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## Motivacija za upis na studij i percepcija o karijeri među studentima Stomatološkog fakulteta Sveučilišta u Zagrebu

### *Motivation and Career Perceptions of Dental Students at the School of Dental Medicine University of Zagreb, Croatia*

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#### Sažetak

**Svrha:** Zdravstveni studiji obično se smatraju složenima, zahtjevnima i dugotrajnima. Pravilna motivacija za izbor karijere u zdravstvu veoma je važna za uspješan završetak studija. Svrha ovog istraživanja bila je dobiti uvid u motivaciju i percepciju o budućoj karijeri među studentima stomatologije na Stomatološkom fakultetu Sveučilišta u Zagrebu. **Ispitanici i postupci:** Na temelju specifičnih pitanja iz dostupne literature pripremljen je anketni upitnik i distribuiran među 270 studenata prve godine tijekom akademskih godina 2013., 2014. i 2015. **Rezultati:** Ispunilo ga je ukupno 206 studenata, a stopa odziva bila je 76,3 posto. 26,9 posto studenata upisalo je studij stomatologije jer je to bio njihov prvi izbor, 16,4 posto studenata stomatologiju doživljava kao profesiju u kojoj je jednostavno dobiti posao. Njih 9,9 posto na upis je motivirala mogućnost visokih plaća koje mogu zaraditi kao doktori stomatologije. Nakon završetka studija 45,4 posto studenata prve godine planira otvoriti vlastitu privatnu stomatološku ordinaciju. **Zaključak:** Dobiveni rezultati pružaju zanimljive podatke o motivaciji studenata za upis, te o njihovim očekivanjima u vezi sa studijem i profesionalnom karijerom. Prikupljeni podatci mogu se koristiti za daljnje usavršavanje studijskog programa i nastavnog procesa.

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#### Ključne riječi

studenti stomatologije; izbor zanimanja; motivacija; društvena percepcija; Stomatološki fakultet; Hrvatska

#### Uvod

Nit vodilja čovječanstva oduvijek je bila znatiželja. Svako ljudsko biće ima želju za napretkom, te društvenim, intelektualnim i moralnim razvojem. Motivacija studenata za odabir karijere u biomedicinskom području veoma je zanimljiva nastavnicima i srednjoškolicima koji su suočeni s najvažnijom odlukom u svojem dosadašnjem životu – što studirati (1–3). Biomedicinski fakulteti oduvijek su smatrani kompleksnima, zahtjevnima i dugotrajnima (4, 5). Valjana motivacija za odabir jednoga od njih vrlo je važna da bi se studij uspješno i završio (4, 6–8).

Mnogo čimbenika utječe na odluku pojedinca u odabiru profesije te nam razumijevanje istih može pomoći u tumačenju zašto i kako izabiremo određenu karijeru. Kad je riječ o dentalnoj medicini, motivacija za upis razlikuje se među državama i spolovima. Tako u Indiji većina studenata odabire dentalnu medicinu jer u obitelji imaju stomatologa koji ih je potaknuo na takav izbor (1). Pomaganje drugima i ekonomski razlozi, drugi je najčešći odgovor. Istraživanje provedeno na Sveučilištu znanosti i tehnologije u Jemenu pokazalo je da studenti daju prednost ekonomskim razlozima (9). Gotovo

#### Introduction

Curiosity has always been the greatest guiding light of the society. Every human being has an inherent desire to progress and, also, to experience social, intellectual and moral advancement or growth. Students' motivation in choosing a career in the health professions is of great interest for educators and high school students who are faced with the most important decision so far - what to study (1-3). Health care studies are usually considered to be complex, demanding and time consuming (4, 5). Right motivation in choosing a career in the health professions is of highest importance for successful completion of the study (4, 6-8).

There are numerous factors that influence decision making process and understanding them can help us explain why and how we choose to pursue specific career fields. Regarding dental medicine, motivating factors differ from country to country and also depend on gender. In India, the majority of students choose dental profession because they have someone in the family in the same business who encouraged them to choose dentistry as a professional career (1). The possibility to help people and economic reasons are the second most com-

50 posto njih smatra da će lako pronaći posao u stomatološkoj struci nakon završetka studija. Scarbecz i Ross na Stomatološkom fakultetu Sveučilišta Tennessee ustvrdili su kako je želja za pomaganjem drugima studenticama najveća motivacija (10). Sljedeći motiv studenticama za upis studija stomatologije dentalne medicine jest stajalište da stomatološka karijera ostavlja dovoljno vremena za obiteljski život. Za razliku od njih, muškarci su to stavili na prvo mjesto. Njima je na drugom mjestu mogućnost samozapošljavanja.

