Health Experts' Opinions about Tobacco Control Activities in Iran: Results from a Delphi Panel of National Experts

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Background: Iran signed the Framework Convention on Tobacco Control on June 16, 2003 and it was ratified by the parliament and the House of Representatives on November 6, 2005. Finally, it came into force on February 4, 2006. In this study, we aimed to evaluate health experts' opinion about tobacco control activities in Iran.

Materials and Methods: This was a qualitative case study. We used a series of open-ended questionnaires to assess important information regarding Iranian National Tobacco Control law and FCTC implementation. The study population comprised of health experts. Use of this method ensured the validity of questionnaires' contents. The first round of the questionnaire had been pre-tested in a pilot study. The final structure and lay out of questionnaires consisted of three main parts. The first part was designed with 7 multiple choice questions. Participants were able to rank answers from five (the most important) to one (the least important). The second part comprised four questions mainly on National Tobacco Control Program (NTCP) and the final part was about FCTC. Data collection was carried out between May 2010 and May 2011. In the analysis process each interview was considered as a separate case and then compared to other cases to ascertain variations in answers.

Results: All 40 members (100%) of the panel completed the entire process. All the participants had a consensus on tobacco control program in Iran. They believed the prevention programs to be important priorities in this regard. Tobacco Company as a governmental organization is believed to be the main barrier against tobacco control activities in Iran, and banning sales of tobacco to minors and controlling its smuggling are important factors for decreasing the supply of tobacco products. It is essential to implement comprehensive tobacco control law in Iran.

Conclusion: It is essential to implement comprehensive tobacco control law in Iran that covers all the priorities mentioned above. Considering the chronological aspect of law implementation, priority should be given to the more important parts of the law.

Key words: Tobacco, Health Expert, Delphi

INTRODUCTION

The World Health Organization's Framework Convention on Tobacco Control (FCTC) (1), which came into force after ratification by 40 countries on February 27, 2005, has been an opportunity to prevent the global burden of tobacco related diseases and disabilities. The treaty creates a set of principles and general duties for nations to address in tobacco use, with the objective (in Article 3) "to protect present and future generations from the devastating health, social, environmental and economic consequences of tobacco use........by providing a framework for tobacco control measures"(1). Iran like other
countries has emphasized the implementation of this law as an appropriate and legal means for achieving the goals of tobacco control in the society (2). However, for the FCTC to succeed, early ratification must be followed by implementation, and there are indications that in many countries around the world, policies and programs as well as local legislation are weak or even practically nonexistent,(3) and consequently the FCTC is not being put into practice. To date, investigations on the process and potential obstacles against its progress in the developing world have been limited (4).

Iranian representative officially signed the Framework Convention on Tobacco Control on June 16, 2003 in New York and it was ratified by the parliament and House of Representatives on November 6, 2005. Finally, it came into force on February 4, 2006 (5).

During the last decades, several efforts have been put into tobacco control in Iran. Examples include fatwa on the ban of smoking by the authoritative religious leaders ratified by the parliament on July 23, 1992 and by the government on August 21, 1994 to decrease tobacco consumption, ban on public sale and use of tobacco by the government on October 29, 1997, Vice President’s decree on July 15, 2002 and comprehensive tobacco control guidelines ratified by the parliament on October 2006 (5). A national Tobacco Control Committee (multidisciplinary stakeholder representation team), responsible for formulating tobacco control policies and making recommendations for tobacco control was established under the auspices of the Minister of Health and Medical Education in 2006. Current tobacco control policies which are in line with both FCTC and Iranian Tobacco Control Law are claimed to be fully-established. However, progress in implementing FCTC policies in Iran has been unclear in the last 5 years. We report here a study of health experts' opinions about tobacco control activities using Delphi method.

The policy Delphi method is a systematic forecasting procedure for obtaining, exchanging, and developing informed opinion on a particular topic (6). It is unique because it allows the investigator to collect data and describe agreement about specific policy options among key players in the policy decision situation. The policy Delphi method was originally developed by the RAND Corporation in the late 1940s (7) and has been used to examine and develop consensus on a variety of issues including drug policy, (8) education, and some other realms of science.

