




Perception and attitudes of dental students towards tobacco use and smoking cessation counseling

Diş hekimliği öğrencilerinin tütün kullanımı ve sigara bırakma danışmanlığına ilişkin algı ve tutumları

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ABSTRACT

Objective: Smoking is a key risk factor for several diseases and disorders, as well as the primary modifiable factor for a variety of oral problems, such as malignant disorders and mouth cancer. The purpose of this survey is to assess Marmara University Faculty of Dentistry students' tobacco use attitudes, knowledge, and views concerning smoking cessation counseling.

Methods: A 21-question online survey was done using Google Forms and sent to 3rd, 4th, and 5th grade students. A total of 309 students, 107 from the third grade, 93 from the fourth grade, and 109 from the fifth grade, completed the questionnaire, which was meant to measure students' attitudes and awareness of tobacco and tobacco products.

Results: A total of 107 third grades, 93 fourth grades, and 109 fifth grades were discovered among the 309 participants in our study. Furthermore, males made up 33% of the participants, while females made up 66%. According to statistics, most students recognize that they are role models for society and believe they should get smoking cessation counseling training. However, according to statistics, just 7% of students obtain this type of formal education.

Conclusion: According to our findings, while dentistry students are aware of the negative consequences of tobacco, there is a lack of instruction in smoking prevention and control.

Keywords: Tobacco use, oral cancer, cessation counseling, smoking, dental students

ÖZ

Amacı: Sigara kullanımı periodontal hastalıklar, malign bozukluklar ve ağız kanserleri olmak üzere birçok oral durum için önemli bir risk faktörü olarak kabul edilmektedir. Bu anlamda sigarayı bırakma konusunda diş hekimleri tarafından uygulanan sağlık stratejileri etkili olabilir. Bu çalışmanın amacı dişhekimliği öğrencilerinin sigara bırakma danışmanlığı konusunda tütün kullanım tutumlarının, bilgi ve algılarının yapılan anket ile değerlendirilmesidir.

Yöntemler: Çalışmamıza Marmara Üniversitesi Diş Hekimliği Fakültesi'nde eğitim gören 107 3. sınıf, 93 4. sınıf ve 109 5. sınıf olmak üzere toplam 309 öğrenci hazırladığımız 20 sorudan oluşan anketi cevaplandırmışlardır. Bu anket ile öğrencilerin tütün ve tütün ürünleri kullanımı ile ilgili tutumları ve farkındalıkları değerlendirilmiştir.

Bulgular: Çalışmamıza dahil edilen 309 katılımcının 107'si 3. sınıf, 93'ü 4. sınıf, 109'u ise 5. sınıf öğrencisi olarak bulgulanmıştır. Bunun yanısıra katılımcı öğrencilerin %33'ü erkek, %66'sı ise kadın olarak saptanmıştır. Yapılan istatistiksel analizler öğrencilerin çoğunun toplum için rol model olduklarının farkında olduğunu ve sigarayı bırakma danışmanlığı konusunda eğitim almaları gerektiğini bildiklerini gösterdi. Ancak istatistiksel analizler, öğrencilerin sadece %7'sinin bu konuda resmi eğitim aldıklarını göstermiştir.

Sonuç: Çalışmamızın sonuçlarına göre diş hekimliği öğrencileri tütünün zararlı etkilerinin farkında olsalar da, sigarayı önleme ve kontrol konusunda eğitim eksikliği bulunmaktadır.

Anahtar Kelimeler: Tütün kullanımı, ağız kanseri, sigara bırakma, dişhekimliği öğrencileri

INTRODUCTION

Despite anti-smoking organizations' relentless efforts, smoking remains a serious public health concern, causing over 7 million deaths each year.^{1,2} Globally, there are roughly 1.3 billion users, with % of them living in disadvantaged nations.^{3,4} Tobacco smoking is a recognized risk factor for multiple diseases and disorders, including periodontal disease, oral cancer, and potentially malignant disorders.^{2,5} Periodontal disease, oral cancer, and possibly malignant diseases all have this as a major modifiable component. When introduced by dentists, health strategies aimed at quitting smoking can be effective in this regard.⁶⁻⁸ In the literature, tobacco cessation counseling by healthcare professionals has proven to be effective, and proper assistance and professional advice by healthcare professionals have been reported to result in a 10-20% quit rate.⁹

This study was presented as an oral presentation in International Congress of Oral Cancer that was held on March 4-6th, 2020 in Eskişehir, Turkey.