Pretragom relevantne literature za hrvatske studente nisu pronađeni slični podaci. Svrha ovog istraživanja bila je dobiti uvid u motivaciju i percepciju profesionalne karijere studenata stomatologije na Stomatološkom fakultetu Sveučilišta u Zagrebu.

### Ispitanici i metode

Na temelju specifičnih pitanja iz dostupne literature sastavljen je anketni upitnik i ukupno je 270 anketnih listića podijeljeno studentima prve godine studija stomatologije na Stomatološkom fakultetu Sveučilišta u Zagrebu tijekom akademskih godina 2013., 2014. i 2015. Svrha ankete bila je potanko objašnjena svima, te je svaki student pristupio ispitivanju dobrovoljno i anonimno. Anketa je složena tako da identificira glavne razloge koji su utjecali na odluku pojedinog studenta pri upisu na dentalnu medicinu i na odabir stomatološke profesije. Jedno od pitanja odnosilo se na planove studenata nakon što diplomiraju. Također ih se pitalo što smatraju važnim za uspješan završetak studija. Za statističku obradu dobivenih podataka korišteni su deskriptivna statistika i hi-kvadrat test. Razina statističke značajnosti postavljena je na  $p < 0,05$ .

### Rezultati

Od 270 podijeljenih anketnih listića ispunjeno je 206 primjeraka. Sveukupna stopa ispunjenih anketa je 76,3 posto. 19,9 posto ispitanih bili su muškarci (41), a 80,1 posto žene (165). Svi ispitanici bili su polaznici prve godine fakulteta, u dobi od 18 i 19 godina. Distribucija ispitanika prikazana je u tablici 1.

Prvo pitanje u anketi odnosilo se na motivirajuće čimbenike koji su utjecali na izbor studija dentalne medicine i karijeru u stomatologiji. Studentima je bilo ponuđeno 10 odgo-

mon answers. In a study which was carried out in University of Science and Technology, Yemen, it was shown that students gave preference to economic reasons (9). Almost 50% of Yemen students assumed that it is easy to find a job in dentistry. Scarbecz and Ross from the University of Tennessee College of Dentistry, stated that female students considered helping people to be the most important reason for choosing dental profession (10). Female students rated the extrinsic motive of "job security", that is, an opinion that career in dentistry would give them enough time to be with their families as the second reason for choosing dental profession. This reason was ranked as first by male students. On the other hand, male students' second reason for choosing dental profession was an opportunity of self-employment.

Regarding the results of relevant literature search, there are no available data for Croatian dental students. The aim of this study was to provide insight into motivation and career perceptions of dental students in the University of Zagreb (Croatia) School of Dental Medicine.

### Materials and methods

Based on specific questions from available literature a questionnaire was designed and a total of 270 questionnaires were distributed to the first year students at School of Dental Medicine, University of Zagreb during academic years 2013, 2014 and 2015. The purpose of the questionnaire was clearly explained and student participation was completely voluntary and anonymous. The questionnaire was designed to identify the dominant motivating factors that may have had an impact on student's decision to enrol in the school of dental medicine and choose dentistry as a profession. There was also a question about student's professional plans after graduation. The students were also asked to identify what they consider important for successful completion of their dental study. Descriptive statistics and chi-square tests were used for statistical analysis of the data. The level of statistical significance was set at  $p < 0,05$ .

### Results

In total 270 questionnaires were distributed and the total of 206 questionnaires were fully answered. The overall response rate was 76.3%. 19.9% of the examined participants were male students (41) and 80.1% were female students (165). All examined students were first-year college students who were 18 or 19 years old. The distribution of the participants is shown in Table 1.

In the first question students were asked about motivational factors. They were asked to rate the importance

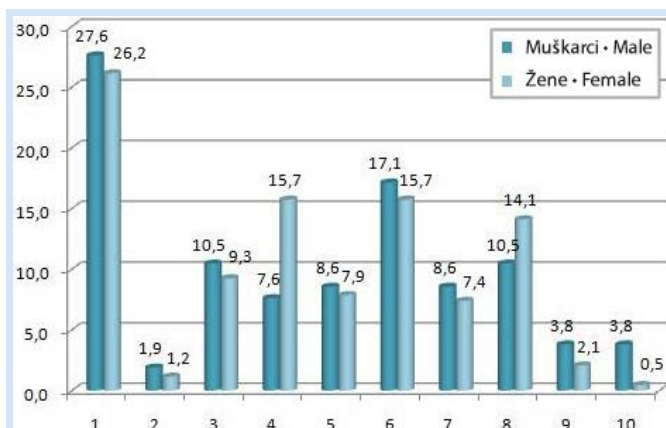
**Tablica 1.** Distribucija ispitanika  
**Table 1** Distribution of participants.

