Med. čas. 2022; 56(1): 7-12.
ORIGINALNI NAUČNI ČLANAK
doi: 10.5937/mckg56-37724
COBISS . SR - ID 73580297
UDK. 613.84-057.875(497.16)

CIGARETTE CONSUMPTION AMONG UNIVERSITY STUDENTS IN MONTENEGRO: THE PREVALENCE AND SMOKING HABITS

Vasilije Boskovic[1], Jelena Vlaovic Boskovic[2], Agima Ljaljevic[3], Batric Babovic[1], Zivana Slovic[4], Snezana Corovic[5], Aleksandar Nenadovic[6], and Olgica Mihaljevic[7]
[1]Clinic for Nephrology, Clinical Center of Montenegro, Podgorica, Montenegro
[2]General Hospital Niksic, Niksic, Montenegro
[3]Institute of Public Health of Montenegro, Podgorica, Montenegro
[4]University of Kragujevac, Serbia, Faculty of Medical Sciences, Department of Forensic Medicine
[5]The First Grammar School of Kragujevac, Kragujevac, Serbia
[6]Institute for Cardiovascular Diseases Dedinje, Belgrade, Serbia
[7]University of Kragujevac, Serbia, Faculty of Medical Sciences, Department of Pathophysiology

KONZUMIRANJE CIGARETA MEĐU STUDENTIMA UNIVERZITETA CRNE GORE: PREVALENCIJA I PUŠAČKE NAVIKE

Vasilije Bošković[1], Jelena Vlaović Bošković[2], Agima Ljaljević[3], Batrić Babović[1], Živana Slović[4], Snežana Ćorović[5], Aleksandar Nenadović[6] i Olgica Mihaljević[7]
[1]Klinika za nefrologiju, Klinički centar Crne Gore, Podgorica, Crna Gora
[2]Opšta bolnica Nikšić, Nikšić, Crna Gora
3Institut za javno zdravlje Crne Gore, Podgorica, Crna Gora
[4]Univerzitet u Kragujevcu, Fakultet medicinskih nauka, Katedra za sudsku medicinu, Srbija
[5]Prva kragujevačka gimnazija, Kragujevac, Srbija
[6]Institut za kardiovaskularne bolesti Dedinje, Beograd, Srbija
[7]Univerzitet u Kragujevcu, Fakultet medicinskih nauka, Katedra za patološku fiziologiju, Srbija

ABSTRACT

Objective. The aim of this study was to determine the prevalence of cigarette consumption and the differences in smoking habits among university students aged 18-26 years from different faculties in Montenegro.

Method. This cross-sectional study was conducted in University of Montenegro in Podgorica and the data were collected using a structured questionnaire.

Results. The study enrolled 146 students of both genders (63 males and 83 females) with an average age of 21.63 ± 2.16 years. It was shown that overall prevalence of cigarette consumption was 52.05% among all participants i.e. 21.62% among the students of Faculty of Medicine ($p < 0.001$). Among the students who practiced smoking, 46.57% of them stated that it was in the period of high school. We did not estimate a significant difference in the daily smoking frequency (number of cigarettes per day) ($p = 0.443$). Also, study participants did not have a specific time during the day for cigarette consumption (67.20%). The largest number of students (40.70%) light the first cigarette more than half an hour after waking up. University students believed that cigarette smoking could help overcome stressful situations, and that it improved concentration and memory. Smoking status was found to be higher among the students of older age ($p < 0.001$) and advancing year of faculty ($p = 0.002$). The analysis showed no significant gender difference in smoking habits.

Conclusion. Our investigation confirmed a high prevalence of cigarette consumption among university students in Montenegro, and therefore we recommend that appropriate programs for smoking prevention and cessation be developed.

Key words: *cigarette smoking; students; universities.*

SAŽETAK

Cilj. Cilj ovog istraživanja bio je da se utvrdi prevalencija konzumiranja cigareta i razlike u pušačkim navikama među studentima starosti 18–26 godina sa različitih fakulteta u Crnoj Gori.

Metode. Ova studija preseka sprovedena je na Univerzitetu Crne Gore u Podgorici, a podaci su prikupljeni korišćenjem strukturisanog upitnika.

