UČESTALOST KONZUMIRANJA DUVANA I STAVOVI STUDENATA ZDRAVSTVENIH STUDIJA O UPOTREBI DUVANA U CRNOJ GORI: GLOBALNO ISTRAŽIVANJE STUDENATA ZDRAVSTVENIH STUDIJA U CRNOJ GORI

ORIGINALNI RAD

ORIGINAL ARTICLE

FREQUENCY OF TOBACCO USE AND THE ATTITUDES OF HEALTH PROFESSIONS STUDENTS ON TOBACCO USE IN MONTENEGRO: GLOBAL HEALTH PROFESSIONS STUDENT SURVEY IN MONTENEGRO

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SAŽETAK

Uvod: Uloga zdravstvenih radnika u savetovanju pacijenata o štetnom uticaju duvana na zdravlje i načinima odvikavanja od te loše navike je velika. Međutim, konzumiranje duvana je izazov i za same zdravstvene profesionalce, kao i za studente zdravstvenih studija.

Cilj: Cilj rada je bilo utvrđivanje učestalosti pušenja duvana među studentima fakulteta zdravstvenog usmerenja u Crnoj Gori i ispitivanje njihovih stavova koji se odnose na mehanizme kontrole duvana.

Metode: Istraživanje predstavlja sekundarnu analizu podataka dobijenih iz istraživanja sprovedenog među studentima fakulteta zdravstvenog usmerenja u Crnoj Gori, u periodu od oktobra 2010. do marta 2011. godine.

Rezultati: U 30 dana pre sprovođenja istraživanja, 24,8% ispitanika je koristilo duvan, dok je unutar fakultetskih prostorija, 38,2% studenata konzumiralo cigarete tokom godine koja je prethodila istraživanju. O važnosti obezbeđivanja obrazovnog materijala pacijentima, kao podrške odvikavanju od pušenja, učilo je 44,6% pušača i 52,9% nepušača, ali je 35,3% pušača i 28,0% nepušača dobilo formalnu obuku kako da pacijente odvikavaju od pušenja. Stav da su zdravstveni radnici koji puše cigarete manje pogodni da savetuju pacijente da prestanu sa pušenjem imalo je 63,7% pušača i 81,7% nepušača ($p < 0,001$). Za 70% je bila manja verovatnoća da će studenti šeste godine fakulteta zastupati taj stav. Takođe, za 40% je bila manja verovatnoća da će isti stav zastupati oni studenti koji su smatrali da ne treba zabraniti pušenje u restoranima, a za 50% je bila manja verovatnoća da će taj stav zastupati oni studenti koji su smatrali da zdravstvenim radnicima ne treba posebna obuka u tehnikama odvikavanja od pušenja.

Zaključak: Istraživanje je pokazalo da je neophodno unaprediti kurikulume zdravstvenih studija i poboljšati formalnu obuku za sticanje znanja o štetnim efektima duvana na zdravlje, kao i za sticanje veština odvikavanja pacijenata od pušenja, koje su zasnovane na dokazima, što bi imalo indirektni efekat smanjenja upotrebe duvana među studentima.

Ključne reči: kontrola duvana, zdravstveni radnici, obuka

ABSTRACT

Introduction: Health professionals play a significant role in advising patients on the harmful effects of tobacco on human health and on the ways of abandoning this bad habit. However, tobacco consumption is also a challenge for health professionals themselves, as well as for medical students.

Aim: The objective of this study was to estimate the prevalence of smoking among students of health sciences in Montenegro, as well as to examine their attitudes related to tobacco control mechanisms.

Methods: This is a secondary analysis of the Global Health Professions Student Survey, which was conducted by the Ministry of Health of Montenegro, in the period between October 2010 and March 2011.

Results: In the 30 days preceding the survey, 25% of respondents had used tobacco. During the year preceding the survey, 38% smokers had consumed cigarettes on school premises. Of the respondents, 44.6% of smokers and 52.9% of non-smokers had been taught on the subject of the importance of providing educational material to patients, as a form of support to smoking cessation, but only 35% of smokers and 28% of non-smokers had received formal training on how to instruct patients to give up smoking. A total of 63.7% smokers and 81.7% non-smokers ($p < 0.001$) expressed the belief that health professionals who smoked cigarettes were less suited to advise patients on smoking cessation. There was a 70% lower probability that sixth year students would support the above stated attitude. Also, there was a 40% lower probability that the same attitude would be supported by students who felt that smoking in restaurants should not be banned in restaurants, and a 50% lower probability that this attitude would be supported by those students who believed that health workers do not need special training in smoking cessation techniques.

Conclusion: The study showed that it was necessary to improve the curricula at health sciences faculties and improve formal training on the harmful effects of tobacco on human health, as well as to improve the training for acquiring evidence-based smoking cessation skills, which would have an indirect effect of reducing tobacco use among students.

Key words: tobacco control, health workers, training

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UVOD

Zdravstveni stručnjaci širom sveta upozoravaju na činjenicu da postoji globalna epidemija upotrebe duvana u obliku pušenja cigareta i lule, žvakanja i ušmrkivanja duvana ili pasivnog udisanja duvanskog dima. Pušenje cigareta, iako socijalno prihvatljiva navika, jeste zdravstveno rizično ponašanje [1], od čijih posledica, prema proceni Svetske zdravstvene organizacije (SZO), svake godine umire oko 8,7 miliona ljudi [2]. Iako je ostvaren značajan napredak u svetu, po pitanju smanjenja prevalencije upotrebe duvanskih proizvoda, duvanski dim i dalje ostaje jedan od glavnih razloga obolevanja i preranog umiranja stanovništva [3]. Prevalencija pušenja, na globalnom nivou, smanjena je sa 22,7% na 17,5% [2]. Takođe, smanjena je prodaja cigareta globalno, što ne zadovoljava, imajući u vidu da je duvanska industrija plasirala nove proizvode, kao što su elektronske cigarete i proizvodi koji zagrevaju duvan, a čija su ciljna grupa upravo mladi ljudi [2].

Prvi naučni dokazi o štetnim efektima pušenja pojavili su se sredinom prošlog veka, kada je dokazana uzročna povezanost pušenja i karcinoma bronhija i pluća, infarkta miokarda i hronične opstruktivne bolesti pluća (HOBP) [4]. Značajnu ulogu u smanjivanju ove životno ugrožavajuće navike mogu da imaju zdravstveni radnici [5], koji godišnje pregledaju oko 70% pušača [6]. Zdravstveni profesionalci bi trebalo da imaju vodeću ulogu u prevenciji pušenja u jednoj društvenoj zajednici, kao savetnici, ali i kao uzori odnosa prema zdravlju [7]. Kao davaoci zdravstvenih usluga, oni igraju ključnu ulogu u savetovanju pušača da prestanu sa pušenjem, kao i motivisanju ljudi da ne počinju sa konzumiranjem duvana [8]. Zdravstveni radnici bi trebalo da osobama obolelim od karcinoma daju savete o povećanom riziku koji je povezan sa nastavkom pušenja, o načinima na koji mogu da prestanu sa konzumiranjem cigareta, te ih mogu informisati o postojećim tretmanima za odvikavanje, koje pokriva njihovo zdravstveno osiguranje [9].

Mladi ljudi predstavljaju deo populacije koji je najpodložniji svim oblicima rizičnog ponašanja i prihvatanja novih životnih izazova, s obzirom na to da mnogi među njima nemaju čvrsto ustanovljene sisteme vrednosti i obrasce zdravog životnog stila [10]. Pušači su češće oni mladi ljudi koji ne prepoznaju zdravstvene rizike korišćenja duvana i duvanskih proizvoda [11,12]. Značajan porast upotrebe cigareta u periodu između adolescencije i ranog zrelog doba predstavlja snažan prediktor pušenja u odraslom dobu [13]. Veoma je važno da se svede na minimum izloženost bilo kojim duvanskim proizvodima u mladosti, jer je pokazano da nikotin šteti normalnom razvoju mozga, te utiče na moždanu funkciju i kogniciju, pažnju i raspoloženje [14].

INTRODUCTION

Health experts worldwide have been drawing attention to the existing global epidemic of tobacco use in the form of cigarette and pipe smoking, tobacco chewing and sniffing, or passive smoking, i.e., passive smoke inhalation. Smoking cigarettes, although a socially acceptable habit, is, in fact, a behavior that puts a person's health at risk [1], and, according to the estimate of the World Health Organization (WHO), leads to the death of around 8.7 million people every year [2]. Although significant progress has been achieved globally, regarding the decrease of the prevalence of tobacco product use, tobacco smoke remains one of the main causes of illness and premature death of the population [3]. Globally, the prevalence of smoking has been reduced from 22.7% to 17.5% [2]. Also, cigarette sales have been reduced globally, however, this is not satisfactory, since the tobacco industry has introduced new products, such as electronic cigarettes and tobacco heating devices, whose target group are primarily young people [2].

The first scientific proof of the harmful effects of smoking dates back to the middle of the last century, when a causal link was proven to exist between smoking and bronchial and lung carcinoma, myocardial infarction, and chronic obstructive pulmonary disease (COPD) [4]. Health workers can play a significant role in reducing this life-threatening habit [5], as they examine around 70% of smokers, per year [6]. Health professionals should play a leading role in smoking prevention in the community, both through the advice they offer, but also through modelling healthy behavior [7]. As health service providers, they play a key part in counselling smokers on smoking cessation, as well as in motivating people to refrain from taking up tobacco consumption [8]. Health workers should advise people suffering from carcinoma on the elevated risk linked to the continuation of smoking, as well as on the ways that they can stop smoking, and can also inform these patients on the existing treatments for smoking cessation that are covered by the patients' medical insurance [9].

Young people are a part of the general population that is most susceptible to all forms of risky behaviors and to accepting new life challenges, since many youths do not have firmly established value systems or healthy lifestyle norms [10]. Those young people who do not recognize the health risks of the consumption of tobacco and its products are more likely to become smokers [11,12]. Significant use of cigarettes in the period between adolescence and early adulthood is a strong predictor of smoking later in life [13]. It is of great importance that exposure to any form of tobacco products in youth should be avoided, as it has been proven that nicotine damages the normal devel-

U sklopu projekta Globalni sistem za nadzor nad duvanom (engl. *Global Tobacco Surveillance System*), Svetska zdravstvena organizacija, Američki centar za kontrolu i prevenciju bolesti i Kanadska asocijacija za javno zdravlje su, 2004. godine, razvili Globalno istraživanje studenata zdravstvenih studija (engl. *Global Health Professional Student Survey – GHPSS*) [15]. Ovo istraživanje implementirano je u više od 20 zemalja Evrope [16]. Zemlje u regionu – Srbija, Albanija, Bosna i Hercegovina i Hrvatska, bile su prve u Evropi u kojima je istraživanje sprovedeno, 2005. godine [16]. Svrha *GHPSS*-a je bila dobijanje podataka o rasprostranjenosti upotrebe duvana među budućim zdravstvenim radnicima i osmišljavanje programa koji bi smanjili upotrebu duvana među njima [15].

Prema podacima Globalnog istraživanja upotrebe duvana među mladima (engl. *Global Youth Tobacco Survey*), od 13. do 15. godine života, prevalencija pušenja je, u 2018. godini, iznosila 7,1% (9,3% dečaka i 4,0% devojčica) [17]. Istraživanje je pokazalo da 9,9% učenika (11,6% dečaka i 8,1% devojčica) predstavlja trenutne korisnike duvanskih proizvoda. Među njima je 6,0% učenika (6,7% dečaka i 5,3% devojčica) koristilo cigarete, a 2,2% učenika (2,8% dečaka i 1,7% devojčica) je koristilo bezdimni duvan [17].

Najčešći oblik konzumacije duvanskih proizvoda u Crnoj Gori je pušenje cigareta [18], što treba posmatrati u kontekstu uticaja porodice i vršnjaka, zdravstvene prosvećenosti o opasnostima korišćenja duvana, sve veće konzumacije elektronskih cigareta i nedovoljne kontrole Zakona o ograničavanju upotrebe duvanskih proizvoda, u smislu dostupnosti mladim ljudima.

Istraživanje o rasprostranjenosti upotrebe duvana u populaciji Crne Gore ukazuje na visoku prevalenciju, jer je više od trećine (35,4%) odraslih (starosti 15 do 64 godina) prijavilo aktivno pušenje. Pri tome, u ovoj populacionoj grupi je za 1% više žena nego muškaraca konzumiralo duvanske proizvode [19].

Paradoksalno je da studenti zdravstvenih studija kontinuirano puše cigarete, i pored brojnih informacija o štetnim efektima upotrebe duvana, koje dobijaju tokom stručnog medicinskog obrazovanja [20,21,22]. Osposobljavanje studenata zdravstvenih studija da pružaju efikasne, tačne i dostupne savete pacijentima, o svim aspektima zdravlja [23], pa i pušenja, predstavlja važan zadatak za zdravstveni kadar [24], za koji se može reći da je ogledalo javnog zdravlja u zemlji.

Svrha ovog istraživanja jeste utvrđivanje prevalencije pušenja duvana među studentima svih fakulteta zdravstvenog usmerenja u Crnoj Gori, te utvrđivanje njihovih stavova prema pušenju duvana, kao i ispitivanje značaja postojećeg nastavno-obrazovnog programa u toku dodiplomskih (osnovnih) studija za kontrolu i prevenciju pušenja.

opment of the brain and influences brain function and cognition, attention and mood [14].

