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Knowledge, Attitude, and Practice Study of Smoking and Smoking Cessation Program Among Doctors in Baghdad, Al-Karkh

Salwa Abdul Aziz Abdul Rahman ⁽¹⁾; Ali Raheem Jebur ⁽²⁾; Harith Fakhri Shakir ⁽³⁾

⁽¹⁾ Family medicine specialist, Baghdad Al-Karkh Sector Al.amiria primary Health Care Centre, Baghdad, Iraq.

⁽²⁾ Emergency medicine specialist, emergency medicine department, Baghdad Al-Karkh Sector/Al Furat General Hospital, Baghdad, Iraq.

⁽³⁾ Emergency medicine specialist, head of emergency medicine department, Baghdad Al-Karkh Sector/Al Furat General Hospital, Baghdad, Iraq.

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ABSTRACT

Background: Tobacco smoking is a major cause of preventable morbidities and mortality, and it is the second major cause of death and the fourth most common risk factor for disease worldwide. Physicians can play a key role in smoking cessation by advising a smoker to quit and serving as role models for healthy behaviors by not smoking.

Methods: A descriptive cross-sectional study was conducted from 1st of October 2023 to 1st of July 2024, using an anonymous, self-administered questionnaire survey for doctors. The sample included 200 doctors and 120 dentists who participated. Data analysis was done on a personal computer (PC) using statistical package for social sciences (SPSS) V.22. Socio-demographic variables were described using descriptive statistics, tables, and figures. Significant associations between variables were determined by the chi-square test. A p-value < 0.05 was assumed to indicate significance.

Results: In this study, 19.38% of doctors were smokers and 5% were ex-smokers, with significant gender differences (males: 43% and females: 6%). Most smokers were between 36 and 45 years, but most doctors started smoking in college. 52% started smoking due to stress. 71% of smokers smoked for over 10 years. Most participants knew about smoking's dangers and the cessation programme. Doctors struggled to advise patients to quit smoking due to time (37.5%) and patient desire (35%).

Conclusion: One in five doctors smoked, according to our findings. Men predominate in smoking, and smokers are aware of health and environmental risks. In Ex-smokers, the causes of quit are mostly to quit addiction and maintain their health. Most participants knew about primary health care center smoking cessation programs (SCP), but only one-third knew Iraqi smoking laws.

Corresponding author E mail:
alirjk83@gmail.com

INTRODUCTION

There are about a billion smokers worldwide, and half will die from it. Tobacco use kills over 7 million people per year and is the single most important cause of preventable death^[1]. If invented today, tobacco products would be illegal due to their high levels of toxins and carcinogens. Despite this fact, doctors in some countries are known to smoke tobacco at rates comparable to or even higher than those of the general population^[2]. It has been observed that doctors who smoke are less inclined to advise their patients against tobacco use, less likely to provide anti-smoking educational materials to their patients and adopt a passive attitude towards smoking^[3]. In countries where physicians' smoking rates have declined, the overall prevalence of tobacco use has subsequently decreased as well, suggesting that physicians' smoking patterns may influence use of tobacco in the general population^[4].

The shift of common interest in health care from treatment to health promotion and risk management increases the importance of smoking cessation. Anti-tobacco campaigns succeeded in decreasing smoking prevalence in developed countries, while it is still high in the developing world^[5].

In a time of great difficulty in Iraq, during which security issues have dominated most press coverage, the Ministry of Health (MOH) in Iraq realised that smoking is one of the major causes of mortality in the country and initiated tobacco control programs in the primary health care centres^[6]. Primary health care physicians play a role in promoting a healthy lifestyle and in decreasing smoking rates among patients^[7].

Aim of the study: To determine the knowledge, attitude, and practice of smoking and smoking cessation programs among a sample of doctors in Baghdad/Al-Karkh.

MATERIALS AND METHODS

The study design was a cross-sectional, descriptive study and conducted in ten sectors in Al-karkh side, thirty primary health care centers (PHCC) were chosen conveniently and two general hospitals. The period of study and data collection, including the pilot study, was nine months, twice weekly, which extended from 1st of October 2023 to 1st of July 2024.

