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Original research article

PHYSICAL ACTIVITY AND DIETARY HABITS AMONG SECOND YEAR STUDENTS OF THE SCHOOL OF MEDICINE, UNIVERSITY OF BELGRADE

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Abstract. *The aim of this study was to investigate the physical activity and dietary habits of second year medical students of the School of Medicine, University of Belgrade. The level of physical activity and dietary habits were also investigated according to other factors: gender, sports activity before and after attending college and students' self-assessment related to their physical activity level. All second year medical students (490 students: 155 male and 355 female) were asked to participate in the study by filling out questionnaires during one week in the 2016/17 school year. They filled out a demographic questionnaire, a shorter version of International Physical Activity Questionnaire (IPAQ) as well as a food frequency questionnaire comprising 13 indicator variables. The Mann-Whitney U test was used to test the overall differences between male and female students, while a Correlation Analysis was investigated using the Spearman correlation coefficient. There is a statistically significant difference in sport habits between both male and female students, before and after enrolling in college. The Spearman correlation coefficient analysis showed that there is a moderate positive correlation between the levels of physical activity calculated from the IPAQ questionnaire with sports activity habits of the students after enrolling in college (0.344) as well as with self-assessment of the level of physical activity by the students (0.440). Second year medical students have good dietary habits that could be responsible for their adequate body composition.*

Key words: *IPAQ, fitness, food frequency questionnaire, assessment.*

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INTRODUCTION

Physical activity is every movement produced by skeletal muscles that results in energy expenditure (Caspersen, Powell, & Christenson, 1985) and is also one of the most important steps in health improvement. It is well-known that physical activity decreases the prevalence of many chronic diseases, such as cardiovascular, autoimmune and malignant diseases as well as diabetes mellitus.

The World Health Organization (WHO) recommends 150 minutes of moderate-intensity aerobic physical activity weekly (WHO, 2010). Unfortunately, the insufficient physical activity of children and adolescents was reported by WHO which pointed out that around 81% of the adolescent population in the world aged between 11-17 is insufficiently physically active (WHO, 2014). Nowadays, the modern lifestyle is characterized by sedentary and less active life habits that lead to decreased level of physical activity (Owen, Sparling, Healy, Dunstan, & Matthews, 2010). Therefore, it was found that physical inactivity is a broadening in the population of young adolescents aged from 15-24 year as an actual lifestyle (Thijssen et al., 2010).

Beside physical activity, adequate dietary habits are equally important in the prevention of many diseases and health improvement. Therefore, one of the most important problems of modern life is obesity that arises from inadequate physical activity and bad dietary habits (Wiklund, 2016). Obesity is usually defined in relation to the body mass index (BMI), if BMI exceeds 30 kg/m^2 while normal nutrition status is related to the BMI from $18.5 - 25 \text{ kg/m}^2$ (WHO, 1995). An increase in body weight and obesity prevalence is present in the general population of both developed and undeveloped countries (Haidar & Cosman, 2011). The risk of type 2 diabetes, cardiovascular disease, certain types of cancer, and even mortality is directly proportional to the degree of obesity. That is why adequate physical activity and good dietary habits are key regulatory factors in body weight control and can be considered obligatory factors in the prevalence of obesity (Finkelstein et al., 2012).

A shift from high school to college is one of the most vulnerable periods in the life of young adult person who is faced with many different challenges. During this period an individual deals with huge pressure and expectations which therefore inevitably lead to changes in the lifestyle. A great number of students leave their parents' homes, resulting in alteration of dietary habits and life conditions. Healthy life habits are exchanged with an unhealthy lifestyle usually at the beginning of college (Wengreen & Moncur, 2009). This unhealthy lifestyle mostly refers to increased consumption of fast food and decreased consumption of fruits and vegetables (McGuire, 2011). New academically responsibilities and obligations, as a social factor related to stressful conditions, also affect previous dietary habits (Fabián et al., 2013) as well as physical activity (Bray, 2007). The most important consequence of all factors mentioned above is the significant increase in body weight of students that can be seen at the beginning of college (Vella-Zarb & Elgar, 2009).

