

Public Participation in Tobacco Control Policy-making in Georgia

George Bakhturidze



Thesis for the degree of philosophiae doctor (PhD)
at the University of Bergen

2017

Date of defence: June 22

© Copyright George Bakhturidze

The material in this publication is protected by copyright law.

Year: 2017

Title: Public participation in tobacco control policy-making in Georgia

Print: AiT Bjerch AS / University of Bergen

Author: George Bakhturidze

Scientific environment

This research was conducted in the Department of Health Promotion and Development, Faculty of Psychology, at the Graduate School of Human Interaction and Growth. The collaborating agencies in Georgia were the Georgian Health Promotion and Education Foundation and the Framework Convention on Tobacco Control Implementation and Monitoring Center in Georgia.

The first two articles were based on data acquired from the “Population survey on tobacco economy and policy in Georgia,” 2007-2008. This survey was supported by a grant from the Open Society - Georgia Foundation.

The Eurasia Programme, administered by the Norwegian Center for International Cooperation in Higher Education (SIU) and the Norwegian Ministry of Foreign Affairs, provided financial support for George Bakhturidze in the data analysis and report-writing phases of three articles related to this dissertation.



Dedication

This work is dedicated to the memory of my father, David Bakhturidze (1947-2011), who would have been very proud to witness the defence of this dissertation. One of the main reasons he passed away so early in life was smoking. He survived laryngeal cancer at age 37, but he was subsequently unable to give up smoking and suffered from various serious illnesses throughout his life, including heart attacks. He finally passed away from a stroke at age 63. His experience is the main reason I began to fight against smoking and to help others avoid premature death and illness related to these kinds of habits. During life he fought tobacco addiction but ultimately couldn't give up smoking due to the severity of his nicotine dependence and complications relating to the operation on his larynx. He was very happy when I began work at the National Tobacco Counter Center in the 1990s and when I created, together with colleagues, both the FCTC Implementation and Monitoring Center in Georgia and the Georgian Health Promotion and Education Foundation. My father was a very kind and friendly person with a great sense of humour. I think about him often, and his memory gives me energy to pursue my personal goal of creating a healthy, smoke-free Georgia. May he rest in peace.

Acknowledgements

I would first like to express my deepest gratitude to my supervisor, Professor Maurice Mittelmark, who has opened so many windows of opportunity for me in the field of health promotion since 2005 when we first met in Canada at the Health Promotion Conference. As president of the International Union for Health Promotion and Education (IUHPE) he has helped our region's country representatives to become more involved in regional collaboration on health promotion under the umbrella of IUHPE. When the newly-formed Georgian Health Promotion and Education Foundation became a member of IUHPE, Maurice, as the head of the Health Promotion and Development Department (HEMIL) at the University of Bergen (UiB), proposed an official agreement of collaboration between our organisations. This agreement allowed him to establish three quota programs for students from former Soviet countries to obtain master's degrees in health promotion from the University of Bergen starting in 2008. After receiving support from the Norwegian Government, eight Georgians received a master of philosophy degree in health promotion from HEMIL at the University of Bergen. The first Georgian master's degree recipient was me. Following my completion of the program Maurice helped me find funding to continue work on my PhD dissertation. He was an excellent guide for me and assisted me in finalizing all three articles in compliance with international standards. Sometimes he expressed serious concern about my staying in Georgia, but in the end, after his involvement and support, we published all of the articles. He is a talented professional who demands a high standard of scientific work. I learned many things from Maurice and he became for me a kind of scientific guru, a person who, like my father, wants his son to become stronger than he is today. The experience I received working with Maurice has shown me how to assist others in doing things the right way. I hope that after this work we can continue our collaboration and friendship. Thank you very much for your patience, effort, and wisdom, Maurice!

I would also like to express my gratitude to my co-advisor Professor Leif Aarø, who is a one of the best tobacco control experts in Norway. We have known each other since April 2008, when our colleagues at the Polish Health Promotion Foundation granted us Gold Honorary Awards for tobacco control efforts in our countries. He is

a great person and a consummate professional who helped me finalize my first two articles. His advice and comments have been very helpful for me. As a tobacco control specialist Leif always looks at his work from the perspective of how it will be applied in practice. I hope that we will have the opportunity to continue our collaboration on different research projects in the future. Thank you very much, my Norwegian colleague and friend!

I would like to also mention the valuable assistance I received from my Ukrainian colleagues Tatiana Andreeva and Konstantin Krasovsky. They are the best tobacco control experts and scientists in our region and I'm always happy to collaborate with them. As a scientist and tobacco control expert Tatiana provided much advice and many corrections during the process of designing my dissertation. It is impossible to overestimate Tatiana's contribution to my work. Thank you for everything, my Ukrainian colleagues and friends!

I offer my warmest thanks to my spouse and academic colleague, Nana Peikrishvili. She is also one of the Georgian students who received a master's degree in health promotion from the University of Bergen in 2012. Without Nana's efforts and patience this work never would have been completed. Nana played an important role in conducting the qualitative study on the basis of which we produced the third article. She is a great friend and an excellent worker who assisted me despite many interruptions by our two small girls, Barbare and Lile. To our children I offer apologies for our busy schedule and for our inability to give you the attention you deserved while we were working on this project. I promise to spend more time with you now that the dissertation is complete. Thank you so much, sweetheart!

I would like to express my gratitude to the team at my organisation who assisted me with the fieldwork, data entry, analysis, and other tasks that we undertook for the 2007-2008 Population survey on tobacco economy and policy in Georgia, which became the basis for our two articles. These colleagues are Mrs. Hanna Ross, Mrs. Judith What, Mr. Revaz Tsakadze (deceased), Mrs. Tsitsino Tediashvili, Mr. George Maghradze, Mr. David Mirotadze, Mr. David Andguladze, Mr. Irakli Guledani, and my wife Nana Peikrishvili.

I also would like to express my gratitude to those who assisted me in the preparation and of the third article: Mrs. Mariam Jashi, Mrs. Guguli Magradze, Mr. Amiran Gamkrelidze, Mrs. Lela Sturua, Mr. Giorgi Khechinashvili, Mr. Mirian Tsiklauri, Mr. Kakaha Gvinianidze, Mr. Merab Pachulia, and Mr. Ioseb Galumashvili.

My sincere gratitude also goes to my mother, who is very happy that I finally completed this work. Now I'll have more time to take care of her. She is a hard worker who enjoys her business very much. My mother has a special notebook where she writes down my trips abroad and all the special days in my life, and I'm sure that she will mark this day as one of the most successful days. I'm also grateful for my elderly children David and Mariam, who sometimes assist me in tobacco control activities. I hope that they will continue my efforts to achieve a smoke-free Georgia.

Abstract

Background

One out of every three people in Georgia smokes cigarettes, and one out of every five people dies from tobacco-related diseases. Though some regulations on smoking and tobacco advertising have been enacted during the past decade, the country still has problems enforcing current regulations and implementing FCTC provisions. Georgia has a high level of tobacco consumption and a very low level of enforcement of existing regulations.

Public opinion could be influential in shaping tobacco policy and the enforcement of regulations, but before this study no public opinion data existed about tobacco control measures in Georgia. There also was not any kind of data about perceptions of tobacco control measures among policy-makers and decision-makers. There is a deficit of research and too little is known about the problem. Our approach to addressing this deficit is to understand perceptions of tobacco control measures in Georgia among policy-makers, decision-makers, and the public, and to find ways to respond appropriately to these challenges.

Aim

This study had two aims: 1) to document the public's opinion about tobacco control measures, and 2) to understand policy-makers' perceptions of how public opinion impacts public health policy-making in the area of tobacco control.

Methodology

This dissertation is based on three articles that I created with the help of colleagues. The first two articles are based on quantitative research methods. These quantitative data were taken from a "Population survey on tobacco economy and policy in Georgia" conducted in 2008. After publishing the quantitative articles in 2012 and 2013, it became clear that qualitative method was needed to understand the problem more deeply. A qualitative study was subsequently conducted in 2013.

We used an explanatory model where an initial quantitative phase was conducted to obtain statistical results. In the second phase I gathered qualitative data (e.g., open-ended interviews) to help explain the quantitative results. This type of mixed approach has been important for this study: by merging the results of two quantitative studies with those of a qualitative study we can learn about real policy-making processes and understand the broader picture of tobacco control policy-making, as well as the lack of enforcement of regulations and international obligations.

Results

Overall support for restrictions on tobacco sales is very high and an absolute majority of non-smokers and a majority of smokers support such measures in Georgia. Regulations already exist but are unfortunately not enforced due to the strong influence of the tobacco industry, which obstructs efforts to introduce licensing requirements for tobacco sales. Though strong political will does not currently exist around this issue, non-governmental organisations strongly support and advocate for the enforcement of tobacco sales restrictions and regulations. These organisations often use public opinion surveys and existing public opinion data as advocacy tools.

The situation is similar with other forms of tobacco control such as bans on tobacco advertising and promotional campaigns, bans on smoking in closed public buildings, and increased penalties for violations.

The results show that the majority of policy-makers in Georgia believe that public opinion plays an insignificant role in policy-making in general.

Discussion

The high level of public support for the prohibition of smoking in public spaces and ban of tobacco advertisement is very similar to findings in other parts of the world with different cultural and political contexts.

Georgia has a very low level of enforcement of FCTC requirements. From the international experience we can assume that implementing smoke-free legislation in

Georgia will decrease the number of young people who start smoking and also protect non-smokers from second-hand smoke exposure.

Georgian policy-makers have the following perceptions of the public's opinion about tobacco control legislation:

- Public opinion is not widely appreciated due to the lack of public opinion data.
- The public's opinion does not carry much weight in matters of public health, and regarding tobacco control specifically.
- The tobacco industry has more influence on tobacco control policy-making than does public opinion or public interests.

Strong public support should be focused on adopting new policy. Though the public demands strong administrative measures and higher penalties for violations, there still exists a deficit of the political will needed to initiate changes.

Conclusions

The three articles that compose our study reached the following major findings and conclusions: (i) the public strongly supports all forms of tobacco control, (ii) due to a lack of public opinion data (before now), public support is not widely recognised, (iii) the public's opinion does not seem to carry much weight in public health policy-making and in tobacco control specifically, (iv) other stakeholders such as the tobacco industry are more influential, and (v) it is therefore a high priority to publicize the findings of the present study showing strong public support for tobacco control. Public opinion in a democratic Georgia has the potential to be an effective tool in the fight for tobacco control.

List of publications

Paper 1

Bakhturidze, G., Peikrishvili, N., Mittelmark, M., & Aarø, L. (2012): The public's attitudes towards tobacco sales prohibitions: Evidence from a nationally representative survey in the former Soviet state of Georgia. *Tobacco control and public health in Eastern Europe*, Vol.2 (2):99-108. DOI: 10.6084/m9.figshare.97675

Paper 2

Bakhturidze, G., Mittelmark, M., Aarø, L., & Peikrishvili, N. (2013): Attitudes towards smoking restrictions and tobacco advertisement bans in Georgia. *PMJ Open*, Vol 3: 1-9. DOI: 10.1136/bmjopen-2013-003461

Paper 3

Bakhturidze, G., Peikrishvili, N., Mittelmark, M. (2016): The influence of public opinion on tobacco control policy-making in Georgia: Perspectives of governmental and non-governmental stakeholders. *Tob. Prev. Cessation*; 2(January):1. DOI: www.dx.doi.org/10.18332/tpc/61580

Abbreviations:

CSO – Civil Society Organisations

EU – European Union

FCTC – Framework Convention on Tobacco Control

GATS – Global Adults Tobacco Survey

GCAO – Georgian Code of Administrative Offences

GLA – Georgian Law on Advertisement

GLTC – Georgian Law on Tobacco Control

GYTS – Global Youth Tobacco Survey

ISSA – Institute for Social Studies and Analyses

MIA – Ministry of Internal Affairs

MoF – Ministry of Finance

MOH (MoH) – Ministry of Health

MoLHSA – Ministry of Labour, Health and Social Affairs

MOP – Members of Parliament

NCD – Non-communicable Diseases

NCDC – National Center for Disease Control

NGO – Non-governmental Organisations

NSOG - National Statistics Office of Georgia

ORA – Opinion Research Agencies

TFI – Tobacco Free Initiative

TFK – Tobacco Free Kids

TNA – Thematic Network Analysis

UNICEF – United Nations Children’s Fund

WHO - World Health Organisation

Contents

SCIENTIFIC ENVIRONMENT	3
DEDICATION	4
ACKNOWLEDGEMENTS	5
ABSTRACT	8
LIST OF PUBLICATIONS.....	11
ABBREVIATIONS:	12
CONTENTS	13
CHAPTER 1. INTRODUCTION	15
<i>THE GLOBAL BURDEN OF TOBACCO USE.....</i>	<i>15</i>
<i>TOBACCO USE AND CONTROL IN GEORGIA.....</i>	<i>15</i>
<i>STUDY AIMS</i>	<i>17</i>
<i>RESEARCH QUESTIONS</i>	<i>17</i>
<i>METHODS</i>	<i>17</i>
CHAPTER 2. THE POLITICS AND PRACTICE OF TOBACCO CONTROL IN GEORGIA.....	19
<i>THE BURDEN OF THE TOBACCO EPIDEMIC IN GEORGIA</i>	<i>19</i>
<i>TOBACCO CONTROL EFFORTS IN GEORGIA.....</i>	<i>20</i>
<i>PUBLIC HEALTH SYSTEM DEVELOPMENT IN GEORGIA</i>	<i>21</i>
<i>HEALTH PROMOTION CHALLENGES</i>	<i>24</i>
<i>THE ROLE OF PUBLIC OPINION WITH RESPECT TO TOBACCO CONTROL IN GEORGIA</i>	<i>25</i>
CHAPTER 3. LITERATURE REVIEW	26
<i>THE ROLE OF PUBLIC OPINION IN MAKING PUBLIC HEALTH POLICY.....</i>	<i>26</i>
<i>TOBACCO INDUSTRY INFLUENCE ON PUBLIC OPINION AND DECISION-MAKERS.....</i>	<i>28</i>
<i>THE MEDIA'S ROLE IN INFLUENCING PUBLIC OPINION</i>	<i>28</i>
CHAPTER 4. THEORY	30
<i>KINGDON'S THEORY.....</i>	<i>30</i>
<i>SUMMARY OF MAIN POINTS</i>	<i>35</i>
CHAPTER 5. METHODS.....	36
<i>STUDY DESIGN FOR MIXED METHODS.....</i>	<i>38</i>
<i>ARTICLE I.....</i>	<i>40</i>
<i>ARTICLE II</i>	<i>41</i>

<i>ARTICLE III</i>	42
CHAPTER 6. RESULTS	44
<i>PAPER I</i>	44
<i>PAPER II</i>	45
<i>PAPER III</i>	46
CHAPTER 7. DISCUSSION	50
<i>PUBLIC SUPPORT FOR TOBACCO CONTROL MEASURES</i>	50
<i>HOW POLICY-MAKERS' PERCEPTIONS OF PUBLIC OPINION INFLUENCE TOBACCO REGULATION</i>	57
<i>A COMPARISON OF ATTITUDES, OPINIONS, AND BELIEFS ABOUT TOBACCO CONTROL</i>	59
<i>METHODOLOGICAL CONSIDERATIONS</i>	63
<i>ETHICAL CLEARANCES</i>	65
CHAPTER 8. CONCLUSIONS AND IMPLICATIONS	66
<i>MAIN CONCLUSIONS</i>	66
<i>POLITICAL AND PRACTICAL IMPLICATIONS</i>	67
<i>IMPLICATIONS FOR FURTHER RESEARCH</i>	68
SOURCE OF DATA	71
PAPERS I-III	81
PAPER I	82
PAPER II	92
PAPER III	101
APPENDIX	110
<i>EXTRACT FROM QUESTIONNAIRE FOR TOBACCO SALES RESTRICTIONS:</i>	110
<i>EXTRACT FROM QUESTIONNAIRE FOR SMOKING PROHIBITION AND TOBACCO ADVERTISEMENT BAN</i>	111
<i>INTERVIEW GUIDE FOR IN-DEPTH INTERVIEWS WITH POLICY-MAKERS</i>	113
<i>ETHICAL COMMITTEE DECISIONS</i>	115

Chapter 1. Introduction

The global burden of tobacco use

Tobacco use is one of the most serious public health problems in the world. It is the number one risk factor for cancer (lung cancer and others), strokes, heart attacks and other cardiovascular diseases, and chronic obstructive pulmonary disease. It is also associated with infertility, congenital abnormalities, chronic diseases, and other severe health problems (US DHHS, 2014). The cost of treatment of such diseases contributes to the direct economic burden of tobacco, which is very high.

Global tobacco use kills nearly six million people each year, and over 600,000 non-smokers die from exposure to second-hand smoke. Approximately 80% of these deaths involve residents of low and middle-income countries. Half of all smokers die from diseases caused by tobacco use (WHO, 2016).

Around the globe, 1.3 billion people aged 15 years or older are tobacco dependent. The highest smoking prevalence persists in low- and middle-income countries. Globally, tobacco use has taken the lives of 100 million people in the 20th century; tobacco-related deaths will amount to one billion in the 21st century if current smoking patterns continue. If governments do not implement effective policies to prevent tobacco use, the number of deaths caused by tobacco-related diseases will increase by up to eight million people annually by 2030 (WHO, 2008).

Tobacco use and control in Georgia

In Georgia one out of every three people smokes cigarettes and one out of five people dies because of tobacco-related diseases (Bakhturidze, et al., 2008; WHO 2015; ISSA, 2016a). This creates a social-economic burden related to the high-level of tobacco consumption. The country has a “leading” position in the region after Russia, whose smoking rate is 39% (TFK, 2013). Russia adapted strong tobacco control legislation in June 2013, and in March 2015 the Ministry of Health of the Russian Federation reported that the number of smokers in Russia had fallen by approximately 17% since the adoption of strong regulations (WHO/TFI, 2015).

Some regulations on smoking and tobacco advertising were created over the last decade after Georgia became a member of the Framework Convention on Tobacco Control (FCTC) in May 2006 (WHO/FCTC, 2016). But today the country still has a problem enforcing current regulations and implementing FCTC provisions. Georgia has restricted smoking in public places and prohibited smoking in medical, educational, sports, and cultural facilities since 2008. But the level of enforcement is very low. Georgia has a ban on tobacco advertising for TV and radio, but the country should have had a total ban on all forms of tobacco advertising and promotion since May 2011 (WHO/FCTC, 2016). There exist restrictions on selling cigarettes to and by minors, on selling individual cigarettes, and on selling cigarettes within 50 meters of schools, but such regulations are also not enforced (GLTC, 2010).

Georgia has a high level of tobacco consumption and a very low level of enforcement of existing regulations.

After the collapse of the Soviet empire, nearly all of the transnational tobacco companies entered the Georgian market. During the Soviet era Georgia was a tobacco-growing country and today local tobacco manufacturers continue to operate (Shalutashvili et. al, 2007). Intensive advertising and the lack of real restrictions on smoking and selling cigarettes have created a very high level of social acceptability, mostly among Georgia's younger population (Bakhturidze, et al., 2013). Strong political will does not exist to deal with tobacco control problems (Bakhturidze, et al., 2016). The tobacco industry still has great influence on political processes and lobbies to postpone implementation of the FCTC (Bakhturidze, et al., 2016).

Public opinion could be influential in shaping tobacco policy and enforcement, but before this study no data existed regarding public opinion about tobacco control measures in Georgia. There also did not exist any kind of data about perceptions of tobacco control measures among policy-makers and decision-makers. There is a deficit of research and understanding about this problem. Our approach to addressing this deficit is to understand perceptions of tobacco control measures in Georgia among policy-makers, decision-makers, and the public, and to find ways to respond appropriately to these challenges.

Study aims

This study has two aims: 1) to document the public's opinion about tobacco control measures, and 2) to understand policy-makers' perceptions of how public opinion impacts public health policy-making in the area of tobacco control.

Research questions

Quantitative research questions:

1. What are the public's attitudes toward restrictions on tobacco sales and toward strengthening enforcement of these measures?
2. What are the public's attitudes toward restrictions on smoking in public spaces, on tobacco advertising, and on strengthening enforcement of these measures?

Quantitative research question:

1. How do policy-makers and decision-makers perceive the impact of public opinion on tobacco control processes?

Quantitative / qualitative mixed-method research question:

1. What are the comparable attitudes, opinions, and beliefs about tobacco control in the governmental, non-governmental, and public spheres with respect to smoking?

Methods

There are several ways to approach research about public opinion: quantitative survey methods, qualitative research methods, mixed methods, etc. The most effective way to research the problem is to use a hybrid research method that gives us more opportunities to explore perceptions of this issue among citizens and policy-makers.

Mixed-method research is characterised as research that contains elements of both qualitative and quantitative approaches. Qualitative and quantitative methods are based on different philosophical paradigms (Teddlie and Tashakkori, 2003). A mixed method is an important tool for answering complex questions and it can take many forms. This approach takes time, expertise, resources, management, and publishing experience, but it can also produce strong, unique results (Bryman, 2007).

There are paradigmatic differences between quantitative and qualitative research. Both, for example, employ empirical observations to address research questions (Jonson & Onwuegbuzie, 2004). There exist multiple research paradigms including positivism, postpositivism, interpretivism, and participatory/advocacy perspectives (Teddlie & Tashakkori, 2003; Creswell, et al., 2007; Jonson & Onwuegbuzie, 2004). The advocacy/participatory perspective is particularly relevant to my research. This perspective dictates that research should include an action plan for changing the lives of individuals and participants by influencing the institutions where they live and work. Furthermore, it is characterised by a desire to change actual practice in this field. This study proposes an action plan for change.

The advocacy/participatory model of research often begins by examining the problematic issues in a society and then creating political discussion in order to affect change. Its nature is fundamentally collaborative, as researchers collaborate with participants in their inquiries (Creswell, 2007).

This approach is immediately relevant to the present dissertation, as it merges two sets of quantitative study results with one set of qualitative findings to better understand the bigger picture of tobacco control policy-making, the lack of enforcement of existing regulations, and failures to fulfil international obligations.

Chapter 2. The politics and practice of tobacco control in Georgia

The burden of the tobacco epidemic in Georgia

Tobacco farming developed significantly in Georgia during the 20th century. After the collapse of the Soviet Union, however, tobacco farming ceased development and was replaced with different forms of agricultural production. After Georgia declared independence, the transnational tobacco companies began importing cigarettes and raw materials for local manufacturing. Tobacco use has increased to serious proportions since 1990, largely due to the collapse of the Soviet industrial era and the country's transition toward a market economy. When transnational tobacco companies arrived in Georgia they initiated expensive promotional campaigns and thrived in the absence of legislative restrictions on the tobacco industry (Bakhturidze, et al., 2012; 2013).

The prevalence of smoking among men in 2001 was 53.3% and rose to 59.8% by 2008. The prevalence of smoking among women increased from 6.3% to 14.9% over the same period (Bakhturidze, et al., 2008; Gilmore, et al., 2004). A recent study conducted by the Institute for Social Studies and Analysis (ISSA, 2016a) shows that around 31% of the adult population in Georgia currently smokes cigarettes (65% of men and 10% of women).

Smoking among youth is also a global problem. The Global Youth Tobacco Survey (GYTS) conducted between 2000 and 2007 estimated that 19.2% of young people aged 13-15 years smoked cigarettes in EU countries. In Georgia the proportion is 23.7% (Warren, et al., 2008).

The 2008 Global Youth Tobacco Survey indicated that 62.7% of adolescents live in homes where others smoke in their presence and 74.4% are exposed to tobacco smoke outside their homes. This high percentage of young people aged 13-15 years who are exposed to tobacco smoke indicates that more work is necessary in order to establish smoke-free environments. More than half of the surveyed students reported having seen cigarette advertisements on billboards, and nearly half have

seen tobacco advertisements in newspapers or magazines in the past 30 days. 14.6% of students reported having an object with a cigarette brand logo on it.

One in five Georgians dies from smoking-related diseases, and tobacco is accountable for an estimated 11,000 deaths annually. Tobacco use is causing a serious demographic problem in the country: in addition to mortality, the serious impact of smoking is also seen in terms of lost years of life and decreased working ability and performance caused by disease. These constitute both economic and social losses (G. Bakhturidze, et al., 2008).

To conclude, tobacco use is one of Georgia's most significant public health threats. The country has a leading position among those with high rates of smoking within WHO's European Region.

Tobacco control efforts in Georgia

Smoking restrictions in public areas were introduced in Georgia in 2003 when the first Georgian Law on Tobacco Control was adopted (GLTC, 2003). In 2004 changes were made in the Georgian Code of Administrative Offences and penalties for violations of the tobacco control law were established (GCAO, 2016). The Framework Convention on Tobacco Control (FCTC) entered into force in Georgia in May 2006 (WHO/FCTC, 2016). Since that time several changes have been made in Georgian tobacco control law, and the most recent amendments were adopted in 2010 (GLTC, 2010). Current law prohibits tobacco smoking in educational institutions, enclosed sports buildings, medical and pharmacy buildings, and on transport including trains and ships. A partial smoke-free policy has been in place in other types of indoor premises; where designated smoking areas are not possible, a total ban of smoking will apply. Restaurants and bars must designate smoking areas, and at least 50% of public areas should be smoke-free.

Georgia's Law of Advertising, adopted in 2003, prohibits the advertisement of tobacco products on radio and TV, and on newspaper and magazine covers. There are also some restrictions on the location of outdoor tobacco advertising: it is not allowed in educational, medical, and sports facilities, and advertising intended to attract minors is banned as well. Advertisements for tobacco products must be

accompanied by a warning about the harmful effects of smoking. Tobacco advertising must include the following text written in large, black letters against a white background: "Health Ministry's warning: Smoking is harmful to your health." There are cigarette advertisements on billboards and in newspapers and magazines. Point-of-sale advertisements are quite visible in almost all shops selling tobacco products (GLA, 1998).

Article 10 of the Tobacco Control Law adopted in 2010 prohibits the demonstration of tobacco smoking by the mass media if it is not an accidental recording and/or part of the creative process (GLTC, 2010).

After ratifying the FCTC, Georgia had five years to implement a total ban on tobacco advertisement and promotion, but this deadline expired in May 2011. The ban is still only a partial one, as it permits outdoor advertising and other marketing vehicles (except TV and radio) (Bakhturidze, et al., 2013).

The tobacco control situation in Georgia can be characterised as follows: even though Georgia is a member of the FCTC, the tobacco control regulations that have been adopted are hardly enforced. The main problem is one of lax enforcement, not poor legislative action (FCTC Mission Report, 2013).

To conclude, tobacco control efforts in Georgia are far behind what is called for by the WHO and tobacco control experts.

Public health system development in Georgia

After Georgia gained independence in 1991 the government initiated health care reforms. The Georgian health system has moved away from the highly centralised Semashko model, a legacy of the Soviet Union (WHO/Euro, 2009; Gamkrelidze, et al., 2002). Following its declaration of independence, Georgia no longer had resources to provide free health care. The healthcare sector was considered less effective, and the government rapidly reduced an already insufficient budget for healthcare services, which resulted in a complete collapse of the healthcare system (Gzirishvili & Mataradze, 1998; Chanturidze, et al., 2009; Rukhadze, 2013). The government began to pay less attention to preventive services as it did to

therapeutic and clinical services. Unhealthy lifestyles are common in Georgia and the nation's healthcare system has not responded adequately to this phenomenon (Gamkrelidze, et al., 2002).

