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IZVORNI ZNANSTVENI RAD
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Utjecaj pušenja na zdravlje usne šupljine; znanje i stajališta stomatologa i studenata stomatologije

Impact of Smoking on Oral Health: Knowledge and Attitudes of Dentists and Dental Students

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Sažetak

Svrha: Željele su se procijeniti pušačke navike te razina znanja i stajališta u vezi s pušenjem i ulogom stomatologa u prevenciji pušenja među studentima Stomatološkog fakulteta Sveučilišta u Zagrebu i hrvatskim stomatolozima. **Materijali i metode:** Istraživanje je provedeno među studentima prve i šeste godine te stomatolozima zaposlenima u ordinacijama primarne prakse diljem Hrvatske i na Stomatološkom fakultetu Sveučilišta u Zagrebu. Sudjelovalo je ukupno 159 ispitanika (51 student 1. godine, 53 studenta 6. godine i 55 stomatologa). **Rezultati :** Prevalencija pušenja bila je najveća među studentima šeste godine (39,6 %) te nešto manja kad je riječ o stomatolozima (34,5 %), a među studentima prve godine bilo je najmanje pušača (7,8 %). Veći udjel studenata koji puše želi s tom ovisnošću prestati (66,7 % studenata pušača 1. godine i 76 % studenata pušača 6. godine), a to želi i manje od polovine stomatologa (45,8 %). Studenti i prve i šeste godine, u odnosu prema stomatolozima, pokazali su statistički značajno veći stupanj želje za edukacijom o štetnim učincima pušenja i za savjetovanje pacijenata o prestanku pušenja. Sve navedeno upućuje na to da je nužno povećati svijest struke o opasnostima pušenja kad je riječ o općem i oralnome zdravlju, te među pacijentima isticati važnost zdravstvenih radnika kao promicatelja zdravih životnih navika.

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Uvod

Pušenje duhana se, uz povišeni krvni tlak i pretilost, smatra glavnim preventabilnim uzrokom smrtnosti u svijetu (1). Od posljedica pušenja u Hrvatskoj svake godine umre više od 9000 ljudi, što je otprilike svaki peti umrli stanovnik. Prema najnovijim podatcima 33 % hrvatskoga stanovništva čine pušači – od toga su 37 % muškarci i 30 % žene. Svaki drugi pušač u našoj zemlji barem je jedanput pokušao prestati s tom navikom, no uspjelo je tek njih 16 % (2).

Štetni učinci duhana na oralno zdravlje dobro su dokumentirani. To uključuje i česta i rijetka stanja – od bezopasnih do životno opasnih bolesti poput diskoloracije zuba i zubnih nadomjestaka, neugodnog zadaha, učinka na izoštrenost osjeta okusa i mirisa, usporenog cijeljenja rana, parodontne bolesti, kratkoročnog i dugoročnog uspjeha implantata, promjena oralne sluznice kao što su pušačka melanoza i pušačko nepce, potencijalno malignih lezija i raka usne šupljine (3).

Introduction

Tobacco smoking, along with hypertension and obesity, is considered the leading preventable cause of death in the world (1). As a result of smoking, more than 9,000 people - roughly one in five deaths die in Croatia every year. According to the latest data, 33% of the Croatian population are smokers, of which 37% are men and 30% women. One in two smokers in Croatia tried to quit smoking at least once, but only 16% of them succeeded (2).

The adverse effects of tobacco smoking on oral health are well documented. This includes common and rare conditions, from benign to life-threatening diseases such as discoloration of teeth and dental restorations, bad breath, taste and smell disorders, impaired wound healing, periodontal disease, short-term and long-term implant success, oral mucosal lesions such as smoker's melanosis and smoker's palate, potentially malignant lesions and oral cancer (3).

Zdravstvenim radnicima, uključujući i stomatologe i njihove timove, etička je, moralna i profesionalna obveza pomoći pacijentima u odvikavanju od pušenja. Zbog prirode svojega posla i redovitog kontakta s pacijentima, stomatolog je u idealnoj poziciji da savjetuje o prestanku pušenja. Raspolaže potrebnim znanjem za prepoznavanje i liječenje oralnih promjena povezanih s pušenjem te može savjetovati pacijente o štetnom djelovanju pušenja i prednostima prestanka (4). Aktivnost stomatologa u prevenciji pušenja imat će na pacijente dvostruki učinak – ne samo da će se prestankom pušenja poboljšati oralno zdravlje nego će to pridonijeti i prevenciji sistemskih bolesti povezanih s pušenjem (5). Smjernice za savjetovanje o prestanku pušenja uključuju *5P protokol* – kratak informativni razgovor kojim se u pet *koraka* nastoji doznati što više o pušačkim navikama pacijenta i o njegovoj volji za prestankom. Pritom treba imati na umu da veći dio pušača tijekom odvikavanja posrne od tri do pet puta prije negoli konačno uspije prestati pušiti (3), a zadaća cijeloga dentalnog tima jest da mu u tomu pruži potporu i poticaj za daljnji nastavak apstinencije.