Therefore, it is of great importance to define different factors that contribute to changes in students' lifestyle habits, as well as the reasons for their insufficient physical activity. As a result, there are many studies that reported physical activity and dietary habits among the student population in different countries (Vella-Zarb & Elgar, 2009; Black, Coster, & Paige, 2017; Rao et al., 2012). The diversity of obtained results can be, at least partially, explained by their different education programs and their attitude towards health promotion, illness prevention and exercise.

Since medical students are more aware of healthy lifestyles, health promotion among students (Black et al., 2017) and the importance of physical activity and dietary habits as a prevalence factor for many chronic diseases (Rao et al., 2012), the aim of this study was to

investigate the physical activity and dietary habits of second year medical students of the School of Medicine, University of Belgrade. The level of physical activity and dietary habits were also investigated according to other factors: gender, sports activity before and after enrolling in college and the students' self-assessment related to their physical activity level.

METHODS

Participants

The study was conducted at the School of Medicine, University Belgrade and was approved by the Ethics Committee of the School of Medicine. All second year medical students were asked to participate in the study by filling out questionnaires during one week (from May 22nd until May 26th, 2017) in the 2016/17 school year. They filled out a demographics questionnaire, a shorter version of International Physical Activity Questionnaire (IPAQ, n.d.), as well as a food frequency questionnaire comprising 13 indicator variables that measured their consumption of vegetables, citrus fruits, other fruits, milk and dairy products, eggs, meat and meat products, fish and seafood, margarine and mayonnaise, white flour products, cakes, whole wheat bread and grains, commercial drinks and fried food during the last 6 months.

All of the participants signed informed consent forms and their anonymity was protected. All of the questionnaires were checked when the participants finished filling them out for regularity. All of the second year medical students (490 students: 155 male and 355 female) with a mean age of 19.97 ± 0.56 years participated in the study. In total, 96% of all the second-year students filled out the questionnaires correctly.

Investigation procedure

A shorter version of International Physical Activity Questionnaire (IPAQ) contains questions about three specific types of physical activity in 4 different domains. Types of physical activity that were analyzed through specific separate questions were walking, moderate-intensive activity and vigorous activities while the time (in minutes) and frequency (days) of those activities were used to calculate the physical activity level. Regarding the IPAQ questionnaire score procedure, physical activity levels were classified in three categories according to MET minutes, intensity and duration (days) of the activity: inactive, minimally active and very active.

Inactive participants were those who were not active at all or they reported some activity which is not enough to meet categories 2 or 3.

Minimally active were those participants who met any one of following three criteria:

- 3 or more days of physical activity of at least 20 minutes per day, or
- 5 or more days moderate-intensity activity or walking of at least 30 minutes per day or
- 5 or more days of any combination of walking, moderate-intensity or vigorous intensity activities achieving a minimum of at least 600 MET-min/week.

Very active were the participants with any one of following 2 criteria:

- Vigorous-intensity activity on at least 3 days and accumulating at least 1500 MET-minutes/week or
- 7 or more days of any combination of walking, moderate-intensity or vigorous intensity activities achieving a minimum of at least 3000 MET-minutes/week.

The food frequency questionnaire contained 13 questions related to frequency (from less than one per week to more than twice per day) of their usual consumption of each food group individually (5-point scale: less than once per week, once per week, 2-4 times per week, almost every day or every day and 2-4 times per day).

After the filling out of the questionnaires was finished, body weight (BW in kg) and body height (BH in meter) were measured for each student and used for BMI calculation. For this measuring procedure, the students wore shorts, shirt and in socks without shoes.

Data Analysis

SPSS Statistics for Windows operating system version 20.0 was used to analyze data obtained from the questionnaire and to calculate descriptive statistics of the focus group sample. The Mann-Whitney U test was used to test the overall differences between male and female students. A Correlation Analysis was investigated using the Spearman Correlation Coefficient.

