National Survey of the Smoking Cessation Services in Iran's Primary Health Care System

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Authors' contributions

This work was carried out in collaboration between all authors. All authors read and approved the final manuscript.

Original Research Article

ABSTRACT

Aim: Delivery of smoking cessation supports via primary health care settings could be an effective way to increase people access to cessation services. This study was aimed at evaluating structural characteristics of smoking cessation services established within the Iranian Primary Health care system.
Materials and Methods: In order to obtain structural information about smoking cessation services, firstly a phone call was made with coordinating authorities of tobacco control programs in each university which are under supervision of Ministry of Health. Secondly, after describing the objectives of project they were asked to fill the related questionnaire. The questionnaire was available at MOH website and follow-up for its completion was done via telephone call.
Results: Smoking cessation centers started their activities in 2007 and their number increased between 2008 and 2011. In all primary health centers, smoking cessation services are provided free of charge. In sixty percents of centers individual therapy was used, a combination therapy

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(including pharmacotherapy) is highly preferred. Nicotine patch was the most common drug which is used (62%) in smoking cessation clinics. General physicians are the main providers of smoking cessation programs in health care centers (87%). The number of smoking cessation centers in primary health care system decreased during years of 2011(89 centers) and 2012(79 centers) compare with 158 centers in 2010. There isn't national quit line in Iran.

Conclusion: This study shows smoking cessation programs provided in primary health care system in Iran. The present study gathered useful and updated information on structural of smoking cessation services in Iran's primary health care system.

1. INTRODUCTION

Tobacco smoking is the most important cause of preventable death in the world [1]. According to the WHO (World Health Organization) reports; 14.2% of Iranian population are smokers. It's estimated to be responsible for up to 50000 deaths annually in Iran [1], therefore helping smokers to stop smoking is a health priority. High percentages of smokers want to quit and most of them try it but the success rate is very low in many countries [2,3], accordingly they need to get consultation in this regard. Finding of a study performed in Iran showed that 2.4% of smokers have managed to stop smoking [4]. According to the nature of nicotine addiction, smoking cessation rate would be decreased without any intervention [5-6].

Providing smoking cessation supports via primary health care settings could be an effective way to increase people access to cessation services. Continues counseling at each visit can emphasize the importance of tobacco cessation [7-8]. Additionally, counseling by health workers may increase quit rates [9]. This modality is relatively low in cost and it is available to most individuals. These interventions are very useful as they are presented by health professionals, who are reliable and smokers can also have a good communication with them [10-11].

In each Iran's province there is a university under supervision of Ministry of Health and Medical Education. The names of medical sciences universities in Iran have been changed into universities of medical sciences and health services and alongside with medical education their responsibility is providing health services. Therefore, primary health care services are provided by universities of medical sciences and health services in different provinces. These universities are under supervision of Ministry of Health and Medical Education. National tobacco control programs of health care system are also provided by these universities and in each university there is a person to coordinate these activities in the affiliated centers all across the province. "Primary health care system network "is demonstrated in Fig. 1.

Integration of smoking cessation in UK health system resulted in the treatment of five percent of smokers. Per year health system provides a significant smoking cessation service for a large number of smokers [12]. It has been discovered that quit program plays an important role in the decreasing of smoking behavioral rate [2,13,14].

A survey conducted in the first smoking cessation clinic in Iran showed that quit rate is associated with pharmacotherapy, behavioral therapy and group therapy [15].

The number of smoking cessation services and their treatment programs are not fully recognized at a national level and there are differences in the details of activities for example costs, drugs and their methods. This study was aimed at evaluating structural characteristics of smoking cessation services established within the Iranian Primary Health Care System.

2. METHODS

In order to obtain structural information about smoking cessation services in health system, firstly a phone call was made with coordinating authorities of tobacco control programs in university of medical sciences. Secondly, after describing the objectives of project they were asked to fill the related questionnaire. A check list was available at MOH (Ministry Of Health) website and follow-up for its completion was done via phone call. Our subjects were governmental primary health care settings. As mentioned before these centers are under supervision of medical sciences universities. There are 64 universities of medical sciences in Iran. We made contact with coordinators of

tobacco control programs in 64 universities of which 5o universities responded. Fifty universities went through questioning in order to get these centers' data, besides smoking cessation services of affiliated centers were evaluated. Every university includes a tobacco control unit and smoking cessation program is a main activity in this unit.

As mentioned before data were collected using a check list including the following information:

Services access modalities: This part includes registration process, costs to access the smoking cessation programs and the number of smoking cessation clinics in each province.

