Evaluation of healthy lifestyle behaviors and related factors in medical students

Tıp fakültesi öğrencilerinde sağlıklı yaşam biçimi davranışlarının ve ilişkili faktörlerin değerlendirilmesi

Ali Dörtkol, Levent Özdemir

Bursa Uludağ University Faculty of Medicine, Public Health Department, Bursa, Turkey
Corresponding author: Ali Dörtkol, MD, Bursa Uludağ University Faculty of Medicine, Public Health Department, Bursa, Turkey
E-mail: dralidortkol@gmail.com

ID Ali Dörtkol
ID Levent Özdemir

ORCID IDs of the authors:
A.D. 0000-0002-5307-0008
L.Ö. 0000-0002-4330-8334

SUMMARY

Objective: A healthy lifestyle can be defined as the adoption and implementation of behaviors that will reduce the risk of a serious illness or premature death, as well as protect and improve health levels. The aim of this study was to determine healthy lifestyle behaviors of students in a medical faculty and to investigate the relationships between healthy lifestyle behaviors and various factors.

Method: This descriptive cross-sectional study was conducted at Bursa Uludağ University Faculty of Medicine between October 2019 and March 2020. A total of 357 students attending the first and sixth grade of medical faculty were included in the study. The data were collected by a questionnaire included questions about the sociodemographic characteristics of the participants and Healthy Lifestyle Behaviors Scale II (HLBS-II).

Results: Of the respondents, 54.3% (n=194) were women and 52.7% (n=188) were sixth-year graduates. Most of them were living apart from family (in a private house or dormitory) (n=258, 72.3%) and stated their health status as very good/good (n=286, 80.1%). Students, who were living with their families (p=0.039), who had very good/good level of health status perception (p<0.001), whose fathers' educational level was high school or above (p=0.004), who were non-smokers (p=0.003), and who were not drinking alcohol (p=0.001) had significantly higher HLBS-II total scores. Furthermore, HLBS-II total score (p=0.003), physical activity (p<0.001), spiritual growth (p<0.001), and interpersonal relationships (p=0.039) subscale scores of first-year students were significantly higher than sixth-year students.

Conclusions: It was observed that the healthy lifestyle behaviors of medical students did not develop in a positive way despite the education they received. Examining of students' health habits at regular intervals and developing multisectoral on-campus health programs should be considered as an opportunity to improve the health of both students and the community.

Keywords: Health promotion, healthy lifestyle, medical education, medical students.

ÖZET

Amaç: Sağlıklı bir yaşam tarzı, ciddi bir hastalık veya erken ölüm riskini azaltmanın yanı sıra sağlık düzeyini koruyan ve iyileştiren davranışların benimsenmesi ve uygulanması olarak tanımlanabilir. Bu çalışmanın amacı, tıp fakültesi öğrencilerinin sağlıklı yaşam biçimi davranışlarını değerlendirmek ve sağlıklı yaşam biçimi davranışları ile çeşitli faktörler arasındaki ilişkileri araştırmaktır.

Yöntem: Tanımlayıcı kesitsel tipteki bu çalışma Ekim 2019- Mart 2020 tarihleri arasında Bursa Uludağ Üniversitesi Tıp Fakültesi'nde yürütülmüştür. Tıp fakültesinin birinci ve altıncı sınıfına devam eden toplam 357 öğrenci çalışmaya dahil edilmiştir. Veriler; katılımcıların sosyodemografik özelliklerine ilişkin sorular ve Sağlıklı Yaşam Biçimi Davranışları Ölçeği II'den (SYBD-II) oluşan bir anket ile toplanmıştır.