The policy Delphi method is a multistage process involving the initial measurement of opinions (the first round), followed by data analysis, design of a new questionnaire, and a second measurement of opinions (the second round) (9). The same process can be repeated until consensus is reached or saturation of opinion occurs. In the first round, divergence of opinions is typical. Consensus is more likely to occur with subsequent rounds. The Delphi method encourages convergence towards agreement (9). Taking part in the Delphi process can be a highly motivating experience for participants. In most Delphi studies, experts are asked to generate items through a first-round, open-ended procedure (10) using mailed questionnaires rather than face-to-face meetings (9).

**MATERIALS AND METHODS**

This was a qualitative case study. Health experts' opinions about tobacco as a health problem constituted the case. We started with a standardized open-ended questionnaire assessing important information regarding Iranian National Tobacco Control law and FCTC implementation. The study population comprised of Health experts e.g. officials in executive positions or leading positions in Ministry of Health and Medical Education, Ministry of Education, Mass Media, Ministry of Commerce, Ministry of Culture, Ministry of Foreign Affairs, Ministry of Youth and Sports, related NGO’s, police forces, Tobacco Control Research Centers, and Parliament members. We believed that, the involvement of different stakeholders enables a wide range of perspectives to be obtained and increases the range and quantity of opinions available to the researcher. Stakeholders holding
senior, middle or executive positions were interviewed. Tobacco control items included policies or issues on basic data on tobacco control, access to data in tobacco control, failure causes of tobacco control laws in Iran, measures for reducing the demand for tobacco products, measures to reduce tobacco supply, and priority of research programs.

Sample
In order to ensure inclusion of a broad spectrum of representatives, our sample was made according to Daisy Chaining method. Knowledgeable persons are usually identified through literature searches for who has published on the subject under study, recommendations from institutions and other experts in a process known as daisy chaining (11). One to three people from each organization were entered the study. Use of this method ensured the validity of the questionnaires' contents.

The organizations included the Ministry of Health and Medical Education, Ministry of Education, Mass Media, Ministry of Commerce, Ministry of Culture, Ministry of Foreign Affairs, Ministry of Youth and Sports, Iranian Anti Tobacco Association, police forces, Tobacco Prevention and Control Research Center, and Parliament members. Research team sent requests to all the selected organizations, in which Tobacco Control experts were identified. Personal appointments were made with experts after obtaining the approval of the directors/heads of departments.

Data collection and analysis
The first round of questionnaires had been pre-tested in a pilot study. The final structure and lay out of questionnaires consisted of three main parts. The first part was designed as seven multiple choice questions. Participants were able to rank answers from five (the most important) to one (the least important). The second part included four questions mainly on National Tobacco Control Program (NTCP) and the final part was about FCTC. Data collection was carried out between May 2010 and May 2011.

Data were analyzed using SPSS for Windows version 16 software. Data were categorized according to relevant themes. In the analysis process, each interview was considered as a separate case and then compared to other cases to ascertain variations in answers. After completion of each round, responses were analyzed by obtaining percentages for each item. If at least 60% of the panel experts rated an item as essential or important, it was included in the second round to be ratered. From the first round on, the weakest items were replaced by participants' new suggestions.

RESULTS
All 40 members (100%) of the panel completed the entire process. After three rounds, the panel members reached a high level of consensus on determining the most important priorities for Tobacco Control programs in Iran.

Need for basic data on tobacco control
Most participants believed that the most important subject that we need to have information about is the status of tobacco control activities in Iran (90%). Compiling national tobacco control program (70%) ranked second in this respect.

"We need data on tobacco smoking trend and pattern in all provinces" (participant 1)
"Data regarding other countries' experiences on Tobacco Control in their own nation" (participant 2)
"Evaluation of the causes of smoking initiation by the youngsters" (participant 3)
"Evaluation of NGO's activities and their effects on Tobacco Control" (participant 4)

Basic data on pattern of consumption, smoking cessation, other countries' experiences, and reasons for decreased age of smoking initiating and dependence were expressed by some participants as new suggested topics.

Importance of accessing data in tobacco control
Most participants (82.5%) believed that data regarding the pattern of tobacco consumption in different parts of the country has the highest priority in this respect. Smokers'
social and demographic characteristics ranked the second most important subjects (50%).

The most important failure causes of tobacco control laws in Iran:

The highest levels of agreement (81.5%) were reached regarding the role of Tobacco Company as a governmental organization. Insufficient financial support from tobacco control activities ranked second (42%).

