opinion influences decision-making cannot be ascertained, since there is no method to separate this source of influence from many other sources of influence (eg, lobbying, scientific

evidence and Government white papers). Therefore, this study is limited in documenting the state of public opinion, and cannot make valid and reliable estimates of the degree to which public opinion has affected actual tobacco-control decision-making in Georgia.

STUDY AIM AND METHODOLOGY

Aim

This study aims to provide data from a nationally representative sample including non-smokers, ex-smokers and current smokers on their level of support for restricting smoking in public places, banning tobacco advertisement, and increasing penalties for violations of restrictions and bans.

Study design and methods

Survey data were collected in January and February 2008 in the whole country. The primary sampling units were households and one member aged between 13 and 70 was selected for the interview. The sampling frame was formed on the basis of the national census, covering the non-institutionalised population. Households located at the sampled addresses were observed. The sample size was determined with the objective to ensure high statistical reliability of the estimates of key indicators: the 95% CI should not exceed 10–15% of a key indicator estimate. According to this criterion, the sample size was determined to be 1655. The sampling was carried out by using stratification and a two-stage procedure. At the first stage, a sample of primary sampling units (enumeration districts) was drawn. In accordance with the sampling design, the country was divided into 10 comparatively homogenous regions. Each region was divided into homogenous strata according to urban/rural and mountainous/lowland settlements. Regional sampling quotas were proportional to their size. Primary sampling units were selected in each stratum by random sampling (with the probability proportional to size) from the frame of enumeration districts. At the first stage of sampling, from 16 000 enumeration districts 94 districts were selected. At the next stage, lists of the household addresses in the selected districts were compiled. Then, using systematic sampling, addresses were selected from those lists according to the sampling quotas.

In-house face-to-face interviews used a standard questionnaire. In households with more than one age-eligible person available for selection, selection of the respondent was carried out at random. About 50 interviewers and 10 regional supervisors from the Department of Statistics of Georgia carried out this survey. Regional supervisors controlled the selection of addresses and the work of the interviewers. Sample weights were calculated using π -estimation, determined as the inverse $1/p$ (i) of its probability p (i) to be selected.¹⁰

Study outcomes/determinants

The variables considered in the present report were as follows:

- A. Demographic variables age, gender, education level and income;
- B. Smoking status (daily, occasional, ex-smoker and never smoker);
- C. Levels of agreement with the implementation of eight tobacco smoking prohibitions and tobacco advertisement/promotion ban, and increased penalties on violations, coded 'yes', 'no', 'don't know' and 'refuse to answer':
 1. Prohibition of smoking promotion (including offering free promotional items, such as t-shirts, free samples, etc);
 2. Prohibition of tobacco and tobacco company advertising in the printing media, on the billboards and sponsorship;
 3. Prohibition of all tobacco and tobacco company advertising;
 4. Prohibition of indoor smoking in government buildings/offices, schools and youth organisations;
 5. Prohibition of indoor smoking in medical, educational, sport and cultural facilities;
 6. Prohibition of indoor smoking private workplaces;
 7. Prohibition of indoor smoking in restaurants bars and nightclubs;
 8. Increased penalties for violations of restrictions/prohibitions.

In calculating agreement rates, the denominators included those who refused to answer, such that the two coded response categories were 'agree' and 'disagree or no answer'. This was intended to create a conservative bias in estimating the level of agreement with restrictions.

Data analysis

The dimensionality of the attitudes towards the scale of smoking prohibition and tobacco ad ban was examined with correlation analysis and with factor analysis (principal axis factoring). The reliability (ie, internal consistency) of the scale was estimated with Cronbach's α . A simple, additive sum score was constructed based on all eight dichotomised attitude items. This sum score indicates the degree of overall support for smoking restrictions and tobacco ad bans. The sum score was recoded into a single dichotomous variable with high support for smoking restrictions as one category (agreement with at least 4 of the 8 restrictions) and low support as the other. Support for smoking restrictions was analysed against demographic variables with the χ^2 statistic. Associations between demographic factors and smoking status, and support for smoking prohibition and tobacco ad bans, were also examined with bivariate as well as multiple logistic regression analysis. SPSS V19 and V20 were used for all analyses. Analyses were also carried out in Mplus with the weighted least squares—mean adjusted and variance adjusted estimator, and all items



were defined as categorical. The Mplus results, which are not reported here, supported the results of the principal components analysis that are reported here.