Rezultati. Istraživanjem je obuhvaćeno 146 ispitanika oba pola (63 studenta i 83 studentkinje) prosečne starosti 21,63 ± 2,16 godina. Pokazano je da je ukupna prevalencija konzumiranja cigareta 52,05% među svim studentima, odnosno 21,62% među studentima Medicinskog fakulteta ($p < 0,001$). Među studentima koji su imali iskustvo sa pušenjem, njih 46,57% je navelo da je to bilo u periodu srednje škole. Nismo utvrdili značajnu razliku u dnevnoj učestalosti pušenja (broj cigareta dnevno) ($p = 0,443$). Takođe, ispitanici nisu imali određeno vreme tokom dana za konzumiranje cigareta (67,20%). Najveći broj ispitanika (40,70%) zapali prvu cigaretu nakon više od pola sata od buđenja. Studenti veruju da konzumiranjem cigareta mogu da prevaziđu stresne situacije i poboljšaju koncentraciju i pamćenje. Utvrđeno je da je pušački status viši kod studenata starijeg uzrasta ($p < 0,001$) i više godine fakulteta ($p = 0,002$). Studija nije pokazala značajnu razliku u pušačkim navikama među polovima.

Zaključak. Naše istraživanje je potvrdilo visoku prevalenciju konzumiranja cigareta među studentima u Crnoj Gori, te stoga preporučujemo izradu odgovarajućih programa za prevenciju i odvikavanje od pušenja.

Ključne reči: *konzumiranje cigareta; studenti; univerziteti.*

Primljen/Received: 07.05.2022.
Prihvaćen/Accepted: 28.07.2022.

Olgica Mihaljevic, MD, PhD
University of Kragujevac, Kragujevac, Serbia, Faculty of Medical Sciences, Department of Pathophysiology,
Svetozara Markovica 69, 34000 Kragujevac, Serbia
Tel: +38134306800, Fax: +38134306800, ext 121, E-mail: vrndic07@yahoo.com

doi: 10.5937/mckg56-37724
COBISS . SR - ID 73580297
UDK. 613.84-057.875(497.16)

INTRODUCTION

Smoking is the most common addiction worldwide, which is considered as the leading preventable cause of disease and death (1). According to the World Health Organization (WHO) cigarette smoking is responsible for 6 million deaths every year, with further increase in mortality rate, especially in developing countries (2). Namely, cigarette smoking has been associated with an increased risk of smoking-related diseases, in both men and women (chronic obstructive pulmonary disease, coronary heart disease and heart attack, peripheral vascular and cerebrovascular disease, diabetes, cancer) (3,4), and shorter life expectancy (at least 10 years in smokers compared to non-smokers) (5). It is estimated that smoking prevalence in developed world is 41% for men and 21% for women, whereas it is 48% for men and 8% for women in low income countries (6).

Data from previous research on rates of cigarette smoking indicate that it is a global epidemic among young people, especially in student population (7). Students' independence during faculty enrolment and changes in their social environment and identity can lead to smoking onset, reflecting the transition from children's to adults' age (8,9). Socio-cultural aspects (10) and the influence of peer behaviour (11,12) certainly contribute to the promotion on smoking initiation and continuation.

The results published so far on the rate of cigarette consumption in the student population are quite uneven, so that the prevalence of smoking among university students ranges from 28% to 67% for males, and 19% to 34% for females (13). After enrolling a faculty, about 1/3 of the students develops a daily habit of consuming cigarettes until the end of their studies (14,15). In other words, there is a positive relationship between cigarette smoking prevalence and the years of study, increasing from the first grade to the last (16). Among medical students the prevalence of smoking ranges from 3% in the United States to as much as 58% in Japan according to the results of the systematic literature review conducted by Smith and Leggat (17).

When it comes to Montenegro, the results of the ESPAD 2019 (*The European School Survey Project on Alcohol and Other Drugs*) investigation demonstrated a slight increase in smoking prevalence among high school youth, with a rate of 35% in the total study population, 37% in boys and 32% in girls (18). A previous national survey on the quality of life and lifestyles of Montenegrins showed that the prevalence of smoking in the population of young adults (aged 15 to 34) is 25.5%, and that there is a gradual increase in the percentage of subjects who started to smoke at an early age (19).