In 2004, within the project – Global Tobacco Surveillance System, the World Health Organization, the American Centers for Disease Control and Prevention, and the Canadian Public Health Association, developed the Global Health Professions Student Survey – GHPSS) [15]. This survey was implemented in more than 20 European countries [16]. The countries in the region – Serbia, Albania, Bosnia and Herzegovina, and Croatia, were the first European countries where this survey was carried out, in 2005 [16]. The purpose of the GHPSS was to obtain data on the prevalence of tobacco use amongst future health workers and to design programs that would reduce tobacco consumption amongst them [15].

According to the data of the Global Youth Tobacco Survey, the smoking prevalence in the age group 13 – 15 years, in the year 2018, was 7.1% (9.3% of boys and 4.0% of girls) [17]. The survey showed 9.9% of students (11.6% of boys and 8.1% of girls) to be current tobacco product users. Amongst them, 6.0% of students (6.7% of boys and 5.3% of girls) used cigarettes, while 2.2% of students (2.8% of boys and 1.7% of girls) used smokeless tobacco products [17].

The most frequent form of tobacco product consumption in Montenegro is smoking cigarettes [18], which should be observed in the context of the influence of the family, peer pressure, inadequate and incomplete health prevention and control of the implementation of the Law on Limiting the Use of Tobacco, in the sense of the availability and low prices of tobacco products.

The survey on the prevalence of tobacco use in the population of Montenegro indicates a high prevalence, since more than a third (35.4%) of adults (aged 15 to 64 years) reported that they actively smoked. In this population group, by 1% more women than men reported the use of tobacco products [19].

Paradoxically, students of health sciences continuously smoke cigarettes, despite a large body of information on the harmful effects of tobacco use which they have access to during their professional medical training [20,21,22]. Training students of health sciences to provide efficient, accurate, and available advice to patients on all aspects of health [23], including smoking, is an important task for health professionals [24], which can be deemed to reflect the state of public health in a country.

The purpose of the present study is to determine the prevalence of tobacco smoking amongst students of health sciences in Montenegro; to determine student attitudes towards smoking tobacco; as well as to analyze the relevance of the existing curriculum of undergraduate studies with regards to smoking control and prevention.

Stoga je istraživanje sprovedeno među studentima zdravstvenih studija u Crnoj Gori imalo tri konkretna cilja:

1. Utvrditi učestalost pušenja.
2. Ispitati odnos između statusa pušenja i socijalno-demografskih karakteristika (pol, starost i godina studija) studenata; ispitati stavove studenata prema zabranama upotrebe duvana; ispitati stavove studenata o ulozi zdravstvenih radnika u prevenciji pušenja; ispitati stavove studenata prema dodiplomskom profesionalnom obrazovanju.
3. Ispitati moguće prediktore studentskih stavova o tome da li su zdravstveni radnici koji konzumiraju cigarete i druge duvanske proizvode pogodni da savetuju korisnike zdravstvenih usluga, odnosno pacijente, o tome kako da prestanu da puše.

MATERIJALI I METODE

Dizajn studije i ispitivana populacija

Ovo istraživanje je sekundarna analiza podataka dobijenih iz Istraživanja o korišćenju duvana i duvanskih proizvoda među studentima zdravstvenih studija u Crnoj Gori [25], koje je rađeno prema metodologiji Globalnog istraživanja studenata zdravstvenih studija [15].

Istraživanje u Crnoj Gori je studija preseka, sprovedena od oktobra 2010. do marta 2011. godine. Dobijena je saglasnost etičkih komisija Instituta za javno zdravlje i Kliničkog centra Crne Gore, na sve neophodne komponente istraživanja (upitnik, metodologija, način diseminacije dobijenih rezultata). U istraživanju su učestvovale sve visoke škole medicinskog usmerenja (Medicinski fakultet, Stomatološki fakultet i Farmaceutski fakultet u Podgorici, Fakultet za primenjenu fizioterapiju u Igalu, kao i Visoka medicinska škola za sestre u Beranama).

Istraživanjem su obuhvaćeni svi ispitanici koji su bili prisutni na nastavi dana kada je na njihovom fakultetu rađeno istraživanje i koji su dobrovoljno pristali da učestvuju u istraživanju – ukupno 822 ispitanika. Prethodno je ispitanicima objašnjena svrha istraživanja, kao i činjenica da je istraživanje anonimno i da se podaci mogu tumačiti isključivo na nivou celokupnog uzorka ispitanika. Ispitanici su sami popunjavali upitnik uz mogućnost da, u slučaju nerazumevanja pitanja, od anketara potraže objašnjenje. Podaci iz svakog upitnika uneseni su u prethodno kreiranu bazu. Stopa uključenosti ispitanika iznosila je 92% (u odnosu na broj polaznika svih pomenutih fakulteta), a stopa odgovora 98%.

INSTRUMENT ISTRAŽIVANJA I VARIJABLE

Kao instrument istraživanja korišćen je standardni *GHPSS* upitnik [15], koji je preveden i prilagođen u skladu sa posebnim karakteristikama ciljnih grupa u Crnoj Gori. Pre

To this end, the survey carried out among health professions students in Montenegro had three specific goals:

1. Determining the frequency/prevalence of smoking.
2. Analyzing the relationship between smoking status and sociodemographic characteristics (sex, age, university study level/year of study) of the students; analyzing student attitudes towards bans and restrictions related to tobacco use; analyzing student attitudes on the role of health workers in smoking prevention; analyzing student attitudes towards undergraduate professional education.
3. Investigating possible predictors of student attitudes on whether it is appropriate for health workers who smoke cigarettes and use other tobacco products to advise health service users, i.e., patients, on how to stop smoking.

MATERIALS AND METHODS

Study design and participants

This study is a secondary analysis of data obtained from the Survey on the use of tobacco products among health professions students in Montenegro [25], which was carried out in keeping with the methodology of the Global Health Professions Student Survey [15].

The Montenegro survey is a cross-sectional study, carried out between October 2010 and March 2011. The ethics committees of the Institute of Public Health of Montenegro and the Clinical Center of Montenegro approved all the necessary components of the survey (questionnaire, methodology, method of dissemination of the results obtained). All tertiary level medical education institutions (Faculty of Medicine, Faculty of Dental Medicine, and the Faculty of Pharmacy in Podgorica, Faculty of Applied Physiotherapy in Igalo, as well as the Nursing College in Berane) participated in the survey.

The survey included all respondents present in class on the day that the survey was carried out at their school and who volunteered to participate in the survey – a total of 822 respondents. Before the respondents took the survey, its purpose was explained to them as was the fact that the survey was anonymous, and that the data could be interpreted exclusively at the level of the entire sample of respondents. The respondents filled out the questionnaires on their own, with the option of asking the surveyors for clarifications, if needed. The data from each questionnaire were entered into a previously prepared database. The participation rate was 92% (as compared to the number of students at all the above-mentioned schools), and the response rate was 98%.

pristupanja istraživanju, izvršeno je pilotiranje upitnika na jednoj grupi od 20 studenata, kako bi se testiralo vreme potrebno za ispunjavanje upitnika, razumljivost postavljenih pitanja i preciznost u datim odgovorima. Testiranje i predtestiranje pratili su posebno edukovani koordinatori Instituta za javno zdravlje Crne Gore.

Konačna forma upitnika sadržala je 42 pitanja, koja su podeljena u šest celina. Prvi deo upitnika se odnosio na rasprostranjenost upotrebe duvana i drugih duvanskih proizvoda među studentima zdravstvenih studija u Crnoj Gori. Drugi deo upitnika je sadržao pitanja o izloženosti duvanskom dimu u okruženju i stavove ispitanika o zabrani pušenja u školskim i zdravstvenim ustanovama. Treći deo upitnika odnosio se na stavove studenata o politici zabrane prodaje duvana licima mlađim od 18 godina, o zabrani reklamiranja duvanskih proizvoda, zabrani pušenja na javnim i radnim mestima i o ulozi zdravstvenih radnika kao uzora u ponašanju i savetnika za odvikavanje pacijenata od pušenja. Pitanja u četvrtom delu upitnika odnosila su se na ponašanje studenata, samoprocenu prestanka pušenja i na stavove o zdravstvenim radnicima/savetnicima koji puše. Peti deo upitnika se sastojao od pitanja o stavovima koji se odnose na nastavni plan i dodiplomsku edukaciju u vezi sa pušenjem i značajem prestanka pušenja, kao i od pitanja o poznavanju terapijskih metoda uvrštenih u program odvikavanja od pušenja. Poslednja, šesta celina sadržala je pitanja o demografskim podacima (starost, pol, godina studija). Ovako kreiran upitnik omogućio je dodatno (sekundarno) ispitivanje povezanosti rizičnog ponašanja studenata zdravstvenog usmerenja sa njihovim opštim karakteristikama i stavovima prema obrazovanju, regulativi i ulozi zdravstvenih radnika u prevenciji pušenja, sa stanovišta da oni imaju odgovornu ulogu kao budući pružaoci zdravstvenih usluga.

Za potrebe istraživanja određeno je klasifikovanje ispitanika kao "pušača" koje podrazumeva da su to osobe koje su koristile cigarete jedan ili više dana u prethodnih 30 dana [26].

Jedna zavisna varijabla (status pušenja) i 19 nezavisnih varijabli je korišćeno za univarijantni regresioni model (Model 1). Univarijantni model je korišćen za identifikaciju onih stavova i iskaza koji statistički značajno utiču na status pušenja. Nezavisne varijable su bile: pol; starosni intervali (18 – 24, 25 – 29, iznad 29 godina); godine studija (od prve do šeste godine, apsolventi); stavovi o zabranama koji se odnose na duvan i duvanske proizvode (stavovi o zabranama prodaje duvana adolescentima i osobama mlađim od 18 godina; stavovi o zabrani reklamiranja duvanskih proizvoda; stavovi o zabrani pušena u restoranima; stavovi o zabrani pušenja u diskotekama/barovima/kafićima; stavovi o

Instruments and variables

The standard *GHPSS* questionnaire was used as the research instrument [15]. It was translated and adapted to the particular characteristics of target groups in Montenegro. Before the survey was carried out, the questionnaire was piloted on a group of 20 students, in order to test the time necessary for completing the questionnaire, the clarity of the questions, as well as the level of precision of the provided answers. Testing and pretesting were monitored by specially trained coordinators from the Institute of Public Health of Montenegro.

The final version of the questionnaire consisted of 42 questions, divided into six segments. The first segment referred to the prevalence of the use of tobacco and other tobacco products amongst health professions students in Montenegro. The second part of the questionnaire included questions on exposure to tobacco smoke in the environment and the attitudes of the respondents on the ban on smoking in educational and health institutions. The third segment of the questionnaire referred to student attitudes on the policy prohibiting the sale of tobacco to minors (persons younger than 18 years), attitudes on the ban on advertising tobacco products, on banning smoking in public spaces and in workplaces, as well as attitudes on the role of health workers as models of behavior and patient counselors on smoking cessation. The questions in the fourth segment of the questionnaire related to student behavior, to self-assessment on smoking cessation, as well as to attitudes on health workers/counselors who smoke. The fifth segment of the questionnaire included questions on the attitudes related to the curriculum and undergraduate education on smoking and the importance of smoking cessation, as well questions on the knowledge of therapeutic methods included in the program for smoking cessation. The last, sixth segment of the questionnaire was composed of questions related to the respondent demographic data (age, sex, university study level/year of study). The survey, designed in such a way, provided the opportunity of additional (secondary) research of the connection between the risky behavior of health sciences students and their general characteristics and attitudes towards education, regulations, and the role of health workers in smoking prevention, from the point of view of their responsibility as future health service providers.

For the purpose of the survey, the classification of respondents as *smokers* was performed according to the existing WHO definition, which identifies persons using cigarettes for one or more days in the previous 30 days as smokers [26].

One dependent variable (smoking status) and 19 independent variables were used for the univariate regression model (Model 1). The univariate model was used to

zabrani pušenja na svim zatvorenim javnim mestima); isprobavanje/eksperimentisanje sa duvanom; stavovi koji se odnose na ulogu zdravstvenih radnika u prevenciji pušenja („Zdravstveni radnici treba rutinski da savetuju svoje pacijente da ne puše."; "Zdravstveni radnici treba rutinski da savetuju svoje pacijente da ne koriste druge duvanske proizvode."; "Zdravstveni radnici treba da dobiju posebnu obuku za tehnike odvikavanja od pušenja."); uloga zdravstvenih radnika u davanju informacija ili saveta o odvikavanju od pušenja svojim pacijentima („Mogućnosti za prestanak pušenja rastu ako zdravstveni radnik savetuje pacijenta da prestane da puši."); percepcija o dodiplomskoj edukaciji o efektima duvana i tehnikama za odvikavanje od pušenja (dobijanje formalne obuke o tome kako da pacijente odvikavaju od pušenja; učenje o važnosti obezbeđivanja obrazovnog materijala koji bi podržao odvikavanje od pušenja). U model su ušli samo oni stavovi i iskazi koji su pokazali statistički značajnu razliku, a koji su ispitani u odnosu na pušače i nepušače.