Bulgular: Katılımcıların %54,3'ü (n=194) kadın, %52,7'si (n=188) altıncı sınıf öğrencisidir. Katılımcıların çoğu ailesinden ayrı (özel bir evde veya yurtta) yaşamaktadır (n=258, %72,3) ve sağlık durumlarını çok iyi/iyi (n=286, %80,1) olarak belirtmiştir. Ailesiyle birlikte yaşayan (p=0,039), çok iyi/iyi sağlık durumu algısına sahip olan (p<0,001), babasının eğitim düzeyi lise veya üstü olan (p=0,004), sigara içmeyen (p=0,003) ve alkol kullanmayan (p=0,001) öğrencilerin SYBD-II toplam skorları anlamlı olarak daha yüksektir. Ayrıca, birinci sınıf öğrencilerinin SYBD-II toplam puanı (p = 0,003), fiziksel aktivite (p<0,001), manevi gelişim (p<0,001) ve kişilerarası ilişkiler (p=0,039) alt ölçek puanları altıncı sınıf öğrencilerinden anlamlı olarak daha yüksektir.

Sonuç: Çalışmamızda tıp öğrencilerinin aldıkları eğitime rağmen sağlıklı yaşam biçimi davranışlarının olumlu yönde gelişmediği görülmüştür. Öğrencilerin sağlık alışkanlıklarının düzenli aralıklarla incelenmesi ve çok sektörlü kampüs içi sağlık programlarının geliştirilmesi hem öğrencilerin hem de toplumun sağlığını iyileştirmek için bir fırsat olarak düşünülmelidir.

Anahtar sözcükler: Sağlığı geliştirme, sağlıklı yaşam biçimi, tıp eğitimi, tıp fakültesi öğrencileri.

INTRODUCTION

A healthy lifestyle can be defined as the adoption and implementation of behaviors that will reduce the risk of a serious illness or premature death, as well as protect and improve health levels [1,2]. Many non-communicable diseases such as cardiovascular diseases, cancers, chronic respiratory diseases, diabetes, which are the main causes of worldwide mortality and morbidity, are closely related to unhealthy lifestyle habits such as poor nutrition, physical inactivity, smoking and heavy alcohol use [3,4].

Health-related behaviors in youth affect disease risks in later life periods. It is projected that the conditions or behavior that started during the youth period are linked with approximately two-thirds of premature deaths and one-third of the total burden of disease in adulthood [5].

Healthy lifestyle habits of medical students are important in terms of both being in the young group and being future physicians. A majority of people view their physicians as the main source of information concerning healthy lifestyle [6]. Physicians can reduce years of life lost (YLL) and restrain health expenditures through counseling to people who engage in risky behaviors that can negatively affect their health [7]. However, one of the most important determinants of consultancy on health protection and promotion is whether the physicians practice healthy lifestyle behaviors. In many studies on health protection and promotion, it has been determined that physicians who have positive health habits in many areas such as physical activity, nutrition, alcohol use, smoking provide more consultancy to their patients [6,8].

Medical students face many challenges brought on by university life during their education. In this period of rapid physical and psychosocial changes, students meet a new environment where academic workload and stress increase, which can contribute to unhealthy lifestyles, and usually move away from the family environment to a process where they gain more autonomy over their lives. Work-related stress and poor time management come to the forefront as the biggest obstacles to the healthy lifestyle preferences of medical students [9].

In this study, it was aimed to determine the effect of medical education on healthy lifestyle behaviors by comparing healthy lifestyle behaviors of first and sixth grade students of medical faculty and to examine the relationships between healthy lifestyle behaviors and related factors.

MATERIAL AND METHODS

Study Design and Participants

This descriptive cross-sectional study was conducted between October 2019 and March 2020 at Bursa Uludağ University Faculty of Medicine in Bursa, Turkey. The study population consisted of the first and last classes from the medical faculty in the 2019-20 academic year with a total number of 709. Medical students who were non-native Turkish speakers were excluded from the study (83 people). Of the 394 students who were reached during the study period, 357 agreed to participate in the study (response rate 90.6%).

Data Collection

The data of the study were collected by an anonymous self-completed questionnaire consisting of two sections and 66 items. The first section of the questionnaire contained questions about the sociodemographic characteristics of the participants (e.g., gender, age, class, education level of parents, history of chronic disease, smoking, alcohol use). In the second part of the questionnaire, Healthy Lifestyle Behaviors Scale II (HLBS-II) was used to investigate the students' health behaviors [10].

