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Usporedba oralno-higijenskih navika studenata četvrte godine različitih fakulteta Sveučilišta u Zagrebu

Comparison of Oral Hygiene Habits of the 4th Year Students of Different Faculties of University of Zagreb

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Sažetak
Preddiplomsko obrazovanje mijenja percepciju oralno-zdravstvenih i oralno-higijenskih navika i stajališta studenata stomatologije. **Svrha** istraživanja bila je usporediti te navike i stajališta studenata četvrte godine Stomatološkog fakulteta i njihovih kolega s iste godine na ostalim fakultetima Sveučilišta u Zagrebu, kako bismo odredili opseg i važnost mogućih razlika. **Ispitanici i postupci:** Sudjelovao je 151 student obaju spolova i to 79 sa stomatologije (četvrte godine) i 72 s ostalih fakulteta (četvrte godine). Svi su odgovorili na 21 pitanje iz prilagođenog upitnika prema Špalju o oralno-higijenskim navikama i stajalištima. Podaci su nakon toga statistički analizirani programskim paketom SPSS ver. 16,0. **Rezultati:** Rezultati su pokazali da postoji razlika između dviju skupina te da studenti stomatologije imaju bolje oralno-higijenske navike i bolja oralno-zdravstvena stajališta od kolega s ostalih fakulteta. Bili su bolje podučeni u tehnici četkanja zuba, zube češće četkaju, koriste se dodatnim sredstvima za održavanje higijene, rjeđe imaju probleme s krvarenjem gingive te posjećuju stomatologa češće nego njihovi kolege s drugih fakulteta. **Zaključak**: Zbog svjesnosti o problemima oralnoga zdravlja i većeg znanja o preventivnim mjerama, studenti stomatologije mogli bi pozitivno pridonositi oralnom zdravlju svojih pacijenata i kolega i to ne samo educirajući ih, nego i vlastitim primjerom.

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Ključne riječi
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Uvod

Oralno zdravlje važna je komponenta općeg zdravlja i ima niz psihosocijalnih utjecaja na kvalitetu života (1). Na to utječu sljedeći čimbenici: način života, ekonomski status, navike i rizična ponašanja te redoviti posjeti stomatologu (2).

Osobe slabijega socijalno-ekonomskog statusa, stanovništvo ruralnih područja i izbjeglice, imaju

Introduction

Oral health is an important part of overall health status and has numerous psychosocial influences on quality of life (1). Factors that affect oral health include lifestyle, economic status, habits and attitudes as well as regular dental check-ups (2).

Persons with low socio-economic status, inhabitants of rural areas and refugees generally have

lošiju oralnu skrb, lošije održavaju oralnu higijenu i rjeđe odlaze stomatologu te zbog toga imaju i više izgubljenih zuba (3–8). Kritična su populacija i mladi ljudi, jer tijekom odrastanja eksperimentiraju s alkoholom i cigaretama (9), a to, osim loših higijenskih navika u razdoblju sazrijevanja, povećava prisutnost karijesa i bolesti parodontalnih tkiva (10).

Stomatolozi imaju važnu zadaću u poboljšanju razine zdravstvene edukacije i zato su tijekom studija znanje i stajališta o oralnom zdravlju važni za prevenciju, kontrolu i liječenje dentalnih bolesti (11). Opsežni preventivni programi, u što su uključeni i postupci osobne njege usne šupljine, trebali bi biti dio dodiplomskoga nastavnog programa (12). Profesionalna izobrazba studenata stomatologije trebala bi stvoriti stabilne modele ponašanja u brizi za vlastito oralno zdravlje (13), što bi svakako trebalo dati bolje rezultate (14). Tome pridonosi, osim činjenice da studenti stomatologije polako razvijaju bolju percepciju oralnog zdravlja, i to što su uglavnom iz obitelji zdravstvenih djelatnika s visokom stručnom spremom, u boljem su socijalno-ekonomskom položaju i većinom potječu iz urbanih područja (15).

Svrha ovog istraživanja bila je usporediti oralno-zdravstvene i oralno-higijenske navike i stajališta studenata četvrte godine stomatologije i njihovih kolega s iste godine ostalih fakulteta Sveučilišta u Zagrebu.

Ispitanici i postupci

U istraživanju je sudjelovao 151 ispitanik obaju spolova - 79 studenata stomatologije i 72 studenta četvrte godine ostalih fakulteta Sveučilišta u Zagrebu .