Svrha ovog istraživanja bila je procijeniti pušačke navike, razinu znanja i stajališta u vezi s pušenjem i ulogom stomatologa u prevenciji pušenja među studentima Stomatološkog fakulteta Sveučilišta u Zagrebu i hrvatskim stomatolozima.

Materijali i metode

U ovom istraživanju sudjelovalo je ukupno 159 ispitanika – 51 student prve godine i 53 studenta šeste godine, što čini oko 50 % studenata tih godina, te 55 stomatologa. Istraživanje je, na temelju priloženog anketnog upitnika, provedeno među studentima prve i šeste godine Stomatološkog fakulteta Sveučilišta u Zagrebu i stomatolozima zaposlenima u ordinacijama primarne prakse diljem Hrvatske te na Stomatološkom fakultetu Sveučilišta u Zagrebu. Anketni upitnik u cijelosti je bio anoniman i nije predviđao upisivanje osobnih podataka poput imena, prezimena, datuma rođenja, adrese i sličnoga. Sastojao se od četiri dijela – u prvom dijelu unosili su se opći parametri poput spola i dobne skupine, te pripadnost jednoj od triju ispitnih skupina.

U drugom dijelu ispitivalo se sadašnje i dosadašnje iskustvo u pušenju duhana, dob u kojoj je stečeno prvo iskustvo s pušenjem, mjesečna količina popušenih cigareta, te postoji li želja za prestankom. Također se ispitivala svakodnevna izloženost duhanskom dimu te eventualno postojanje zabrane pušenja u fakultetskim prostorijama, odnosno na radnom mjestu.

Za treći dio upitnika na temelju dostupne literature (1, 3, 5, 6 – 10) oblikovano je 15 tvrdnji o utjecaju pušenja na usnu šupljinu s ponuđena tri moguća odgovora: DA, NE i NE ZNAM.

Četvrti dio upitnika sadržavao je 15 tvrdnji kojima se ispitivalo osobno stajalište ispitanika o pušenju te o ulozi stomatologa u prevenciji pušenja i savjetovanju pacijenata o prestanku pušenja. Stajališta ispitanika procjenjivala su se 5-stupanjskom Likertovom ljestvicom kojom se izražavao stupanj slaganja s određenom tvrdnjom (od 1 – uopće se ne slažem, do 5 – u cijelosti se slažem).

Health professionals, including dentists and their teams, have ethical, moral and professional obligations to help patients quit smoking. Due to the nature of their work and regular contact with patients, the dentist is in an ideal position to advise their patients about smoking cessation. Dentists have the necessary skills, competence and expertise for the recognition and treatment of oral lesions associated with smoking and can advise patients about harmful effects of smoking, as well as benefits of smoking cessation (4). Dentists' activity in the prevention of smoking will have a double effect for patients: not only quitting smoking will improve oral health, but will also contribute to prevention of systemic diseases associated with smoking (5). The Guideline on smoking cessation counselling include "5P Protocol" - a short briefing which in five steps examines the patient's smoking habits and his willingness to quit. A large number of smokers fail three to five times in the course of withdrawal before they finally manage to quit smoking (3), and the role of the entire dental team is to provide support and encouragement during this period.

The aim of this study was to evaluate smoking habits, the level of knowledge and attitudes towards smoking, as well as the role of dental professionals in the prevention of smoking among students of the School of Dental Medicine, University of Zagreb and compare them to the attitudes of practicing Croatian dentists.

Materials and methods

This study included a total of 159 subjects: 51 1st year dental students and 53 6th year dental students, which amounts to nearly 50% of the students of the first and sixth year, and 55 practicing dentists. The study was conducted among 1st and 6th year dental students at the School of Dental Medicine, University of Zagreb and the dentists employed in primary practice throughout Croatia using an attached questionnaire. The questionnaire was completely anonymous. No personal information such as names, surnames, dates of birth, addresses etc. were registered. The questionnaire consisted of four parts: the first part of the questionnaire examined general parameters of subjects such as sex, age group, and belonging to one of three test groups.

The second part of the questionnaire examined the current and previous experience of smoking, age of first experience of tobacco smoking, the number of cigarettes smoked each month, and willingness to stop smoking. Also, it examined daily exposure to tobacco smoke, and the possible existence of smoking ban at college campus or workplace.

In the third part of the questionnaire, which is based on the available literature (1, 3, 5, 6, 7, 8, 9, 10), 15 statements were made on the impact of smoking on oral cavity with three possible answers: YES, NO and DO NOT KNOW.

The fourth part of the questionnaire contained 15 statements that assessed the respondent's personal attitude towards tobacco smoking and the dentist's role in the prevention of smoking and smoking cessation counselling for patients. The attitudes of respondents were assessed using a 5 point Likert scale which indicated the level of agreement with a particular statement (from 1 - strongly disagree, to 5 - completely agree).