U drugom regresionom modelu, prikazana je jedna zavisna varijabla i 13 nezavisnih varijabli. Zavisna varijabla je bila: „Zdravstveni radnici koji puše manje su pogodni da savetuju pacijente kako da prestanu da puše." (Model 2). Model logističke regresije korišćen je za ispitivanje mogućih prediktora za navedenu zavisnu varijablu. Nezavisne varijable su bile sledeće: pol, starosni intervali (18 – 24, 25 – 29, iznad 29 godina); godine studija (od prve do šeste godine, apsolventi); status pušenja; stavovi o zabranama koji se odnose na duvan i duvanske proizvode (stavovi o zabranama prodaje duvana adolescentima i osobama mlađim od 18 godina; stavovi o zabrani reklamiranja duvanskih proizvoda; stavovi o zabrani pušena u restoranima; stavovi o zabrani pušenja u diskotekama/barovima/kafićima; stavovi o zabrani pušenja na svim zatvorenim javnim mestima); isprobavanje/eksperimentisanje sa duvanom; stavovi koji se odnose na ulogu zdravstvenih radnika u prevenciji pušenja („Zdravstveni radnici treba rutinski da savetuju svoje pacijente da ne puše."; "Zdravstveni radnici treba rutinski da savetuju svoje pacijente da ne koriste druge duvanske proizvode."; "Zdravstveni radnici treba da dobiju posebnu obuku za tehnike odvikavanja od pušenja.").

Statističke metode

Za predstavljanje podataka su korišćene osnovne metode deskriptivne statistike. Statistički $\chi 2$ test je primenjen za određivanje statističke značajnosti razlike između dve grupe studenata – pušača i nepušača cigareta (nepušači su predstavljali referentnu kategoriju varijable), u odnosu na sociodemografske karakteristike, stavove i iskaze o edukaciji tokom studija, kao i statistički

identify those attitudes and statements which significantly affect the smoking status. The following were the independent variables: sex; age intervals (18 – 24, 25 – 29, above 29 years of age); the university study level/year of study (from year 1 to year 6, degree candidates); attitudes on bans related to tobacco and tobacco products (attitudes on the ban on selling tobacco to adolescents and persons under the age of 18 years; attitudes on the ban on advertising tobacco products; attitudes on the ban on smoking in restaurants; attitudes on the ban on smoking in discos/bars/caffes; attitudes on the ban on smoking in all indoor public places); trying/experimenting with tobacco; attitudes on the role of health workers in smoking prevention ("Health workers should routinely advise their patients not to smoke."; "Health workers should routinely advise their patients not to use other tobacco products."; "Health workers should receive special training on smoking cessation techniques."); the role of health workers in providing information or advice on smoking cessation to patients ("The possibility of smoking cessation increases if the health worker advises the patient to stop smoking."); the perception of undergraduate training on the effects of tobacco and smoking cessation techniques (receiving formal training on how to help patients stop smoking; learning about the importance of providing educational material that would provide support in smoking cessation). Only those attitudes and statements which demonstrated a statistically significant difference, and which were tested in relation to both smokers and non-smokers were entered into the model.

In the second regression model, one dependent variable and 13 independent variables were presented. The dependent variable was the following: "Health workers who smoke are less suited to advise patients on how to stop smoking." (Model 2). The logistic regression model was used to analyze possible predictors for the above stated dependent variable. The independent variables were as follows: sex; age intervals (18 – 24, 25 – 29, above 29 years of age); university study level/year of study (from year 1 to year 6, degree candidates); smoking status; attitudes on bans related to tobacco and tobacco products (attitudes on the ban on selling tobacco to adolescents and persons under the age of 18 years; attitudes on the ban on advertising tobacco products; attitudes on the ban on smoking in restaurants; attitudes on the ban on smoking in discos/bars/caffes; attitudes on the ban on smoking in all indoor public places); trying/experimenting with tobacco; attitudes on the role of health workers in smoking prevention ("Health workers should routinely advise their patients not to smoke."; "Health workers should routinely advise their patients not to use other tobacco products."; "Health workers should receive special training on smoking cessation techniques.").

značajne razlike upotrebe drugih vrsta duvana, prema polu pušača studenata zdravstvenih fakulteta u Crnoj Gori.

Univarijantna i višestruka logistička regresija su korišćene za procenjeni *OR* (engl. *odds ratio*) uz prateći 95%-tni interval poverenja (engl. *confidence interval – CI*) za ispitivanje mogućih prediktora za stavove ispitanika o zdravstvenim radnicima koji konzumiraju cigarete i njihovoj pogodnosti da savetuju korisnike, odnosno pacijente kako da prestanu da puše. Kao zavisne varijable modela izabrani su samo stavovi kod kojih je uočena statistički značajna razlika između ispitanika pušača i nepušača. Model opisuje potencijalne prediktore ispitanika koji su imali stav da su zdravstveni radnici koji puše manje pogodni da savetuju pacijente kako da prestanu da puše. Nivo verovatnoće od $p < 0,05$ je razmatran kao prag statističke značajnosti. Podaci su analizirani u *SPSS* softverskom alatu (*SPSS Inc., Chicago, IL, USA*).

REZULTATI

Sociodemografske karakteristike ispitanika

Istraživanjem je obuhvaćeno 822 studenta medicinskih grana Univerziteta u Crnoj Gori, od čega je 71,90% (591) bilo ženskog pola. U uzorku je 85,28% (701) studenata imalo od 18 do 24 godine života. Prevalencija ispitanika koji su koristili duvan u 30 dana koji su prethodili anketi je bila 204 (24,8%), (Tabela 1). Od 618 nepušača, 313 (38,1%) nikada nije eksperimentisalo sa duvanom, a sličan broj studenata, 305 (37,1%) njih, probalo je duvan ali nije nastavilo sa pušenjem.

Testiranjem razlike učestalosti upotrebe duvana u odnosu na starost ispitanika ustanovljeno je da nije postojala statistički značajna razlika ($p = 0,84$), iako je uočeno da se sa starošću ispitanika broj pušača cigareta u uzorku povećava (Tabela 1).

Statistical analysis

The basic methods of descriptive statistics were applied in presenting the data. The statistical $\chi 2$ test was applied in determining statistical significance of the difference between two student groups – smokers and non-smokers (non-smokers represented the reference category of the variable), in relation to sociodemographic characteristics, attitudes and statements on training during university education, as well as statistically significant differences in the use of other types of tobacco products, presented by sex, in students of health sciences in Montenegro who were smokers.

Univariate and multivariate logistic regression were used for assessing the odds ratio (OR), with a 95% confidence interval (CI) for assessing possible predictors for respondent attitudes on health workers who smoke cigarettes and their suitability to advise service users, i.e., patients on how to stop smoking. As dependent variables of the model, only attitudes that showed a statistically significant difference amongst respondents smokers and respondents non-smokers, were selected. The model describes potential predictors of respondents whose attitude was that health workers who smoke are less suited to advise patients on smoking cessation. The probability value of $p < 0.05$ was considered the threshold of statistical significance. The data were analyzed with SPSS software (SPSS Inc., Chicago, IL, USA).

RESULTS

Sociodemographic characteristics of the participants

The survey included 822 medical professions students enrolled at the University of Montenegro, of whom 71.90% (591) were female respondents. In the sample, 85.28% (701) students were between 18 and 24 years old. The prevalence of the participants who had used

Tabela 1. Prevalencija pušača i nepušača, prema polu i starosnim kategorijama, među studentima zdravstvenih studija u Crnoj Gori, 2011. godine

Table 1. Prevalence of smokers and nonsmokers, by sex and age intervals among health professions students in Montenegro, 2011

Varijable / *Variables*		**Starosni intervali (godine) / *Age-intervals (years)***			**Pol / *Sex***	
Status pušenja / *Smoking status*	**Svega / *Total* n (%)**	**18 - 24**	**25 - 29**	**>29**	**Muški / *Male***	**Ženski / *Female***
Pušači[1] / Smokers[1]	204 (24.8%)	174 (24.8%)	24 (23.8%)	6 (30.0%)	63 (27.3%)	141 (23.9%)
Nepušači[2] / Non-smokers[2]	618 (75.2%)	527 (75.2%)	77 (76.2%)	14 (70.0%)	168 (72.7%)	450 (76.1%)
Ukupno / Total	822 (100.0%)	701 (85.3%)	101(12.3%)	20 (2.4%)	231 (28.1%)	591 (71.9%)

[1] Oni koji su pušili u 30 dana pre ankete, bilo jedan ili svih 30 dana
[2] Oni koji nisu pušili u 30 dana pre ankete

[1] Those who smoked in the 30 days preceding the survey, whether one day or each of those 30 days
[2] Those who did not smoke in the 30 days preceding the survey

U učestalosti upotrebe duvana u odnosu na pol ispitanika nije postojala statistički značajna razlika ($p = 0,308$), pri čemu je više konzumenata cigareta bilo među mladićima nego među devojkama (Tabela 1).

U odnosu na vreme kada je prvi put isprobano pušenje, između polova i starosnih kategorija se uočava statistički značajna razlika ($p < 0,01$). Skoro svaki peti učenik je konzumirao cigarete po prvi put u uzrastu od 16. do 17. godine života. Bilo je duplo više mladića nego devojaka koji su probali da puše oko 10. godine života ili još ranije, a bilo je više devojaka nego mladića koje su prvi put probali cigarete posle 18. godine života (Tabela 2).

Prevalencija ispitanika koji su koristili duvan u 30 dana koji su prethodili anketi, iznosila je 24,8%, s tim da su mladići (27,3%) u mesec dana koji su prethodili anketi više konzumirali cigarete u odnosu na devojke (23,9%).

Istraživanje je pokazalo da su studenti pušači cigareta u toku godine koja je prethodila anketi konzumirali cigarete unutar fakultetskih prostorija, i to njih 38,2%. Nije postojala statistički značajna razlika između polova, iako se uočava da su devojke procentualno duplo više pušile cigarete unutar školskih prostorija nego mladići ($p = 0,551$).

Od ukupnog broja ispitanika, tri petine (61,9%) je eksperimentisalo – isprobalo makar jedan ili dva dima cigarete (uključujući tu i 305 onih koji su bili nepušači u vreme sprovođenja ankete). Analizirajući polnu strukturu ispitanika u odnosu na eksperimentisanje sa pušenjem cigareta, dolazi se do podatka da je postojala statistički značajna razlika ($p < 0,05$), odnosno više mladića (68,4%) je probalo da konzumira cigarete u odnosu na devojke (59,4%). Od ukupnog broja studenata, 509 je probalo, odnosno eksperimentisalo sa pušenjem cigareta, a dve petine njih (204 ili 40,1%) je, nakon toga, nastavilo sa konzumiranjem.

tobacco in the 30 days preceding the survey was 204 (24.8%), (Table 1). Of the 618 non-smokers, 313 (38.1%) had never experimented with tobacco, and a similar number of students, 305 (37.1%) of them, had tried tobacco but did not continue smoking.

Testing the difference in frequency of tobacco use against the age of the respondents showed no statistically significant difference ($p = 0.84$), although it was noted that the number of cigarette smokers in the sample rose with the age of the participants (Table 1).

There was no statistically significant difference in tobacco use in relation to the sex of the respondents ($p = 0.308$), though the number of cigarette smokers was greater amongst the young men than the young women (Table 1).

In relation to the time when smoking was first experimented with, a statistically significant difference was noted amongst the sexes and age categories ($p < 0.01$). Almost every fifth student had tried smoking for the first time between the age of 16 and 17. The number of young men who had tried smoking for the first time at the age of 10 or earlier was twice greater than the number of girls who had done that, while there were more young women than young men who tried smoking cigarettes for the first time after the age of 18 years (Table 2).

The prevalence of respondents who had used tobacco in the 30 days preceding the survey was 24.8%, whereby the young men (27.3%) had smoked cigarettes in that period more than the young women (23.9%).

The survey showed that 38.2% of the student smokers had smoked cigarettes on school premises in the year preceding the survey. There was no statistically significant difference amongst the sexes, although it is evident that the young women had smoked cigarettes on school premises at twice the percentage as the young men ($p = 0.551$).

Tabela 2. Starosni interval u kojem su studenti zdravstvenih studija u Crnoj Gori prvi put isprobali pušenje cigareta, po polu, 2011. godina

Table 2. Age interval of smoking initiation among Montenegrin health professions students, by gender, 2011

Starosni interval u kojem se prvi put probalo pušenje cigareta (godine) / *Age interval of smoking initiation (years)*	**Ukupno / *Total* n (%)**	**Ženski pol / *Female* n (%)**	**Muški pol / *Male* n (%)**
Ukupno / *Total*	100.0%	100.0%	100.0%
Nikada / *Never*	327 (39.8%)	246 (41.6%)	81 (35.1%)
≤10	65 (7.9%)	36 (6.1%)	29 (12.5%)
11 – 15	83 (10.1%)	50 (8.5%)	33 (14.3%)
16 – 17	154 (18.7%)	112 (18.9%)	42 (18.2%)
18 – 19	128 (15.6%)	96 (16.2%)	32 (13.8%)
20 – 24	59 (7.2%)	46 (7.8%)	13 (5.6%)
25 – 29	6 (0.8%)	5 (0.8%)	1 (0.4%)
>29	1(0.1%)	1 (0.2%)	0 (0.00%)

Tabela 3. Upotreba duvanskih prerađevina, prema polu studenata zdravstvenih studija u Crnoj Gori, 2011. godina

Table 3. Use of tobacco products among health professions students, by sex, Montenegro, 2011

Učestalost upotrebe duvanskih prerađevina u mesec dana pre ankete* / *Frequency of the use of tobacco products during the 30 days preceding the survey**	**Ukupno / *Total* n (%)**	**Ženski pol / *Female* n (%)**	**Muški pol / *Male* n (%)**
Ukupno / *Total*	822 (100.0%)	591 (100.0%)	231 (100.0%)
Nikada / *Never*	720 (87.6%)	525 (88.8%)	195 (84.4%)
1 – 2 dana / *days*	19 (2.3%)	12 (2.0%)	7 (3.0%)
3 – 9 dana / *days*	22 (2.7%)	14 (2.4%)	8 (3.5%)
10 – 19 dana / *days*	14 (1.7%)	10 (1.7%)	4 (1.7%)
20 – 29 dana / *days*	12 (1.5%)	9 (1.5%)	3 (1.3%)
Svih 30 dana / *All 30 days days*	35 (4.3%)	21 (3.6%)	14 (6.1%)

* Duvanske prerađevine su sastavljene u celini ili delimično od duvana, mogu biti i genetski izmenjene, a namenjene su za pušenje, šmrkanje, sisanje ili žvakanje (rezani duvan, cigarete, cigare, cigarilosi, duvan za lulu, duvan za žvakanje, burmut, i druge duvanske prerađevine)

* Tobacco products are composed wholly or partly of tobacco, which can be genetically modified, and are intended for smoking, sniffing, sucking or chewing (cut tobacco, cigarettes, cigars, cigarillos, pipe tobacco, chewing tobacco, snuff, and other tobacco products)

U ukupnom uzorku, prevalencija ispitanika koji su se izjasnili da su koristili duvanske prerađevine (duvan za lulu, cigare, cigarilose, duvan za žvakanje i burmut) bila je 12,4%. Analizirajući ovu varijablu u odnosu na pol ispitanika, uočeno je da nije postojala statistički značajna razlika ($p = 0,084$), s tim da je 15,6% mladića i 11,2% devojaka koristilo duvanske prerađevine (Tabela 3).