Spol/akademska godina • Gender/Academic year	Muškarci • Male students		Žene • Female students		Ukupno • Total
	N	%	N	%	N
2013	15	23.8	48	76.2	63
2014	13	19.4	54	80.6	67
2015	13	17.2	63	82.8	76
Ukupno • Total	41	19.9	165	80.1	206

vora, a mogli su odgovoriti na tri koja su najviše odgovarala njihovoj motivaciji pri odabiru dentalne medicine. Za 27,6 posto studenata i 26,2 posto studentica, dentalna medicina bila je prvi izbor. Mogućnost lakog pronalaska posla nakon diplomiranja motiviralo je 17,1 posto muških i 15,7 posto ženskih studenata. Treći najčešći odgovor među ženama bila je želja za pomaganjem drugima (15,7 %). Želja za pomaganjem drugima, prema odgovorima muškog dijela ispitanih, našla se na sedmom mjestu (7,6 %). Treći najčešći odgovor među muškarcima bila je mogućnost usklađivanja poslovnog stomatološkog i privatnog života (10,5 %) te obavljanje dobro plaćenog posla (10,5 %). Želja za pomaganjem drugima i mogućnost usklađivanja poslovnog i privatnog života jedini su odgovori u kojima postoje statistički značajne razlike između studenata i studentica ( $p < 0,05$ ). Kao što je već navedeno, za 15,7 posto žena i 7,6 posto muškaraca pomaganje drugima je motivirajuće. Mogućnost usklađivanja privatnog i poslovnog života bilo je motivirajući čimbenik za 14,1 posto žena i 10,5 posto muškaraca. Zanimljiva je činjenica da samo 3,8 posto muških i 2,1 posto ženskih ispitanika ima stomatologa u užoj obitelji. Muškarci i žene stavili su to na osmo mjesto motivirajućih čimbenika. Manje od 2 posto studenata na upis dentalne medicine potaknuli su roditelji. Slika 1. prikazuje motivaciju studenata za odabir stomatološke profesije.

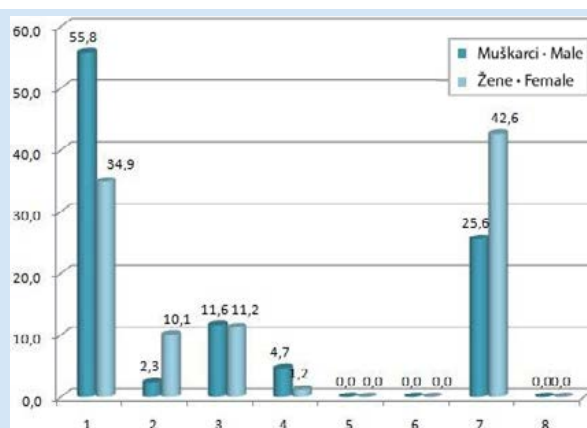
Drugo pitanje odnosilo se na planove nakon diplomiranja. Studentima je bilo ponuđeno osam mogućih odgovora te su mogli odabrati onaj koji najviše odgovara njihovim profesionalnim planovima nakon završetka studija. Kao što prikazuje slika 2., 74,4 posto studenata točno zna gdje će početi raditi. Kod studentica taj postotak pada na 57,4 posto. Većina muškaraca (55,8 %) planira raditi u svojoj privatnoj sto-

of each influence on their choice of a professional career in dentistry. The students were offered 10 possible answers and were allowed to choose 3 answers that best matched their real motivation to start a professional career in dentistry. For 27.6% male and 26.2% female students, dentistry was their first professional choice. The fact that finding a job in Croatia and abroad after graduation is easy was a good motivational factor for 17.1% of male students as well as for 15.7% of female students. The third most commonly chosen answer among female students was a desire for helping people (15.7%). The desire for helping people as motivating factor was on the seventh place among male students (7.6%). The third most commonly chosen answer among male students was a possibility to live their lives privately and to be able to live the life for which they have planned and dreamed as dental professionals (10.5%) and an opportunity to have a well-paid job (10.5%). The desire for helping people and the possibility to have both, private and family life were found to be the only motivating factors with a statistically significant difference between male and female students ( $p < 0.05$ ). As previously mentioned, the desire for helping people was motivational factor for 15.7% of female as well as for 7.6% of male students. The possibility to have a private and family life was a motivating factor for 14.1% of female and for 10.5% of male students. It is interesting that only 3.8% of male and 2.1% of female students had a family member in dentistry. This factor was ranked 8<sup>th</sup> by both male and female students on the list of motivating factors. Less than 2% of students were advised by parents to choose dentistry as a career. Figure 1 shows students' motivation for choosing dental profession.