Ethical clearance

Signed informed consent was obtained from all participants. For participants under age 18, parents or guardians confirmed, by signature, their approval of the minor's participation. The survey organisers took responsibility with regard to the protection of confidentiality during the collection, analysis and dissemination of data. No respondent's identity was recorded on the interview forms or in any other manner.

RESULTS

Of the 1655 households selected, interviews could not be conducted in 67 households due to no age-eligible residents present (n=5), refusal to participate (n=13) and no response/no one home (n=49). Interviews were conducted with 1588 respondents (response rate of 96%). The number of study participants who were interviewed but refused answer to one or more questions about restrictions ranged from 14 to 76 (0.9–4.8%). Fourteen respondents who had missing responses on half or more of the eight restrictions questions were not included in the analysis, reducing the analysis sample size to 1574 (response rate 95%).

Intercorrelations between the smoking prohibition and tobacco ads/promotion ban attitude items ranged from 0.81 to 0.95. Factor analysis (principal axis factoring) showed that the first unrotated factor had an eigenvalue of 6.41 while the second unrotated factor had an eigenvalue of 0.56. This supports the assumption that the scale is unidimensional and can be reduced to one index, for which Cronbach's α is 0.96. An unweighted sum score was calculated using all eight attitude items.

The lowest level of approval was 47.5% among respondents aged 13–25 for the 'prohibition of indoor smoking in restaurants, bars and night clubs'. The highest level of approval was 98.2% among respondents aged 56–70 for the 'prohibition of indoor smoking in medical, educational, sport and cultural facilities'. There was a statistically significant age gradient for all eight restrictions, with older respondents having the highest approval rates (table 1).

No statistically significant gender differences or differences by income and educational level were observed with regard to any of the smoking prohibition and tobacco ad ban items.

Approval of each of the eight prohibitions ranged from 88.6% to 98.9% among ex-smokers and never smokers, from 73% to 82% among daily smokers and from 47.1% to 53.9% among less-than-daily smokers (table 1). Across all items, the average support for smoking restrictions and tobacco advertisement bans was 84.9%. All eight smoking status gradients were statistically significant, with ex-smokers and never smokers

having the highest approval rates, and less-than-daily smokers having the lowest approval rates. Daily smokers had higher approval rates than occasional smokers but lower than ex-smokers and never smokers.

When we examine the dichotomised sum score, it turns out that among never smokers and ex-smokers, high approval of restrictions was indicated by 94.2–97.7% of respondents. Occasional smokers were less supportive of restrictions than the daily smokers. These differences in approval were statistically significant, as shown in table 2.

There were no statistically significant differences in the levels of support for restrictions by gender and household income. The bivariate association between the highest completed education and support for restrictions was significant. This significance is due to the difference between the level of support among those who have college-level education (82.7%) and those who have a university level education (87.9%).

The bivariate relationships between the attitude scale and each of the sociodemographic/tobacco-use variables also described with logistic regression are shown in table 2 (in the columns under bivariate logistic regression). The associations are identical to the ones described with percentages above.

Results of a multiple logistic regression analysis are shown in the last four columns of table 2. Support for restrictive measures increased with age from the youngest age group (13–25) to the second oldest (46–55), with OR values similar to the bivariate ones. There were no significant associations with gender and household income. The overall association between the highest completed level of education and support for restrictions was no longer significant, but the difference between those with the lowest level of education (reference group) and those with college-level education (OR=0.062) was significant at the $p<0.05$ level. When compared with the daily smokers (reference group), the occasional smokers were significantly less supportive of restrictive measures (OR=0.63) and never smokers are significantly more supportive (OR=5.80).

