

Knowledge and Practice of Smoking Cessation among Physicians in Madinah, 2016

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ABSTRACT

Background: Healthcare professionals should be active in smoking prevention, as part of their daily practice. Smoking cessation significantly reduces morbidity and mortality. Brief tobacco cessation counseling interventions, including screening, brief counseling (3 min or less), and/or pharmacotherapy; have proven to increase tobacco abstinence rates.

Objectives: To assess knowledge, attitude, and practice (KAP) in smoking cessation among PHCPs in Madinah city, Saudi Arabia.

Subjects and Methods: A cross-sectional survey was conducted among a convenient sample of 60 physicians (from both genders and all nationalities) recruited from different Madinah hospitals and primary care centers. They were asked to fill an electronic structured questionnaire inquiring about tobacco use and its health effects, as well as on the knowledge and practices of smoking cessation.

Results: The study included 60 physicians. Most of them (78.3%) aged between 25 and 35 years. Two-thirds were females. Slightly more than one-third of them (36.7%) were family physicians. Majority of them (80%) were aware of smoking cessation/quitting therapy and sixty percent of them having sufficient knowledge of tobacco cessation/ quitting. More than half of them had their information about smoking cessation from internet (58.3%) or books (55%). Believing that tobacco education content in the medical school curriculum is inadequate was reported by majority of them (80%). Majority of them (96.7%) were asking patients if they smoke /use tobacco, advising smoking patients to quit (90%) and discussing benefit of quitting tobacco with patients (81.7%). However only 31.7% were asking them about reason of using tobacco, 28.3% were setting a target quit day for patients and 39.3% arranged for a

follow up contact. Brief counseling was the commonest mode of cessation therapy has applied in practice (73.3%). Regarding, time spend discussing on tobacco education, 48.4% of the physicians spent less than 3 minutes whereas only 6.6% spent more than 10 minutes. Lack of time (45%) and poor knowledge of smoking cessation (36.7%) were the commonest obstacles to cessation therapy in practice. Almost one-third of the physicians (31.7%) were current smokers. Physicians working in primary health care centers and those having their information from more than one source were more aware of smoking cessation/quitting therapy.

Conclusion: Majority of physicians in Madinah general hospitals and primary care centers were aware of smoking cessation/quitting therapy and their practice regarding smoking cessation was sufficient in some areas. However, it was deficient in other areas.

Key word: Knowledge, Practice, Smoking Cessation, Physicians.

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INTRODUCTION

The World Health Organization (WHO) report on the global tobacco epidemic mentioned that tobacco use is one of the biggest public health threats the world has ever faced. Tobacco users who die prematurely deprive their families of income, raise the cost of healthcare, and hinder economic development.¹

The biggest impact of smoking is through non-communicable diseases, although it may also increase the risk of communicable

diseases such as tuberculosis and lower tract respiratory infections. 2 It is responsible for 87 % of all lung cancer deaths, 3 42 % of chronic respiratory diseases and nearly 10 % of cardiovascular diseases. 4 The prevalence of smoking in Saudi Arabia ranges from 2.4-52.3% (median = 17.5%). 5

Healthcare professionals should be active in smoking prevention, as part of their daily practice.⁶ Smoking cessation significantly

reduces morbidity and mortality. Brief tobacco cessation counseling interventions, including screening, brief counseling (3 min or less), and/or pharmacotherapy; have proven to increase tobacco abstinence rates. The United States Preventative Services Task Force (USPSTF) highly recommends "that clinicians screen all adults for tobacco use and provide tobacco cessation interventions for those who use tobacco products (Grade: A recommendation).7

Physicians are highly respected in their communities, they act as role models in issues related to health, and people turn to them for advice and consultation. For this reason, they are very important in advancing any tobacco control policies. Physicians, however, often do not seriously address the issue of smoking, or perhaps smoke themselves, which makes it even more difficult to discuss this problem with their patients or take an active role in antismoking efforts.⁸ Nonsmoking doctors were more active in encouraging patients not to smoke than those physicians who smoked.⁹ In Estonia, about two-thirds of surveyed physicians spent time counseling smokers and making follow-up arrangements.¹⁰ In a Turkish study, physicians asked about smoking almost half the time,¹¹ while only 30% of Cuban physicians always asked about smoking.¹²

To best of our knowledge, this study is the first attempt to assess knowledge, attitude, and practice (KAP) in smoking cessation among PHCPs in Madinah city, Saudi Arabia.