However, there is limited information on smoking among university students in Montenegro. Thus, the aim of our study was to estimate the prevalence of cigarette smoking and the differences in smoking habits among university students aged 18–26 years from different faculties in Montenegro.

SUBJECTS AND METHODS

A cross-sectional study was conducted from October to December 2019 at the University of Montenegro. The study included 146 students from different faculties: Faculty of Medicine, Faculty of Pharmacy, Faculty of Civil Engineering and Architecture, Faculty of Law, Faculty of Mechanical and Electrical Engineering, Faculty of Science, and Faculty of Economics. The inclusion criteria were: full-time student status (of both genders), enrolment in one of the listed university units, New Student Dormitory accommodation in Podgorica (I and II phase) and an age range 18-26 years.

The data were collected using a self-administered questionnaire developed by the authors and pretested to a group of students before starting the research. Smoking habits among university students were analyzed by 19 questions related to the demographic data (gender, age, faculty, year of study) and behavioural patterns with cigarette consumption (previous smoking, age of the initiation of cigarette smoking, daily frequency, duration, smoking addiction, smoking at a certain time, the first cigarette smoking after waking up, the presence of subjective difficulties, smoking in certain conditions including stressful situations and learning, roommate smoking, the impact of smoking on self-esteem, smoking in the future). All students gave written consent for the participation in the study.

All statistical analyses were done using the commercial software SPSS version 21.0 for Windows. Data are presented as mean ± standard deviation (SD) and proportion. The frequency of categorical variables was compared by Chi-square (χ^2) test. Logistic regression test was performed to determine the possible association between different socio-economic variables and smoking status. p values less than 0.05 were considered to be statistically significant.

RESULTS

The results of our study are presented in Tables 1-2 and Figures 1-3. The distributions of the study participants by sociodemographic characteristics are summarized in Table 1. The study included 146 students from different faculties of University of Montenegro. There were 63 (43.15%) male and 83 (56.85%) female students with an average age of 21.63 ± 2.16 (22.23 ± 2.10 for males and 21.17 ± 2.09 for females, $p < 0.001$). The most participants were the students of the Faculty of Medicine (n = 37), then the

doi: 10.5937/mckg56-37724
COBISS . SR - ID 73580297
UDK. 613.84-057.875(497.16)

Table 1.Sociodemographic characteristics of the study population.

Analyzed parameters		N°/percentage
Gender	Male	63 (43.15%)
	Female	83 (56.85%)
Age	18-20	56 (38.35%)
	21-23	59 (40.41%)
	24-26	31 (21.24%)
Faculty of study	Faculty of Medicine	37 (25.34%)
	Faculty of Pharmacy	21 (14.38%)
	Faculty of Civil Engineering and Architecture	22 (15.06%)
	Faculty of Law	20 (13.69%)
	Faculty of Mechanical and Electrical Engineering	22 (15.06%)
	Faculty of Science	10 (6.89%)
	Faculty of Economics	14 (9.58%)
Study year	The first year	22 (15.06%)
	The second year	30 (20.54%)
	The third year	38 (26.03%)
	The fourth year	35 (23.96%)
	The fifth year	11 (7.52%)
	The sixth year	10 (6.89%)

Table 2. Smoking habits of the study population.