Odobrilo ga je Etičko povjerenstvo Stomatološkog fakulteta Sveučilišta u Zagrebu (odluka je prihvaćena na sjednici održanoj 25. ožujka 2009.). Svi sudionici ispunili su prilagođeni upitnik o oralno-higijenskim navikama prema Špalju (16), te odgovorili na jedno dodatno pitanje vezano za medicinsku struku roditelja (slika 1.). Upitnik se inače sastojao od 21 pitanja o socijalnom statusu, oralnoj higijeni, posjetima stomatologu, konzumaciji slastica, alkohola i cigareta, te o stajalištima o oralnom zdravlju. Nakon redovitog predavanja studentima stomatologije bila je objašnjena svrha istraživanja te opisan način prikupljanja podataka. Zatim su zamoljeni da anonimno i dobrovoljno ispune anketni upitnik. Prije početka svi su nazočni dali informira-

weaker oral care, unsatisfactory oral hygiene, and fewer dental check-ups. All these factors lead to increased loss of teeth (3-8). Adolescents also represent part of this critical population. Experimental consumption of alcohol and cigarettes (9) combined with poor oral habits during this period of growing up results in greater incidence of caries and periodontal diseases (10).

Dental practitioners have an important role in improving the level of health-related public education. Thus, adoption of oral health knowledge and attitudes are as important as dental disease prevention, control and treatment (11). Comprehensive preventive dental programs, which include guidelines on personal oral health care, should be included into undergraduate curriculum (12). Professional education of dental students should create more stable behavior patterns in their own oral health care (13), which should result in the improvement of their oral health (14). Besides growing awareness of their own oral health during education, this improvement is also contributed by the fact that dental students predominately originate from families with at least one parent being a health professional, with their parents having improved overall education, better socio-economic status and usually residing in urban areas (15).

The aim of this study was to compare oral health and oral hygiene habits and attitudes of 4th year dental students with the 4th year students of other faculties of University of Zagreb.

Materials and methods:

Number of subjects participating in this study was 151 which included 79 students of dental medicine (4th year) and 72 students of other faculties (4th year) of University of Zagreb, of both genders.

Research was approved by Ethical committee of School of dental medicine Zagreb (Approved on Ethical committee of School of dental medicine Zagreb session on 25.03.2009.). Adapted questionnaire according to Špalj (16) with additional question related to the medical profession of parents was used (Figure 1). Questionnaire consisted of 21 questions about social status, oral hygiene, dental check-ups, sweets consumption, alcohol and cigarette usage and oral health attitudes. After regular classes, dental students were familiarized with purpose and aim of the study and manner of data collecting. Afterwards, they were asked for anonymous and voluntary completion of the form. Informed consent was obtained prior to questionnaire filling. Inves-

Upitnik o zdravlju usta•Oral health questionnaire:

1. Roditelj s višom stručnom spremom ima završenu: • Parent with higher educational status has:
   a) manje od 8 razreda osnovne škole • less than 8 grades of primary school
   b) osmogodišnju osnovnu školu • primary school
   c) srednju školu • high school
   d) višu školu, fakultet • college, university degree

2. Jedan od roditelja je: • One of the parents is:
   a) stomatolog • dentist
   b) liječnik • physician
   c) zdravstveni djelatnik više i srednje stručne spreme • other medical professional
   d) ništa od navedenog • nothing of previous

3. Koliko često idete stomatologu? • How often do you visit a dentist?
   a) ponekad • seldom
   b) neredovito - rjeđe od jednom godišnje • infrequently
   c) jednom godišnje • once a year
   d) dva puta godišnje i češće • twice a year or more often

4. Zbog čega češće idete stomatologu? • What is a reason for your visit to the dentist?
   a) jer me boli zub • toothache
   b) na kontrolu • control

5. Kad Vas boli zub radije bi ga: • When experiencing toothache, what would you rather do:
   a) izvadio • pull the tooth out
   b) popravio repair and preserve the tooth

6. Mislite li da zube treba prati? • Do you think it is neccesary to brush the teeth?
   a) ne • no
   b) da • yes

7. Koliko često perete zube? • How often do you brush your teeth?
   a) uopće ne • I don't brush my teeth
   b) ne svaki dan • not every day
   c) jednom dnevno • once a day
   d) dva puta dnevno • twice a day
   e) češće od dva puta dnevno • more than twice a day

8. Mislite li da znate pravilno prati zube? • Do you think you know how to brush your teeth properly?
   a) da • yes
   b) ne • no

9. Je li Vam ikad itko pokazao kako se peru zubi? • Did anyone instruct you on how to brush teeth?
   a) ne • no
   b) da • yes

