Araştırma Makalesi

Smoking Prevelance and Influencing Factors for Undergratuate and Postgraduate Students in Gazi University Faculty of Dentistry

Gazi Üniversitesi Diş Hekimliği Fakültesi Lisans ve Lisansüstü Öğrencilerinin Sigara Kullanım Prevalansı ve Etkileyen Faktörler

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ABSTRACT

Aim: The aim of this research is to gather information on the smoking habits and the factors affecting this habit of both undergraduate and graduate students of the school of dentistry who are mostly the role models in their society. The study also aims to get to know the opinions of the students regarding to the smoking ban.

Material and Methods: In this study, a questionnaire was conducted face-to-face to undergraduate and postgraduate students. The students themselves' and other family members' smoking status, the reasons for smoking, their thoughts on quitting smoking and opinions on legal regulations about smoking were questioned.

Results: 33.4% of the 654 respondents declared having smoking habits, and 16.2% of them addicted to tobacco, hookah, etc. 54.6% considered that smoking habits of physicians were incentive to their patients and 74.2% of them pointed out that smoking habits of physicians adversely affect patients' opinions about themselves.

Conclusion: As a result of this study, it was revealed that one out of every three graduate students or dentist candidates has a smoking habit. Although physicians and physician candidates think that it will create negative opinions on patients and encourage patients, their continued use of cigarettes constitutes a negative example for society.

Keywords: Dentistry; Physchological model; Smoking cessation; Smoking habit

ÖZET

Amaç: Bu çalışmanın amacı topluma örnek teşkil eden meslek gruplarından birini yetiştiren diş hekimliği fakültesindeki öğrencilerin birçok sağlık problemine yol açan sigara ve tütün ürünleri kullanımı, bu alışkanlıklarını etkileyen faktörler ve bu öğrencilerin sigara yasağı konusundaki düşünceleri hakkında veri toplamaktır.

Gereç ve Yöntem: Bu çalışmada Gazi Üniversitesi Diş Hekimliği Fakültesi'nde öğrenim gören lisans ve lisansüstü öğrencilerine 27 sorudan oluşan anket yüz yüze yapılmıştır. Öğrencilerin kendilerinin ve diğer aile bireylerinin sigara içme durumu, sigara kullanım nedenleri, sigara bırakma ile ilgili düşünceleri ve sigara kullanımı ile ilgili yasal düzenlemeler hakkındaki görüşleri sorgulanmıştır.

Bulgular: Anketi cevaplayan 654 kişinin %33.4'ü sigara kullandığını, %16.2'si ise sigara dışında tütün, nargile vb. alışkanlıkları olduğunu belirtmişlerdir. Hekimlerin sigara kullanımının tedavi ettikleri hastalar üzerinde hekimlerle ilgili olumsuz görüş oluşturduğunu belirtenlerin oranı %74.2 iken; hekimlerin sigara kullanımının hastalar üzerinde özendirici etkisi olduğunu bildirenlerin oranı %54.6'dır.

Sonuç: Bu çalışmanın sonucunda her üç uzmanlık öğrencisi veya diş hekimi adayından birinin sigara alışkanlığının olduğu ortaya konmuştur. Hekimlerin ve hekim adaylarının hastalar üzerinde olumsuz görüş oluşturacağını ve hastaları özendirici etkileri olacağını düşünmelerine rağmen sigara kullanmaya devam etmeleri toplum üzerinde olumsuz örnek teşkil etmektedir.

Anahtar Kelimeler: Diş hekimliği; Sigara içme; Sigarayı bırakma; Psikolojik model

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INTRODUCTION

Tobacco products are the only legal chemical that are encouraged by the manufacturers and kill many of its users. Worldwide, there are more than 1 billion smokers including the majority in low-and middle-income countries and smoking causes the premature death of more than 7 million people each year.[1] One in 10 deaths around the world is caused by tobacco. It is estimated by WHO that more than 600,000 of these deaths are due to passive smoking. Tobacco smoking is also associated with an increased risk of death from communicable diseases despite that often associated with ill-health, disability and death from noncommunicable chronic diseases.[2]