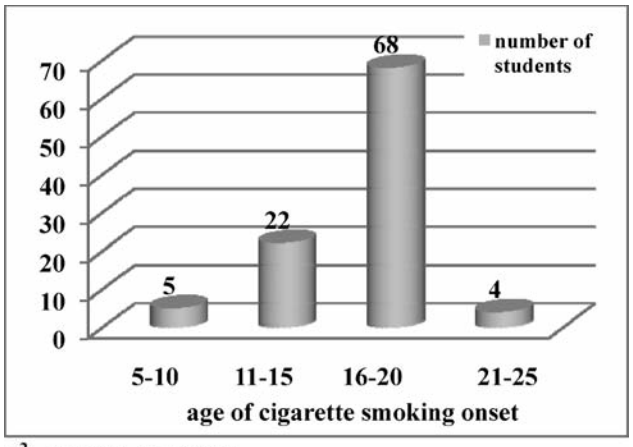
Cigarette smoking habits		N°/percentage	χ^2	p
Smoking addiction	Yes	34 (44.74%)		
	No	42 (55.26%)	0.842	0.359
Smoking at certain time	Yes	25 (32.80%)		
	No	51 (67.20%)	8.895	0.003
The first cigarette after waking up	<5 min	10 (13.15%)		
	6–10 min	16 (21.05%)	12.316	0.006
	11–30 min	19 (25.10%)		
	> 30 min	31 (40.70%)		
Symptoms in case of impossibility of smoking	Yes	39 (51.32%)		
	No	37 (48.68%)	0.053	0.819
Smoking in an uncomfortable situation	Yes	57 (75.00%)		
	No	19 (25.00%)	19.000	<0.001
Smoking during learning	Yes	54 (71.01%)		
	No	22 (28.99%)	13.474	<0.001
Smoking and stressful situation	Yes	64 (84.22%)		
	No	12 (15.78%)	35.579	<0.001
The impact of smoking on self-esteem	Yes	16 (21.05%)		
	No	60 (78.95%)	25.474	<0.001
Smoking in the future	Yes	43 (56.57%)		
	No	33 (43.43%)	1.316	0.251

Faculty of Civil Engineering and Architecture (n = 22) and the Faculty of Mechanical and Electrical Engineering (n = 22). Half of the study population were second- and third-year students.

An analysis of smoking habits showed that as many as 99 (67.80%) students had ever tried smoking, while the rest (32.20%) had no experience with smoking cigarettes ($\chi 2 = 18.521$, $p < 0.001$). Among those who experienced smoking, 46.57% of students stated that they started with cigarette smoking during their high school period (Figure 1).

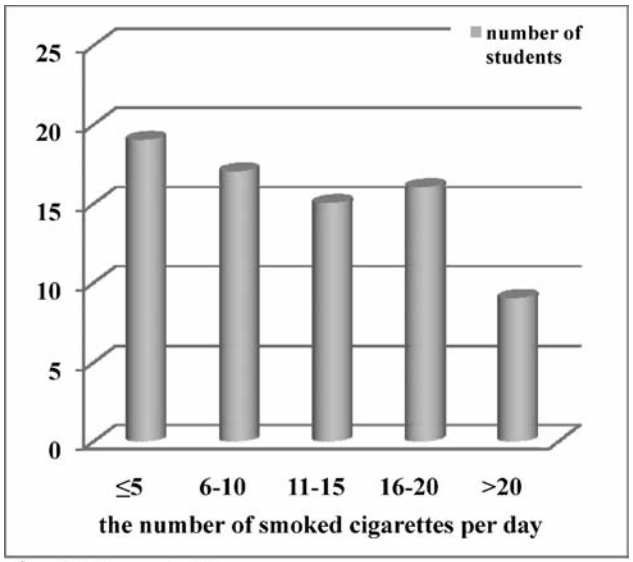
When asked about their current smoking status, 76 (52.05%) students declared themselves as smokers, while 70 (47.95%) denied cigarette consumption. In other words, we did not find a statistically significant difference in the number of smokers and non-smokers among the students included in our study ($\chi^2 = 0.247$, $p= 0.619$). Among the students of Faculty of Medicine, there were 21.62% of smokers and 78.38% of non-smokers ($\chi^2 = 11.919$, $p = 0.001$). We concluded there was a significant difference in smoking prevalence between medical and non-medical students ($\chi^2 = 115.00$, $p < 0.001$).

doi: 10.5937/mckg56-37724
COBISS . SR - ID 73580297
UDK. 613.84-057.875(497.16)