10. Ako Vas je netko učio prati zube, tko je to bio? •If someone instructed you on how to brush teeth, who was it?
   a) roditelji • parents
   b) stomatolozi • dentists
   c) tete u vrtiću ili učitelji • preschool educator or teachers

11. Koliko su Vam često u školi pokazali kako se peru zubi? • How often were you instructed on how to brush teeth in school?
   a) nikad • never
   b) jednom • once
   c) 2-4 puta • 2-4 x
   d) više od 4 puta • more than 4x

12. Koliko dugo koristite istu četkicu? • How long do you use the same toothbrush?
   a) manje od 3 mjeseca • less than 3 months
   b) 3-6 mjeseci • 3-6 months
   c) više od 6 mjeseci • more than 6 months

13. Krvari li Vam zubno meso kada perete zube? • Do you experience gum bleeding while brushing your teeth?
   a) da, često • yes, often
   b) ponekad • sometimes
   c) nikada • never

14. Što radite kad Vam krvari zubno meso? • What do you do when your gums bleed?
   a) prestanem prati zube • I stop brushing my teeth
   b) perem nježnije • I brush gentler
   c) perem temeljitije • I brush more thorough
   d) potražim pomoć stomatologa • I visit dentist

15. Osim četkice koristite li još što? • What else do you use besides your toothbrush?
   a) samo četkicu • toothbrush only
   b) zubnu svilu • dental floss
   c) interdentalnu četkicu ilil stomatološku čačkalicu • interdental brush or dental toothpick
   d) tekućine za ispiranje usta • mouthwash

16. Mislite da je normalno da se kod starijih ljudi zubi klimaju i ispadaju? • Do you think it's normal for old people to have loose teeth and increased tooth loss?
   a) ne • no
   b) da • yes

17. Mislite li da zube treba što prije izvaditi i napraviti umjetne pa s njima neće biti više problema? • Do you think it's best to pull out all of the teeth, make dentures and avoid any further problems?
   a) ne • no
   b) da • yes

18. Koliko često pijete alkohol? • How often do you drink alcohol?
   a) ne pijem alkohol • I don't drink
   b) nekoliko puta mjesečno ili rjeđe • several times a month or more seldom
   c) nekoliko puta tjedno • several times a week
   d) svaki dan 1 čašu • once a day
   e) svaki dan više čaša • several times a day

19. Koliko često jedete slatkiše? • How often do you consume sweets?
   a) ne jedem uopće • not at all
   b) ne svaki dan • not every day
   c) jednom dnevno • once a day
   d) više puta dnevno • several times a day

20. Slatkiše jedete između obroka? • Do you consume sweets inbetween meals?
   a) da, često • yes, often
   b) ponekad • sometimes
   c) ne • no

21. Pušite li više od 5 cigareta dnevno? • Do you smoke more than 5 cigarettes a day?
   a) ne • no
   b) da • yes

Slika 1. Upitnik o oralno-zdravstvenim i oralno-higijenskim navikama i stajalištima (16).
Figure 1 Oral health and oral hygiene habits and attitudes questionnaire (16).

ni pristanak. Ispitivači su provjerili svaki ispunjeni upitnik, te ako je neki odgovor manjkao, zamolili su za nadopunu. Studenti ostalih fakulteta anketirani su na ulazu u Studentski dom „Stjepan Radić" u istim uvjetima kao i studenti stomatologije. Jedini dodatni uvjet bio je da su studenti četvrte godine bilo kojeg fakulteta, osim Stomatološkoga. Dobiveni podaci uneseni su u bazu podataka u MS Access-u 2003 (Microsoft Office 2003, Microsoft, Redmond, SAD) i statistički obrađeni metodama ne-parametrijske statistike tj. Pearsonovim Hi-kvadrat testom u programskom paketu SPSS 16,0. (SPSS Inc., Chicago, IL) s p-vrijednošću manjom od 0,05

Rezultati

Rezultati istraživanja nalaze se u Tablici 1. Najveći dio ispitanika (50,3%) posjećuje stomatologa dva puta na godinu i to najčešće radi kontrole (84,1%), a nešto manje odlazi k liječniku zbog zubobolje (15,9%). Njih 65,6% pere zube dva puta na dan, 29,1% i češće, a samo 1,3% ne čini to svaki dan. Većina misli da zna pravilno prati zube (78, 8%) i dobili su upute o pravilnoj njezi (74,2%). Istom četkicom većina se koristi manje od tri mjeseca (48,3%), a dodatni pribor (zubnu svilu, interdentalne četkice ili tekućinu za ispiranje usta) upotrebljava 74,8% ispitanika.