RESULTS

The demographic characteristics of the participants (age, body weight, body height, BMI, smoking habits) are presented in Table 1.

Table 1 The demographic characteristics and body composition assessment of the participants

	Total	Male	Female	P value
Age (years)	19.97 ± 0.56	19.63 ± 0.55	20.12 ± 0.56	<i>p</i> > 0.05
Body Weight (kg)	68.33 ± 13.62	83.3 ± 10.20	61.36 ± 8.39	<i>p</i> > 0.05
Height (cm)	174.62 ± 9.65	185.20 ± 6.86	169.69 ± 6.17	<i>p</i> > 0.05
**BMI	22.24 ± 2.95	24.27 ± 2.50	21.29 ± 2.65	<i>p</i> < 0.01
Underweight	31 (6.40%)	0 (0%)	31 (9.30%)	<i>p</i> > 0.05
Normal weight	369 (75.80%)	97 (62.60%)	272 (81.90%)	<i>p</i> > 0.05
Overweight	81 (16.60%)	55 (35.50%)	26 (7.80%)	<i>p</i> > 0.05
Obese	6 (1.20%)	3 (1.90%)	3 (0.90%)	<i>p</i> > 0.05
Smoking cigarettes				
yes	113 (23.10%)	34 (21.90%)	79 (23.60%)	<i>p</i> > 0.05
no	377 (76.90%)	121 (78.10%)	256 (76.40%)	<i>p</i> > 0.05
*Number of cigarettes	11,72 ± 7,11	14,20 ± 7,38	10,70 ± 6,78	<i>p</i> < 0.05

* *p* < 0.05; ** *p* < 0.01

Statistical analyses revealed that there is a statistically significant difference in the BMI and number of cigarettes smoked per day between male and female students, whereby male students have a higher BMI value and smoke more cigarettes.

Data obtained by analysis and scoring of the IPAQ questionnaire are presented in table 2.

Table 2 Participant classification with respect to their category of physical activity

	Total	Male	Female	P value
Inactive (walking)	75 (15.30%)	18 (11.61%)	57 (17.01%)	<i>p</i> > 0.05
Minimally active (moderate)	305 (62.20%)	89 (57.42%)	216 (64.48%)	<i>p</i> > 0.05
Very active (vigorous)	110 (22.40%)	48 (30.97%)	62 (18.51%)	<i>p</i> > 0.05

According to the results, all of the participants are divided into 3 categories: inactive, minimally active and very active.

There was no statistically significant difference between genders in each of the categories (table 2). But, the participants of the same gender differ significantly between minimally (moderate) vs. very active (vigorous) and inactive (walking) vs. very active (vigorous) but not between inactive (walking) vs. minimally active (moderate) categories of physical activity.

Table 3 represents the results obtained based on the food frequency questionnaire comprising 13 indicator variables.

Table 3 Dietary habits of the second-year students presented as a frequency of consumption of specific dietary products