Tablica 1. Demografski podatci
Table 1 Demographic data

Spol N (%) • Sex N (%)	Studenti 1. godine • 1st year students	Studenti 6. godine • 6th year students	Stomatolozi • Dentists
Ženski • Female	44 (86.3)	44 (83)	34 (61.8)
Muški • Male	7 (13.7)	9 (17)	21 (38.2)
Dobna skupina N (%) • Age group N (%)			
18 – 30	50 (98)	53(100)	9 (16.4)
31 – 40	1 (2)		20 (36.4)
41 – 50			13 (23.6)
51. i više • 51 and more			13 (23.6)
Zaposlenje* N(%) • Employment* N(%)			
Dom zdravlja • Community health centre			17 (30.9)
Privatna ordinacija • Private practice			14 (25.5)
Ugovorna ordinacija • Practice under contract with HZZO			24 (43.6)

*samo za stomatologe / *dentists only

Tablica 2. Iskustvo s pušenjem duhana i izloženost duhanskom dimu
Table 2. Experience of tobacco smoking and exposure to tobacco smoke

	Studenti 1. godine • 1st year students	Studenti 6. godine • 6th year students	Stomatolozi • Dentists	p
Pušite li? N (%) • Do you smoke? N (%)				
Da • Yes	4 (7.8)	21 (39.6)	19 (34.5)	0.003*
Ne • No	36 (70.6)	27 (50.9)	30 (54.5)	
Povremeno • Occasionally	11 (21.6)	5 (9.5)	6 (10.9)	
Jeste li ikada do sada zapalili cigaretu/pušili? N (%) • Have you ever smoked? N (%)				
Da • Yes	40 (78.4)	44 (83)	45 (81.8)	0.826
Ne • No	11 (21.6)	9 (17)	10 (18.2)	
S koliko godina ste prvi put zapalili cigaretu? N (%) • Age of first experience of tobacco smoking? N (%)				
Manje od 12 • Less than 12	2 (3.9)	0	2 (3.7)	0.001*
12 – 18	37 (72.5)	27 (50.9)	22 (40.7)	
19 – 25	1 (2)	17 (32.1)	17 (31.5)	
Nakon 25. • After 25	0	0	2 (3.7)	
Nikad nisam pušio/la • I have never smoked	11 (21.6)	9 (17)	11 (20.4)	
U posljednjih mjesec dana koliko ste dana pušili? N (%) • In the past month, how many days have you smoked?				
0	37 (72.5)	27 (50.9)	31 (56.4)	0.003*
0 – 5	9 (17.6)	3 (5.7)	3 (5.5)	
5 – 10	2 (3.9)	4 (7.5)	4 (7.3)	
10 – 25	1 (2)	7 (13.2)	2 (3.6)	
više od 25 dana • more than 25 days	2 (3.9)	12 (22.6)	15 (27.3)	
Želite li prestati pušiti? + (N %) • Do you have a desire to quit smoking? + (N %)				
Da • Yes	10 (66.7)	19 (76)	11 (45.8)	0.086
Ne • No	5 (33.3)	6 (24)	13 (54.2)	
U posljednjih tjedan dana koliko ste puta u svojem domu bili izloženi duhanskom dimu? • In the past week, how many times have you been exposed to tobacco smoke in your home?				
0	31 (60.8)	31 (58.5)	37 (66.7)	0.001*
1 – 2 dana • 1 – 2 days	10 (19.6)	4 (7.5)	2 (3.7)	
2 – 6 dana • 2 – 6 days	6 (11.8)	8 (15.1)	0	
svih 7 dana • all 7 days	4 (7.8)	10 (18.9)	16 (29.6)	
U posljednjih tjedan dana koliko ste puta u javnim prostorima bili izloženi duhanskom dimu? • In the past week, how many times have you been exposed to tobacco smoke in public places?				
0	6 (11.8)	4 (7.5)	10 (18.2)	0.670
1 – 2 dana • 1 – 2 days	24 (47.1)	24 (45.3)	21 (38.2)	
2 – 6 dana • 2 – 6 days	16 (31.4)	16 (30.2)	17 (30.9)	
svih 7 dana • all 7 days	5 (9.8)	9 (17)	7 (12.7)	
Je li na vašem fakultetu / radnom mjestu službeno zabrano pušenje? • Is there official smoking ban in your college / workplace?				
Da • Yes	33 (64.7)	51 (96.2)	49 (89.1)	p<0.001
Ne • No	1 (2)	0	6 (10.9)	
Nisam siguran/a • I'm not sure	17 (33.3)	2 (3.8)	0	

+ samo za pušače • + smokers only
* statistički značajna razlika ($p < 0.05$) • * statistically significant result ($p < 0.05$)

Podatci su organizirani u tablične datoteke (Microsoft Excel, Microsoft Inc. SAD) i statistički obrađeni programom SPSS (IBM Inc, SAD). Normalnost distribucije podataka testirana je Kolmogoroff-Smirnovljevim testom te je utvrđeno da su normalno distribuirani. Za opisivanje podataka korištene su mjere centralne tendencije (minimum, maksimum, srednja vrijednost, standardna devijacija). Za ispitivanje razlika među skupinama korišteni su hi-kvadrat test za nominalne i Studentov t-test za ordinalne varijable. Vrijednosti manje od 0,05 ($p < 0,05$) smatrale su se statistički značajnima.