SUBJECTS AND METHODS

A cross-sectional survey was conducted among a convenient sample of 60 physicians (from both genders and all nationalities) recruited from different Madinah hospitals and primary care centers. Al Madinah is a city in the Hejaz region of western Saudi Arabia, and serves as the capital of AlMadinah Province. It is the second holiest city in Islam, after Makkah. Madinah is 437 km

north of Makkah and about 190 km from the Red Sea coast. Madinah currently has a population of more than 1,675,731 people. They were asked to fill an electronic structured questionnaire inquiring about tobacco use and its health effects, as well as on the knowledge and practices of smoking cessation. The questionnaire has been adopted from that used in a similar study carried out in Nigeria. Before conducting study, proposal has been submitted to the research ethical committee for approval.

Data were entered into a personal computer and statistical analysis was performed utilizing The Statistical Package for Social Sciences (SPSS), version 22. Knowledge questions (n=5) were scored in a way that right answers were assigned a score of "1" whereas wrong answers were assigned a score of "0". Total knowledge score and percentage were computed. Those scored 60% or over were considered as having adequate knowledge whereas those scored below 60% were considered as having inadequate knowledge. Data were presented in the form of frequencies and percentage as well as chi-square test and Fischer exact tests were applied for testing association between compared variables. P-value less than 0.05 was considered a as a cut-of statistical significance.

RESULTS

The study included 60 physicians. Table 1 summarizes their baseline characteristics. Most of them (78.3%) aged between 25 and 35 years. Two-thirds were females. Slightly more than one-third of them (36.7%) were family physicians. Majority of them (96.7%) were working in urban places. Sixty percent of them practice in general hospital whereas 38.3% practice in primary health centers. Half of the physicians had an experience less than 5 years. Number of patients consulted/week was less than 30 among half of the physicians.

Table 1: Baseline characteristics of the participants (n=60)

		Frequency	Percentage
Age (years)	25-35	47	78.3
	>35	13	21.7
Sex	Male	20	33.3
	Female	40	66.7
Specialty	Family medicine	22	36.7
	Internal medicine	17	28.3
	Others	21	35.0
Location of practice	Rural	2	3.3
	Urban	58	96.7
Type of practice	General	36	60.0
	Primary health care	23	38.3
	Private	1	1.7
Experience after graduation (years)	<5	30	50.0
	5-10	20	33.3
	>10	10	16.7
Number of patients consulted/week	<30	130	50.0
	30-50	14	23.3
	>50	16	26.7

Table 2: Awareness and knowledge of smoking cessation among physicians, Al-Madinah city

			Frequency	Percentage
•	Awareness of smoking cessation/quitting	Yes	48	80.0
	therapy	No	12	20.0
•	Having sufficient knowledge of tobacco	Yes	36	60.0
	cessation/ quitting	No	24	40.0
•	Sources of information on tobacco cessation *	Books	33	55.0
		Internet	35	58.3
		Expert	18	30.0
		Others	10	16.7
•	Believing that tobacco education content in	Yes	48	80.0
	the medical school curriculum is inadequate	No	12	20.0

^{*} More than one source was accepted

Table 3: Practice of smoking cessation among physicians, Al-Madinah city

		Frequency	Percentage
Number of tobacco users seen in	<5	18	30.0
practice per week	5-10	21	20.0
	11-15	10	16.7
	>15	11	18.3
Asking patients if they smoke /use	Yes	58	96.7
tobacco	No	2	3.3
Ask patients about reason for using	Yes	19	31.7
tobacco	No	41	68.3
Discussing benefit of quitting tobacco	Yes	49	81.7
with patients	No	11	18.3
Advise smoking patient to quit	Yes	54	90.0
	No	6	10.0
Setting a target quit day for patients	Yes	17	28.3
	No	43	71.7
Modes of cessation therapy have	Brief counseling	44	73.3
applied in practice	Others	9	15.0
	None	7	11.7
Arrangement for a follow up contact	Yes	22	39.3
(n=56)	No	34	60.7
Time spend discussing on tobacco	<3	29	48.4
education (minutes)	3-5	19	31.6
	7-10	8	13.4
	>10	4	6.6
Obstacles to cessation therapy in your	Poor knowledge of smoking cessation	22	36.7
practice	Lack of time	27	45.0
	Unavailability of NRT	6	10.0
	Others	5	8.3

Table 2 shows that majority of physicians (80%) were aware of smoking cessation/quitting therapy and sixty percent of them having sufficient knowledge of tobacco cessation/ quitting. More than half of them had their information about smoking cessation from internet (58.3%) or books (55%). Believing that tobacco education content in the medical school curriculum is inadequate was reported by majority of them (80%).