Bu çalışma 4-6 Mart 2020 tarihlerinde Eskişehir'de düzenlenen Uluslararası Ağız Kanseri Kongresi'nde sözlü bildiri olarak sunulmuştur.

Received/Geliş Tarihi: 07.09.2021

Accepted/Kabul Tarihi: 21.12.2021

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Cite this article: Keser G, Yılmaz G, Nardar Pekiner F. Perception and attitudes of dental students towards tobacco use and smoking cessation counseling. *Curr Res Dent Sci.* 2022; 32(2): 132-136.



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Comprehensive anti-smoking campaigns that are designed and operated by health practitioners are needed. Dentists are in an advantageous role among these professions because they have access to patients of all ages, from children to the elderly, and may influence people to stop or not resume smoking.^{2,3} However, studies show that only a minority of dental students receive training on how to approach these patients during their dental education.^{5,10,11}

Dental appointments can be used to educate patients about the harmful effects of tobacco and encourage them to quit. However, unlike physicians and other health professionals, it has been found that dentists are not adequately trained on tobacco cessation services and protocols.⁹ In a study conducted by Da Silva Leonel et al.⁴, it is reported that only 12.5% of the students out of 224 dental students received formal education on this subject.

Dentistry students, who are dentists of the future, examine the oral cavity and encounter symptoms ranging from tobacco to bad breath, premalignant lesions and cancerous lesions in the oral tissues.^{8,12-14} Dental treatment, which usually requires multiple visits, provides a mechanism for initiating, reinforcing and supporting tobacco cessation activities. Therefore, this study aims to evaluate dental students' tobacco use attitudes, knowledge, and views concerning smoking cessation counseling.

MATERIAL AND METHODS

A self-administered questionnaire adapted from the Global Health Professions Student Survey (GHPSS) presented in the study of da Silva et al.⁴ consisting of 21 close-ended questions was administered using Google Forms and distributed to 3rd, 4th, and 5th grade students. The World Health Organization (WHO) produced the Global Health Professions Student Survey (GHPSS), which includes questions regarding tobacco use prevalence, en-

vironmental exposure to tobacco smoke, attitudes about smoking, behavior and quitting, curriculum and training, and demographic data. The questionnaire was translated into Turkish by experts and checked. The Turkish form and the English form were filled by the same people at different times in a pilot study, and the results were tested with a paired t-test ($P > .05$). A total of 309 students from Marmara University Faculty of Dentistry, 107 from the third grade, 93 from the fourth grade, and 109 from the fifth grade, completed the questionnaire.

Statistical Analysis

IBM Statistical Package for the Social Sciences version 22 (IBM SPSS Corp., Armonk, NY, USA) was applied for statistical analysis. In addition to descriptive statistical approaches, Chi-Square, Fisher's Exact, Fisher Freeman Halton, and Continuity (Yates) Correction were done to evaluate qualitative data (frequency). The 0.05 level was used to assess significance.

RESULTS

The study was conducted with a total of 309 dentistry students, including 102 (33%) males and 207 (67%) females. It was also examined under 3 groups, of which 107 (34.6%) were 3rd grade, 93 (30.1%) 4th grade and 109 (35.3%) 5th grade.

The rate of male students' first cigarette attempt age being between 11-15 years (19.6%) was found to be statistically significantly higher than female students (6.3%) ($P = .000$; $P < .05$).

There is no statistically significant difference between male and female students in terms of distribution of factors in starting smoking and distribution rates of smoking within school boundaries in the past year ($P > .05$). The ratio of male students chewing tobacco derivatives (58.8%) was found to be statistically significantly higher than female students (32.4%) ($P = .003$; $P < .05$) (Table 1).

