

## Brief Report

# Key Policy Makers' Awareness of Tobacco Taxation Effectiveness through a Sensitization Program

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## Abstract

The implementation of 5 of the 6 WHO MPOWER program in Iran is satisfactory; the only notable shortcoming is the lack of tobacco taxation increases.

This study was designed to increase key policy makers' awareness of tobacco taxation effectiveness through a sensitization program in Iran.

This analytical and semi-experimental study in 2014 included 110 tobacco control key policy makers, who were trained and received educational materials on the importance of tobacco taxation. A valid and reliable questionnaire was completed before and three months after intervention. Data were analyzed using mean (SD), *t*-Test and analysis of variance.

The mean (SD) scores at pre- and post-test were  $2.7 \pm 3$  and  $8.8 \pm 1$  out of 10, respectively. Paired *t*-tests demonstrated a significant difference in the pre- post-test knowledge scores.

Increasing knowledge and promoting favorable attitudes of policy makers can lead to greater attention which could in turn change tobacco taxation policies.

**Keywords:** Control, tax, tobacco

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## Introduction

Currently tobacco use is one of the chief preventable causes of death in the world, causing more than 5 million deaths per year. By 2030, tobacco use is expected to be the single biggest cause of death worldwide, accounting for approximately 8 million deaths per year. If effective action is not taken, tobacco will cause a billion deaths worldwide in the 21<sup>st</sup> century.<sup>1</sup> To accomplish the important objectives of the Framework Convention for Tobacco Control (FCTC), the World Health Organization (WHO) has developed the MPOWER policy package that includes six measures intended to advance tobacco control. These six measures are as follows: Monitor tobacco use and prevention policies, Protect people from tobacco smoke, Offer help to quit tobacco use, Warn about the dangers of tobacco, Enforce bans on

tobacco advertising, promotion and sponsorship, and Raise taxes on tobacco.<sup>2</sup> Among these six measures, tobacco taxation is the most effective approach to tobacco control in developing countries, as mentioned in Kostova, *et al.*'s study in Turkey in 2014.<sup>3</sup> Also, a study in Australia in 2013 demonstrated the impact and effects of increasing tobacco taxation on smoking cessation.<sup>4</sup>

In the meantime, another similar experience in 2012 in Ukraine has demonstrated the effect of tobacco taxation on reducing tobacco use in the population and increasing state revenue between US\$500 to US\$700 million per year.<sup>5</sup>

Tobacco taxation policies in Iran are not at an adequate level.<sup>6</sup> Despite the fact that Iran compared highly favorably to other countries in the Eastern Mediterranean Region on total scores for implementation of the MPOWER package, it has received the minimum scores on increasing tobacco taxation. Tobacco Taxation in Iran is only about 17.3% of the total retail price, far short of the 75% recommended. This clearly could be due to insufficient awareness and attention of policy makers to the impact of tobacco taxation on tobacco control.

Therefore, this study was designed both to assess the knowledge of key tobacco control policy makers about the importance of tobacco taxation and its effect on tobacco use and general health improvement and to change their attitudes toward greater support for effective tax policy.

## Materials and Methods

This study was implemented through a pre-test followed by an educational intervention and posttest in 2014. A 10-item questionnaire about tobacco taxation was designed by a panel of experts, including national and international tobacco use senior experts and members of the Framework Convention Alliance (FCA). The face

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**Table 1.** Percentage of true answer in pre- and post-test.

Questions	True answer in pre-test	True answer in Post-test
1. Are you apprised of the Framework Convention of Tobacco Control (FCTC)?	45%	87%
2. What is Article 6 of FCTC about?	30%	92%
3. How many measures does the WHO MPOWER package have?	35%	76%
4. What is the percentage of the tobacco tax rate compared to price in our country?	30%	79%
5. In developed countries what is the percentage of the tobacco tax rate compared to price	30%	69%
6. Do tobacco tax raises lead to decreases in starting smoking?	25%	90%
7. Do tobacco tax raises lead to increases in the quit rate?	15%	93%
8. Do tobacco tax raises lead to increases in government revenue?	15%	91%
9. Do you agree with a tobacco tax raise in this country?	20%	100%
10. Which one is more convenient? Tobacco taxation greater than annual inflation, increasing taxation at a fixed rate per year, no increase in tobacco tax.	25%	80%

**Table 2.** Results of *t*-tests and differences between mean item scores in pretest and post-test.

Pair 1		Mean	SD	SE	95% CI		<i>t</i>	df.	Sig.
					Lower	Upper			
	Pre test	-5.87	15.88	5.01	-70.0	-47.3	-11.7	9	0.000
	Post test								

and content validity of the questionnaire were confirmed through a separate panel expert meeting with the presence of 15 tobacco control and health experts. The reliability of questions were also evaluated and approved by performing a test-retest procedure on 15 tobacco control experts.