Rezultati

Prema demografskim podatcima prikupljenima u prvom dijelu upitnika (tablica 1.) ustanovljena je statistički značajno viša zastupljenost žena u odnosu prema muškarcima među studentima i prve i šeste godine u usporedbi sa stomatolozima.

U drugom dijelu upitnika ispitivalo se iskustvo i navike pušenja cigareta (tablica 2.). Prevalencija pušenja bila je najveća među studentima šeste godine (39,6 %), nešto manja zabilježena je među stomatolozima (34,5 %) kod kojih

The data were organized in spreadsheet files (Microsoft Excel, Microsoft Inc. USA) and statistically analyzed using the SPSS (IBM Inc, USA). The normality of data distribution was tested by the Kolmogoroff- Smirnov test and it was found that data were normally distributed. Measures of central tendency were used (minimum, maximum, mean, standard deviation) for data presentation. To test differences between groups, the chi - square test for nominal and Student's t - test for ordinal variables were used. P - values lower than 0.05 ($p < 0.05$) were considered statistically significant.

Results

According to demographic data collected in the first part of the questionnaire (Table 1), a significantly higher proportion of women comparing to men was found among first and sixth year students, compared to dentists.

The second part of the questionnaire examined previous experience of tobacco smoking and the current smoking habits (Table 2). The prevalence of smoking was highest among 6th year dental students (39, 6%). It slightly decreased among

Tablica 3. Znanje ispitanika o utjecaju pušenja na oralno zdravlje
Table 3 Knowledge about the impact of tobacco smoking on oral health

	Tvrdnja • Statement	Ne (%) • No (%)	Da (%) • Yes (%)	Ne znam (%) • I don't know (%)	p
1.	Pušenje je povezano s nastankom raka usne šupljine. • Smoking is associated with development of oral cavity cancer.	0	**155 (97.5)**	4 (2.5)	0.013*
2.	Prestankom pušenja smanjuje se rizik od razvoja oralnog karcinoma • Quitting smoking reduces the risk of developing oral cancer.	4 (2.5)	**147 (92.5)**	8 (5)	0.006*
3.	Pušenje ugrožava zdravlje pasivnih pušača u okolini pušača • Smoking endangers passive smokers health.	0	**158 (99.4)**	1 (0.6)	0.345
4.	Brzim pregledom oralne sluznice pacijenta može se otkriti rak usne šupljine • prekancerozne lezije u najranijem stadiju. • It is possible to detect cancerous • pre-cancerous lesions at the earliest stage by quick inspection of patients oral mucosa.	16 (10.1)	**105 (66)**	38 (23.9)	<0.0001*
5.	Svaku suspektnu oralnu prekancerozu leziju nužno je poslati na biopsiju. • Any suspicious oral precancerous lesion should be sent to biopsy.	4 (2.5)	**131 (82.4)**	24 (15.1)	<0.0001*
6.	Rak usne šupljine najčešće se otkrije u uznapredovalom stadiju. • Oral cancer is most commonly discovered in advanced stage.	18 (11.3)	**99 (62.3)**	42 (26.4)	<0.0001*
7.	Pušenje izaziva psihičku, ali ne i fizičku ovisnost. • Smoking causes psychic but not physical dependence.	**81 (50.9)**	57 (35.8)	21 (13.2)	0.244
8.	Alkohol u kombinaciji s pušenjem povećava mogućnost od razvoja raka usne šupljine. • Alcohol combined with smoking increases possibility of developing oral cancer.	5 (3.1)	**123 (77.4)**	31 (19.5)	<0.0001*
9.	Rak usne šupljine u ranim fazama je asimptomatski. • Oral cancer is asymptomatic in the early stages.	7 (4.4)	**107 (67.3)**	45 (28.3)	<0.0001*
10.	Prekancerozne lezije u manjem broju slučajeva maligno alteriraju. • Pre-cancerous lesions in a small number of cases malignantly alter.	19 (11.9)	**84 (52.8)**	56 (35.2)	<0.0001*
11.	Pušenje je rizični čimbenik za razvoj akutnog ulceroznog nekrotizirajućeg gingivitisa. • Smoking is a risk factor for the development of acute ulcerative necrotizing gingivitis.	11 (6.9)	**111 (69.8)**	37 (23.3)	<0.0001*
12.	Pušačka melanoza ubraja se u prekancerozna stanja. • Smokers melanosis is a precancerous condition.	**45 (28.3)**	42 (26.4)	72 (45.3)	<0.0001*
13.	Da bi se postavila dijagnoza crnoga dlakavog jezika, nužna je biopsija. • Biopsy is required for black hairy tongue diagnosis.	**114 (71.7)**	6 (3.8)	39 (24.5)	<0.0001*
14.	Pušenje je rizični čimbenik kad je riječ o zubnom karijesu. • Smoking is a risk factor for dental caries.	**70 (44)**	62 (39)	27 (17)	<0.0001*
15.	Pacijentie s leukoplakijom uputno je jedanput na godinu poslati na biopsiju. • Leukoplakia patients are advised to have biopsy once a year.	17 (10.7)	**80 (50.3)**	62 (39)	<0.0001*