In 1996 the Department of Public Health was established and proclaimed health promotion and disease prevention as its main areas of work. A budget for health promotion activities, included smoking prevention, and several other programs to prevent diseases was established (Djibuti, et al., 2010; Gamkrelidze, et al., 2002; Chanturidze, et al., 2009).

In 2003 the Rose Revolution in Georgia resulted in an opportunity to establish a new government. Mikheil Saakashvili, then 36 years old, was elected as the new president in 2004 (Kemoklidze, 2013). Many stakeholders stated that they were not properly consulted about health reforms in the country. Consequently, their limited involvement was thought to be a major problem in decision-making processes. Since then health-related policy-making rhetoric in Georgia has evolved from the Soviet model relying on top-down experts into a model emphasizing transparency and participatory elements. This new orientation is reflected, for example, in the Prime Minister's 2006 directive to the Ministry of Labour, Health and Social Affairs of Georgia (MoLHSA) to involve all key stakeholders in the policy-making process (Chanturidze, et al., 2009). This directive could be interpreted in many ways, however. Hauschild and Berkhout (2009) provide the only empirical study of this issue conducted in Georgia. Very little is known by government agencies about the level of involvement of non-governmental stakeholders (Bakhturidze, et al., 2013; 2016).

The reorganisation of the Georgian healthcare system resulted in the abolishment of the Department of Public Health, whose functions were transferred to the National Centre for Disease Control and Public Health (NCDC) in 2006. After this transition development of the healthcare system was very slow, with progress occurring mainly through input from non-governmental and international programs. Georgia has several laws and orders from the government and various ministries that regulate issues relating to public health. The existing legal framework addresses health promotion issues including tobacco control, HIV/AIDS prevention, drug misuse, prevention of micronutrient deficiencies, and water and food safety.

Although many necessary public health laws have been adopted, enforcement systems are often absent or very weak (Chanturidze, et al., 2009; Rukhadze, 2013).

Another important document is the National Health Care Strategy for 2011-2015, which was adopted by the government of Georgia with a focus on health promotion. With this strategy the government intended to improve the population's health and to reduce the burden of diseases and deaths by 2015 (MoLHSA, 2011). This document was designed to inform the public about the planned reforms in order to encourage its involvement in implementing these reforms. Creating supportive environments was a central theme in this strategy as it aimed to inspire people to take care of their own health. The following priority areas were outlined in this strategy: prevention and screening of non-communicable diseases, enhancing the public health system, monitoring the population's health and conducting health risk assessments, transparency and public involvement, and inter-sector work (MoLHSA, 2011). The document also covers the improvement of social policy, the educational system, access to high-quality health care, urban and regional development, and macroeconomic stability. The strategy emphasised the need to establish and monitor these areas so that they may contribute to the development of health promotion policy in the country (Bakhturidze, et al., 2016).

Following the parliamentary elections on October 1, 2012, the new Georgian government announced that the health of Georgian citizens will be a high priority. According to the literature, governmental efforts in health promotion and disease prevention can have a significant influence on a country's health status by helping prevent non-communicable diseases and detecting health problems at an early stage (WHO/Euro, 2009; Chanturidze, et al., 2009; Rukhadze, 2013). Even so, there are very few indicators that can be used to assess the success of the national health system in these areas. There is no regular reporting system that uses either routine or population-based data sources (WHO/Euro, 2009; Chanturidze, et al., 2009; Rukhadze, 2013).

At the systemic level, public health work is hampered by a weak legislative framework, lack of coordination between agencies, lack of funding, and lack of adequately trained public health professionals (Djibuti, et al., 2010; Gamkrelidze, et al., 2002).

Health promotion challenges

The Ministry of Health is not the only government agency responsible for addressing significant health problems. It is the responsibility of the entire government to enact public health policies in all sectors (NCDC, 2010; WHO/Euro, 2009). Unfortunately, there is as of yet no systematic consideration of health across the government agencies (WHO/Euro, 2009; Chanturidze, et. al., 2009). As a result the conditions for health promotion in Georgia today are bleak, characterised by a lack of political will to prioritize health. This issue is complicated by the complexity of multi-sectorial work in a politically challenging environment, the lack of positive attitudes to public health challenges among Georgians, and inadequate human and financial resources for health promotion (Swallow, 2010; NCDC, 2010).

Many public health problems and practices in Georgia have not been fully acknowledged. There is great need for the country to develop a sustainable health promotion system that would take into account local needs, social disparities, and opportunities for health promotion. The task of promoting the health of the Georgian population should be shared among various governmental and non-governmental agencies, but this will require effective coordination between all agencies and organisations that are involved. The latest draft of the Health Promotion Strategy for Georgia addresses inter-sector cooperation and institutional and human resource capacity building, and acknowledges the impact of other policies and cultural change as essential factors in keeping people healthy (Swallow, 2010; NCDC, 2010; Raminashvili, et al., 2014).

The population's health challenges are related to living conditions and how society is organised. A systematic approach will be needed to address all of these challenges, and not only within the health sector. Since public health is affected by various factors in different fields, inter-sector work with joint responsibility and coordinated resource mobilization is necessary (NCDC, 2010; Raminashvili, et al., 2014).

To summarise, the weak condition of Georgia's public health system is exacerbated by frequent changes in the government and poor enforcement of laws. The political context for public health has been marred by a rapid succession of governments

since the dissolution of the Soviet Union, as well as a poorly anchored and poorly functioning public health system. As a result, tobacco control laws that have been enacted are not enforced.

The role of public opinion with respect to tobacco control in Georgia

Georgia has enacted a tobacco control law, as well as some other legislative acts, that regulate particular elements of the tobacco problem. Despite these restrictions, however, tobacco use is ubiquitous even in places where it is prohibited, due primarily to lax enforcement of laws. To be effective, Georgian tobacco control law must be amended to include enforcement measures. This calls for policy-makers to revisit the current structure of tobacco control (Bakhturidze, et al., 2013).

No systematic data about public opinion regarding tobacco control exists in Georgia. There are, however, very limited data available through general surveys such as the Global Youth Tobacco Survey (GYTS) and the Global Adults Tobacco Survey (GATS). Globally, 82.5% of youth supported a smoking ban in public places in 2008, compared to 76.1% in 2003 (WHO, 2009). No one from the Georgian government uses these data to respond to public demand.

One possible source of pressure to encourage tighter laws and their enforcement could derive from public opinion, as this strategy has made a difference in other countries. The Georgian public's opinion about tobacco control has been largely unknown, however, due to a conspicuous lack of research on the subject.

In the absence of hard data about public opinion, policy-makers might believe that the public does not support tobacco control. This would obviously make the enactment of tougher control and enforcement laws even more difficult to accomplish.

Chapter 3. Literature review

The role of public opinion in making public health policy

Surveys and polls are often used to assess the public's opinions about specific issues. The public may be not sufficiently informed to express educated, meaningful opinions about complex or highly targeted policy issues (Stein, 2005; Kinder & Sears, 1985; Weakliem, 2003). Contextual factors are also important, and factors such as the president's popularity and electoral proximity show that policy leadership sources are institutional (Canes-Wrone & Shotts, 2004). But there is reason to believe that state lawmakers are also responsive to public opinion, especially on certain issues. Specific data about public opinion may provide legislators with more precise information about public attitudes than general opinions about a subject (Erikson, 1976; Arceneaux, 2002; Erikson & Tedin, 2015). There is a deficit of public opinion survey data with regard to tobacco control measures in Georgia, and no evidence exists regarding the responsiveness of policy-makers and decision-makers to public opinion.

On the global level, however, review of the literature shows that there is a high degree of policy responsiveness to public opinion. The main source of data about public opinion, which is important for our study, are organisations, individuals, and social movements that participate in social-political life. Polls can be a significant influence on politicians' behaviour, but they can also be manipulated by policy-makers to pursue their own agendas. Politicians can influence public opinion by focusing public attention on particular social problems, often through speeches. They use media that can change opinion and impact policy-making. Manipulation of public opinion by elites does happen and can reverse policy achievements that accurately reflect the will of the people (Manza, et. al, 2002; Petry & Bastein, 2009; Brooks, 2006). We have no scientific evidence that such manipulations have occurred in the public health policy arena in Georgia.

It is important to examine how special interests influence public policy, as the link between public opinion and policy is often weakened when special interest lobbying efforts are strong. If politicians and legislators pay more attention to special interests

and less attention to public opinion, “policy congruence” will weaken. Public opinion can set the main contours of public policy when lobbying is not present (Gray, et al., 2004).

Public opinion data seem to have played a significant role in influencing tobacco control policy changes in most European countries. These data help shift policy-makers’ perceptions of the public’s beliefs and attitudes about tobacco control legislation. Survey data from several countries shows that smoking bans in workplaces, on public transport, and in public spaces such as shopping malls are widely supported by the public (Borland, et. al., 2006; Brooks & Mucci, 2001; Trotter & Mullins, 1996; Lam, et al., 2002; Brenner, et al., 1997). Awareness among the population about smoking plays an important role in supporting smoke-free policies in general. Public health advocacy work supporting smoke-free policies could be helpful in increasing the health awareness of individuals (Lam, et al. 2002). Prior to this study, the deficit of relevant data about Georgia on this subject has been problematic.

A survey of global research reveals that members of the general public, including tobacco users, seem to be aware of the dangers of tobacco and support tobacco control. In Australia, 89% of never-smokers supported a smoking ban in the workplace, compared with 67% of smokers (McAllister, 1995), and only a minority of Australian tobacco users supported smoking in public bars (Trotter & Mullins, 1996). In South Africa, 83% of non-smokers and 70% of smokers supported bans on smoking in public places (Reddy, et al., 1996). In Greece, smokers and non-smokers were equally supportive of bans on tobacco sales to minors (Lazuras, et al., 2009). In Hungary, almost 80% of respondents supported smoking restrictions in closed and outdoor public spaces, workplaces, restaurants and bars (Paulik, et al., 2012). Public support has proven an important tool for promoting changes to tobacco policy internationally, and this can also be true in Georgia.

In a country closer to Georgia, Ukrainian public support for banning smoking in education and health-related buildings exceeded 94% and reached 67.1% for smoking bans in bars (Andreeva, et al., 2010). Russian studies showed that 95% of the public supported a ban on indoor smoking in healthcare areas, and 99% supported a ban in schools (Chuchalin, et al., 2009). Our goal was to assess public

support for different tobacco control measures in different countries and learn how politicians can use public support to change tobacco control policy and promote enforcement.

Tobacco industry influence on public opinion and decision-makers

Studies of the tobacco industry's internal documents reveal a strategy of using international scientific consultants to influence public opinion about the environmental effects of tobacco smoke (Muggli, et al., 2003; Saloojee & Dagli, 2000).

Efforts taken by the Ministry of Health and NGOs, and the positions of the prime minister, resulted in the establishment of a special government committee on tobacco control (Governmental Decree N58, 15.03.13) and the adaptation of the Tobacco Control Strategy (Governmental Decree N196, 30.07.13) and Action Plan 2013-2018 (Governmental Decree N304, 29.11.13). Following these actions, however, the influence of the tobacco industry on government officials and politicians has increased significantly. Use of these kinds of tactics by the tobacco industry is well known (Saloojee and Dagli, 2000; Gray, et. al., 2004). They still continued to defend a "half-pregnant" policy and, looking toward the financial interests of the media, sponsored sporting and cultural bodies (Chapman & Wakefield, 2001). Many of these tactics are based on false facts and deceptive theories that are offered as proven science by tobacco groups (Gruning, et al., 2008). The same thing is happening across countries of the former Soviet Union. In Russia, for example, mass media outlets are sometimes blocked by pro-tobacco interest groups that promote activities of the tobacco industry, especially at the federal level (Demin, et al., 2012). Prior to our study the extent of the tobacco industry's influence on policy-making processes was unknown in Georgia.

The media's role in influencing public opinion

In democratic countries the media can exercise powerful influence on political agendas, and can significantly affect public opinion (Kingdon, 2011; Cook, et. al., 1983). In western countries, the government pays attention to mass media outlets

and listens and reacts to their positions (Kingdon, 2011; Cook, et. al., 1983; Sweanor & Kyle, 2003; Lerberghe & Ferrinho, 2002). Media outlets are more likely to focus on the interests of individuals than on community interests, and this is a major obstacle to making health systems more responsive to societal needs in developing countries (Cassels, 1995). Mass media outlets have little influence on health issues-mostly they are interested in sensational content (Lerberghe & Ferrinho, 2002). Australian researchers concluded that a willingness and capacity to engage with mass media was seen as an essential attribute of successful public health policy (Chapman, et al, 2012).

Media communications play a vital role in shaping how individuals and communities understand tobacco-related issues, opinions, attitudes, and behaviours (Studlar, 2006; WHO/IARC, 2009). Public relations organisations have often been used to manipulate media and public opinion about various aspects of tobacco control and obtain the support of those who oppose government intervention in business and taxation, thereby encouraging antiregulatory and anti-government viewpoints (WHO, 2012).

Public opinion is of particular importance in the promotion of “new public health,” a model that seeks to empower people to take control of their own wellbeing. But it is important to remember that the public is empowered only to the extent that their views are known and respected.

Chapter 4. Theory

Kingdon's theory

The main theoretical framework for our study is Kingdon's theory on agenda setting. In this theory interest groups are active in the policy-making process, but primarily as impediments (rather than actors who promote policy changes) or as people whose agendas are considered only after the policy has been established (Kingdon, 2011). Kingdon defines lobbyists as special interest groups that include businesses and industry representatives, professional groups, labour groups, public interest groups, and sometimes government officials. Public interest groups that include consumers, environmentalists, and healthcare professionals sometimes affect policy agenda as well. Academic literature about the structure of the medical care system has markedly affected the thinking of people in the field of health policy. Some researchers and scholars construct "inner-outer" careers in which they travel between academia and government (Kingdon, 2011). Some suggest that groups avoid competition and pursue "niche-seeking behaviour." Others argue that resource limitations limit both the monitoring behaviour of groups and the extent to which groups can engage and influence policy activity. While there is some consensus that groups tend to specialize, little published research is available which seeks to explain it (Darren, 2011).

Some groups of people such as politicians, journalists, academics, and citizens have interests in current policy-making and its implementation. Think tanks, opinion leaders, and the media can be major influences on policy-making. Government bodies prefer to keep the status quo, but an attentive public that has greater interest in changing the status quo is more likely to pursue new approaches and achieve them (Pross, 1986; Dumitrescu, 2003). Main actors interested in health promotion include CSOs, patient groups, and media organisations. Both governmental and non-governmental organisations, as well as public and private institutions, try to influence policy-making processes and programs aimed at improving the wellbeing of people in society as a whole (WHO, 2013). Pluralist political theorists recognize organised special interest groups as key players. While policy-making is the purview

of the government, and particularly of the executive organs, the realities of modern politics enable groups formed specifically to promote the interests of certain social groups to play a significant role in the process (Howlett & Ramesh, 2003).

Data on policy reforms gathered from nearly every developing country between 1975-2007 show that insider groups are against reforms because they like to keep the status quo and weaken the government's commitments to strengthening the regulatory regime, which is similar to the US experience described by Kingdon (Weymouth, 2012; Kingdon, 2011). Evidently, having an interest group advocate a policy goal is not the same as political success (Binderkrantz & Krøyer, 2012). Consumers in developing countries create incentives for policy-makers to promote the adaptation of regulations regarding their rights, which is an instrument for democratic development. The results show, however, that democracy is not a universal way to achieve public good, because the process appears to depend on powerful insiders as well (Weymouth, 2012).

Kingdon's theory of agenda setting (1995) suggests the potential importance of public opinion survey data in tobacco control. As the policy-making process progresses at the governmental level, the number of actors decreases. Some actors participate in lobbying activities to persuade government officials to adopt their positions. There are two models of public policy decision-making: the rational model and the incremental model. The rational model holds that the main aim of public policy decision-making is to maximize solutions to complex problems. The second model states that public policy decision-making is more a political activity than a technical one. The rational model shows how to make decisions, while the incremental model describes actual decision-making practice (Kingdon, 2003; Howlett & Ramesh, 2003). The public can have influence on policy, even when there is no democratic government, through informal pressure and the risk of disorder (Burstein, 1998; 2010; Johnson, et al. 2005; Weakliem, 2003; Brooks & Manza, 2006). Supporters of the democratic theory assume that political actors should be alerted to changes in public opinion and adjust their behaviour accordingly. If public opinion had little influence, democratic institutions would not be working well (Soroka & Wleziem, 2004; Burstein, 2003; 2006).

Kingdon's data are based on the experience of the United States democratic system, but they also provide an example for newly democratic states like Georgia. In the populist version of democracy, politicians demonstrate respect for citizens and their expectations regarding policies. Changes in public mood result in almost immediate shifts in policy activity, and in this model, public opinion is paramount. The anticipation of future public opinion impact does not weaken the influence of present opinion (Druckman & Jacobs, 2006; Stimson, et al., 1995). Normative democratic theory addresses the responsiveness of government policy to citizens' preferences. Many laws on civil rights were adopted only after public support for them increased (Page & Shapiro, 1992). If we look at countries that have strong tobacco control measures in place, there are big differences among them with regard to democratic development.

Kingdon also emphasizes the role of high officials in agenda setting: "Presidents sometimes set the agenda, for instance, then mobilize the public to pass their legislative proposals" (Kingdon, 2011, p. 67). But most important are deliberations outside of government that can happen through direct public involvement, a democratic ideal. Deliberative processes are a new phenomenon in the health care sector. Top-down formal consultation has a political nature and restricts the neutrality of the opinions expressed. This kind of representation, however, does often provide well-argued opinions (Abelson, et al., 2003; Contandriopoulos, 2004).

Politicians pay attention to public interests because they help make political decisions. A responsive public behaves like a thermostat: a departure from favoured policy temperature, which can be changed over time, produces a signal to consequently adapt a policy. When the signal stops, the policy is changed. Government responsiveness is proportional to the public's desire for change (Wlezien, 1995; Soroka & Wlezien, 2004; Monroe, 1998; Petry & Mendelsohn, 2004). According to Kingdon's experience, public agendas sometimes have minimal impact on government officials (Kingdon, 2011).

Most health systems lack this democratic approach and include resistance to greater civil society involvement in health issues and healthcare. One of the essential functions of civil society is to help build policies through advocacy and by informing decision-makers and contributing to their choice of priorities. Putting the

interests of groups that have been forgotten or discriminated against on the agenda can be done through advocacy by civil society organisations (CSOs) that give these groups a voice. These groups may include but are not limited to the homeless, refugees, people with AIDS, chronic patients, people that have inadequate healthcare, and people that do not have the money to access strong health infrastructure.

Kingdon's model includes several independent "streams"—policies, problems, and politics—yet they all intersect at a critical juncture to yield policy changes. Kingdon refers to these critical stages as a "policy window," a time when external or internal interest groups push an issue to the top of the political agenda. Economic expectations play a significant role in opening and closing policy windows through which policy advocates may operate. When public opinion can illustrate the harmful effects of tobacco use, this helps open a policy window that might not otherwise open. Public opinion favouring or discouraging different tobacco control measures can be expected to have influence on the degree to which tobacco control policy rises or falls in the political agenda (Kingdon, 2003; Howlett & Ramesh, 2003; Baumgartner, 2015; Bakhturidze, et al., 2012).

The lack of democratic processes in the health sector is significant even in countries where representative democracy is well established. This is a result of a fragmented understanding of what civil society is. Civil society organisations contribute to the health systems by offering technical expertise and evidence, as well as institutional and financial resources for health services and public information. Community networks, non-governmental organisations, and other types of CSOs have a long history of participation in health-related causes through both policy advocacy and community service. There is need for a systematic assessment of the most productive forms of legal, political, institutional, financial, and service-related relationships between CSOs and the state to improve health outcomes (Lerberghe & Paulo Ferrinho, 2002).

Health promotion aims to make political, economic, social, cultural, environmental, behavioural, and biological factors favourable by advocating health and wellbeing. Individuals cannot achieve their fullest health potential unless they can take control of those factors that determine their health (WHO, 1986; Cragg, et. al., 2013).

People are engaged with health promotion as individuals, families, and communities over the duration of their entire lives. Professional groups, social groups, and health industry personnel have a major responsibility to mediate between differing interests in society in the pursuit of health (WHO, 1986; Cragg, et. al., 2013).

Health promotion policy requires identifying barriers to the adoption of healthy public policies in all sectors and finding ways to resolve them. The general aim should be to make sure healthy choices are also easy choices for not only the population, but for policy-makers as well. Health promotion works through networking, effective community actions, asset-centered approaches, healthy decision-making, and planning and implementing strategies to achieve better health. The most important part of this process is the empowerment of communities. Community ownership is crucial in guiding their attempts and preferences (WHO, 1986; WHO, 2009; Cragg, et. al., 2013). The involvement of public opinion in processes is an important part of Kingdon's theory. Public opinion affects preliminary policy drafts more often than final policy decisions or agendas.

The World Health Organization considers participation and empowerment to be hallmarks of health promotion. Participation and empowerment express value orientation in health promotion and can serve as a conceptual framework. One of the most comprehensive and detailed definitions of participation describes it as the process by which members of a community develop the capacity, either individually or collectively, to assume greater responsibility for assessing their health needs. Public participation in decision-making can promote uniting individuals or groups together for passive or active expression of political or civic identity. The public groups plan and then act to implement their solutions, create and maintain organisations in support of these efforts, and evaluate the effects. The evaluation of empowerment and participation is seen as important mainly when they are explicitly part of the program logic. It has become evident that decision-makers frequently do not support the assessment of empowerment and participation because those concepts are usually not considered as important as changes in health or health behaviour. The scepticism among health authorities' concerning empowerment and participation outcomes may be affected by a lack of acceptance of the favoured qualitative measures (Brandstetter, et al., 2012; Vaidya & Pradhan, 2008; Litva, et al., 2002).

Summary of main points

Kingdon's theory is a guide to understanding the processes of including public opinion in tobacco control policy-making in Georgia. Through this theory we can find answers about what kind of role public opinion plays in agenda setting and which interest groups have the most influence on policy decisions. Public participation through public opinion studies is an important part of agenda setting processes. Participation is important in strengthening democracy in that it encourages people to take part in both active and passive tobacco control decision-making processes, such as public opinion studies.

Public attitudes are considered during policy-making processes most often in western countries. With regard to health and tobacco control policy-making, there are several cases where consideration of public opinion in setting agendas has opened windows of opportunity and led to changes in policies or laws. There are very few studies of policy-making processes in developing countries where democracy is not as developed and where there is a lack of consideration of public opinion during policy- and decision-making processes. In such places special interest groups such as the tobacco industry often have more power than the public and create barriers for tobacco control policy-making.

Chapter 5. Methods

Table I presents our various research methods and a timeline of when they were used. Our first two articles are based on quantitative research methods. The quantitative data were taken from the "Population Survey on the Tobacco Economy and Policy in Georgia" conducted in 2008. Quantitative articles were published in 2012 and 2013. After publishing two quantitative articles it became clear that qualitative method is needed to be used to study the problem more deeply, and a qualitative study was subsequently conducted in 2013. Explanations of the methods are provided in Table I below.

In the end I opted to use an explanatory model where an initial quantitative phase is conducted to obtain statistical results (Creswell, et al., 2003). In the second phase I gathered qualitative data (open-ended interviews) to help explain the quantitative results. For my thesis a mixed-method approach proved most appropriate as it merged two quantitative studies with one qualitative study to understand real policy-making processes and the broad picture of tobacco control policy.

Table 1. Study timeline

N	Activity	2008				2012				2013				2014-2015				2016				
		I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	
1.	Quantitative study: population survey on the tobacco economy and policy in Georgia. Activities include a sampling of households, sampling design, fieldwork, computer control, data weighting and analysis.	*	*	*																		
2.	On the basis of the data and methods from the 2008 survey, the authors prepared and published the first quantitative article about public attitudes towards tobacco sales prohibitions in Georgia.					*	*	*														
3.	Based on the data and methods from the 2008 survey, the authors prepared and published the second quantitative article about the public's attitudes towards smoking restrictions and the ban on tobacco advertising in Georgia.								*	*	*											
4.	Qualitative study: the influence of public opinion on tobacco control policy-making in Georgia. Activities included study design and sampling, fieldwork, coding, and thematic network analysis.									*	*	*										
5.	On the basis of the qualitative study, the authors prepared and published the third article about the influence of public opinion on tobacco control policy-making in Georgia: "Perspectives of Governmental and Non-governmental Stakeholders"										*	*	*	*	*	*	*					
6.	The author analysed the three above articles by using a mixed-method approach																	*	*	*		

Study design for mixed methods

Table 2 shows procedures that use qualitative data to explain quantitative results. The two articles illustrate strong public support for different tobacco control measures, but we still had no information about policy-makers' perceptions of public support for tobacco control. For this reason we decided to conduct a qualitative study to explain what's happening in the policy-making sphere. The table 2 below describes the entire process. Descriptions of the methods used by the articles are shown separately below.

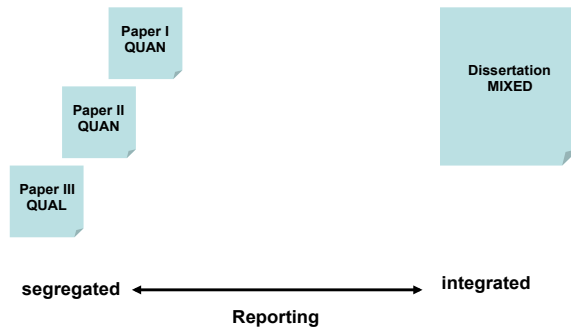
Diagram 1 shows dimensions of mixing. There was gathered quantitative (QUAN) data first and then qualitative (QUAL) data through sequential data gathering method. Component design was used to combine different data at the end for interpretation and conclusions. Purpose of combining data was to explain and find answer on our fourth mixed question: explanatory sequential mixed method design (Creswell, 2014).

Table 2. Mixed methods design

Phase one				Phase two		
Quantitative data collection	Quantitative data analysis	Quantitative Results	Pose new question	Qualitative data collection	Qualitative data analysis	Overall findings and interpretation
Procedures: .Survey N 1588	Procedures: .Factor analyses .Internal consistency	Procedures: .Validity .Differences	Procedures: .Identification of additional questions	Procedures: In-depth interviews	Procedures: Narrative .Thematic network analyses	Procedures: Explain quantitative results through qualitative results
Products: .Numerical item scores	Products: .Factor loadings .Cronbach alpha coefficients	Products: .List of best items .Description of results	Products: .Specify new research question and data collection plans	Products: .Not specified	Products: .Basis themes .Organizing themes .Global themes	Products: .Discussions of findings

Diagram 1. Mixed method design

Dimensions of mixing



Article 1

Design and sample

Two-stage stratified sampling was applied. The 2007 census enumeration districts were used for the sampling frame (NSOG, 2012). At the first stage of sampling, 94 enumeration districts were selected out of 16 000 such districts across the whole Georgia. At the next stage, lists of the household addresses were used in each of the selected 94 enumeration districts to further sample households (Bakhturidze, et al., 2008). A household with members aged 13-70 available for interviews was considered a unit of observation: 1655 households were sampled, and 1588 people (one member from each household) were interviewed (Bakhturidze, et al., 2008).

Data collection

Survey data were collected in January through February 2008, sponsored by the Open Society – Georgia Foundation's grant program (Bakhturidze, et al., 2008). In-house face-to-face interviews used a standard questionnaire. About 80 interviewers and ten regional supervisors from the Department of Statistics of Georgia carried out this survey. Regional supervisors controlled the selection of addresses and the work of interviewers (Bakhturidze, et al., 2008; 2012).