The first version of HLBS was developed by Walker et al. in 1987 and revised in 1996 as HLBS-II [10, 11]. The Turkish validity and reliability study of the HLBS-II was carried out in 2008 by Bahar et al. [12]. HLBS-II is a 4-point likert type scale (never=1, sometimes=2, frequently=3 and regularly=4) composed of 52 questions and six subscales. The subscales are physical activity, nutrition, spiritual growth, interpersonal relationships, health responsibility and stress management. The total scores of the respondents vary from 52 to 208, and higher scores indicate good practice of healthy behaviors.

Ethical approval

The study was approved by the Clinical Trials Ethics Committee of Bursa Uludağ University Faculty of Medicine (Approval date/number: 04.09.2019 / 2019-14/17). All the students were informed about the aim of the study. Participation in the study was voluntary and verbal consent was obtained from those who agreed to participate.

Statistical analysis

The data was analyzed with SPSS version 23.0 (IBM Corp., Armonk, NY). Sociodemographic characteristics of the students were described with frequencies and percentages. Total HLBS-II and subscales scores of the respondents were presented with mean and standard deviation values. The differences in total HLBS-II and subscale scores between the two groups were compared with the Student-t test or Mann-Whitney U test while for comparison of three or more groups ANOVA or Kruskal-Wallis test was used.

Categorical variables were analyzed with Chi-Square test. When comparing three or more groups, Tukey or Bonferroni test was used for multiple comparisons. Shapiro-Wilk test was performed to explore whether variables have a normal distribution. The statistical significance level was determined as $p < 0.05$.

RESULTS

Sociodemographic characteristics of participants

Sociodemographic characteristics of the students are presented in Table 1. The mean age of the participants was 21.6 ± 3.1 and 54.3% (n=194) of them were women. Of the students, 52.7% (n=188) were sixth-year students while 47.3% (n=169) were first-year students. Most of the students (n=258, 72.3%) were living apart from their family (in a private house or dormitory). The percentage of students who evaluated their own health status as good or very good was 80.1% (n=286). The majority of parents were high school or above graduates (62.5% in mothers, 82.1% in fathers). Of the students, 9.2% (n=33) had at least one chronic disease and 12.3% (n=44) of them were smokers and 20.7% (n=74) were using alcohol.

Associations between individual characteristics and HLBS-II

The HLBS-II total and subscale scores of the participants were given in Table 2. The average HLBS-II score of the students was 125.7 ± 17.1. When the scores of the subscales were examined, the spiritual growth subscale had the highest score (25.9 ± 4.3) whereas the physical activity subscale had the lowest score (16.4 ± 4.9).

The distribution of the HLBS-II and subscale scores according to sociodemographic characteristics of the students were given in Table 3. When the total and subscale scores of HLBS-II were compared based on gender, it was found that physical activity scores were significantly higher in males than females ($p < 0.001$).

The results showed that the place of residence was significantly associated with total HLBS-II ($p=0.015$) and nutrition score ($p=0.015$). The students who living with their families had significantly higher total HLBS-II ($p=0.039$) and nutrition subscale scores ($p=0.010$) compared to the students who living in a private house. In addition to this, total HLBS-II scores ($p=0.030$) of the students who living in a dormitory were significantly higher than those living in a private house.

Table 1: Sociodemographic Characteristics of the Participants

	n	%
Gender		
Female	194	54.3
Male	163	45.7
Grade		
1st	169	47.3
6th	188	52.7
Place of residence		
Family house	99	27.7
Private house	126	35.3
Dormitory	132	37.0
Self-perception of health status		
Very good/ Good	286	80.1
Fair/ Poor	71	19.9
Self-perception of economic status		
Very good/ Good	198	55.5
Fair/ Poor	159	44.5
Education level of mother		
Primary school or below	134	37.5
High school or above	223	62.5
Education level of father		
Primary school or below	64	17.9
High school or above	293	82.1
Presence of a chronic disease		
Yes	33	9.2
No	324	90.8
Smoking		
Yes	44	12.3
No	313	87.7
Alcohol use		
Yes	74	20.7
No	283	79.3

When the total HLBS-II and subscale scores were compared according to students' health perception, there were statistically significant differences in all titles except for health responsibility. The students who had very good or good level of health status perception had significantly higher scores than the students who had moderate/bad level of health status perception in terms of total HLBS-II (p<0.001), physical activity (p=0.001), nutrition (p=0.012), spiritual growth (p<0.001), interpersonal relationships (p=0.010) and stress management (p<0.001) subscales. It was also observed that interpersonal relationships scores were significantly higher for the students who had at least one chronic disease (p=0.038). Nutritional score was found significantly higher for the students who stated their own economic status as good or very good (p=0.021).