No guarantee for implementation of tobacco control laws and low influence of tobacco control committee on governmental decisions were new suggested topics by participants.

Important parts of tobacco control program:

Almost all participants (92%) were supportive of emphasizing on tobacco prevention laws. High level of agreement was also reached on enhancing the knowledge of general population (77%).

Effective measures to reduce the demand for tobacco products:

Eighty percent of participants believed that raising taxes is the most effective way to reduce the demand for tobacco products. The second solution expressed by respondents was smoking bans in public places (42.5%). Finally, enhancing the knowledge of young people about smoking hazards was another important factor to reach this goal (40%).

Sales restrictions were another suggestion in this regard.

Effective measures to reduce tobacco supply:

The highest levels of agreement were reached on three items 1) ban supply to adolescents (77.5%), 2) Supply control by the Ministry of Commerce (72.5%) and 3) smuggling control (57.5%).

Smoking ban in public places was a new comment in this respect.

Priority of research programs in tobacco control

Eighty percent believed that research about prevalence and pattern of consumption is the most important priority. High level of agreement was also reached on research regarding the status of tobacco control programs in Iran.

Forcing the implementation of FCTC and evaluation of the efficacy of interventional programs were among the suggestions by the respondents in this regard.

Experts' supportive opinion about members of tobacco control steering committee is presented in Table 1 and 2.

Table 1. Overview of items included and re-rated in three rounds of the survey.

| Section                                           | Number of items |
|---------------------------------------------------|-----------------|
| Basic data on Tobacco Control                     | 5               |
| Important items in Tobacco Control                | 5               |
| Reasons for the failure of tobacco control laws   | 5               |
| Important parts of Tobacco Control Program         | 5               |
| Effective measures to reduce the demand for tobacco products | 5               |
| Effective measures to reduce the supply of tobacco products | 5               |
| Priority of research programs in tobacco control  | 5               |
| Developing National Tobacco Control Program(NTCP)  | 5               |
| Developing National Tobacco Control Steering Committee | 24             |
| Comprehensive National Tobacco Control law and the provisions requiring special attention | 6               |

Table 2. Experts' supportive opinion about members of tobacco control steering committee

| Representatives                                             | Percent |
|-------------------------------------------------------------|---------|
| Ministry of Commerce                                        | 85      |
| The mass media                                              | 80      |
| Ministry of Education                                       | 72.5    |
| Related NGOs                                                | 65      |
| Ministry of Sport                                           | 80      |
| Police force                                                | 75      |
| Ministry of Culture and Islamic Guidance                    | 77.5    |
| Ministry of agriculture                                     | 47.5    |
| Ministry of Economic Affairs and Finance                    | 47.5    |
| Judiciary system                                            | 75      |
| Newspapers                                                  | 65      |
| The Medical Council of the Islamic Republic of Iran          | 42.5    |

New suggestions: Municipality 58.3%
Universities 26.3%

In general, 35% of participants believed that the Tobacco Company representatives should not be invited to the tobacco control steering committee while 22.2% agreed to their attendance; 95% said that compiling national tobacco control program is necessity, 90% agreed with establishing tobacco control steering committee and 85% agreed with organizing professional tobacco control committee in all provinces (Table 3).
Table 3. Level of agreement with questions and priority settings