Stavovi ispitanika koji se odnose na regulativu o upotrebi duvana, ulogu zdravstvenih radnika i edukaciju na fakultetima zdravstvenih nauka

Sprovedena analiza je pokazala da je nešto više od četiri petine (82,8%) pušača smatralo da je potrebno zabraniti prodaju duvana adolescentima i osobama mlađim od 18 godina. Takav stav delila je i većina (92,4%) nepušača ($p < 0,001$) (Tabela 4).

Nešto više od dve trećine (71,1%) pušača je smatralo da bi trebalo u potpunosti zabraniti reklame za duvanske proizvode, dok je 82,2% nepušača zastupalo isti stav ($p < 0,001$) (Tabela 4).

Kada se analizira stav o zabrani pušenja u restoranima vidi se da je 59,8% pušača i većina (91,1%) nepušača smatrala da bi u njima trebalo zabraniti pušenje ($p < 0,001$) (Tabela 4).

Zanimljivo je da je samo nešto više od jedne četvrtine (28,9%) pušača, u odnosu na tri četvrtine nepušača, odnosno njih 72,0%, smatralo da bi trebalo zabraniti pušenje u diskotekama/barovima/kafićima ($p < 0,001$) (Tabela 4).

Dve petine (41,7%) pušača se izjasnilo da bi trebalo zabraniti pušenje na zatvorenim javnim mestima, dok je 82,7% nepušača zastupalo navedeni stav ($p < 0,001$) (Tabela 4).

Of the total number of participants, three fifths (61.9%) had experimented with cigarettes, i.e., had tried at least a few puffs of cigarette smoke (including the 305 respondents who were non-smokers at the time of the survey). Upon analyzing the sex structure of the participants in relation to experimenting with tobacco, the statistically significant difference becomes apparent ($p < 0.05$). Namely, more male students (68.4%) had tried smoking cigarettes, as compared to the female students (59.4%). Of the total number of students, 509 of them had tried smoking, i.e., had experimented with cigarettes, while two fifths of these (204 or 40.1%) continued to smoke cigarettes after that.

In the entire sample, the prevalence of respondents who stated that they used other tobacco products (pipe tobacco, cigars, cigarillos, chewing tobacco, and snuff) was 12.4%. Analysis of this variable, in relation to the sex of the participants, showed that there was no statistically significant difference ($p = 0.084$), with 15.6% male students and 11.2% female students consuming other tobacco products (Table 3).

Respondent attitudes on tobacco use regulations, the role of health professionals, and ducation/training received at health sciences faculties

The analysis showed that a little over four fifths (82.8%) of the smokers believed that it was necessary to ban the sale of tobacco to adolescents and persons under the age of 18 years. This attitude was also supported by most (92.4%) of the non-smokers ($p < 0.001$) (Table 4). A little over two thirds (71.1%) of smokers felt that

Tabela 4. Stavovi pušača i nepušača cigareta prema zabranama upotrebe duvana i duvanskih proizvoda

Table 4. Attitudes towards the ban on tobacco use among Montenegrin health professions students, according to their smoking status

Stavovi / *Attitudes*		Ukupno / *Total* n (%)	Nepušači / *Non-smokers* n (%)[1]	Pušači / *Smokers* n (%)[2]	p vrednost* / *p value**
Da li bi trebalo zabraniti prodaju duvana adolescentima i osobama mlađim od 18 godina? / *Should the sale of tobacco to adolescents and minors, i.e., persons under the age of 18 years be banned?*	**Da / *Yes***	740 (90.0%)	571 (92.4%)	169 (82.8%)	<0.001
	Ne / *No*	82 (10.0%)	47 (7.6%)	35 (17.2%)	
Da li bi trebalo u potpunosti zabraniti reklame za duvanske proizvode? / *Should advertisements for tobacco products be completely prohibited?*	**Da / *Yes***	653 (79.4%)	508 (82.2%)	145 (71.1%)	<0.001
	Ne / *No*	169 (20.6%)	110 (17.8%)	59 (28.9%)	
Da li bi trebalo zabraniti pušenje u restoranima? / *Should smoking in restaurants be banned?*	**Da / *Yes***	685 (83.3%)	563 (91.1%)	122 (59.8%)	<0.001
	Ne / *No*	137 (16.7%)	55 (8.9%)	82 (40.2%)	
Da li bi trebalo zabraniti pušenje u diskotekama/barovima/kafićima? / *Should smoking be banned in discos/bars/pubs?*	**Da / *Yes***	504 (61.3%)	445 (72.0%)	59 (28.9%)	<0.001
	Ne / *No*	318 (38.7%)	173 (28.0%)	145 (71.1%)	
Da li bi trebalo zabraniti pušenje na svim zatvorenim javnim mestima? / *Should smoking be banned in all indoor public places?*	**Da / *Yes***	596 (72.5%)	511 (82.7%)	85 (41.7%)	<0.001
	Ne / *No*	226 (27.5%)	107 (17.3%)	119 (58.3%)	

[1] Oni koji nisu pušili u 30 dana pre ankete
[2] Oni koji su pušili u 30 dana pre ankete, bilo jedan ili svih 30 dana
* Odnos Nepušači : Pušači

[1] Those who did not smoke in the 30 days preceding the survey
[2] Those who smoked in the 30 days preceding the survey, whether one day or each of those 30 days
* Ratio Non-smokers : Smokers

Tri četvrtine (76,0%) pušača je verovalo da zdravstveni radnici imaju ulogu u davanju saveta ili informacija o odvikavanju od pušenja svojim pacijentima, a takvo mišljenje je sa njima delila i većina (84,3%) nepušača ($p < 0,01$). Skoro tri četvrtine (73,5%) pušača i većina (91,1%) nepušača cigareta je smatrala da bi zdravstveni profesionalci trebalo da dobiju posebnu obuku za tehnike odvikavanja od pušenja ($p < 0,001$) (Tabela 5). Većina (87,7%) pušača, kao i većina (94,17%) nepušača je smatrala da bi trebalo da zdravstveni radnici rutinski savetuju svoje pacijente koji puše cigarete da prestanu sa pušenjem ($p < 0,005$). Slično prethodnom rezultatu, većina (87,3%) pušača, kao i većina (93,0%) nepušača, verovala je da bi trebalo da zdravstveni radnici rutinski savetuju svoje pacijente koji koriste druge duvanske proizvode da prestanu da ih koriste ($p < 0,005$). Interesantno je da je dve trećine (67,7%) pušača smatralo da se povećava šansa da pacijent prestane sa pušenjem ako dobije savet od strane zdravstvenog radnika, dok je 79,0% nepušača verovalo u delotvornost takvog saveta ($p < 0,01$) (Tabela 5).

Sprovedena analiza je takođe pokazala da nije postojala statistički značajna razlika između pušača i nepušača cigareta u verovanju da bi trebalo da zdravstveni radnici budu uzor za svoje pacijente i za javnost ($p = 0,132$). Ipak, nešto više od tri petine (63,7%) pušača, odnosno 81,7% nepušača, smatralo je da su zdravstveni radnici koji puše cigarete manje pogodni da savetuju pacijente da prestanu sa pušenjem ($p < 0,001$).

advertising tobacco products should be completely prohibited, while 82.2% of non-smokers was of the same opinion ($p < 0.001$) (Table 4).

As far as the attitude on banning smoking in restaurants was concerned, 59.8% of smokers and most (91.1%) non-smokers felt that smoking in them should be banned ($p < 0.001$) (Table 4).

It is interesting that only a little over a quarter (28.9%) of smokers, as compared to three quarters of non-smokers, i.e., 72.0% of them, believed that smoking should be banned in discos/bars/caffes, as well ($p < 0.001$) (Table 4).

Two fifths (41.7%) of the smokers stated that smoking should be banned in indoor public spaces, while 82.7% non-smokers had the same attitude ($p < 0.001$) (Table 4).

Three quarters (76.0%) of smokers felt that health workers have a part to play in offering advice or information on smoking cessation to their patients, and this opinion was shared by a majority (84.3%) of non-smokers ($p < 0.01$). Almost three quarters (73.5%) of smokers and most (91.1%) non-smokers were of the opinion that health professionals should receive special training on smoking cessation techniques ($p < 0.001$) (Table 5). Most (87.7%) smokers, as well as a majority (94.17%) of non-smokers felt that health workers should routinely advise their patients whoa are smokers to stop smoking ($p < 0.005$). Similarly, most (87.3%) smokers, as well as most (93.0%) non-smokers believed that health workers

Tabela 5. Stavovi studenata zdravstvenih studija u Crnoj Gori, pušača i nepušača, o ulozi zdravstvenih radnika u kontroli pušenja, 2010/2011.

Table 5. The attitudes of health professions students in Montenegro, smokers and non-smokers, towards the role of health care workers in smoking control, 2010/2011

Stavovi / *Attitudes*		Ukupno / *Total* n (%)	Nepušači / *Non-smokers* n (%)[1]	Pušači / *Smokers* n (%)[2]	p vrednost* / *p value**
Da li zdravstveni radnici imaju ulogu u davanju saveta ili informacija o odvikavanju od pušenja svojim pacijentima? / ***Do health workers have a role in giving advice or information on smoking cessation to their patients?***	**Da / *Yes***	676 (82.2%)	521 (84.3%)	155 (76.0%)	<0.01
	Ne / *No*	146 (17.8%)	97 (15.7%)	49 (24.0%)	
Da li zdravstveni radnici treba da dobiju posebnu obuku za tehnike odvikavanja od pušenja? / ***Should health workers receive special training in smoking cessation techniques?***	**Da / *Yes***	713 (86.7%)	563 (91.1%)	150 (73.5%)	<0.001
	Ne / *No*	109 (13.2%)	55 (8.9%)	54 (26.5%)	
Da li zdravstveni radnici treba da rutinski savetuju pacijente koji puše da prestanu da puše? / ***Should health workers routinely advise their patients who smoke to quit smoking?***	**Da / *Yes***	761 (92.6%)	582 (94.2%)	179 (87.7%)	<0.005
	Ne / *No*	61 (7.4%)	36 (5.8%)	25 (12.2%)	
Da li zdravstveni radnici treba da rutinski savetuju svoje pacijente koji koriste druge duvanske proizvode da prestanu da ih koriste? / ***Should health workers routinely advise their patients who use other tobacco products to stop using these products?***	**Da / *Yes***	753 (91.6%)	575 (93.0%)	178 (87.2%)	<0.05
	Ne / *No*	69 (8.4%)	43 (7.0%)	26 (12.7%)	
Da li se povećavaju mogućnosti pacijenta za prestanak pušenja ako zdravstveni radnik savetuje njega ili nju da prestane da puši? / ***Does the possibility of the patients' smoking cessation increase if health workers advise him or her to quit smoking?***	**Da / *Yes***	626 (76.2%)	488 (79.0%)	138 (67.6%)	<0.005
	Ne / *No*	195 (23.7%)	129 (20.9%)	66 (32.3%)	
Da li zdravstveni radnici služe kao uzor svojim pacijentima i za javnost? / ***Do health workers serve as role models to their patients and to the public?***	**Da / *Yes***	515 (62.6%)	400 (64.7%)	115 (56.4%)	<0.05
	Ne / *No*	307 (37.3%)	218 (35.3%)	89 (43.6%)	
Da li su zdravstveni radnici koji puše manje pogodni da savetuju pacijente kako da prestanu da puše? / ***Are health workers who smoke less suited to advise patients to quit smoking?***	**Da / *Yes***	635 (77.2%)	505 (81.7%)	130 (63.7%)	<0.001
	Ne / *No*	187 (22.7%)	113 (18.3%)	74 (36.3%)	
Da li se povećavaju mogućnosti pacijenta za prestanak pušenja ako zdravstveni radnik savetuje njega ili nju da prestane da puši?/ ***Are health care workers who use other tobacco products less suited to advise patients to quit smoking?***	**Da / *Yes***	632 (76.89%)	502 (81.23%)	130 (63.73%)	<0.001
	Ne / *No*	190 (23.11%)	116 (18.77%)	74 (36.27%)	

[1] Oni koji nisu pušili u 30 dana pre ankete
[2] Oni koji su pušili u 30 dana pre ankete, bilo jedan ili svih 30 dana
* Odnos Nepušači : Pušači

[1] Those who did not smoke in the 30 days preceding the survey
[2] Those who smoked in the 30 days preceding the survey, whether one day or each of those 30 days
* Ratio Non-smokers : Smokers

Skoro identičan rezultat dobijen je analizom stavova ispitanika o pogodnosti zdravstvenih radnika koji koriste druge duvanske proizvode da savetuju pacijente da prestanu da ih koriste ($p < 0,001$), (Tabela 5).