With regard to parents' education level, it was found that the total HLBS-II (p=0.004), nutrition (p=0.009) and physical activity (p=0.010) scores of the students whose father's level of education was high school or above, were significantly higher than the students whose father's level of education was primary school or below. However, only the nutrition (p=0.031) score was found to be significantly higher in students whose mother's education level was high school or above.

It was also found significant differences in total HLBS-II and the majority of the subscale scores according to the students' smoking status and alcohol use. The total HLBS-II (p=0.003), nutrition (p=0.001), spiritual growth (p<0.001), interpersonal relationships (p=0.009) and stress management (p=0.038) scores were significantly higher for non-smoking students. Similarly, total HLBS-II (p=0.001), nutrition (p=0.040), spiritual growth (p<0.001) and stress management (p=0.006) scores were significantly higher for those not drinking alcohol.

Comparison of the first-year and the sixth-year medical students according to HLBS-II total and subscale scores were given in Table 4. The total HLBS-II (p=0.003), physical activity (p<0.001), spiritual growth (p<0.001) and interpersonal relationship (p=0.039) subscale scores of the first-year students were found to be significantly higher compared to the sixth-year students. Furthermore, 20.2% of the sixth-grade students were smoking and 25.5% were drinking alcohol while these percentages were 3.6% and 15.4% for the first-grade students respectively and the differences between the groups were significant (p<0.001, p=0.018 respectively).

Table 2: HLBS-II Total and Subscale Scores of the Students

	Mean ± SD	Min-Max
HLBS-II	125.7 ± 17.1	73-186
Subscales		
Health Responsibility	19.0 ± 3.7	10-34
Physical Activity	16.4 ± 4.9	8-32
Nutrition	19.5 ± 3.8	10-34
Spiritual Growth	25.9 ± 4.3	13-36
Interpersonal Relationships	25.4 ± 3.9	14-36
Stress Management	19.1 ± 3.4	10-31

Table 3: Distribution of Participants' HLBS-II Total and Subscale Scores According to Sociodemographic Characteristics

	Health Responsibility	Physical Activity	Nutrition	Spiritual Growth	Interpersonal Relationships	Stress Management	HLBS-II Total
Gender							
Female	19.2 ± 3.4	15.5 ± 4.5	19.5 ± 3.6	25.7 ± 4.1	25.7 ± 4.0	19.0 ± 3.4	124.7 ± 15.8
Male	18.8 ± 4.0	17.6 ± 5.0	19.6 ± 4.1	26.2 ± 4.4	25.1 ± 3.8	19.2 ± 3.4	126.9 ± 18.4
P value	0.149	**0.0001**	0.629	0.296	0.081	0.856	0.227
Place of residence							
Family house	19.2 ± 4.3	16.8 ± 5.5	20.4 ± 4.1	26.1 ± 4.1	25.2 ± 3.6	19.6 ± 3.5	127.8 ± 18.2
Private house	18.6 ± 3.4	15.6 ± 4.5	18.9 ± 3.9	25.3 ± 4.4	25.0 ± 4.3	18.6 ± 3.3	122.2 ± 17.2
Dormitory	19.3 ± 3.5	17.0 ± 4.7	19.6 ± 3.4	26.5 ± 4.2	25.9 ± 3.6	19.1 ± 3.3	127.6 ± 15.6
P value	0.256	0.059	**0.015**	0.056	0.173	0.118	**0.015**
Presence of a chronic disease							
Yes	19.8 ± 3.3	14.9 ± 3.8	20.0 ± 3.5	25.5 ± 4.2	26.8 ± 3.4	18.6 ± 3.7	125.9 ± 15.3
No	18.9 ± 3.8	16.6 ± 5.0	19.5 ± 3.9	26.0 ± 4.3	25.3 ± 3.9	19.1 ± 3.3	125.7 ± 17.2
P value	0.134	0.057	0.403	0.520	**0.038**	0.291	0.950
Self-perception of health status							
Very good/ Good	19.1 ± 3.6	16.8 ± 4.9	19.8 ± 3.7	26.4 ± 4.0	25.7 ± 3.8	19.4 ± 3.3	127.5 ± 16.4
Fair/Poor	18.6 ± 4.0	14.8 ± 4.6	18.7 ± 4.2	23.9 ± 4.6	24.3 ± 4.0	17.9 ± 3.4	118.6 ± 18.0