		Less than once per week	Once per week	2-4 times per week	Almost every day or everyday	2-4 times per day
Vegetable	Male	5 (3.2%)	23 (14.8%)	55 (35.5%)	65 (41.9%)	7 (4.5%)
	Female	11 (3.3%)	33 (9.9%)	114 (34.0%)	159 (47.5%)	18 (5.4%)
	Total	16 (3.3%)	56 (11.4%)	169 (34.5%)	224 (45.7%)	25 (5.1%)
Citrus fruits	Male	20 (12.9%)	42 (27.1%)	54 (34.8%)	36 (23.2%)	3 (1.9%)
	Female	50 (14.9%)	79 (23.6%)	133 (39.7%)	64 (19.1%)	9 (2.7%)
	Total	70 (14.3%)	121 (24.7%)	187 (38.2%)	100 (20.4%)	12 (2.4%)
Other fruits	Male	10 (6.5%)	36 (23.2%)	67 (43.2%)	37 (23.9%)	5 (3.2%)
	Female	20 (6.0%)	79 (23.6%)	121 (36.1%)	96 (28.7%)	19 (5.7%)
	Total	30 (6.1%)	115 (23.5%)	188 (38.4%)	133 (27.1%)	24 (4.9%)
*Dairy products	Male	2 (1.3%)	7 (4.5%)	43 (27.7%)	71 (45.8%)	32 (20.6%)
	Female	12 (3.6%)	32 (9.6%)	93 (27.8%)	148 (44.2%)	50 (14.9%)
	Total	14 (2.9%)	39 (8.0%)	136 (27.8%)	219 (44.7%)	82 (16.7%)
*Eggs	Male	19 (12.3%)	52 (33.5%)	62 (40.0%)	16 (10.3%)	6 (3.9%)
	Female	82 (24.5%)	104 (31.0%)	126 (37.6%)	20 (6.0%)	3 (0.9%)
	Total	101 (20.6%)	156 (31.8%)	188 (38.4%)	36 (7.3%)	9 (1.8%)
** Meat and meat products	Male	0 (0%)	1 (0.6%)	34 (21.9%)	86 (55.5%)	33 (21.3%)
	Female	10 (3.0%)	19 (5.7%)	116 (34.6%)	162 (48.4%)	27 (8.1%)
	Total	10 (2.0%)	20 (4.1%)	150 (30.6%)	248 (50.6%)	60 (12.2%)
*Fish and seafood	Male	60 (38.7%)	61 (39.4%)	24 (15.5%)	7 (4.5%)	2 (1.3%)
	Female	166 (49.6%)	119 (35.5%)	46 (13.7%)	2 (0.6%)	2 (0.6%)
	Total	226 (46.1%)	180 (36.7%)	70 (14.3%)	9 (1.8%)	4 (0.8%)
*Margarine and mayonnaise	Male	70 (45.2%)	40 (25.8%)	30 (19.4%)	10 (6.5%)	2 (1.3%)
	Female	194 (57.9%)	63 (18.8%)	52 (15.5%)	20 (6.0%)	5 (1.5%)
	Total	264 (53.9%)	103 (21.0%)	82 (16.7%)	30 (6.1%)	7 (1.4%)
** White flour products	Male	16 (10.3%)	10 (6.5%)	20 (12.9%)	71 (45.8%)	35 (22.6%)
	Female	53 (15.8%)	50 (14.9%)	95 (28.4%)	94 (28.1%)	42 (12.5%)
	Total	69 (14.1%)	60 (12.2%)	115 (23.5%)	165 (33.7%)	77 (15.7%)
Cakes	Male	25 (16.1%)	35 (22.6%)	57 (36.8%)	35 (22.6%)	2 (1.3%)
	Female	54 (16.1%)	75 (22.4%)	101 (30.1%)	83 (24.8%)	21 (6.3%)
	Total	79 (16.1%)	110 (22.4%)	158 (32.2%)	118 (24.1%)	23 (4.7%)
Whole wheat bread and grains	Male	47 (30.3%)	37 (23.9%)	36 (23.2%)	27 (17.4%)	7 (4.5%)
	Female	98 (29.3%)	74 (22.1%)	93 (27.8%)	65 (19.4%)	5 (1.5%)
	Total	145 (29.6%)	111 (22.7%)	129 (26.3%)	92 (18.8%)	12 (2.4%)
** Commercial drinks	Male	41 (26.5%)	37 (23.9%)	52 (33.5%)	20 (12.9%)	5 (3.2%)
	Female	166 (49.6%)	61 (18.2%)	62 (18.5%)	36 (10.7%)	9 (2.7%)
	Total	207 (42.2%)	98 (20.0%)	114 (23.3%)	56 (11.4%)	14 (2.9%)
*Fried food	Male	7 (4.5%)	26 (16.8%)	80 (51.6%)	34 (21.9%)	5 (3.2%)
	Female	44 (13.1%)	68 (20.3%)	160 (47.8%)	56 (16.7%)	4 (1.2%)
	Total	51 (10.4%)	94 (19.2%)	240 (49.0%)	90 (18.4%)	9 (1.8%)