**Slika 1.** Studentska motivacija za odabir stomatološke profesije: 1 – Dentalna medicina je bila moja želja i prvi izbor, 2 – Poticali su me roditelji, 3 – Kao stomatolog mogu zaraditi puno novca, 4 – Želim pomagati drugima, 5 – Stomatologija je prestižno zanimanje, 6 – Lako je pronaći posao, 7 – Kao stomatolog mogu imati regulirano radno vrijeme, 8 – Kao stomatolog mogu imati normalan obiteljski život, 9 – Netko je u mojoj obitelji stomatolog, 10 – Ostalo

**Figure 1** Students' motivation for choosing dental profession: 1 - Dental medicine was my wish and first choice, 2 - I was advised by my parents, 3 - As a dentist I can earn a lot of money, 4 - I want to help others, 5 - Dentistry is a prestigious profession, 6 - It is easy to find a job, 7 - As a dentist I can have regulated working hours, 8 - As a dentist I can have a normal family life, 9 - A close family member or a relative is a dentist, 10 - Other



**Slika 2.** Planovi studenata u vezi sa zaposlenjem; 1 – Radit ću u svojoj privatnoj ordinaciji, 2 – Bit ću zaposlen u tuđoj privatnoj ordinaciji, 3 – Radit ću u bolnici ili domu zdravlja, 4 – Radit ću na stomatološkom ili sličnom fakultetu, 5 – Radit ću kao prodajni predstavnik u farmaceutskoj industriji, 6 – Neću raditi u dentalnoj medicini, 7 – Ne znam, 8 – Ostalo

**Figure 2** Students' plans regarding employment. 1 - I will work in my own dental practice, 2 - I will be an employee in a private dental practice owned by someone else, 3 - I will work in a hospital or health center, 4 - I will work at dental or related school, 5 - I will work as sales representative in pharmaceutical industry, 6 - I will not be involved in practicing dentistry, 7 - I do not know, 8 - Other

matološkoj ordinaciji, a samo 34,9 posto žena dijeli to mišljenje. Žene su češće spremne biti zaposlene u tuđim privatnim ordinacijama negoli imati svoju (žene 10,1 %, muškarci 2,3 %). Rad u bolnici ili u domu zdravlja manje je privlačan za ispitanike obaju spolova. Muški studenti (4,7 %) ambiciozniji su kad je riječ o akademskoj karijeri i o radu na fakultetu (žene 1,2 %). Studentima je dana i mogućnost odabira karijere u farmaceutskoj industriji, čak i izvan dentalne medicine, ali nitko od ispitanih nije imao takve planove.


U trećem pitanju, studenti su rangirali prema važnosti sedam čimbenika koje su oni smatrali bitnima za visoku kvalitetu studija i uspješno diplomiranje. Žene i muškarci istaknuli su važnost dobrih i kvalitetnih predavanja te kliničke vježbe s pacijentima. Slijede kvalitetni i motivirani nastavnici te suvremena stručna literatura na hrvatskom jeziku, kao što prikazuje tablica 2.

The second question was about dental students' plans after graduation. Students were offered 8 possible answers and were allowed to choose one to match the correct answer in terms of their professional development plan after graduation. As shown in Figure 2, 74.4% of male students had a clear vision about where to start their professional career. In a group of female students, this percentage decreased down to 57.4%. The majority of male students (55.8%) plan to work in their own private dental clinics, which is significantly higher compared to female students (34.9%). Female students are more often ready to work in a private dental practice owned by someone else than to be owners of dental practices (females 10.1%, males 2.3%). Employment in a hospital or in a health center is less attractive than working in a private dental clinic for both, male and female students. Male students (4.7%) showed more ambitions to pursue an academic career by working at dental school than female students (1.2%). Other career options certainly exist and the students can choose to work in pharmaceutical industry. They have a chance to rethink their careers and may choose a job outside the field of dental medicine but none of them showed to have such plans.

In the third question, the students were asked to rate the importance of seven offered factors which they consider important for high quality study and successful graduation. Female and male students emphasized the importance of high quality clinical practice and lectures given by highly motivated academic staff. The most recent literature which is relevant to dental medicine and medicine, written in Croatian language, is also significant, as shown in Table 2.

