Frequency of Smoking and Specialized Awareness among Doctors and Nurses of Hospitals in Kerman, Iran

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Original Article

Abstract

Background: Nicotine is one of the strongest poisons. Every year about 75 thousand of Iranians die due to smoking. Since doctors and nurses have a major role in controlling smoking, this study tried to investigate the prevalence of cigarette smoking among doctors and nurses and their awareness about the effects of smoking.

Methods: This descriptive study was conducted on all doctors (n = 150) and nurses (n = 400) of hospitals affiliated with Kerman University of Medical Sciences (Kerman, Iran). Data was collected through a questionnaire with reliability of 0.8 and validity of 0.79. It consisted of two parts to assess demographic characteristics of the participants and their awareness about the side effects of smoking. Their awareness was ranked from poor to excellent based on the number of correct answers. Chi-square and Mann-Whitney tests were then used to analyze the collected data.

Findings: Of 550 questionnaires, 524 were completed (51.3% by the nurses and 48.7% by the doctors. While 21.2% of all participants smoked cigarettes, 71.8% of doctors and 95.3% of nurses did not smoke. The levels of awareness among nurses and doctors were determined as poor and moderate, respectively.

Conclusion: The higher prevalence of smoking among nurses confirms the significance of education. The level of awareness among the studied doctors and nurses was not desirable. Enhancing the awareness and attitude of medical staff will improve not only their own performance but also the behavioral pattern of the society.

Keywords: Cigarette, Smoking, Doctors, Nurses, Knowledge

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Introduction

Nicotine is one of the strongest poisons available. Inhaling small amounts of it has dire results and it is responsible for dependence on cigarettes. Recently, there has been an increase in the incidence of smoking, especially among the youth and women. The prevalence of smoking has been estimated as 12% among professionals and 40% among semi-professional groups.¹

The habit of smoking is acquisitive and thus inadvertent. In most cases, acquisition begins from adolescence and becomes a definite habit during the years of maturity.² It is very rare to see a dependent smoker who had not smoked up to the age of 21. Half of smokers wish to be saved from this habit, but most of those who have really tried to quit smoking over a year have faced failure. Studies have shown that the prevalence of smoking is growing among students.³ Each year, about 75 thousand Iranians lose their lives due to smoking.⁴ During the past 30 years, 5% of workers in Sweden have been randomly selected every year to calculate smoking rate. The obtained values have shown the prevalence of smoking among doctors to have increased from 10% to 71%. Currently, general physicians have the lowest (4%) and psychologists have the highest rate (12%) of smoking in Sweden.⁵

A study on the students of Tehran University of Medical Sciences (Iran) showed that 61% of male students had the habit of smoking.6 Investigating the awareness of 5140 doctors in Tehran (Iran) about tobacco revealed that one third of the participants had little awareness about ways to quit smoking and 80% expressed that they needed training in this field. Another study showed that 4.42% of students in Hormozgan University of Medical Sciences (Iran) smoked cigarettes. The researchers concluded that improving awareness and attitude of medical staff not only affects their own performance but also influences the behavioral pattern of the society.7 In 1999-2000, 47% of Russian specialized doctors were found to be smokers while only 7% were familiar with the effects of smoking. In 2006, the rates changed to 15% and 34%, respectively. Therefore, many of Russian doctors are not aware of their role in promoting or quitting smoking.⁵

Iranian Medical Association has reported that 10.6% of specialists, 12.5% of dentists, and 18.2%

of nurses smoke. Since 39.6% of medical staff suffer from smoking-related diseases, it is necessary to train medical groups to control tobacco use.8 Doctors and nurses play a major role in creation of a suitable tobacco control national plan.4,6,9 Continuous professional development (CPD) is considered as a success. Success of doctors in assisting patients to quit smoking would in turn lead to a significant reduction in death rate in a wide scale. However, this success is only possible if doctors themselves are protected from smoking.¹⁰ In fact, health professionals can turn into role models by not smoking. Since nurses spend more time with patients and have more opportunities to inform people than physicians do, their training is of higher importance. There have been great concerns about smoking nurses in Iran because they do not receive adequate training during their education. On the other hand, compared to other health professionals, dentists are in a better position to advise against smoking and encourage people to quit.³ Smoking is the most preventable cause of death and diseases in the world which kills more than 13 people per hour.^{5,11} Consequently, the need to prevent smoking and educating medical staff should be more considered.

Methods

This descriptive study evaluated the prevalence of cigarette smoking and the level of specialized information of doctors and nurses about cigarette consumption. The study sample consisted of all general and specialized physicians (n = 150) and nurses (with either bachelor's or master's degree) (n = 400) who were working in hospitals affiliated to Kerman University of Medical Sciences (Iran). The study included all doctors and nurses and no specific sampling method was used. Data was collected through a questionnaire based on the guidelines of the World Health Organization (WHO). The questionnaire has been previously used in similar studies and consisted of two parts. The first part assessed demographic characteristics (13 items). The second part included 51 multiple choice questions to evaluate awareness about complications of smoking. According to the number of correct answers, awareness was ranked as poor (less than 10 correct answers), moderate (10-30 correct. answers), good (30-40 correct answers), and excellent (more than 40 correct answers). Chi-square and MannWhitney tests were used to analyze the collected data in SPSS for Windows 15.0 (SPSS Inc., Chicago, IL, USA). P values less than 0.05 were considered as statistically significant.