Type of smoking cessation programs: In this section gathered information on the variety of smoking cessation programs, for example pharmacotherapy, individual or group counseling brief advice to quit.

Smoking cessation services employees and professional's characteristics: this section was about those who provide smoking cessation programs and their professional qualification.

Drugs availability: In this section collected data were about types of smoking cessation drugs for example nicotine gum, patch and Bupropion. Reasons for poor activity of smoking cessation services in some area especially during past 2 years.

SPSS software version 16 was used to analyzing data on descriptive analysis of main collected information.

3. RESULTS

In October 2013 coordinators of tobacco control programs in 50 universities of medical sciences in Iran were contacted by phone and all of them responded to our study. We have got the information of smoking cessation activities and their structure in health care centers which were under supervision of these universities. There were trained coordinators for smoking cessation activities in 74% of centers. Smoking cessation centers started their activities in 2007 and their number increased between 2008 and 2011 (Table 1). The frequency of smokers who received smoking cessation services from 2007-2012 is showed in Table 1.

Frequency of common methods which were used in smoking cessation clinics showed in Fig. 2.
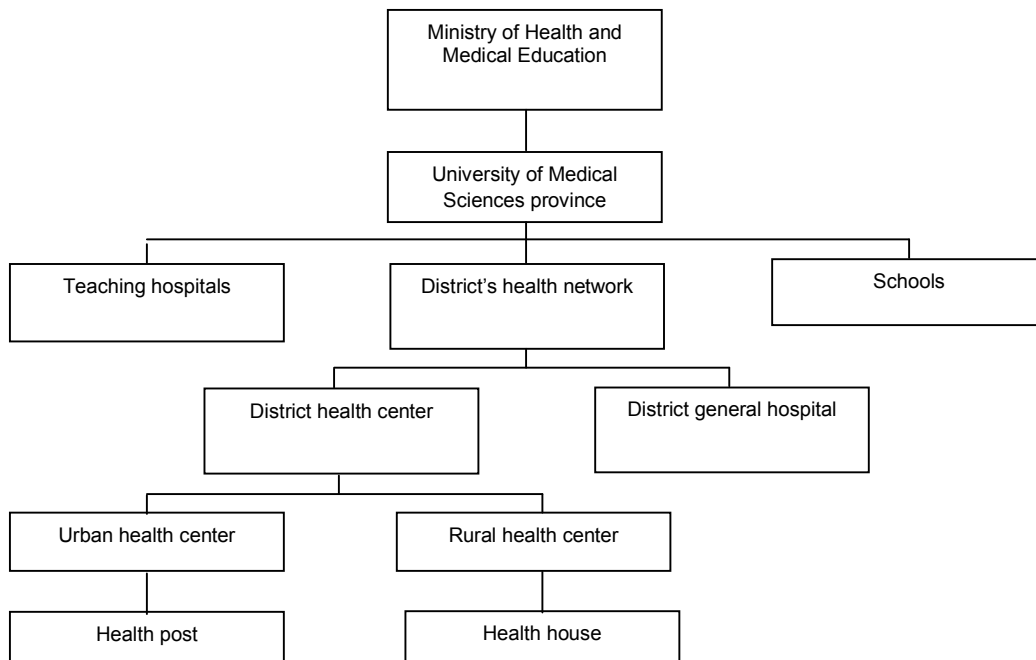

Fig. 1. Iran health system

Table 1. Trend of smoking cessation activities during 2007-2012

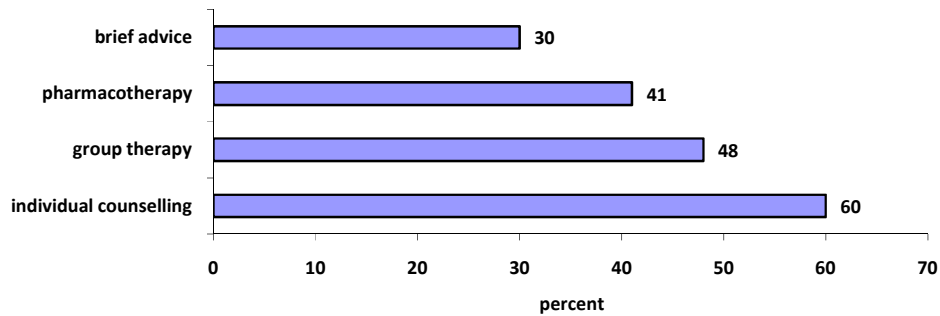| Year	Number of centers that provided smoking cessation services	Number of smokers who attended smoking cessation clinics		
		Female	Male	Total
2007	68	4070	252	4332
2008	106	9050	413	9463
2009	121	7143	262	7405
2010	121	7001	281	7282
2011	89	4828	287	5115
2012	79	3120	215	3335

Fig. 2. Frequency types of smoking cessation programs

Although individual therapy was the most common method for smoking cessation in most centers, a combination therapy was preferred in most centers. Its abundance is showed in Table 2. According to the results; pharmacotherapy is considered in most combination therapies.