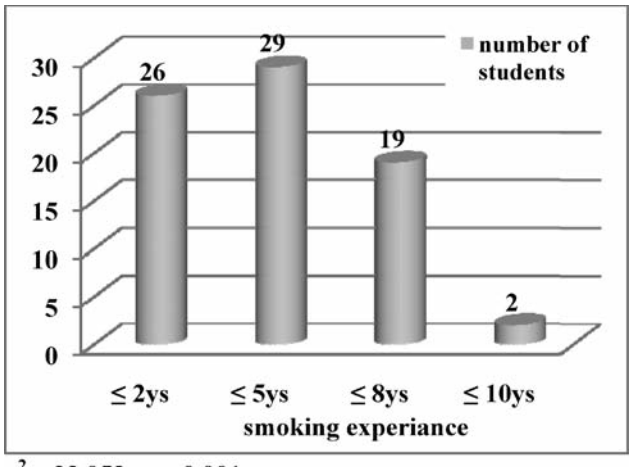
$\chi^2 = 109.04$, $p < 0.001$

Figure 1. The distribution of students who experienced cigarettes smoking at a certain age.



$\chi^2 = 3.737$, $p = 0.443$

Figure 2. The distribution of students in relation to daily frequency of smoking.



$\chi^2 = 23.053$, $p < 0.001$

Figure 3. The distribution of students in relation to the years of smoking experience.

Further, we analysed the distribution of student smokers according to the number of cigarettes smoked per day. There was no significant difference among smokers in daily smoking frequency (Figure 2). In contrast, our investigation demonstrated significant differences among university students according to the years of smoking experience (Figure 3). It has been observed that the largest percentage of smokers (38.10%) had five years of smoking experience.

Table 2 presents the smoking habits of the study population. It can be seen that most study participants did not have a specific time during the day for cigarette consumption. The largest number of students light the first cigarette more than half an hour after waking up. Statistically, more believed that cigarette smoking could help overcome unpleasant and stressful situations, and that it improved concentration and memory. Besides, a significant difference in students' attitudes about the impact of cigarette smoking on self-esteem was observed (mainly exluded positive relationship of smoking and self-esteem).

In general, our investigation showed that cigarette smoking was quite common in the dormitory (declared by 66.4% of the study population) and that roommate smoking could contributed to this habit (54.1% of participants had roommates smokers), but that it was not statistically crucial to the smoking onset ($p = 0.321$).

Finally, we analyzed the association of sociodemographic characteristics with cigarette smoking. Statistical analysis showed no significant gender differences in smoking habits ($p = 0.099$). It demonstrated the significant influence of age ($\beta = 0.730$, $p < 0.001$) and year of study ($\beta = 0.254$, $p = 0.002$) on cigarette consumption.

DISCUSSION

The aim of the current study was to find out the prevalence of cigarette smoking among university students in Montenegro and evaluate a possible association of sociodemographic characteristics with smoking habits. Our investigation indicated a high prevalence of cigarette smoking in the study population. The overall prevalence of cigarette smoking was 52.05% among all participants i.e. 21.62% among the students of Faculty of Medicine. The conducted analyzes showed that almost 70% of students had experience with cigarette consumption (ever smokers). Among the smokers, we did not estimate a significant difference in the daily smoking frequency, although most of them had 5-year cigarette consumption training. Generally, university students from our study believed that cigarette smoking could help overcome unpleasant and stressful situations, and improved concentration and memory. It was indicated that

doi: 10.5937/mckg56-37724
COBISS . SR - ID 73580297
UDK. 613.84-057.875(497.16)

smoking prevalence increased with age and advancing year of faculty.

Previously published data demonstrated an uneven prevalence of cigarette smoking among the population of university students (13,17). The authors believe that this finding could be due to different methodological approaches (including the number of participants), but also socio-demographic aspects, individual vulnerability of young people and family history of smoking as a pattern of behavior (20,21). Our results about the prevalence of cigarette smoking are consistent with the data of *Farah* and contributors who have showed that 48.4% of the students of a private university in Bangladesh were smoking (22). Similary, it was estimated that the prevalence of ever cigarette smoking of almost fifty percent of the study population consisted of university students aged 18-24 in New Zealand (23). When it comes to the differences between the students of Faculty of Medicine and the others, we concluded that current smoking prevalence was significantly lower in the medical population. Available data indicate disagreements of previous research regarding the smoking prevalence among future doctors. Namely, some of them showed declining trends in cigarette consumption with prevalence less than 20% (24), while the others demonstrated increasing trends of smoking among medical students (25,26). Although smoking is considered more acceptable among males, we did not find a significant impact of gender on cigarette consumption. Undoubtedly, there is a growing prevalence of smoking-related diseases and greater acceptance of smoking habit among women (27,28).