Results

Overall, 524 questionnaires were completed by the participants among whom 49% were nurses and 51% were doctors. Females and males constituted 56.3% and 43.7% of the subjects, respectively. In addition, 49.6% of the were participants were single and 50.4% married. While 21.2% of all participants had an experience of smoking cigarettes, 71.8% of doctors and 95.3% of nurses had never smoked. On the other hand, 8% of nurses and 2.6% of doctors were ex-smokers and 8% of nurses and 7.7% of doctors had experienced pipe or hookah (Table 1). Among non-smokers, 17.4% reported recreational use of cigarettes. Only 24.4% of them stated that there was at least one smoker in their family. From current smokers, 4.37% had not attempted to quit smoking and only 3.4% had sought help from doctors to quit smoking. The subjects mentioned that at least 20% of their friends were smokers. The majority of participants (80.9%) agreed with workplace smoking ban. Moreover, 79.8% of the subjects, including current smokers, stated that they advised their patients to stop smoking cigarettes. Smoking prevention was considered as the best tobacco control method by 38% of the studied individuals. Furthermore, 72.3% of participants thought fines should be levied on smoking in public places. Most non-smokers (64.5%) believed they did not have diseases associated with smoking. However, smokers reported that 5.7% of their children and 16.4% of other family members were smokers or suffered from smoking-related diseases.

The studied nurses had a low level of awareness about complications of smoking. Participating doctors, most of whom had refused to mention their expertise and were thus considered as general practitioners, had a moderate level of awareness. The mean scores of awareness of nurses and doctors were 15.60 ± 5.42 and 17.66 ± 4.66, respectively (Table 2). Level of awareness was significantly related with gender (being female). Likewise, the prevalence of smoking had a significant correlation with awareness of doctors and nurses about the effects of smoking. In other words, higher levels of awareness among the participants lowered smoking.

Discussion

Smoking is an acquired habit. Since a hundred thousand people around the world begin smoking every day, the WHO Framework Convention on Tobacco Control was introduced in 2003 to protect current and future generations from the dangers of smoking.¹¹⁻¹³ In this regard, more attention to groups that influence public health is felt. Based on periodic studies in different countries, training of all groups of society, especially educated people, seems to be essential.¹⁴ A study by Iran Medical Organization showed that 18.2% of nurses, 16% of doctors, and 10.6% of specialists in Iran are smokers. In the current study, 9.2% of doctors and 20% of nurses were smokers. Due to the spread of addiction in all segments of society, particularly among educated people, measures need to be taken to prevent and control it.15,16

 Table 1. Frequency of smoking in nurses and physicians of hospitals of Kerman University of Medical Sciences (Kerman, Iran)

Profession	Non-smokers	Smokers	Ex-smokers	Hookah or pipe smokers	No answer	Other types of smoking		
Nurse	272 (51.9)	17 (3.3)	20 (8.0)	20 (8.0)	8 (3.1)	243 (95.3)		
Doctor	252 (48.7)	18 (3.4)	18 (7.7)	6 (2.6)	42 (17.1)	168 (71.8)		
Values are expressed as number (%)								

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Table 2.	Mean	scores	of awa	areness	about	smoking	among	nurses	and	physicians	of	hospital	affiliated	with	Kerman
University	y of Me	edical So	cience	es (Kerma	an, Ira	n)									

	Score of awareness	Р
Nurses	15.60 ± 5.42	0.05
Doctors	17.66 ± 4.66	0.05
Female participants	15.93 ± 5.40	0.05
Male participants	17.51 ± 4.70	0.05
Values are expressed as mean + SD		

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Smoking does not only affect smokers. In fact, meta-analyses have shown that the risk of cardiovascular diseases in non-smokers living with smokers is 30% higher than others.8 Two extensive studies have suggested that non-smokers who are exposed to their spouses' cigarette smoke are at higher risk of developing various diseases.9 In the present study, the effects of smoking were observed in 16.4% of family members of smokers. Previous studies have indicated that half of smokers die due to smokingrelated diseases.^{11,12} Therefore, attention needs to be paid to the complications of smoking among both smokers and their families. Smoking has also been suggested as a major source of cadmium pollution, i.e. cadmium levels in smokers are 4 times higher than non-smokers. In Kerman (Iran), a statistically significant correlation was found between cigarette smoking and severity of periodontal diseases.7 These findings show the extensive effects of smoking on health of individuals.