Study outcomes/determinants

The variables considered were as follows: 1. Demographic variables age, gender, marital status, education level and income; 2. Smoking status (daily, occasional, ex and never); 3. Levels of agreement with the implementation of eight tobacco sales prohibitions and violation penalties, coded 'yes', 'no', 'don't know' and 'refuse to answer' (Bakhturidze, et al., 2012).

Data analysis/generalizability

The dimensionality of the attitudes towards smoking restriction scale was examined with correlation analysis and with factor analysis (principal axis factoring). The reliability of the scale was estimated with Cronbach's alpha. Using these eight variables a single dichotomous variable was constructed indicating the degree of overall support for sales restrictions; those answering 'yes' to three or less of the

eight restrictions were coded 'low support' and those answering yes to 4 or more of the eight sales restrictions were coded 'high support'. Differences in levels of support by the demographic variables were estimated using the Chi-square test of independence. Associations between demographic factors and smoking, on the one hand, and support for smoking restriction, on the other, were also examined with a binary multiple logistic regression analysis. SPSS versions 19 and 20 were used for all analyses (Pallant, 2007; Field, 2009; Bakhturidze, et al., 2012).

Article II

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 sample size was determined with the objective to ensure the 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. Using stratification and a two-stage procedure carried out the sampling.

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.

Data analysis/ generalizability

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 (i.e., 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 eight 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.

Article III

Study Design and Sampling

This study used a collective case study methodology (Creswell, 2007).

Methods and interview process

The data were obtained through 12 semi-structured interviews during the period from April to May 2013, with three respondents each from the Georgian Ministry of Labour, Health and Social Affairs (MOH case), the Parliament of Georgia (MOP case), Opinion Research Agencies (ORA case) and Non-Governmental Organisations (NGO case). Face-to-face, one-on-one interviews were conducted in Georgian by the first author. They were audio recorded.

Thematic Network Analysis and Coding

Thematic network analysis (TNA) was used to analyse the interview data (Attride-Stirling, 2001). The TNA was undertaken by using the Georgian transcripts. The Basic Themes were grouped and summarised into Organizing Themes. These were further abstracted in Georgian into superordinate Global Themes. In coding the transcripts, basic, organising and global themes were identified without regard to the sources of the data. The authors then constructed a graphical network depiction of the theme structure. Only after this stage in the analysis were the themes cross-identified with the cases, to ascertain which cases contributed information to which themes. Selected quoted material was then translated into English (the transcripts themselves were not translated into English). All authors then discussed the

Georgian-English translations and agreed that close/literal translations resulted in close to unintelligible English. The decision was then taken to paraphrase the Georgian quotes in English, to avoid giving the impression of precise translation. Therefore, material obtained from the interviewees as reported in this paper appears without quotation marks, and in paraphrased form only.

The role of the researcher

Many authors believe that the role of the researcher is central to the effectiveness of a study, but this can lead to ethical, personal, and strategic complications in qualitative research practice. As the principal researcher in this study, I have relied on knowledge, skills, and experience in health promotion and policy-making that I have accumulated over 18 years of advocacy and research work.

Most participants represent an elite group that requires a specific approach to the interview process. They regard the researcher as a colleague, and this was helpful to maintain neutrality. Information was obtained from the participants' offices and there was a possibility that the researchers were biased. But the qualitative research methods used in this study were designed to reinforce my objectivity as the author. For example, I asked a diverse set of questions about public health, of which only one was related to tobacco control. As a researcher I am strongly interested scientifically in tobacco control policy-making processes inside government and the real role played by public opinion. It is vital for us to understand such processes in order to find solutions. The desire for objective results informed our decision to use only scientific methods in our research.

Chapter 6. Results

Paper I

77.3% of all respondents had agreed to all eight items, while no agreement (or missing answer) on all items was found for 12.5%. The association between a simple, additive sum score based on the eight sales restrictions attitude items and the dichotomy described in the methods section (high versus low support for sales restrictions) was 0.98. The lowest level of approval was 50.4% among respondents aged 13- 25 for 'sales of cigarettes must be only from stores that have a license to sell tobacco products'. The highest level of approval was 98.4% among respondents aged 56-70 for 'sales prohibition to children under 18'. There was a statistically significant age gradient for all eight restrictions, with older respondents having the highest approval rates.

Regarding demographic education segments, approval of each of the eight restrictions for all education segments was in the range 81.1%- 90.1%; nevertheless, there was a statistically significant education gradient, with higher educated respondents having the highest approval rates. Comparison across tobacco use status segments revealed that approval of each of the eight restrictions ranged from 92.1% to 97.9% among ex- and never-smokers, and from 51.2% to 84.2% among less than daily and daily smokers. The lowest approval rates were observed among less than daily smokers, ranging from 51.2% to 54.6%. All the smoking status gradients were statistically significant, with ex and never-smokers having the highest approval rates and less than daily smokers have the lowest approval rates.

In the sample segments aged 36-70 for males and females alike, high approval of restrictions was expressed by 93.4-98.7% of respondents. In the age segment 13-25, only 55.7% of respondents indicated high approval of restrictions. The age differences in level of support for restrictions were statistically significant. Among never or ex-smokers, high approval of restrictions was indicated by 94.3% to 97.9% of respondents. Occasional smokers were less supportive of restrictions than were current smokers. These differences in approval were statistically significant. The

results of the multivariate binary logistic regression analysis roughly confirm the associations with age and smoking behaviour described above. However, after controlling for age, ex-smokers are no longer different from daily smokers, and the association with education is no longer significant.

Approval levels were lowest among occasional smokers. Perhaps the most noteworthy data pertain to smokers' approval of restrictions, with levels of 71% among women and 87% among men. Data shows no education differences between males and females in levels of approval for restrictions. The result shows high levels of approval for restrictions for income level for both women and men, but lower levels of approval among those who did not provide income data.

Paper II

The lowest level of approval was 47.5% among respondents aged 13–25 for the 'prohibition of indoor smoking in restaurants, bars and nightclubs'. 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.

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. 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.

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%). 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 (are between lowest education and college-level education).

Paper III

The global theme driving the Thematic Network Analyse (TNA) is the public's role in public health policy making as perceived by the respondents. The TNA revealed three organising themes: A) The public has an opinion; B) Public opinion is ignored or manipulated; C) Public opinion not influential in tobacco control and 13 basic themes.

Organizing Theme A is labelled 'The public does, indeed, have opinions'.

Basic Theme 1 arises from respondents' claims that public opinion related to illicit drugs has always been strongly negative. Basic Theme 2 follows from respondents' comments about sex education and family planning that there is strong public opinion against contraception and sex education hindered policy-makers' intentions to address these sensitive issues. Basic Theme 3 is stimulated by the changing public stance on road safety relevant to almost everyone. Respondents remembered that public opinion on the compulsory use of seat belts was not supportive before legislation was enacted in 2010. But public support increased after enforcement became a reality. Basic Theme 4 arose out of expressions connected to drinking water quality. Several respondents remarked that the public

attitude is united in calling for safe water, sewerage systems, proper waste management, and permanent supplies of quality drinking water.

Taken together, these basic themes suggest that Georgian policy-makers have some awareness of public opinion on a range of health issues. That conclusion ties in with Organizing Theme B: is public opinion perceived to matter in policy-making processes, or is it ignored, or is it manipulated? The respondents perceive that public opinion is ignored rather than regarded in policy processes.

Basic Theme 5 arises from respondents' reports that during Shevardnadze's leadership (1992-2003), public opinion was not monitored via polls or other means polls, even if the public was presumably informed by the relatively free mass media. During Saakashvili's leadership (2004-2012), public participation in policy-making processes did not increase, and nor has it since. All respondents mentioned in one way or another that there is no political will to involve the public in policy-making. Basic Theme 6 shows, that most of the respondents believed that government should be more willing to consider public opinion in policy formation. NGO respondents underlined the potential for better policy-making if the public were to be involved. ORA representatives underlined potential importance of public opinion polls in policy-making. MOP and MOH group respondents assumed that national mood is important in decision-making when it supports the decisions preferred by the elite. Basic Theme 7 suggests that one reason public opinion may be ignored is that it is considered to be dangerously ill-informed. MOP and MOH respondents declared that sometimes public opinion on a particular issue is ill-informed and is against the course of action that is best (as seen by 'experts'). Basic Theme 8 illuminates the opinion of some respondents that beyond simply ignoring public opinion, the public mood is sometimes studied and then used for manipulation. Respondents believed that during the era of Saakashvili, knowledge about public opinion was used to enhance success during election periods, but was otherwise used to manipulate the public in the direction of policy preferences of the dominant political regime. Basic Theme 9 is closely related to Basic Theme 8: its focus is the perception that the mass media has been an important mechanism in public opinion manipulation. Sometimes the mass media is seen to distort critical facts or omit vital stories or details, to manipulate the public.

Basic Theme 10 is based on respondents' recollection that during the Saakashvili era, public opinion data were collected periodically to manipulate policy outcomes, even if not to inform decision-making processes. At the time of the interviews, NGO, MOH and ORA respondents felt there was no real interest to conduct public opinion research, for any purpose whatsoever.

Turning to Organizing Theme C, tobacco control comes into focus. The basic themes illuminate a dissonance between two perceptions: the public is known to support tobacco control, and this should count, but the public's opinion about tobacco control is ignored.

Basic Theme 11 is addressed by MOH and NGO respondents, who underlined the importance of public opinion when considering tobacco control policy. ORA, NGO and MOH representatives remarked that public opinion regarding tobacco control is supportive, but the Government does not take it into account in its policy-making. This is due in part, some respondents remarked, to the tobacco industry providing opposite and misleading information to the Government, suggesting that there is a negative public mood towards strong measures like a total ban of smoking in public places, a tobacco tax increase, ad bans, and so forth. NGO and MOH respondents addressed the powerful influence of commercial interests against tobacco control and remarked that Government officials are the lobbyists for the tobacco industry. Basic Theme 12 is not focused on the public itself but on Donors' support for tobacco control, which is seen by respondents to be in synchrony with Georgian public opinion. Basic Theme 13 raises for the first time the influence of Georgian tobacco users. MOP representatives expressed a widely held view that smokers' reaction will be strongly negative to tobacco control measures and thus outweigh public opinion favouring tobacco control. The industry, respondents say, tries to oppose tobacco control efforts in all possible ways. Policy-makers are aware that public opinion favours tobacco control and enforcement, but politicians are resistant; they support business including the tobacco industry and ignore public opinion. NGO and MOH respondents mentioned that even the weak tobacco control policies in place during Saakashvili period were not enforced. The NGO respondents remarked that public health interest was ignored, and planning and strategy development occurred without public involvement.

The fourth study question: what are the comparable attitudes, opinions, and beliefs about tobacco control in the governmental, non-governmental, and public spheres with respect to smoking?

Overall support for tobacco sales restrictions is very high in Georgia, where an absolute majority of non-smokers and a majority of smokers support such measures. Policy has been officially implemented—regulations now exist—but these regulations are not enforced because of strong interference from the tobacco industry. The tobacco industry creates barriers against restoring the system of licensing required to produce and sell tobacco. Though strong political will is lacking, non-governmental organisations strongly support and advocate for the enforcement of restrictions on tobacco sales. These organisations sometimes conduct public opinion surveys or use existing public opinion data as advocacy tools.

The circumstances are similar with other forms of tobacco control such as bans on tobacco advertising and promotion, prohibitions on smoking in closed buildings, and increased penalties for violations.

The majority of policy-makers perceive that consideration of public opinion in policy-making is very low. This is due to the under-developed nature of democratic institutions, the lack of political will to include the public in policy-making processes, political and business influence on the media, and the fact that the tobacco industry has more influence than those actors seeking to promote public health.

Chapter 7. Discussion

Public support for tobacco control measures

On average, more than 78% of the Georgian population supports tobacco sales restrictions and strong administrative measures. These include a prohibition on the sale of tobacco to and by children under 18; a prohibition on the sale of cigarettes as single units; a prohibition on the sale of cigarettes in schools and youth organisations; a prohibition on the sale of tobacco in health care settings; a prohibition on the sale of tobacco with children's clothes and toys; increased penalties for violations of the law prohibiting sales to minors and single unit sales; and a prohibition on the sale of cigarettes from stores that do not have a license to sell tobacco products. A high level of support was found among smokers (71% of women, 87% of men) for prohibiting tobacco sales to minors and in schools and hospitals, for increasing penalties and for establishing licenses to sell tobacco. More than half of occasional smokers (54% of women, 55% of men) support all of the proposed prohibitions on tobacco sales. An absolute majority of ex-smokers and never-smokers express high-level support (94% or more) for the above-mentioned measures (Bakhturidze, et al., 2012).

On average, 85% of the Georgian population supports the following smoking prohibitions and administrative measures: prohibitions on smoking promotional campaigns (including free promotional items, such as t-shirts and free samples); prohibitions on the advertisement of tobacco and tobacco companies in mass media and through sponsorship; prohibitions on smoking inside government buildings and offices, in schools, and in youth organisations; prohibitions on smoking inside medical, educational, sport, and cultural facilities; prohibitions on smoking inside private workplaces; prohibitions on smoking inside restaurants, bars, and night clubs; and the introduction of more restrictions on smoking and increased penalties for violations (Bakhturidze, et al., 2013).

These data show that public support for some tobacco control measures is very strong. They also indicate that the public wants to see changes in tobacco policy with the goal of creating a smoke-free environment in Georgia.

It is useful to compare the public opinion data from Georgia with those of other countries with regard to sales restrictions, prohibitions on smoking in public places, bans on tobacco advertising, and increased penalties for violations.

The high level of public support for the prohibition of smoking in workplaces and in public spaces is very similar to findings in other parts of the world with different cultural and political contexts. For example, 76% of Australian non-smokers support a ban on smoking in public spaces, and 81.8% of urban residents in China support the same ban. In South Africa, 83% of non-smokers and 70% of smokers agree with smoking bans. Approximately 80% of Hungarians support smoking restrictions in closed and outdoor public spaces (McAllister, 1995; Perlstadt & Holmes, 1987; Yang, et al., 2010; Reddy, et al., 1996; Paulik, et al., 2012).

With regard to Georgia's neighbours, 95% of Russians agree that indoor smoking should be prohibited in healthcare facilities, 99% support a ban in schools, and more than half believe that smoking should be prohibited in restaurants and cafes (GATS-Russia, 2009; Danishevski, et al., 2008). In Ukraine in 2009, public support for banning smoking in education and health facilities was more than 94%, and 67.1% of those surveyed want smoking to be banned in bars (GATS-Ukraine, 2010).

Somewhat counter-intuitively, young occasional smokers in Georgia were sometimes less supportive of restrictions than daily smokers. We were not able to find comparable analyses on this subject, and can therefore only speculate about the reasons for this finding. It may be that the occasional smokers in this study perceive themselves to be in control of their tobacco use, and therefore do not feel the need for external restrictions. Nevertheless, approximately one 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.

The most recent study in Georgia shows that 89-92% of the population supports prohibiting smoking in public spaces and banning tobacco advertising (ISSA, 2016a). Support for banning all smoking in the hospitality sector (bars, restaurants, hotels, etc.) has also increased from 76% in 2008 to 79.1% in 2016 (ISSA, 2016a;

Bakhturidze, et al., 2013). These levels of support suggest that Georgian public opinion about tobacco control issues is in line with global public opinion.

Georgia has very a low level of enforcement of FCTC Article 8, which requires parties to prohibit smoking in public places (WHO, 2005; Bakhturidze, et al., 2016). From the international experience we can assume that implementing smoke-free legislation in Georgia will decrease the number of young people who start smoking and also protect non-smokers from second-hand smoke exposure. A total ban on smoking in public spaces will also decrease cigarette consumption, mostly among young people, and will promote the growth of non-smoking as a social norm in the country (Anderson & Hughes, 2000; Eriksen & Carak, 2008; Reid, et al.; Wakefield, et al.).

It should be mentioned that most challenging part of the smoking ban in public places relates to the prohibition in restaurants and bars. In 2009 the Georgian government argued that it is not possible for restaurants to designate a space for non-smokers and purchase ventilation devices. They also argued that if the government prohibits smoking in bars and restaurants, they will lose money. Public support for these regulations is very high (76% on average), even among smokers (73.0%). Today this support is even higher at approximately 79% (ISSA, 2016a). Studies from different countries show that partial smoking restrictions are not effective and that total bans on smoking in bars and restaurants do not have a negative economic impact. On the contrary, they often have a positive influence on local businesses (Eriksen & Chaloupka, 2007). A study conducted in Georgia in April 2016 showed that 17.3% of respondents expected the number of visitors to increase if Georgia prohibits smoking in restaurants and bars, while only 9.8% expected the number to decrease (ISSA, 2016a). This suggests that such measures would have a positive impact on the profitability of bars and restaurants in Georgia.

Georgia is interested in becoming a full member of the European Union and should implement appropriate regulations and follow the examples set by EU member states. The Baltic countries are a good example for Georgia to follow in implementing tobacco control legislation, including bans on tobacco advertising (Joossens & Raw, 2007). Another excellent example is Norway, which banned smoking in all public spaces, including restaurants and bars, and has a

comprehensive ban on all forms of tobacco advertising, promotion, and sponsorship. The Norwegian experience can be used as a model for countries like Georgia to analyse patterns of smoking risk factors under various market conditions (Braverman & Aarø, 2004).

Our study also showed high support (81-83% of respondents) from the public for a total ban on tobacco sponsorship and advertising in Georgia. The most recent study shows even higher support: 92% (ISSA, 2016a). Together these results confirm that an absolute majority of the Georgian population supports a total ban of tobacco advertisement and promotion.

Georgia currently has a partial ban of tobacco advertising, including TV and radio, but still there exist advertisements in print media, on billboards, and at points of sale (including on the Internet), as well as promotional campaigns. While comprehensive bans on tobacco advertising causes a 6.7% decline in per capita consumption, limited bans have no substantial impact on consumption. Changes in income have a greater impact on consumption in the developing world than in developed countries, and this is also a significant factor in Georgia (Jha & Chaloupka, 2000; Harris et al., 2003).

Due to aggressive tobacco advertising and promotional activities, smoking rates have increased most among the younger population in Georgia, and particularly among young women. Significantly, the frequency of adverse pregnancy outcomes including perinatal loss, low birth weight, birth abnormalities, and miscarriage rises proportionately with increasing rates of smoking among women (Bakhturidze, et al., 2008).

Tobacco advertising causes increased smoking rates, and increased smoking rates correspond to poorer public health (Saffer & Chaloupka, 2000). The group most vulnerable to advertising is the younger population, whose attitudes and intentions regarding tobacco use, as well as their choice of products, are in a state of formation compared with the more established behavioural choices of adults. Tobacco companies exploit the vulnerability of youth through tobacco advertising and promotions (Saffer & Chaloupka, 2000; Cornwell, 1997; Arbogast, 1986; DiFranza, et al., 2006; Moodie, et al., 2008; Braverman & Aarø, 2004). Given how

harmful tobacco use is to one's health and the particular susceptibility of younger generations to advertising, there is a public health imperative in Georgia to fully implement FCTC Article 13, which has strong support from the Georgian public.

Georgia was supposed to implement these regulations before May 15, 2011, but they are still under discussion by the government. Civil society organisations have been trying to promote changes in the Law on Advertisement since 2008, but these initiatives have been largely ignored. A prohibition on advertising was proposed in the amendments prepared in 2013, but it only passed in the Parliament in June 2016. The draft law is still under consideration in the Parliament of Georgia. The tobacco industry and its lobbyists in the Georgian Parliament are against any ban on tobacco advertising and promotion. They argue that international brands are already known and that local production needs advertising (Bakhturidze, et al., 2013; Parliament of Georgia, 2016).

The Institute for Social Studies and Analyses (2016b) conducted focus-group discussions among youth from 8-12 years of age. The results showed that children and young people are under considerable influence from tobacco advertising and promotional campaigns. In everyday life they see billboards, light boxes, and cigarette displays in front of shops and at points of sale. They also report seeing smoking on most TV programs, specifically in the most popular Georgian TV series.

The design of cigarette packs is also attractive for children, who often remember meeting promo-girls in the shops and know about the lotteries offering gifts that are also appropriate for teenagers. The results of those studies, together with our quantitative data has become a tool for NGOs to use in advocating for a total ban on tobacco advertising and sponsorship in the Parliament of Georgia (ISSA, 2016a; 2016b; Bakhturidze, 2012; 2013). These efforts are gaining momentum and there is a window of opportunity to convince policy-makers of the importance of protecting Georgia's young population from the harmful influence of tobacco advertising.

After strong effort from civil society organisations, the Georgian Parliament initiated new amendments to the Law on Advertisement on June 13, 2016, that will prohibit all forms of tobacco advertising and promotion, including at points of sale. There is hope that Parliament will take into account the strong support of the public for these

measures and adopt new laws to discourage children and young people from starting smoking (ISSA, 2016a; 2016b; Bakhturidze, 2012; 2013).

Regarding sales restrictions, our results are similar to those studies indicating that never-smokers are more likely to support tobacco control measures than smokers (Ashley, et al., 2000; Laforge, et al., 1998; Pederson, et al., 1987). The majority of the Georgian population strongly supports a ban on tobacco sales to minors as well as related measures aimed at limiting youth access to smoking. But in spite the high level of public support (even among smokers) for enforcing already existing tobacco sales prohibitions, the level of enforcement remains very low.

Since May 15, 2006, the WHO Framework Convention on Tobacco Control (FCTC) entered into force for Georgia, where Article 16 prohibits the sale of tobacco to and by minors (WHO/FCTC, 2016; WHO, 2005). Since Georgia ratified the FCTC, however, enforcement has been weak due to a lack of political and administrative will to deal effectively with those who violate the law (Bakhturidze, et al., 2013; 2016).

Since 2003 Georgian tobacco control laws, for example, have prohibited tobacco sales to and by minors, within 50 meters of schools, in medical facilities, and as single cigarettes (GLTC, 2010). Georgian administrative bodies, however, have no political will to do their duty and fine those who violate the law. There is also strong influence from the tobacco industry, which has blocked the initiative to require licensing for the sale and production of cigarettes (Bakhturidze, et al., 2016).

In keeping with Kingdon's theory we have identified the important role of tobacco sales restrictions in agenda-setting in Georgia. First, we described tobacco company tactics that target youth. Second, we compared the international and Georgian experiences in this area. Third, we categorised problems relating to the implementation and enforcement of exiting regulations on tobacco sales. Our research results, which showed very high public support for the enforcement of tobacco sales prohibitions, is an opportunity for advocates to draw attention to this problem (Bakhturidze, et al., 2016; Kingdon, 2011).

There are several cases that illustrate the tobacco industry's efforts to influence worldwide public opinion. One of them is the Environmental Tobacco Smoke

Program. This program was simply another “product” designed to influence public opinion and was used by the industry in specific markets throughout the world. Scientists were hired primarily for their influence and contacts within their regions and for their ability to influence decisions about proposed smoking restrictions. The industry deployed these consultants to oppose local tobacco control efforts and, in one instance, exploited the dual role of a scientist who served as an industry consultant and presidential advisor (Muggli, et al., 2003).

Howlett and Ramesh state that the public agenda is primarily an agenda for discussion, while institutional agendas are designed for action (Howlett & Ramesh, 2003). Agenda setting in developing countries depends on the level of democratic development and active advocacy efforts aimed at persuading, encouraging, and sometimes coercing holders of public office. In a democracy where politicians ignore public demands at their peril, waning attention to public opinion would result in a cyclical pattern of agenda setting and public policy-making (Howlett & Ramesh, 2003). As mentioned previously, there is strong interest from the tobacco industry to covertly decrease attention to public opinion through lobbyists influencing the government. The most important messaging on this issue comes from advocates who seek to defend public participation, thereby creating a safe and healthy environment for future generations.

The body of relevant academic literature suggests that public opinion may play a major role in public policy-making in communities where public opinion carries weight in political processes. Though our research shows that the majority of Georgians support stronger tobacco control, this support continues to carry no significant weight in political decision-making processes in Georgia compared to the influence of the tobacco industry. It seems likely that Georgian policy-makers are not aware of the public’s overwhelming support for stronger tobacco control, even among most smokers (Bakhturidze, et al., 2012; 2013). The recent and compelling evidence on this topic may heighten policy-makers’ awareness of the actual state of public opinion, and that might increase their motivation to adjust tobacco policy in directions favoured by the majority of citizens. While this may be cause for optimism, it will be essential for public health advocates to convince policy-makers of the public’s desire for change (Bakhturidze, et al, 2016).

How policy-makers' perceptions of public opinion influence tobacco regulation

Georgian policy-makers have the following perceptions of the public's opinion about tobacco control legislation:

- Public opinion is not widely appreciated due to the lack of public opinion data.
- The public's opinion does not carry much weight in matters of public health, and regarding tobacco control specifically.
- The tobacco industry has more influence on tobacco control policy-making than does public opinion or public interests.

Public involvement in health policy-making processes, which is the foundation of the Ottawa Charter (WHO, 1986), remains at a low level in Georgia. In this field, policy-making rhetoric in Georgia has evolved from a Soviet style based on a top-down expert model to a model that is somewhat more receptive to outside views. In 2006, for example, the Prime Minister called for the involvement of all key stakeholders in policy-making, though this could be interpreted in many ways (Chanturidze, et. al., 2009). According to Bishop and Davis' model, the current level of participation is merely on the "consultation" level (Bishop and Davis, 2002). Hauschild and Berkhout (2009), who have presented the only empirical study of this issue in Georgia, have concluded that very little is actually known about how the government plans to involve stakeholders, how it attempts to involve them, and how the government and the stakeholders perceive the latter's involvement. Their paper notes that many stakeholders have not been properly consulted about proposed healthcare reforms, and that the decision-making processes lack transparency.

The Ministry of Health is not the only body responsible for addressing major health challenges; it is the responsibility of the entire government to enact healthy public policies in all sectors, as well as health monitoring (NCDC, 2010; WHO, 1986). There is a low level of awareness about the principles of health promotion among the public, and this is further complicated by the fact that to some degree citizens do not think they can contribute to their own health (Chanturidze, et. al., 2009). As a result, the conditions for health promotion in Georgia today are bleak and

characterised by a lack of political will to prioritize health. There is a lack of public involvement in policy-making processes (which is admittedly complex, multi-sector work in a politically difficult environment), as well as inadequate human and financial resources for health promotion (Chanturidze, et. al., 2009; NCDC, 2010; Raminashvili, et al, 2014).

Greater transparency is needed in tobacco control policy-making in Georgia to illuminate and prevent interference from the tobacco industry and increase responsiveness to public opinion. In 2013 WHO Director-General (DG) announced its Endgame policy that aims by 2050 to decrease global tobacco consumption dramatically to a maximum of five per cent. European countries aim to achieve this goal by 2040 (WHO, 2013; Endgame Conference, 2013; WHO/Euro, 2013).

In Georgia, political will must strengthen significantly if the country is to meet international obligations related to the FCTC and the Tobacco Endgame strategy. On a positive note, there is some evidence that policy-makers are now more aware of public support for tobacco control. Georgia's new Tobacco Control State Strategy, established in Decree N196, 30.07.13, highlights recent evidence indicating the public's support for tobacco control (the evidence is provided in Bakhturidze, et al., 2012; 2013). There is reason to be cautious, however, as it is one thing to mention such research results in a policy document, but quite another to continue the weak enforcement of current tobacco control regulations and obligations established by the FCTC (Bakhturidze, et al., 2016). In his annual report for 2015, the Georgian Public Defender specifically underlined FCTC obligations and called on the government to effectively implement FCTC provisions (Public Defender Report 2015). The Office of the Public Defender began preparing a special report about this problem in March 2016. We anticipate that this report will include results from our study and others that draw attention to violations of health rights and politicians' general ignorance about the public's demand to live in a smoke-free environment.