**Tablica 2.** Stajališta studenata o tome što smatraju bitnim za uspješan završetak studija

**Table 2** Students' attitudes towards factors they consider important for successful completion of their dental studies

	Studenti • Male students	Studentice • Female students
<b>Važnije • More important</b>	1. Dobra i kvalitetna predavanja • High quality lectures	1. Dobre i kvalitetne kliničke vježbe s pacijentima • High quality clinical practice with patients
	2. Dobre i kvalitetne kliničke vježbe s pacijentima • High quality clinical practice with patients	2. Dobra i kvalitetna predavanja • High quality lectures
	3. Kvalitetni i motivirani nastavnici • Highly motivated academic staff	3. Kvalitetni i motivirani nastavnici • Highly motivated academic staff
	4. Suvremena i stručna literatura na hrvatskom jeziku • High quality literature in Croatian language	4. Suvremena i stručna literatura na hrvatskom jeziku • High quality literature in Croatian language
	5. Stručna putovanja • Professional trips	5. Stručna putovanja • Professional trips
	6. Mogućnost e-učenja • Availability of e-learning	6. Mogućnost e-učenja • Availability of e-learning
<b>Manje važno • Less important</b>	7. Suvremena i stručna literatura na stranom jeziku • High quality literature in English	7. Suvremena i stručna literatura na stranom jeziku • High quality literature in English

## Rasprava

U našoj zemlji stomatologija se tradicionalno smatra unosnim, uglednim i perspektivnim zanimanjem. Danas Hrvatska ima oko 4,2 milijuna stanovnika i oko 4000 aktivnih stomatologa. U Hrvatskoj djeluje samo jedan stomatološki fakultet (Stomatološki fakultet Sveučilišta u Zagrebu s oko 100 studenata po godini studija) te dva studija stomatologi-

## Discussion

Dental medicine has traditionally been considered a financially lucrative, prestigious and prosperous profession in Croatia. Today, Croatia has about 4.2 million inhabitants and about 4000 active doctors of dental medicine. There is only one dental school in Croatia (School of Dental Medicine University of Zagreb with about 100 students per year) and two dental stud-



je pri medicinskim fakultetima (Medicinski fakultet Sveučilišta u Rijeci s oko 30 studenata po godini studija te Medicinski fakultet Sveučilišta u Splitu s oko 20 studenata po godini studija). Sveukupno, svake godine na hrvatskom tržištu rada pojavi se između 100 i 130 novih mladih stomatologa. U Republici Hrvatskoj nema privatnih stomatoloških fakulteta, a studij traje šest godina.

Rezultati dobiveni u ovom istraživanju prvi su podaci o motivacijskim čimbenicima te o percepciji karijere među hrvatskim studentima stomatologije. Za 27,6 posto studenata i 26,2 posto studentica stomatologija je bila želja te prvi izbor. Ovi rezultati, zajedno s činjenicom da su za upis na studij stomatologije roditelji savjetovali manje od 2 posto studenata te da samo 3,8 posto muških i 2,1 posto ženskih studenata u užoj obitelji ima stomatologa, upućuju na to da je odluka o upisu na studij donesena samostalno te je bila motivirana drugim čimbenicima, kao što je istaknuto u poglavlju s rezultatima. Usporedba pet najčešćih motivacijskih čimbenika za odabir stomatologije u državama Europe, Azije, Afrike, Sjeverne i Južne Amerike pokazala je da se motivacijski čimbenici mogu podijeliti u četiri glavne skupine – ekonomski, profesionalni, strukovni i osobni (tablica 3.). U mnogim se državama dobre mogućnosti zapošljavanja i financijski razlozi nalaze na prvom mjestu.

Kao što je prikazano, postoji golema razlika između broja studenata i studentica – s muško-ženskim omjerom 1:4. Feminizacija stomatologije uočena je i u drugim zemljama (9, 11, 14, 15). Kao jedan od najvažnijih motivacijskih čimbenika sudionice su izdvojile pomaganje ljudima, što se slaže s rezultatima istraživanja provedenog na nekoliko javnih fakulteta stomatologije u Sjedinjenim Američkim Državama (10). Muški studenti ne dijele to altruističko mišljenje te kao važnije navode novac, ugled i društveni status. Oba spola slažu se da će kao stomatolozi imati dovoljno vremena za obitelj i postavljaju taj razlog kao četvrti za upis na studij dentalne medicine. Dovoljno vremena za obiteljski život izravno je povezano s reguliranim radnim vremenom, što je prema našim studentima jedna od karakteristika bavljenja stomatologijom, a slični zaključci mogu se naći i u drugim istraživanjima (16).