Table 1. Gender and grades versus experiment age, control, and tobacco and derivatives usage

		Gender			P	Grades			P
		Male n (%)	Female n (%)	Total n (%)		Grade 3 n (%)	Grade 4 n (%)	Grade 5 n (%)	
When did you first try a cigarette?	I have never smoked cigarettes	28 (27.5)	81 (39.1)	109 (35.3)	¹ .000*	39 (36.4)	40 (43)	30 (27.5)	¹ .203
	Age 10 or younger	7 (6.9)	2 (1)	9 (2.9)		4 (3.7)	2 (2.2)	3 (2.8)	
	Age 11-15	20 (19.6)	13 (6.3)	33 (10.7)		12 (11.2)	7 (7.5)	14 (12.8)	
	Age 16-17	25 (24.5)	33 (15.9)	58 (18.8)		25 (23.4)	15 (16.1)	18 (16.5)	
	Age 18-19	13 (12.7)	35 (16.9)	48 (15.5)		13 (12.1)	17 (18.3)	18 (16.5)	
	Age 20-29	9 (8.8)	43 (20.8)	52 (16.8)		14 (13.1)	12 (12.9)	26 (23.9)	
When you first started smoking, did you have any influence?	I've never smoked a cigarette in my life	42 (41.2)	109 (52.7)	151 (48.9)	² .157	54 (50.5)	50 (53.8)	47 (43.1)	¹ .076
	I had no influence	20 (19.6)	36 (17.4)	56 (18.1)		24 (22.4)	18 (19.4)	14 (12.8)	
	Family members' influence	2 (2)	1 (0.5)	3 (1)		0 (0)	1 (1.1)	2 (1.8)	
	Friends/colleagues' influence	38 (37.3)	61 (29.5)	99 (32)		29 (27.1)	24 (25.8)	46 (42.2)	
How many days did you smoke cigarettes in the last 30 days (1 month)?	0 day	55 (53.9)	140 (67.6)	195 (63.1)	² .003*	70 (65.4)	65 (69.9)	60 (55)	¹ .055
	1 or 2 days	3 (2.9)	18 (8.7)	21 (6.8)					
	3 to 5 days	5 (4.9)	7 (3.4)	12 (3.9)		5 (4.7)	2 (2.2)	5 (4.6)	
	6 to 9 days	4 (3.9)	9 (4.3)	13 (4.2)		4 (3.7)	2 (2.2)	7 (6.4)	
	10 to 19 days	4 (3.9)	7 (3.4)	11 (3.6)		7 (6.5)	2 (2.2)	2 (1.8)	
	20 to 29 days	31 (30.4)	26 (12.6)	57 (18.4)		18 (16.8)	12 (12.9)	27 (24.8)	
Have you ever smoked cigarettes on school campus or property in the previous year?	I have never smoked cigarettes	45 (44.1)	92 (44.4)	137 (44.3)	¹ .242	50 (46.7)	46 (49.5)	41 (37.6)	¹ .078
	Yes	43 (42.2)	72 (34.8)	115 (37.2)		41 (38.3)	25 (26.9)	49 (45)	
	No	14 (13.7)	43 (20.8)	57 (18.4)		16 (15)	22 (23.7)	19 (17.4)	
Have you ever experimented with chewing tobacco, snuff, narguilé, cigars, or pipes?	Yes	60 (58.8)	67 (32.4)	127 (41.1)	¹ .000*	46 (43)	34 (36.6)	47 (43.1)	¹ .567
	No	42 (41.2)	140 (67.6)	182 (58.9)		61 (57)	59 (63.4)	62 (56.9)	
How many days did you chew tobacco, snuff, narguilé, cigars, or pipes in the previous 30 days (1 month)?	0 day	58 (56.9)	171 (82.6)	229 (74.1)	² .000*	80 (74.8)	74 (79.6)	75 (68.8)	¹ .075
	1 or 2 days	39 (38.2)	34 (16.4)	73 (23.6)		24 (22.4)	18 (19.4)	31 (28.4)	
	3 to 5 days	2 (2)	2 (1)	4 (1.3)		3 (2.8)	1 (1.1)	0 (0)	
	6 to 9 days	3 (2.9)	0 (0)	3 (1)		0 (0)	0 (0)	3 (2.8)	
Have you ever used chewing tobacco, snuff, narguilé, cigars, or pipes in a school setting in the past year?	Yes	2 (2)	1 (0.5)	3 (1)	³ .254	0 (0)	1 (1.1)	2 (1.8)	² .521
	No	100 (98)	206 (99.5)	306 (99)		107 (100)	92 (98.9)	107 (98.2)	
Have you ever tried smoking a cigarette, even for one or two puffs?	Yes	77 (75.5)	153 (73.9)	230 (74.4)	¹ .765	77 (72)	67 (72)	86 (78.9)	¹ .414
	No	25 (24.5)	54 (26.1)	79 (25.6)		30 (28)	26 (28)	23 (21.1)	