The public strongly supports tobacco control, but will the democratic imperative to listen to the voice of the people help Georgia move toward more stringent tobacco control policy and enforcement? Democracy in Georgia is young and difficulties remain in increasing public participation and consideration of public opinion in policy-making processes. This is also true of tobacco control policy, where

unfortunately the most influential player is not the public, but the tobacco industry (Bakhturidze, et al., 2016).

A comparison of attitudes, opinions, and beliefs about tobacco control

Created from three articles published over in the scope of this dissertation, Table 3 (below) compares the attitudes, opinions, and beliefs about tobacco control subjects from the perspective of governmental agencies, non-governmental organisations, and the public according to smoking status.

The table clearly shows that overall support for tobacco sales restrictions is very high and an absolute majority of non-smokers and majority of smokers support such measures in Georgia. Policy in this regard is in place (i.e., regulations already exist) but it is not enforced due to strong influence from the tobacco industry and its efforts to block the creation of a system of licensing to sell tobacco. No strong political will exists, but non-governmental organisations strongly support and advocate for the enforcement of tobacco sales restrictions. These organisations sometimes use existing public opinion data as an advocacy tool.

The situation is similar with other forms of tobacco control such as the ban on tobacco advertising and promotion, the ban on smoking in closed buildings, and increased penalties for violations.

To analyse what's happening at the governmental level with regard to its consideration of public opinion we must examine documents such as Decree N196, 30.07.13, regarding the approval of Georgia's Tobacco Control State Strategy. This document emphasizes that, "public support is important to provide tobacco control measures effectively." Though this policy document cites poll data, it also shows the very low level of enforcement of current tobacco control regulations and the lack of improvement of tobacco control legislation with respect to the FCTC (Bakhturidze, et al., 2016).

The majority of our survey respondents confirmed that policy-makers' consideration of public opinion is very low. This is primarily due to the low level of development among democratic institutions in Georgia, the lack of political will to include the

public in the policy-making process, the control of the media by political and business entities, and the fact that the tobacco industry has more influence on policy-making than public health promoters.

The NGO sector needs more support in order to promote awareness among policy-makers and resist interference by the tobacco industry lobby. Several examples from different countries show that NGOs can play an important role in enforcing FCTC requirements (Sparks, 2012). Civil society organisations should use the opportunity provided by strong support from the public to demand that the government take appropriate actions.

The government and lawmakers must implement FCTC requirements, adopt appropriate regulations, and promote compliance with the rule of law. The degree to which decision-makers and policy-makers consider public demand in their decisions, instead of special interests, which are sometimes linked to corruption, will be a test for democracy in our country.

On June 13, 2016, following strong advocacy efforts from civil society organisations that included the results of our studies and the latest public opinion polls (ISSA 2016a), the Georgian Parliament introduced new amendments to the Tobacco Control Law to prohibit smoking in all enclosed buildings (excluding private houses). Open discussions were held in different committees, most of which supported strong regulations and acknowledged the high level of public support for restrictions. At the same time, interference from the tobacco industry was very high and in the end the government mostly considered the industry's interests and recommendations. The government required significant changes in the current draft after consultation with the industry, which is in violation of article 5.3 of the FCTC guidelines as well as the above-mentioned governmental decree related to its tobacco control strategy and action plan. The tobacco control strategy says that it is not acceptable to consider input from the tobacco industry during the preparation and implementation of tobacco control policy (Decree N196, 30.07.13). The most recent Parliament of Georgia concluded its work at the end of July, 2016, and the country is now waiting for the results of the parliamentary elections, which were held on October 8, 2016. Using a familiar strategy, the tobacco industry advised the government not to implement strong regulations before the elections because it will decrease political

support among smokers. The use of smokers' attitudes to manipulate government policy during elections has in the past influenced the ruling party. Following the elections a new window of opportunity opened to use strong public support to promote strong tobacco control policy and enforcement.

The public demands stronger administrative measures and higher penalties for violations, but there is still a deficit of political will to address these problems. The administrative bodies charged with enforcing current tobacco control laws are the Ministry of Internal Affairs (MIA) and the Ministry of Finance (MoF), but neither ministry has the political will to enforce the law, as there are very few documented incidents of violations (during the last three years the MIA has reported zero violations while the MoF has reported less than 100). The active involvement of NGOs is needed to promote greater compliance with existing legislation. Georgia will not meet FCTC obligations or maintain the constitutional right to a healthy environment without comprehensive tobacco control regulations and stringent enforcement. The Georgian Parliament also initiated appropriate amendments to the Administrative Violations Code on June 13, 2016. The two major enforcement agencies—the Ministry of Finance together with the Ministry of Internal Affairs—will increase penalties. Also, decisions about violations will be made by an officer of the Ministry of Finance, and not by a court, which currently deals with such matters. The best solution would be the involvement of NGOs in the enforcement process, or the creation of a special Tobacco Control Agency to manage enforcement activities. But the government is against spending resources on the establishment of new structures. The most important task today is to adopt new amendments. After this, NGOs can continue advocacy work for meeting FCTC obligations, which require member states to create a National Center for Tobacco Control.

Table 3. A comparison of attitudes, opinions and beliefs about tobacco control: The non-smoking public, the smoking public, government, and non-governmental organisations.

Tobacco control issue	The public		The policy makers	
	Non-smokers	Smokers	Government	Non-government
<p>Tobacco sales restrictions:</p> <p>Sales prohibition to and by children under 18, in single units, in schools, medical and youth organizations, with children's clothes and toys; sales of cigarette must be only from stores that have a license to sell tobacco products</p>	<p>Overall support on tobacco sales restrictions is very high (78%). Absolutely majority of non-smokers (94%) supports such measures in Georgia</p>	<p>Majority of smokers (63%) supports such measures in Georgia</p>	<p>Regulations in this regard exist, but no implementation from enforcing bodies like Ministry of Interior Affairs and Ministry of Finance. Economic block is against restoring license to sell tobacco. Lack of public opinion surveys in this field. No readiness to consider public opinion. Negative influence from Tobacco industry.</p>	<p>Non-governmental organizations strongly supports and advocate for enforcement of tobacco sales restriction regulations. Also promotes restoration of license to sell tobacco. As an advocacy tool, they sometimes conduct or use existing data.</p>
<p>Tobacco Advertisement and promotion ban:</p> <p>Prohibition of tobacco and tobacco companies advertising in the printing media, on the billboards and sponsorship; prohibition of all types of tobacco products advertisement by tobacco companies; prohibition of smoking promotion (including offering free promotional items, such as t-shirts, free samples, etc.)</p>	<p>Overall support on tobacco advertisement and promotion ban is very high (81-83%). Absolutely majority of non-smokers (96%) supports such measures in Georgia</p>	<p>Majority of smokers (67%) supports such measures in Georgia</p>	<p>Ministry of Health strongly supports such measures, when economic block creates barriers to regulate this direction. No political will exists now. Lack of public opinion surveys in this field. No readiness to consider public opinion. Negative influence from Tobacco industry.</p>	<p>Non-governmental organizations strongly supports and advocate for enforcement of the FTC obligation related to total ban of tobacco advertisement and promotion. As an advocacy tool, they sometimes conduct or use existing data.</p>

Methodological considerations

The methodological strength of this dissertation lies in its mixed-method approach. Quantitative data alone would not be able to answer our general question about the degree of public participation in tobacco control policy-making. Two quantitative studies together give us sufficient data about the strong public support for different tobacco control issues, but this support has not translated into new policy. Qualitative data became the basis for understanding the processes taking place inside the government and the role played by public opinion and civil society in these processes.

The strengths of the quantitative studies are their high response rates. Regarding statistical assessment, the internal consistency of the questions about attitudes towards sales restrictions, smoking prohibitions, and bans on tobacco advertising is very high.

This dissertation is the first attempt to study the role played by public opinion in tobacco-related policy-making processes in Georgia. It offers a scientific framework for understanding the important questions as we move forward in this field. An important part of this study is the involvement of opinion research experts who have considerable experience conducting public opinion surveys and polls. These experts emphasised that it is important to conduct periodic population surveys, in-depth interviews, and focus group discussions with different stakeholders to have a clearer understanding of the subject. One weakness in our methodology is that the number of in-depth interview respondents was not as high as we had hoped it would be. There is need for more comprehensive, periodic studies covering a greater number of stakeholders and experts in order to learn different factors affecting tobacco control processes in the country.

It is possible that there have been shifts in public opinion since the collection and publication of these data in 2008, and these shifts could affect our conclusions. The most recent study (ISSA, 2016a), however, confirms the positive shift in public support for tobacco control regulation. This survey also collected data not reported in our study, such as the level of respondents' knowledge about the harmful effects of tobacco and their attitudes towards tobacco tax policies. A complete picture of the

findings from this survey will emerge only after completion of further analyses and publication.

Another weakness in our method is that raw quantitative data cannot be directly translated into policy. Each and every constituency grappling with a public health problem such as tobacco that wishes to assess public opinion can only do so within its own constituency. Advocacy based on research about other populations can be expected to be less effective than advocacy based on locally-generated data.

Regarding qualitative data, it should be noted that respondents from governmental organisations and members of Parliament were mostly connected to the ruling political party. They expressed considerable criticism regarding the role of public opinion in policy-making, which increased our confidence in the validity of the interview data. Regarding reliability, we have checked the transcripts to make sure they do not contain obvious mistakes made during transcription. To prevent drifting definitions of codes we always compared independent data and wrote memos about the codes and their definitions. To ensure validity, we conducted follow-up interviews with participants and gathered their comments. The issue of translation from Georgian to English was cause of some concern. Though we always attempted to verify all translations, the tone of many of the respondents' comments could not be communicated well in English in the limited space of a scientific paper.

I created Table 3 to better illustrate the mixed-method approach. The horizontal axis lists smoking statuses and governmental and non-governmental actors, and the vertical axis lists tobacco control issues. The individual cells feature summarised results of public support according to smoking status, and stakeholders' perceptions relating to the influence of public opinion on tobacco control policy-making. This matrix presents an analysis of the combined qualitative and quantitative data. Though using mixed methods plays a central role in this study, this is the first time it has been used in this context and as such it requires further refinement.

Similar studies must be continued in Georgia so that their results can be transferred into advocacy streams aimed at realising the adoption of stronger tobacco-control measures and more effective enforcement mechanisms.

Ethical clearances

Ethical clearance for article 1

The ethical committee of the Georgian Health Promotion and Education Foundation approved the study protocol. Informed consent was obtained via signature from all participants. For participants under age 18, parents or guardians confirmed their approval by signature. The survey organisers took the responsibility of protecting confidentiality very seriously during the collection, analysis, and dissemination of data.

Ethical clearance for article 2

Informed consent was obtained via signature from all participants. For participants under age 18, parents or guardians confirmed their approval by signature. The survey organisers took the responsibility of protecting confidentiality very seriously during the collection, analysis, and dissemination of data. The identities of the respondents were not recorded on the interview forms or in any other manner.

Ethics statement for article 3

The ethical committee of the Georgian Health Promotion and Education Foundation approved the study protocol, which complied with the current laws of the country. Signed, informed consent was obtained from all participants. Neither the raw data nor the data analysis files contain information that can identify the respondents.

Chapter 8. Conclusions and implications

Main conclusions

This study reached the following major findings and conclusions: (i) the public strongly supports all forms of tobacco control, (ii) due to the lack of public opinion data prior to this study, this support is not widely appreciated, (iii) in public health generally and in tobacco control specifically, public opinion seems not to carry much weight in policy-making, (iv) other stakeholders such as the tobacco industry carry more weight, and (v) publicising the findings of this study is therefore a high priority. Showing strong public support for tobacco control is important because the public's opinion in a democratised Georgia will have the potential to carry more weight in the tobacco control arena.

The findings of this study show that prohibiting the sale of tobacco to minors has strong support among the Georgian population, and this can be a tool to urge policy-makers to enforce existing regulations on this point. It is of high importance to implement those FCTC obligations agreed to by Georgia in May 2006. To avoid ignoring public opinion we must limit interference from the tobacco industry in decision-making processes. Legislation alone is not sufficient to prevent tobacco sales to minors (Stead & Lancaster, 2008). If effective programs are not developed and implemented soon, future morbidity and mortality rates attributed to tobacco consumption will most likely increase. Nationwide and region-wide tobacco control action plans provide useful frameworks for implementing such a comprehensive approach. They offer a unique opportunity to develop, implement, and evaluate comprehensive tobacco control policy that can be helpful for Georgia.

Additional control measures that must be implemented include taxation, sales prohibitions, bans on advertising, tobacco prevention, and education programs. These measures, which should complement law enforcement efforts, will lead to a decrease in tobacco consumption among the young population in Georgia.

Smoking prohibitions and bans on tobacco advertising and sponsorship also have a high level of public support in Georgia. We interpret this as public demand for the

government to adopt comprehensive smoking prohibitions in all closed public buildings, including restaurants and bars, and to completely ban tobacco advertising and promotional campaigns. We have shown in our review of the literature that conducting research on public opinion is important because the public's opinion is a factor in political decision-making. Together with our findings, the latest ISSA study results (2016a, 2016b) can be a strong advocacy tool for NGOs to stimulate tobacco control political processes in Georgia. A new comprehensive draft law was initiated in the Georgian Parliament on June 13, 2016.

The process of adapting a new draft law will be a test for democracy and an opportunity to respond to public demand instead of the tobacco industry, which continues to have serious influence on political processes in Georgia.

As an Associate Member of the EU and a member of the FCTC, Georgia must consider the membership requirements and obligations of these organizations. Georgia must follow the Endgame Policy, the Non-Communicable Diseases (NCD) action plan, and other relevant policy documents and recommendations that promote the health of the population, save lives, and contribute to Georgia's economic development.

Political and practical implications

Our study results clearly indicate significant public support for all tobacco control measures, and this has practical implications for policy-making in Georgia. Some policy-makers acknowledge the importance of public opinion concerning public health problems, including tobacco control. Tobacco control questions are easy to understand and easy to take into account during political decision-making and policy-making processes. Unfortunately, there is still a high level of negative influence from the tobacco industry and its lobbyists on government agencies and the Georgian Parliament. The public, medical organisations, and NGOs are simply not strong enough to fully counter such influence. The tobacco industry's influence is allowed to continue primarily due to the lack of transparency in the relationships between the tobacco industry and governmental officials. Politicians still consider the tobacco industry a "normal" industry like any other that should be supported.

It is critical that we disseminate the results of relevant public opinion studies. Georgia has a very limited number of such studies, and most decision-makers have no information about these data. Most are still afraid of resistance from the smoking electorate. This is a myth created by tobacco industry representatives and spread among policy-makers. Most politicians don't know the real benefits of public support and participation, and consequently don't take them into account during policy deliberations.

The media in Georgia is weak in this regard: it has no strong positions and some media outlets continue to receive funding from the tobacco industry, which in turn creates serious barriers for strong media advocacy work. Our study's conclusions were not surprising: though the public strongly supports anti-smoking measures, the government doesn't take this support seriously and does not use it to create appropriate policy and legislation. A new window of opportunity opened in 2016 with the creation of a new draft law in the Georgian Parliament. If Parliament passes this law, it will confirm the importance of our conclusions.

Implications for further research

This dissertation shows that the Georgian public overwhelmingly supports tobacco control measures. As with many controversial issues in which strong interests are at stake, the media may influence the public perception of these issues. Often only sensational stories and controversial positions qualify as "newsworthy" in Georgian media. This kind of distortion is relevant to the questions at hand: decision-makers are also members of the public, and they may be prone to misjudge public opinion on issues where a loud minority manages to make a lot of news. If smokers, tobacco retailers, or cigarette manufacturers complain in the media about infringement on their freedom due to tobacco control, decision-makers may perceive that support for tobacco control is lower than it actually is. The potential for situations like this only increases the importance of the present study, which relies on relatively unbiased estimates of public support for tobacco control.

The results of our qualitative study show that public opinion has very little influence on decision-making related to public health, and to tobacco control in particular.

Members of Parliament confirm, for example, that economic interests carry more weight than public interest. High officials from the Ministry of Health, however, as well as experts in the field, emphasize the importance of including the public in decision-making processes and listening to public opinion.

This dissertation is essential in the Georgian context because no amount of public opinion results from other countries will have as much impact on Georgian decision-makers as local findings will. Many low-income and middle-income countries in Eastern Europe are struggling with the same forces encouraging tobacco consumption that are at work in Georgia.

We need continued study of public opinion on this matter in Georgia and persistent media attention about study results. As a general strategy we recommend generating data regularly, reporting them to the public, and allowing them to bring pressure on policy-makers so that they will become less indifferent to public opinion and more resistant to the tobacco lobby. Georgia needs on-going surveys of adults and children (school-based surveys) regarding rates of substance use and abuse in society (including tobacco). These surveys should collect data not only about behaviour, but also about knowledge, intentions, and attitudes in this area.

We had no opportunity to develop new mechanisms for calculating the degree of consideration of public opinion in policy-making processes. More observations and interviews are needed alongside periodic collection of relevant data. For this study we only used existing methods and theories.

Finally, we can conclude that while some decision-makers care about public opinion, most are largely ignorant of the public's support for tobacco control. To address this problem we must develop a public health strategy that ensures the continued collection of public opinion data and includes efforts to educate decision-makers about the findings.

A future tobacco control strategy should use communication and educational campaigns to activate the public in ways that reinforce its fundamental right to a smoke-free environment. This strategy should involve petitions, public awareness-raising campaigns that demand no-smoking policies, social-advertisements,

educational programs in schools, community-based interventions, and on-going public opinion surveys on different tobacco control questions.

Tobacco control advocates should disseminate public opinion data and indications of public support by using direct contact with policy-makers. These findings should also be disseminated through mass-media targeting decision-makers and through capacity-building work for politicians.

Source of data

Abelson, J., Forest, P., Eyles, J., Smith, P., et al. (2003): Deliberations about deliberative methods: issues in the design and evaluation of public participation processes. *Social Science & Medicine*, 57:239-251.

Anderson, P., & Hughes, J. (2000): Policy interventions to reduce the harm from smoking. *Addiction*, 95:S9-S11.

Andreeva, T., Kharchenko, N., Krasovsky, K., et al. (2010): Global Adult Tobacco Survey (GATS), Ukraine. WHO, Country Report 2010. Retrieved from: http://www.who.int/tobacco/surveillance/en_tfi_gats_ukraine_report_2010.pdf

Arbogast, R. (1986): A proposal to regulate the manner of tobacco advertising. *J Health Polit Policy Law*, 11:393-422.

Arceneaux, K. (2002): Direct Democracy and the Link between Public Opinion and State Abortion Policy. *State Politics and Policy Quarterly*, Vol. 2(4):372-387.

Ashley, M., Cohen, J., Bull, Sh., et al. (2000): Knowledge about tobacco and attitudes toward tobacco control. How different are smokers and nonsmokers? *Canadian Journal of Public Health*, 91(5), 376- 80.

Attridge-Stirling, J. A. (2001): Thematic networks: an analytic tool for qualitative research. Sage. *Qualitative Research*, 1(3):385-405.

Bakhturidze, G., Mittelmark, M., Aaro, L., & Peikrishvili, N. (2013): Attitudes towards smoking restrictions and tobacco advertisement bans in Georgia. *PMJ Open*, Vol 3:1-9. DOI: 10.1136/ bmjopen-2013-003461

Bakhturidze, G., Peikrishvili, N., & Mittelmark, M. (2016): The influence of public opinion on tobacco control policy-making in Georgia: Perspectives of governmental and non-governmental stakeholders. *Tob. Prev. Cessation*; 2(January):1. DOI: www.dx.doi.org/10.18332/tpc/61580

Bakhturidze, G., Peikrishvili, N., Mittelmark, M., & Aarø, L. (2012): The public's attitudes towards tobacco sales prohibitions: Evidence from a nationally representative survey in the former Soviet state of Georgia. *Tobacco control and public health in Eastern Europe*, Vol.2 (2):99-108. DOI:10.6084/m9.figshare.97675

Bakhturidze, G., Ross, H., What, J., et al. (2008): Population survey on tobacco economy and policy in Georgia. FCTC Implementation and Monitoring Center in Georgia: 4-22.

Baumgartner, F. (2015): John Kingdon and the Evolutionary Approach to Public Policy and Agenda-Setting. *University of North Carolina at Chapel Hill*.

Binderkrantz, A., & Krøyer, S. (2012): "Customizing strategy: Policy goals and interest group strategies." *Interest groups & Advocacy*, 1(1):115-138.

- Bishop, P., & Davis, G. (2002): Mapping Public Participation in Policy Choices. *Australian Journal of Public Administration*, 61(1):14-29.
- Borland, R., Yong, H., Siahpush, M., et al. (2006): Support for and reported compliance with smoke-free restaurants and bars by smokers in four countries: findings from the International Tobacco Control (ITC) Four Country Survey. *Tob Control*, 15(Suppl III):iii34-41.
- Brandstetter, S., McCool, M., Wise, M., & Loss, J. (2012): Australian health promotion practitioners' perceptions on evaluation of empowerment and participation. *Health Promotion International*.
- Braverman, M., & Aarø, L. (2004): Adolescent smoking and exposure to tobacco marketing under a tobacco advertising ban: findings from 2 Norwegian national samples. *Am J Public Health*, 94:1230-8.
- Brenner, H., Born, J., Novak, P., et al. (1997): Smoking behavior and attitude toward smoking regulations and passive smoking in the workplace. A study among 974 employees in the German metal industry. *Prev Med*, 26:138-43.
- Brooks, C. (2006): Voters, Satisficing, and Policymaking: Recent Directions in the Study of Electoral Politics. *Annual Review of Sociology*, Vol. 32:191-211.
- Brooks, J. E., Manza, J. (2006): Social policy responsiveness in developed democracies. *Am Sociol Assoc*, Vol. 71:474-94.
- Brooks, D., & Mucci, L. (2001): Support for smokefree restaurants among Massachusetts adults, 1992-1999. *Am J Public Health*, 91:300-3.
- Bryman, A. (2007): Barriers to integrating quantitative and qualitative research. *Journal of Mixed Methods Research*, Vol. 1(1):8-22.
- Burstein, P. (1998): Bringing the public back in: should sociologists consider the impact of public opinion on public policy? *Oxford University Press*, Vol. 77:27-62.
- Burstein, P. (2003): The impact of public opinion on public policy: a review and an agenda. *Political Res*, Vol. 56:29-40.
- Burstein, P. (2006): Why estimates of the impact of public opinion on public policy are too high: empirical and theoretical implications. *Oxford University Press*, Vol. 84:2273-89.
- Burstein, P. (2010): Public opinion, public policy, and democracy: old expectations and new. *Handbook of politics*. Springer:2-16.
- Canes-Wrone, B., & Shotts, K W. (2004): The conditional nature of presidential responsiveness to public opinion. *Am J Political Sci*, 48: 690-706.
- Cassels, A. (1995): Health Sector Reform: Key Issues in Less Developed Countries. *Journal of International Development*, Vol. 7(3):329-347.

- Chanturidze, T., Ugulava, T., Duran, A., & Ensor, T. (2009): Georgia Health System Review. Health Systems in Transition, The European Observatory on Health Systems and Policies 11(8).
- Chapman, S., Haynes, A., Derrick, G., et al. (2012): Reaching “an audience that you would never dream of speaking to”: influential public health researchers’ views on the role of news media in influencing policy and public understanding. *Journal of Health Communication*: 1-17.
- Chapman, S., & Wakefield, M. (2001): Tobacco control advocacy in Australia: Reflections on 30 years of progress. *Health Education and Behavior*, 28:274–289.
- Chuchalin, A., Sakharova, G., Antonov, N., et al. (2009): Global Adult Tobacco Survey (GATS), Russian Federation. WHO, Country Report 2009. Retrieved from: http://www.who.int/tobacco/surveillance/en_tfi_gats_russian_countryreport.pdf
- Contandriopoulos, D. (2004): A sociological perspective on public participation in health care. *Soc Sci Med.*, 58(2):321-30.
- Cook, F., Tyler, T., Goetz, E, et al. (1983): Media and Agenda Setting: Effects on the Public, Interest Group Leaders, Policy Makers, and Policy. *Public Opinion Quarterly*, Vol. 47:16-35.
- Cornwell, B. (1997): The use of Sponsorship-linked marketing by tobacco firms: international public policy issues. *J Consum Aff.*, 31: 238–54.
- Cragg, L., Davies, M., & MacDowall, W. (2013): Health Promotion Theory. *Open University Press*.
- Creswell, J. (2007): *Qualitative Inquiry & Research Design. Choosing among five Approaches*. 2nd ed. Sage Publications, Inc.
- Creswell, J. (2014): *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. 4th ed. Sage Publications, Inc.
- Creswell J W et al. (2007): *Advanced mixed methods research design. The Mixed Methods Reader*.
- Creswell, J. W., Plano, Clark, V. L., Guttman, M., Hanson, W. (2003): Advanced mixed methods research designs. In: *Tashakkori A, Teddlie C, eds. Handbook on Mixed Methods in the Behavioral and Social Sciences (209-240)*. Thousand Oaks, Calif: Sage Publications.
- Danishevski, K., Gilmore, A., & McKee, M. (2008): Public attitudes towards smoking and tobacco control policy in Russia. *Tob Control*, 17:276–83.
- Darren, H., & Binderkrantz, A. (2011): "Explaining breadth of policy engagement: patterns of interest group mobilization in public policy." *Journal of European Public Policy*, 18(2): 201-219.

Demin, A.K., Demina, I.A., Demin, A.A., Demin, A.A. & Demina, I.A. (2012): Russia: Deal is Tobacco. Investigation of Mass Killing. Moscow: Russian Public Health Association.

DiFranza, J.R., Wellman, R.J., Sargent, J.D., et al. (2006): Tobacco promotion and the initiation of tobacco use: assessing the evidence for causality. *Pediatrics*, 117:e1237-48.

Djibuti, M., Gotsadze, G., Mataradze, M. & Menabde, G. (2010): Human resources for health challenges of public health system in Georgia. *Human Resources for Health*, Vol. 6(8):1-7.

Druckman, J., & Jacobs, L. (2006): Lumpers and Splitters: The Public Opinion Information That Politicians Collect and Use. *The Public Opinion Quarterly*, Vol. 70(4):435-476.

Dumitrescu, A. (2003): Providing evidence for high level decision making health evidence network of the World Health Organization Regional Office for Europe In Scintee, S., & Galan, A. (Eds.), *Public Health Strategies: A Tool for Regional Development* (89-105). Hans Jacobs Publishing Company.

Endgame Conference. (2013): International Conference on Public Health Priorities in the 21st Century: the Endgame for Tobacco. New Delhi, WHO. Retrieved from: http://www.who.int/dg/speeches/2013/tobacco_endgame_20130911/en/

Eriksen, M., & Cerak, R. (2008): The Diffusion and Impact of Clean Indoor Air Laws. *Annu. Rev. Public Health*, 29:171-85.

Eriksen, M., & Chaloupka, F. (2007): The Economic Impact of Clean Indoor Air Laws. *CA Cancer J Clin.*, 57:367-378.