In a study in Tehran (Iran), 80% of doctors expressed that they needed training.14 We also found that improving the awareness and attitudes of medical staff not only enhances their performance but also shapes the behavioral pattern of society. Similar to our findings, a Russian study in 1999-2000 showed that only 7% of doctors were familiar with the hazards of smoking.14 A study which evaluated the curriculum of 24 medical schools failed to find any reference to using or quitting smoking in the list of courses of 10 faculties. Consequently, the contents of the courses in medical schools have to be revised. Another study assessed the prevalence of smoking and its related factors in university students of Kerman (Iran) in 2008 and reported 11% of university students to be smokers.¹⁶ In a similar study on 460 university students in Kerman in 2010, 52.8% of male students had experienced smoking and 12.1% of them had continued smoking.17 Based on research on students of Kerman in 2008, smoking is highly prevalent among adolescents. Higher rates among high school girls than boys is a serious warning to health care authorities to pay more attention to preventive measures which should be taken by medical teams.18

Previous studies have shown that the prevalence of smoking decreases by increased

education level. The importance of training is felt in all segments of society, especially in medical groups.¹⁴ Our findings showed low to moderate levels of awareness among doctors and nurses. Higher levels of awareness in doctors confirm the significance of education. On the other hand, doctors and nurses, who play a critical role in training and prevention and control of smoking and drug abuse, have these habits themselves. Since medical groups are of best help in preventing smoking in the community, they need to be encouraged not to use cigarettes. They should also be trained about the effects of smoking to gain enough knowledge to teach others.^{3,15}

In 85% of cases, smoking begins before the years of puberty and is converted to a definite habit during the years of puberty.¹⁷ Therefore, preventive steps can be very effective. Divsalar et al. performed a study on university students in Kerman and introduced the role of friends as a risk factor for tendency to smoking. In contrast, adherence to prayers was suggested as a protective factor.¹⁶ Since training is fundamental to every preventive measure, it is important to seriously revise the content of school lessons. The prevalence of smoking in high schools increases as students go to higher grades.¹⁹ A previous study reported 54.7% of high school students to have low knowledge about the hazards of smoking and 46.6% of them had good attitude toward it.17 Another study in Kerman showed a shift from smoking and traditional drugs to the use of newer substance in students.19 Therefore, interventional and educational programs in schools are suggested to prevent further problems.

Finally, according to our findings, all individuals require training on complications and prevention of smoking. Moreover, since medical students play an important role in the society, they should be better educated about the complications and preventive measures of smoking as well as patient education. The existing materials should also be revised. More knowledgeable medical students will then be able to educate the youth, particularly the vulnerable groups, and help the development of healthier communities.

Conflict of Interest

The Authors have no conflict of interest.

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بررسی فراوانی مصرف سیگار پزشکان و پرستاران بیمارستانهای شهر کرمان و دانش تخصصی آنان راجع به مصرف سیگار

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مقاله پژوهشی

چکیدہ

مقدمه: نیکوتین یکی از قویترین سموم است. در هر سال حدود ۷۵ هزار ایرانی بر اثر کشیدن سیگار جان خود را از دست میدهند. پزشکان و پرستاران نقش عمدهای در کنترل مصرف سیگار دارند. مطالعه حاضر با هدف، بررسی میزان مصرف سیگار و اطلاعات پزشکان و پرستاران راجع به مصرف آن انجام شد.

روشها: مطالعه توصیفی حاضر بر روی همه پزشکان و پرستاران بیمارستانهای دانشگاه علوم پزشکی کرمان صورت گرفت که در مجموع حدود ۱۵۰ پزشک و ۴۰۰ پرستار بودند. اطلاعات از طریق پرسشنامهای با نمره روایی ۸۸۰۰ و پایایی ۲۷۹۰ که از دو بخش ویژگیهای دموگرافیک و ۵۱ سؤال چهار گزینهای در زمینه عوارض ایجاد شده به دنبال مصرف سیگار تشکیل شده بود، جمعآوری گردید. میزان آگاهی از ضعیف تا عالی رتبهبندی شد. به تعداد پاسخ صحیح کمتر از ۱۰ آگاهی ضعیف، بین ۳۰–۱۰ پاسخ صحیح نمره متوسط و ۴۰–۳۰ پاسخ صحیح رتبه خوب و بیش از ۴۰ پاسخ صحیح نمره عالی تعلق گرفت. پس از جمعآوری دادهها مبادرت به تجزیه و تحلیل اطلاعات شد.

یافتهها: از بین ۵۲۴ پرسشنامه تکمیل شده، ۵۱/۹ درصد را پرستاران و ۴۸/۷ درصد را پزشکان تشکیل دادند. ۲۱/۲ درصد سابقه مصرف سیگار را ذکر نمودند؛ در حالی که، ۷۱/۸ درصد پزشکان و ۹۵/۳ درصد پرستاران سیگار نمیکشیدند. سطح آگاهی پرستاران در حد ضعیف و پزشکان متوسط ارزیابی شد.

نتیجه گیری: مصرف سیگار در پرستاران بیشتر از پزشکان بود و این خود تأییدی بر معنیدار بودن سطح آگاهی بر تحصیلات میباشد. میزان آگاهی پزشکان و پرستاران در حد متوسط تا ضعیف میباشد. ارتقا، آگاهی و نگرش کادر پزشکی علاوه بر نحوه عملکرد آنان، در شکل دادن به الگوی رفتاری جامعه نیز تأثیر دارد.

واژگان کلیدی: سیگار، مصرف سیگار، پزشکان، پرستاران، دانش

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