* - $p < 0.05$; ** - $p < 0.01$

We found that there is a statistically significant difference between genders in the consumption of milk and dairy products, eggs, meat and meat products, fish and seafood, margarine and mayonnaise, the products of white flour, commercial drinks and fried food. Male students consume more frequently eggs, fish and seafood, margarine and mayonnaise, commercial drinks and fried food while female students prefer milk and dairy products. Through more detailed analysis of white flour products and meal and meat products consumption, we found that female students consume these products fewer days in a week (less than 4 times per week) while a greater number of male students consume those products almost every day or even a few times per day.

We also aimed to investigate if there are any differences in the dietary habits of students depending on their physical activity categories calculated by the IPAQ questionnaire (table 4).

Table 4 Statistical significance in dietary habits among the students depending on their physical activity categories

Food stuff	Walking / Moderate	Moderate / Vigorous	Walking / Vigorous
Vegetables	p >0.05	p <0.05	p >0.05
Citrus fruits	p >0.05	p <0.01	p <0.01
Other fruits	p >0.05	p <0.01	p <0.01
Milk and dairy products	p <0.01	p >0.05	p <0.01
Eggs	p <0.05	p <0.01	p <0.05
Meat and meat products	p >0.05	p >0.05	p <0.05
Margarine, mayonnaise	p >0.05	p <0.05	p >0.05
White flour products	p >0.05	p <0.05	p >0.05
Whole wheat bread and grains	p >0.05	p <0.05	p <0.05
Commercial drinks	p >0.05	p <0.05	p >0.05

When we analyzed the dietary habits of students belonging to different physical activity categories, we found that inactive and minimally active students differ only in the consumption of eggs and milk and dairy products. On the other hand, there was more diversity between other categories. According to this, minimally and very active students differ in consumption of vegetables, citrus and other fruits, margarine and mayonnaise, white flour products, whole wheat bread and grains and commercial drinks, whereby very active students consume more vegetables, citrus and other fruits and whole wheat bread and grains vs. minimally active while minimally active consume more frequently margarine and mayonnaise, white flour products and commercial drinks. Very active students also consume more citrus and other fruits, eggs, meat and meat products and whole wheat bread and grains vs. inactive students, while inactive students consume more milk and dairy products than very active. Inactive and minimally active students differ in just two food items - milk and dairy products and eggs.

Table 5 describes the sport habits of medical students (active sport and recreation) before and after enrolment in college.

There is a statistically significant difference in sport habits between male and female students, both before and after faculty enrolment. More female students were active recreationally before, whereby more male students were involved in some sport in terms of recreation after enrolment in college. Also, more male students exercised actively both before and after enrolling in college.

Table 5 Incidence of active and recreational sports activity of male and female students before and after enrolment in college

Sports activity?	Before enrolment in college			p
	Total	Male	Female	
No, never	47 (9.59%)	12 (7.74%)	35 (10.45%)	p> 0.05
Yes, recreationally	247 (50.41%)	66 (42.58%)	181 (54.03%)	p< 0.05
Yes, actively	196 (40.00%)	77 (49.68%)	119 (35.52%)	p< 0.05
Total	490 (100%)	155 (100%)	335 (100%)	p< 0.05
	After enrolment in college			
No, never	325 (73.05%)	81 (52.26%)	244 (73.05%)	p< 0.05
Yes, recreationally	148 (24.25%)	67 (43.22%)	81 (24.25%)	p< 0.01
Yes, actively	16 (2.69%)	7 (4.52%)	9 (2.69%)	p< 0.01
Total	489 (100%)	155 (100%)	334 (100%)	p< 0.01

The Spearman correlation coefficient analysis showed that there is a moderate positive correlation between the levels of physical activity calculated from the IPAQ questionnaire with sports activity habits of the students after enrolment in college (0.344) as well as with the self-assessment of the level of physical activity by the students (0.440).

