

# Dental Students' Perspective to Participate in Tobacco Control Training

## Diş Hekimliği Öğrencilerinin Tütün Kullanım Kontrolü Eğitimine Katılım Hakkındaki Görüşleri

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**ABSTRACT Objective:** Dentists are becoming to play an important role in educating patients about the health risks of tobacco use and promoting tobacco cessation program in most part of the world. The purpose of this study is to investigate dental students' perspective if they would like to take a part in tobacco control program as an adviser and be trained receiving an individual class for tobacco abstinence during their dental education. **Material and Methods:** A self administered questionnaire including personal and smoking queries was distributed to total of 434 dental students at the Gazi University, Faculty of Dentistry in 2007. Chi-square test was performed to analyze the data using SPSS (version 10). **Results:** Third year dental students were found to be smoking more than the rest of the participants (14.5%). However, they were more enthusiastic in participating tobacco control training among the rest (24%). **Conclusion:** Third year students were significantly more eager upon participating in tobacco control program than other students despite their large percentage of smoking. Therefore, it is proposed that dental curricula would benefit from inclusion of specific sessions on 'oral diseases related to tobacco use', including 'tobacco control training' to enable dental students to take part in the tobacco control programme and to give advice to their patients on life style choices without tobacco.

**Key Words:** Tobacco use cessation; smoking; education, dental, continuing

**ÖZET Amaç:** Dünyanın büyük bir kısmında diş hekimleri tütün kullanımının sağlık üzerine olan istenmeyen kötü etkileri hakkında eğitim vermede önemli bir rol oynamaya ve tütün kullanımının bırakılması programlarına hastalarının katılımını teşvik etmeye başlamışlardır. Çalışmanın amacı, diş hekimliği öğrencilerinin tütün kullanımının kontrolü programlarına katılmayı isteyip istemediklerini ve bu konu ile ilgili eğitim görme konusundaki görüşlerini saptamaktır. **Gereç ve Yöntemler:** Kişisel ve tütün kullanım kontrolü programları ile ilgili soruları içeren soru-anket formları 2007 yılında farklı sınıflarda eğitim gören toplam 434 Gazi Üniversitesi Diş Hekimliği Fakültesi öğrencisine dağıtılmıştır. Sonuçların istatistiksel analizinde SPSS istatistik programı kullanılarak (10. versiyon) ki-kare testi uygulanmıştır. **Bulgular:** Çalışmanın sonuçları, 3. yıl öğrencilerinin diğer yıllardaki öğrencilere göre daha çok (%14.5) sigara içtiğine işaret etmektedir. Bununla beraber, tütün kullanımının kontrolü veya sigara gibi tütün ürünlerinin kullanımının bırakılması konusunda eğitmen olabilme açısından diğer diş hekimliği öğrencilerine göre daha istekli (%24) oldukları da saptanmış olmaktadır. **Sonuç:** Tüm diş hekimliği öğrencileri arasında en çok 3. sınıf diş hekimliği öğrencilerinin tütün kullanımı kontrolü eğitiminde yer almak istediklerini, bu nedenle diş hekimliği eğitiminin 3. yılı ve sonrasındaki yıllarda diş hekimliği öğrencilerinin 'tütün kullanımına bağlı ağız hastalıkları' ve 'tütün kullanımının kontrolü' adlı lisans derslerini hastalarına daha sağlıklı bir hayat için gerekli olan tavsiyelerde bulunabilmeleri açısından diş hekimliği eğitim programında yer alması gerektiği öngörülmektedir.

**Anahtar Kelimeler:** Tütün kullanımının bırakılması; sigara kullanımı; devam eden dental eğitim

The medical and dental health risks of tobacco usage have been a well known fact by dental health professionals. Dentists are becoming to play an important role in educating patients about the health risks of tobacco use and promoting tobacco cessation program in most part of the world as more than 90% of head and neck cancers worldwide can be attributed to the combined effects of tobacco use, heavy alcohol consumption and poor diet.<sup>1</sup> It has already been recommended by the U.S. Public Health that dentists can offer brief tobacco cessation interventions to their patients using tobacco as dentists have been examining routinely the certain number of population each year.<sup>2</sup> Thus, educating dental students on tobacco cessation to give brief advices to their patients who smokes might be effectual to encourage patients quit smoking. Therefore, the aim of this study is to investigate the opinion of dental students if they would like to take a part in tobacco control program as an adviser and be trained receiving an individual class for tobacco abstinence during their dental education.

