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Public Awareness about Framework Convention on Tobacco Control (FCTC) in Tehran

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ABSTRACT

Background: *The global tobacco epidemic is currently responsible for 5.2 million morbidity and mortality per year seventy percent of which occur in developing countries. Framework Convention on Tobacco Control (FCTC) is the first international public health treaty ratified by all countries in order to encounter the ever-growing tobacco epidemic. This study was designed to evaluate the public awareness of Tehran residents about FCTC.*

Materials and Methods: *This was a cross-sectional study and sampling was performed in main city centers during the years 2007-2008 by using non-probability sampling method. The questionnaires were designed according to the World Health Organization (WHO) and IUATLD standard questionnaires and a total of 2053 individuals were questioned.*

Results: *Of the participants, 47.2% had experienced smoking (55.5% of men and 28.8% of women). The frequency of daily cigarette consumption was 22/7% (29/7% of men and 7% of women) (P<0.001). Forty-six percent of the participants had experienced hookah (50% of men and 36/8% of women) (P=0.0000). A total of 184 individuals (9%) were aware of FCTC among which, 35 individuals (19%) who comprised 1/7% of the total understudy population claimed to have a complete knowledge regarding some details. Awareness about FCTC was 5.1% among those with an educational level equal or below high school diploma. This rate was 14.9% in those with a bachelor's degree and 33.3% (more than twice the rate) in those with higher educational levels (P<0.001).*

Conclusion: *Prevalence of smoking was found to be higher in our study compared to similar studies. Higher level of education was significantly associated with greater awareness regarding FCTC. The overall public awareness was low and implementation of public awareness programs regarding FCTC is necessary.* ***(Tanaffos 2009; 8(4): 26-32)***

Key Words: *Cigarette smoking, Hookah, International cooperation*

INTRODUCTION

Tobacco consumption is among the most common preventable causes of mortality and the second cause of death in the world. Currently, one out of ten deaths is attributed to tobacco use and the WHO has estimated the total mortality due to smoking to reach 8 million by the year 2030 (1). It is noteworthy that more than half these mortalities occur in middle-ages (between 35-59 years) (2). This on growing trend in the past few decades has caused concerns for public

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health officials nationally and internationally and resulted in the WHO considering tobacco control among its priorities. Between the years 1999-2003, WHO adopted the FCTC after four years of continuous efforts and it was ratified by the health administers of 192 countries. FCTC is considered the first largest international public health treaty aiming to encounter the ever-growing tobacco epidemic. The objective of this convention and its protocols are to protect present and future generations from the devastating health, social, environmental and economic consequences of tobacco consumption and exposure to tobacco smoke (3).

Iranian representative officially signed the convention on June 16, 2003 in New York and it was ratified by the parliament and House of Representatives on November 6, 2005. It came into force on February 4, 2006 (3).

FCTC is a major international agreement and the only one adopted by the WHO (4). FCTC is predominantly a standard-setting document which identifies various measures that can help Member States in adopting a comprehensive tobacco control strategy but it has a few provisions which impose a binding obligation on the Parties.

Some of the recommendations made by FCTC are as follows: a comprehensive ban should be placed on direct and indirect tobacco advertising (Article 13), prohibition of smoking in public places (Article 8), each unit packet and package of tobacco products and any outside packaging and labeling of such products should carry health warnings (Article 15), include tobacco cessation programs in national health and education programs and strategies (Article 14) and many other interventions presented in 11 parts and 38 articles (5). According to FCTC articles 1-4 public awareness is required regarding the health hazards of smoking, its addictive nature and the risks of mortality due to smoking and exposure to second hand smoke (5). Article 12 emphasizes on education, communication, training and public awareness which are essential factors for the enforcement of FCTC. Section C of this article states that each party shall adopt and implement effective legislative, executive, administrative or other measures to promote public access, in accordance with national law, to a wide range of information on the tobacco industry as relevant to the objective of this Convention (5).

Previously, only developed countries in northern Europe, America and England had tobacco control. Beginning from the 1980's, Thailand and Brazil invested in comprehensive tobacco control programs and achieved great success in this regard (6).

In Iran, like many other countries, tobacco consumption is considered a major public health concern. According to the latest statistics published by the Ministry of Health, 12.5% of the Iranian population smoke including 25% of men and 2.5% of women (7).