	Health Responsibility	Physical Activity	Nutrition	Spiritual Growth	Interpersonal Relationships	Stress Management	HLBS-II Total
P value	0.285	**0.001**	**0.012**	**0.0001**	**0.010**	**0.0001**	**0.0001**
Self-perception of economic status							
Very good/ Good	19.1 ± 3.9	16.8 ± 4.9	20.0 ± 4.0	26.2 ± 4.2	25.5 ± 4.0	19.2 ± 3.4	127.2 ± 17.4
Fair/Poor	18.9 ± 3.5	16.0 ± 4.9	19.0 ± 3.6	25.6 ± 4.3	25.3 ± 3.8	18.9 ± 3.3	123.9 ± 16.5
P value	0.789	0.093	**0.021**	0.133	0.522	0.349	0.073
Smoking							
Yes	18.2 ± 4.3	15.6 ± 4.7	17.6 ± 3.4	23.7 ± 4.8	23.9 ± 4.1	18.2 ± 3.4	117.5 ± 18.6
No	19.1 ± 3.6	16.5 ± 4.9	19.8 ± 3.8	26.3 ± 4.1	25.6 ± 3.8	19.2 ± 3.4	126.9 ± 16.5
P value	0.114	0.257	**0.001**	**0.0001**	**0.009**	**0.038**	**0.003**
Alcohol use							
Yes	18.3 ± 3.7	16.0 ± 4.8	18.6 ± 3.9	23.8 ± 4.5	24.7 ± 4.0	18.1 ± 3.0	120.0 ± 17.5
No	19.2 ± 3.7	16.6 ± 4.9	19.8 ± 3.8	26.5 ± 4.0	25.6 ± 3.9	19.3 ± 3.4	127.2 ± 16.7
P value	0.076	0.422	**0.040**	**0.0001**	0.139	**0.006**	**0.001**
Education level of mother							
Primary school or below	18.8 ± 3.4	16.3 ± 4.8	19.0 ± 3.9	26.0 ± 4.0	25.2 ± 3.8	19.0 ± 3.3	124.6 ± 16.0
High school or above	19.1 ± 3.9	16.5 ± 4.9	19.9 ± 3.8	25.9 ± 4.4	25.5 ± 4.0	19.1 ± 3.4	126.4 ± 17.7

	Health Responsibility	Physical Activity	Nutrition	Spiritual Growth	Interpersonal Relationships	Stress Management	HLBS-II Total
P value	0.642	0.704	**0.031**	0.778	0.537	0.956	0.348
Education level of father							
Primary school or below	18.3 ± 3.5	15.0 ± 4.6	18.3 ± 3.7	25.3 ± 4.0	24.6 ± 4.1	18.4 ± 3.3	120.1 ± 16.5
High school or above	19.2 ± 3.8	16.8 ± 4.9	19.8 ± 3.8	26.1 ± 4.3	25.6 ± 3.8	19.2 ± 3.4	126.9 ± 17.0
P value	0.177	**0.010**	**0.009**	0.296	0.077	0.153	**0.004**

Table 4: Comparison of First-year and Sixth-year Medical Students According to HLBS-II Total and Subscale Scores, (Mean ± SD) Smoking and Alcohol Use