Dobre mogućnosti za zapošljavanje u mnogim su državama visoko postavljene na listi motivacijskih čimbenika (1, 9). U nekima je to realnost, ali u zemljama poput Hrvatske to je nažalost samo mit, posebno u kombinaciji s očekivanjem visoke plaće. Više od 45 posto hrvatskih studenata prve godine dentalne medicine vidi se nakon diplome u vlastitoj privatnoj ordinaciji. To je važan pokazatelj nedostatka razumijevanja stomatološke profesije kao iznimno izazovne djelatnosti s mnogo financijskih, pravnih, tehničkih i drugih zahtjeva (17–19). Radni i organizacijski uvjeti na fakultetu znatno su drukčiji u usporedbi s uvjetima u privatnoj stomatološkoj praksi i studenti toga često nisu svjesni. Zbog toga je iznimno važno u stomatološki kurikulum uključiti praktičan rad izvan fakulteta te teoretsko znanje i praktične vještine o upravljanju stomatološkom ordinacijom.

Važnost savjetovanja adolescenata o izboru karijere raste na visoko konkurentnom tržištu rada koje se brzo mijenja. Značenje savjetovanja pozitivno korelira s duljinom školovanja. Produljenje školovanja povećava važnost savjetovanja o

ies at medical schools (School of Medicine University of Rijeka with about 30 students per year and School of Medicine University of Split with about 20 students per year). Altogether, there are between 100 and 130 new young dentists in the Croatian labor market each year. There are no private dental schools in Croatia and the study lasts for 6 years..

The results presented in this study are the first reported data about motivating factors and career perception among Croatian dental students. For 27.6% male and 26.2% female students, dental profession corresponded to their wish and dentistry was their first choice. These results combined with the finding that less than 2% of students were advised to enroll into dental school by their parents and that only 3.8% of male and 2.1% of female students had a dentist among close family members show that the decision to enroll into dental school was taken independently and was motivated by other factors as described in the Results section. A comparison of top 5 motivational factors for choosing dentistry between countries from Europe, Asia, Africa, South and North America showed that motivational factors can be divided in four main groups: economic, professional, vocational and personal (Table 3). In many countries, good job opportunities and financial reasons rank first.

As presented, there is a huge difference between the number of male and female students – with male to female ratio of 1:4. The feminization of dentistry has been noticed in other countries as well (9, 11, 14, 15). As one of the most important motivational factors, the female respondents highlighted helping people, which is in line with the results from the study conducted in several public dental schools in the United States (10). Male students did not share this altruistic view, but rather placed money, prestige and social status as more important factors. Both genders agreed that by being a dentist they would have enough time for family, placing it as the fourth reason for their enrolment in dental school. Spending enough time with family is directly related to regulated working hours; hence our students stated this reason as one of the characteristics of being a dentist. Other studies have come to similar conclusions (16).

'Good job opportunities' was found to be the highest ranking motivator in many countries (1, 9). In some countries this is a reality, but in countries such as Croatia it is unfortunately only a myth, especially if combined with high salary expectations. More than 45% of Croatian first year dental students see themselves in their own dental practice after graduation. This is an important indicator showing lack of understanding of dental profession as an extremely challenging business with a lot of financial, legal, technical and other requirements (17-19). Work and organizational conditions in a dental school are very different from conditions in a private dental practice and students are often unaware of these differences. Therefore, implementation of practical work outside dental school as well as implementation of theoretical knowledge and practical skills needed for a successful management of dental office in dental curricula is of paramount importance.

Importance of career counselling among adolescents increases on the highly competitive and fast changing labor

**Tablica 3** Usporedba pet najčešćih motivacijskih čimbenika za studij stomatologije među državama  
**Table 3** Comparison of top 5 motivational factors for choosing dentistry between countries