Analizirajući odgovore studenata u vezi sa edukacijom tokom studija o štetnim efektima duvana, došlo se do podataka da se više od dve petine (44,6%) should routinely advise their patients who use other tobacco products to stop their consumption of these products ($p < 0.005$). It is interesting that two thirds (67.7%) of smokers thought that the probability of a patient ceasing to smoke increases if the patient receives advice to do so from a health worker, while 79.0% of non-smokers believed that such advice was effective ($p < 0.01$) (Table 5).

Tabela 6. Stavovi studenata pušača i nepušača zdravstvenih studija u Crnoj Gori o edukaciji o efektima upotrebe duvana koja se sprovodi na fakultetima

Table 6. The attitudes of health professions students in Montenegro, smokers and non-smokers, towards the education on the effects of tobacco use, which is being carried out at the faculties, 2010/2011

Stavovi / *Attitudes*		Ukupno / *Total* n (%)	Nepušači / *Non-smokers* n (%)[1]	Pušači / *Smokers* n (%)[2]	p vrednost* / *p value**
Da li ste učili o važnosti obezbeđivanja obrazovnog materijala pacijentima kao vida podrške u odvikavanju od pušenja? / ***Did you learn on the importance of providing educational material to support smoking cessation in patients who want to quit smoking?***	**Da / *Yes***	418 (50.8%)	327 (52.9%)	91 (44.6%)	0.04
	Ne / *No*	404 (49.1%)	291 (47.1%)	113 (55.4%)	
Da li ste ikada dobili formalnu obuku kako da pacijente odvikavate od pušenja? / ***Did you ever receive any formal training on how to assist patients in smoking cessation?***	**Da / *Yes***	245 (29.8%)	173 (28.0%)	72 (35.3%)	0.05
	Ne / *No*	577 (70.2%)	445 (72.0%)	132 (64.7%)	
Da li su vas, na bilo kojem od časova, učili o opasnostima pušenja? / ***Were you, in any of the classes, taught about the dangers of smoking?***	**Da / *Yes***	678 (82.5%)	511 (82.7%)	167 (81.9%)	0.79
	Ne / *No*	144 (17.5%)	107 (17.3%)	37 (18.1%)	
Da li ste diskutovali na bilo kojem od časova o razlogu zbog kojeg ljudi puše?/ ***Did you discuss, in any of the classes, about why people smoke?***	**Da / *Yes***	491 (59.7%)	372 (60.2%)	119 (58.3%)	0.77
	Ne / *No*	331 (40.3%)	246 (39.8%)	85 (41.7%)	
Da li ste učili o važnosti beleženja podataka o korišćenju duvana kao dela anamneze? / ***Did you learn on the importance of recording the history of tobacco use as part of patient anamnesis?***	**Da / *Yes***	503 (61.2%)	389 (63.0%)	114 (55.9%)	0.07
	Ne / *No*	319 (38.8%)	229 (37.1%)	90 (44.1%)	
Da li ste informisani o terapiji zamene nikotina u svrhu odvikavanja pacijenata od pušenja cigareta? / ***Are you aware of the use of nicotine replacement therapy in smoking cessation?***	**Da / *Yes***	690 (83.9%)	526 (85.1%)	164 (80.4%)	0.11
	Ne / *No*	132 (16.1%)	92 (14.9%)	40 (19.6%)	
Da li ste informisani o upotrebi antidepresiva u programu odvikavanja pacijenata od pušenja cigareta? / ***Are you aware of the use of antidepressants in smoking cessation?***	**Da / *Yes***	353 (42.9%)	272 (44.0%)	81 (39.7%)	<0.001
	Ne / *No*	469 (57.1%)	346 (56.0%)	123 (60.3%)	

[1] Oni koji nisu pušili u 30 dana pre ankete
[2] Oni koji su pušili u 30 dana pre ankete, bilo jedan ili svih 30 dana
* Odnos Nepušači : Pušači

[1] Those who did not smoke in the 30 days preceding the survey
[2] Those who smoked in the 30 days preceding the survey, whether one day or each of those 30 days
* Ratio Non-smokers : Smokers

pušača i oko polovina (52,9%) nepušača izjasnila da su učili o važnosti obezbeđivanja obrazovnog materijala pacijentima, kao vidu podrške u odvikavanju od pušenja ($p < 0,05$), (Tabela 6). Nešto više od jedne trećine (35,3%) pušača i nešto više od jedne četvrtine (28,0%) nepušača je navelo da su dobili formalnu obuku kako da pacijente odvikavaju od pušenja ($p < 0,05$). Odgovori pušača i nepušača na ostala pitanja se nisu statistički značajno razlikovali. Oko četiri petine studenata je u toku studija učilo o opasnostima od pušenja cigareta (82,5%) i dobilo informaciju o terapiji zamene nikotina nikotinskim flasterima i žvakaćim gumama (83,9%). Manje od dve trećine studenata je navelo da su diskutovali o razlozima zašto ljudi puše cigarete (59,6%) i učili o važnosti beleženja podataka o korišćenju

The performed analysis also showed that there was no statistically significant difference between smokers and non-smokers in the belief that health workers should be role models for their patients as well as for the general public ($p = 0.132$). However, a little over three fifths (63.7%) of the smokers and 81.7% of the non-smokers felt that health workers who smoke are less suited to advise patients on smoking cessation ($p < 0.001$). An almost identical result was obtained with the analysis of the respondent attitudes on the suitability of health workers who use other tobacco products to advise patients to stop using these products ($p < 0.001$), (Table 5).

The analysis of student responses in relation to the training received during their university studies on the

Tabela 7. Prediktivna vrednost sociodemografskih karakteristika studenata fakulteta zdravstvenih usmerenja za status pušenja* (referentna vrednost: Da)

Table 7. The predictive value of the sociodemographic characteristics of health professions students regarding smoking status (reference value: Yes)*

Varijable / *Variables*		**OR****	**95% CI****	**p**
Pol / *Sex*	Ženski / *Female*		1 (referentni / *reference*)	
	Muški / *Male*	0.8	(0.6 - 1.2)	0.309
Starosni interval u godinama / *Age interval (years)*	18 – 24		1 (referentni)	
	25 – 29	1.1	(0.6 – 1.7)	0.817
	>29	0.8	(0.3 – 2.0)	0.599
Godina studija / *University study level/Year of studies*	I		1 (referentni / *reference*)	
	II	0.7	(0.8 – 1.2)	0.209
	III	0.7	(0.4 – 1.1)	0.137
	IV	1.1	(0.6 – 2.0)	0.656
	V	1.9	(0.8 – 4.3)	0.132
	VI	1.9	(0.7 – 4.8)	0.182
	Apsolventi / *Degree candidates*	1.6	(0.7 – 3.4)	0.245
Da li ste ikada probali/eksperimentisali s pušenjem duvana? / H*ave you ever tried/experimented with smoking cigarettes?*	Da / *Yes*	19.9	(10.3 – 38.3)	<0.001
	Ne / *No*		1 (referentni / *reference*)	
Da li bi trebalo zabraniti prodaju duvana adolescentima i osobama mlađim od 18 godina? / *Should the sale of tobacco to adolescents and minors, i.e., persons under the age of 18 years be banned?*	Da / *Yes*	2.5	(1.6 – 4.0)	<0.001
	Ne / *No*		1 (referentni / *reference*)	
Da li bi trebalo u potpunosti zabraniti reklame za duvanske proizvode? / *Should advertisements for tobacco products be completely banned?*	Da / *Yes*	1.9	(1.3 – 2.7)	<0.001
	Ne / *No*		1 (referentni / *reference*)	
Da li bi trebalo zabraniti pušenje u restoranima? / *Should smoking in restaurants be banned?*	Da / *Yes*	0.1	(0.1 – 0.2)	<0.001
	Ne / *No*		1 (referentni / *reference*)	
Da li bi trebalo zabraniti pušenje u diskotekama/barovima/kafićima? / *Should smoking be banned in discos/bars/pubs?*	Da / *Yes*	6.3	(4.5 – 9.0)	<0.001
	Ne / *No*		1 (referentni / *reference*)	
Da li bi trebalo zabraniti pušenje na svim zatvorenim javnim mestima? / *Should smoking be prohibited in all indoor public places?*	Da / *Yes*	6.7	(4.7 – 9.5)	<0.001
	Ne / *No*		1 (referentni / *reference*)	
Da li zdravstveni radnici treba da dobiju posebnu obuku za tehnike odvikavanja od pušenja? / *Should health care workers receive special training in smoking cessation techniques?*	Da / *Yes*	3.7	(2.4 – 5.6)	<0.001
	Ne / *No*		1 (referentni / *reference*)	
Da li zdravstveni radnici treba da rutinski savetuju pacijente koji puše da prestanu da puše? / *Should health care workers routinely advise their patients who smoke to stop smoking?*	Da / *Yes*	2.2	(1.3 – 3.9)	<0.01
	Ne / *No*		1 (referentni / *reference*)	
Da li zdravstveni radnici treba da rutinski savetuju svoje pacijente koji koriste druge duvanske proizvode da prestanu da ih koriste? / *Should health care workers routinely advise their patients who are using other tobacco products to stop using these products?*	Da / *Yes*	1.9	(1.2 – 3.3)	<0.01
	Ne / *No*		1 (referentni / *reference*)	
Da li zdravstveni radnici imaju ulogu u davanju saveta ili informacija o odvikavanju od pušenja svojim pacijentima? / *Do health care workers have a role in giving advice or information on smoking cessation to their patients?*	Da / *Yes*	1.7	(1.2 – 2.5)	<0.001
	Ne / *No*		1 (referentni / *reference*)	
Da li se povećavaju mogućnosti pacijenta za prestanak pušenja ako zdravstveni radnik savetuje njega ili nju da prestane da puši? / *Does the possibility of the patients' smoking cessation increase if health workers advise him or her to quit smoking*	Da / *Yes*	1.8	(1.3 – 2.5)	<0.001
	Ne / *No*		1 (referentni / *reference*)	
Da li su zdravstveni radnici koji puše manje pogodni da savetuju pacijente kako da prestanu da puše? / *Are health care workers who smoke less suited to advise patients to stop smoking?*	Da / *Yes*	2.5	(1.8 – 3.6)	<0.001
	Ne / *No*		1 (referentni / *reference*)	
Da li su zdravstveni radnici koji koriste duvanske proizvode manje pogodni da savetuju pacijente da prestanu da puše? / *Are health care workers who use other tobacco products less suited to advise patients to quit smoking?*	Da / *Yes*	0.4	(0.3 – 0.6)	<0.001
	Ne / *No*		1 (referentni / *reference*)	
Da li ste ikada dobili formalnu obuku kako da pacijente odvikavate od pušenja? / *Did you ever receive any formal training on how to assist patients in smoking cessation?*	Da / *Yes*	0.7	(0.5 – 1.0)	<0.05
	Ne / *No*		1 (referentni / *reference*)	
Da li ste učili o važnosti obezbeđivanja obrazovnog materijala pacijentima kao vida podrške u odvikavanju od pušenja? / *Did you learn on the importance of providing educational material to support smoking cessation in patients who want to quit smoking?*	Da / *Yes*	1.4	(1.0 – 1.9)	<0.05
	Ne / *No*		1 (referentni / *reference*)	

* "Pušač" je osoba koja je koristila cigarete jedan ili više dana u 30 dana pre ankete

** *OR* – količnik verovatnoće (engl. *unadjusted odds ratio*); *CI* – interval poverenja (engl. *confidence interval*)

* A "smoker" is a person who smoked one or more cigarettes in the 30 days preceding the survey

** OR – unadjusted odds ratio; CI – confidence interval

duvana kao sastavnog dela istorije bolesti pacijenta (61,2%). Nešto više od dve petine (42,9%) studenata je bilo informisano o upotrebi antidepresiva u programu odvikavanja pacijenata od pušenja cigareta (Tabela 6).

Modeli logističke regresione analize stavova ispitanika o zdravstvenim radnicima koji su pušači

U istraživanju je korišćen univarijantni model logističke regresije (Model 1), kako bi se izdvojili stavovi koji statistički značajno utiču na status pušenja. Analiza izdvojenih varijabli, koje se odnose na eksperimentisanje s pušenjem duvana, kao i na stavove o pogodnosti zdravstvenih radnika koji koriste duvan i druge duvanske proizvode i njihov uticaj na pacijente da prestanu da puše, pokazala je sledeće rezultate. Studenti koji su eksperimentisali sa pušenjem duvana imali su skoro 20 puta veću šansu (*OR* 19,9) da će biti pušači. Studenti koji su smatrali da su "zdravstveni radnici koji puše manje pogodni da savetuju pacijente kako da prestanu da puše", imali su dva puta manju verovatnoću da će biti pušači. Studenti koji su smatrali da su "zdravstveni radnici koji koriste druge duvanske proizvode manje pogodni da savetuju pacijente kako da prestanu da puše", imali su 59% manju verovatnoću da će biti pušači (Tabela 7).