Several studies have been conducted and so much effort has 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 guideline ratified by the parliament on October 2006.

Since there was no information available on public awareness about FCTC in Iran and considering the mandatory enforcement of FCTC in our country following its ratification and guaranteed enforcement by the Iranian authorities in February 2006, this study was performed to evaluate the public knowledge of Tehran residents about FCTC and its contents. Although, the awareness of health officials regarding this matter is much more important than the public awareness in this regard, this study was performed 1 year after the ratification of FCTC by the Iranian authorities. This study aimed to evaluate

the public awareness regarding FCTC and this information can be used as a primary baseline in future studies.

MATERIALS AND METHODS

This was a cross-sectional study conducted in a one year period. Study location was the city of Tehran and 5 major geographical districts in the north, south, east, west and center of Tehran were selected for sampling. In this manner, 5 busy squares with heavy traffic were chosen. Participants were interviewed face to face in the walkways by trained interviewers. Individuals were informed about the study and personal information of participants was collected. Questionnaires were filled out anonymously by the interviewers after obtaining the informed consent from the participants.

Sampling was done by using the non-probability sampling method. Questionnaires used contained 12 close-ended questions and were designed according to the WHO and IUATLD questionnaires. Demographic data included gender, age, level of education, smoking experience and amount of tobacco consumption. Cigarette and hookah were the two products studied.

Amount of smoking was measured by the number of cigarettes smoked. Individuals who smoked at least one cigarette a day were considered current smokers, if smoking was occasionally, individuals were considered occasional smokers; those who used to smoke but had not smoked during the previous year were considered ex-smokers and those who had smoked a total of less than 100 cigarettes so far were considered experimental smokers. Public awareness about FCTC was measured by 2 questions: 1- knowing about it and 2- having knowledge about some important details. Possible responses were categorized into 2 choices of "I am aware of it" or "I am not aware of it."

To evaluate the prevalence of smoking or hookah consumption, three age groups of less than 19 years, 20-50 years and above 50 years were considered.

Data were analyzed using SPSS (Version 11.5) software.

RESULTS

A total of 2053 individuals participated in this study out of which 1426 (69/5%) were men. The mean age was 34.9 years, the median was 30 years and the mode was 25 (range 19-80 years). The mean age was 36±1 years in men and 33±12/3 years in women (P<0.001). Eleven point seven percent of the participants were below 19 years, 72% were between 20-50 years and 16.3% were above 50 years old.

In terms of level of education, 132 individuals (6.4%) were illiterate, 552 (25.4%) were below high school diploma, 808 (39.5%) had high school diploma, 471 (22.9%) had bachelor's and 120 individuals (5.8%) had higher degrees.

In terms of daily cigarette consumption (Table 1), 467 participants (22.7%) were daily smokers including 423 (29.7%) men and 44 (7%) women.

Two hundred and six participants (10%) smoked hookah at least once a week, 368 (17/9%) at least once a month and 352 (17/1%) at least once a year (Table 2).

Of all the participants, 184 (9%) individuals were aware of FCTC out of which 35 (19%) subjects who comprised 1/7% of all the participants claimed to have a complete knowledge about some details. Awareness about FCTC was almost equal among men and women (8.8% of men and 9.3% of women) (p=0.7).

Individuals who were aware of FCTC were mostly in the age range of 30-39 yrs (26%) and those with the least amount of knowledge were mostly in the age group of above 60 years old (3%).

Overall, 5.1% of individuals with the high school diploma and below diploma degree were aware of FCTC. This rate was 14.9% among those with bachelor's degree and 33.3% (more than twice) in those with higher degrees (P<0.001).

Table 1. Prevalence of tobacco/hookah smoking based on age and gender in Tehran residents-2007.