su rezultati u skladu s državnim prosjekom (33 % hrvatskoga stanovništva su pušači) (2), a među studentima prve godine bilo je najmanje pušača (7,8 %). Iako je statistički značajno više nepušača bilo među studentima prve godine prema studentima šeste godine i stomatolozima, više studenata prve godine počelo je pušiti u ranijoj dobi u odnosu na studente šeste godine i stomatologe.

Za razliku od studenata, kod kojih većina pušača želi prestati pušiti (66,7 % studenata pušača 1. godine i 76 % studenata pušača 6. godine), to želi manje od polovine stomatologa koji puše – samo njih 45,8 %.

dentists (34, 5%), thus pointing to the fact that these results are consistent with the national average (33% of Croatian population are smokers) (2), while least smokers were found among first year dental students (7,8%). Although a significantly larger number of non-smokers were found among 1st year dental students compared to 6th year dental students and dentists, a larger number of 1st year dental students started smoking at an earlier age compared to 6th year dental students and dentists.

Unlike students, among which the majority of smokers stated that they wanted to quit smoking (66.7% of 1st

Tablica 4. Stajališta ispitanika o pušenju duhana te o ulozi stomatologa u prevenciji pušenja i u savjetovanju o prestanka pušenja
Table 4. Attitudes about tobacco smoking and the dentists' role in the prevention of smoking

Tvrdnja • Statement	Stupanj slaganja s tvrdnjom⁺ % • Stage of agreement with statement⁺ %					p
	1	2	3	4	5	
Smatram da je pušenje cigareta iznimno šteti zdravlju. • I find smoking cigarettes extremely harmful to health.		1.9	3.1	20.8	74.2	0.341
Dužnost je stomatologa da pacijenta educira o štetnosti duhanskoga dima te mu sugerira prestanak pušenja. • The dentist's duty is to educate the patient about the dangers of tobacco smoke and suggest smoking cessation.	2.5	3.8	9.4	15.7	68.6	0.044*
Stomatolog svojim nepušenjem treba biti uzor pacijentima. • Dentist should serve as a role-model for patients by his non-smoking behaviour.	10.1	4.4	11.9	10.7	62.9	0.276
Velika je mogućnost da će stomatologova sugestija o prestanku pušenja utjecati na pacijentovu odluku o prestanku pušenja. • There is a great chance that the dentist's suggestion of smoking cessation will affect the patient's decision to stop smoking.	21.5	24.1	34.2	12	8	0.031*
Pušenje je osobni izbor pojedinca i stomatolog se nema pravo upletati. • Smoking is a matter of personal choice and the dentist has no right to interfere.	24.1	22.2	29.7	13.3	10.8	0.001*
Dužnost je stomatologa da trudnici koja puši sugerira prestanak te joj treba objasniti moguće štetne posljedice na plod ako to ne učini. • The dentist's duty is to suggests smoking cessation to pregnant woman who smokes and to explain possible damaging consequences of smoking for fetus.	3.8	1.9	3.8	12	78.5	0.051
Dužnost je stomatologa da roditelje pušače informira o opasnostima od pasivnog pušenja kad je riječ o njihovoj djeci i ostalim ukućanima. • Dentist's duty is to inform the parents about the risks of passive smoking for their children and other households members.	1.9	5.1	19.6	16.5	57	0.163
Stomatolog treba biti dostatno educiran o utjecaju pušenja na zdravlje. • The dentist should be adequately educated about the impact of smoking on health.	1.9	2.6	4.5	14.7	76.3	0.013*
Moje trenutačno znanje dovoljno je da mogu savjetovati pacijenta u vezi s prestankom pušenja. • My current knowledge is sufficient for patients counseling on smoking cessation.	11.4	11.4	23.4	24.1	29.7	<0.0001*
Studentima • stomatolozima potrebna je bolja edukacija o savjetovanju pacijenata u vezi s prestankom pušenja. • Students • dentists need better education on patients counseling about smoking cessation.	3.8	7	28.7	34.4	26.1	0.225
Kad bi postojao, pohađao • la bih specifični kolegij • tečaj o štetnim učincima pušenja te o savjetovanju pacijenata o prestanku pušenja. • If there was a specific course about harmful effects of smoking and the patients counseling for smoking cessation, I would have attended it.	10.8	6.3	25.9	25.9	31	0.010*
Zabrana pušenja u svim prostorijama zdravstvenih ustanova vrlo je važna u promociji zdravog okružja bez duhanskoga dima. • Smoking ban in all areas of health care institutions has a major role in promoting a healthy environment without tobacco smoke.	2.5	6.3	8.2	12.7	70.3	0.510
Zabrana pušenja u javnim prostorima pridonijela bi osvještavanju javnosti o štetnosti duhanskoga dima. • Smoking ban in public spaces would have contributed to public awareness of dangers of tobacco smoke.	3.2	7	20.4	19.7	49.7	0.169
Zabrana pušenja u javnim prostorima kršenje je prava pušača. • Smoking ban in the public spaces is violation of smokers rights.	56.3	9.5	17.7	7	9.5	0.054
Davanjem savjeta o pušenju mogla • mogao bih izgubiti pacijenta. • By giving advice on smoking I could lose my patient.	27.4	16.6	35	16.6	4.5	0.018*