DISCUSSION

The aim of this study was to investigate the physical activity and dietary habits of second year medical students at the School of Medicine, University Belgrade. As far as we know, there are no other studies that analyzed those parameters among medical students' in Serbia. But, there are also other studies that reported dietary habits among the student population, since the beginning of college is a vulnerable period and social-cultural milestone which is often connected with an increase in body mass (Wengreen & Moncur, 2009; Bray, 2007; Black et al., 2017; Wiklund, 2016). Therefore, we focused our investigation on second year students, at the beginning of their college experience.

One of our results, which proved that the period of time spent in college leads to significant changes in the everyday living habits of the students, is the fact that 90.41% of the students were active in sports (actively or recreationally) before college while now, at the second year, just 26.94% of them are still active suggesting that college life initiates a decrease in the physical activity of students. Also, there is a significant difference between a type of physical activity among male and female students both before and after beginning college. In addition to this finding, just 1.2% of all students were obese with a BMI higher than 30kg/m², meaning that the healthy dietary habits of students involved in this study more than their physical activity, which decreased after beginning of college, are responsible for this good result we obtained. On the other hand, the decreased number of obese students can also be the result of regular education of medical students that are aware of different prevention programs for obesity, diabetes mellitus type 2, hypertension and cardiovascular diseases as well as of the importance of physical activity and good dietary habits for health development (Rao et al., 2012). Contrary to our findings, physical therapy students in Spain did not show such good result as just few percent of them were familiar with the Food Pyramid and around 70% of them needed additional education about the Mediterranean diet (Bayona-Marzo, Navas-Cámara, de Santiago Fernández, Mingo-Gomez, & del Amo Cacho, 2007; Egeda & Vega, 2014). These findings

imply that different education programs between different faculties can be responsible for different levels of physical activity and dietary habits of students.

In respect to the IPAQ questionnaire, students were classified into three categories according to MET minutes, intensity and duration (days) of the activity. We showed that most of them (62.24%) were minimally active which is in accordance with other studies that reported analogous results for the students of other faculties and other countries (Fagarasa, Radub, & Vanvuc, 2015).

Also, it was determined that there are significant differences in dietary habits and physical activity between students attending different faculties (Peltzer et al., 2014), which can be also explained by their different educational programs. To avoid this factor that certainly can affect the obtained result; we focused our attention just on medical students' cause of their specific educational programs. In our study, only 15.31% of all students reported insufficient physical activity that is below (Rao et al., 2012; Peltzer et al., 2014) or in accordance with the physical activity habits of medical students in other countries (Wattanapisit, Fungthongcharoen, Saengow, & Vjijitpongjinda, 2016; Al-Drees et al., 2016). This discrepancy of obtained results can be explained through a more detailed analysis of the IPAQ questionnaire results which show that a great number of students were classified as minimally physical active because the increased portion of walking activities compared to inactive students.

In addition, a high correlation between self-assessment of the level of physical activity and the results obtained by the IPAQ questionnaire imply that students are aware of the benefits of physical activity practices. This finding can also be the reason for satisfactory results obtained among medical students in this study.

Taking into account categories of physical activity (inactive, minimally active and very active) and dietary habits, we emphasize that minimal differences in dietary habits were presented between inactive and minimally active students (just in consumption of eggs and milk and dairy products) while more differences were presented between other categories of physical activity. Analyzing the frequency of specific meal consumption, we revealed that very active students consume vegetables, citrus and other fruits, eggs, meat and meat products and whole wheat bread and grains more frequently compared to two other categories (inactive and minimally active). On the other hand, minimally active students consume margarine and mayonnaise, white flour products and commercial drinks more frequently than very active students. These findings suggest that students with most intensive physical activity have also the best dietary habits. They consume vegetables and fruits as a source of vitamins and minerals, and more meat and whole wheat bread and grains, which is in accordance with the Food Pyramid (Gil, Ruiz-Lopez, Fernandez-Gonzalez, & Martinez de Victoria, 2014).