Statistička obrada podataka pokazala je da studenti stomatologije potječu iz obitelji s višom stručnom spremom (χ^2=22,826, df=1, p=0,000) (Tablica 1.) i da su većini roditelji liječnici ili stomatolozi (26,6%), u odnosu prema kolegama s ostalih fakulteta (2,8%) (χ^2=16,693, df=2, p=0,000).

Studenti stomatologije češće posjećuju stomatologa (χ^2=30,941, df=2, p=0,000) i to zbog kontrole (89,9%) (χ^2=4,123, df=1, p=0,042) (Tablica 1.), za razliku od studenata ostalih fakulteta – njih 22, 2% odlazi liječniku kada ih zaboli zub.

Studenti stomatologije također češće peru zube (Tablica 1.) (χ^2=10,273, df=3, p=0,016) i uglavnom su uvjereni da to čine kako treba (91,1%), za razliku od ostalih – njih 6,3% misli da znaju ispravno prati zube (χ^2=15,085, df=1, p=0,000). Postoji i statistički znatna razlika između toga jesu li bili ili ne podučeni pranju zuba - studenti stomatologije dobili su poduku u 86,1%, slučajeva, a ostali u 61,1% (χ^2=12,555, df=1, p=0,000). Ako im je tko dao upute, tada su studente stomatologije najčešće informirali stomatolozi, a ostale, osim stomatologa, često su podučavale i tete u vrtiću (χ^2=22,778, df=3, p=0,000). Istom četkicom studenti stomatologije najčešće se koriste manje od tri mjeseca, za

tigators checked every questionnaire upon completion and in case of missing answer, subject was asked for an update. Students of other faculties were polled on the entrance to dormitory „Stjepan Radić" under the same conditions as dental students. Only additional condition was being the student of the 4th year of any faculty of University of Zagreb except School of Dental Medicine. Data were acceded into MS Access 2003 (Microsoft Office 2003, Microsoft, Redmond WA) and statistically processed using nonparametric statistic (chi-square test) using SPSS ver. 16.0 program package (SPSS Inc., Chicago, IL) with p value < 0.05.

Results

Results are shown in Table 1. Large proportion of all subjects (50.3%) visits dentist 2 times per year or even more often, for control (84.1%), while smaller percentage visits dentist because of toothache (15.9%). Out of total population 65.6% of subjects brush teeth twice a day, 29.1% brush more than twice a day and only 1.3% of subjects doesn't brush at all. Majority believes that they know how to brush teeth properly (78.8%) and were instructed on how to brush teeth (74.2%). Single toothbrush is used for less than 3 months by majority of subjects (48.3%), while usage of additional instruments of oral hygiene (dental floss, interdental brushes and mouthwash) is reported by 74.8% of subjects.

Statistical analysis revealed that dental students originate from families with higher education (χ^2=22.826, df=1, p=0.000) (Table 1). It is more common for dental students to have at least one parent being a dentist or physician (26.6%) when compared to other faculties (2.8%) (χ^2=16.693, df=2, p=0.000).

Dental students visit dentist more often (χ^2=30.941, df=2, p=0.000) and the main reason is control examination (89.9%) (χ^2=4,123, df=1, p=0.042) (Table 1), while students of other faculties visit dentist when experiencing toothache (22.2%).

Dental students also brush more often (Table 1) (χ^2=10.273, df=3, p=0.016), and are more convinced that they brush properly (91.1%) than their colleagues from other faculties (65.3%) (χ^2=15.085, df=1, p=0.000). There is also significant difference between groups in the category of being instructed or not on brushing teeth properly, whereas dental students were instructed in 86.1% and other students 61.1% of cases (χ^2=12.555, df=1, p=0.000). If the subjects were instructed on how to brush teeth, dental students were mostly instructed by den-

Tablica 1. Oralno-higijenske navike i stajališta studenata
Table 1 Students' oral health habits and attitudes