### MATERIAL AND METHODS

Total of 434 dental students of Gazi University, Faculty of Dentistry between the age of 17 to 21 from first year to fifth (last) year have been participated in this survey in 2007 (Table 1). A self administered written questionnaire including personal and smoking data was distributed to all participants. The questions referred to age, year of dental education, gender, smoking status, age for smoking initiation and their opinion to be trained for tobacco control.

Chi-square test was performed to analyze the data using SPSS (version 10).

Year	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)	All
Male	51 (11.8)	44 (10.1)	42 (9.7)	51 (11.8)	25 (5.8)	213
Female	39 (9)	54 (12.4)	51 (11.7)	39 (9)	38 (8.7)	221
Total	90 (20.8)	98 (22.5)	93 (21.4)	90 (20.8)	63 (14.5)	434

Values are expressed in n (%)

Year	1	2	3	4	5
Yes	35M, 17F	31M, 33F	33M, 35F	40M, 20F	19M, 23F
Total	52 (12%)	64 (14.7%)	68 (15.7%)	60 (13.8%)	42 (9.7%)
No	16M, 22F	13M, 21F	9M, 16F	11M, 19F	6M, 15F
Total	38 (8.8%)	34 (7.8%)	25 (5.8%)	30 (6.9%)	21 (4.8%)

M: Male, F: Female

### RESULTS

The participants were 213 male and 221 female students between the ages of 17 to 21. The mean age of the students was  $20.29 \pm 0.76$ . The 20.8% of 434 participants were first year students, 22.5% of them second year, 21.4% of them third year, 20.8% of them fourth year and the 14.5% of them were fifth year dental students. Distribution of gender according to year of education has been displayed in Table 1.

There were 286 students who tried smoking at least one puff. Distribution of dental students who smoke according to year and gender has been shown in Table 2. The difference was statistically significant when the number of male and female dental students who smoke were compared, male students smoked significantly more than female students [158 M (55%); 128 F (45%)] ( $p < 0.001$ ). In addition, last year students have got the least (9.7%) third year students have got the maximum percentage (15.7%) in term of smoking. Most of the participants stated that they started smoking at the age of 16 and over ( $p < 0.001$ ) and high percentage of them (88.6%) use cigarette as tobacco compare to other types of tobacco products such as pipe or cigar. Although, their parents have been previously informed them about the harm of smoking, they continued smoking ( $p < 0.05$ ). However, the 97.2% of the participants including the smoking ones we agree that smoking is harmful ( $p < 0.01$ ). Male students believed they can stop smoking anytime if they want it on the contrary to female students ( $p < 0.001$ ). In addition, when questioned smoking male students prefer to take an immediate attempt to quit smoking more than female students ( $p < 0.001$ ).

Students were also questioned if they attended any lecture this year discouraging them not to smoke and if they have known previously that smoking colors the teeth, wrinkles the face and causes a bad breath? The answer for both questions was significantly positive ( $p < 0.01$ ).

Moreover, they have also questioned if they would like to participate in tobacco control program consisting to give brief advices to their patients about the harm of tobacco products to their overall medical and dental health status. Participants significantly stated that they would like to take part in tobacco control program at their graduate career ( $p < 0.01$ ). However, last year students were significantly the least willing to participate in tobacco control program (14.5%) on the contrary to third year students (24%) (Table 3).

## DISCUSSION

Tobacco use has been reported to be the significant public health problem across Europe. Every year over half a million Europeans die prematurely due to smoking-related diseases.<sup>3</sup> The well-known harmful effects of smoking on respiratory and cardiovascular systems have also got significant adverse effects on oral health. Smoking is associated with an increased risk of oral diseases as tobacco exposes the oral cavity to toxic carcinogens that may have a role in initiation and promotion of oral dysplasia or cancer.<sup>4</sup>