The multiple logistic regression analysis produced results that were similar to the results of the bivariate analyses, although some relationships became insignificant (overall association with highest completed education and contrast between daily smokers and ex-smokers) and one surfaced (contrast between lowest education and college-level education).

DISCUSSION

The study sampling design and the 96% response rate give reason for confidence in the representativeness of the findings, and we surmise therefore that the majority of the Georgian population supports smoking prohibitions in public places and a total ban on tobacco advertisement and promotion. The high level of public support to prohibit smoking in public places and work

Table 1 Smoking restrictions and tobacco ads ban 1–8 by demography and smoking status (bivariate analyses); see footnote 1–8 for key to the specific content of each restriction (n=1574)

| | 1 Percentage of yes | 2 Percentage of yes | 3 Percentage of yes | 4 Percentage of yes | 5 Percentage of yes | 6 Percentage of yes | 7 Percentage of yes | 8 Percentage of yes | Sum score (dichotomy) Percentage of yes | N |
|--|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|--|-----|
| Age— χ^2 , p value | 262.16, 0.000 | 273.01, 0.000 | 241.65, 0.000 | 360.73, 0.000 | 341.57, 0.000 | 346.34, 0.000 | 248.0, 0.000 | 323.38, 0.000 | 349.19, 0.000 | |
| 13–25 | 51.0 | 51.7 | 54.0 | 49.4 | 53.2 | 50.6 | 47.5 | 52.1 | 51.3 | 263 |
| 26–35 | 74.8 | 75.4 | 77.4 | 75.7 | 76.4 | 76.4 | 72.1 | 75.4 | 77.0 | 305 |
| 36–45 | 88.3 | 88.6 | 87.1 | 91.6 | 93.4 | 91.3 | 83.5 | 91.9 | 91.9 | 333 |
| 46–55 | 92.9 | 94.6 | 93.9 | 98.0 | 98.0 | 98.0 | 92.5 | 97.6 | 98.0 | 294 |
| 56–70 | 95.5 | 96.0 | 96.3 | 97.6 | 98.2 | 97.6 | 92.9 | 96.8 | 98.2 | 379 |
| Gender— χ^2 , p value | 0.04, 0.840 | 0.04, 0.840 | 0.17, 0.680 | 0.00, 0.920 | 0.59, 0.440 | 0.50, 0.480 | 0.15, 0.700 | 0.58, 0.450 | 0.00, 0.960 | |
| Male | 81.8 | 83.0 | 82.7 | 84.2 | 86.2 | 83.6 | 78.8 | 85.1 | 84.8 | 659 |
| Female | 82.2 | 82.6 | 83.5 | 84.0 | 84.8 | 84.9 | 79.6 | 83.7 | 84.9 | 915 |
| Education— χ^2 , p value | 3.28, 0.350 | 7.00, 0.140 | 2.36, 0.310 | 2.84, 0.240 | 8.32, 0.160 | 3.73, 0.150 | 4.13, 0.130 | 4.02, 0.130 | 6.10, 0.050 | |
| Low | 82.7 | 81.0 | 81.5 | 84.6 | 85.6 | 84.4 | 78.8 | 85.2 | 84.2 | 486 |
| Middle | 82.9 | 81.1 | 82.9 | 82.2 | 82.3 | 82.3 | 77.0 | 81.8 | 82.7 | 566 |
| High | 80.9 | 85.7 | 85.1 | 85.8 | 88.5 | 86.6 | 82.0 | 86.2 | 87.9 | 522 |
| Income— χ^2 , p value | 4.42, 0.110 | 1.89, 0.590 | 3.30, 0.350 | 2.82, 0.420 | 2.78, 0.430 | 2.46, 0.480 | 1.46, 0.690 | 3.76, 0.290 | 2.25, 0.520 | |
| Low | 81.1 | 82.5 | 83.6 | 85.8 | 86.5 | 85.6 | 77.0 | 84.7 | 85.8 | 452 |
| Middle | 80.2 | 84.0 | 83.8 | 83.8 | 84.7 | 84.5 | 79.8 | 84.7 | 84.9 | 568 |
| High | 84.9 | 82.1 | 82.6 | 83.4 | 85.6 | 83.6 | 79.3 | 84.1 | 84.5 | 535 |
| Smoking status— χ^2 , p value | 224.93, 0.000 | 239.88, 0.000 | 221.10, 0.000 | 248.66, 0.000 | 223.34, 0.000 | 267.03, 0.000 | 200.13, 0.000 | 232.89, 0.000 | 269.38, 0.000 | |
| Daily | 77.1 | 78.4 | 79.1 | 79.3 | 82.0 | 79.8 | 73.0 | 80.4 | 80.9 | 445 |
| Less than daily | 48.5 | 48.5 | 50.5 | 50.5 | 53.9 | 49.5 | 47.1 | 51.5 | 50.0 | 206 |
| Ex-smoker | 93.7 | 98.9 | 97.9 | 94.7 | 94.7 | 95.8 | 95.8 | 96.8 | 97.9 | 95 |
| Never smoker | 91.7 | 91.8 | 91.8 | 93.8 | 94.0 | 94.2 | 88.6 | 93.1 | 94.2 | 828 |