Age group	Hookah smoking				Total	P Value
	At least once a week No(%)	Monthly No(%)	Yearly No.(%)	Never No.(%)		
Men						
≤19 years	35(21.3)	38(32.2)	26(15.9)	65(39.6)	164(100)	
20-50 years	110(11.2)	196(20.0)	166(17.0)	507(51.8)	979(100)	P=0.006
>50 years	30(10.6)	54 (19.1)	49(17.3)	150(53.0)	283(100)	
Total	175(12.3)	288(20.2)	241(16.9)	722(50.6)	1426(100)	
Women						
≤19 years	2(2.6)	8(10.4)	16(20.8)	51(66.2)	77(100)	
20-50 years	25(5.0)	66(13.2)	89(17.8)	319(63.9)	499(100)	P=0.7
>50 years	4(7.8)	6(11.8)	6(11.8)	35(68.6)	51(100)	
Total	31(4.9)	80(12.8)	111(17.7)	405(64.6)	627(100)	
All Participants						
≤19 years	37(15.4)	46(19.1)	42(17.4)	116(48.4)	241(100)	
20-50 years	135(9.1)	262(17.7)	255(17.3)	826(55.9)	1478(100)	P=0.101
>50 years	34(10.2)	60(18.0)	55(16.5)	185(55.4)	334(100)	
Total	2.6(10.0)	368(17.9)	352(17.1)	127(54.9)	2053(100)	

Table 2. Prevalence of cigarette smoking based on age and gender in Tehran residents-2007

Age group	Cigarette smoking habit				Total	P Value
	Daily No.(%)	Occasionally No.(%)	Ex-smoker No.(%)	Non- smoker No.(%)		
Men						
≤19 years	21(12.8)	23(14.0)	7(4.3)	113(68.9)	164(100)	
20-50 years	273(27.9)	193(19.7)	54(5.5)	459(46.9)	979(100)	P<0.001
>50 years	129(45.6)	39(13.8)	23(8.1)	92(32.5)	283(100)	
Total	423(29.7)	255(17.9)	84(5.9)	664(46.6)	1426(100)	
Women						
≤19 years	0(0.0)	12(15.6)	1(1.3)	64(83.1)	77(100)	
20-50 years	39(7.8)	85(17.0)	18(3.6)	357(71.5)	499(100)	P=0.067
>50 years	5(9.8)	4(7.8)	1(2.0)	41(80.4)	51(100)	
Total	44(7.0)	101(16.1)	20(3.2)	462(73.7)	627(100)	
All Participants						
≤19 years	21(8.7)	35(14.5)	8(3.3)	177(73.4)	241(100)	
20-50 years	312(21.2)	278(18.8)	72(14.9)	816(55.2)	1478(100)	P<0.001
>50 years	134(40.1)	43(12.9)	24(7.2)	133(39.8)	334(100)	
Total	467(22.7)	356(17.3)	104(5.1)	1126(54.8)	2053(100)	

Table 3. Prevalence of cigarette and hookah smoking based on the level of education

	Cigarette		Hookah		
	Daily	Occasionally	At least once a week	Monthly	Yearly
Illiterate	46.2	15.2	20.5	21.2	12.1
Below Diploma	28.2 *	13.2	10 *	17.4	15.1
Diploma	20.9 *†	16.5	10.1 *	19.8	17.2
Bachelor's Degree	14.9 *†	21.2 †	7.9 *	16.6	19.7
Higher Degrees	16.7 *†	28.3 †‡	6.7 *	9.2 *†	20.8

*P<0.001 compared to illiterate

†P<0.005 compared to below diploma

‡P<0.01 compared to illiterate

Among individuals who had some kind of knowledge about the FCTC, 47.3% were smokers (daily or occasional). This rate was 39.3% among those with no knowledge in this regard (P=0.036).

Amount of cigarette or hookah smoking based on the educational level is shown in Table 3.

Awareness about FCTC was significantly higher among those who had experienced smoking compared to non-smokers (10.8% versus 7.4%, P<0.01). However, no such correlation was found in hookah smokers (9/7% versus 8/4%, P=0.32).

Nineteen point seven percent of smokers who were aware of FCTC (10/8% of the understudy population) had also some level of knowledge about the details.