On the other side, it was pointed out that prevalence of cigarette smoking was positively associated with the age and study year, which could be the consequence of the increase of external influences (27). The majority of students had had their first experience with smoking in high school period, when they had been more likely to experiment with cigarettes (29). Addictive behaviors correlated to stressful life events, and self-esteem, reflecting young people's attempts to fit into the socio-cultural demands and peer attitudes (30). Thus, *Chapman* (31) and *Wellman* (32) have found a positive association between low self-esteem and smoking in adolescents. Montenegrin university students confirmed that smoking habits correlate with stress, not with self-esteem.

Our study has certain limitations including the small number of participants. Thus, repeat cross-sectional data or some longitudinal research are necessary to determine the real prevalence of cigarette smoking in this population.

In conclusion, cigarette consumption is a major public health problem that has reached epidemic proportions in the youth population. Our investigation confirmed a high prevalence of cigarette smoking among university students in Montenegro, which increased with age and advancing year of faculty. Faculty-based smoking prevention and cessation programs should be an integral part of study programs in order to raise the awareness of young people about the harmful effects of cigarette smoking.

ACKNOWLEDGMENTS

No funding was received from any sources. Conflict of interest: Authors declare no conflict of interest.

REFERENCES

1. Bernstein SL, Toll BA. Ask about smoking, not quitting: a chronic disease approach to assessing and treating tobacco use. Addict Sci Clin Pract 2019; 14: 29.
2. World Health Organization. WHO report on the global tobacco epidemic, 2017: monitoring tobacco use and prevention policies. Geneva: World Health Organization, 2017.
3. Thi Thanh Huong L, Khanh Long T, Xuan Son P, et al. Prevalence of smoking and associated factors: evidence from the CHILILAB Demographic Surveillance System in Vietnam. Asia Pac J Public Health 2017; 29(5 Suppl): 53S–61S.
4. Saffer H, Chaloupka F. The effect of tobacco advertising bans on tobacco consumption. J Health Econ 2000; 19: 1117–37.
5. Jha P, Ramasundarahettige C, Landsman V, et al. 21st-Century hazards of smoking and benefits of cessation in the United States. N Engl J Med 2013; 368: 341–50.
6. Word Health Organisation. WHO report on the global tobacco epidemic 2019: offer help to quit tobacco use. Geneva: World Health Organization, 2019. (https://www.who.int/publications/i/item/9789241516204).
7. Arrazola RA, Dube SR, King BA. Tobacco product use among middle and high school students - United States, 2011 and 2012. MMWR Morb Mortal Wkly Rep 2013; 62: 893–7.
8. La Torre G, Kirch W, Bes-Rastrollo M, et al. Tobacco use among medical students in Europe: results of a multicentre study using the Global Health Professions Student Survey. Public Health 2012; 126: 159–64.
9. Kenford SL, Wetter DW, Welsch SK, et al. Progression of collegeage cigarette samplers: what influences outcome. Addict Behav 2005; 30: 285–94.
10. Afanador LdPC, Radi DSS, Pinto LEV, et al. Sociocultural determinants of tobacco smoking initiation among university students in Bucaramanga, Colombia, 2012. Int J Prev Med 2014; 5: 1106–12.

doi: 10.5937/mckg56-37724
COBISS . SR - ID 73580297
UDK. 613.84-057.875(497.16)