⁺ 1 – Uopće se ne slažem; 2 – Ne slažem se; 3 – Niti se slažem niti se ne slažem; 4 – Slažem se; 5 – U cijelosti se slažem / ⁺ 1 – I completely disagree; 2 – I disagree; 3 – I do not agree nor disagree; 4 – I agree; 5 – I completely agree
* statistički značajna razlika ($p < 0.05$) / * statistically significant result ($p < 0.05$)

U trećem dijelu upitnika, koji se odnosio na razinu postojećeg znanja o utjecaju pušenja na usnu šupljinu, utvrđene su statistički značajne razlike u znanju ispitanika (tablica 3.). Studenti prve godine imali su statistički značajno manje točnih odgovora na gotovo sva pitanja u usporedbi s kolegama sa šeste godine i stomatolozima.

Podatci dobiveni u četvrtom dijelu upitnika, u kojem su se ispitivala stajališta o pušenju duhana te o ulozi stomatologa u prevenciji pušenja, nalaze se u tablici 4. (tablica 4.). Stomatolozi su u statistički značajno većoj mjeri iskazali neslaganje s tvrdnjom prema kojoj je njihova dužnost da pacijenta educiraju o štetnosti duhanskoga dima te mu predlože prestanak pušenja. Stomatolozi također češće od studenata vjeruju kako je gotovo nemoguće da njihova sugestija o prestanku pušenja utječe na pacijenta te su izrazili veći stupanj slaganja s tvrdnjom prema kojoj je pušenje osobni izbor pojedinca te da se oni nemaju pravo upletati.

Studenti i prve i šeste godine studija u odnosu prema stomatolozima pokazali su statistički značajno viši stupanj želje za edukacijom o temi štetnih učinaka pušenja te za savjetovanje pacijenata o prestanku pušenja. Studenti također u većoj mjeri u odnosu na stomatologe smatraju da stomatolog treba biti dostatno educiran o utjecaju pušenja na zdravlje.

Rasprava

Provedeno istraživanje daje nam uvid u navike, znanja i stajališta ispitanika o problematici pušenja i o ulozi stomatologa u prevenciji pušenja.

Utvrđen je veći postotak pušača među studentima šeste godine studija i stomatolozima u odnosu na studente prve godine. Istodobno, studenti prve godine počeli su pušiti u ranijoj dobi od studenata šeste godine i stomatologa. Navedeno upozorava na trend sve ranijeg prvog kontakta mladih s pušenjem duhana, te na nužnost javnozdravstvene protupušačke kampanje, posebno na organizirane edukacije u osnovnim i srednjim školama kako bi se preveniralo sve ranije eksperimentiranje mladih s cigaretama.

Veći dio studenata pušača izrazio je želju za prestankom pušenja, a s druge strane isto je izjavilo tek nešto manje od polovine stomatologa pušača. Takvi rezultati mogli bi se objasniti već stvorenom ovisnošću te dugogodišnjom navikom od koje se vrlo teško odviknuti, što potvrđuje i činjenica da vrlo malo pušača uspije prestati pušiti nakon prvog pokušaja (3).

Studenti prve godine studija pokazali su manju razinu znanja o ispitivanoj temi u odnosu na kolege sa šeste godine i stomatologe, što je očekivano s obzirom na to da su tek na početku studija i još nemaju dovoljno teorijskog i praktičnog znanja o toj temi. Zabrinjava podatak da gotovo trećina ispitanika nije znala da se pregledom oralne sluznice može otkriti rak usne šupljine u najranijem stadiju, te da se u praksi ta opaka bolest najčešće otkriva u uznapredovalom stadiju. Upravo zbog lake dostupnosti oralnih tkiva oku stomatologa, bitno je educirati sadašnje i buduće doktore dentalne medi-

year dental student smokers and 76% 6th year dental student smokers), less than half of dentists-smokers had the desire to stop - only 45,8% of them.

The third part of the questionnaire was related to the level of existing knowledge about impact of smoking on the oral cavity, and results showed statistically significant differences in subjects' knowledge (Table 3). First year dental students had statistically significant less correct answers to almost all questions compared to 6th year dental students and dentists.