Turkey is also working about smoking cessation and one of the six countries that keeps on the television advertising containing graphic imagery which is especially effective in cessation for daily 4 periods from 2009 to 2016. Despite; health warnings on cigarette packs about the dangers of smoking by placing pictures in 2010,[3] the national tobacco control law numbered 4207 includes smoking ban in closed spaces, a requirement that all broadcasters air at least 90 minutes of anti-tobacco content per month, including 30 minutes during primetime hours.[4] It was determined that the health warnings on cigarette packs and imaginary warnings were significantly effective on the thought of quitting smoking.[3]

In the 2012 Global Adult Tobacco Survey at Turkey, it was determined that 27.1% of the population were using tobacco. In the 2017 Global Youth Tobacco Survey, 17.9% of students between the ages of 13-15 were using tobacco and 7.7% had smoking habit in Turkey.[5]

In the publication of Public Health Professionals Association (HASUDER) in 2008 involving 4.761 health workers, it is determined that approximately 26% of 206 dentists and pharmacists, 22.1% of 173 medical specialists and 30.5% of 190 physicians and pharmacists using cigarette. In 2012, the Global Adult Tobacco Survey in Turkey published. There is a study involved more than 6,000 health workers in year 2011 in this publication. It was stated that nearly 20% of dentists and pharmacists, 13% of medical specialists and 24% of medical practitioners had smoking habit and generally in all branches a decrease in rate of smoking were found comparing with 2008. While the positive effect of demonstrating the harmful sides of smoking to community for quitting have proven, this smoking rate of the physicians are conflicting.[6]

It is shown in a number of studies that some professions such as physicians, health professionals, actors, and singers have very important role to encourage people to quit smoking or to discourage those who are about to initiate.[7] It is important that physicians and other health care workers should not smoke for both creating a role model in their society and keeping their health in good standing. In this study, the data about smoking habits, factors affecting smoking, thoughts about the effects of smoking in patient-health worker relations and smoking ban were collected from the undergraduate and postgraduate students who are expected to be specialist in different branches in dentistry and assumed to have role models in their community and have crucial impact on patients to stop smoking.

MATERIAL AND METHODS

This study was carried among the dental students from all five grades and postgraduate students in different branches in the Faculty of Dentistry of Gazi University between January - April 2018. Survey consisted of 27 questions containing information about students' grade or academic year, socio-demographic data, smoking status of themselves and their families, reasons for smoking, thoughts about smoking cessation, thoughts about the effect of smoking in patient-physician relation, opinions about legal regulations were questioned. Ethical approval was obtained from the Institutional Ethical Committee of Gazi University (Approval number: E.175032). The students were informed about the study, and only those who consented to participate were included. The collected data were classified and tabulated in Microsoft Office Excel. SPSS for Windows, version 16 (2007), was employed for statistical analysis. The responses to the questions were analyzed considering the percentages of the respondents in questionnaire process.

Table 1. Sociodemographic data (n,%)

Gender	**Female**	**Male**		
	417	237		
	63.8%	36.2%		
Education Level	**Undergraduate**	**Postgraduate**		
	569	85		
	87%	13%		
Place of Residence	**Dormitory**	**At home with friends**	**At home with family**	**Others**
	239	184	167	64
	36.5%	28.1%	25.5%	9.8%
Education Level of Mothers	**University/College**	**High School**	**Primary School**	**Illaterate**
	233	154	162	19
	35.6%	23.5%	24.8%	2.9%
Education Level of Fathers	**University/College**	**High School**	**Primary School**	**Illaterate**
	362	140	90	3
	55.4%	21.4%	13.8%	0.5%

RESULTS

The respondents were 654 dental students that 569 of them were in undergraduate and 85 in postgraduate education and 417 of them female (63.8%) and 237 male (36.2%) in gender. 36.5% of respondents were living in the dormitory while 28.1% were living at home with friends, and 25.5% were living at home with family. No significant relationship was found between the place of residence and smoking habit. When the education levels of the families were examined, it was found that 55.4%, 35.6% of fathers and mothers graduated from university or college; 21.4%, 23.5% graduated from high school; 13.8%, 24.8% graduated from primary school respectively and the illiteracy rate was quite low (Table 1).

33.4% of participants stated that they had smoking habit, while 16.2% used tobacco, hookah and so on except cigarettes. 17.6% of the total reported smoking regularly, while 15.6% reported smoking occasionally. 49.9% stated that one or more of their family members had habit of smoking. The amount of cigarette consumed daily was mostly marked as below 1 pack and the most selected answer was up to 5. Among undergraduate students and postgraduate students smoking rate was identified as 31.4% and 48.3% respectively. Although the number of graduate students is less in terms of mass, it was seen that the percentage of regular smokers were 1.5 times of never-smokers and 2 times of occasional smokers (Table 2).