1. Agree to prohibition of smoking promotion (including offering free promotional items, such as t-shirts, free samples, etc).
2. Agree to prohibition of tobacco and tobacco companies advertising in the printing media, on the billboards and sponsorship.
3. Agree to prohibition of all types of tobacco products and advertisement by tobacco companies.
4. Agree to prohibition of indoor smoking in government buildings/offices, schools and youth organisations.
5. Agree to prohibition of indoor smoking in medical, educational, sport and cultural facilities.
6. Agree to prohibition of indoor smoking in private workplaces.
7. Agree to prohibition of indoor smoking in restaurants, bars and night clubs.
8. Agree to include more restrictions on smoking and increase the penalties for violations.

**Table 2** Support for smoking restrictions and tobacco ads ban by demography

| | N | High support (%)* | Bivariate logistic regression | | | | Multiple logistic regression | | | |
|---|-----|-------------------|-------------------------------|-------------------|-------------|---------|------------------------------|-------------------|-------------|---------|
| | | | OR | 95% CI for Exp(B) | | p Value | OR | 95% CI for Exp(B) | | p Value |
| | | | | Lower bound | Upper bound | | | Lower bound | Upper bound | |
| Age | | | | | | | | | | |
| 13–25 (ref) | 263 | 51.3 | 1.00 | | | 0.000 | 1.00 | | | 0.000 |
| 26–35 | 305 | 77.0 | 3.18 | 2.22 | 4.56 | 0.000 | 3.54 | 2.24 | 5.60 | 0.000 |
| 36–45 | 333 | 91.9 | 10.75 | 6.77 | 17.05 | 0.000 | 11.21 | 6.52 | 19.28 | 0.000 |
| 46–55 | 294 | 98.0 | 45.51 | 19.57 | 105.82 | 0.000 | 37.93 | 15.60 | 92.20 | 0.000 |
| 56–70 | 379 | 98.2 | 50.39 | 22.96 | 110.56 | 0.000 | 37.44 | 15.98 | 87.74 | 0.000 |
| Gender | | | | | | | | | | |
| Female (ref) | 915 | 84.9 | 1.00 | | | | 1.00 | | | |
| Male | 659 | 84.8 | 0.99 | 0.75 | 1.31 | 0.960 | 1.32 | 0.90 | 1.95 | 0.154 |
| Highest compulsory education | | | | | | 0.000 | | | | 0.124 |
| Primary or secondary school (ref) | 486 | 84.2 | 1.00 | | | | 1.00 | | | |
| Middle college | 566 | 82.7 | 0.90 | 0.65 | 1.25 | 0.523 | 0.62 | 0.40 | 0.98 | 0.041 |
| University, postgraduation/ graduation degree | 522 | 87.9 | 1.37 | 0.96 | 1.96 | 0.084 | 0.73 | 0.43 | 1.21 | 0.222 |
| Household income | | | | | | 0.538 | | | | 0.773 |
| Low (ref) | 452 | 85.8 | 1.00 | | | | 1.00 | | | |
| Middle | 568 | 84.9 | 0.92 | 0.65 | 1.31 | 0.660 | 0.98 | 0.64 | 1.51 | 0.930 |
| High | 535 | 84.5 | 0.90 | 0.63 | 1.28 | 0.552 | 1.20 | 0.77 | 1.86 | 0.421 |
| Tobacco use | | | | | | 0.000 | | | | 0.000 |
| Daily (ref) | 445 | 80.9 | 1.00 | | | | 1.00 | | | |
| Less than daily | 206 | 50.0 | 0.24 | 0.16 | 0.34 | 0.000 | 0.63 | 0.40 | 0.98 | 0.042 |
| Ex-smoker | 95 | 97.7 | 10.98 | 2.65 | 45.45 | 0.000 | 2.74 | 0.61 | 12.42 | 0.190 |
| Never smoker | 828 | 94.2 | 3.84 | 2.64 | 5.58 | 0.000 | 5.80 | 3.66 | 9.19 | 0.000 |