The fourth part of the questionnaire examined attitudes about tobacco smoking and the dentists' role in the prevention of smoking (Table 4). Dentists had significantly higher disagreement with the statement that the dentist's duty is to educate the patient about the dangers of tobacco smoke and suggest smoking cessation. In addition, dentists more often than students believed that there was a small possibility that their suggestion to stop smoking would affect the patient, and they expressed a greater degree of agreement with the statement that smoking is a matter of personal choice and private risk and that they have no right to interfere.

Dental students of the 1st and 6th year compared to dentists showed a significantly higher level of desire for education about harmful smoking effects and patients counselling to quit smoking compared to dentists. Also, a larger number of students believed that dentist should be sufficiently educated about harmful effects of smoking on health compared to dentists.

Discussion

This study gives us insights into habits, knowledge and attitudes of respondents towards the problem of smoking and the dentist's role in the prevention of smoking.

Higher percentages of smokers were found among 6th year dental students and dentists, compared to 1st year dental students. On the other hand, 1st year dental students began smoking at an earlier age than 6th year dental students and dentists. This indicates that young people nowadays experiment with tobacco smoking at an earlier age, and that there is a need for anti-smoking campaigns, in particular the need for organized forms of education in primary and secondary schools, in order to prevent even earlier experimentation with cigarette smoking among young people.

A higher proportion of dental student smokers expressed a desire to stop smoking compared to less than half of dentist smokers. Such results could be explained by already established addiction, as well as long-standing habits that are very difficult to stop, as evidenced by the fact that very few smokers manage to quit after the first attempt (3).

First year dental students showed a lower level of knowledge on smoking cessation compared to the 6th year dental students and dentists, which is expected given that they are at the beginning of their dental education and still lack specific theoretical and practical knowledge. It is worrisome that almost a third of respondents did not know that oral cancer could be detected at the earliest stage just by examination of the oral mucosa, and that, in practice, oral cancer is usually discovered in an advanced stage. Because of the availabil-

cine o važnosti pregleda oralnih sluznica tijekom rutinskoga stomatološkog pregleda (11, 12).

Podatci dobiveni u četvrtom dijelu upitnika, u kojem su se ispitivala stajališta o pušenju duhana te o zadaći stomatologa u prevenciji pušenja, dali su zanimljive rezultate. Stomatolozi su pokazali manju zainteresiranost od studenata za savjetovanje pacijenata u svrhu informiranja, prevencije i prestanka pušenja. Također su u većoj mjeri smatrali da ih se ne tiče navika pušenja njihovih pacijenata. To se može objasniti slabom informiranošću o zadaćama stomatologa u prevenciji i suzbijanju pušenja u populaciji, nedovoljno razvijenom sviješću o štetnim učincima duhanskoga dima i njegovim dugoročnim posljedicama, te nedostatkom konkretnih mjera kad je riječ o edukaciji zdravstvenih radnika o tehnikama savjetovanja pacijenata za prestanak pušenja, ali i nedostatkom osiguravateljeve financijske stimulacije takvog djelovanja, što potvrđuju studije u literaturi (13). Uz to, više od polovine stomatologa pušača nije željelo prestati s tom navikom, pa se može očekivati da i njihova motivacija za savjetovanje pacijenata neće biti velika. Mišljenja o ulozi stomatologa u borbi protiv pušenja variraju od studije do studije. U istraživanju Dablea i suradnika (14) studenti stomatologije također su imali pozitivno stajalište o ulozi stomatologa u savjetovanju za prevenciju i prestanak pušenja, a autori su dokazali i da provedba edukacijskih programa te programa odvikavanja među studentima tijekom studija može znatno utjecati na njihovu motivaciju za buduće protupušačko djelovanje. Slične rezultate dobili su i Yip i suradnici (15) te Alrsheedi i suradnici (16). S druge strane, rezultati istraživanja Utija i suradnika (13) pokazuju da su nigerijski stomatolozi i studenti stomatologije negativno raspoloženi prema ulozi stomatologa kao zdravstvenih radnika u globalnoj akciji suzbijanja pušenja te aktivnostima kojima bi poticali prestanak pušenja među pacijentima. Uz to, stomatolozi i studenti stomatologije najčešće ne vjeruju da njihov savjet može utjecati na odluku pacijenta o prestanku pušenja. Uti i suradnici (13) smatraju da ovakvo negativno stajalište može biti posljedica nedostatne edukacije te izostanka općeg znanja o prevenciji pušenja. Osim toga, u zemljama u kojima je zbog loše organizacije zdravstvenog sustava i nedostatka radne snage stomatolog opterećen velikim brojem često hitnih pacijenata, i tri minute za savjetovanje o pušenju mogu biti luksuz koji si ti liječnici ne mogu dopustiti (13).