The manager of PHCC. was visited before starting work in each centre to get permission. Verbal consent was obtained from each doctor before starting the interview, and the doctor was informed that this information would be used for research purposes only.

The Sample size was collected through a convenience sampling technique. The total sample was 320 doctors, who were willing to participate in this study and available at the time of data collection, including all physicians and dentists and both sexes.

An anonymous self-administered questionnaire was developed by the investigator, with modifications based on multiple national and regional studies on smoking. It is written in English and consists of 26 questions, which are divided into four sections: -

First section: - Includes demographic questions applicable to all participants.

Second section: - Contains questions specifically for current smokers regarding their smoking habits.

Third section: - Is intended for former smokers and includes inquiries about their reasons for quitting, methods they used to stop smoking, and whether they utilized nicotine replacement therapy (NRT).

Fourth section: - Addresses all participants and focuses on their awareness and opinions regarding (SCP).

A pilot study was conducted with 25 healthcare providers at the nearest primary healthcare centre to evaluate the questionnaire's clarity, comprehensiveness, and expected response rate. Out of 25 providers, 22 participated, yielding an 88% response rate. Participants found the questionnaire easy to complete but suggested modifications for clarity, which were incorporated into the final version. Assured of anonymity and privacy, participants completed the questionnaire at the end of the workday, and it was collected 15 minutes later.

A personal computer with SPSS version 22 was utilised for data analysis. Descriptive statistics were employed to summarize socio-demographic variables, and tables and figures were created as necessary. The Chi-square test was applied to assess the association between the related variable stages. A p-value of less than 0.05 was considered significant.

RESULTS

In this study, the total number of participants was 320 doctors (200 physicians and 120 dentists). Most participants 111(34.6%) are between (25-35) years old. The highest proportion of smokers and ex-smokers is among the age group (36-45) years old, including 24 (24.4%) smokers or ex-smokers. The number of participants was equal in relation to the gender, but there is a

significantly high proportion of smokers and ex-smokers among male doctors, who were 68 (43%), compared with female doctors who were 10 (6%). In our study, most of the doctors were married. **Table (1)** show association between socio-demographic variables and smoking among doctors.

242 (75.63%) doctors were found to be non-smokers, 62 (19.38%) doctors were smokers, and 16 (5%) were ex-smokers. **Figure (1)** show the age of doctors when they start smoking.

The causes of first trying smoking among the participants, as revealed by our study, were stress 32 (52%), being influenced by friends 16 (25%), as a fashion trend 8 (13%), and 6 (10%) being influenced by relatives.

More than half of doctors smoke (11-20 cigarettes /day), more than one third smoke (1-10 cigarettes/day), and only 5 doctors (8%) smoke more than one pack (>20 cigarettes/day).

Most smokers in this study have a prolonged period of smoking, 44 (71%) more than ten years, 10 (16%) less than ten years and 8 (13%) less than one year, both the number of cigarettes and duration of smoking detect the intensity of addiction status of those professionals.

Nicotine addiction was the most common cause of smoking continuity in 40 (65%), followed by peer pressure in 18 (29%), negative family attitude, and other causes each represented by 2 persons (3%).

In this study, most of the doctors 42 (67.7%) smoke inside the workplace, 41 (66.1%) smoke outdoors, 36 (58%) smoke inside the home, 18 (29%) smoke in front

of children, and 13 (21%) in front of the patient.

There is a high level of awareness about the harmful consequences of smoking; 58 (94%) are aware, and only 4 (6%) don't care. Most current smokers do not try to quit 38 (61.2%), while 20 (32.2%) try to quit for <6 months, and only 4 (6.5%) quit for 6-12 months. The causes of return to smoking among quitters were: 10 (42%) due to withdrawal symptoms, 6 (25%) due to exposure to new stress, 4 (16%) because of friends and 4 (16%) for other causes. In this study, we find that 30 (48%) are not sure of the desire to quit smoking, 16 (26%) said no, and only 16 (26%) are ready to quit smoking.

