

# Smoking Cessation, Activity Level & Influencing Factors among Primary Care Doctors in Kuwait

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Smoking is the commonest preventable cause of death. Several studies highlighted the value of opportunistic intervention by the family doctor. However, it is important not only to encourage people to quit but also to organize a quitting program and follow-up [1]. "In my view, a doctor is not providing an appropriate standard of care for his or her patients if he or she does not ask two key questions – 'do you smoke?'-'Do you want to quit?' –and then work with that individual to make it happen." said Michael C. Fiore, MD, MPH Chair of the guideline panel and director of the center for Tobacco Research and Intervention at the University of Wisconsin Medical School in Madison [2]. He added "Any one who uses tobacco and is committed to quitting needs to know that tobacco dependence is a chronic disease that, like high blood pressure or diabetes, frequently requires treatment".

Smoking is now well established as a recognized cause of cancer, lung disease, coronary heart disease, and stroke [3-5]. It is considered to be the single most important avoidable cause of premature morbidity and mortality in the world.

The present results show that heavy smoking is associated with cognitive impairment and decline in midlife. Smokers who survive into later life may be at risk of clinically significant cognitive declines [6].

Even in middle age stopping smoking substantially increased the subsequent expectation of life - and those who stopped before 35 years of age had an expectation of life that was not significantly different from that of non-smokers [7]. World wide, tobacco use accounts for around 3 million deaths each year. It has been estimated that, unless immediate steps are taken to reduce smoking rates, the number of deaths due to tobacco use will rise to 10 million per year over the next 30-40 years, and 70% of these deaths will occur in developing countries [8].

Smoking cessation counseling can assist smokers to quit. It has been chosen to be emphasized in this study because of the very favorable relationship cost-effectiveness comparable to that of other customarily accepted preventive measures, at least, in terms of cost by year of life saved [9].

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### Major Recommendation for Promoting Smoking Cessation [10]

**1-Address the agenda:** The smoking status of every adult should be identified



and prominently documented in the medical record. For current smokers and those who have quit in the past year, smoking status should be updated at each visit. This assessment would gather information on addiction level, readiness to quit, prior quit attempts and barriers to cessation.

**2-Assess** the individual situation: Determine the willingness of smokers to make an attempt to quit by asking every smoker how they feel about their smoking. The purpose of determining a person's willingness to quit is to enable the most appropriate and beneficial assistance to facilitate smoking cessation. This stage may extend to the patient's smoking history, related symptoms, previous attempts, knowledge, fears and questions.

**3-Advice:** Personal advice and encouragement to quit by health professionals in a consultation setting has a small but significant effect on quit rates[10]. These messages should be: clear, strong and personalized, supportive, and non-confrontational.

◆ Clear  
"I think it is important for you to quit smoking and I can help you."

◆ Strong  
"As your doctor/health professional, I need you to know that quitting smoking is the most important thing you can do to protect your health now and in the future. The staff here and I will help you."

◆ Personalized-Tie smoking to current health/illness, significant life events, social and economic costs, motivation level, readiness to quit and/or the impact of second-hand smoke on children and others in the household. If the opportunity is right, provide motivational interventions as specified in the **5R's**. The purpose of these interventions is to get smokers themselves to identify the key issues for them personally.

◆ Relevance: Encourage the smoker to identify why quitting is personally relevant.

◆ Risks: Ask the smoker to identify negative consequences of continued tobacco use for them in both the short and long term.

◆ Rewards: Ask the smoker to identify and discuss specific benefits of quitting.

◆ Roadblocks: Assist the smoker to identify barriers and specific impediments to quitting.

- ◆ Repetition: Reinforce the motivational message at every opportunity and reassure that repeated quit attempts are not unusual

It is important to note that not all of the **5 R's** apply to each of the stages in the cycle of change.

4- **Assist:** Provide assistance according to the person's readiness to quit. Relevant information is important for everyone, even those not ready to quit. Provide additional support for those with some interest in quitting.

5- **Arrange follow-up:** Arrange (follow-up).

#### **"Arrange appropriate follow-up for all smokers"**

This is the most important step to get the patient, step forward along different stages of quitting. Family physicians should take advantage of each contact with smokers to encourage and support smoking cessation [11].

- ◆ Change is a process which takes time, not an 'all or nothing' phenomenon.
- ◆ Success is progress through the stages, not just the act of quitting.
- ◆ People in all stages of change can be helped.
- ◆ Intervention must be matched to the stage of change.
- ◆ Relapse is a normal part of the process, not a failure.

A commonly accepted model for describing stages of change was provided by Prochaska & Diclemente in which smokers are seen as moving through a series of stages:

- (1) Pre-contemplative (not considering quitting)
- (2) Contemplative (planning to quit in the next six months)
- (3) Action (ready to quit soon) 'trial and error period'.
- (4) Maintenance/relapse: 'desire to work on making the change a permanent one'.

From a public health perspective, failure of substantial proportion health providers to consistently intervene in an effective manner with smokers represents a significant missed opportunity to

reduce the smoking rate [12-15].