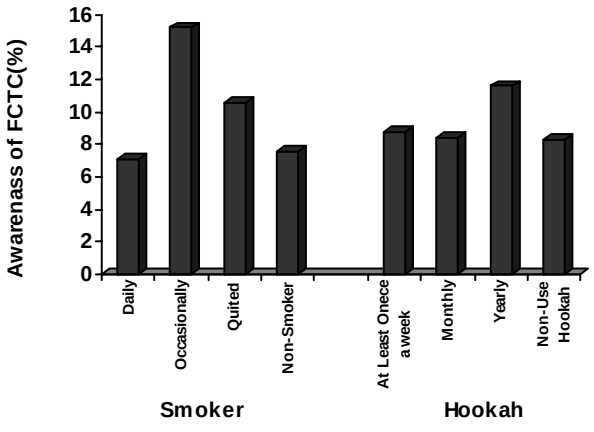

Figure 1. Awareness about FCTC based on the consumption of tobacco products

DISCUSSION

Different countries are in various levels in terms of their involvement in the tobacco epidemic. They also have different enforcement abilities to confront it. FCTC basically acts as scaffolding for helping the nations to formulate and adopt better tobacco control policies. There would then be changes/additions that would be made in order to adopt the FCTC to the particular country (3,8). FCTC was adopted by the WHO after 4 years of planning. In this regard, Iran was chosen as the speaker of EMRO region. To date, 183 countries have signed the treaty and parliaments of 167 of them including Iran have ratified its enforcement and reported to the United Nations (3).

This study evaluated the prevalence of tobacco consumption as well as the correlations between social and educational levels and knowledge about FCTC. A total of 2053 individuals were questioned out of which 69.5% were men. Twenty nine point seven percent of men and 7% of women were regular smokers and overall more than half the men and one third of women had experienced smoking. Whereas, similar studies conducted the same year reported 25.2% of men and 2.5% of women as daily smokers (7). These rates were reported to be 24.2% of men and 3.4% of women by the WHO in the year 2008.(1) Despite different study methods, it can be concluded that prevalence of tobacco consumption

has increased among both genders, especially among women.

Almost two third of the participants (68.2%) had high school diploma or higher degrees indicating the high level of education in the understudy population. Additionally, awareness about FCTC significantly increased with higher education. On the other hand, it was shown (Table 3) that higher educational level (from illiterate to bachelor's of science) was associated with decreased prevalence of daily smoking. This indicates the protective role of education in initiation and continuation of daily smoking. However, frequency of occasional smoking increased by higher educational levels (from under diploma to higher than bachelor's degree). In a similar study conducted by M. Siahpush and colleagues in Australia, England and Canada on the public knowledge about risks of smoking, it was shown that higher educational level was associated with greater awareness about the harmful effects of smoking. It shows that whenever information is available on the health hazards of a product, these data are absorbed more rapidly by the educated people. They usually have better access to information and know how to obtain it (9).

Various studies have shown that lower educational level or economical status are associated with less awareness about the harmful effects of tobacco products resulting in higher addiction to nicotine (10).

To obtain and improve the public awareness are among the first steps in the process of behavioral change (11). Despite the tobacco control discussions since 1999 and adoption of FCTC by Iran in 2003, public knowledge in this regard is low compared to other countries. For example, in a study conducted in Ghana in 2006, 36% of the participants were aware of FCTC and 20/7% had some kind of knowledge about the major details. Also, 95% of those who knew FCTC would follow the tobacco control measures (12,13,16).

In 2001, the Canadian Ministry of Health designated a 5-year program with 480 million dollars budget for tobacco control, 40% of which was contributed to the media to increase the public knowledge in all age groups in this regard (14).

The FCTC is among the best strategic methods for tobacco control, but it takes time to achieve the major goals and to enforce all the guidelines of FCTC in different countries. Some countries have not ratified the treaty yet and many of those who ratified it face some obstacles for its enforcement (15).

CONCLUSION AND SUGGESTIONS

This study showed that public awareness about FCTC is low. By increasing the public knowledge in this regard, non-smokers will become more demanding of their rights and smokers will become more aware of their unacceptable behavior.

Considering the high prevalence of cigarette and hookah smoking, larger studies are required for a more comprehensive evaluation of factors affecting public awareness, attitude and function. On the other hand, in order to increase the knowledge and change behaviors authorities have to use educational means and communication tools to cover the whole population.

Authors suggest the following recommendations to help the enforcement of FCTC:

-Implementation of public awareness programs regarding FCTC

-Cooperation with social and political authorities, governmental and non-governmental tobacco control organizations, the media and newspapers to increase the public knowledge regarding FCTC and tobacco control programs

-Educating physicians and other business owners about FCTC and coordinating the national tobacco control guidelines with the FCTC recommendations

-Adoption of FCTC and its guaranteed enforcement by the government as soon as possible

Limitations of the Study

Considering our method of sampling, our understudy population may not be the exact representative of the society and the results may not be applicable to the whole nation. However this study can be considered as a base for the future studies in this regard.

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