Slightly less than one-third of the physicians (30%) have seen less than 5 patients per week whereas 18.3% have seen more than 15

patients. Majority of them (96.7%) were asking patients if they smoke /use tobacco, advising smoking patients to quit (90%) and discussing benefit of quitting tobacco with patients (81.7%). However only 31.7% were asking them about reason of using tobacco, 28.3% were setting a target quit day for patients and 39.3% arranged for a follow up contact. Brief counseling was the commonest mode of cessation therapy has applied in practice (73.3%). Regarding, time spend discussing on tobacco education, 48.4% of the physicians spent less than 3 minutes whereas only

6.6% spent more than 10 minutes. Lack of time (45%) and poor knowledge of smoking cessation (36.7%) were the commonest obstacles to cessation therapy in practice. (Table 3)

Almost one-third of the physicians (31.7%) were current smokers. The duration of smoking ranged between 6 and 10 years among 52.6% of them. Awareness of banning smoking in public places was reported among 75% of the physicians and supporting of smoking ban in public places was reported by 78.3% of the physicians. (Table 4)

Adequate knowledge regarding smoking and its bad effects was reported among most of physicians (83.3%). None of the studied

factors was significantly associated with this adequate knowledge as illustrated in table 5.

Majority of physicians working in primary health care centers (95.7%) compared to 69.4% of those working in general hospitals were aware of smoking cessation/quitting therapy. The difference was statistically significant, p=0.043. All of physicians who had more than one source of information regarding smoking cessation/quitting therapy compared to 50% of those reported experts as the only source of information, p=0.012. Other factors were not significantly associated with awareness of smoking cessation/quitting therapy. (Table 6)

Table 4: Smoking history of the physicians

		Frequency	Percentage
Current smoking	Yes	19	31.7
	No	41	68.3
Duration of smoking (years)	<5	9	47.4
	6-10	10	52.6
Awareness of banning smoking in	Yes	45	75.0
public places	No	15	25.0
Supporting smoking ban in public	Yes	47	78.3
places	No	13	21.7

Table 5: Factors associated with knowledge of smoking among physicians in Al-Madinah

		Tobacco consum	p-value	
		Inadequate (n=10)	Adequate (n=50)	
Age (years)	25-35 (n=47)	8 (17.0)	39 (83.0)	0.629
	>35 (n=13)	2 (15.4)	11 (84.6)	
Sex	Male (n=20)	5 (25.0)	15 (75.0)	0.221
	Female (n=40)	5 (12.5)	35 (87.5)	
Specialty	Family medicine (n=22)	3 (13.6)	19 (86.4)	0.156
	Internal medicine (n=17)	1 (5.9)	16 (94.1)	
	Others (n=21)	6 (28.6)	15 (71.4)	
Location of practice	Rural (n=2)	1 (50.0)	1 (50.0)	0.308
	Urban (n=58)	9 (15.5)	49 (84.5)	
Type of practice	General (n=36)	5 (13.9)	31 (86.1)	0.074
	Primary health care (n=23)	4 (17.4)	19 (82.6)	
	Private (n=1)	1 (100)	0 (0.0)	
Experience after	<5 (n=30)	4 (13.3)	26 (86.7)	0.787
graduation (years)	5-10 (n=20)	4 (20.0)	16 (80.0)	
	>10 (n=10)	2 (20.0)	8 (80.0)	
Number of patients	<30 (n=30)	4 (13.3)	26 (86.7)	0.393
consulted/week	30-50 (n=14)	4 (28.6)	10 (71.4)	
	>50 (n=16)	2 (12.5)	14 (87.5)	
Current smoking	Yes (n=19)	5 (26.3)	14 (73.7)	0.172
	No (n=41)	5 (12.2)	36 (87.8)	

Table 6: Factors associated with awareness of smoking cessation/quitting therapy among physicians in Al-Madinah

		Awareness of smoking cessation		p-value
		Yes	No	-
		(n=48)	(n=12)	
Age (years)	25-35 (n=47	36 (76.6)	11 (23.4)	0.199*
	>35 (n=13)	12 (92.3)	1 (7.7)	
Sex	Male (n=20)	17 (85.0)	3 (15.0)	0.375*
	Female (n=40)	31 (77.5)	9 (22.5)	
Specialty	Family medicine (n=22)	21 (95.5)	1 (4.5)	0.075**
	Internal medicine (n=17)	12 (70.6)	5 (29.4)	
	Others (n=21)	15 (71.4)	6 (28.6)	
Location of practice	Rural (n=2)	1 (50.0)	1 (50.0)	0.363*
	Urban (n=58)	47 (81.0)	11 (19.0)	
Type of practice	General (n=36)	25 (69.4)	11 (30.6)	0.043
	Primary health care (n=23)	22 (95.7)	1 (4.3)	
	Private (n=1)	1 (100)	0 (0.0)	
Experience after	<5 (n=30)	22 (73.3)	8 (26.7)	0.413
graduation (years)	5-10 (n=20)	17 (85.0)	3 (15.0)	
	>10 (n=10)	9 (90.0)	1 (10.0)	
Number of patients	<30 (n=30)	23 (76.7)	7 (23.3)	0.674
consulted/week	30-50 (n=14)	11 (78.6)	3 (21.4)	
	>50 (n=16)	14 (87.5)	2 (12.5)	
Current smoking	Yes (n=19)	5 (26.3)	14 (73.7)	0.172
	No (n=41)	5 (12.2)	36 (87.8)	
Source of information	Books (n=10)	8 (80.0)	2 (20.0)	0.012
	Internet (n=14)	9 (64.3)	5 (35.7)	
	Expert (n=4)	2 (50.0)	2 (50.0)	
	Others (n=7)	4 (57.1)	3 (42.9)	
	More than one source (n=25)	25 (100)	0 (0.0)	