Sve navedeno upućuje na nedostatak entuzijazma među stomatolozima u odnosu prema studentima kada je u pitanju štetnost duhana i savjetovanje pacijenata o prestanku pušenja, zbog čega bi se trebalo poticati na edukaciju ne samo u sklopu studijskih programa, nego i u sklopu cjeloživotnog obrazovanja. Nužno je povećati svijest struke o opasnostima pušenja i o njegovu utjecaju na opće i oralno zdravlje te o glavnoj ulozi zdravstvenih radnika kao promotora zdravih životnih navika među pacijentima. Također je potrebno osmisliti specifične tečajeve na kojima bi polaznici učili o osnovnim tehnikama savjetovanja o prestanku pušenja i o pružanju potpore pacijentima. Uz to pacijentima treba omogućiti da dobiju informativne materijale. Navedene metode ne zahtijevaju velike financijske izdatke ni mnogo vremena, a uz ostale mjere za suzbijanje epidemije pušenja,

ity of oral tissues to the dentist's eye, it is important to educate the current and future dentists about the importance of inspection of oral mucosa during a routine dental check-up (11, 12).

The data obtained in the fourth part of the study, in which attitudes about tobacco smoking and the dentists' role in smoking cessation were examined, yielded some interesting results. Dentists have shown less interest in the activities of patients counselling for the purpose of informing, preventing and stopping smoking than dental students. Also, dentists thought more often that their patients' smoking habits are private matters and that they have no right to interfere. This may be explained by the lack of awareness about the dentist's role in the prevention and control of smoking in the population, as well as lack of knowledge about harmful effects of tobacco smoke and its long-term consequences, and poor practical measures that would educate healthcare workers about the techniques of patients counselling for smoking cessation, as well as lack of financial support by the insurer, all confirmed by some studies in the literature review (13). In addition, more than half of dentist smokers had no desire to quit smoking and it is expected that their motivation for patients counselling would not be high. Subjects' opinions on the dentist's role in the activities against smoking vary from study to study. According to the study of Dable et al. (14), dental students have also shown a positive attitude towards dentists' roles in counselling for smoking prevention and cessation, and the authors have also proved that the implementation of educational programs and student retirement programs during the study can play a significant role in their motivation for future anti-smoking activities. Similar results were reported by Yip et al. (15) and Alrsheedi et al. (16). On the other hand, the study results obtained by Uti et al. (13) showed that Nigerian dentists and dental students are negatively inclined to the role of dentists as health workers in the global anti-smoking campaign and activities that would encourage dentists to conduct smoking cessation activities. In addition, dentists and dental students do not generally believe that their advice may affect the patient's decision about quitting. Uti et al. (13) believe that this negative attitude may be due to lack of education and lack of formal training on smoking cessation. Moreover, in countries where poor organization of the health system and the lack of workforce are burdened with a large number of emergency patients, even three minutes for smoking counselling may pose a luxury that these dentists cannot afford (13).

All of the above suggests that dentists lack enthusiasm for smoking cessation activities compared to dental students, which is why education about given subject should be available within academic programs. Besides, it should become part of lifelong learning. It is necessary to increase the awareness of dental professionals about negative effects of smoking on oral and general health. Furthermore, they should be more aware of their central role of healthcare workers as promoters of healthy lifestyle among patients. Also, it is necessary to develop specific courses in which participants could learn basic techniques for smoking cessation counselling, thus providing education materials and offering support for healthy de-

mogu biti ključan pomak u mijenjanju svijesti i pušačkih navika društva.

cision-making among patients. These methods are not time consuming and do not require significant financial resources. Along with other anti-smoking activities, these measures could contribute to major changes in public views of cigarette smoking and smoking habits of society.

Sukob interesa

Nije bilo sukoba interesa.

Conflict of interest

None declared

Abstract

Objective: The aim of this study was to evaluate smoking habits, the level of knowledge and attitudes towards smoking, as well as the role of dental professionals in prevention of smoking among students of the School of Dental Medicine, University of Zagreb and compare them to attitudes of practicing Croatian dentists. **Materials and methods:** The study was carried out among 1st and 6th year dental students at the School of Dental Medicine, University of Zagreb and dentists employed in primary practice throughout Croatia. A total of 159 subjects (51 1st and 53 6th year dental students and 55 dentists) participated in the study. **Results:** The prevalence of smoking was highest among 6th year dental students (39, 6%). It slightly decreased among dentists (34, 5%), while least smokers were found among first year dental students (7, 8%). The majority of dental student smokers expressed a desire to stop smoking (66, 7% of 1st year dental student smokers and 76% of 6th year dental student smokers), while less than half of dentist smokers had the desire to stop - only 45, 8% of them. Dental students of the 1st and 6th year of the study showed a statistically significantly higher level of desire for education about harmful smoking effects and patients counselling to quit smoking compared to dentists. The data gathered in this study indicate that it is necessary to increase awareness among dental professionals about harmful effects of smoking on oral and general health. Also, their awareness about the central role of healthcare workers as promoters of a healthy lifestyle among patients should be raised.

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Tobacco Smoking; Oral Health; Dental Students; Dentists

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