Studenti • Students		Br. • No	Postotak • Percent
Obrazovanje roditelja s višim obrazovnim statusom • Parent with higher educational status			
Stomatološkog fakulteta • School of dental medicine	srednja škola ili manje • High school or less	22	27,85
	viša škola ili fakultet • College, University degree	57	72,15
	Ukupno • Total	79	100
Ostalih fakulteta • Other faculties	srednja škola ili manje • High school or less	48	66,67
	viša škola ili fakultet • College, University degree	24	33,33
	Ukupno • Total	72	100
Učestalost stomatoloških kontrolnih pregleda • Dental check-up frequencies			
Stomatološkog fakulteta • School of dental medicine	neredovito, ponekad • seldom/infrequently	5	6,33
	1x/god. • 1x/yr.	18	22,78
	2x/god. i češće • 2x/yr. and more often	56	70,89
	Ukupno • Total	79	100
Ostalih fakulteta • Other faculties	neredovito, ponekad • seldom/infrequently	23	31,94
	1x/god. • 1x/yr.	29	40,28
	2x/god. i češće • 2x/yr. and more often	20	27,78
	Ukupno • Total	72	100
Učestalost četkanja zubi • Frequencies of toothbrushing			
Stomatološkog fakulteta • School of dental medicine	ne svaki dan • not every day	0	0
	1x dnevno • 1x/day	1	1,27
	2x dnevno i češće • 2x/day and more	78	98,73
	Ukupno • Total	79	100
Ostalih fakulteta • Other faculties	ne svaki dan • not every day	2	2,78
	1x dnevno • 1x/day	5	6,94
	2x dnevno i češće • 2x/day and more	65	90,28
	Ukupno • Total	72	100
Korištenje iste zubne četkice • Usage of the same toothbrush			
Stomatološkog fakulteta • School of dental medicine	više od 6 mj. • more than 6 months	2	2,53
	3 - 6 mj. • 3 - 6 months	16	20,25
	manje od 3 mj. • less than 3 months	61	77,22
	Ukupno • Total	79	100
Ostalih fakulteta • Other faculties	više od 6 mj. • more than 6 months	10	13,89
	3 - 6 mj. • 3 - 6 months	50	69,44
	manje od 3 mj. • less than 3 months	12	16,67
	Ukupno • Total	72	100
Krvarenje gingive tijekom četkanja zubi • Gum bleeding experience while brushing teeth			
Stomatološkog fakulteta • School of dental medicine	Nikada • never	42	53,16
	Ponekad • sometimes	37	46,84
	Često • often	0	0
	Ukupno • Total	79	100
Ostalih fakulteta • Other faculties	Nikada • never	17	23,61
	Ponekad • sometimes	49	68,06
	Često • often	6	8,33
	Ukupno • Total	72	100
Postupak u slučaju krvarenja gingive • Actions in case of gum bleeding			
Stomatološkog fakulteta • School of dental medicine	nema krvarenja • no bleeding	42	53,16
	temeljitije četkanje zubi/pomoć stomatologa • brush thoroughly/visit the dentist	21	26,58
	nježnije četkanje zubi • brush gentler	15	18,99
	prestanak četkanja zubi • stop brushing	1	1,27
	Ukupno • Total	79	100
Ostalih fakulteta • Other faculties	nema krvarenja • no bleeding	17	23,61
	temeljitije četkanje zubi/pomoć stomatologa • brush thoroughly/visit the dentist	19	26,39
	nježnije četkanje zubi • brush gentler	26	36,11
	prestanak četkanja zubi • stop brushing	10	13,89
	Ukupno • Total	72	100
Dodatna sredstva održavanja oralne higijene • Additional means of oral hygiene			
Stomatološkog fakulteta • School of dental medicine	samo četkica • toothbrush only	6	7,59
	četkica i tekućine za ispiranje usta • toothbrush and mouthwash	5	6,33
	četkica i pomoćna sredstva za interdentalno čišćenje • toothbrush and interdental brush/dental toothpick/dental floss	47	59,49
	sve navedeno • everything previously mentioned	21	26,58
	Ukupno • Total	79	100
Ostalih fakulteta • Other faculties	samo četkica • toothbrush only	32	44,44
	četkica i tekućine za ispiranje usta • toothbrush and mouthwash	9	12,5
	četkica i pomoćna sredstva za interdentalno čišćenje • toothbrush and interdental brush/dental toothpick/dental floss	29	40,28
	sve navedeno • everything previously mentioned	2	2,78
	Ukupno • Total	72	100

razliku od ostalih studenata – oni je upotrebljavaju između tri i šest mjeseci (Tablica 1.) (χ^2=55,534, df=2, p=0,000).

Krvarenje zubnog mesa tijekom pranja zuba češće je kod studenata ostalih fakulteta (Tablica1.) (χ^2=17,982, df=2, p=0,000), pa zato oni uglavnom peru zube nježnije ili ih čak prestanu prati (Tablica 1.) (χ^2=20,728, df=3, p=0,000). Osim četkice studenti stomatologije češće se koriste i pomoćnim sredstvima (zubnom svilom i/ili interdentalnom četkicom) te otopinama za ispiranje usta, za razliku od ostalih studenata – oni najčešće upotrebljavaju samo četkicu (Tablica 1.) (χ^2=38,65, df=3, p=0,000).