¹Chi square Test, ²Fisher Freeman Halton Test, ³Fisher's Exact Test, * $P < .05$

Table 2. Evaluation of smoking ban parameters according to gender and grades

		Gender			P	Grade			P
		Male	Female	Total		Grade 3	Grade 4	Grade 5	
		n (%)	n (%)	n (%)		n (%)	n (%)	n (%)	
Is there an official no-smoking policy in your school's buildings and clinics?	Yes, but only for school buildings.	1 (1)	3 (1.4)	4 (1.3)	.657	1 (0.9)	2 (2.2)	1 (0.9)	.809
	Yes, but just for clinics.	4 (3.9)	7 (3.4)	11 (3.6)		4 (3.7)	4 (4.3)	3 (2.8)	
	Yes, for both school and clinic facilities.	90 (88.2)	188 (90.8)	278 (90)		97 (90.7)	83 (89.2)	98 (89.9)	
	Yes, but only for school buildings	1 (1)	0 (0)	1 (0.3)		0 (0)	1 (1.1)	0 (0)	
Is your school's stated smoking prohibition in classrooms and clinics being followed?	I do not know	6 (5.9)	9 (4.3)	15 (4.9)	.241	5 (4.7)	3 (3.2)	7 (6.4)	.361
	Yes, the policy is followed	79 (77.5)	154 (74.4)	233 (75.4)		84 (78.5)	71 (76.3)	78 (71.6)	
	No, the policy is not followed	10 (9.8)	16 (7.7)	26 (8.4)		11 (10.3)	5 (5.4)	10 (9.2)	
	There is no formal policy at the school	1 (1)	0 (0)	1 (0.3)		0 (0)	1 (1.1)	0 (0)	
	I do not know	12 (11.8)	37 (17.9)	49 (15.9)		12 (11.2)	16 (17.2)	21 (19.3)	

Fisher Freeman Halton Test

Table 3. Evaluation of parameters regarding tobacco cessation programs during school education by gender

		Gender			P
		Male	Female	Total	
		n (%)	n (%)	n (%)	
Were you ever educated about the risks of smoking throughout your school years?	Yes	92 (90.2)	188 (90.8)	280 (90.6)	1.000
	No	10 (9.8)	19 (9.2)	29 (9.4)	
Did you taught in school that it's critical to keep track of a patient's cigarette usage as part of their overall medical history?	Yes	93 (91.2)	191 (92.3)	284 (91.9)	1.913
	No	9 (8.8)	16 (7.7)	25 (8.1)	
Have you ever received any official instruction in smoking cessation techniques to utilize with patients throughout your schooling?	Yes	13 (12.7)	11 (5.3)	24 (7.8)	1.039*
	No	89 (87.3)	196 (94.7)	285 (92.2)	
Did you learn in school that providing instructional materials to patients who wish to quit smoking is important?	Yes	27 (26.5)	36 (17.4)	63 (20.4)	2.062
	No	75 (73.5)	171 (82.6)	246 (79.6)	
Have you heard of nicotine replacement treatments (such as nicotine patches or gum) being used in cigarette cessation programs?	Yes	86 (84.3)	178 (86)	264 (85.4)	1.825
	No	16 (15.7)	29 (14)	45 (14.6)	
Have you heard of antidepressants being used in tobacco-abandonment programs?	Yes	12 (11.8)	20 (9.7)	32 (10.4)	1.710
	No	90 (88.2)	187 (90.3)	277 (89.6)	