Autor • Author	Aggarwal, 2012 (1)	Banabilh, 2013 (9)	Carmo Matias Freire, 2011 (11)	Sulong, 2014 (12)	Orenuga, 2006 (13)	Scarbecz, 2002 (10)	This study
Država • Country	Indija • India	Jemen • Yemen	Brazil • Brazil	Irska • Ireland	Nigerija • Nigeria	SAD • USA	Hrvatska • Croatia
Broj studenata • Number of students	369	300	296	305	197	430	206
Pet najčešćih motivacijskih čimbenika za odabir stomatologije • Top 5 motivational factors for choosing dentistry							
1	U mojoj obitelji ima stomatologa i oni su me potaknuli • There are dentists in my family, and I was encouraged by them	Lako je naći posao • Easy to find jobs	Poslovna koncepcija • Job concept	Pomaganje ljudima • Helping people	Dobra poslovna mogućnost • Good job opportunity	Stomatologija je isplativija od ostalih poslovnih mogućnosti koje su mi dostupne • Dentistry pays better than other job options available to me	Lako je naći posao • It is easy to find a job
2	Volim pomagati ljudima • I like helping people	Volim liječiti ljude kako bih im poboljšao zdravlje • I like to treat people to improve their health.	Osobno ispunjenje • Personal fulfillment	Profesionalna neovisnost • Professional independence	Prestiž • Prestige	Stvarno želim pomoći ljudima • I really want to help people	Kao stomatolog mogu imati normalan obiteljski život • As a dentist I can have a normal family life
3	Stomatologija pruža stabilan posao • Dentistry offers a stable work	Potaknuo me obiteljski stomatolog • My family dentist encouraged me	Financijski motivi • Financial motives	Rad s ljudima • Working with people	Regulirano radno vrijeme • Regular work hours	Karijera u stomatologiji će mi pružiti dovoljno vremena za obitelj • A career in dentistry will give me enough time to be with my family	Želim pomoći drugima • I want to help others
4	Sam mogu određivati radno vrijeme • I can determine my own hours	Prije sam radio u područjima povezanim sa stomatologijom • I previously worked in fields related to dentistry	Utjecaj drugih • Influence of others	Roditeljski poticaj • Parental encouragement	Financijska nagrada • Financial remuneration	Nema puno rada po pozivu • There is not much "on call" work.	Kao stomatolog mogu zaraditi puno novca • As a dentist I can earn a lot of money
5	Mogu biti svoj šef • I can be my own boss	Mogu raditi vlastiti posao • I can do my own work	Doprinos ljudskom zdravlju • Contribution to people's health	Intelektualno zadovoljstvo • Intellectual satisfaction	Neovisnost • Independence	Sviđa mi se biti sam svoj šef • I like the idea of being my own boss	Stomatologija je prestižno zanimanje • Dentistry is a prestigious profession

karijeri. U slučaju svakog studija, ali posebno onih duljih od 5 ili 6 godina, odgovarajući odabir karijere trebao bi biti učinjen što je prije moguće. Doznati podatke o budućem poslu iznimno je važno. Savjetnici o karijeri bi trebali raditi sa svim studentima kako bi ih potaknuli u traženju karijere koja odgovara njihovim željama i sposobnostima. Savjetovanje o karijeri trebalo bi biti omogućeno studentima prve godine, ali i budućim studentima prije njihova upisa na studij. Smanjenjem broja mogućnosti za zapošljavanje nakon završetka studija povećava se važnost savjetovanja u izboru profesionalne karijere. Na primjer, student koji diplomira na ekonomskom

market. The importance of career counselling is positively correlated to the duration of the study. The increase of the duration of the study increases the importance of career counselling. The right selection of career should be made as early as possible for each study, particularly for those that last 5 or 6 years. Becoming familiar with professional career is of utmost importance. Career counselors should work with all students to encourage them to pursue careers that match their skills and desires. An effective careers counselling service should be offered to first year students and to future students before they enrol in their schools. Importance of career coun-

fakultetu ima mnogobrojne mogućnosti za zapošljavanje, poput financijskih i poreznih usluga, računovodstva, maloprodaje, marketinga, nadzora, turizma i mnogih drugih. Suprotno tomu, student koji diplomira na stomatološkom studiju može raditi jedino kao stomatolog. Obično ne postoje druge mogućnosti za upotrebu stomatološkog znanja i vještina.

U mnogim zemljama studenti koji biraju medicinu ili stomatologiju kao buduće zanimanje često su najbolji učenici srednjih škola ili gimnazija. U Hrvatskoj najbolji učenici srednjih škola ili gimnazija upisuju farmaceutski fakultet, stomatološki fakultet te medicinski fakultet (20). Ta se zanimanja smatraju najuglednijima i najuspješnijima. Iako je to čast, istodobno je i velika odgovornost te izazov za svaki od tih fakulteta te za njihovo nastavno osoblje. Oni imaju zadatak od najboljih učenika učiniti najbolje stručnjake s najvišim sposobnostima za državno, europsko te svjetsko tržište rada.

Iako postoje neki primjeri dobre prakse (poput smotre sveučilišta, dana otvorenih vrata nekih fakulteta, dana izbora zanimanja, itd.), općenito sustav savjetovanja o izboru karijere adolescenata i studenata prvih godina fakulteta u Hrvatskoj nije dobro razvijen, te nije izravno povezan s potrebama tržišta rada. To uzrokuje najmanje dva problema. Prvi je da studentima koji upisuju fakultet bez odgovarajućeg znanja o svojem studiju i budućoj profesionalnoj karijeri treba više vremena za završavanje studija, a drugi je, ako ne postoji izravna veza između potreba tržišta rada i studijskog programa, postoji velik rizik da će studenti koji diplomiraju biti dulje nezaposleni. To ih može prisiliti na razmišljanje o promjeni zanimanja, što može uzrokovati daljnje troškove ili u najlošijem slučaju iseljenje u države koje nude bolje mogućnosti zapošljavanja. U posljednjem slučaju nastaje višestruka i dugotrajna šteta koja utječe na ekonomske i demografske pokazatelje.