Obje skupine ispitanika podjednako smatraju da je normalno da starim ljudima ispadaju zubi (26,6% stomatolozi, 34,7% ostali).

Alkohol se u obje skupine najčešće pije nekoliko puta na mjesec ili rjeđe (stomatolozi 89,9%, ostali 83,4%). Slastice se uglavnom rijetko jedu ili uopće ne (studenti stomatologije 65,8%, studenti ostalih fakulteta 76,4%). Konzumacija alkohola i slastica statistički je podjednaka u obje skupine, kao i učestalost uzimanja slastica između obroka. Skupine se statistički ne razlikuju ni po pušenju cigareta.

Rasprava

Studentska populacija pripada dijelu društva od kojega se očekuje vodeća uloga u mnogim djelatnostima. Oralno zdravlje važna je komponenta općeg zdravlja i znatno utječe na kvalitetu života svakog pojedinca (17). Vrlo je važno da mladi ljudi ispravnim stajalištima i navikama postave temelje za dugotrajno održavanje oralnog zdravlja. Studenti stomatologije, koji tijekom studija dodatno razvijaju i modificiraju svoje ponašanje prema oralnom zdravlju (1, 18, 19), mogu pridonijeti edukaciji šire populacije, a posebice kolega s ostalih fakulteta jer oni često ne mogu dobiti točne informacije o tom pitanju. Studenti stomatologije trebali bi biti uzor ostalim kolegama i pacijentima i učiti ih koliko je važna oralna higijena, te navike i stajališta na temelju samozaštite (dnevno četkanje, smanjen unos rafiniranih ugljikohidrata i uporaba fluorida) i redovito korištenje stomatoloških usluga (20).

Za ovo istraživanje odabran je upitnik prema Špalju (16) i prilagođen našim uvjetima, za razliku od onoga s Fakulteta u Hirošimi (Dental Behavi-

tists, while other students were instructed by dentists, but also very often by preschool teachers, too (χ^2=22.778, df=3, p=0.000). Single toothbrush was used less then 3 months by dental students while other students usually use toothbrush between 3 and 6 months (Table 1.) (χ^2=55.534, df=2, p=0.000).

Gingival bleeding affects students of other faculties more often (Table 1) (χ^2=17.982, df=2, p=0.000), and if it happens, they brush gentler or even stop brushing their teeth more often (Table 1) (χ^2=20.728, df=3, p=0.000). Besides toothbrush, dental students show increased usage of additional means of oral hygiene (dental floss and/or interdental brush) and mouthwashes when compared to other students which most frequently use toothbrush only (Table 1) (χ^2=38.65, df=3, p=0.000).

Both groups similarly consider tooth loss in the elderly normal (26.6% dental students and 34.7% other students).

In both groups of students alcohol is consumed several times per month or more seldom (dental students 89.9%, other students 83.4%). Both groups of students consume sweets rarely or don't consume sweets at all (dental students 65.8%, other students 76.4%). Alcohol and sweets consumption including consumption in between meals is alike in both groups and doesn't statistically differ between groups. The same case is with smoking habits, where no significant difference exists between groups.

Discussion

Student population represents the part of the society which is expected to be leading in many fields. Oral health is important component of general well being and it greatly affects quality of life of an individual (17). It is important for adolescents to create healthy foundation for long-term preserving of oral health by incorporating adequate attitudes and habits. Dental students, thanks to the improvements and perfection of their own behavior and attitudes towards oral health during their education (1, 18, 19) can certainly contribute to the population education. This is especially important in case of their colleagues from other faculties who often lack the proper awareness about oral health and its importance. Dental students should be a role-model for their colleagues and patients, teaching them the importance of oral hygiene habits and attitudes based on self protection principles (frequent tooth brushing, reduced consumption of refined carbohydrates, fluoride usage) and regular utilization of dental services (20).

our Inventory HU-DBI) koji se koristio u mnogim studijama diljem svijeta (18, 19, 21, 22). Osim pitanja o oralno-higijenskim navikama, upitnik prema Špalju sadržava socijalno-ekonomski dio, kao važan čimbenik u odnosu pojedinca prema oralnom zdravlju, što je bio dodatni kriterij u njegovu odabiru. Ipak, u tumačenju rezultata i njihovu projiciranju na cijelu populaciju, treba postupati oprezno i imati na umu da se u takvim upitnicima može dobiti procjena koja ne mora potpuno odgovarati stvarnim stajalištima i ponašanju pojedinaca i to zbog mogućih promjena tijekom kraćeg ili dužeg razdoblja.