Drugi model logističke regresije (Model 2) korišćen je za ispitivanje mogućih prediktora (pol, starost, godine studija, status pušenja, stavovi) u vezi sa stavom da su "zdravstveni radnici koji puše manje pogodni da savetuju pacijente kako da prestanu da puše" (Tabela 7).

Prema Modelu 2, u odnosu na studente zdravstvenih studija starosnog doba 18 – 24 godine, ispitanici koji su bili u starosnom dobu 25 – 29 godina, imali su pet puta veću šansu (*OR* 5,8) da zastupaju stav da su "zdravstveni radnici koji puše manje pogodni da savetuju pacijente kako da prestanu da puše". Studenti koji su bili na šestoj godini fakulteta imali su 70% manju šansu da će zastupati gore navedeni stav (*OR* 0,3). Ispitanici koji su imali stav da ne treba zabraniti pušenje u restoranima imali su 40% manju verovatnoću da zastupaju stav da su "zdravstveni radnici koji puše manje pogodni da savetuju pacijente kako da prestanu da puše" (*OR* 0,6). Takođe, oni koji nisu smatrali da „zdravstveni radnici treba da dobiju posebnu obuku za tehnike odvikavanja od pušenja", imali su za 50% manju verovatnoću da će zastupati gore navedeni stav (*OR* 0,5), (Tabela 8). Celokupni model je statistički značajan ($p < 0,001$). Model u celini objašnjava između 8,3% (*Cox & Snell*) i 12,6% (*Nagelkerke*) varijanse u statusu pušenja, i tačno klasifikuje 79,8% slučajeva (98,6% onih koji su zastupali navedeni stav i 16,1% onih koji su ga negirali).

harmful effects of tobacco revealed that more than two fifths (44.6%) of smokers and around a half (52.9%) of the non-smokers stated that they had learned on the importance of providing educational material for patients, as a form of support in smoking cessation ($p < 0.05$), (Table 6). A little over a third (35.3%) of the smokers and a little over a quarter (28.0%) of the non-smokers stated that they had received formal training on the ways of helping patients with smoking cessation ($p < 0.05$). The responses of the smokers and non-smokers to the rest of the questions were not statistically significantly different. Around four fifths of the students had learned about the dangers of cigarette smoking during their university studies (82.5%) and had received information on nicotine substitute therapy with nicotine patches and nicotine chewing gum (83.9%). Less than two thirds of students stated that they had discussed the reasons why people smoked cigarettes (59.6%) and that they had learned about the importance of noting tobacco use as an integral part of patient history taking (61.2%). A little over two fifths (42.9%) of the students were informed on the use of antidepressants within the cigarette smoking cessation program (Table 6).

Logistic regression models of respondent attitudes towards health care workers who are smokers

The univariate logistic regression model (Model 1) was used in this study, in order to identify attitudes which statistically significantly affect smoking status. The analysis of the identified variables, which relate to experimenting with tobacco, as well as to attitudes on the suitability of health workers who use tobacco and tobacco products and their influence on patients with regards to smoking cessation, showed the following results. Students who experimented with smoking had an almost 20 times greater chance (*OR* 19.9) of being smokers. Students who felt that "health workers who smoke are less suitable to advise patients on how to stop smoking", had a twice lower likelihood of being smokers. Students who though that "health workers who use other tobacco products are less suited to advise patients on how to stop smoking", had a 59% lower probability of being smokers (Table 7).

The second logistic regression model (Model 2) was used for testing possible predictors (sex, age, university study level/year of study, smoking status, attitudes), in relation to the attitude: "Health workers who smoke are less suitable to advise patients on how to stop smoking." (Table 7).

According to Model 2, in comparison with health professions students aged 18 – 24 years, respondents aged 25 – 29 years had a five times higher likelihood

Tabela 8. Prediktivna vrednost sociodemografskih karakteristika studenata za stav: "Zdravstveni radnici koji puše su manje pogodni da savetuju pacijente kako da prestanu da puše" (referentna vrednost: Ne)

Table 8. The predictive value of the sociodemographic characteristics of health professions students regarding the attitude that "health care workers who smoke are less suited to advise patients to stop smoking" (reference value: No)*

Varijable / *Variables*		**Univarijantni model / *Univariate model***		**Multivarijantni model / *Multivariate model***	
		OR	p	p	OR (95% CI)*
Pol / *Sex*	Ženski / *Female*	1 (referentni / *reference*)		1 (referentni / *reference*)	
	Muški / *Male*	1.2 (0.9 – 1.8)	0.23	0.130	0.6 (0.3 – 1.2)
Starosni interval u godinama / *Age interval (years)*	18 – 24	1 (referentni / *reference*)		1 (referentni / *reference*)	
	25 – 29	1.3 (0.8 – 2.2)	0.21	0.040	5.8 (1.1 – 31.6)
	>29	0.9 (0.3 – 2.7)	0.82	0.340	2.6 (0.4 – 18.3)
Godina studija / *University study level/Year of studies*	I	1 (referentni / *reference*)		1 (referentni / *reference*)	
	II	1.2 (0.7 – 2.0)	0.423	0.977	1.0 (0.6 – 1.7)
	III	1.1 (0.7 – 1.7)	0.753	0.342	0.8 (0.5 – 1.3)
	IV	0.8 (0.4 – 1.5)	0.502	0.195	0.7 (0.3 – 1.2)
	V	0.9 (0.5 – 2.0)	0.900	0.600	0.8 (0.4 – 1.8)
	VI	0.3 (0.1 – 0.9)	0.036	0.047	0.3 (0.1 – 1.0)
	Apsolventi / *Degree candidates*	1.6 (0.8 – 3.1)	0.143	0.668	1.2 (0.5 – 3.2)
Tokom proteklih 30 dana (jedan mesec) koliko dana ste pušili cigarete** / *Over the previous 30 days (one month) on how many days did you smoke cigarettes?***	Da / *Yes*	2.5 (1.8 – 3.6)	<0.001	0.113	1.4 (0.9 – 2.3)
	Ne / *No*	1 (referentni / *reference*)		1 (referentni / *reference*)	
Da li ste ikada probali/eksperimentisali s pušenjem duvana? / *Have you ever tried/experimented with smoking cigarettes?*	Da / *Yes*	1.7 (1.2 – 2.5)	0.002	0.353	0.8 (0.6 – 1.2)
	Ne / *No*	1 (referentni / *reference*)		1 (referentni / *reference*)	
Da li bi trebalo u potpunosti zabraniti reklame za duvanske proizvode? / *Should advertisements for tobacco products be completely banned?*	Da / *Yes*	1 (referentni / *reference*)		1 (referentni / *reference*)	
	Ne / *No*	0.5 (0.3 – 0.7)	<0.001	0.725	0.9 (0.4 – 2.0)
Da li bi trebalo zabraniti pušenje u restoranima? / *Should smoking in restaurants be banned?*	Da / *Yes*	1 (referentni / *reference*)		1 (referentni / *reference*)	
	Ne / *No*	0.3 (0.2 – 0.4)	<0.001	0.029	0.6 (0.3 – 1.0)
Da li bi trebalo zabraniti pušenje u diskotekama/barovima/kafićima? / *Should smoking be banned in discos/bars/pubs?*	Da / *Yes*	1 (referentni / *reference*)		1 (referentni / *reference*)	
	Ne / *No*	0.4 (0.3 – 0.6)	<0.001	0.786	0.9 (0.6 – 1.5)
Da li bi trebalo zabraniti pušenje na svim zatvorenim javnim mestima? / *Should*	Da / *Yes*	1 (referentni / *reference*)		1 (referentni / *reference*)	
	Ne / *No*	0.4 (0.3 – 0.5)	<0.001	0.456	0.8 (0.5 – 1.4)
Da li bi trebalo zabraniti prodaju duvana adolescentima i osobama mlađim od 18 godina? / *Should smoking be banned in all indoor public places?*	Da / *Yes*	1 (referentni / *reference*)		1 (referentni / *reference*)	
	Ne / *No*	0.3 (0.2 – 0.5)	<0.001	0.149	0.7 (0.4 – 1.2)
Da li zdravstveni radnici treba da rutinski savetuju pacijente koji puše da prestanu da puše? / *Should health care workers routinely advise patients who smoke to stop smoking?*	Da / *Yes*	1 (referentni / *reference*)		1 (referentni / *reference*)	
	Ne / *No*	0.4 (0.2 – 0.7)	0.001	0.698	0.9 (0.4 – 1.8)
Da li zdravstveni radnici treba da rutinski savetuju svoje pacijente koji uzimaju druge duvanske proizvode da prestanu da ih koriste? / *Should health care workers routinely advise their patients who use other tobacco products to stop using these products?*	Da / *Yes*	1 (referentni / *reference*)		1 (referentni / *reference*)	
	Ne / *No*	0.4 (0.2 – 0.7)	0.001	0.457	0.8 (0.4 – 1.5)
Da li zdravstveni radnici treba da dobiju posebnu obuku za tehnike odvikavanja od pušenja? / *Should health workers receive special training in smoking cessation techniques?*	Da / *Yes*	1(referentni / *reference*)		1 (referentni / *reference*)	
	Ne / *No*	0.3 (0.2 – 0.4)	<0.001	0.003	0.5 (0.3 – 0.8)

* *OR* – količnik verovatnoće (engl. *unadjusted odds ratio*); *CI* – interval poverenja (engl. *confidence interval*)

** "Pušač" je osoba koja je koristila cigarete jedan ili više dana u 30 dana pre ankete

* OR – unadjusted odds ratio; CI – confidence interval

** A "smoker" is a person who smoked one or more cigarettes in the 30 days preceding the survey

DISKUSIJA

Pušenje cigareta je globalni javnozdravstveni problem. Prevalencija upotrebe duvana među studentima fakulteta zdravstvenih usmerenja varira u različitim delovima sveta. U godini istraživanja, iznosila je iznad 40% u Albaniji (43,3%), Bosni i Hercegovini (40,3%) i Boliviji (41,1%), a ispod 5% u Ugandi (2,8%), Šri Lanki (4,1%) i Tajlandu (2,1%) [23]. Posmatrajući zemlje iz okruženja Crne Gore, u Srbiji je prevalencija pušenja iznosila 34,7%, u Hrvatskoj 36,6% i u Sloveniji 20,9% [23].

Činjenicu da mladići počinju ranije da konzumiraju cigarete od devojaka, kao i da među njima ima duplo više pušača, potkrepljuje mišljenje da su pojedine sredine tolerantnije prema muškarcima, te se rizično ponašanje posmatra kao deo muškog identiteta [27]. To je i potvrđeno pojedinim istraživanjima, koja su pokazala da se muškarci koji gaje tradicionalnu muškost češće upuštaju u rizična ponašanja, kao što su upotreba duvana, zloupotreba alkohola i droga, rizično seksualno ponašanje i nasilje [28,29,30]. Sa početkom borbe za emancipaciju žena, zabrana pušenja shvatana je kao diskriminacija i pušenje je postalo jedan od simbola moderne žene [31].

Prevalencija upotrebe duvanskih prerađevina ili drugih duvanskih proizvoda među studentima zdravstvenih usmerenja u Crnoj Gori je, posmatrajući godinu istraživanja, iznosila 12,4%. U odnosu na zemlje u regionu, jedino je u Srbiji ta prevalencija bila veća i iznosila je 18%, dok su druge zemlje iz okruženja imale manju prevalenciju u odnosu na Crnu Goru: Hrvatska (10,7%), Bosna i Hercegovina (8,7%), Slovenija (5,6%) i Albanija 1,5%. U odnosu na druge zemlje širom sveta Nigerija je imala vodeću prevalenciju koja je iznosila 27,7%, a najmanju, od 0,7%, imala je Uganda [23].

U Crnoj Gori je poslednjih godina, formulisanjem zakonske regulative, učinjen izvesni napor da se ograniči upotreba duvana i duvanskih proizvoda. Doneti zakonski propisi regulišu zabranu pušenja u javnim ustanovama, posebno u ustanovama koje obavljaju delatnost iz domena zaštite zdravlja i obrazovanja [32]. Većina crnogorskih studenata nepušača je imala pozitivne stavove u odnosu na zakonsku regulativu prodaje duvana, zabrane reklamiranja duvana i obezbeđivanja zona bez duvanskog dima. Takvo mišljenje su delili i studenti zdravstvenih studija u Hrvatskoj [33]. U odnosu na zabranu pušenja na svim zatvorenim javnim mestima, istraživanja su pokazala da je većina studenata zdravstvenih usmerenja u Turskoj, Kini, Rijadu (Saudijska Arabija) podržavala ovakav tip zabrane [34,35,36].

Skoro dve trećine ispitanika u Crnoj Gori (62,7%) je smatralo da bi zdravstveni radnici trebalo da služe kao uzor svojim pacijentima i stanovništvu. Slično ovom rezultatu, 65% studenata zdravstvenih usmerenja na Malti je takođe verovalo da su zdravstveni radnici svojim primerom uzori u društvu [37].