## Zaključak

Hrvatski studenti dentalne medicine ne razlikuju se od većine svojih kolega u drugim državama kad je riječ o motivaciji i profesionalnim očekivanjima. Studenti su istakli da je dentalna medicina bila njihov primarni interes. Glavni razlozi zbog kojih se odlučuju za studij stomatologije jesu općenito mišljenje da je lako pronaći posao nakon završetka studija, želja za samozapošljavanjem te dovoljno vremena za obiteljski život. Jedan od razloga je baziran na općem mišljenju da je lako naći posao nakon diplomiranja.

Propitivanje prvog odabira nije neuobičajeno za studente prve godine. U dentalnoj medicini, kao zahtjevnom studiju i izazovnom zanimanju, vrlo je važno savjetovanje adolescenata i studenata prve godine o izboru karijere. Manjak viso-

selling is negatively correlated to different employment opportunities after graduation. Decreasing the number of different employment opportunities increases the importance of career counselling. For example, a student graduated from the faculty of economics has numerous employment possibilities such as financial services, tax services, accounting services, retail, marketing, controlling, tourism and many more. On the other hand, after graduation from dental school, a student can begin practicing only as a general dentist. Usually, there are no other options to employ dental knowledge and skills.

In many countries, the students choosing medicine or dental medicine as their professional career are often best performing high school or secondary school (gymnasium) students. In Croatia, the best performing high school (or gymnasium) students enrol in the Faculty of Pharmacy, School of Dental Medicine or School of Medicine (20). These professions are considered to be most prestigious and prosperous. Although this is an honor, at the same time it is also a huge responsibility and challenge for each of these schools and their academic staff. They have to accomplish a very difficult task: to educate the best performing students in such a way to become best professionals with highest skills and competences for national, European and global labor market.

Although there are some examples of good practice (such as university fairs, open days of some schools, career days, etc.), in general, the career counselling system among adolescents and first year students in Croatia is not well developed and it is not directly associated with labor market needs. As a result, at least two problems arise. First, the students enrolling in dental school without sufficient knowledge on their study and professional career need more time to complete their studies. Second, if there is no direct link between the needs of labor market and the university program, there is a high risk for graduated students to be unemployed for a longer period. This situation could make them consider a career change, which can cause further costs or in the worst case scenario, dental professionals can become migrants seeking better employment opportunities and higher standards of living within countries and across international borders. In consequence, there will be a multiple and long lasting damage affecting national economy and demography.

## Conclusion

Croatian dental students do not differ from the majority of their colleagues in other countries regarding their motivation and professional expectations. The students reported that dental medicine was their primary field of interest. There were many compelling reasons to choose dentistry as a career: self-employment, balanced lifestyle - having enough time to spend with family. One reason was based on general opinion that it is easy to find a job after graduation.

It is not uncommon for first year students to question their original choice. Since dental medicine is a demanding study and challenging profession, career counselling for adolescents and first year students is very important. Lack of high quality career counselling can extend the time which



kokvalitetnog savjetovanja o karijeri može produžiti vrijeme potrebno studentima za završetak studija te se zbog slabe veze s tržištem rada može produžiti vrijeme potrebno za pronalazak odgovarajućeg posla.

### Sukob interesa

Nije bilo sukoba interesa.

students need to complete their studies. A rather weak association with labor market may result in prolonged periods of unemployment.

### Conflict of interest

None declared.

#### Abstract

**Purpose:** Health care studies are usually considered to be complex, demanding and time consuming. The right motivation toward choosing a career in the health field is of utmost importance for the successful completion of studies. The aim of this study was to gain insight into the factors motivating students at the School of Dental Medicine University of Zagreb, Croatia and, also, to examine their career perceptions. **Material and Methods:** Based on specific questions from available literature, a questionnaire was designed and a total of 270 questionnaires were distributed to the first year students during 2013, 2014 and 2015. **Results:** A total of 206 students responded, for a response rate of 76.3%. 26.9% of students enrolled in dental studies because it was their first career choice; 16.4% of them believed that it is easy to find a regular job in dentistry. 9.9% of students thought that salaries are high in the field of dental medicine. 45.4% of the first year students were interested in a career in private practice after graduation. These results provide interesting clues to motivation and give additional insights into the expectations of students regarding their studies and profession. **Conclusion:** The obtained data can be used for the further improvements in the quality of dental study curricula and teaching process.

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