Erikson, R. (1976): "The Relationship between Public Opinion and State Policy: A New Look Based on Some Forgotten Data." *American Journal of Political Science*, 20: 25-36.

Eriskon, R., & Tedin, K. (2015): American Public Opinion: Its Origins, Content and Impact. Taylor & Francis Group.

FCTC Secretariat Mission Report for Georgia. (2013): Retrieved from: <http://ncdc.ge/pdf/ENG631.pdf>

Field, A. (2009). *Discovering Statistics using SPSS*. 584-626.

Gamkrelidze, A., Atun, R., Gotsadze, G., & MacLehose, L. (2002): Health Care Systems in Transition. European Observatory on Health Care Systems, Vol. 4(2).

GATS-Russia. (2009): Global Adult Tobacco Survey (GATS), Russian Federation. (2009): Country Report. WHO, 2009. Retrieved from: http://www.who.int/tobacco/surveillance/en_tfi_gats_russian_countryreport.pdf

GATS-Ukraine. (2010): Global Adult Tobacco Survey (GATS), Ukraine. Country Report. WHO, 2010. Retrieved from: http://www.who.int/tobacco/surveillance/en_tfi_gats_ukraine_report_2010.pdf

GCAO - Georgian Code of Administrative Offences. (2016): Retrieved from: <https://matsne.gov.ge/ka/document/view/28216>

GLA - Georgian Law on Advertisement. (1998): Retrieved from: <https://matsne.gov.ge/ka/document/view/31840>

Gilmore, A., Pomerleau, J., McKee, M., *et al.* (2004) Prevalence of Smoking in 8 Countries of the Former Soviet Union: Results From the Living Conditions, Lifestyles and Health Study. *American Journal of Public Health*, 94(12):2177-87.

GLTC – Georgian Law on Tobacco Control. (2003): Retrieved from: <https://matsne.gov.ge/ka/document/view/16126>

GLTC - Georgian Law on Tobacco Control. (2010): Retrieved from: <https://matsne.gov.ge/ka/document/view/1160150>

Governmental Decree N58, 15.03.13. (2013): Decree on Establishment of Governmental Commission regarding strengthening tobacco control activities in Georgia. Retrieved from: <https://matsne.gov.ge/ka/document/view/1874677>

Governmental Decree N196, 30.07.13. (2013): Decree to prove Tobacco Control Strategy of Georgia. Retrieved from: <https://matsne.gov.ge/ka/document/view/1978972>

Governmental Decree N304, 29.11.13. (2013): Decree to prove Tobacco Control Action Plan for 2013-2018. Retrieved from: <https://matsne.gov.ge/ka/document/view/2096830>

Gray, V., Lowery, D., Fellowes, M., & McAtee, A. (2004): Public Opinion, Public Policy, and Organized Interests in the American States. *Political Research Quarterly*, Vol. 57(3):411-420.

Gruning, T., Strunck, C., and Gilmore, A. B. (2008): Puffing Away? Explaining the Politics of Tobacco Control in Germany. *German Politics*, 17(2):140-164.

Gzirishvili, D., & Mataradze, G. (1998): Healthcare Reform in Georgia. Curatio International Foundation. Retrieved from: <http://curatiofoundation.org/wp-content/uploads/2015/09/117.pdf>

Harris, F., MacKintosh, A.M., Anderson, S., *et al.* (2006): Effects of the 2003 advertising/promotion ban in the United Kingdom on awareness of tobacco marketing: findings from the International Tobacco Control (ITC) Four Country Survey. *Tobacco Control*, 15(Suppl III):iii26–iii33.

Hauschild, T., & Berkhout, E. (2009): Health-Care Reform in Georgia. A Civil-Society Perspective: Country Case Study. Oxfam International. Retrieved from: <https://www.oxfam.org/sites/www.oxfam.org/files/healthcare-reform-georgia-report-0905.pdf>

Howlett, M., & Ramesh, M. (2003). Studying public policy – policy cycles and policy subsystems. *Oxford University Press*: 129, 163, 185-204.

Institute of Social Studies and Analysis-ISSA. (2016a): Study on public attitude's related to smoke free environment in Georgia. Retrieved from: http://ncdc.ge/AttachedFiles/თამბაქოსგან თავისუფალ გარემოსთან დაკავშირებით სამოგადოების დამოკიდებულების შესწავლა_9fca64c3-c115-4064-a848-f51dbc2fed2d.pdf

Institute of Social Studies and Analysis-ISSA. (2016b): Influence of tobacco products advertisement and promotion to children in the places of sale in Georgia. Retrieved from: http://ncdc.ge/AttachedFiles/გაყიდვის ადგილებში თამბაქოს ნაწარმის რეკლამის და პოპულარიზაციის ზეგავლენა ბავშვებზე_9a208465-db07-4960-9492-fd5dd0ba1c5f.pdf

Jha, P., & Chaloupka, F. (2000): Tobacco control in developing countries. *Oxford University Press*, New York, 46-61.

Johnson, M., Brace, P., & Arceneaux, K. (2005): Public opinion and dynamic representation in the American States: the case of environmental attitudes. *Soc Sci Q*, Vol. 86:88–105.

Jonson, B., & Onwuegbuzie, A J. (2004): Mixed methods research: A research paradigm whose time has come. *Educational Researcher*, Vol. 33 (7): 14-26.

Joossens, L., & Raw, M. (2007): Progress in tobacco control in 30 European countries, 2005 to 2007. *Swiss Cancer League*, 1–24.

Kemoklidze, N. (2013): Georgia's Parliamentary Elections – Democracy in Action? University of Birmingham. Retrieved from: <http://www.birmingham.ac.uk/research/perspective/georgias-parliamentary-elections-kemoklidze2.aspx>

Kinder, D., & Sears, D. (1985): Public opinion and political action. *Handb Soc Psychol*, 2:659–741.

Kingdon, J. W. (2003): *Agendas, Alternatives and Public Policies*. 2nd ed. Longman, New York.

Kingdon, J. W. (2011): *Agendas, Alternatives, and Public Policies*. Longman classics in political science, 196-208.

Lam, T H., Janghorbani, M., Hedley, A J., et. al. (2002): Public opinion on smoke-free policies in restaurants and predicted effect on patronage in Hong Kong. *Tob Control*, 11:195–200.

Laforge, G.R., Velicer, F.W., Levesque, A.D., et al. (1998): Measuring support for tobacco control policy in selected areas of six countries. *Tob Control*, 7:241–6.

Lazuras, L., Rodafinos, A., Panagiotakos, D B., et al. (2009): Support for smoke-free policies in a pro-smoking culture: findings from the European survey on tobacco control attitudes and knowledge. *Int J Public Health*, 54:403–8.

- Lerberghe, V., & Ferrinho, P. (2002): From human resource planning to human resource impact assessment: changing trends in health workforce strategies. *Cah. Socio. Démo. Méd.* 42:167-178.
- Litva, A., Coast, J., Donovan, J., et al. (2002): 'The public is too subjective': public involvement at different levels of health-care decision making. *Soc Sci Med.*, 54(12):1825-37.
- Manza, J., Cook, L., & Page, B. (eds.) (2002): *Navigating Public Opinion: Polls, Policy, and the Future of American Democracy*. Oxford University Press.
- McAllister, I. (1995): Public opinion in Australia on restricting smoking in public places. *Tob Control*, 4:30–5.
- MoLHSA of Georgia. (2011): *Georgia-National Health Care Strategy 2011-2015*. Access to Quality Health Care. Retrieved from: <https://extranet.who.int/nutrition/gina/sites/default/files/GEO%202011%20GEORGIA%20-%20NATIONAL%20HEALTH%20CARE%20STRATEGY%202011-2015.pdf>
- Monroe, A. (1998): Public Opinion and Public Policy, 1980-1993. *Public Opinion Quarterly*, 62(1): 6-28.
- Moodie, C., MacKintosh, A., Brown, A., et al. (2008): Tobacco marketing awareness on youth smoking susceptibility and perceived prevalence before and after an advertising ban. *Eur J Public Health*, 18:484–90.
- Muggli, M., Hurt, R., & Blanke, D. (2003). Science for hire: A tobacco industry strategy to influence public opinion on secondhand smoke. *Nicotine & Tobacco Research*, 5:303–314
- NCDC of Georgia. (2010): *Evaluation of Health Promotion and Communication system in Georgia*. UNICEF, Tbilisi, Georgia.
- NSOG-National Statistics Office of Georgia. (2012): *Population data by years*. Retrieved from: http://www.geostat.ge/index.php?action=page&p_id=152&lang=eng
- Page, B. I., & Shapiro, R. Y. (1992): *The rational public: Fifty years of trends in Americans' policy preferences*. Chicago, IL: University of Chicago Press.
- Pallant, J. (2007). *SPSS Survival Manual*. *Open University Press*: 118- 200.
- Parliament of Georgia. (2016): *Draft law on tobacco control*. Retrieved from: <http://info.parliament.ge/file/1/BillReviewContent/123031>
- Paulik, E., Maroti-Nagy, A., Nagymajteni, L., et al. (2012): Support for population level tobacco control policies in Hungary. *Cent Eur J Public Health*, 20:75–80.
- Pederson, U., Bull, Sh., Ashley, M., & Lefcoe, N. (1987): A Population Survey in Ontario Regarding Restrictive Measures on Smoking: Relationship of Smoking Status to Knowledge, Attitudes and Predicted Behaviour. *International Journal of Epidemiology*, 16(3).

- Perlstadt, H., & Holmes, R. (1987): The role of public opinion polling in health legislation. *Am J Public Health*, 77:612–14.
- Petry, F., & Bastein. (2009): From Pollsters to Journalists: Inaccuracies in Horse-race Coverage During the 2008 Canadian Election. Retrieved from: <http://ssrn.com/abstract=1473967>
- Petry, F., & Mendelsohn, M. (2004): Public Opinion and Policy Making in Canada, 1995-2001. *Canadian Journal of Political Science*, 27(3):505-29.
- Pross, P. (1986): *Group Politics and Public Policy*. Toronto, ON: Oxford University Press.
- Raminashvili, D., Bakhturidze, G., Zarnadze, I., et al. (2014): Promoting health in Georgia. *Global Health Promotion*, 21(1):5-12.
- Reddy, P., Meyer-Weitz, A., & Yach, D. (1996): Smoking status, knowledge of health effects and attitudes towards tobacco control in South Africa. *S Afr Med J*, 86:1389–93.
- Reid, D., Killoran, A., McNeill, A., & Chambers, J. (1992): Choosing the most effective health promotion options for reducing a nation's smoking prevalence. *Tobacco Control*, 1:185-197.
- Report of Public Defender (Ombudsman) of Georgia. (2015): The Report of the Public Defender of Georgia on the Situation of Protection of Human Rights and Freedoms in Georgia. Retrieved from: <http://www.ombudsman.ge/uploads/other/3/3652.pdf>
- Rukhadze, T. (2013): An overview of the health care system in Georgia: expert recommendations in the context of predictive, preventive and personalised medicine. *EPMA Journal. A journal of predictive, preventive and personalized medicine*, 4:8.
- Saffer, H., & Chaloupka, F. (2000): The effect of tobacco advertising bans on tobacco consumption. *J Health Econ.*,19:1117–37.
- Saloojee, Y., & Dagli, E. (2000): Tobacco industry tactics for resisting public policy on health. *Bull World Health Organ*, 78:902–10.
- Shalutashvili, A., Ross, H., Watt, J., Hilborn, S., Bakhturidze, G., Kobeshavidze, G., & Grigalashvili, Z. (2007): Tobacco Economic Study in Georgia since the Fall of the Soviet Union. Study Report organized by the FCTC Implementation and Monitoring Center in Georgia.
- Soroka, S. N., & Wlezien, C. (2004): Opinion representation and policy feedback: Canada in comparative perspective. *Can Political Sci Assoc*, Vol. 37:531–59.
- Sparks, M. (2012): Governance beyond governments: the role of NGOs in the implementation of the FCTC. *Global Health Promotion Supp*, (1):67-72.

- Stead, L.F., Lancaster, T. (2008): Interventions for preventing tobacco sales to minors (Review). The Cochrane Collaboration. *Published by John Wiley & Sons, Ltd.*
- Stein E. (2005): The politics of policies: economic and social progress in Latin America. *Washington, DC: Inter-American Development Bank*:23–181.
- Stimson, J. A., Mackuen, M. B., & Erikson, R. S. (1995): Dynamic Representation. *The American Political Science Review*, 89(3):543–565.
- Studlar, D. (2006): The Political Dynamics of Tobacco Control in Australia and New Zealand: Explaining Policy Problems, Instruments, and Patterns of Adoption. *Australian Journal of Political Science*, 40(2):255-274.
- Swallow, A. (Edit) (2010): Lessons Learned: Developing the Health Promotion Strategy and Action Plan in Georgia. Oxford Policy Management briefing notes. Retrieved from: http://www.opml.co.uk/sites/default/files/bn2010-04_0.pdf
- Sweanor, D., & Kyle, K. (2003): Legislation and Applied Economics in the Pursuit of Public Health: Canada, *Tobacco Control Policy: Strategies, Successes, and Setbacks* (71-96). World Bank and RITC.
- Teddlie, Ch., & Tashakkori, A. (2003): Major issues and controversies in the use of mixed methods in the social and behavioral sciences. In: *Handbook on mixed methods in social and behavioral research*. Sage.
- TFK - Tobacco Free Kids. (2013): Tobacco burden facts: RUSSIA. Retrieved from: http://global.tobaccofreekids.org/files/pdfs/en/Russia_tob_burden_en.pdf
- Trotter, L., & Mullins, R. (1996): Environmental tobacco smoke: surveys of restaurant patrons and hospitality industry personnel. *Quit Eval Stud*, 9:27–41.
- U.S. Department of Health and Human Services (DHHS). (2014): The Health Consequences of Smoking 50 Years of Progress: A Report of the Surgeon General. Retrieved from: <http://www.surgeongeneral.gov/library/reports/50yearsofprogress/>
- Vaidya, A., & Pradhan, B. (2008): Community participation in health: A brief review and the experience of Kathmandu Medical College with the Duwakot community. *Kathmandu University Medical Journal*, Vol. 6(4-24):526-532.
- Wakefield, M., Chaloupka, F., Kaufman, N., et al. (2000): Effect of restrictions on smoking at home, at school, and in public places on teenage smoking: cross sectional study. *BMJ*, 321:333-7.
- Warren, C W., Jones, N R., Peruga, A., et al. (2008): Global youth tobacco surveillance, 2000–2007. *MMWR Surveill Summ*, 57 (SS01):1–21.
- Weakliem, D L. (2003): Public opinion research and political sociology. *Research in Political Sociology*, 12:49–80.

Weymouth, S. (2012); Competition Politics: Interest Groups, Democracy, and Antitrust Reform in Developing Countries. *The Antitrust Bulletin, Forthcoming*:1-38.

Wlezien, Ch. (1995): The Public as Thermostat: Dynamics of Preferences for Spending. *American Journal of Political Science*, 39:981-1000.

WHO. (1986): The Ottawa Charter for Health Promotion. Retrieved from: <http://www.who.int/healthpromotion/conferences/previous/ottawa/en/>

WHO. (2005): WHO framework convention on tobacco control. Geneva: WHO, 2005:1–16. Retrieved from: http://www.who.int/tobacco/framework/WHO_FCTC_english.pdf

WHO. (2008): WHO Report on the Global Tobacco Epidemic. The MPOWER package. Retrieved from: http://apps.who.int/iris/bitstream/10665/43818/1/9789241596282_eng.pdf

WHO. (2009): Youth and Tobacco. Retrieved from: <http://www.who.int/tobacco/research/youth/en/>

WHO. (2012): Tobacco Industry Interference: A Global Brief. Retrieved from: http://apps.who.int/iris/bitstream/10665/70894/1/WHO_NMH_TFI_12.1_eng.pdf

WHO. (2013): WHO Director-General considers the tobacco endgame. Retrieved from: http://www.who.int/dg/speeches/2013/tobacco_endgame_20130911/en/

WHO. (2015): WHO global report on trends in prevalence of tobacco smoking. Retrieved from: http://apps.who.int/iris/bitstream/10665/156262/1/9789241564922_eng.pdf

WHO. (2016): Tobacco Fact Sheet. Retrieved from: <http://www.who.int/mediacentre/factsheets/fs339/en/>

WHO/Euro. (2009): Georgia - Health systems performance assessment. Retrieved from: http://www.euro.who.int/_data/assets/pdf_file/0012/43311/E92960.pdf

WHO/Euro. (2013): European tobacco control status report 2013. Retrieved from: http://www.euro.who.int/_data/assets/pdf_file/0011/235973/European-Tobacco-Control-Status-Report-2013-Eng.pdf

WHO/FCTC. (2016): Parties to the WHO Framework Convention on Tobacco Control. Retrieved from: http://www.who.int/fctc/signatories_parties/en/

WHO/IARC. (2009): Evaluating the Effectiveness of Smoke-free Policies. *International Agency for Research on Cancer*, Vol. 13.

WHO TFI - Tobacco Free Initiative. (2015): Tobacco control in Russian Federation. Retrieved from: <http://www.who.int/tobacco/about/partners/bloomberg/rus/en/>

Yang, Y., Li, L., Yong, H., et al. (2010): Regional differences in awareness of tobacco advertising and promotion in China: findings from the ITC China Survey. *Tob Control*, 19:117–24.

PAPERS I-III

PAPER I

Bakhturidze, G. D., Peikrishvili, N. T., Mittelmark, M. B., & Aarø, L. E. (2012). The public's attitudes towards tobacco sales prohibitions: Evidence from a nationally representative survey in the former Soviet state of Georgia. [Original study]. *Tobacco Control and Public Health in Eastern Europe*, 2(2), 99-108. doi:10.6084/m9.figshare.97675

The public's attitudes towards tobacco sales prohibitions: Evidence from a nationally representative survey in the former Soviet state of Georgia

George D. Bakhturidze, Nana T. Peikrishvili, Maurice B. Mittelmark, Leif E. Aarø

BACKGROUND: In the Caucasus region country of Georgia, no data on public opinion regarding tobacco sales restrictions have been available until now. The aim of the study is to provide data from a nationally representative sample including non-smokers, ex-smokers and current smokers, on their level of support for restricting tobacco sales.

METHODS: 1,588 people aged 13-70 were interviewed at home about their level of agreement with eight possible tobacco sales restrictions, which were combined to create a dichotomous scale indicating low agreement (agree with none to three of eight restrictions) or high agreement (agree with four or more of eight restrictions). Levels of agreement were analyzed by demographic segments defined by age, gender, education and income and by tobacco use status.

RESULTS: Across all eight forms of tobacco sales restrictions, the average support for tobacco sales restrictions was 85.2% which is a high level of support.

Among smokers, 71% of women and 87% of men indicated a high level of agreement for restricted

tobacco sales; among occasional smokers 54% and 55% respectively. Above 95% of female and male ex-smokers and never smokers expressed high level of agreement with sales restrictions.

After adjustment for other predictors, agreement was significantly associated with age (more agreement with higher age) and smoking status (more agreement among never-smokers, less in current smokers), while there were no significant differences in agreement by gender, education, and income.

DISCUSSION: It is of high importance for Georgia to fully implement the Framework Convention on Tobacco Control, including strong sales restrictions, and there is good evidence of public support for doing so.

CONCLUSION: The present findings indicate to Georgian public health authorities that the support for tightened tobacco sales restrictions is high.

KEYWORDS: tobacco; tobacco control; tobacco control policy; public attitude; sales restriction; tobacco sales restriction; youth access; law; FCTC.

Отношение общественности к запрету продаж табака: данные национально-репрезентативного опроса в Грузии

George D. Bakhturidze, Nana T. Peikrishvili, Maurice B. Mittelmark, Leif E. Aarø

УДК 303.425:[339.1:663.97](479.22)

АКТУАЛЬНОСТЬ: В стране кавказского региона Грузии до настоящего времени не было результатов исследований об отношении общественности к ограничению продаж табачных изделий. Целью данного исследования является получение сведений по национально-репрезентативной выборке, включающей некурящих, бывших курильщиков и нынешних курильщиков, об уровне поддержки ограничений продажи табака.

МЕТОДЫ: 1588 человек 13-70 лет были опрошены у них дома об их согласии с восьмью возможными ограничениями продаж, эти ответы затем были скомбинированы для получения dichotomической переменной, противопоставляющей низкий уровень согласия (от нуля до трех из восьми ограничений) и высокий уровень

(согласие с четырьмя и более из восьми ограничений). Уровень согласия сопоставляли по демографическим группам, определяемым возрастом, полом, образованием и уровнем доходов, а также в зависимости от курительного статуса.

РЕЗУЛЬТАТЫ: Средний уровень согласия при сравнении восьми вариантов ограничений продаж табака составил 85,2%, что составляет высокий уровень поддержки.

Среди курильщиков 71% женщин и 87% мужчин обозначили высокий уровень поддержки ограничений продаж, среди эпизодических курильщиков 54% и 55% соответственно. Среди бывших курильщиков и некурящих более 95% респондентов сообщили о высоком уровне поддержки ограничений продаж табака.

После учета других факторов, уровень согласия определялся возрастом (большая поддержка выражалась людьми старшего возраста) и курительным статусом (более высокий уровень согласия выражали никогда не курившие, меньший – нынешние курильщики), при этом не было существенных различий в зависимости от пола, образования и уровня доходов.

ОБСУЖДЕНИЕ: Важно, чтобы Грузия полностью выполнила требования Рамочной Конвенции по контролю над табаком, включая ограничения

продаж, и данное исследование свидетельствует об общественной поддержке этих действий.

ЗАКЛЮЧЕНИЕ: Полученные результаты указывают органам здравоохранения Грузии на высокую поддержку ужесточения ограничений продаж.

КЛЮЧЕВЫЕ СЛОВА: табак; контроль над табаком; политика контроля над табаком; отношение общественности; ограничение продаж; ограничение продажи табака; доступ молодежи; РКБТ.

INTRODUCTION

The World Health Organization (WHO) terms tobacco consumption and related health burden 'the 20th century's epidemic'; even after decades of public health work to reduce tobacco use, it remains the number one cause of avoidable deaths worldwide (WHO, 2012). Nevertheless, health promotion strategies combining public education and healthy public policy are effective in reducing tobacco use as experienced in the USA, Canada, and Australia (Ashley, et al., 2000; Borland, 2006; Brooks, 2001; Laforge, et al., 1998). The Framework Convention on Tobacco Control (FCTC) emphasizes the importance of combining tobacco demand reduction strategies with tobacco supply reduction ones (WHO, 2005).

Experience of countries that have done well in reducing tobacco consumption shows that key policy elements in a comprehensive approach to the tobacco problem include specific actions to increase tobacco prices and taxes, to protect smokers and non-smokers from exposure to tobacco smoke, to restrict advertising, promotion and sponsorship, to restrict sales to minors, and to conduct of education, communication, and public awareness campaigns (Borland, 2006; Brooks, 2001; Laforge, et al., 1998; WHO, 2005).

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 transition toward a market economy and the arrival of the international tobacco industry, whose costly promotional campaigns have thrived in the absence of legislative restrictions on tobacco industry behavior. In 2001, the prevalence of tobacco use among men was 53.3% and rose to 59.8% in 2008. Among women, the prevalence increased from 6.3% to 14.9% in the same period (Bakhturidze, et al., 2008; Gilmore, et al., 2004).

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 (Warren, et al., 2008).

Thus, the trend in Georgia is opposite to that in countries with long-running comprehensive approaches to tobacco control. Ban of tobacco sales to minors and other tobacco control measures have been recently enacted but not enforced (Bakhturidze, et al., 2008).⁷

The influence of public opinion on policy-making

From the public health perspective, Georgia is in need of better tobacco

control legislation with effective enforcement. Such legislation may be enacted as a result of policy decision-making, which is the subject of several theories in the literature on public policy-making (Anderson, 2006). Factors that are hypothesized to be of importance to collective decision-making are values at different levels (organizational, professional, personal, public interest, ideological), political party affiliation, constituency interests, deference to others, decision rules and public opinion, amongst other factors (Anderson, 2006; Kingdon, 2003; Stein, et al., 2005).

In this context, public opinion is defined as "those public perspectives or viewpoints on policy issues that public officials consider or take into account in making decisions" (Anderson, 2006, p. 133). Public opinion may be expressed in many ways, amongst which surveys and polls are used to elicit public opinion on specific issues. However, the public may be not sufficiently informed about an issue to express a meaningful opinion about it, and hence surveys and polls may be not able to illuminate public opinion in a comprehensive way (Stein, et al., 2005; Kinder & Sears, 1985).

The potential importance of public opinion survey data for tobacco control is suggested by Kingdon's (1995) theory of agenda setting. Based on his research in California in the USA, Kingdon described the

policy-making process as an ongoing one, where streams of policies, problems, and politics constantly mingle together in a primeval soup. His model attempts to capture the organic, constantly changing nature of political agenda-setting (Kingdon, 2003).

Kingdon's model presents streams of policies, problems, and politics as largely independent of one another, yet coupled at critical junctures to yield policy change. The term Kingdon used for these critical junctures is 'policy window', a moment when external or internal forces push an issue to the top of the political agenda.

In theory, at least, convincing claims about public opinion can illuminate problems, like that of the harm tobacco does to health, sufficiently that they help to open a policy window that might otherwise not open. Thus, with regard to tobacco control policy-making, public opinion favoring or not favoring certain control measures may be expected to have some influence on the degree to which tobacco control rises or falls on the political agenda, interacting with the host of other factors that have impact on political agenda-setting.

In the arena of tobacco control, public opinion data do seem to have played a significant role in many countries in helping to shift policy-makers' perceptions about the public's normative beliefs and attitudes towards tightened tobacco control legislation. Survey data from the USA, Canada, the UK, and Australia indicate that even smokers supported bans on smoking in restaurants and bars if they lived in places with such bans, and many studies show that bans in workplaces, public transport and in public spaces such as shopping malls are widely supported by the public as well (Borland, 2006;

Brooks, 2001; Trotter & Mullins, 1996; Lam, et al., 2002; Brenner, et al., 1997). Support for tobacco control is evident among smokers and non-smokers across various age groups from students to the adult population (Rigotti, et al., 2003; Trotter & Mullins, 1996). Similarly, data from Canada shows that smokers demonstrate high compliance with smoking bans even if non-smokers were less optimistic (Ashley, et al., 2000; Pederson, et al., 1987). Newer types of bans (e.g., in homes and in vehicles carrying children) were supported by up to 77% of respondents in an opinion poll in New South Wales, Australia (Walsh, et al., 2002).

However, it is a truism that 'all politics are local', and no amount of public opinion data from outside Georgia can be expected to have significant influence on health policy-making in Georgia. Furthermore, while the general thrust of evidence from Anglo-Saxon countries suggests strongly that citizens support legislation restricting the use of tobacco, as reviewed above, there are no similar studies in the former Soviet Union, at least so far. One cannot guess what public opinion about tobacco control exists in today's Georgia. This situation prompted the design of the present study aiming to provide unique data on the Georgian public's attitudes towards a range of tobacco sales restrictions options.

Aim

In Georgia, no data on public opinion regarding tobacco sales restrictions have been available until now, and public opinion has therefore played a minor role in policy development processes. This situation is the background for the present report, which aims to provide data from a nationally representative sample including non-smokers,

ex-smokers and current smokers, on their level of support for restricting sales to minors, restricting sales outlets, and increasing penalties for sales restrictions violations.