*Continuity (Yates) Correction, ²Chi square test, *P < .05

Table 4. Evaluation of parameters related to healthcare workers among grades

		Grade			P
		Grade 3	Grade 4	Grade 5	
		n (%)	n (%)	n (%)	
Should health workers receive specialized training in smoking cessation methods?	Yes	79 (73.8)	80 (86)	93 (85.3)	.039*
	No	28 (26.2)	13 (14)	16 (14.7)	
Do health care providers act as "role models" for their patients and the general public?	Yes	74 (69.2)	74 (79.6)	73 (67)	.113
	No	33 (30.8)	19 (20.4)	36 (33)	
Is it the responsibility of health professionals to give people smoking cessation counsel or information?	Yes	89 (83.2)	82 (88.2)	96 (88.1)	.483
	No	18 (16.8)	11 (11.8)	13 (11.9)	
Is it more likely for a patient to stop smoking if a health expert urges him or her to do so?	Yes	85 (79.4)	76 (81.7)	86 (78.9)	.872
	No	22 (20.6)	17 (18.3)	23 (21.1)	

Chi-square Test, *P < .05

No statistically significant difference between male and female students in terms of chewing tobacco, narguilé, cigars, snuff or pipes distribution rates inside the school borders in the previous year, or distribution rates of never having attempted smoking in their lives was found in our study ($P > .05$). In terms of the distribution rates of the first cigarette trial ages, factors in starting

smoking or smoking within the school boundaries of the students, there was no statistically significant difference between grades ($P > .05$) (Table 1).

In terms of smoking ban distribution rates at school and clinics, and smoking ban efficacy ($P > .05$), there was no statistically significant difference between male and female students. There was also no statistically significant difference between grades in terms of the distribution rates of smoking and the effectiveness of the smoking ban in the school building and clinics ($P > .05$) (Table 2).

The rate of male students receiving any formal training on smoking cessation approaches during school education (12.7%) was found to be statistically significantly higher than female students (5.3%) ($P = .039$; $P < .05$) (Table 3).

There was no statistically significant difference between male and female students in terms of being informed about the importance of providing educational materials to support patients who want to quit smoking during school education ($P > .05$). Furthermore, there was no statistically significant difference in hearing about nicotine replacement therapy such as nicotine patches and chewing gums in smoking cessation programs between male and female students ($P > .05$) (Table 3).

Table 4 demonstrates the parameters related to healthcare workers among grades. There was a statistically significant difference between grades in terms of the rate of students thinking about giving special education to healthcare workers to stop tobacco use ($P = 0.039$; $P < .05$). The ratio of 3rd grade students believing that healthcare workers should give special training to stop tobacco use (73.8%) was found to be statistically significantly lower than 4th grade (86%) and 5th grade (85.3%) students ($P1: .048$; $P2: .049$; $P < .05$).

DISCUSSION

Tobacco use is also detrimental to people's oral health as well as their overall health in some way. It has been discovered that the majority of nicotine users who chose to quit without medical or psychiatric support struggle.^{8,15,16} According to Brazilian estimates, about 60% of dental students had tried smoking and 20% had already started.¹⁷ In Iran 54.2% of prospective dentists and 33 %of current patients in Texas, USA have attempted nicotine.^{11,12} According to a recent survey conducted in Spain, 18% of dental students smoke.⁷

According to a WHO Global Report¹⁸, Polish students (27.6% vs. 25.3%) and Italian students (42.1% vs. 21.3%) smoked twice as much as the general population.¹⁹ This is in line with recent studies from other countries.²⁰⁻²² Another study conducted in Turkey reported that 62.0% of the participants had inhaled cigarette

smoke at least once, even though the median number of active smokers was 37.9%.²³ These rates of previous experience and current usage are similar to those found in our current study. In our research, 75.5% had tried cigarettes at least once and 36.9% were current users, with the majority of smokers claiming that peers had influenced their decision (32.0%).