*Percentages from crosstabs (bivariate analyses) and results from binary multiple logistic regression. Low support is agreement with three or fewer of eight types of smoking prohibition and tobacco ads ban. High support is agreement with four or more prohibitions.

sites is consistent with observations in other parts of the world with different cultural and political contexts, although there are exceptions. In Australia 76% of non-smokers reported supporting a total ban, among Chinese urban residents 81.8% supported banning smoking in public places; in South Africa, 83% of non-smokers and 70% of smokers; non-smokers were more supportive in this regard in Greece than current smokers.^{46–50} Nine in 10 Hungarian respondents supported a ban on smoking in healthcare facilities and almost 80% supported smoking restrictions in closed and outdoor public places, work places, restaurants and bars.⁵¹

These prevalence rates suggest that Georgian public opinion about tobacco control is in line with global public opinion generally. Closer to home, nearly all adults in two Russian studies agreed that indoor smoking should be prohibited at healthcare facilities (95%) and schools (99%), more than half thought smoking should be prohibited in restaurants and cafes, and almost a third supported a total ban of smoking in bars and restaurants.^{52–53} Public support for banning smoking in educational and health facilities exceeded

94% and reached 67.1% for bars in Ukraine in 2009.⁵⁴ This pattern supports the validity of the present findings, which might otherwise be suspected as resulting from a possible ‘acquiescence’ bias, in a public that not too long ago was a part of the Soviet Union.

Yet important exceptions to the overall pattern do exist. A survey conducted in nine former Soviet countries during 2010–2011 observed that only 36.8% of adults supported a total ban of smoking in restaurants, bars and cafes in Russia. In the same study, the corresponding figure was 38.2% in Ukraine and 30% in Georgia.⁵⁵ It is well known that the exact form of question wording in survey research can have a significant influence on findings, and this is sometimes exploited by pollsters who are affiliated with candidates, campaigns and causes. Question wording, however, is but one source of survey research bias among many sources. It is beyond the scope of this report to analyse and speculate about the large discrepancy just noted. We simply note that the many estimates cited in the paragraphs above are close to the estimate we provide for Georgia.

There is a strong discord between public opinion as documented in this study and tobacco control as

practiced in Georgia today. Georgia has a partial ban on tobacco ads. While there is evidence for the effectiveness of total advertising bans in reducing per capita tobacco consumption,⁵⁶ no such evidence exists for partial bans and restrictions. Accordingly, limited bans cannot be assumed to have important impact on consumption.