U ovom istraživanju opovrgnuta je nulta hipoteza te su pronađene razlike u navikama i stajalištima između studenata stomatologije i njihovih kolega s ostalih fakulteta. Studenti stomatologije češće četkaju zube i smatraju da to čine ispravno. Uzmemo li u obzir dosadašnje studije i količinu znanja dobivenu na četvrtoj godini stomatologije, možemo smatrati da doista dobro četkaju zube, dok se u skupini studenata s ostalih fakulteta njihovo mišljenje da ispravno četkaju zube ne mora nužno slagati sa stvarnim stanjem (14). U prilog tome govori i činjenica da je krvarenje gingive češće kod studenata s ostalih fakulteta. Osim toga, ako počnu problemi s krvarenjem desni, studenti ostalih fakulteta uglavnom neodgovarajuće reagiraju. Studenti stomatologije redovitije odlaze stomatolozima na kontrole. To djelomice može biti povezano s dostupnošću usluge, jer su mnogima roditelji te struke. Drugi je razlog općenito viši stupanj obrazovanja roditelja u skupini studenata stomatologije, što svakako pridonosi boljem socijalno-ekonomskom statusu i oralnozdravstvenim navikama (9). Studenti ostalih fakulteta često posjećuju stomatologa tek kada se pojave simptomi. To predstavlja negativan model ponašanja i vjerojatno je rezultat manje razvijene svijesti o higijenskim i preventivnim mjerama. Zanimljivo, u jednoj brazilskoj studiji ističe se da pacijenti koji posjećuju stomatologa samo u hitnom slučaju, svoje oralno zdravlje obično percipiraju kao loše (8). Špalj (16) je u svojem istraživanju populacije mladića između 18 i 28 godina pronašao pozitivnu povezanost između naobrazbe ispitanika i učestalosti četkanja, te koliko često odlaze na kontrole.

Oralno-higijenske navike studenata proučavane su, između ostaloga, u Velikoj Britaniji, Kini (18, 21), Jordanu (23), Grčkoj, Japanu (22) i Indiji (19). S obzirom na to da su rezultati dobiveni na temelju upitnika HU-DHI, usporedba je moguća samo u nekim pitanjima - onima koja se nalaze i u upitniku odabranom u ovom istraživanju. Studenti sto-

Adapted questionnaire according to Špalj was used for this study (16). It is more appropriate and adjusted to the local circumstances then Hiroshima University – Dental Behavior Inventory (HU – DBI) questionnaire, which is often used abroad (18, 19, 21, 22). Besides questions related to oral hygiene habits, questionnaire according to Špalj also consists of questions related to socio-economic status, which greatly determines oral health related behavior of the individual. This was also additional criterion in choosing the most appropriate questionnaire. However, interpretation of results of questionnaires must be taken with common sense and carefully extrapolated onto larger population because the real attitudes and behavior of the individual are subject to change during time or even during a shorter period.

By disproving the null hypothesis, this study showed substantial differences in habits and attitudes of two student populations. Dental students brush their teeth more often and, according to their opinion, they are doing it properly. Considering the results of previous studies and the quantity of knowledge on the fourth year of school of dental medicine, it can be presumed that dental students really do brush their teeth properly, while in the group of students from other faculties reality may differ from their belief of properly brushing their teeth (14). This is supported by reports of more frequent gingival bleeding and inadequate actions when it occurs in group of students from other faculties. Dental students are also regular in their dental check-ups. This may be due to the fact that large number of dental students has at least one parent that is a dentist, so availability of dental care in this group is increased. Another reason that can influence this difference is generally higher level of parental education in dental students' group which greatly determines socioeconomic standard and influences oral health habits (9). Students of other faculties often visit a dentist when symptoms appear. This represents a negative behavioral pattern which is probably a result of less developed consciousness about hygienic and preventive measures. Interestingly, study performed in Brazil showed that patients that visit dentist only in case of emergency usually perceive their oral health as bad (8). In his study of male adolescents aged 18-28, Špalj (16) has found positive correlation between educational level of subjects, frequency of brushing teeth and regularity of dental check-ups. Student's oral hygiene habits have been studied in UK and China (18, 21), Jordan (23), Greece, Ja-