^{*} Fischer exact test

DISCUSSION

General physicians particularly those working in primary care settings have a unique opportunity to deliver effective smoking cessation treatment to their patients who smoke, 14,15 and smoking cessation counseling by physicians is now considered to be an evidence-based practice. Number of reports 16-19 suggested that physician smoking status related to the quantity and quality of cessation counseling.

It is hypothesized that physicians who smoke have less favorable beliefs and attitudes and more perceived barriers to counseling than non-smoking physicians and would therefore be less likely to intervene with smokers.²⁰ Therefore, this study was conducted to investigate the smoking cessation behavior among physicians in general hospitals and primary care centers in Tabuk and explore factors associated with it.

The prevalence of current smoking among physicians in the present study was 31.7%. This rate is higher than other studies carried out in Vietnam $(9.2\%)^{21}$ USA $(7\%)^{22}$ New Zealand $(5\%)^{23}$ UK $(4\%)^{24}$, Switzerland $(12\%)^{25}$ Denmark $(15\%)^{26}$ China among rural physicians $(16\%)^{27}$ and Italy $(28\%)^{28}$ However, it is lower than that reported in Egypt²⁹ where a high prevalence rate (45%) has been reported among PHC personnel in Alexandria.

To better guide smokers who wish to quit, physicians must understand the underlying dynamics of the guitting process with

respect not only to smokers' demographic and behavioral characteristics but also their living and working environments. In the present study, physicians working in primary care settings and those having more than one source of information about smoking quitting were more aware of smoking cessation/quitting therapy.

The present study revealed that smoking status of physicians was not related to their awareness of smoking cessation/quitting therapy as well as tobacco consumption knowledge. This is contradicts what hypothesized by others.²⁰

Practice of physicians regarding smoking cessation/quitting was sufficient in some aspects in the present study a majority of them were asking patients if they smoke/use tobacco, advising smoking patients to quit and discussing benefit of quitting tobacco with patients. However almost one third of them were asking them about reason of using tobacco, setting a target quit day for patients and arranged for a follow up contact. Most of physicians (80%) were aware of the smoking cessation therapy. Bad practice regarding smoking cessation was reported among 52.7% of the physicians in another recent Saudi study carried out in Makkah.³⁰ In Nigeria, 67.0% of physicians were aware of smoking cessation, but only 30.3% showed good knowledge on this topic.¹³

In the present survey, 80% of physicians reported that tobacco education in the medical school curriculum was inadequate. Quite similar figure (70.6%) was reported from Nigeria.¹³ In addition,

^{**} Chi-square test

brief counseling was the commonest mode of cessation therapy has applied in practice half of physicians spent less than 3 minutes in counseling. In Nigeria, brief advice/counseling for 2-5 min was the commonest practice.¹³

Lack of time and poor knowledge of smoking cessation were the commonest obstacles to cessation therapy in practice in the current study. Similarly In Nigeria, poor knowledge of the issue and lack of time were the frequent reported obstacles.¹³

Conclusively, majority of physicians in Tabuk general hospitals and primary care centers were aware of smoking cessation/quitting therapy and their practice regarding smoking cessation was sufficient in some areas. However, it was deficient in other areas. Therefore, we recommended implementing of further study on a larger scale including larger number of physicians from different specialties and sectors to have a comprehensive overview on smoking cessation status and conducting training courses for them in smoking cessation.

Study limitations include that the cross-sectional design does not permit causal inference. Self-reports of smoking status and practice in smoking cessation/quitting may result in misclassification bias which could have attenuated the findings of the study. The inclusion of a convenient sample of physicians from one city in Madinah could affect the generalizability of results to all entire-population of physicians of different specialties.

Despite of these aforementioned limitations, this study may have several important implications for policy. The significant impact of a no-smoking policy in the workplace on smoking cessation indicates that its implementation will help those who intend to quit smoking.

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