With this report in hand, public health agencies in Georgia get empirical evidence on the degree to which Georgians support, or do not support tobacco sales restrictions. This report can also be valuable for other countries making the transition to market economies, providing a means to compare levels of public support for tobacco sales prohibitions, and a guide to analyze data on public opinion regarding such prohibitions.

METHODS

Sample

Survey data were collected in January through February, 2008, sponsored by the Open Society – Georgia Foundation's grant program (Bakhturidze, et al., 2008). Two-stage stratified sampling was applied. The 2007 census enumeration districts were used for the sampling frame (National Statistics Office of Georgia, 2012). Each region was divided into homogenous strata consisting of urban/rural and mountainous/lowland settlements.

At the first stage of sampling, 94 enumeration districts were selected out of 16 000 such districts across the whole Georgia. At the next stage, lists of the household addresses were used in each of the selected 94 enumeration districts to further sample households (Bakhturidze, et al., 2008). A household with members aged 13-70 available for interviews was considered a unit of observation: 1655 households were sampled and 1588 people (one member from each household) were actually interviewed (Bakhturidze, et al., 2008).

Data Collection

In-house face-to-face interviews used a standard questionnaire. About 80 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 interviewers.

Study outcomes/determinants

The variables considered in the present report were as follows:

1. Demographic variables age, gender, marital status, education level and income;
2. Smoking status (daily, occasional, ex and never);
3. Levels of agreement with the implementation of eight tobacco sales prohibitions and violation penalties, coded 'yes', 'no', 'don't know' and 'refuse to answer': (1) sales prohibition to children under 18, (2) prohibition of sales by children under 18, (3) prohibition of sales of single cigarettes, (4) prohibition of sales in schools and youth organizations and within 50 meters around these facilities, (5) prohibition of sales in health care settings, (6) prohibition of sales along with children's clothes and toys, (7) increased penalties for violations of the law prohibiting sales to minors and single cigarette sales, and (8) sales of cigarettes only from stores licensed to sell tobacco products.

The denominators equaled numbers of all respondents, including those who refused to answer. For the whole sample (n=1588), the number of study participants who did not answer individual sales restriction attitude items ranged from 17 to 31 (1.1-2.0%). The numerators were all respondents who indicated 'yes' when asked to consider each sales restriction.

Data analysis

The dimensionality of the attitudes towards smoking restriction scale was examined with correlation analysis and with factor analysis (principal axis factoring). The reliability of the scale was estimated with Cronbach's alpha. Using these eight variables a single dichotomous variable was constructed indicating degree of overall support for sales restrictions; those answering 'yes' to three or less of the eight restrictions were coded 'low support' and those answering yes to 4 or more of the eight sales restrictions were coded 'high support'. Differences in levels of support by the demographic variables were estimated using the Chi-square test of independence. Associations between demographic factors and smoking, on the one hand, and support for smoking restriction, on the other, were also examined with a binary multiple logistic regression analysis. SPSS versions 19 and 20 were used for all analyses (Pallant, 2007; Field, et al., 2000).

Ethical clearance

The Georgian Health Promotion and Education Foundation Ethical Committee approved the study protocol. 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 organizers took responsibility with regard to the protection of confidentiality during the collecting, analysis and dissemination of data.

RESULTS

Intercorrelations between the sales restrictions attitude items ranged from 0.79 to 0.95. Factor analysis (principal axis factoring) showed that the first unrotated factor had an eigenvalue as high as 7.11 while

the second unrotated factor had an eigenvalue as low as 0.32. This strongly supports the assumption that the scale is unidimensional and can be reduced to one single index. Cronbach's alpha turned out to be as high as 0.98. A simple, additive sumscore based on the eight attitude items was constructed (range 0-8). As much as 77.3% of all respondents had agreed to all eight items, while no agreement (or missing answer) on all items was found for 12.5%. The association between a simple, additive sumscore based on the eight sales restrictions attitude items and the dichotomy described in the methods section (high versus low support for sales restrictions) was 0.98.

The lowest level of approval was 50.4% among respondents aged 13-25 for 'sales of cigarettes must be only from stores that have a license to sell tobacco products'. The highest level of approval was 98.4% among respondents aged 56-70 for 'sales prohibition to children under 18'. 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 level were observed with regard to any of the sales restrictions items.

Regarding demographic education segments, approval of each of the eight restrictions for all education segments was in the range 81.1%-90.1%; nevertheless, there was a statistically significant education gradient, with higher educated respondents having the highest approval rates.

Comparison across tobacco use status segments revealed that approval of each of the eight restrictions ranged from 92.1% to 97.9% among ex- and never-smokers, and

Table 1. Tobacco sales restrictions 1-8 by demography and smoking status, bivariate analysis; (n = 1588)

		1	2	3	4	5	6	7	8
		% Yes	% Yes	% Yes	% Yes	% Yes	% Yes	% Yes	% Yes
Age	X ² (4)	312.8	316.1	337.7	310.9	291.5	314.9	305.0	319.9
	p	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	13-25	55.7	55.3	53.8	54.9	54.2	54.5	51.1	50.4
	26-35	77.5	78.5	77.5	76.9	78.8	78.2	77.5	78.2
	36-45	92.5	92.5	92.8	92.8	92.8	93.7	90.7	91.3
	46-55	97.7	98.0	98.3	96.6	95.6	97.7	95.3	95.6
	56-70	98.4	98.2	98.2	98.2	96.6	96.9	96.6	96.6
Gender	X ² (1)	0.2	0.8	0.02	0.1	0.01	0.3	0.52	0.7
	p	0.68	0.77	0.88	0.74	0.91	0.56	0.47	0.41
	Male	86.3	86.3	85.9	85.1	85.3	86.3	84.7	85.0
	Female	85.6	85.8	85.6	85.7	85.0	85.3	83.3	83.4
Education	X ² (2)	8.5,	10.5,	10.5,	7.4,	8.0,	12.6,	6.5,	15.0,
	p	0.01	0.01	0.01	0.02	0.02	<0.01	0.04	<0.01
	Low	85.4	85.2	85.2	84.6	84.2	84.4	82.8	82.2
	Middle	83.2	83.2	83.2	83.0	82.7	82.8	81.8	81.1
Income*	X ² (2)	1.4,	0.5,	0.8,	0.1,	1.3,	0.2,	3.1,	0.7,
	p	0.50	0.76	0.68	0.93	0.52	0.90	0.21	0.71
	Low	86.7	86.0	86.7	85.6	85.4	85.4	85.6	84.9
	Middle	86.9	87.0	86.2	86.0	86.5	86.3	84.9	84.6
Smoking status	X ² (3)	225.3	222.4	231.2	199.5	214.7	213.1	213.4	219.0
	p	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	Daily	84.2	83.5	82.6	84.0	83.1	83.3	80.0	81.3
	Less than daily	53.7	54.6	53.7	54.6	53.2	54.6	52.2	51.2
Ex-smoker		95.8	97.9	96.9	93.8	94.8	96.9	97.9	94.8
	Never smoker	93.6	93.7	93.9	92.8	93.0	93.3	92.1	92.4

* 19 study participants did not report income

1. Agree to sales prohibition to children under 18
2. Agree to prohibition of sales by children under 18
3. Agree to prohibition of sales of cigarettes in single units
4. Agree on sales prohibition in schools and youth organisations
5. Agree to prohibition of sales in health care settings
6. Agree to prohibition of sales with children's clothes and toys
7. Agree it is important to increase penalties for violations of the law prohibiting sales to minors and single unit sales
8. Sales of cigarette must be only from stores that have a license to sell tobacco products

from 51.2% to 84.2% among daily and less than daily smokers. The lowest approval rates were observed among less than daily smokers, ranging from 51.2% to 54.6%. All the smoking status gradients were statistically significant, with ex- and never-smokers having the

highest approval rates and less than daily smokers have the lowest approval rates.

Approval rates across all demographic segments and across the eight restrictions were very high for all restrictions.

In the sample segments aged 56-70 for males and females alike, high approval of restrictions was expressed by 93.4-98.7% of respondents. In the age segment 13-25, only 55.7% of respondents indicated high approval of restrictions (Table 2). The age differences in

Table 2. Support for tobacco sales prohibitions by the demographic factors

	N total	High support %	Bivariate logistic regression			Multiple logistic regression		
			Odds ratio	CI95%	Sign. P	Odds ratio	CI95%	Sign. P
Age	13-25	55.7	1.00		<.001	1.00		<.001
	26-35	79.2	3.02	2.09-4.36	<.001	2.85	1.81-4.47	<.001
	36-45	93.4	11.29	6.88-18.53	<.001	9.94	5.88-17.40	<.001
	46-55	98.0	38.74	16.66-90.09	<.001	28.32	11.72-68.43	<.001
Gender	56-70	98.5	60.49	24.23-151.04	<.001	43.87	16.41-117.26	<.001
	Female	923	86.6	1.00	.954	1.00		.379
Highest completed education	Male	665	86.5	0.99	0.74-1.33	1.19	0.81-1.76	.085
	Primary or secondary school	494	85.4	1.00		1.00		.073
	Middle college	571	83.9	0.89	0.64-1.24	.490	0.66	0.42-1.04
	University, post graduate degree	523	90.4	1.61	1.10-2.37	<.05	0.97	0.57-1.63
Household income last month	Low (100-400 Gel., about 50-200 Euro)	458	86.7	1.00		1.00		.383
	Middle (401-800 Gel., about 201-400 Euro)	571	87.4	1.07	0.74-1.54	.736	1.22	0.78-1.88
	High (401+ EURO)	540	85.9	0.94	0.65-1.35	.730	1.23	0.79-1.91
	Not applicable	19	73.7	0.43	0.15-1.24	.118	1.09	0.26-4.50
Tobacco use	Smoke daily	449	84.2	1.00		1.00		<.001
	Smoke less than daily	205	54.6	0.23	0.16-0.33	<.001	0.68	0.37-0.92
	Smoker cigarettes regularly in the past Never smoker	96 836	97.9 94.3	8.63 3.09	2.13-36.64 2.10-4.35	<.01 <.001	1.85 4.18	0.40-8.53 2.65-8.63

Percentages from cross-tabs (bivariate analyses) and results from binary multiple logistic regression. Low support is agreement with three or fewer of eight types of sales prohibitions. High support is agreement with four or more sales prohibitions.

level of support for restrictions were statistically significant, as shown in the Table 2.

Among never- or ex-smokers, high approval of restrictions was indicated by 94.3% to 97.9% of respondents. Occasional smokers were less supportive of restrictions than were current smokers. These differences in approval were statistically significant, as shown in the Table 2. Bivariate analysis showed that support for restrictions was significantly higher among those with university or post-graduate degree. There were no statistically significant differences in levels of support for restrictions by gender and household income level.

The results of the multivariate binary logistic regression analysis roughly confirms the associations with age and smoking behavior described above. However, after controlling for age, ex-smokers are no longer different from daily smokers, and the association with education is no longer significant (Table 2).

Figures 1-4 provide a further breakdown of the composite measure of approval of restrictions, with age by gender tabulations given in Figure 1, showing no gender differences by age. As shown in Figure 2, approval levels were lowest among occasional smokers. Perhaps the most noteworthy data in Figure 2 pertain to smokers' approval of restrictions, with levels of 71% among women and 87% among men. Figure 3 shows no education differences between males and females in levels of approval for restrictions. Figure 4 shows similarly high levels of approval for restrictions for income level for both women and men, but lower levels of approval among those who did not provide income data.

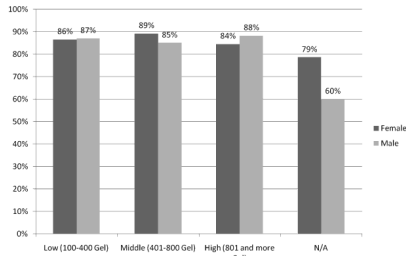


Figure 1. Percent of females and males supporting four or more of eight tobacco products sales prohibitions, by age.

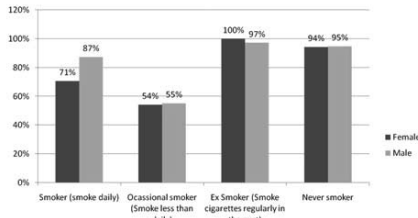


Figure 2. Percent of females and males supporting four or more of eight tobacco products sales prohibitions, by smoking status.

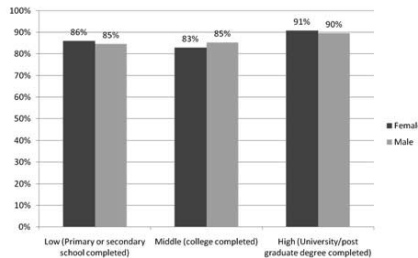


Figure 3. Percent of females and males supporting four or more of eight tobacco products sales prohibitions, by education.

DISCUSSION

This study presents new data suggesting that a majority of the Georgian population strongly supports restrictions to prevent youth access to tobacco. In fact, such restrictions already exist in Georgia de jure, but there is a very low level of implementation and enforcement. This is deplorable, since restrictive youth access laws are most effective when administered in a comprehensive manner. Restricted accessibility of tobacco products is particularly important to prevent an eventual first use of tobacco (Ashley, et al., 2000).

The point has been made that beyond sales restrictions, it is also important to prevent adolescents from acquiring cigarettes through noncommercial sources (Laforge, et al., 1998). Yet the importance of commercial restrictions cannot be overemphasized. Global Youth Tobacco Survey data analyses show that 61.7% of youth aged 13-15 who smoke cigarettes usually purchase their cigarettes in stores. In European countries, seventy percent of youth who attempted to purchase cigarettes in a store were not refused a purchase because of

their age, during the month preceding the survey (Warren, et al., 2008).

According to the WHO, the World Bank and several relevant studies, raising taxes and sales restrictions on tobacco products are among the measures aimed to reduce tobacco consumption (Pederson, et al., 1987; Andreeva, 2005; Rimpela & Aaro, 1993; Castrucci, et al., 2002; WHO, 2004; Jha & Chaloupka, 2000). Turning to the situation in Georgia, since May 15, 2006, the WHO Framework Convention on Tobacco Control (FCTC) entered into force in the country, with Article 16 prohibiting sales of tobacco to and by minors, and other related measures (WHO, 2005; WHO, 2012). However, after six years since Georgian ratification of the FCTC, enforcement has been poor due to little political and administrative will to deal effectively with those who violate the law (WHO, 2007; WHO/Euro, 2007).

Summing up the situation in Georgia, it seems evident that the political environment is ripe for renewed advocacy to penalize sales of tobacco to minors. Yet as mentioned in the introduction, the tobacco in-

dustry and their lobbyists present a huge barrier to the successful implementation of tobacco control regulations in Georgia; the industry works actively to hinder the enforcement of laws and regulations dealing with tobacco sales prohibition, in part by efforts to influence public opinion in many countries (Muggli, et al., 2003). They hope to turn public opinion to their side, to counter public health's concentrated assault on youth access to tobacco products (Forster & Wolfson, 1998).

The potential relevance of this study's findings for policy processes in Georgia can be probed by considering Kingdon's ideas about policy windows (Kingdon, 2003); does the unique information about public opinion presented in this paper have the potential to open a policy window for tightened regulation and enforcement of sales restrictions to protect youth? Realistically, that will depend on the effectiveness of health advocates' efforts to translate a research publication into advocacy material that can reach the ears, minds and hearts of decision-makers.

Yet there is one aspect that should not be overlooked – there may be few public issues, indeed, in which a strong majority of the public expresses such uniform support, as is found in the present data. Guessing cautiously, one might have expected strong support for some restrictions, modest support for others and low support for yet other restrictions. But that is not the case; pick any restriction and the large majority in this study supports it. Beyond that they support virtually all of the restrictions, and there is evidence that very high levels of public support can have rather direct impact on the enactment of legislation restricting youth access to tobacco (Howlett & Ramesh, 2003).

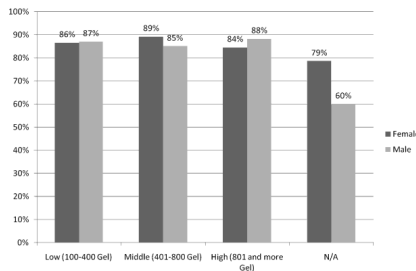


Figure 4. Percent of females and males supporting four or more of eight tobacco products sales restrictions, by income.

Strengths and limitations

Strengths of this study that are worth noting are the representativeness of the sample and the high response rate. Regarding measurement, the internal consistency of the items regarding attitudes towards sales restrictions is very high, the advantages of which have already been mentioned. On the other hand, the attitude items have not been used in previous research, nor were their psychometric properties tested in a pilot study. 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.

Further research

This study shows that the normative attitude in Georgia supports tobacco sales restrictions, almost overwhelmingly. However, for many controversial issues in which strong vested interests are at stake, communication via the media may help twist the public's perceptions about what is normative and what is not. That is because the media emphasise 'news', and what is news is often uncommon experiences and controversial positions on issues. For example, even if the majority of users of a particular hospital are quite satisfied with the level and quality of medical service, media stories about just a few instances of bad treatment in the hospital may give readers the impression that the level of satisfaction with the service is lower – perhaps much lower – than it actually is. Similarly, media reports of serious crime in a community may give the public the impression that crime is a much more serious problem than it actually is.

The relevance of this kind of norm distortion to tobacco control gener-

ally, and to attitudes toward tobacco sales restrictions in particular, is that decision-makers are also members of the public, and they may be prone to misjudge public opinion about issues in which a loud minority manage to make a lot of news. If some smokers, or tobacco retailers, or cigarette manufacturers complain in the media about abuses of their freedoms due to tobacco control, decision-makers may perceive that support for tobacco control is lower than it actually is. That would enhance the importance of studies like this one, which report relatively unbiased estimates of public support for tobacco control.

However, in the case of Georgian decision-makers, no research on their perceptions about public opinion regarding tobacco control has been undertaken, as far as we are aware. To explore this issue it would be useful to complement studies like this one with studies of decision-makers' perceptions about public opinion. One can only speculate what the findings would be, but if there is a large disconnect between what the public supports and what decision-makers think they support, that be news-worthy, indeed.

CONCLUSION

The findings of this study show that all eight tobacco sales restrictions have a high level of public support in Georgia. We interpret this as public demand for the government to enforce the already existing restrictions and regulations, to establish new restrictions on tobacco sale at non-licensed outlets, and increase penalties for violations of restrictions.

ABOUT THE AUTHORS

George D. Bakhturidze^{1,2}, MD, MPhil; Nana T. Peikrishvili², MSc, MPhil; Maurice B. Mittelmark¹, PhD; Leif E. Aarø, PhD^{1,3}

¹ Department of Health Promotion and Development, Faculty of Psychology, University of Bergen

² Framework Convention on Tobacco Control Implementation and Monitoring Center in Georgia

³ Division of Mental Health, Norwegian Institute of Public Health, Oslo

Corresponding author's contacts: George Bakhturidze, 6/72, Bakradze st., Tbilisi-0154, Georgia, Ph/Fax: +995 23 2347750; Mob: +995 599 174973 E-mail: iayd@yahoo.com

ACKNOWLEDGMENTS

We express our gratitude to Hana Ross, (USA), Judith Watt (UK), and Konstantin Krasovsky (Ukraine), who assisted in the design of the survey and helped to develop the questionnaire. We are grateful for the contribution to the sampling design of the late Revaz Tsakadze (Georgian State Department of Statistics).

Funding source – Open Society-Georgia Foundation's grant: "Population survey on tobacco economy and policy in Georgia", 2007-2008. Implementer organization – the FTC Implementation and Monitoring Center in Georgia.

This paper was received September 25, 2012; accepted October 30, 2012; published November 21, 2012.

REFERENCES

Anderson J. E. (2006). Public Policymaking. Wadsworth, Belmont, USA.

- Andreeva, T. (2005). Tobacco in Ukraine: national survey of knowledge, attitudes and behavior. A survey of Ukrainian population by Kiev International Institute of Sociology commissioned by the International Centre for Policy Studies, 71.
- Ashley, M., Cohen, J., Bull, Sh., Ferrence, R., Poland, B., Pederson, L., & Gao, J. (2000). Knowledge about tobacco and attitudes toward tobacco control. How different are smokers and nonsmokers? *Canadian Journal of Public Health*, 91(5), 376-80.
- Bakhturidze, G., et al. (2008). Population survey on tobacco economy and policy in Georgia. *FTC Implementation and Monitoring Center in Georgia*, 4-22.
- Borland, R. (2006). Support for and reported compliance with smoke-free restaurants and bars by smokers in four countries: findings from the International Tobacco Control (ITC) Four Country Survey. *Tobacco Control*, 15, iii34-iii41.
- Brenner, H., et al. (1997). Smoking Behaviour and Attitude Toward Smoking Regulations and Passive Smoking in the Workplace. *Preventive Medicine*, 26, 138-143.
- Brooks, D. (2001). Support for smoke-free restaurants among Massachusetts adults, 1992-1999. *American Journal of Public Health*, 91(2), 300-303.
- Castrucci, B. C., Gerlach, K. K., Laufman, N. J and Orleans, T. C. (2002). Adolescents' acquisition of cigarettes through noncommercial sources. *J Adolesc Health*, 31, 322-6.
- Field, A. (2009). Discovering Statistics using SPSS. 584-626.
- Forster, J. L., & Wolfson, M. (1998). Youth access to tobacco: policies and politics. *Ann Rev Public Health*, 19, 203-35.
- Georgian Law on Tobacco Control, updated in December 15, 2010. Retrieved from <http://www.tobaccocontrollaws.org/files/live/Georgia/Georgia%20-%20ITC%20Law%202010.pdf>
- Gilmore, A., Pomerleau, J., McKee, M., Rose, R., Haerpfer, Ch., Rotman, D., & Tumanov, S. (2004). Prevalence of Smoking in 8 Countries of the Former Soviet Union: Results From the Living Conditions, Lifestyles and Health Study. *American Journal of Public Health*, 94(12), 2177-87.
- Howlett, M., & Ramesh, M. (2003). Studying public policy – policy cycles and policy subsystems. Oxford University Press, 129, 163, 185-204.
- Jha, P., & Chaloupka, F. (2000). Tobacco control in developing countries. Oxford University Press, New York, 46-61.
- Kinder, D., & Sears, D. (1985). Public Opinion and Political Action. The Handbook of Social Psychology, II, 659-741.
- Kingdon, J. (2011). Agendas, Alternatives, and Public Policies. Longman classics in political science, 196-208.
- Kingdon, J. W. (2003). Agendas, Alternatives and Public Policies, 2nd ed. Longman, New York.
- Laforce, G. R., Velicer, F. W., Levesque, A. D., Fava, L. J., Hill, J. D., Schofield, E. P., Fan, D., Vries, H., Shisana, O. W., & Conner, M. (1998). Measuring support for tobacco control policy in selected areas of six countries. *Tobacco Control*, 7, 241-246.
- Lam, T. H., et al. (2002). Public opinion on smoke-free policies in restaurants and predicted effect on patronage in Hong Kong. *Tobacco Control*, 11, 195-200.
- Muggli, M., Hurt, R., & Blanke, D. (2003). Science for hire: A tobacco industry strategy to influence public opinion on secondhand smoke. *Nicotine & Tobacco Research*, 5, 303-314.
- National Statistics Office of Georgia. (2012). Retrieved from http://www.geostat.ge/index.php?action=page&p_id=152&lang=eng
- Novotny, T., & Mamudu, H. (2008). Progression of tobacco control policies: Lessons from the United States and Implications for Global Action. World Bank publications.
- Pallant, J. (2007). SPSS Survival Manual. Open University Press, 118-200.
- Pederson, U., Bull, Sh., Ashley, M., & Lefcoe, N. (1987). A Population Survey in Ontario Regarding Restrictive Measures on Smoking: Relationship of Smoking Status to Knowledge, Attitudes and Predicted Behaviour. *International Journal of Epidemiology*, 16(3).
- Rigotti, N. A., et al. (2003). Students' opinion of tobacco control policies recommended for US colleges: a national survey. *Tobacco Control*, 12, 251-256.
- Rimpela, A., & Aaro E. L. (1993). The effects of tobacco sales promotion on initiation of smoking – experiences from Finland and Norway. *Scand J Social Med*, 49, 5-23.
- Stein, E., et al. (2005). The Politics of Policies: Economic and Social Progress in Latin America. Inter-American Development Bank, Washington, D.C.
- Trotter, L., & Mullins, R. (1996). Environmental tobacco smoke: Surveys of restaurant patrons and hospitality industry personnel. *Quit Evaluation Studies*, 9, 27-41.
- Walsh, R., et al. (2002). Environmental tobacco smoke in homes, motor vehicles and licensed premises: community attitudes and practices. Australian and New Zealand Journal of Public Health, 26(6), 536-542.
- Warren, Ch., Jones, N., Peruga, A., Chauvin, J., Baptiste, J-P, Costa de Silva, V., Awa, F., Tsouras, A., Rahman, Kh., Fishburn, B., Bettscher, D., & Asma, S. (2008). Global Youth Tobacco Surveillance, 2000-2007. Morbidity and Mortality Weekly Report (MMWR), Centers for Disease Control and Prevention, 57(SS01), 1-21.
- WHO (2004). European Strategy for Smoking Cessation Policy European Tobacco Control Policy Series, WHO, 4-29.
- WHO (2005). WHO Framework Convention on Tobacco Control. WHO, Geneva, 1-16. Retrieved from http://www.who.int/tobacco/framework/WHO_FCTC_english.pdf
- WHO (2007). Protection from exposure to second-hand tobacco smoke. Policy recommendations. WHO, 2-35.
- WHO (2007). The European Tobacco Control Report. WHO, Copenhagen, 12-85.
- WHO (2012). Parties to the WHO Framework Convention on Tobacco Control. Retrieved from http://www.who.int/fctc/signatories_parties/en/index.html
- WHO (2012). WHO Global Report – Mortality attributable to tobacco. WHO, Geneva, 2-14.

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

George D Bakhturidze,^{1,2} Maurice B Mittelmark,¹ Leif E Aaro,^{1,3} Nana T Peikrishvili²

To cite: Bakhturidze GD, Mittelmark MB, Aaro LE, et al. Attitudes towards smoking restrictions and tobacco advertisement bans in Georgia. *BMJ Open* 2013;3:e003461. doi:10.1136/bmjopen-2013-003461

► Prepublication history and additional material for this paper is available online. To view these files please visit the journal online (<http://dx.doi.org/10.1136/bmjopen-2013-003461>).

Received 23 June 2013
Revised 7 October 2013
Accepted 11 October 2013



CrossMark

¹Department of Health Promotion and Development, Faculty of Psychology, University of Bergen, Bergen, Norway

²Tobacco Control Research, Framework Convention on Tobacco Control Implementation and Monitoring Center in Georgia, Tbilisi, Georgia

³Division of Mental Health, Norwegian Institute of Public Health, Oslo, Norway

Correspondence to
Dr George D Bakhturidze;
layd@yahoo.com

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.^{21 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.^{35 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	348,34, 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	93,3	93,6	97,1	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, 0,210	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	2,76, 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	536
Smoking status— χ^2 , p value	224,93, 0,000	239,88, 0,000	221,10, 0,000	248,86, 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	95,9	97,9	94,7	94,7	95,8	95,8	96,6	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					0.000				0.000	
13–25 (ref)	263	51.3	1.00			1.00				
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.^{32, 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 States⁵ 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.

Acknowledgements The authors express their gratitude to Hana Ross (USA), Judith Watt (UK) and Konstantin Krasovsky (Ukraine), who assisted in the design of the survey and helped to develop the questionnaire. The authors

would like to acknowledge for the contribution to the sampling design of the late Revaz Tsakadze (Georgian State Department of Statistics).