In our study, the total number of ex-smokers was 16, table (2) showed the causes of quitting smoking among them. The motivation to initiate quitting smoking among ex-smokers was: 10 (63%) took their decision to stop smoking alone, while 6 (37%) did so after advice from others. On the other hand, only 2 (12.5%) need to use NRT (lozenges or nicotine gums) as assistance for quitting, and 14 (87.5%) do not need to use any drug.

From the result of this study, we found that most of the doctors, 260 (81%), know the (SCP) in PHCC. In the present study, 240 (75%), reported that there are activities (lectures, seminars, symposiums) about smoking hazards and (SCP)s in PHCC, and 80 (25%) said no.

The study revealed that 60 (25%) of nonsmoker always participate the social activities against smoking, compared with smokers and ex-smokers were 8 (10%), 66 (27%) of nonsmoker some time participate versus 20 (26%) of smoker, equal proportion (18%) participating rarely, and 72 (30%) of nonsmoker had no

participation versus 36 (46%) of smokers and ex-smokers not participate in social activities against smoking. 228 (71%) of the doctors always asked their patients about smoking status during taking history, 83 (26%) sometimes, and only 9 (3%) asked rarely. Frequency of advising smokers to quit: 210 (65.6%) of the physicians and dentists always advise patients to quit smoking, 80 (25%) sometimes, 20 (6.2%) rarely, and only 10 (3.1%) do not advise the patients.

Most participants 283 (88.43%) support patients in quitting by brief counselling, 20 (6.25%) prescribe drug, 16 (5%) send the patient to a specific centre (clinic of respiratory diseases, or clinic of psychological diseases in the general hospitals), and only one doctor (0.31%) uses other methods.

Our study revealed that the most common cause that prevent some doctors from advising patients to quit smoking was lack of time which represent 120 (37.5%), the second common cause was lack of patient desire 112 (35%), lack of training 46 (14.5%), poor knowledge 28 (8.75%), and unavailability of NRT was 14 (4.37%).

DISCUSSION

In our study, about demographics of the participants related to smoking status, there is a significantly high proportion of smokers and ex-smokers among male doctors (43%) compared with female doctors (6%). These results agree with, Baey HA et al 2011 [8] showed the smoking prevalence among male health care providers is (26% versus 1.6% among females), this may be due to a higher perceived stigma among females who smoke, so smoking among females is not so accepted in our society.

In our study, 62 (19.38%) doctors were smokers. This is consistent with Mahfouz AA et al and Besson A et al were found (18.3% and 21% respectively) among physicians [9], [10].

In this study The most common age of starting smoking was between (18-24) years old (39%), i.e. during the undergraduate study period. This result agrees with Baltaci D et al which found the mean age to start smoking was 21.73^[11], but disagree with Baey HA et al done in Al-Hilla city, Iraq that found (64%) of participant started at the age range 10-20 years ^[8].

In current study, the results revealed that Stress was the most common cause of first-time smoking 32 (52%). This agrees with Mahfouz AA et al found that the main reasons for smoking are relaxation and fighting stress ^[9]. So most people may be considering smoking as management of anxiety and stress, then smoking become as habit and addiction.

In this study, nicotine addiction was the most common cause of smoking continuity (65%). this agreed with Pöld M et al ^[12] results.

We found in this study (21%) of doctor smoke in front of patient. This result is consistent with the result of Baey HA et al (20%) ^[8], while disagree with Mahfouz AA et al which show (96.8%) male and (97.4%) female smokers never smoke in front of the patients ^[9], this may be due to strict follow up the instructions and law.

In our study, there is a high level of awareness about the harmful consequences of smoking (94%). This similar to Mahdi HA et al (93.1%) ^[13] and Prucha MG et al (94.39%) ^[14].

Despite a high awareness of harmful consequences of smoking in most of

current smokers, we find only (26%) ready to quit smoking, these results inconsistent to Mahfouz AA et al (89.9%) were interested in quitting smoking ^[9].