There are many other studies that investigated the influence of other factors, such as dormitory and other social factors on dietary habits during time spent at college (Deliens, Clarys, De Bourdeaudhuij, & Deforche, 2014; Salameh et al., 2014) whereby Kumar et al. (2017) also confirmed that intensely active students have better dietary habits.

Besides physical activity and dietary habits, many other factors can affect body weight and lead to obesity among the student population: social-economic factors, physical inactivity, mental health and smoking (Fagarasa et al., 2015). In this study we also analyzed the presence and importance of some of those factors (gender and dormitory (socio-economic), consuming of specific meals, the number of meals and skipping breakfast (dietary habits), physical inactivity and smoking (risky behavior). The results of this study showed that beside all of the studied factors, only gender can be consider an important factor responsible for differences obtained in BMI, MET minutes, practicing sport before

and after starting college, and the consumption of specific food. These differences are expected and can be explained by physiological differences and different demands of the male and female students (Azevedo et al., 2007).

One of interesting findings of this study is that just 113 students of all 490 students in this study are active smokers suggesting that they have satisfactory knowledge about the harm that cigarettes can cause. We did not find a statistically significant difference between male and female students, while we found that male students smoke more cigarettes than female students who have longer smoking habits. Also, we did not find any correlation between the number of smoked cigarettes and category of physical activity, while some studies even reported the presence of this positive correlation (Kaczynski, Manske, Mannell, & Grewal, 2008).

CONCLUSION

Based on the results obtained from the IPAQ questionnaire and food frequency questionnaire about dietary habits, we showed that second year medical students have good dietary habits that could be responsible for their adequate body composition. We also found that the students are aware of their own level of physical activity and the necessity of increasing it in the future. The quality of these results could be improved by comparing them with the same results obtained from the other faculties, as well as broadening them both transversally and longitudinally.

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FIZIČKA AKTIVNOST I PREHRAMBENE NAVIKE STUDENATA MEDICINSKOG FAKULTETA UNIVERZITETA U BEOGRADU

Cilj ovog istraživanja bio je da se analiziraju fizičke aktivnosti i prehrambene navike studenata druge godine medicine Medicinskog fakulteta Univerziteta u Beogradu. Stepen fizičke aktivnosti i prehrambenih navika istražen je na osnovu sledećih faktora: pol, sportska aktivnosti pre i posle upisa na fakultet i samo-procena studenata u vezi sa njihovim nivoom fizičke aktivnosti. Svi učenici druge godine (490 učenika: 155 muškaraca i 355 žena) dobrovoljno su pristali da učestvuju u studiji popunjavanjem upitnika tokom jedne nedelje u školskoj 2016/2017. godini. Popunili su upitnik o demografskim podacima, kraću verziju upitnika za međunarodnu fizičku aktivnost (IPAK), kao i upitnik o učestalosti konzumiranja hrane koji sadrži 13 varijabli. Mann-Whitney U test koristio se za testiranje ukupnih razlika između studenata muškog i ženskog pola, dok je korelaciona analiza određena pomoću Spearmanovog koeficijenta korelacije. Postoji statistički značajna razlika u sportskim navikama između muškaraca i žena, pre i nakon početka studija. Analiza Spearman korelacionog koeficijenta pokazala je da postoji umerena pozitivna korelacija između nivoa fizičke aktivnosti izračunata na osnovu upitnika IPAK i nivoa sportske aktivnosti nakon početka studija (0.344), kao i samo-procena nivoa fizičke aktivnosti studenata (0.440). Studenti druge godine medicine imaju dobre navike kada je ishrana u pitanju, koje bi mogle biti odgovorne za njihov adekvatan sastav tela.

Ključne reči: IPAQ, fizička spremnost, upitnik o učestalosti konzumiranja hrane, procena.