(OR 5.8) of supporting the attitude: "Health workers who smoke are less suitable to advise patients on how to stop smoking.". Students who were on their sixth year of studies had a 70% lower likelihood of supporting the above stated statement (OR 0.3). Respondents whose opinion was that smoking should not be banned in restaurants had a 40% lower probability of supporting the attitude: "Health workers who smoke are less suitable to advise patients on how to stop smoking." (OR 0.6). Also, those students who did not support the attitude: "Health workers should receive special training on smoking cessation techniques.", had a 50% lower probability of supporting the above-mentioned attitude (OR 0.5), (Table 8). The entire model is statistically significant ($p < 0.001$). The model entirely explains between 8.3% (Cox & Snell) and 12.6% (Nagelkerke) of the variance in the smoking status, and precisely classifies 79.8% cases (98.6% of those who supported the stated attitude and 16.1% of those who negated it).

DISCUSSION

Smoking cigarettes is a global public health problem. The prevalence of tobacco use amongst health professions students varies in different parts of the world. In the year of our survey, it was above 40% in Albania (43.3%), Bosnia and Herzegovina (40.3%), and Bolivia (41.1%), while it was under 5% in Uganda (2.8%), Sri Lanka (4.1%) and Thailand (2.1%) [23]. Looking at the countries surrounding Montenegro, the prevalence of smoking in Serbia was 34.7%, it was 36.6% in Croatia, and 20.9% in Slovenia [23].

The fact that young men start smoking cigarettes earlier than young women, as well as the fact that the number of young men who smoke is double the number of young female smokers supports the view that certain societies are more tolerant towards men than towards women, whereby risky behavior is viewed as a part of the male identity [27]. This was, in fact, confirmed in certain studies, which showed that men who cultivate a traditional sense of masculinity more commonly engage in risky behavior, such as tobacco use, alcohol and drug abuse, risky sexual behavior and violence [28,29,30]. With the beginning of the fight for women emancipation, the prohibition of smoking was viewed as discrimination, and smoking became one of the symbols of the modern woman [31].

The prevalence of the use of tobacco products other than cigarettes amongst health professions students in Montenegro was, observing the year of the survey, 12.4%. In relation to the countries in the region, only Serbia had a higher prevalence, and it was 18%, while other countries had a lower prevalence than Montenegro, namely: Croatia (10.7%), Bosnia and Herzegovina

Istraživanje sprovedeno u Kanadi među studentima fakulteta zdravstvenog usmerenja, pokazalo je da jedan deo profesionalne odgovornosti podrazumeva izjednačavanje ličnog zdravog ponašanja sa angažovanjem u preventivnom savetovanju i prihvatanjem značajnosti takve uloge [38]. Slično njima, svaki osmi crnogorski student, od njih deset, smatrao je da zdravstveni radnici imaju ulogu u davanju saveta ili informacija o odvikavanju od pušenja svojim pacijentima, dok je tri četvrtine njih smatralo da se uvećavaju šanse da pacijent prekine da puši ako dobije savet od zdravstvenog radnika. Veruje se da savet od strane lekara oko dva puta povećava šansu da pacijent "ostavi cigarete" [39]. Međutim, zdravstveni radnici koji koriste duvan mogu imati barijeru da daju savet pacijentima kako da prestanu sa pušenjem cigareta [40].

Većina studenata iz Crne Gore, više od 90%, smatrala je da zdravstveni radnici treba da rutinski savetuju pacijente koji puše duvan i koji koriste druge duvanske proizvode kako da prestanu da ih koriste. Osim toga, nešto više od tri četvrtine studenata je smatralo da su zdravstveni radnici koji puše, kao i oni koji koriste druge duvanske proizvode, manje pogodni da savetuju pacijente kako da prestanu da ih koriste.

Nekoliko istraživanja je ukazalo na moguće barijere koje se odnose na nemogućnost pružanja preventivnih usluga od strane zdravstvenih radnika [41]: nedostatak informacija (znanja) o tehnikama koje se odnose na prestanak pušenja [42], nedostatak poverenja u savetodavne veštine [43,44], višestruki zahtevi koji se istovremeno postavljaju pred zdravstvene radnike [42,44,45], nedostatak specijalizovanih usluga koje se bave odvikavanjem od pušenja [45] i zabrinutost o otuđenju onih pacijenata kojima se ponudi savet o prestanku pušenja, posebno pušača koji nisu spremni da prekinu sa tom navikom [44]. Edukacija i obuka zdravstvenih radnika mogla bi da umanji dejstvo nekih od ovih prepreka. Zapravo, istraživanja su pokazala da samo par sati obuke o štetnim efektima duvana može značajno da obogati medicinsko znanje studenata i lekara, i da poveća poverenje i verovatnoću pružanja preventivnih usluga [46,47].

Većina studenata zdravstvenih studija u Crnoj Gori (86,74%) je smatrala da bi zdravstveni radnici trebalo da dobiju posebnu obuku za tehnike odvikavanja od pušenja, što je donekle u saglasnosti sa rezultatima istraživanja koje prikazuje situacionu analizu problema pušenja među studentima fakulteta zdravstvenih usmerenja, a koje je sprovedeno po istoj metodologiji u 48 zemalja širom sveta [23]. Najniža stopa u korist ovog pitanja zabeležena je u Češkoj (60,8%), a najviša u Kambodži (99,1%) [23].

Napori koji se ulažu da bi se pacijenti odvikli od štetne upotrebe duvana potiču prvenstveno od lekara

(8.7%), Slovenia (5.6%), and Albania (1.5%). As compared to other countries worldwide, Nigeria had a leading prevalence of 27.7%, while Uganda had the lowest prevalence of 0.7% [23].

In Montenegro, in the recent years, with the formulation of new laws and regulations, a certain effort has been made to limit the use of tobacco and tobacco products. The adopted regulations formulate the ban on smoking in public institutions, especially in institutions involved in health and education [32]. Most non-smoking Montenegrin students had positive attitudes in relation to laws and regulations regulating tobacco sale, the ban on advertising tobacco, and providing smoke free zones. This opinion was shared also by health professions students in Croatia [33]. In relation to smoking prohibition in all public indoor spaces, research showed that most health professions students in Turkey, China, Riad (Saudi Arabia) supported this type of ban [34,35,36].

Almost two thirds of the respondents from Montenegro (62.7%) also felt that health workers should be role models both for their patients and for the general population. Similarly, 65% of the health professions students in Malta also believed that health workers should be role models in the society [37].

A study carried out in Canada amongst health sciences students, showed that it was considered a part of professional responsibility to equal one's own healthy lifestyle with engagement in preventive consulting and with accepting the importance of this role [38]. Similarly, every eighth Montenegrin student, out of ten, felt that health workers have a role in providing advice and information on smoking cessation to their patients, while three quarters of them believed that the chances that a patient will stop smoking increase if they are given advice by a health worker to do so. It is believed that advice from a doctor to that effect, approximately doubles the probability that a patient will stop smoking [39]. However, health workers who consume tobacco may have reservations when it comes to advising patients on how to stop smoking [40].

Most students from Montenegro, i.e., more than 90% of them, felt that health workers should routinely advise their patients who smoke or use other tobacco products to stop using them. Also, a little over three quarters of the students believed that health workers who smoke, as well as those who use other tobacco products, are less suitable to advise patients on how to stop using them.

Several studies indicated the possible barriers which relate to the inability of health workers to provide preventive services [41], these being: lack of information (knowledge) on techniques related to smoking

na primarnom nivou zdravstvene zaštite [48,49,50]. Istraživanja pokazuju da studenti medicine nemaju adekvatno znanje o bolestima povezanim s pušenjem i nemaju obuku o tehnikama odvikavanja od pušenja [51,52]. U tretiranju zavisnosti pacijenata od pušenja, pored lekara, potrebno je uključiti i druge profile zdravstvenih radnika (npr. medicinske sestre, stomatologe, farmaceute), što bi pomoglo u identifikaciji novih pušača a samim tim i unapredilo pokušaje odvikavanja pacijenata od pušenja [7].

Okvirna konvencija o kontroli duvana naglašava važnost uloge zdravstvenih radnika (doktora, stomatologa, farmaceuta, medicinskih tehničara) u prevenciji upotrebe duvana i prestanku pušenja, kratkim savetovanjem ili bar jednostavnim savetom [40].

Većina studenata je, tokom nastave na fakultetima zdravstvenih usmerenja u Crnoj Gori, učila o opasnostima upotrebe duvana. Međutim, samo jedna trećina studenata je dobila formalnu obuku kako da pacijente odvikavaju od pušenja. Rezultati već pomenute analize podataka dobijenih iz istraživanja znanja i stavova studenata zdravstvenih studija širom sveta [23], pokazali su da se, u većini zemalja, odnosno u 46 od analiziranih 48 zemalja, manje od 40% studenta zdravstvenih nauka izjasnilo da su dobili formalnu obuku na ovu temu. Međutim, u Nigeriji je taj procenat bio nešto veći i iznosio 46,4%, kao i u Mjanmaru (43,7%) [23]. Tokom kliničkog staža, studenti medicine, prilikom uzimanja anamneze od pacijenata, obično pitaju o istoriji pušenja, ali retko savetuju o prestanku pušenja cigareta [40].

Oko polovine ispitivanih studenata fakulteta zdravstvenog usmerenja u Crnoj Gori je učilo o važnosti obezbeđivanja obrazovnog materijala pacijentima kao vida podrške u odvikavanju od pušenja, dok je oko dve petine njih imalo priliku da diskutuje o razlozima zašto ljudi puše i o opasnim posledicama koje duvanski dim ima na ljudsko zdravlje. Analiza poznavanja metoda za odvikavanje od pušenja pokazala je da je četiri petine crnogorskih studenata čulo za terapiju zamene nikotina, dok je upola manji broj studenata čuo za upotrebu antidepresiva u programu odvikavanja pacijenata od pušenja. Za razliku od njih, studenti u Španiji su bili najbolje informisani o upotrebi zamenskih nikotinskih sredstava (96,3%), dok su studenti u Nemačkoj bili lošije informisani – 33,6% njih je čulo za upotrebu antidepresiva kao jedne od terapijskih metoda odvikavanja pacijenata od pušenja [51].

Rezultati dobijeni ovim istraživanjem ukazuju na praznine u obrazovnim kurikulumima škola medicinskih usmerenja. Istraživanje je ukazalo na postojanje potrebe da se u okviru nastavnog plana i programa ovakvih škola osmisli specifično gradivo koje će, ne samo informisati studente o zdravstvenim posledicama

cessation [42], lack of confidence in their own counselling skills [43,44], multiple simultaneous demands put before health care workers [42,44,45], lack of specialized services that deal with smoking cessation [45], as well as the fear of alienating those patients whom they may advise to stop smoking and who are not ready to do so [44]. The education and training of health workers could mitigate some of these barriers. In fact, research has shown that as little as several hours of training on the harmful effects of tobacco may significantly improve medical knowledge of students and doctors, as well as increase trust and the probability of offering preventive services [46,47].

Most health professions students in Montenegro (86.74%) believed that health workers should receive special training in smoking cessation techniques, which is somewhat in keeping with the results of the study showing a situational analysis of the problem of smoking amongst students of health sciences, carried out according to the same methodology, in 48 countries worldwide [23]. The lowest rate supporting this attitude was in the Czech Republic (60.8%), while the highest was in Cambodia (99.1%) [23].

The efforts invested in helping patients stop the harmful habit of using tobacco stem primarily from doctors at the level of primary health care [48,49,50]. Research shows that medical students do not have the appropriate knowledge on smoking related diseases and that they do not receive training on smoking cessation techniques [51,52]. In treating smoking addiction in patients, in addition to doctors, other profiles of health workers need to be included (e.g., medical nurses, dentists, pharmacists), which could help in the identification of new smokers, and thereby promote patient smoking cessation attempts [7].

The Framework Convention for Tobacco Control stresses the significance of the role of health workers (doctors, dentists, pharmacists, medical technicians) in the prevention of tobacco use and in smoking cessation, through short counselling or at least a simple piece of advice [40].

Through their studies at health sciences faculties in Montenegro, most students learned on the dangers of tobacco use. However, only one third of students received formal training on how to assist patients in smoking cessation. The results of the abovementioned data analysis obtained through research on the knowledge and attitudes of health professions students worldwide [23], showed that, in most countries, i.e., in 46 out of 48 countries, less than 40% of health professions students stated that they had received formal training related to this subject. However, in Nigeria, this percentage was somewhat higher 46.4%, as well as in

upotrebe duvana, već će im i omogućiti da steknu veštine u savetovanju i pomaganju pacijentima u odvikavanju od pušenja [53]. Prenatrpano jezgro nastavnog plana i programa u većini škola zdravstvenih usmerenja ograničava mogućnost dodatne edukacije, tako da bi najosnovnija strategija mogla da se odnosi na skretanje pažnje kliničkim profesorima da iskoriste svaki povoljan trenutak da obaveste studente o toksičnim efektima upotrebe duvana i duvanskih proizvoda, što bi moglo da bude isplativ i efikasan način za poboljšanje znanja [54].

Zdravstveni radnici koji puše šalju ambivalentnu poruku pacijentima koje oni zapravo ohrabruju da prestanu sa pušenjem [15,55]. Veća je šansa da će medicinski stručnjaci koji puše imati stavove koji ih sprečavaju da pacijentima upute antipušački savet [56]. Rezultati istraživanja u Crnoj Gori pokazali su da je bilo manje verovatno da će potvrdan stav o tome da su zdravstveni radnici koji puše manje pogodni da savetuju pacijente o prestanku pušenja, imati oni studenti koji su smatrali da je potrebno zabraniti pušenje u restoranima i oni koji misle da je zdravstvenim radnicima potrebna posebna obuka za tehnike odvikavanja od pušenja, dok je veća verovatnoća bila da će takav stav zastupati stariji studenti.