Contributors GDB participated in the planning and data collection phases of the study and in formulating the study questions. He was the lead statistical analyst and the lead writer of the article. MBM participated in formulating the study questions, the statistical analysis and drafting of all sections of the article. LEA participated in the statistical analysis and contributed to the drafting of the statistical parts of the article. NTP participated in the planning and data collection phases of the study, and also edited the article.

Funding An Open Society-Georgia Foundation grant "Population survey on tobacco economy and policy in Georgia" provided financial and technical support to collect the study data.

Competing Interests The Eurasia Programme, administered by the Norwegian Center for International Cooperation in Higher Education and the Norwegian Ministry of Foreign Affairs, provided financial support for GDB in the study's data analysis and report writing phase.

Patient consent Obtained.

Ethics approval The Georgian Health Promotion and Education Foundation Ethical Committee approved the study protocol.

Provenance and peer review Not commissioned; externally peer reviewed.

Data sharing statement The study data are available by emailing the corresponding author.

Open Access This is an Open Access article distributed in accordance with the Creative Commons Attribution Non Commercial (CC BY-NC 3.0) license, which permits others to distribute, remix, adapt, build upon this work non-commercially, and license their derivative works on different terms, provided the original work is properly cited and the use is non-commercial. See: <http://creativecommons.org/licenses/by-nc/3.0/>

REFERENCES

- World Health Organization (WHO). *WHO framework convention on tobacco control*. Geneva: WHO, 2003:1–16. http://www.who.int/tobacco/framework/WHO_FCTC_english.pdf
- Borland R, Yong H-H, Siahpush M, et al. Support for and reported compliance with smoke-free restaurants and bars by smokers in four countries: findings from the International Tobacco Control (ITC) Four Country Survey. *Tob Control* 2006;15(Suppl III):iii34–41.
- Brooks D, Mucci L. Support for smokefree restaurants among Massachusetts adults, 1992–1999. *Am J Public Health* 2001;91:300–3.
- Lalorge GR, Velicer FW, Lewisque AD, et al. Measuring support for tobacco control policy in selected areas of six countries. *Tob Control* 1998;7:241–6.
- Jha P, Chaloupka F. *Tobacco control in developing countries*. WB&WHO, Oxford University Press, 2000:1–10, 215–34, 273–83, 449–63.
- Jocossens L, Raw M. *Progress in tobacco control in 30 European countries, 2005 to 2007*. Swiss Cancer League, 2007:1–24.
- Kerryn R. *Report on smoke-free policies in Australia*. WHO, 2004. http://www.who.int/tobacco/research/secondhand_smoke/en/best_practices_australia.pdf
- National Institutes of Health (NIH). *Changing adolescent smoking prevalence*. *Smoking Tob Control Monogr* 2001; No. 14. Bethesda, MD, 210.
- WHO Report on the Global Tobacco Epidemic, *Enforcing bans on the tobacco advertising, promotion and sponsorship*. WHO, 2013. http://apps.who.int/iris/bitstream/10665/85380/1/9789241505871_eng.pdf
- Bakhturidze GB, Ross H, What J, et al. *Population survey on tobacco economy and policy in Georgia*. FCTC Implementation and Monitoring Center in Georgia 2008:4–22.
- Gilmore A, Pomeroy J, McKee M, et al. Prevalence of smoking in 8 countries of the former Soviet Union: results from the living conditions, lifestyles and health study. *Am J Public Health* 2004;94:2177–87.
- Warren CW, Jones NR, Peruga A, et al. Global youth tobacco surveillance, 2000–2007. *MMWR Surveill Summ* 2008;57 (SS01):1–21.
- Georgian Law on Tobacco Control, Updated in 15 December 2010. <http://www.tobaccocontrollaws.org/files/live/Georgia/Georgia%20-%20TCT%20Law%202010.pdf>
- Georgian Code of Administrative Offences, due to date 23 September 2012. <http://laws.codexserver.com/931.DOC>
- WHO, Parties to the WHO Framework Convention on Tobacco Control by 2013. http://www.who.int/ctc/signatories_parties/en/index.html
- Georgian Law on Advertisement, due to date 23 September 2012. <http://laws.codexserver.com/183.DOC>
- Anderson JE, Buller D, Voeks J, et al. *Public policymaking*. Vol. 30, Belmont, USA:Wadsworth, 2006:292–9.
- Petry F. *How policy makers view public opinion*. Vol. 6, University of Toronto Press, 2005.
- Canes-Wrone B, Shotts KW. The conditional nature of presidential responsiveness to public opinion. *Am J Political Sci* 2004;48:690–706.
- Burstein P. *Why estimates of the impact of public opinion on public policy are too high: empirical and theoretical implications*. Vol. 84, Oxford University Press, 2006:2273–89.
- Burstein P. *Bringing the public back in: should socialologists consider the impact of public opinion on public policy?* Vol 77, Oxford University Press, 1998:27–62.
- Burstein P. *Public opinion, public policy, and democracy: old expectations and new*. *Handbook of politics*, Springer 2010:2–16.
- Johnson M, Braze P, Arceneaux K. Public opinion and dynamic representation in the American States: the case of environmental attitudes. *Soc Sci Q* 2005;86:88–105.
- Weakliem DL. Public opinion research and political sociology. *Research in Political Sociology* 2003;12:49–80.
- Brooks J E, Manza L. Social policy responsiveness in developed democracies. *Am Sociol Assoc* 2006;71:474–94.
- Weissberg R. Why policymakers should ignore public opinion polls. *Policy Analyses* 2001:402–16.
- Stein E. *The politics of policies: economic and social progress in Latin America*. Washington, DC: Inter-American Development Bank, 2005:23–181.
- Kinder D, Sears D. Public opinion and political action. *Handb Soc Psychol* 1985;2:659–741.
- Burstein P. The impact of public opinion on public policy: a review and an agenda. *Political Res Q* 2003;56:29–40.
- Page B, Shapiro R. Effects of public opinion on policy. *Am Political Sci Rev* 1983;77:175–90.
- Soroka SN, Wlezien C. Public Preferences and Public Expenditure in the United Kingdom 2003. a study in representation and feedback. <http://degreesofdemocracy.mcgill.ca/sorokawlezienpnsa2003.pdf>
- Soroka SN, Wlezien C. Opinion representation and policy feedback: Canada in comparative perspective. *Can Political Sci Assoc* 2004;37:531–59.
- Trotter L, Mullins R. Environmental tobacco smoke: surveys of restaurant patrons and hospitality industry personnel. *Quit Eval Stud* 1995;9:27–41.
- Lam TH, Janghorbani M, Hedley AJ, et al. Public opinion on smoke-free policies in restaurants and predicted effect on patronage in Hong Kong. *Tob Control* 2002;11:195–200.
- Brenner H, Born J, Novak P, et al. Smoking behavior and attitude toward smoking regulations and passive smoking in the workplace. A study among 974 employees in the German metal industry. *Prev Med* 1997;26:138–43.
- Anderson PA, Buller DB, Voeks JH, et al. Predictors of government officials' support for youth tobacco control policies. *J Public Health Manag Pract* 2007;13:621–9.
- de Guia NA, Cohen JE, Ashley MJ, et al. Support for tobacco control policies: how congruent are the attitudes of legislators and the public? *Can J Public Health* 2003;94:36–40.
- Snyder A, Falba T, Busch S, et al. Are State legislatures responding to public opinion when allocating funds for tobacco control programs? *Health Promot Pract* 2004;5(Suppl 3):35S–45S.
- Bartosh WJ, Pope GC. Local enactment of tobacco control policies in Massachusetts. *Am J Public Health* 2002;92:941–3.
- Rigotti NA, Regan S, Moran SE, et al. Students' opinion of tobacco control policies recommended for US colleges: a national survey. *Tob Control* 2003;12:261–8.
- Walsh RA, Tzelepis F, Paul CL, et al. Environmental tobacco smoke in homes, motor vehicles and licensed premises: community attitudes and practices. *Aust N Z J Public Health* 2002;26:536–42.
- Walsh RA, Paul CL, Tzelepis F, et al. Is government action out-of-step with public opinion on tobacco control? Results of New South Wales population survey. *Aust N Z J Public Health* 2008;32:482–8.
- Manuac-Vidal P, Melich-Carreira J, Paccaudet F, et al. Opinions on tobacco control policies in Lausanne, Switzerland, 2003–2006. *Prev Med* 2010;51:193–4.



44. Muggill ME, Hurt RD, Blanke DD. Science for hire: a tobacco industry strategy to influence public opinion on secondhand smoke. *Nicotine Tob Res* 2003;5:303–14.
45. Saloojee Y, Dagli E. Tobacco industry tactics for resisting public policy on health. *Bull World Health Organ* 2000;78:902–10.
46. McAllister L. Public opinion in Australia on restricting smoking in public places. *Tob Control* 1995;4:30–5.
47. Perfstadt H, Holmes R. The role of public opinion polling in health legislation. *Am J Public Health* 1987;77:612–14.
48. Yang Y, Li L, Yong H, *et al*. Regional differences in awareness of tobacco advertising and promotion in China: findings from the ITC China Survey. *Tob Control* 2010;19:117–24.
49. Reddy P, Meyer-Weltz A, Yach D. Smoking status, knowledge of health effects and attitudes towards tobacco control in South Africa. *S Afr Med J* 1996;86:1389–93.
50. Lazuras L, Rodafinos A, Panagiotakos DB, *et al*. Support for smoke-free policies in a pro-smoking culture: findings from the European survey on tobacco control attitudes and knowledge. *Int J Public Health* 2009;54:403–8.
51. Paulik E, Maroti-Nagy A, Nagymajteni L, *et al*. Support for population level tobacco control policies in Hungary. *Cent Eur J Public Health* 2012;20:75–80.
52. Global Adult Tobacco Survey (GATS). Russian Federation, Country Report. WHO, 2009. http://www.who.int/tobacco/surveillance/en_tfi_gats_russian_countryreport.pdf
53. Danishevski K, Gilmore A, McKee M. Public attitudes towards smoking and tobacco control policy in Russia. *Tob Control* 2008;17:278–83.
54. Global Adult Tobacco Survey (GATS). Ukraine, Country Report. WHO, 2010. http://www.who.int/tobacco/surveillance/en_tfi_gats_ukraine_report_2010.pdf
55. Roberts B, Stickley A, Gilmore AB, *et al*. Knowledge of the health impacts of smoking and public attitudes towards tobacco control in the former Soviet Union. *Tob Control* 2013;22:e12.
56. Saffer H, Chaloupka F. The effect of tobacco advertising bans on tobacco consumption. *J Health Econ* 2000;19:1117–37.
57. Cornwell B. The use of Sponsorship-linked marketing by tobacco firms: international public policy issues. *J Consum Aff* 1997;31:238–54.
58. Arbogast R. A proposal to regulate the manner of tobacco advertising. *J Health Polit Policy Law* 1986;11:393–422.
59. DiFranza JR, Wellman RJ, Sargent JD, *et al*. Tobacco promotion and the initiation of tobacco use: assessing the evidence for causality. *Pediatrics* 2006;117:e1237–48.
60. Moodie C, MacKintosh A, Brown A, *et al*. Tobacco marketing awareness on youth smoking susceptibility and perceived prevalence before and after an advertising ban. *Eur J Public Health* 2008;18:484–90.
61. Braverman M, Aaro L. Adolescent smoking and exposure to tobacco marketing under a tobacco advertising ban: findings from 2 Norwegian national samples. *Am J Public Health* 2004;94:1230–8.

PAPER III

Research Paper

Bakhturidze G. et al. *Tob. Prev. Cessation* 2016; 2(January):1
DOI: www.dx.doi.org/10.18332/tpc/61580



The influence of public opinion on tobacco control policy-making in Georgia: Perspectives of governmental and non-governmental stakeholders

George Bakhturidze^{a,b,c}, Nana Peikrishvili^b, Maurice Mittelmark^c

^a *FTC Implementation and Monitoring Center in Georgia*

^b *Georgian Health Promotion and Education Foundation, Georgia*

^c *Department of Health Promotion and Development, University of Bergen, Norway*

ABSTRACT

Introduction: Georgia has one of the highest smoking rates (36%) in Europe. This may be due partly to the fact that the present Georgian tobacco control regulations are weakly enforced. It is unclear if the authorities are aware that they would have majority public support for tighter enforcement of tobacco control regulations. The study aimed to fill a knowledge gap by addressing these research questions: (1) To what degree are policy makers aware of the Georgian public's opinions about tobacco control and enforcement? (2) To what degree do policy makers take Georgian public opinion into account in their decision-making, including tobacco control and enforcement?

Methods: This study used a collective case study methodology. The data were obtained through 12 semi-structured interviews during the period from April to May 2013, with three respondents each from the Ministry of Health, the Parliament of Georgia, Opinion Research Agencies and Non-Governmental Organizations. Thematic Network Analysis was used to analyze the interview data.

Results: Policy-makers are aware that public opinion favors tobacco control and enforcement. However, Georgian politicians do not take public opinion into account during policy-making. Tobacco industry influence is very strong in the Georgian policy-making arena. Some policy-makers are themselves lobbyists for the tobacco industry, and ignore public opinion. Public health planning and strategy development occur without public involvement.

Conclusions: Georgia faces a challenge in increasing the influence of public opinion in health policy making generally, and in tobacco control in particular.

Keywords: Public health, tobacco control, Public policy, public opinion, policy-making, public participation

INTRODUCTION

The level of tobacco consumption in Georgia is currently one of the highest in Europe.[1] It has increased drastically since the 1990's, mostly due to arrival of the international tobacco industry. The prevalence of tobacco use among men was 53.3% in 2001 and went up to 59.8% in 2008, and the prevalence among women increased from 6.3% to 14.9% in the same period.[1, 2]

The first Georgian law on tobacco control was enacted in 2003, followed by changes in the Georgian Code of Administrative Offences in 2004, which established fines for violations of tobacco control law.[3, 4] The WHO's Framework Convention on Tobacco

Control (FCTC) entered into force for Georgia since May 15, 2006.[5] Georgian tobacco control law was further strengthened in December 2008, based on FCTC provisions.[3] The tobacco control situation in Georgia can be summarized in this way: even if Georgia is a member of the Framework Convention on Tobacco Control (FCTC), the tobacco control regulations that are in place are hardly enforced. The main problem is one of lax enforcement, not of poor legislative action (FCTC mission Report, 2013).[8]

To support the public health effort to control tobacco use, research was conducted to study public opinion regarding tobacco control.[6,7] This revealed majority support for tobacco control (85% approval), even among tobacco users (71% of female and 87% of

Correspondence: Oluwakemi Ololade Odukoya. Department of Community Medicine, Lagos University teaching hospital, Idi-Araba, Lagos state, Nigeria, Ishaga road, 12003 Idi-araba, Nigeria Email: drolukemiodukova@yahoo.com
Published by European Publishing on behalf of the European Network for Smoking and Tobacco Prevention (ENSP).
© 2016 Odukoya O. This is an open access article distributed under the terms of the Creative Commons Attribution 4.0 International License. (<http://creativecommons.org/licenses/by/4.0>)

male smokers approving strict tobacco control). Given the strong level of public support for tobacco control, from a public health standpoint the main challenge in Georgia is to stiffen the enforcement of existing controls. On the face of it, strong public opinion favoring tobacco control should create an atmosphere supporting strong enforcement. As reviewed below, research in many countries indicates that public opinion has a meaningful role to play in the degree to which tobacco control is pursued as a public health priority.

With Georgian public opinion research showing strong support for enforcement, yet with enforcement being lax, two questions arise that this article addresses: Are Georgian health policy makers and authorities sensitive to public opinion about tobacco control and enforcement? If they are, what is their level of understanding of the Georgian public's support for tobacco control enforcement? Answers to these questions should help to identify the next steps to strengthen Georgian tobacco control. If the authorities tend to discount or ignore public opinion in this context, advances in tobacco control will first require a strengthening of the responsiveness of authorities to public opinion. If, on the other hand, the problem is a lack of awareness of public opinion, educational efforts are needed to inform the authorities about the actual state of public support for tobacco legislation enforcement. Combined strategies will be required to the extent that both these scenarios are evident.

The challenges to tobacco control described above are, of course, not unique to Georgia. Poor enforcement of tobacco control policies and the interference of the industry is commonplace in Eastern Europe, undermining progress in tobacco control. Positive attitudes from the public without effective enforcement do not translate into compliance with the law.[9, 10] For example, full protection from second-hand smoke is only achieved when compliance with smoking bans is high. Compliance is related to public support but also knowledge of second hand smoke hazards,[11] both influenced by media campaigns and by advocacy efforts. [11]

Public opinion in policy-making processes

Methods to ascertain public opinion include referenda, elections, public demonstrations and electoral research. Public opinion polls, especially, are rapid barometers by which policy makers detect public preferences.[12, 13, 14] There is evidence that public opinion can translate into policy in significant ways, at least in some arenas. For example, much of civil rights legislation in the USA was enacted only after public support was expressed repeatedly and forcefully in the American mass media.¹⁵ There is some controversy about the relative impact on policy makers of public opinion versus interest group pressure versus research on policy makers.[16] Still, Burstein's (2104) [17]summary of the public policy literature concludes that public opinion is a significant force for policy change, in the USA and in other Anglo - Saxon countries. This is also evident in cultures as disparate as those of Western and Eastern Europe.[14, 16, 18 -21]

In the study of policy responsiveness to public opinion, perhaps the most influential theorist is Kingdon (2011). [22] His theory of political agenda setting includes consideration of the role of public opinion and he provides a framework within which to study the public's influence. Kingdon's core idea is that three distinct influence 'streams' - policies, problems, and politics - sometimes intertwine at 'policy windows', moments when external or internal forces push an issue to the top of the political agenda. [22, 23] These forces include public opinion and other interests arising from business and industry, professional associations, civil servants, labor groups, welfare advocates, lobbyists and the mass media:

"Health officials know, for instance, that the nation's bill for medical care could be lowered considerably by a change in such health habits as smoking, drinking, and reckless driving. But they feel keenly the limits on government action in this area". Kingdon (2011, p. 65) [22]

An illuminating example of the policy window concept is the experience with tobacco control in the USA. The US Surgeon General's report in 1964 clearly opened a policy window for taking major steps towards

comprehensive tobacco control, [24] contributing to the enactment of landmark control policies and now in force in many USA States.

Indeed, research worldwide reveals that the public everywhere, including tobacco users, seem to be aware of the dangers of tobacco and support tobacco control. In Australian research, 89% of never-smokers reported supporting a workplace-smoking ban, compared with 67% smokers,[25] and only a minority of Australian tobacco users reported support for smoking in public bars.[26] In South Africa, 83% of non-smokers and 70% of smokers supported bans on smoking in public places.[27] In Greece, smokers and non-smokers were equally supportive of bans on tobacco sales to minors.[28] In Hungary, almost 80% supported smoking restrictions in closed and outdoor public places, work places, restaurants and bars.[29]

Closer to Georgia, Ukrainian public support for banning smoking in educational and health premises exceeded 94% and reached 67.1% for drinking bars. [30] Russian studies showed that 95% of the public supported a ban on indoor smoking in healthcare premises, and 99% supported a ban in schools.[31]

In view of the above, the present study aimed to fill a knowledge gap by addressing these research questions:

1. To what degree are policy makers aware of the Georgian public' opinion about tobacco control and enforcement?
2. To what degree do policy makers (and those who try to influence policy makers) take Georgian public opinion into account in their decision making regarding key public health issues, including tobacco control and enforcement?

METHODS

Study Design and Sampling

This study used a collective case study methodology. [32]

Methods and interview process

The data were obtained through 12 semi-structured interviews during the period from April to May 2013,

with three respondents each from the Georgian Ministry of Labor, Health and Social Affairs (MOH case), the Parliament of Georgia (MOP case), Opinion Research Agencies (ORA case) and Non-Governmental Organizations (NGO case). Respondents were selected based on their having extensive public health portfolios within their respective organizations. Face-to-face, one-on-one interviews were conducted in Georgian by the first author. They were audio recorded.

Thematic Network Analysis and Coding

The second author prior to further data analysis listened to all the recordings. The second author then transcribed the tapes in Georgian. All tapes were transcribed before analysis began. Thematic network analysis (TNA) was used to analyze the interview data. [33] The TNA was undertaken by the second author using the Georgian transcripts. The intent to have the second author undertake the analysis was to distance the analysis from the first author and his interview context/experience. TNA is a hermeneutic approach to extracting the lowest-order of meaning, referred to as Basic Themes. This was done in Georgian. The Basic Themes were grouped and summarized into Organizing Themes, also done in Georgian. These were further abstracted in Georgian into super-ordinate Global Themes.

In coding the transcripts, basic, organizing and global themes were identified without regard to the sources of the data, with the second author having no access to the identities of the interviewees (beyond what might be guessed/surmised by the content of an interview). The first and second authors then constructed a graphical network depiction of the theme structure. Only after this stage in analysis were the themes cross-identified with the cases, to ascertain which cases contributed information to which themes.

The first and second authors then returned to the transcripts to search for case-specific data to illustrate the evidence for the themes. Selected quoted material was then translated to English (the transcripts themselves were not translated into English). All authors then discussed the Georgian-English translations and agreed that close/literal translations resulted in close to

unintelligible English. This stemmed in good part from the interviewees' frequent use of jargon and phraseology commonly used in the Georgian policymaking and public administrative arena, but having obscure meaning in everyday Georgian.

The decision was then taken to paraphrase the Georgian quotes in English, to avoid giving the impression of precise translation. Therefore, material obtained from the interviewees as reported in this paper appears without quotation marks, and in paraphrased form only. The Georgian transcripts are available from the first author, which permits an independent analysis.

Ethics statement

The Georgian Health Promotion and Education Foundation Ethical Committee approved the study protocol, which complied with the current laws of the country. Signed informed consent was obtained from all participants. Neither the raw data nor the data analysis files contain information that can identify the respondents.

RESULTS

Before presenting the results, we can underline that all respondents were collaborative and none refused to participate in our study.

The global theme driving the TNA is the public's role in public health policy making as perceived by the respondents. The TNA revealed three organizing themes: A) The public has an opinion; B) Public opinion is ignored or manipulated; C) Public opinion not influential in tobacco control and 13 basic themes as shown in Figure 1. The basic and organizing themes on the role of public opinion in public health policy making are presented in Table 1. As shown, a "+" sign is assigned to similar responses of all respondents from the appropriate stakeholder group (case representatives). In most cases there are similar positions from the different stakeholder groups.

Organizing Theme A is labeled 'The public does, indeed, have opinions'. That, at least, is how the respondents perceived it. They had no trouble describing their perceptions of public stances on a

variety of health issues that were probed by the interviewer. The four basic themes supporting this interpretation cover a range of health topics.

Basic Theme 1 arises from respondents' claims that public opinion related to illicit drugs has always been strongly negative. Only a small minority of the public is seen to support marijuana decriminalization, and according to MOP respondents, this minority can and should be ignored.

Basic Theme 2 follows from respondents' comments about sex education and family planning. In general family planning and sex education hindered policy-makers' intentions to address these sensitive issues. As an ORA respondent put it, 'the main hindering force [for family planning policy] was public opinion'.

Basic Theme 3 is stimulated by the changing public stance on an issue relevant to almost everyone; the requirement to use seat belts in moving vehicles. Respondents remembered that public opinion on the compulsory use of seat belts was not supportive before legislation was enacted in 2010. Yet, as the majority of respondents remarked, public support increased after enforcement became a reality.

Basic Theme 4 arose out of expressions connected to drinking water quality. Despite the fact that Georgia is rich in water resources, there are still problems with water supply and water quality. Several respondents remarked that the public attitude is united in calling for safe water, sewerage systems, proper waste management, and permanent supplies of quality drinking water. Taken together, these basic themes suggest that Georgian policy makers have some awareness of public opinion on a range of health issues. That conclusion ties in with Organizing Theme B: is public opinion perceived to matter in policy-making processes, or is it ignored, or is it manipulated?

The Basic Themes informing Organizing Theme B suggest that the respondents perceive that public opinion is ignored rather than regarded in policy processes.

Basic Theme 5 arises from respondents' reports that during Shevardnadze's leadership (1992-2003), public opinion was not monitored via polls or other means polls, even if the public was presumably informed by the relatively free mass media. During Saakashvili's leadership (2004-2012), public participation in policy-making processes did not increase, and nor has it since. Most of the respondents simply did not believe that policy-making in Georgia is affected by public opinion. Rather, the perception is that private vested interests always have been a dominant influence. Yet, the MOH respondents believed that the fundamental expression of democracy is when public opinion and public policy interact. Thus, at least at a private level among some policy-makers, there may be a desire for a greater role in policy-making than seems to have been the case. For example, NGO and ORA respondents argued that government should increase the involvement of the public in order to enhance the public's connections with governmental officials. They believed that in general, decisions are made without considering public opinion and policy-making processes are dominated by the elite's interests. All respondents mentioned in one way or another that there is no political will to involve the public in policy-making.

Basic Theme 6 is very closely related to Basic Theme 5; the latter deals with the perception that public opinion is ignored, while the former deals with the conviction that public opinion should count. Most of the respondents believed that government should be more willing to consider public opinion in policy formation. NGO respondents underlined the potential for better policy-making if the public were to be involved. ORA representatives underlined potential importance of public opinion polls in policy-making. MOP and MOH group respondents assumed that national mood is important in decision-making when it supports the decisions preferred by the elite.

Basic Theme 7 suggests that one reason public opinion may be ignored is that it is considered to be dangerously ill-informed. MOP and MOH respondents declared that sometimes public opinion on a particular issue is ill-informed and is against the course of action that is best (as seen by 'experts'). Hence, they ignore

such opinions, citing the need to avoid potential danger. This thought was expressed in a general way, and not with reference to particular policy issues.

Basic Theme 8 illuminates the opinion of some respondents that beyond simply ignoring public opinion, the public mood is sometimes studied and then used for manipulation. ORA representatives mentioned that in earlier times, instruments were used to listen to the 'heart beat' of the public. These instruments were research surveys repeated 3-4 and more times a year (during the period 2004-2012). Also used were league tables and other data sources. The data were accumulated in one database, which was used to manipulate the public and steer policy processes including health care policy making. PO respondents believed that during the era of Saakashvili, knowledge about public opinion was used to enhance success during election periods, but was otherwise used to manipulate the public in the direction of policy preferences of the dominant political regime.

Basic Theme 9 is closely related to Basic Theme 8: its focus is the perception that the mass media has been an important mechanism in public opinion manipulation. The mass media are seen as always serving the interests of the elite. Sometimes the mass media is seen to distort critical facts, or omit vital stories or details, in order to manipulate the public. One NGO respondent remarked that today, the mass media are selective, if any pro-tobacco control public event is planned, media coverage is neutral. An ORA respondent claimed that since 2004 the mass media are fully controlled, which has resulted in the total non-support of tobacco control by the media.

Basic Theme 10 is based on respondents' recollection that during the Saakashvili era, public opinion data were collected periodically in order to manipulate policy outcomes, even if not to actually inform decision-making processes. At the time of the interviews, NGO, MOH and ORA respondents felt there was no real interest to conduct public opinion research, for any purpose whatsoever.

Turning to Organizing Theme C, tobacco control comes into focus. The basic themes illuminate a dissonance between two perceptions: the public is

known to support tobacco control and this should count, but the public's opinion about tobacco control is ignored.