Tobacco advertising causes increased smoking and increased smoking translates into poorer public health.⁵⁶ The population segment most vulnerable to ads are the youth, whose attitudes and intentions regarding possible tobacco use and choice of products are in a state of formation, compared with the more established behavioural choices of adults. The vulnerability of youth is exacerbated by targeted tobacco advertising and promotions.^{56–61} Given the damage to health attributable to tobacco use and the special vulnerability of youth to advertising, there is a public health imperative in Georgia to fully implement the FCTC prohibitions, with strong support from the Georgian public. Furthermore, recent successes have the Baltic States⁶ and Norway⁶¹ in implementing FCTC prohibitions—among a number of other European countries—are nearby examples that full implementation is feasible.

A counter-intuitive finding in the present study was that occasional and young age smokers were less supportive of restrictions than daily smokers. A search of the literature to find comparable analyses was unsuccessful, and we can only speculate about the reason for this finding. It may be that occasional smokers in this study perceived themselves to be in control of their tobacco use, and therefore not in need of externally imposed restrictions. They may have generalised this perception to tobacco users in general. Nevertheless, fully half of occasional smokers indicated support for four or more of the restrictions. This puzzling finding does not detract from the overall conclusion that even tobacco users are generally in favour of restrictions.

Strengths and limitations

It seems evident from this study that supportive public opinion makes the time ripe for renewed advocacy to fully implement the FCTC and its smoking restrictions. Strengths of this study that are worth noting are the national representativeness of the sample and the high response rate of 96%. Regarding measurement, the internal consistency of attitudes towards smoking prohibition and tobacco ads ban is very high in this study. On the other hand, the attitude items have not been used in previous research, and comparative studies are not available. Whether the high internal consistency observed in this study would be replicated in other populations is therefore a matter for speculation that only future research could illuminate. In the period since the data of this study were collected and in this publication, it is possible that there have been shifts in public opinion that might affect our conclusions. Regarding the study data, this report focuses just on one issue, the state of public opinion regarding tobacco-control

measures. The survey also collected data not reported here, such as the level of respondents' knowledge of the harmful health effects of tobacco and their attitudes towards tobacco tax policies. Thus, a complete picture of the findings from the survey will only emerge after completion of more analyses and publication.

Further research

This study provides a model, a methodology and an instrument for the assessment of national public opinion about tobacco control. As we remarked in the Background section, this study is essential in the Georgian context, because no amount of public opinion findings from other countries has as much currency with Georgian decision-makers as findings from Georgia have. Many low-income and middle-income countries in Eastern Europe (mostly former Soviet Republics) are struggling with the same negative forces for increased tobacco consumption that are at work in Georgia. We have described and demonstrated a method for gathering good quality data on national public opinion regarding tobacco control. The study's findings have relevance in Georgia, while the study's methodology has relevance not only in Georgia, but also in other former Soviet Republics that are facing the same tobacco-related public health threat that Georgia faces.

Public opinion data have a special standing in public health research. Questions about the generalisability of findings are restricted to constituencies defined by political boundaries. Each and every constituency, that is, grappling with a public health problem like tobacco use, and that wishes to document public opinion relevant in controlling the problem, has to do so within the constituency. Advocacy based on research in other constituencies can always be expected to be less effective than advocacy based on locally generated data and findings.

Conclusion/recommendation

The findings of this study show that all eight smoking prohibition and tobacco ads/sponsorship ban have a high level of public support in Georgia. We interpret this as public demand for the government to enforce the already existing smoking prohibitions and regulations, to establish total prohibitions in any other public places including restaurants/bars, and to totally ban tobacco advertisement, direct and indirect, and to ban tobacco promotion in any form. We have shown in our review of literature that there is a good reason to conduct research on public opinion, because the public's opinion is a factor in political decision-making.

High quality public opinion data can be gathered using a methodology accessible to researchers in Former Soviet Republics, where the threats to the health of people consuming tobacco are in many cases rising.

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