Analiza istraživanja među studentima zdravstvenih studija u Pakistanu odnosila se na njihovu percepciju o ulozi zdravstvenih radnika u kontroli duvana. Podaci pokazuju da je veća verovatnoća bila da će studenti imati negativnu percepciju o ulozi zdravstvenih radnika u kontroli upotrebe duvana ako su bili u pitanju muškarci i ako su imali nedovoljno znanja o tehnikama za odvikavanje od pušenja, kao i ako su u pitanju bili ispitanici koji nisu smatrali da treba zabraniti reklamiranje duvana i duvanskih proizvoda, te upotrebu duvana na svim javnim mestima [57]. U crnogorskom istraživanju razmatrana je percepcija studenata o povezanosti ponašanja i savetovanja, odnosno, konkretno je bio u pitanju stav o pogodnosti zdravstvenih radnika koji puše da savetuju pacijente da prestanu da konzumiraju cigarete. Ovo istraživanje može poslužiti za ispitivanje kurikuluma za izgradnju uloge zdravstvenih profesionalaca u prevenciji i kontroli pušenja.

Ovakvi rezultati nam ukazuju na to da je potrebno obratiti pažnju na formiranje zdravog ponašanja studenata fakulteta zdravstvenih nauka kako bi se obezbedile generacije budućih zdravstvenih profesionalaca koji će negovati zdrave životne navike i na taj način unaprediti veštine savetovanja, te biti pozitivan primer za pacijente i za društvo. Smanjenje pušenja među studentima fakulteta zdravstvenog usmerenja je potencijalno veoma moćna strategija za smanjenje pušenja među budućim zdravstvenim

Myanmar (43.7%) [23]. During their clinical internship, when taking the patient's anamnesis, medical students usually inquire about smoking history, but they rarely advise on cigarette smoking cessation [40].

Around half of the health professions students in Montenegro included in the survey studied about the significance of providing educational materials to patients as a form of smoking cessation support, while around two fifths of them had the opportunity to discuss the reasons why people smoke and to discuss the harmful consequences of smoking on human health. The analysis of the knowledge on smoking cessation methods showed that four fifths of Montenegrin students had heard of nicotine replacement therapy, while a half of that number had heard of the use of antidepressants as a part of the smoking cessation program. Conversely, students in Spain were best informed on nicotine replacement products (96.3%), while students in Germany were less informed – 33.6% of them had heard of the use of antidepressants as one of the therapeutic methods used in patients to help with smoking cessation [51].

The results obtained in the present study indicate the deficiencies in the curricula of health sciences faculties. The study indicated the need for special content to be designed within the study programs of such faculties, which would, not only inform students on the health effects of tobacco use, but also enable them to obtain skills in counselling patients and assisting them in smoking cessation [53]. An overburdened core curriculum in most health sciences faculties limits the options for additional education and training, which is why the most basic strategy could relate to suggesting to the professors at these faculties to use every favorable opportunity to inform students on the toxic effects of the use of tobacco and tobacco products, which could be a profitable and efficient way of improving the students' knowledge and understanding of this issue [54].

Health workers who smoke send an ambivalent message to patients whom they are, in fact, encouraging to stop smoking [15,55]. There is a higher probability that health workers who smoke will have attitudes that prevent them from advising patients against smoking [56]. The results of the survey in Montenegro showed that it was less probable that a positive opinion on the attitude that health workers who smoke are less suitable to advise patients on smoking cessation would be held by those students who believed that smoking should be banned in restaurants as well as those who believed that health workers need special training in smoking cessation techniques, while it was more likely that this attitude would be supported by older students.

profesionalcima, što može imati i značajan uticaj na smanjenje upotrebe duvana među korisnicima zdravstvene zaštite, kao i na smanjenje upotrebe duvana u opštoj populaciji [58].

Međutim, promocija, unapređenje i očuvanje zdravlja nisu odgovornost samo zdravstvenog sektora. Promovisanje nepušenja, kao jednog od vidova zdravog načina života, koristeći potencijale modernih mas-medija, može biti jedno od najjačih sredstava u borbi protiv reklamiranja duvanskih proizvoda. Dovoljno je dokaza koji pokazuju uzročno-posledičnu vezu između napora duvanskih kompanija, koje reklamiraju i promovišu svojih proizvode, i započinjanja (inicijacije) i progresivnog korišćenja duvana među mladima [26]. Istraživanja pokazuju da su mas-medijske kampanje jedne od najdelotvornijih strategija u promeni socijalnih normi, kao i u prevenciji pušenja kod mladih ljudi [26]. U skladu sa tim, pored razvijene mreže savetovališta za mlade u Crnoj Gori, u kojima se sprovodi program za odvikavanje od pušenja, potrebno je mobilisati i društvene mreže, kao nov i moderan način komunikacije i prenošenja informacija, sa zanimljivim porukama, klipovima, spotovima ili kratkim filmovima o štetnim efektima upotrebe duvana.

Pri tumačenju rezultata istraživanja sprovedenog u Crnoj Gori, moraju se uzeti u obzir i određenja ograničenja u metodologiji. Iako je istraživanje obuhvatilo veliki uzorak studentske populacije zdravstvenih studija, ono je rađeno po tipu studije preseka, te se nisu mogli utvrditi uzročno-posledični odnosi, niti generalizovati rezultati na sve zdravstvene radnike. Drugo ograničenje je to što su podaci dobijeni putem upitnika koji su studenti sami popunjavali i koji je bio zasnovan na samoizveštavanju, što je sledstveno moglo da dovede do potcenjivanja ili precenjivanja vrednosti dobijenih rezultata. Treće ograničenje je u tome što su razmatrani stavovi ispitanika a nisu ispitivana njihova znanja (npr. o efektima pušenja ili o intervencijama) koja su potrebna da bi se radilo na smanjivanju prevalencije pušenja. Četvrto ograničenje ogleda se u tome što istraživanje nije razmatralo efekte drugih faktora, kao što su uticaj porodice ili prijatelja na status pušenja ispitanika. Peto ograničenje sastoji se u tome što istraživanje nije ispitivalo razlike u stavovima između studenata medicinskog fakulteta, stomatologije, farmacije, odnosno studenata visoke medicinske škole i škole za fizioterapiju. Istraživanje je rađeno pre deset godina, i to je šesto ograničenje, ali je važno da postoji osnovna (engl. *baseline*) studija, kako bi se uradila nova istraživanja, naročito ispitivanja znanja i stavova o upotrebi elektronskih cigareta među studentima fakulteta zdravstvenih usmerenja, kao i u opštoj populaciji.

The analysis of a survey carried out amongst Pakistani health professions students, related to their perception on the role of health workers in tobacco control. The data showed that there was a higher probability that students would have a negative perception of the role of health workers in the control of tobacco if they were male and if the respondents had insufficient knowledge on smoke cessation techniques, as well as if the respondents were those who did not believe that tobacco and tobacco product advertising should be banned, nor that the use of tobacco in all public places [57] should be prohibited. The Montenegrin survey analyzed the perception of students related to the link between behavior and counselling, i.e., specifically the attitude on the suitability of health workers who smoke to counsel patients on cigarette smoking cessation. This survey may be useful for analyzing the curriculum for building the role of health professionals in smoking prevention and control.

Such results indicate that it is necessary to focus on the forming of healthy behavior amongst health professions students in order to cultivate generations of future health professionals who will foster a healthy lifestyle, and in this way promote counseling skills, in addition to being positive role models for patients and society. Reducing smoking amongst students of health sciences is potentially a very powerful strategy for decreasing smoking amongst future health professionals, which may have a significant impact on the reduction of tobacco consumption amongst healthcare service users, as well as the reduction of tobacco consumption in the general population [58].

However, promoting, improving, and maintaining health is not only the responsibility of the healthcare sector. Promoting non-smoking, as one of the forms of a healthy lifestyle, through the use of potentials of modern mass media, may be one of the most powerful instruments in the fight against tobacco advertising. There is enough evidence demonstrating the cause-and-effect link between the efforts of tobacco companies advertising their products and the initiation and progressive use of tobacco amongst young people [26]. Research has shown that mass media campaigns are some of the most effective strategies in altering social norms, as well as in preventing smoking in young people [26]. Therefore, in addition to a comprehensive network of counseling youth centers in Montenegro, where smoking cessation programs are being carried out, it is also necessary to mobilize social networks, as a new and modern way of communicating and disseminating information with interesting messages, video clips, or short films on the harmful effects of tobacco use.

ZAKLJUČAK

Rezultati istraživanja ukazuju na to da je svaki četvrti student fakulteta zdravstvenih usmerenja pušio cigarete u 30 dana pre sprovođenja ankete. Više konzumenata cigareta je bilo među mladićima nego među devojkama. Najveći broj konzumenata cigareta su bili studenti treće i apsolventske godine studija. Najslabiju kariku u smanjivanju upotrebe duvana među studentima, pored zakonske regulative i uloge zdravstvenih radnika u prevenciji pušenja, predstavljala je njihova dodiplomska edukacija na zdravstvenim fakultetima. Stav o manjoj pogodnosti zdravstvenih radnika koji koriste duvan da savetuju pacijente kako da prestanu da ga koriste imali su oni ispitanici koji su smatrali da nije potrebno zabraniti pušenje cigareta u restoranima i oni koji su mislili da zdravstvenim radnicima nije potrebna posebna obuka za tehnike odvikavanja od pušenja.

S obzirom na rezultate istraživanja i pojavu veće upotrebe elektronskih cigareta, naročito kod mladih ljudi, potrebno je uraditi slično istraživanje, kako bi se utvrdilo da li je došlo do smanjenja konzumiranja cigareta i drugih duvanskih proizvoda, ali i utvrdila prevalencija i učestalost upotrebe elektronskih cigareta, u opštoj populaciji, kao i među studentima fakulteta medicinskih usmerenja. Imajući u vidu sličnost rezultata sa rezultatima istraživanja u drugim zemljama u evropskom regionu, postoji potreba osmišljavanja efikasnog univerzalnog programa kontrole i prevencije pušenja među studentima fakulteta zdravstvenih usmerenja, uz poštovanje ažuriranih smernica Okvirne konvencije za kontrolu duvana Svetske zdravstvene organizacije. Važno je da se poboljša formalna obuka i praktikovanje veština za odvikavanje od pušenja koje su zasnovane na dokazima, istražuju razlozi i razviju medijske tehnike za sticanje znanja, kako bi se doprinelo naporima da fakulteti zdravstvenih usmerenja budu 100% bez duvanskog dima. Postoje delotvorne i efikasne mere za odvikavanje od pušenja, međutim najefikasnija mera jeste život bez duvanskog dima, odnosno ne počinjati sa tom životno ugrožavajućom navikom.

Sukob interesa: Nije prijavljen.

When interpreting the study carried out in Montenegro, certain limitations in methodology need to be taken into consideration. Although the survey included a large sample of the health professions student population, it was performed as a cross-sectional study, which made it impossible to determine cause-and-effect relationships or to generalize the results so that they could apply to all health workers. The second limitation relates to the fact that the data was obtained through a questionnaire filled out by the students themselves and based on self-reporting, which could consequently have led to the underestimation or overestimation of the obtained results. The third limitation lies in the fact that respondent attitudes were investigated but not their knowledge (for instance, on smoking effects or on interventions), which is necessary in order to work on decreasing smoking prevalence. The fourth limitation relates to the fact that the study did not consider the effects of other factors, such as the influence of the family or friends on the smoking status of the respondents. The fifth limitation is connected to the fact that the study did not investigate the differences in attitudes amongst the students of the faculties of medicine, dental medicine, and pharmacy, as well as students of applied physiotherapy and students at the nursing college. The study was carried out ten years ago, which is the sixth limitation, however, it is important that it represents a baseline study for new research, especially research on the attitudes on the use of electronic cigarettes amongst students of health sciences faculties, as well as in the population.

CONCLUSION

The research results showed that every fourth health professions student smoked cigarettes in the 30 days preceding the survey. There were more male than female cigarette smokers. The greatest number of cigarette smokers were third year students and degree candidates. In addition to laws and regulations and the role of health workers in smoking prevention, the weakest link in decreasing the use of tobacco amongst students, was their undergraduate education at health sciences faculties. The attitude that health workers who use tobacco are less suitable to advise patients on how to stop using tobacco, was supported by those respondents who also believed that it was not necessary to ban smoking in restaurants and those who felt that health workers did not need special training on smoking cessation techniques.

Bearing in mind the results of the research, and the increased use of electronic cigarettes, especially in the young population, it is necessary to carry out a similar survey, in order to determine whether smoking cigarettes and the consumption of other tobacco products

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has decreased, but also in order to establish the prevalence and frequency of the use of electronic cigarettes, both in the general population, and amongst health professions students. Bearing in mind the similarity of the results of the present study with the results from other European countries, it is necessary to design an efficient universal program of smoking control and prevention amongst students of health sciences, in keeping with the updated guidelines of the World Health Organization Framework Convention for Tobacco Control. It is important to improve the formal training and practice of evidence-based smoking cessation skills, to research reasons and develop media techniques for acquiring knowledge, in order to contribute to the effort of making health sciences faculties 100% smoke free. There are effective and efficient methods of smoking cessation, however, the most efficient measure is life without cigarette smoke, i.e., simply not beginning with this life-threatening habit.

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