Table 2. Combination therapies ingredients in smoking cessation programs

Combination of therapeutic treatment	%
Individual therapy +pharmacotherapy	25.1
Individual therapy+ group therapy	5.9
group therapy+ pharmacotherapy	12
Individual therapy + pharmacotherapy+ group therapy	30
Other combinations	**27**

Nicotine patch was used in 62.1% of centers. Nicotine gum was used in 51.9% of centers and in 18.2% of centers Bupropipn was used. In 78% of centers general practitioners provided smoking cessation services. In 87% of centers health professionals provided smoking cessation programs and in 17.2% of centers psychologists were providers of smoking cessation programs.

The main reasons for poor activity of smoking cessation services were lack of financial supports

67%, having no access to drug 50% and lack of trained person for smoking cessation 48.2%. Table 3 shows smoking cessation activities status during 2007-2012

4. DISCUSSION

The findings of our study showed smoking cessation structure and characteristic within primary health care system in Iran.

Our results on smoking cessation program are supported by other studies in this regards. Individual counseling is the most common way in smoking cessation program. This result is supported by findings of similar studies in Italy and Irland [16-17]. It could be due to being cost benefit and feasibility of this method. Pharmacotherapy is almost used with all these methods. It seems combination therapy is preferred. Several studies all around the world suggest the point that using the medicines increases the likelihood of success in smoking cessation [18-19].

Nicotine replacement therapy is the most common treatment of nicotine dependency in Iran. The most available NRT medicines are firstly nicotine patch and secondly nicotine gum. Bupropion a non-nicotinic drug is less used in

Table 3. Smoking cessation activities status during 2007-2012

	2007	2008	2009	2010	2011	2012
	%	%	%	%	%	%
Active	81.5	82.5	82.9	68.3	50	41.9
Inactive	13.5	12.5	12.2	24.4	35.7	37.2
Close down	5	5	4.9	7.3	14.3	20.9

smoking cessation centers and it is provided by the smoker's prescription and budget. This trend is according to many countries trend [20]. In a study of 36 countries regarding the structure of smoking cessation services it is shown that NRT was available in almost all the countries. Nicotine patch and gum were available in all the countries [20]. It is worthy to mention that in comparison to other interventions and services nicotine dependency treatment is not only very useful [21-22], but also is economical [23]. This point should be regarded by authorities.

In all Iran's health centers, smoking cessation services are provided free of charge. It is a strength point for health care system, while in many developed countries only a small number of centers provide these services free of charge. For instance in a study done in Italy only 22% of smoking cessation centers provided their services free of charge [17]. Health care professionals and general physicians are the most important people who provide smoking cessation services in Iran. Results of a study showed general physicians had good knowledge about the smoking cessation methods [24]. Considering the large number and dispersion of urban and rural health centers and the presence of general physicians mostly in all these centers, access to the smoking cessation services is facilitated. This is another strength point for Iran's health care system.

One worthy finding is the number of smoking cessation centers and their status. Smoking cessation activities in health care system have been started since 2007 and the number of smoking cessation centers has been increasing until 2010, but this trend decreased in 2011 and 2012. The main causes of closing down of these centers were firstly the financial barriers, secondly unavailability of smoking cessation medicines and finally the limitation number of experts in this field.

Due to the sanctions during the two past years in Iran having access to many drugs including smoking cessation drugs was very hard. From 2008 to 2010 the large number of smokers were supported by smoking cessation services, but this trend reduced in 2011 and 2012. In 2008 a year after Iran adherence to Framework Convention of Tobacco Control about 9000 smokers used smoking cessation services of health care system.

Iran's status regarding smoking cessation services is acceptable among regional countries.

5. CONCLUSION

Our findings showed on the status of tobacco addiction treatment in Iranian primary health care services at a level of details were not before published. Although smoking cessation exist in our country within health care system, but there is still long way to provide comprehensive treatment for smokers.

CONSENT

We evaluated health system therefore there is no need to get consent.

ETHICAL APPROVAL

This study approved by ethical committee of National Research Institute Tuberculosis and Lung Diseases. It is not applicable.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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