11. El-Sharkawy GF. Cigarette smoking among university students: family-related & personal risk factors. J Am Sci 2011; 7: 260–8.
12. Liu J, Zhao S, Chen X, Falk E, Albarracín D. The influence of peer behavior as a function of social and cultural closeness: A meta-analysis of normative influence on adolescent smoking initiation and continuation. Psychol Bull 2017; 143: 1082–115.
13. Substance Abuse and Mental Health Services Administration. (2009). Results from the 2008 National Survey on Drug Use and Health: National Findings. Office of Applied Studies, NSDUH Series H-36, HHS Publication No. SMA 09-4434. Rockville: U.S. Department of health and human services , Substance abuse and mental health services administration, Office of applied studies. (https://www.dpft.org/resources/NSDUHresults2008.pdf).
14. Senol Y, Donmez L, Turkay M, et al. The incidence of smoking and risk factors for smoking initiation in medical faculty students: cohort study. BMC Public Health 2006; 6: 128.
15. Rigotti NA, Lee JE, Wechsler H. US college students' use of tobacco products: results of a national survey. JAMA 2000; 284: 699–705.
16. Masjedi M, Azaripour-Masooleh H, Heydari G, et al. Smoking prevalence among universities students of Tehran. J Med Counc Islam Repub Iran 2003; 20: 283–7.
17. Sychareun V, Hansana V, Choummanivong M, Nathavong S, Chaleunvong K, Durham J. Cross-sectional survey: smoking among medical, pharmacy, dental and nursing students. University of Health Sciences, Lao PDR. BMJ Open 2013 30; 3: e003042.
18. Đurišić T, Golubović Lj, Mugoša B. Evropsko istraživanje o upotrebi psihoaktivnih supstanci i nehemijskih sredstava zavisnosti među mladima: ESPAD 2019 Crna Gora. Podgorica: Institut za javno zdravlje Crne Gore Podgorica, 2020.
19. Đurišić T, Golubović Lj, Mugoša B. Istraživanje o kvalitetu života, životnim stilovima i zdravstvenim rizicima stanovnika Crne Gore: Nacionalni izvještaj istraživanja. Podgorica: Institut za javno zdravlje Crne Gore i Monstat Podgorica, 2017.
20. Levy DT, Romano E, Mumford E. The relationship of smoking cessation to sociodemographic characteristics, smoking intensity, and tobacco control policies. Nicotine Tob Res 2005; 7: 387–96.
21. Vargas LS, Lucchese R, Silva AC, Guimarães RA, Vera I, Castro PA. Determinants of tobacco use by students. Rev Saude Publica 2017; 51: 36.
22. Farah SM, Chowdhury ABMA, Nascimento L, et al. Prevalence and factors associated with tobacco consumption among students of a selected private university in bangladesh. Anatol J Family Med 2020; 3: 22–30.
23. Wamamili B, WallaceBell M, Richardson A, et al. Cigarette smoking among university students aged 18–24 years in New Zealand: results of the first (baseline) of two national surveys. BMJ Open 2019; 9: e032590.
24. Zhu T, Feng B, Wong S, Choi W, Zhu SH. A comparison of smoking behaviors among medical and other college students in China. Health Promot Int 2004; 19: 189–96.
25. Vakeflliu Y, Argjiri D, Peposhi I, Agron S, Melani AS. Tobacco smoking habits, beliefs, and attitudes among Medical Students in Tirana, Albania. Prev Med 2002; 34: 370–3.
26. Akvardar Y, Demiral Y, Ergör G, Ergör A, Bilici M, Özer OA. Substance use in a sample of Turkish medical students. Drug Alcohol Depend 2003; 72: 117–21.
27. Barbosa Filho VC, Campos W, Lopes AS. Prevalence of alcohol and tobacco use among Brazilian adolescents: a systematic review. Rev Saude Publica 2012; 46: 901–17.
28. Abreu MNS, Caiaffa WT. Influence of family environment and social group on smoking among Brazilian youth aged 15 to 24 years. Rev Panam Salud Publica 2011; 30: 22–30. (in Portuguese).
29. Polańska K, Wojtysiak P, Bąk-Romaniszyn L and Kaleta D. Susceptibility to cigarette smoking among secondary and high school students from a socially disadvantaged rural area in Poland. Tob Induc Dis 2016; 14: 28.
30. Okasaka Y, Morita N, Nakatani Y and Fujisawa K. Correlation between addictive behaviors and mental health in university students. Psychiatry Clin Neurosci 2008; 62: 84–92.
31. Chapman SLC, Wu L-T. Substance use among adolescent mothers: A review. Child Youth Serv Rev 2013; 35(5): 806–15.
32. Wellman RJ, Dugas EN, Dutczak H, et al. Predictors of the onset of cigarette smoking: A systematic review of longitudinal population-based studies in youth. Am J Prev Med 2016; 51(5): 767–78.