In our study, showed that most cause to quitting smoking among ex-smoker was they worried about their own health (75%), a similar finding in Mohan S et al ^[15].

Regarding the motivation to initiate quitting smoking among ex-smokers, the study reported that (63%) took their decisions to stop smoking alone, while (37%) did that after advice from others, and most of them (87.5%) did not need to use NRT (lozenges or nicotine gums) as assistance for quitting, or any drug. similar to Guazzelli AC et al, the majority (88.1%) present with personal decision to quit, NRT was used by 4.3%, and only 1.08% used antidepressants ^[16].

In our study we find (71%) of the doctors always ask their patients about smoking status in history. This agrees with Pati S et al which showed (62%) ^[17].

In the results of this study we find that (65.6%) of the physicians and dentists always advise patients to quit smoking, this agree with Pati S et al (70%) ^[17].

In this study, most of participant (88.43%) support patient in quitting by brief counseling. This result is consistent with Pati S et al (78%) of physicians providing counselling to patients using tobacco ^[17].

Our study revealed that the most common cause that prevent some doctors from advising patients to quit smoking was lack of time (37.5%), followed by lack of patient desire (35%). These results agree with Panaiteescu C et al ^[18].

CONCLUSION

Nearly one in five physicians and dentists in Al-Karkh were smokers, with men predominating and most initiating the habit during college years, often due to stress. Smoking persisted largely because of nicotine dependence.

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REFERENCES

1. WHO. Tobacco. <https://www.who.int/health-topics/tobacco>. 2024.
2. Maria Rosaria Tumolo, Pierpaolo Mincarone, Roberto Guarino, Saverio Sabina, Eugenio Sabato, Maria Veronica Palma et al. Smoking habits among healthcare workers in the Southern Italy: a cross-sectional study. *Discov Public Health*. 2024; 21: 220.
3. Amanda Evenhuis, Stefano Occhipinti, Liz Jones, Darren Wishart. Factors associated with cessation of smoking in health professionals: a scoping review. *GlobalHealth Action*. 2023; 16:1-12.
4. Atayoglu AT, Tokaç M, Doğan S, Güner AE, Kocayigit E, Güner M. Smoking Status of Family Physicians and Their Attitude on Smoking Cessation. *Anatol J Family Med*. 2021;4(1):85–91.
5. Fu D, Xiao L. The Progress of the Global Tobacco Cessation Strategies. *China CDC Wkly*. 2023; 5(21):475-478.
6. WHO. Iraq: warning about the dangers of tobacco. 2019 <https://www.emro.who.int/ar/tfi/news/iraq-warning-about-the-dangers-of-tobacco>
7. Abdullah MY, Alshehri SA, Mahnashi HA, Alshahrani SS, Alkhaldi SS, AlshammariSM, et al. Role of primary care physician in health promotion and education. *Int J Community Med Public Health* 2022; 9:4705-9
8. Baey HA, Wahhudi MMA, Hashim HM, Ali OH, Nadhim N, Shamkhi BA. Smoking among health care providers, identification of associated factors in Hilla City during the year 2011. *Med J Babylon*. 2011;8(4):69-81.
9. Mahfouz AA, Shatoor AS, Al-Ghamdi BR, Hassanein MA, Nahar S, Farheen A, et al. Tobacco use among health care workers in southwestern Saudi Arabia. *BioMed Research International*. 2013;2013(1):960292.
10. Besson A, Tarpin A, Flaudias V, Brousse G, Laporte C, Benson A, et al. Smoking Prevalence among Physicians: A Systematic Review and Meta-Analysis. *Int J Environ Res Public Health*. 2021;18(24):13328.
11. Baltaci D, Bahcebasi T, Aydin LY, Ozturk S, Set T, Eroz R, et al. Evaluation of smoking habits among Turkish family physicians. *Toxicology and industrial health*. 2014;30(1):3-11.
12. Pöld M, Pärna K. Nicotine Dependence and Factors Related to Smoking Cessation among Physicians in Estonia. *Int J Environ Res Public Health*. 2020;17(9):3217.
13. Mahdi HA, Elmorsy SA, Melebari LA, Al-Masudi SM, Sharbini DA, Najjar AG, et al. Prevalence and intensity of smoking among healthcare workers and their attitude and behavior towards smoking cessation in the western region of Saudi

Arabia: A Cross-sectional study. *Tob Prev Cessat.* 2018; 4:30.