In an Indian research, ninety-four percent (42%) of dentistry students admitted to smoking at least once in their life, with 44 (46.8%) of those under the age of 18 and 50 (53.2%) of those over 18. When compared to other age ranges, those aged 20 to 24 years had the highest prevalence rate ($P < .05$).⁸ In our study the highest response rate for the question "How old were you when you first tried a cigarette?" was "Age 16-17" (18.8%) and there was no statistically significant difference between male and female students ($P < .05$).

114 dentistry students (36.9%) had smoked cigarettes in the preceding month, according to our survey study. Male students (30.4%) were more likely than female students ($P < .05$) to be current smokers (12.6%). This finding is similar to that of da Silva Leonel et al.⁴, who discovered that male dental students (10-17%) were more likely than female students (10-6%) to be current smokers ($P < .05$).⁴

When asked if they had smoked cigarettes at university facilities, 37.2% who had tried cigarettes responded "Yes" and 18.4% answered "No" in our recent study. There was no statistically significant difference between gender and grade groups. These findings are similar to those of da Silva Leonel et al.⁴, who reported that 26.6 percent of students who had tried nicotine replied "Yes", whereas 73.4 percent answered "No" to the same question. Regarding tobacco ban policies and banning tobacco products in university facilities, a total of 233 students (75.4%) agreed with the statement "a policy is enforced". Yet, there was no statistically significant difference between grades in terms of the distribution rates of the smoking ban and the effectiveness of the smoking ban in the school building and clinics of the students ($P > .05$). When asked if there is an official regulation banning the use of cigarettes and tobacco products in academic institutions and clinics, 145 (64.7%) students answered they didn't know, 24 (10.7%) claimed there isn't one, and 43 (19.2%) stated it is.⁴ Furthermore, Tam-Maury et al.¹² investigated the connection between tobacco-related risk factors and smoking among third-year dentistry students in Latin American nations, finding that 2173 (46.8%) of the 5605 participants said their institution has implemented a policy. The authors have noted that, while many countries have rules prohibiting smoking in public and at work, these prohibitions are not necessarily strictly applied.^{24,25}

The rate of male students (12.7%) receiving any formal training on smoking cessation approaches during school education was found to be statistically significantly higher than female (5.3%) students in our study ($P = 0.039$; $P < .05$). Hearing about nicotine replacement therapies such as nicotine patches and chewing gums in smoking cessation programs was not statistically significant ($P > .05$). In another research, Italian dental students had a slightly more positive perspective toward smoking cessation advice and the role of health practitioners in offering smoking cessation advice than Polish dental students.¹⁹

In a research article, 220 students (98.2%) believe that health practitioners should teach and warn their patients about how to quit smoking, with 213 (95.1%) saying that frequent therapy should

be offered. According to the same survey, the majority of students (92.9%) agreed that it is important to document tobacco usage in the patient's past, and 116 (51.8%) said they were taught the value of supplying instructional resources to assist patients in leaving this habit.⁴ There was a statistically important difference between grades in terms of students considering providing special education to healthcare professionals to help them quit smoking ($P = 0.039$; $P < 0.05$) in our research. Aside from these findings, several researchers discovered that nonsmokers had a greater degree of tobacco control knowledge.^{22,26-28}

There are some limitations of our survey study. First and foremost, owing to peer pressure or self-conflicts, there is a chance of false negatives. Furthermore, those who claimed to be nonsmokers may be passive smokers, making the results much more notable.

Tooth stains, halitosis, premalignant lesions, and cancerous lesions are some of the tobacco-related oral tissue symptoms that dental students confront. Dental students study the oral cavity as future dentists and are frequently exposed to medical problems in dental clinics. The dental program should be changed, and young graduates and students should be encouraged to participate in tobacco cessation counseling. This would help dental practitioners cultivate a preventive mindset regarding tobacco use by increasing their technical expertise. As a result, it will aid in the long-term rates of tobacco cessation by patients and will be helpful in the prevention of tobacco-related diseases in the immediate future. Nonetheless, there is a critical need for dental practitioners to play a greater part in tobacco-related public health issues.