Smoking was the most determined to begin at 17 and 18 years of age and smoking initiation rate under 18 years of age was found as 45%. The reason to start smoking under age 18 was determined mostly as curiosity and envy while that above 18 years age detected as recovering the problems and the statistical rate of choice of envy was decreased. 113 participants (77.4%) stated that they tried to quit smoking or they were planning to quit while 22.6% of smokers never attempted to quit smoking and did not even intend to.

The percentage of those that believed to have sufficient knowledge about the negative effects of smoking was determined to be 73.5%. 82.2% of the participants have stated that family members, physicians, teachers, movie stars, football players and other people do not affect to start smoking. 74.2% of the respondents' stated smoking habit of physicians creates a negative opinion on patients and 54.6% of respondents demonstrated that physicians are crucial on patients that are being treated to quit smoking. But there was no statistically significant results on answers for both questions between non patient contact undergraduate students and patient contact

postgraduate students. The questions for the last two subjects were answered positively by 50% and negatively by 20% of the participants (Table 2).

69.7% of respondents thought that they have been passive smokers due to smoking of their relatives. 50% of the respondents found the law 4207 that contains regulations about smoking in in-door areas, etc. as crucial and effective, however 42% found crucial but ineffective. Although 60.8% of the participants found public service announcements beneficial for cessation, 81.3% stated that the health warnings on cigarette packs were not beneficial.

DISCUSSION

To the best of the authors' knowledge, this is the first study regarding the smoking habits between both the graduate and postgraduate students in dentistry schools. In the study[8] performed on 26.586 undergraduate students of 11 different faculties at Suleyman Demirel University between the years 2009-2010, smoking rate stated as 43.6%, the rate of using hookah and pipe 26.9%, 7.5% respectively. In our study, the rates of smoking (33.4%) and using tobacco products (16.2%) were higher than those found in the mentioned study. The proportion of students

Table 2. Smoking Habits Data (n,%)

Smoking Habit	**Regularly**	**Occasionaly**	**Quit**	**Never**	
	115	102	28	405	
	17.7%	15.7%	4.3%	62.3%	
Tobacco Products Use Except Cigarettes	**Yes**	**No**			
	106	548			
	16.1%	83.8%			
Smoking Habits of Family	**Yes**	**No**			
	326	328			
	49.9%	50.1%			
	Mother	**Father**	**Sister/Brother**		
	88	213	124		
	13.5%	32.6%	19%		
Amount of Cigarettes Consumed Daily	**Up to 5**	**6-10 cigarettes**	**11-15 cigarettes**	**1 package**	**More than one package**
	62	36	35	38	8
	34.6%	20.1%	19.6%	21.2%	4.6%
Passive Influence Due to Smoking	**Yes**	**No**			
	456	198			
	69.7%	30.3%			
Enough Knowledge About the Fatal Effects of Smoking	**Yes**	**No**			
	481	173			
	69.7%	26.5%			
Smoking Habit of Physicians Creates a Negative Opinion on Patients	**Yes**	**No**			
	485	169			
	74.2%	25.8%			
Smoking of Physicians May Have Incentive Effects on Patients	**Yes**	**No**			
	357	297			
	54.6%	45.4%			

who were thinking to quit smoking was found to be 55.6%, which was lower rate than found in our study (68.4%). The rate of participants who were thinking that they had enough information about the adverse effects of smoking was determined as 92.3% which was higher than we stated (73.5%).[8]

In the study[9] performed on 298 freshmen and senior year students at Ege and Dicle Universities School of Dentistry in 2013, smoking rate was found to be 29.9% which was lower than ours (33.4%). The students of both faculties using tobacco products were freshmen and senior year students respectively, and it was determined that senior year students used more tobacco products dramatically. However, there was no correlation found between the students in different grades and smoking rates in our study. In the same study, smoking initiation rate under the age of 18 was determined to be 58%, which is similar to our rate that is 59.9%. Most of the students (80-90%) in Ege and Dicle Universities found all legal regulations as a requirement alike the rate (92%) found in our study.