14. Prucha MG, Fisher SG, McIntosh S, Grable JC, Holderness H, Thevenet-Morrison K, et al. Health care workers' knowledge, attitudes and practices on tobacco use in economically disadvantaged Dominican Republic communities. *International journal of environmental research and public health.* 2015;12(4):4060-75.

15. Mohan S, Pradeepkumar A, Thresia C, Thankappan K, Poston W, Haddock C, et al. Tobacco use among medical professionals in Kerala, India: the need for enhanced tobacco cessation and control efforts. *Addictive behaviors.* 2006;31(12):2313-8.

16. Guazzelli AC, Terra Filho M, Fiss E. Smoking among physicians in a specific region of the greater metropolitan area of São Paulo. *Jornal Brasileiro de Pneumologia.* 2005; 31:516-22.

17. Pati S, Patnaik S, Swain S. 5A tobacco cessation strategy and physician's practice in Odisha, India: a cross-sectional study. *International Journal of Preventive Medicine.* 2014;5(3):325.

18. Panaitescu C, Moffat MA, Williams S, Pinnock H, Boros M, Oana CS, et al. Barriers to the provision of smoking cessation assistance: a qualitative study among Romanian family physicians. *NPJ primary care respiratory medicine.* 2014;24(1):1-6.

TABLES

Table (1): Association between socio-demographic variables and smoking among doctors.

Variables		Smoker or Ex-Smoker	Never Smoke	Total no.	X ²	P-Value
Age Group	25-35	20(18%)	91(82%)	111	0.911	0.091
	36-45	24(24.4%)	75(75.6%)	99		
	46-55	19(27%)	51(73%)	70		
	>55	15(37.5%)	25(62.5%)	40		
Gender	Male	68(43%)	92(57%)	160	57	0.001
	Female	10(6%)	150(94%)	160		
Marital Status	Un married	14(19%)	60(81%)	74	1.09	0.296
	Married	60(25%)	182(75%)	242		
	Divorced	2(100%)	0	2		
	Widow	2(100%)	0	2		
Specialty	General practitioner	34(31%)	76(69%)	110		
	Family physicians	2(5%)	38(95%)	40		
	Dentist	26(21.5%)	94(78.5%)	120		
	Other Specialty	16(32%)	34(68%)	50		

Table (2): Causes of quitting smoking among ex-smokers.

The cause	NO.	%
Requests of parents, partner, others	2	12.5
Did not want to smell like a smoker	2	12.5
Wanted to get rid of addiction	12	75
Spending money more reasonably	2	12.5
Better role model for children	4	25
Worried about one's own health	12	75
Pregnancy	0	0
Get fit again	5	31
Others	0	0

Abbreviations

Abbreviations	Description
MOH	Ministry Of Health
NRT	Nicotine Replacement Therapy
PHCC	Primary Health Care Center
SCP	Smoking Cessation Program
SPSS	statistical package for social sciences

FIGURES

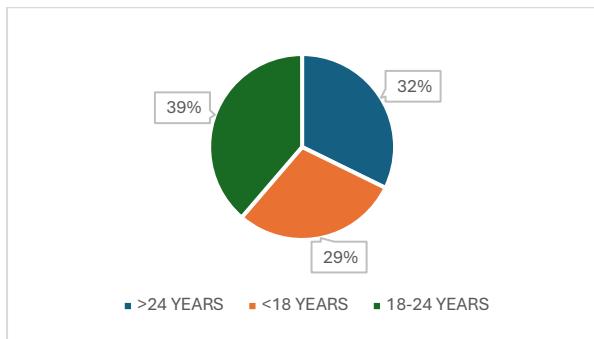


Figure (1): Age of doctors when they start smoking.