Ethics Committee Approval: Ethics committee approval was received for this study from the ethics committee of Marmara University (Date: March 18, 2021, Protocol Number: 09.2021.259).

Informed Consent: Written informed consent was obtained from patients who participated in this study.

Peer-review: Externally peer-reviewed.

Author Contributions: Concept – F.N.P.; Design – F.N.P., G.Y., G.K.; Supervision – F.N.P.; Resources – G.K.; Data Collection and/or Processing – G.Y.; Analysis and/or Interpretation – G.K., G.Y.; Literature Search – G.K., G.Y.; Writing Manuscript – G.K.; Critical Review – F.N.P.

Declaration of Interests: The authors have no conflicts of interest to declare.

Funding: The authors declared that this study has received no financial support.

Etik Komite Onayı: Bu çalışma için etik komite onayı Marmara Üniversitesi'nden (Tarih: 18 Mart 2021, Protokol No: 09.2021.259) alınmıştır.

Hasta Onamı: Yazılı hasta onamı bu çalışmaya katılan hastalardan alınmıştır.

Hakem Değerlendirmesi: Dış bağımsız.

Yazar Katkıları: Fikir – F.N.P.; Tasarım – F.N.P., G.Y., G.K.; Denetleme – F.N.P.; Kaynaklar – G.K.; Veri Toplanması ve/veya İşlenmesi – G.Y.; Analiz ve/veya Yorum – G.K., G.Y.; Literatür Taraması – G.K., G.Y.; Yazıyı Yazan – G.K.; Eleştirel İnceleme – F.N.P.

Çıkar Çatışması: Yazarlar çıkar çatışması bildirmemişlerdir.

Finansal Destek: Yazarlar bu çalışma için finansal destek almadıklarını beyan etmişlerdir.