Table 1. Basic and organizing themes on the role of public opinion in public health policy making

Public opinion has very little consideration in policy-making generally	MOP ⁺	MOH ^{***}	NGO ^{****}	ORA ^{*****}
Policy makers have little interest in involving public in decision-making		+	+	+
Public opinion has very little consideration	+	+	+	+
Public is considered "dangerously" uninformed	+	+		
Public opinion polls have been used for manipulation			+	+
Media have been used for manipulation			+	+
Public opinion data are not regularly collected		+	+	+
Public opinion has little influence on public health policy-making in particular		+	+	+
Public opinion to combat illicit drugs is very supportive	+	+		
Public opinion was negative on sex education and family planning from early stages		+	+	+
Public opinion support increased sufficiently after the seat belt regulations entered into force			+	+
Public has little interest in quality of drinking water	+		+	+
Donors have some positive influence on policy-making	+		+	
Public opinion is not considered in tobacco control policy-making				
It is important to consider public opinion regarding tobacco control		+	+	+
It is not important to react to public opinion regarding tobacco control	+			
Media role is weak on tobacco control			+	+
No tobacco control policy enforcement		+	+	
Tobacco industry influence is strong		+	+	
Donors have positive interest in supporting tobacco control	+	+	+	
Public opinion is very supportive for strong tobacco control measures and requests enforcement		+	+	

+ Means similar responses of all respondents from appropriate stakeholder group (case)
⁺ MOP – Members of Georgian Parliament
^{***} MOH – High officials of the Georgian Ministry of Labor, Health and Social Affairs
^{****} NGO – Heads of relevant Non-Governmental Organizations
^{*****} ORA – Heads of Opinion Research Agencies

Basic Theme 11 is addressed by MOH and NGO respondents who underlined the importance of public opinion when considering tobacco policy. ORA, NGO and MOH representatives remarked that public opinion regarding tobacco control is supportive, but the Government does not take it into account in its policy-making. This is due in part, some respondents remarked, to the tobacco industry providing opposite and misleading information to the Government, suggesting that there is a negative public mood towards strong measures like a total ban of smoking in public places, a tobacco tax increase, ad bans, and so forth. NGO and MOH respondents addressed the powerful influence of commercial interests against tobacco control and the embroilment of the Government, with one remarking that Georgians live in a country where politicians are richer than businessmen, and

Government officials are the lobbyists for the tobacco industry.

Basic Theme 12 is not focused on the public itself, but on Donors' support for tobacco control, which is seen by respondents to be in synchrony with Georgian public opinion. The strong support of the international public health community for tobacco control was remarked on by NGO, MOP and MOH respondents, with one saying that international organizations and donors have ideological and financial influence in the policy formation process, a positive example of which is the World Health Organization's Framework Convention on Tobacco Control. Donors, NGO respondents said, make ideological contributions, investments and help with policy design. MOP respondents noted that donors are one of main players in policy making and their influence is important. Furthermore, international obligations

were found to be important, such as the motivation to implement EU regulatory regimes.

Basic Theme 13 raises for the first time the influence of Georgian tobacco users. MOP representatives expressed a widely held view that smokers' reaction will be strongly negative to tobacco control measures, and thus outweigh public opinion favoring tobacco control. This creates inertia for tobacco control, exacerbated by pressure from the tobacco industry. The industry, respondents say, tries to oppose tobacco control efforts in all possible ways. Policy-makers are aware that public opinion favors tobacco control and enforcement, but politicians are resistant; they support business including the tobacco industry, and ignore public opinion. NGO and MOH respondents mentioned that even the weak tobacco control policies in place during Saakashvili period were not enforced. The NGO respondents remarked that public health interest was ignored, and planning and strategy development occurred without public involvement.

DISCUSSION

It is important to recall the reason this study was undertaken, to establish a framework for a discussion of the above findings. Two recently published studies from Georgia revealed strong majority support for tobacco control (more than 80%), including support from tobacco users.[6, 7] The academic literature suggests that public opinion may play an important role in public policy making, in communities where public opinion carries weight in political processes. The majority of Georgians support enhanced tobacco control according to the new research, but can this have weight in Georgian political decision-making processes in the tobacco control arena? We cast the issue in the form of two research questions: (1) To what degree are policy makers aware of the Georgian public' opinion about tobacco control and enforcement? (2) To what degree do policy makers (and those who try to influence policy makers) take Georgian public opinion into account in their decision making regarding key public health issues, including tobacco control and enforcement?

The short answers are these: (1) our respondents were of the opinion that many Georgians favor tobacco control (and recent research indicates this is correct), but (2) the public's opinion carries little weight, especially in comparison to the influence of the tobacco industry. This is a sobering finding. Yet it seems likely that Georgian policymakers are not aware of the overwhelming support of the public for strong tobacco control, nor that most smokers also favor tobacco control. [6,7] The recent and compelling evidence on this may heighten policy-makers awareness of the actual state of public opinion, and that might increase motivation to adjust tobacco policy in directions favored by the majority of the public. There may be grounds for optimism, but it will be essential that public health advocates find ways to illuminate the recent findings about public opinion so that policy-makers are confronted emphatically with the facts of the matter.

The barriers are formidable. Grass-roots involvement and participation, which is the Ottawa Charter's basis, [3, 4] is not sufficiently practiced in health policy-making processes in Georgia. The health policy-making rhetoric in Georgia has evolved from a soviet focus based on a top-down expert model. For example, in 2006 the Prime Minister called for the involvement of all key stakeholders in policy-making. [35] However, the instruction 'to involve' stakeholders could be interpreted in many ways. Using the Bishop and Davis' model, the current situation in Georgia is that participation is merely on the 'consultation' level. [20] The paper by Hauschild and Berkhout [36] is the only empirical study of this issue from Georgia, and it concludes that very little is actually known about how the government plans to involve stakeholders, how they actually attempt to involve them, and how the government and the stakeholders perceive their involvement:

"Many stakeholders (the general public, health professionals, health insurance companies, donors and non-government organizations (NGOs)) stated that they have not been properly consulted about proposed reforms; decision-making processes lack transparency..."

In theory, the Ministry of Health is not the only responsible body addressing major health challenges; it is the task of the entire government, which should enact healthy public policies in all sectors and health monitoring.[37, 34] Citizens generally lack the awareness of the principles of health promotion and to some extent do not believe that they can contribute to their own health.³⁸ Thus, the conditions for health promotion in Georgia today are bleak, characterised by a lack of political will to prioritize health, lack of public involvement in policy-making processes, the complexity of multi-sectorial work in a politically difficult environment and inadequate human and financial resources.[37-39]

It should be noted that the respondents from governmental organizations and the members of Parliament were mostly connected to the ruling political party. Yet they did express considerable critical comments regarding the role of public opinion in policy-making engendering confidence in the validity of the interview data. Of more concern is the issue of translation from Georgian to English. We attempted close translation using the translation-re translation method, but the tone of the respondents' comments could not be communicated well in English in the limited space of a scientific paper. We therefore elected to take a conservative approach, using paraphrasing as explained in the Methods. However, the complete Georgian transcripts of the interviews are available for independent analysis.

CONCLUSIONS

Greater transparency is needed in tobacco control policy-making in Georgia, to illuminate and prevent tobacco industry interference, and increase responsiveness to public opinion. WHO DG announced in 2013 the End Game policy, which aims to decrease tobacco consumption dramatically, to a maximum of five percent tobacco use prevalence globally by 2050; European countries aim to achieve this goal by 2040.[40, 41] In Georgia, political will must strengthen significantly if the country is to implement international

obligations connected to the FCTC and the Tobacco End Game strategy. On a positive note, there is some evidence that policy-makers are now more aware of public support for tobacco control. The new Georgian State Strategy was set in Resolution N196,[42] 30.07.13, and the Resolution highlights recent evidence on the public's support for tobacco control.[6, 7] The Resolution acknowledges that "public support is important to provide tobacco control measures effectively". Yet there is reason for skepticism. It is one side of the issue to mention such research results in a policy document, but quite another side is the continued very low level of enforcement of current tobacco control regulations. The public strongly supports tobacco control; will the democratic imperative to listen to the voice of the people propel Georgia to an ever more stringent tobacco control policy, and rigorous enforcement? Georgian democracy is new. There remain challenges to increasing public participation and consideration of public opinion in policy-making processes generally. This is also true in the tobacco control policy arena, where the most important player is still the tobacco industry and not the public interest.

Declaration of competing interests

The authors have no conflicts of interest to disclose.

Declaration of funding sources

The Eurasia Program, administered by the Norwegian Center for International Cooperation in Higher Education and the Norwegian Ministry of Foreign Affairs, provided financial support for first author in the study's data analysis and report writing phase.

REFERENCES

1. Bakhturidze GB, Ross H, What J, et al. Population survey on tobacco economy and policy in Georgia. FCTC Implementation and Monitoring Center in Georgia 2008; 4-22.
2. Gilmore A, Pomerleau J, McKee M, et al. Prevalence of Smoking in 8 Countries of the Former Soviet Union: Results From the Living Conditions, Lifestyles and Health Study. *American Journal of Public Health* 2004; 94(12): 2177-87.
3. Georgian Law on Tobacco Control, updated in December 15, 2010. Retrieved from <https://matsne.gov.ge/en/document/view/1160150>

4. Administrative Offences Code of Georgia, due to date December 11, 2015. <https://matsne.gov.ge/en/document/view/28216>
5. WHO. Parties to the WHO Framework Convention on Tobacco Control, last update: 12 February 2015. Retrieved from http://www.who.int/fctc/signatories_parties/en/index.html
6. Bakhturidze G, Peikrishvili N, Mittelmark M, Aaro L. The public's attitudes towards tobacco sales prohibitions: Evidence from a nationally representative survey in the former Soviet state of Georgia. *Tobacco Control and Public Health in Eastern Europe* 2012; 2(2):99-108.
7. Bakhturidze G, Mittelmark M, Aaro L, Peikrishvili N. Attitudes towards smoking restrictions and tobacco advertisement bans in Georgia. *BMJ Open* 2013; 3:1-10. doi: 10.1136/bmjopen-2013-003461.
8. Framework Convention on Tobacco Control (FCTC), Secretariat mission report for Georgia, 2013: <http://fncc.ge/pdf/ENG631.pdf>
9. Ravara S, Castelo-Branco M, Aguiar P, Calheiros J. Compliance and enforcement of a partial smoking ban in Lisbon taxi: an exploratory cross-sectional study. *BMC Public Health* 2013, 13:134.
10. Vardavas C, Dimitrakaki Ch, Schoretsaniti S, et al. The role of the non-smoker in enforcing smoke-free laws. *Journal of Public Health Policy* 2011, 32, 46-59. doi:10.1057/jphp.2010.45
11. Nagelhout G, De Vries H, Fong G, et al. Pathways of Change Explaining the Effect of Smoke-Free Legislation on Smoking Cessation in the Netherlands. An Application of the International Tobacco Control Conceptual Model. *Nicotine Tob Res* (2012) 14 (12): 1474-1482. doi: 10.1093/ntr/ntr12081
12. Soroka SN, Wiseman C. Opinion representation and policy feedback: Canada in comparative perspective. *Can Political Sci Assoc* 2004, 37:531-59.
13. Petry F. How policy makers view public opinion. University of Toronto Press 2005, 6:1-32.
14. Brooks J E, Manza J. Social policy responsiveness in developed democracies. *Am Sociol Assoc* 2006, 71:474-94.
15. Monroe, A. Public Opinion and Public Policy, 1980-1993. *The Public Opinion Quarterly* 1998, 62(1):6-28.
16. Warner K, Tam J. The impact of tobacco control research on policy: 20 years of progress. *Tobacco control* 2012, 21:103-109.
17. Burstein P. American Public Opinion, Advocacy, and Policy in Congress: What the Public Wants and What It Gets. Cambridge University Press 2011:1-19, 45-70.
18. Johnson M, Brace P, Arceneaux K. Public opinion and dynamic representation in the American States: the case of environmental attitudes. *SocSci* 2005, 86:88-105.
19. Weakliem DL. Public opinion research and political sociology. *Research in Political Sociology* 2003, 12:49-80.
20. Bishop P, Davis G. Mapping Public Participation in Policy Choices. *Australian Journal of Public Administration* 2002, 61(1):14-29.
21. Horne C. The Consistency of Policy with Opinion in the Russian Federation, 1992-2006. *Journal of Elections, Public Opinion and Parties* 2012, 22(3):215-244.
22. Kingdon J. (2011) *Agendas, Alternatives, and Public Policies*. Longman classics in political science 196-208.
23. Howlett M, Ramesh M. Studying public policy – policy cycles and policy subsystems. Oxford University Press 2003, 129, 163, 185-204.
24. Fritschler L, Rudder. Smoking and politics. Bureaucracy centered policymaking. Pearson Education, Inc 2007, 12-43, 155-173.
25. McAllister I. Public opinion in Australia on restricting smoking in public places. *Tob Control* 1995, 4:30-5.
26. Trotter L, Mullins R. Environmental tobacco smoke: surveys of restaurant patrons and hospitality industry personnel. *Quit Eval Stud* 1996, 9:27-41.
27. Reddy P, Meyer-Weitz A, Yach D. Smoking status, knowledge of health effects and attitudes towards tobacco control in South Africa. *S Afr Med J* 1996, 86:1389-93.
28. Lazuras L, Rodafinos A, Panagiotakos DB et al. Support for smoke-free policies in a pro-smoking culture: findings from the European survey on tobacco control attitudes and knowledge. *Int J Public Health* 2009, 54:403-8.
29. Paulik E, Maroti-Nagy A, Nagymajkeni L et al. Support for population level tobacco control policies in Hungary. *Cent Eur J Public Health* 2012, 20:75-80.
30. Andreeva T, Kharchenko N, Krasovsky K et al. Global Adult Tobacco Survey (GATS), Ukraine. WHO, Country Report 2010. http://www.who.int/tobacco/surveillance/en/fi_gats_ukraine_report_2010.pdf
31. Chuchalin A, Sakharova G, Antonov N et al. Global Adult Tobacco Survey (GATS), Russian Federation. WHO, Country Report 2009. http://www.who.int/tobacco/surveillance/en/fi_gats_russian_surveyreport.pdf
32. Creswell J. *Qualitative Inquiry and Research Design*. Choosing among five Approaches. 2nd ed. Thousand Oaks, CA 2007, Sage: 35-41.
33. Altride-Stirling J.A (2001) Thematic networks: an analytic tool for qualitative research. *Sage*. *Qualitative Research* 1(3):385-405.
34. WHO. The Ottawa Charter for Health Promotion. 1986. <http://www.who.int/healthpromotion/conferences/previous/ottawa/en/>
35. Chanturidze T, Ugulava T, Duran A et al (2009) Georgia; Health system review. *Health Systems in Transitions* 11(8):85.
36. Hauschild, T and Berkhout, E. Health-care reform in Georgia; A Civil-Society Perspective: Country Case Study. *Oxfam International* 2009, 36.
37. UNICEF and National Center for Diseases Control of Georgia (NCDC). Evaluation of Health Promotion and Communication system Georgia 2010, 1-60. http://nccd.ge/uploads/publications/Evaluation_of_Health_Promotion_and_Communication_system_2010.pdf
38. Chanturidze T. Lessons learned: developing the health promotion strategy and action plan in Georgia. *Oxford Policy Management* 2010, 5:1-4.
39. Raminashvili D, Bakhturidze G, Zarnadze I et al. Promoting health in Georgia. *Global Health Promotion* 2014, 21(1):5-12.
40. WHO. The International Conference on Public Health Priorities in the 21st Century: The Endgame for Tobacco (2013) <http://www.endgameconference2013.in/>
41. WHO-Euro. European Tobacco Control Status Report 2013. http://www.euro.who.int/_data/assets/pdf_file/0011/2359/73/European-Tobacco-Control-Status-Report-2013-Eng.pdf?ua=1
42. Government of Georgia on Approval of Georgian State Strategy on Tobacco Control. Resolution N 196, 30.07.2013 https://matsne.gov.ge/index.php?option=com_ldmsssearch&view=docView&id=19789728&lang=ge

APPENDIX

Extract from questionnaire for tobacco sales restrictions:

A. GENERAL INFORMATION

A1. Name _____

A3. How old are you?

AGE OF RESPONDENT IN YEARS: ____ IF THE AGE OF THE RESPONDENT IS NOT
13-70 YEARS, STOP THE INTERVIEW

A4. Gender: 1. Female; 2. Male;

A5. What is your marital status?

1. Married, living with a spouse; 2. Other _____; 99. Refuse to answer

A6. What is your highest completed education?

1. Low (Primary or Secondary school completed); 2. Middle (College completed);

3. High (University/postgraduate degree completed)

88. Don't know; 99. Refuse to Answer

A7. Last month what was your household income in GEL

1. Low (100-400 GEL, equal to about 50-200 EURO); 2. Middle (401-800 GEL, equal to about 201-400 EURO); 3. High (801 and more GEL, equal to about 401 and more EURO); 88. Don't know; 99. Refuse to Answer

A10. Would you say that in general your health is

1. Good; 2. Poor; 88. Don't know; 99. Refuse to answer

B. SMOKING STATUS

Now I will ask you several questions regarding your smoking. As I mentioned before, this questionnaire is

anonymous, so please answer the questions sincerely, to the best of your knowledge.

B1. Do you currently smoke cigarettes on a daily basis, less than daily, or not at all?

1. Daily; 2. Less than daily (occasional); 3. Not at all; 4. Ex-smoker; 88. Don't know; 99. Refuse to answer

B2. IF CURRENTLY Less than daily SMOKER: How many days of the week do you smoke on a TYPICAL

week? _____

H. RESTRICTION ON SMOKING & ATTITUDES

H1. Are you agree to be implemented the following tobacco sale's prohibitions:

READ THE RESPONSES, CIRCLE ALL MENTIONED

H1.1. Sale of tobacco products to children under 18

1. Yes; 2. No; 88. Don't Know; 99. Refuse to answer

H1.2. Sale of tobacco products by children under 18

H1.3. Sale of tobacco products by stick

H1.4. Sale of tobacco products in schools and organizations for children under 18, and around their territories on 50 m. distance

H1.5. Sale of tobacco products in medical organizations

H1.6. Sale of tobacco products with the toys and clothes for children

H3. Do you think that the current policy should include more restrictions on smoking and increase the penalties for violations?

1. Yes; 2. No; 3. Don't know details about the current law; 88. Don't know/Hard to say; 99. Refuse to answer

Extract from questionnaire for smoking prohibition and tobacco advertisement ban

A. GENERAL INFORMATION

A1. Name _____

A3. How old are you?

AGE OF RESPONDENT IN YEARS: ____ IF THE AGE OF THE RESPONDENT IS NOT

13-70 YEARS, STOP THE INTERVIEW

A4. Gender: 1. Female; 2. Male;

A5. What is your marital status?

1. Married, living with a spouse; 2. Other _____; 99. Refuse to answer

A6. What is your highest completed education?

1. Low (Primary or Secondary school completed); 2. Middle (College completed);

3. High (University/postgraduate degree completed)

88. Don't know; 99. Refuse to Answer

A7. Last month what was your household income in GEL

1. Low (100-400 GEL, equal to about 50-200 EURO); 2. Middle (401-800 GEL, equal to about 201-400 EURO); 3. High (801 and more GEL, equal to about 401 and more EURO); 88. Don't know; 99. Refuse to Answer

A10. Would you say that in general your health is

1. Good; 2. Poor; 88. Don't know; 99. Refuse to answer

B. SMOKING STATUS

Now I will ask you several questions regarding your smoking. As I mentioned before, this questionnaire is

anonymous, so please answer the questions sincerely, to the best of your knowledge.

B1. Do you currently smoke cigarettes on a daily basis, less than daily, or not at all?

1. Daily; 2. Less than daily (occasional); 3. Not at all; 4. Ex-smoker; 88. Don't know; 99. Refuse to answer

B2. IF CURRENTLY Less than daily SMOKER: How many days of the week do you smoke on a TYPICAL

week? _____

E. MEDIA (Ask everyone)

Now let's talk about your knowledge, attitude and experience regarding advertising of tobacco products.

E2. Tobacco companies should not be allowed to offer promotional items (such as t-shirts, free samples of cigarettes, etc.)

- 1- Strongly agree;
- 2- Agree;
- 3- Neither agree nor disagree;
- 4 -Disagree-;
- 5- Strongly disagree

E3. Tobacco and tobacco company advertising in the printing media, on the billboards, sponsorship of sports and cultural events by tobacco companies should be banned

- 1- Strongly agree;
- 2- Agree;
- 3- Neither agree nor disagree;
- 4 -Disagree-;
- 5- Strongly disagree

E4. All tobacco and tobacco company advertising should be banned

- 1- Strongly agree;
- 2- Agree;
- 3- Neither agree nor disagree;
- 4 -Disagree-;
- 5- Strongly disagree

H. RESTRICTION ON SMOKING & ATTITUDES

H2. Please tell me if you think indoor smoking should be allowed in following public places.

H2.1. Government buildings/offices

- 1. Smoking should not be allowed in any indoor areas;
- 2 Smoking should be allowed only in some indoor areas;
- 3. Should not have any rules or restrictions on indoor smoking

H2.2. Medical, educational, sport and cultural facilities

1. Smoking should not be allowed in any indoor areas;
2. Smoking should be allowed only in some indoor areas;
3. Should not have any rules or restrictions on indoor smoking

H2.3. Private workplaces

1. Smoking should not be allowed in any indoor areas;
2. Smoking should be allowed only in some indoor areas;
3. Should not have any rules or restrictions on indoor smoking

H2.4. Restaurants bars and night clubs

1. Smoking should not be allowed in any indoor areas;
2. Smoking should be allowed only in some indoor areas;
3. Should not have any rules or restrictions on indoor smoking

H3. Do you think that the current policy should include more restrictions on smoking and increase the penalties for violations?

1. Yes;
2. No;
3. Don't know details about the current law;
88. Don't know/Hard to say;
99. Refuse to answer

Interview guide for in-depth interviews with policy-makers

"As an expert on health policy, can you please tell me what are the main forces that shape public health policy in Georgia?" Then go on:

Please think about how your *professional staff members* assist you in public health policy making. Are there certain health policy issues wherein staff contributions to policy making are particularly helpful to you, or less helpful? Influential or not particularly influential? What are the particular health concerns where staff input really helps you to decide your position? Thank you! Can you please say some more about that?

Please think about how *lobbyists* assist you in public health policy making. Are there certain health policy issues wherein lobbyists are particularly helpful or less helpful? Influential or not particularly influential? What are the particular health concerns where lobbyists' input really helps you to decide your position? Thank you! Can you please say some more about that?

Please think about how *doctors and other health professionals* assist you in policy making. Are there certain health policy issues wherein they are particularly helpful or less helpful? Influential or not particularly influential? What are the particular health concerns where their input really helps you to decide your position? Thank you! Can you please say some about that?

Please think about how *patients' special interest groups* assist in policy making. Are there certain health policy issues wherein they are particularly helpful or less helpful? Influential or not particularly influential? What are the particular health concerns where their input really helps you to decide your position? Thank you! Can you please say some about that?

Please think about how *medical equipment manufacturers and drug companies* assist in policy making. Are there certain health policy issues wherein they are particularly helpful or less helpful? Influential or not particularly influential? What are the particular health concerns where their input really helps you to decide your position? Thank you! Can you please say some about that?

Please think about how *public opinion*, for example as measured in opinion polls, assists you in policy making. Are there certain health policy issues wherein public opinion is particularly helpful or less helpful? Influential or not particularly influential? What are the particular health concerns where

their public opinion really helps you to decide your position? Thank you! Can you please say some about that?

Please think about how newspapers, radio and TV inform you about public health policy issues. Are there certain health policy issues wherein mass media news is particularly helpful to you, or less helpful? influential or not particularly influential? What are the particular health concerns where information in the mass media really helps you to decide your position? Thank you! Can you please say some more about that?

Thank you, I am very near the end, I realise you are quite busy! Just these last few questions... In your expert view, how much do the ideas, beliefs, opinions and political influence of these groups influence health policy making in Georgia?

Family planning? [staff, lobbyists, health professionals, patient interest groups, manufacturers and drug companies, public opinion, media]

Restricting harm due to tobacco? [staff, lobbyists, health professionals, patient interest groups, manufacturers and drug companies, public opinion, media]

Traffic safety? [staff, lobbyists, health professionals, patient interest groups, manufacturers and drug companies, public opinion, media]

Safe water supply and public sanitation? [staff, lobbyists, health professionals, patient interest groups, manufacturers and drug companies, public opinion, media]

Control of illegal drugs? [staff, lobbyists, health professionals, patient interest groups, manufacturers and drug companies, public opinion, media]

Now, I have just about come to the end, but I must ask you... are there any important questions I should have asked you, to gain a better understanding of how public health policy making happens in Georgia? And if so, what answers are you able to provide?

Ethical committee decisions

საქართველოს ჯანმრთელობის ხელშეწყობისა და განათლების ფონდი
GEORGIAN HEALTH PROMOTION AND EDUCATION FOUNDATION
თბილისი, ვანის ქ. 4/72. 6/72, Vani str. Tbilisi, Georgia
ტელ/ფაქსი:(+995 32) 2347750 Tel/Fax: (+995 32) 2347750
ელ-ფოსტა: ghpef.georgia@gmail.com E-mail: ghpef.georgia@gmail.com
www.gbp.org.ge  www.gbp.org.ge

05.11.2007

Ethics Committee Approval Letter

To: Dr George Bakhturidze (PI)
FCTC Implementation and Monitoring Center in Georgia

Dear Dr Bakhturidze,

The Ethics Committee (EC) of the Georgian Health Promotion and Education Foundation reviewed and discussed your application and documents (dated: 12.10.2007) to conduct the survey entitled: **Population Survey on Tobacco Economy and Policy in Georgia** on 5th November 2007.

We approve the survey to be conducted in presented form.

The Ethics Committee expects to be informed about progress of the study, any changes in the study protocol and participants consent form should be notified to EC.

Please provide a final study report to the EC at the end.

We confirm that none of your study staff member was present during the decision-making/voting procedures of this meeting.

Yours sincerely,



Gela Kobeashvidze

EC Chairman

! "#\$ %&' () ! * "+, \$ %' () -. ! / ' (0' 12) -. ! " 3 " 4 "+ "% (' -. ! 5) +3 .

GEORGIAN HEALTH PROMOTION AND EDUCATION FOUNDATION

%- . (. ! . , &*+ ! #. 4/72.
6' (/5 "#! . :(+995 32) 2347750
' (-5) !6": ghpef.georgia@gmail.com
www.ghp.org.ge



6/72, Vani str. Tbilisi, Georgia
Tel/Fax: (+995 32) 2347750
E-mail: ghpef.georgia@gmail.com
www.ghp.org.ge

17.03.2013

Ethics Committee Approval Letter

To: Dr George Bakhturidze (PI)
FCTC Implementation and Monitoring Center in Georgia

Dear Dr Bakhturidze,

The Ethics Committee (EC) of the Georgian Health Promotion and Education Foundation reviewed and discussed your application and documents (dated: 02.03.2013) to conduct the qualitative study entitled: **The nature of the relationship between public opinion and policy-making in the public health arena: Experience of Georgian policy-makers, bureaucrats and advocates** on 17th March 2013.

We approve the study to be conducted in presented form.

The Ethics Committee expects to be informed about progress of the study, any changes in the study protocol and participants consent form should be notified to EC.

Please provide a final study report to the EC at the end.

We confirm that none of your study staff member was present during the decision-making/voting procedures of this meeting.

Yours sincerely,

Simon Gabrichidze

EC Chairman