An earlier study was conducted to assess the delivery of smoking cessation interventions by the obstetricians and gynecologists in the state of Alabama [16]. The current study, however, was done among physicians of primary care clinics in the state of Kuwait to determine the level of smoking cessation activities and address the significant factors that influence their application. Therefore, it may define the need to achieve a successful antismoking program. The study assumes that many physicians of the primary care clinics in Kuwait do not succeed to adhere to the clinical guidelines of smoking cessation.

#### **Patients and methods**

All primary care doctors registered in the Ministry of Health in Kuwait were target for a cross-sectional study using a questionnaire assessing their smoking

### **Descriptive statistics were done to define the sample characteristics**

cessation activities with regard to the 5-A counseling model for smoking cessation and the influencing factors. The response options ranged from *always, often, sometimes and not applicable*.

The questionnaire was designed to include the following items:

1- Demographic background information (age, sex, nationality, work place, specialty and smoking status).

2- Questions related to anti-smoking related activities including:

\*The 5 A's questions of counseling patients who quit smoking (ask, assess, advice, assist, arrange follow-up).

\* *The provision of related written information* that indicates one important way that doctor can assist the patient to quit smoking. Self-help materials provide a small increase in quitting compared

with no intervention [10].

\**The participation in smoking cessation counseling programs* that aim to show the level of doctors' interest and the range of their activities.

3- Factors influencing antismoking related activities: to compare with other studies a number of factors have been tested such as availability of time, a defined work plan, doctors' knowledge, doctors' motivation and training courses for smoking cessation.

The permission was taken from the Undersecretary of Ministry of Health to help distribute the questionnaire to the five health areas in the state of Kuwait and handle it for each general practitioner through the head of the clinic. The response was checked with the secretary of the staff and the heads of the clinics by telephone. Statistical analyses were done using SPSS 7.5 for windows. Descriptive statistics were done to define the sample characteristics. The mean and the standard deviation of the age was calculated. Then the different responses for both the activities and the influencing factors were collected, and percentages were measured.

A recorded score of antismoking activity questions (first seven questions) was performed to simplify the interpretation of the results. The total score was divided into three to categorize the responses along the scale into *high, average, and low response*. Those who score 7-14 have high score value; 14-21 =average; and 21-28=low score. It also helps to determine the correlation of anti-smoking activity score with regard to the demographic characteristics of the sample. This correlation has been examined using the chi-square test.

#### **Results**

Out of 644 self-administered questionnaires to physicians, 495 were returned. The response rate was 76.9%. Non-response was mainly due to vacations of physician and three clinics refused to participate. Among those who responded, there were few missing

Characteristics	No.(%)
<b>*Age</b>	
25-35	130(27.2)
36-45	211(44.2)
46-55	102 (21.3)
mean=42	
56-65	35 (7.3)
Std. Dev.=8.6	
<b>*Sex</b>	
Female	182(37.4)
Male	304(62.6)
<b>*Nationality</b>	
Kuwaiti	106(21.8)
Non-Kuwaiti Arabs	371(76.2)
Non-Kuwaiti Non-Arabs	10(2.1)
<b>*Work area</b>	
Capital	97(19.9)
Hawalli	108(22.2)
Farwaniya	82(16.8)
Jahra	86(17.7)
Ahmadi	114(23.4)
<b>*Specialty</b>	
G.P	382(78.4)
F.P	105(21.6)
<b>*Smoking status</b>	
Smoker	46(9.4)
Non-smoker	396(81.3)
Ex-smoker	45(9.2)

Std. Dev. = Standard Deviation  
 G.P= General Practitioner  
 F.G.= Family practitioner  
 Ex-smoker =Off smoking two years or more

Table 1 - Socio-demographic Characteristics Of Survey Subjectsenhanced endoscopic ITA takedown.

cally significant correlation of the score except for the working area of the doctors where the P-value ( $p = .028$ ). Chart (1) shows the results in detail.

Regarding the individual responses to each question and the opinions regarding the selected factors that might influence the activity outcome, the details are shown on Table 2. It is interesting to recognize that the primary care doctors who always advise their smoking patients to stop smoking were 96.3%, however, 51% do not follow them up. Many doctors (40.7%) also missed to give an appropriate written material and 46.9% did not participate in smoking-cessation counseling programs. ( i.e. nearly half of them fail to go beyond advise.)

Examining the individual factors assumed to influence the doctors' anti-smoking activities, responses were as the following:

- ◆ Only 5.7% who considered time as absolute barrier. i.e have no time
- ◆ 67.7% had no antismoking plan at their working area.
- ◆ 10.8%of doctors who did not know about how to help a smoker to stop smoking.
- ◆ 62.2% were fully motivated.
- ◆ 53% doctors thought that training courses for doctors in smoking cessa-

tion as absolutely significant; 26.8% often; 13.6% sometimes and 6.5% not applicable.