matologije iz Velike Britanije i Kine u 13% slučajeva, odnosno 54%, posjećuju stomatologa zbog simptoma, za razliku od naših studenata koji rjeđe zbog toga odlaze liječniku (10,1%). Čak i studenti ostalih fakulteta zbog boli rjeđe posjećuju stomatologa (22,2%) od kineskih studenata. To se pripisuje kulturalnim razlikama i dostupnosti stomatološke usluge. U Kini radi jedan stomatolog na 40 tisuća stanovnika (21), a broj stanovnika po jednom stomatologu u Hrvatskoj iznosi oko 1140, što je velika razlika i može pridonijeti kvalitetnijoj zdravstvenoj skrbi. U Indiji 50% ispitanih studenata stomatologije odlazi stomatologu kada se pojavi bol, no taj se postotak smanjuje prema višoj godini (33,3% na četvrtoj godini). To upućuje na činjenicu da edukacija tijekom studija utječe na njihovo razmišljanje i ponašanje. Naši studenti stomatologije, prema tome koliko često odlaze stomatologu, bliže su zapadnim zemljama. Na primjer, 60% korejskih studenata i 41% japanski idu stomatologu kada ih zaboli zub, za razliku od 1% studenata stomatologije u SAD-u i 3% u Finskoj (24, 25).

U Kini su studenti stomatologije i medicine prve i pete godine bili uspoređeni na temelju upitnika HU-DBI-ja. Tamo je također uočen porast pozitivnih ponašanja prema oralnom zdravlju studenata stomatologije na petoj godini, za razliku od onih na medicini čija su stajališta uglavnom ostala nepromijenjena (18).

Zaključak

Velike razlike u upitniku o oralno-higijenskim navikama pronađene su u 11 od 21 pitanja, te se može ocijeniti da studenti stomatologije općenito imaju roditelje s višom stručnom spremom, te bolje održavaju oralnu higijenu, rjeđe im krvari zubno meso i redovitije posjećuju stomatologa od studenata ostalih fakulteta Sveučilišta u Zagrebu. U konzumiranju slastica, alkohola i cigareta ne razlikuju se od ostalih studenata.

pan (22), and India (19). Because HU-DBI has been used in these studies, only limited comparison is possible in cases of questions that are similar to those from Špalj's questionnaire used in our study. Dental students from UK and China visit the dentist because of symptoms in 13% and 54% respectively, while students of dental medicine in our study visit the dentist solely because of toothache in only 10.1%. When compared to dental students from China in this category, even other students in our study have significantly lover percentage of dental check-ups exclusively because of symptoms (54% vs. 22.2%). This might be due to cultural differences and availability of dental care. In China, there is 1 dentist on 40 000 inhabitants (21), while in Croatia, there is 1 dentist on 1140 inhabitants, which represents considerable difference and can contribute to an increased level of health care. Even in India, 50% of dental students visits the dentist only when they experience symptoms, but there is trend of reducing that percentage when higher years of faculty are observed (33.33% of students of 4th year). This phenomenon suggests that education during undergraduate study affects behavior and attitudes of students. Students of dental medicine in our study are closer to the western countries when frequency of dental checkups is considered. For example, 60% of Korean oral hygiene students and 41% of Japanese students visit the dentist only if they experience pain, while only 1% of dental hygiene students in USA and 3% of Finnish students does the same (24,25).

First and fifth year students of dental medicine and medicine were compared using HU-DBI questionnaire in China. Increase of eligible oral health related behaviors was observed only at 5th year of dental medicine, while attitudes of medical students mostly remained unchanged (18).

Conclusion

Substantial differences in oral hygiene habits were found in 11 out of 21 questions, where dental students generally have parents with higher education levels, better oral hygiene, less gingival bleeding and more frequently visit the dentist because of check-up than students of other faculties of the University of Zagreb. Students of dental medicine do not differ from other students in consuming sweets and usage of alcohol and cigarettes.

Abstract
Undergraduate dental education changes students's perception of oral health, as well as oral hygiene habits and attitudes. **Aim** of this study was to compare oral hygiene and oral health habits and attitudes between 4th year students of dental medicine and 4th year students of other faculties of University of Zagreb in order to determine the possible extent and significance of differences. **Material and Methods**: Total number of subjects was 151 which included 79 dental students (4th year) and 72 students of other faculties (4th year) of University of Zagreb, of both genders. Modified oral hygiene habits and attitudes questionnaire according to Špalj consisting of 21 questions was used. Data were statistically analyzed using SPSS ver. 16.0 software. **Results** showed difference between two groups, where dental students had better oral hygiene habits and better oral health attitudes compared to their colleagues from other faculties. Dental students were better instructed in brushing techniques, brush more often, use additional means of oral hygiene, have lesser prevalence of gingival bleeding and visit dentist more often then their colleagues from other faculties. **Conclusion:** Because of greater awareness of oral health problems and improved knowledge on preventive measures, students of dental medicine could positively contribute to the oral health of their patients and their colleagues by education, but also by their own example as a role – model.

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