The study undergone to 5th grade dentistry students in Iran where the smoking rate was found to be 23% which was lower than our finding (33.4%). It was thought that this difference between the rates might due to the lower number of senior students that attempted to the study in Iran. In the same study smoking rate decreased as the father's education level increased.[10] In our study, despite the high level of education of the fathers, the rate of smoking was also found to be high. But no statistically significant relationship was found between them.

In the literature, the most common causes of smoking include curiosity, stress/boredom and the influence of friends.[11,12] Similarly, in our study curiosity, envy and boredom were found as the most common causes.

Global Adult Tobacco Survey[6] helded in November 2008 stated that more than 6 million adults (38.5%) who were working indoors had passive influence due to smoking. In our study, the percentage of people who thought that they had passive influence was quite high (69.7%), despite that they were in limited sample. In the same study, the number of cigarettes consumpted daily was found as half a pack (11 cigarettes) (66.1%) while 15.5% of respondents consumed more than one pack. In our study, the majority of the consumption of 1 package and up to 5 units which was similar to Turkish population average. In Global Adult Tobacco Survey, 96% of respondents stated that they had knowledge about the fatal effects of smoking. Even though there was a limited number of people whether educated on health or health-worker in our study, it was engrossing that the rate of people who thought that had sufficient knowledge was 73.5% which was lower than the population.

High rates of students of having education in medical and health-related schools have been shown to agree with the idea of "health workers are role models for society and their patients; each patient should be advised to quit smoking and patients will have a greater chance of quitting if they are advised by a medical staff member".[13] It was found that, physicians who had been educated on the adverse effects of smoking, carcinogenesis and other diseases related with smoking, could have affected patients about their smoking habits.[14,15] In our study, nearly half of participants who were educated on the harmful effects of smoking on the oral region other than general health such as oral cancer, alveolar bone loss, oral lesions and periodontitis, stated that they had no effect on changing patients' smoking habits. These results indicated that the participants were less conscious on their physchological role model in society. Richmond noted that medical students' knowledge of the health-damaging effects of smoking had a relativistically low impact on their smoking habit and could not be effective unless the information was reflected in their smoking behavior.[16]

In survey[17] on smoking habits of 902 undergraduate students in Uludağ University Medical School between years 2012-2013, smoking rate was found to be 17%. The number of cigarettes consumed daily was determined as 11-20 cigarettes and the rate of participants who desired to quit smoking was found to be 71.2%. While similar results were found in our research, the average number of cigarette consumed per day was found less (5 cigarettes per day).

In 2010 Global Adult Tobacco Research Report,[18] placement of stimulant pictures on cigarette packets about hazards was founded effective in smoking

cessation and 46.5% of participants stated that they thought quitting smoking when they had seen warnings on packages. But in our research, participants found warnings on cigarette packages less effective and 81.3% of them stated that these warnings were wholly ineffective.

A statistical analysis[19] published by TUIK (Turkish Statistical Institute) in 2015 reported that household expenditures on alcoholic beverages, cigarettes and tobacco were 4.2%, which were higher than expenditures on education, health, transportation and communication. Monthly consumption expenditures in this scope were increasing about 10% to 29% as income levels were rising. The participants in this sample who were expected to have a high income level in the future were projected to contribute to the cigarette, tobacco and alcohol economy as health workers as long as the consumption continues in the same rate.

CONCLUSION

It is crucial to note that, one of the three of the dentist candidates and dental specialist student have smoking habit. One out of every two prospective dental specialists have at least one member who is addicted to smoking in their family. The rate of addiction to cigarette among these health professionals is found to be high in contrary of our expectation about them to serve as a role model in smoking cessation in the community in which they serve as health experts. The high proportion of students who are thinking about quitting smoking is promising while one out of five smokers do not consider to quit soon. Physicians and prospective health specialists accepted the idea that addiction to smoking of health professionals is more likely to cause negative view of patients towards their health experts. This situation further discourages patients about quitting to smoke with the perception that the damaging effects of smoking is overstated by health experts. The indulgence of health professionals to smoking set a bad example to their patients as well as to other segments of the society. One of the crucial findings of the research reveals that smoking habits of the health professionals may discourage the efforts for their patients to quit. Keeping the important points of this study in mind, further studies should focus on health professionals about quit smoking for their own health benefits as well as on patients not to be discouraged to quit by addicted physicians.

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