REFERENCES

1. Jemal A, ThunMJ, Ries LA, et al. Annual report to the nation on the status of cancer, 1975-2005, featuring trends in lung cancer, tobacco use, and tobacco control. *J Natl Cancer Inst.* 2008;100(23):1672-1694. [\[Crossref\]](#)
2. Musskopf ML, Fiorini T, Haddad DC, Susin C. Tobacco use and smoking cessation among third-year dental students in southern Brazil. *Int Dent J.* 2014;64(6):312-317. [\[Crossref\]](#)
3. World Health Organization. Toolkit for oral health professionals to deliver brief tobacco interventions in primary care. World Health Organization (2017), Geneva.
4. da Silva Leonel ACL, Bonan PRF, de Castro JFL, et al. Tobacco use, attitudes, knowledge, and perception about smoking cessation counseling among Brazilian dental students: A cross-sectional study. *J Canc Educ.* 2021;36(1):143-151.
5. Arslan H, Topçuoğlu HS, Çakıcı F, Köseoğlu M. The evaluation of patients applied to the endodontic clinic of the Dental School of Atatürk University, according to the sex, education situation and smoking. *Curr Res Dent Sci.* 2010;20(1):7-11.
6. Keshavarz H, Jafari A, Khami MR, Virtanen JI. Passive smoking and attitudes towards tobacco control programs among Iranian dental students. *Asian Pac J Cancer Prev.* 2013;14(6):3635-3639. [\[Crossref\]](#)
7. Lorenzo-Pouso AI, Pérez-Sayáns M, Pérez-López D, Otero-Rey EM, García-García A, Blanco-Carrión A. Knowledge about the relation between tobacco and disease and the attitude toward advising the cessation of its consumption among a group of Spanish dental students. *J Cancer Educ.* 2019;34(1):145-153. [\[Crossref\]](#)
8. Kachwaha P, Singhal DK, Singh N. Perceptions regarding tobacco cessation counselling among dental students and graduates: A cross-sectional study. *Asian Pac J Cancer Prev.* 2019;20(9):2589-2593. [\[Crossref\]](#)
9. Rajasundaram P, Sequeira PS, Jain J. Perceptions of dental students in India about smoking cessation counselling. *J Dent Educ.* 2011;75(12):1603-1610. [\[Crossref\]](#)
10. Tamí-Maury I, Silva-Vetri MG, Marciano-Caldera M, Baasch A, Prokhorov AV. Smoking behavior among third year dental students in Latin American countries: prevalence, perceptions, and risk factors. *Salud Publica Mex.* 2013;59(Suppl 1):45-53. [\[Crossref\]](#)
11. Rikard-Bell G, Groenlund C, Ward J. Australian dental students' views about smoking cessation counseling and their skills as counselors. *J Public Health Dent.* 2013;63(3):200-206. [\[Crossref\]](#)
12. Yip JK, Hay JL, Ostroff JS, Stewart RK, Cruz GD. Dental students' attitudes toward smoking cessation guidelines. *J Dent Educ.* 2000;64(9):641-650. [\[Crossref\]](#)
13. Mohanty VR, Rajesh GR, Aruna DS. Role of dental institutions in tobacco cessation in India: current status and future prospects. *Asian Pac J Cancer Prev.* 2013;14(4):2673-2680. [\[Crossref\]](#)
14. Monson AI, Engeswick LM. Promotion of tobacco cessation through dental hygiene education: a pilot study. *J Dent Educ.* 2005;69(8):901-911. [\[Crossref\]](#)
15. Centers for Disease Control and Prevention. National Center for Chronic Disease Prevention and Health Promotion, Office of Smoking and Health, Global Tobacco Surveillance System Data (GTSSData). URL: <https://www.cdc.gov/tobacco/global/gtss/gtssdata/index.html>. Accessed 02 May 2021.
16. WHO global report on trends in prevalence of tobacco use 2000-2025, third edition. Geneva: World Health Organization; 2019.
17. Rodakowska E, Mazur M, Baginska J, et al. Smoking prevalence, attitudes and behavior among dental students in Poland and Italy. *Int J Environ Res Public Health.* 2020;17(20):7451. [\[Crossref\]](#)
18. La Torre G, Kirch W, Bes-Rastrollo M, et al. Tobacco use among medical students in Europe: Results of a multicenter study using the Global Health Professions Student Survey. *Public Health.* 2012;126(2):159-164. [\[Crossref\]](#)
19. Ficarra MG, Gualano MR, Capizzi S, et al. Tobacco use prevalence, knowledge and attitudes among Italian hospital healthcare professionals. *Eur J Public Health.* 2011;21(1):29-34. [\[Crossref\]](#)
20. Dumitrescu AL, Ibric S, Ibric-Cioranu V. Opinions of Romanian dental students toward tobacco use interventions in the dental setting. *J Cancer Educ.* 2016;31(1):172-180. [\[Crossref\]](#)
21. Gürlek Ö, Başer Ü, Beklen A, et al. The rate of tobacco smoking among dental school students in Turkey. *EÜ Dişhek Fak Derg.* 2019;40(3):185-191. [\[Crossref\]](#)
22. Sinha D, Singh G, Gupta P, et al. Linking India global health professions student survey data to the world health organization framework convention on tobacco control. *Indian J Cancer.* 2010;47(Suppl 1):30-34. [\[Crossref\]](#)
23. Surani NS, Pednekar MS, Sinha DN, et al. Tobacco use and cessation counseling in India-data from the Global Health Professions Students Survey, 2005-09. *Indian J Cancer.* 2012;49(4):425-430. [\[Crossref\]](#)
24. Polychonopoulou A, Gatou T, Athanassouli T. Greek dental students' attitudes toward tobacco control programmes. *Int Dent J.* 2004;54(3):119-125. [\[Crossref\]](#)
25. Fujita Y, Maki K. Associations of smoking behavior with lifestyle and mental health among Japanese dental students. *BMC Med Educ.* 2018;18(1):264. [\[Crossref\]](#)
26. Lung ZH, Kelleher MG, Porter RW, Gonzalez J, Lung RF. Poor patient awareness of the relationship between smoking and periodontal diseases. *Br Dent J.* 2005;199(11):731-737. [\[Crossref\]](#)