| Priority Number | Questions and priority settings                                      | Agreement Number | %  |
|-----------------|-----------------------------------------------------------------------|------------------|----|
| 1. Basic data on tobacco control | Status of tobacco control activities in Iran | 36 | 90 |
| 2. | National tobacco control program | 28 | 70 |
| 3. | Status of the Tobacco Company activities | 2 | 5.3 |
| 4. | Performance of tobacco control advocates (e.g. research centers, NGOs and governmental organizations) | 0 | 0 |
| 2. Important items in tobacco control | Pattern of tobacco consumption | 30 | 82.5 |
| 3. | Social and demographic characteristics of users | 12 | 50 |
| 4. | Knowledge, attitude and practice of smoking | 18 | 45 |
| 5. | Smoking cessation services | 10 | 25 |
| 6. | Tobacco company status (production, export, import) | 11 | 27.5 |
| 3. Failure causes of tobacco control laws | Tobacco company role as a governmental organization | 31 | 81.5 |
| 2. | Lack of financial support for tobacco control activities | 16 | 42.1 |
| 3. | Low level of authorities’ knowledge | 15 | 39.5 |
| 4. | Ineffective policies of Ministry of Health | 13 | 34 |
| 5. | Paying more attention to other health priorities than to tobacco control programs | 4 | 11 |
| 4. | Important parts of tobacco control program | Prevention program | 37 | 92 |
| 2. | Enhance knowledge of general population | 31 | 77 |
| 3. | Tobacco smoking ban in public places | 12 | 30 |
| 4. | Smoking ban in work places | 8 | 20 |
| 5. | Smoking cessation programs | 4 | 10 |
| 5. Effective measures to reduce the demand for tobacco products | Raising taxes on tobacco | 32 | 80 |
| 2. | Tobacco smoking ban in public places | 17 | 42 |
| 3. | Packaged labeling | 6 | 15.8 |
| 4. | Enhance the knowledge of adolescents about tobacco | 22 | 25.5 |
| 5. | Ban tobacco advertising | 14 | 25 |
| 6. Effective measures to reduce tobacco supply | Ban supply to adolescents | 33 | 77.5 |
| 2. | Control supply by the Ministry of Commerce | 29 | 72.5 |
| 3. | Smuggling control | 25 | 57.5 |
| 4. | Emphasis on Ministry of Agriculture | 15 | 37 |
| 5. | Smoking cessation program | 2 | 5.3 |
| 7. Priority of research programs in tobacco control | Prevalence and pattern of use | 32 | 80 |
| 2. | Evaluation of tobacco control program status in the country | 27 | 67.5 |
| 3. | Evaluation of economic aspects | 15 | 39.5 |
| 4. | Smoking cessation programs | 13 | 27.5 |
| 5. | Tobacco side effects on health | 8 | 21 |

**DISCUSSION**

Although the conclusions drawn in this study should be considered attenuated due to the applied method, the findings suggest practical priorities and stances of Tobacco Control Law implementation in Iran. This study was done for the first time on tobacco control field and it could be considered as a pilot study for other studies in this realm of public health. Health experts who participated in this study were more interested in tobacco control programs than expected, and it becomes more surprising bearing in mind that experts were from different organizations. This fact shows that organizations are meaningfully involved in this field. Findings from this study revealed that Delphi method could be a valuable tool for building consensus on Tobacco control activities. This method has already proven its effectiveness in this kind of capacity building studies (12). Most health experts understood the necessity of a national tobacco control program. In particular, most participants were aware of the tobacco use side effects and the need for tobacco control program implementation. This level of awareness amongst experts has been reported in previous studies elsewhere (12, 13).

Most participants in this study believed that basic data on tobacco control is the most essential issue. It seems that research evidence is further important to politicians, because it helps them support government interventions to protect public health. Their view is supported by a study done in New Zealand (14). In the mentioned study some indications were considered by which research evidence was used to try and affect Tobacco control policies. They were: “(i) helping get policy change onto the political agenda, (ii) the exposure of politicians to health professionals using research, (iii) repeated exposure of politicians to a range of evidence, and (iv) positioning the research as reliable, ‘expert’, or ‘accepted’, and therefore ‘preferable’ compared to other types of evidence.” (14)

The most important cause of failure of tobacco control laws in Iran according to participants was efforts of tobacco companies. The tobacco companies and their allies appear to have impacts on some national level politicians by their acts. The main causes of the willingness of these participants to go against tobacco companies in this case are questions for further research, but generally speaking these efforts are completely clear for all experts despite the
long time attempts of tobacco companies to affect and change politicians' opinions (15).

The information resulted from this study could help advocates realize how tobacco control experts think about different types of tobacco control activities which could lead to the development of more effective advocacy and implementation strategies. If it is known there is experts support for a tobacco control policy, these findings prove that support is also present or can be achieved from other related legislative and executive bodies.

We hope that this paper urges others to carry out research on common factors underlying legislator and public attitudes toward tobacco control.

**CONCLUSION**

Delphi method has the potential for building consensus on tobacco control activities. It is essential to implement comprehensive tobacco control law in Iran that includes all the priorities mentioned above, and considering chronological aspect of law implementation, priority should be given to the more important parts of the law.

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