A list of key policy makers in tobacco control was prepared through a convenience sampling method from the Ministry of Health and Medical Education, Ministry of Economic Affairs and Finance, Iranian Parliament Members, Universities and Research Centers. The educational intervention, including a 10–15 minute training on the importance of tobacco taxation and its effect on tobacco use and an educational package (booklet, pamphlet and CD), was presented by the principal investigator through a panel meeting or individual meetings over the three months between the pre- and post-test sessions.

A total of 110 key policy makers in tobacco control participated in our study, including 11 members of Parliament, 8 Deputy Ministers, 9 Directors General, 28 Senior Experts at the Ministry of Health and the Ministry of Economy, 25 University Professors, 7 Heads of Health Research Centers, 12 Senior members of health-related NGOS, and 10 senior experts in Tobacco control. For ethical considerations, the names and exact positions of the participants are kept confidential.

Numerical data were collected and frequency and mean scores were calculated. Statistical significance was determined using the *t*-test and analysis of variance. A *P*-value of less than 0.05 was considered significant.

## Results

The mean of the pretest scores for the participants was  $2.7 \pm 3$  (the maximum score was 10). Question No. 1 (45% true answers) and questions No. 7 and 8 (15% true answers) had the maximum and minimum true answers, respectively, in the questionnaire. The mean of the post-test scores was  $8.8 \pm 1$  (the maximum score was 10). Question No. 9 with 100% true answers and question

No. 5 with 69% true answers were the maximum and minimum true answers, respectively, on the questionnaire (Table 1). The *t*-test results demonstrated the magnitude of the differences between mean item scores for the pre- and posttest ( $P < 0.05$ ).

## Discussion

This study demonstrates that changes in health related policies can be achieved by increasing awareness and changing attitudes of the main and key policy makers after an educational intervention on the importance of tobacco taxation. The rate of tobacco taxation was 17.3% in Iran in 2013 and it was increased to 20%, 30%, and 40% on national, joint and imported products, respectively, after our simple and short intervention in 2014.<sup>7</sup>

Iran has taken the lead in the region in implementing 5 out of the 6 MPOWER measures,<sup>6</sup> but failed to make major progress in tobacco taxation policy perhaps due to awareness and attention on the part of policy makers. Therefore, it was necessary to undertake lobbying and educational intervention with major policy makers in tobacco control. The importance of this approach has been also investigated over a 30-year period by Golden, *et al.*<sup>8</sup>

The results of the pretest in our study revealed insufficient or inaccurate awareness on the part of the main policy makers about the FCTC (45% true answer) and tobacco taxation (15% true answer), but this changed dramatically after a simple and short intervention. This is especially important in a context in which, as demonstrated in a systematic review, tobacco industries have tried to keep tobacco taxes low and have worked to influence tobacco tax policies. The most commonly identified industry argument against tax increases was the claim that tax increases lead to illicit trade, promote smuggling and decrease government revenue. These claims were appropriately rejected in the World Bank's report. This report emphasized the available evidence; for example, increased tobacco taxation in South Africa has led to increased government revenue and reduced illicit trade.<sup>9</sup>

Uninformed attitudes of decision makers can be a significant

barrier to increasing tobacco taxation, especially given misinformation spread by the tobacco industry. Governments need to be informed and to be challenged to implement a comprehensive advocacy program in order to overcome barriers. As mentioned clearly in Thrasher's 2014 study,<sup>10</sup> advocacy can build consensus and communicate more clearly how to implement successful tobacco tax initiatives. All of the main tactics identified in the above mentioned studies are applicable to Iran. Our study demonstrated that even simple lobbying and sensitization of officials and key policy makers at an opportune time (before approval of the budget in parliament) could lead to implementation of effective tobacco taxation policy.

The implementation of WHO MPOWER program in Iran is satisfactory; the only notable shortcoming is the lack of tobacco taxation increases. However, the result of this study reveals that increasing awareness, attention and sensitization of policy makers could make major progress in tobacco taxation policy at national level but we will need additional follow up efforts to implement lobbying and sensitization of tobacco control key policy makers' tactics.

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