Dentists have been seeing a certain number of patients each year and most of them may visit their dentists for more than one times in a year.<sup>5</sup> Thus, dentist may play an important role in tobacco control. However, in reality dental practitioners display less consistency to support such intervention than expected.<sup>6</sup> It was reported that more than 40% of dentists do not even routinely ask about tobacco use or advise to quit.<sup>7</sup> It is considered that all

dental patients should be informed about the possible harm of tobacco use to oral health and their regular dentist should have been the person to inform them. Therefore, it might be more appropriate giving tobacco control training to dentists before their graduation. The present study displays dental students were significantly conscious about the harms of tobacco use ( $p < 0.01$ ) such as periodontal diseases, halitosis, reduced ability to taste, staining of teeth, gingival pigmentation, oral mucosal lesions and oral cancer.<sup>8</sup> However, nearly more than half of the participants are currently smokers. This situation may rise up a question that should dentist be a non-smoker to be accredited as a guide on tobacco control? Yip et al. previously reported that generally gender, ethnicity, and current smoking status did not predict students' adherence to smoking cessation practices.<sup>9</sup> Similarly, Rikard-Bell et al. declared that most Australian dental students being independent of their own smoking status planned to advise patients about tobacco use in their graduate careers ( $n = 219$ ; 91%).<sup>10</sup> However, significantly a few of them ( $n = 129$ ; 54%) indicated such counseling would be effective. Results of the present study are consistent with previous reports that smoking situation of dental students did not affect their positive intention towards tobacco control training. All the participants including the smoking ones were significantly willing to give a brief advice for controlling tobacco use ( $p < 0.01$ ). Opinions of South Carolina dental students including the smoking ones were also positive in about 89% toward tobacco use interventions.<sup>11</sup> However, lack of time and training might be the potential barriers for dentists to practice such interventions in their dental practice as reported previously by UK dental practitioners.<sup>12</sup> Thus, authors of this study considers that committing an individual class for tobacco related diseases including tobacco control training in dental curriculum may enable dental students more confident to give brief advice for tobacco control. However, the length and timing of the class should be arranged effectively.

Tobacco use interventions conducted by dental health professionals has already been reported as more effective interventions than the ones conducted by other healthcare professionals to incre-

**TABLE 3:** Distribution of dental students who were willing to participate in tobacco control program at different years.

Year	1 <sup>st</sup> year	2 <sup>nd</sup> year	3 <sup>rd</sup> year	4 <sup>th</sup> year	5 <sup>th</sup> year
Percentage	20.7%	21%	24%	19.8%	14.5%

ase tobacco abstinence rate.<sup>4</sup> In addition, we also know that smoking cessation is more effective when oral cancer patients attend to a smoker's clinic at dental school and receive brief advice for tobacco cessation from a dental specialist.<sup>13</sup> Thus, it is necessary to train dental students on tobacco control. The present questionnaire study displayed that third year dental students are more enthusiastic participating in tobacco control training than the rest (24%), which may indicate tobacco control education would be more effective if starts from third year onwards in dental schools. However, third year dental students were the ones smoking more than the rest of the participants (15.7%). Thus, it is considered that training for tobacco control starts from third year onwards may also reduce the incidence of smokers among dental students in oppose to Frukawa et al.<sup>14</sup> They suggested that it is necessary to conduct smoking cessation program soon after students enter the university and to provide more lectures on tobacco use and related health issues during the dental education as they figured out Japanese dental students start smoking after they enter the university and those smoking students display passive attitudes participating in smoking cessation program. Furthermore, Polychonopoulou et al. reported more than 80% of the Greek dental students' considered tobacco cessation counseling as a duty of every dentist.<sup>15</sup> However, non-smokers of the survey were significantly more optimistic about the effectiveness of tobacco cessation activities conducted by dentists. In summary, den-

tal curriculum seems to need enriched by individual class concerning tobacco use related oral diseases including tobacco control training to increase the self confidence of dental students for giving brief advices to their patients irrespective of their smoking situation.

In conclusion, this survey displayed that smoking status of dental students did not affect their attitude to participate in tobacco control program. Third year students were significantly more eager upon participating in tobacco control program than other students despite their large percentage of smoking. Therefore, it is proposed that dental curricula would benefit from inclusion of specific sessions on 'oral diseases related to tobacco use', including 'tobacco control training' to enable dental students to take part in the tobacco control programme and to give advice to their patients on life style choices without tobacco. In addition, third year students were found to be appropriate to start such training due to their higher interest in tobacco control programme.

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