**Discussion**

This study is the first of its kind in Kuwait. Few limitations, noted in this study such as missed answers, were compensated by including all physicians in primary care clinics as target sample with a good response rate76.9%. As predicted, few physicians in the primary care clinics have been involved in anti-smoking activities including the recommended guidelines. These findings are consistent with those of other studies that have shown that physicians generally fail to offer appropriate interventional strategies and follow-up support for their patients who smoke [16,17].

The only demographic characteristic that has shown a significant correlation with the anti-smoking activity score was the practice site. i.e. the working area. This may reflect how different health areas support smoking cessation programs may be an anise field for competition between different health areas. Having few physicians (4.1%) that did not ask their patients if they smoke, made few numbers of smokers undefined. In addition, Failure to go beyond advice with the absence of work plan in

answers that have been considered in the interpretation of data.

The sample description is shown in Table 1 Only 9.4% were current smokers, all of them were men (total=46). However, (9.2%) were former smokers (i.e. stopped smoking for 2 years or more) .It may be interesting to know that 6 of the former smokers were women.

Regarding the sample response along the scale of antismoking activity score (described in methods), 61.3% of primary care doctors had average anti-smoking activity score; 22.4% had high score and 16.3% had low score. The mean value of the score is 1.9 and the standard deviation is 0.6.

Within the sample there was no statisti-

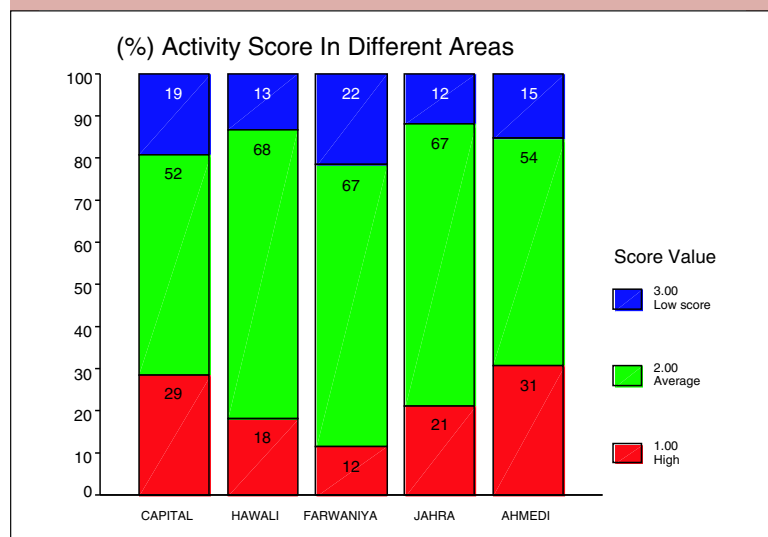


Figure 1 - Percent activity score in different areas

## PRIMARY CARE

Smoking Cessation Activities	Always (%)	Often (%)	Sometimes (%)	Not applicable (%)
I ask all patients if they smoke	125 (25.5)	240 (49)	105 (21.4)	20 (4.1)
I revise smoking history & ask all smokers if they want to quit.	98 (20)	180 (36.7)	173 (35.3)	39 (8)
I advice all smokers to stop smoking	341 (96.3)	106 (21.6)	36 (7.3)	8 (1.6)
I assist all my patients to quit	178 (36.2)	149 (30.3)	127 (25.8)	38 (7.7)
I provide all patients a proper written self-helping material	26 (5.3)	82 (16.7)	184 (37.4)	200 (40.7)
I arrange follow-ups for all smoking patients	24 (4.9)	45 (9.2)	171 (34.9)	250 (51)
I participate in smoking-cessation counseling programs	17 (3.4)	65 (13.2)	180 (36.5)	231 (46.9)
<b>Factors influencing anti smoking activities.</b>				
I have no time for these activities	28 (5.7%)	115 (23.6)	175 (35.9)	170 (34.8)
There is a work plan to organize such activities at m work place	34 (6.9)	34 (7.3)	89 (18.1)	334 (67.7)
I have enough knowledge about how to help a smoker to stop smoking	104 (21.2)	239 (48.7)	95 (19.3)	53 (10.8)
I have a strong motivation to help smokers stop smokin	306 (62.2)	135 (27.4)	38 (7.7)	13 (2.6)
Training courses for doctors in smoking cessation are significant	261 (53)	132 (26.8)	67 (13.6)	32 (6.5)
% is row percentage				

Table 2 - Responses of Survey Subjects To Questions

67%, may raise the anxiety of missing and maintaining a successful quitting. A positive promising result of doctors'

motivation (62.8% who are fully motivated) would make a successful national anti-smoking program rather achievable.

In former studies, physicians have cited a number of reasons for not adhering to the smoking cessation guide lines, including lack of time, insufficient training, belief that their patients are not ready to change, and limited availability of supporting materials [11-14]. Analyzing the selected influencing factors in this study: one may recognize that time and doctors' knowledge are not significant barriers in general practice, whereas, the work plan and the training courses seem to play a significant

### Conclusion

Doctors need to be provided with training courses in smoking cessation. They also need to be encouraged to follow-up their quitting smokers, to give them self-helping materials and to participate in smoking cessation counseling programs as part of integrated national anti-smoking campaign.

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