	First-Year Medical Student (n=168)	Sixth-Year Medical Student (n=188)	p Value
HLBS-II Total and Subscale Scores (Mean ± SD)			
Health Responsibility	19.0 ± 3.9	19.0 ± 3.5	0.665
Physical Activity	17.4 ± 4.8	15.6 ± 4.8	**<0.001**
Nutrition	19.8 ± 4.0	19.3 ± 3.7	0.346
Spiritual Growth	26.8 ± 4.4	25.1 ± 4.0	**<0.001**
Interpersonal Relationships	25.9 ± 3.7	25.0 ± 4.0	**0.039**
Stress Management	19.3 ± 3.5	18.8 ± 3.2	0.291
HLBS-II Total	128.5 ± 17.0	123.1 ± 16.7	**0.003**
Smoking, and Alcohol Use (%)			
Smoking	3.6	20.2	**<0.001**
Alcohol use	15.4	25.5	**0.018**

DISCUSSION

In our study, the average HLBS-II score of the medical students was 125.7±17.1 and with regard to this it can be considered that the students exhibit moderate level healthy lifestyle behaviors. The average HLBS-II score ranges between 121-134 in the studies conducted on the healthy lifestyle behaviors of medical students in our country and it is generally similar to the results of our study [13-17].

In our study, while the total HLBS-II score did not differ significantly by gender, physical activity score was found to be significantly higher in male students. In accordance with our findings, in many studies which were conducted in university students, it was reported that no significant differences were found for total HLBS-II score between genders [15, 16, 18]. However, Asma et al. and Demir & Artantaş found that physical activity scores of male students were significantly higher [14, 19]. These results can be interpreted as male students devote most of their spare time to sports activities and more adopting physical activity as an image of a healthy lifestyle compared to female students.

It was detected that total HLBS-II and nutrition scores were significantly higher for the students who were living with their family than the students who were living in a private house. Similarly, Wei et al. and Ardıç & Taşkın reported that the nutrition score was found to be significantly higher in students who were living with their families [13, 20]. In Demir & Artantaş's study in addition to nutrition score, total HLBS-II, health responsibility and interpersonal relationships scores were also reported as significantly higher in the students who were living with their families [19]. Although different results were obtained in some studies on this subject, it is possible to say that living with the family is an important factor in the healthy eating behaviors of the students. It can be thought that students who live alone or with their friends in a home environment will have a higher risk of acquiring fast-food style eating habits for reasons such as saving time and convenience. In our study, the HLBS-II total scores of the students living in the dormitory were found to be significantly higher than the students living in private homes. Contrary to this finding, Ünalan et al. reported that students living in the dormitories generally have lower scores than the other groups [21]. It can be thought that the accommodation conditions and the services provided in the dormitory may play a role in the formation of different results.

In our study, in all subscales scores except of health responsibility and HLBS-II total scores were significantly higher in students with a better perception of health status. Similarly, Ünalan et al. and Nacar et al. observed that healthy lifestyle behavior of the students generally positively improving as their perceived health status level increases [16, 21]. These results show that the perceived health level is mostly related to healthy lifestyle behaviors. In addition to this, nutrition score was found to be significantly higher in the students who indicated their economic status as good or very good and this finding was consistent with the study conducted on nursing students by Özyacıoğlu et al. [22]. In many studies, it was observed that a better economic situation is significantly associated with healthy lifestyle behaviors in a positive way [15, 16, 18]. These results suggest that the economic situation together with social factors play an active role in healthy lifestyle behaviors.

In terms of parents' education level, it was found that total HLBS-II, nutrition and physical activity scores were significantly higher for the students whose fathers' levels of education were high. On the other hand, only nutrition score was found to be significantly higher for the students whose mothers' levels of education were high. Hacıhasanoğlu et al. reported in their study that as the education level of the parents increases, total HLBS-II and the majority of the subscale scores increased significantly [18]. Similarly, Nacar et al. reported in their study that the HLBS-II total score of the students whose parents have a high education level was significantly higher [16]. Contrary to these results, in several studies it was reported that the education level of parents was not significantly associated with healthy lifestyle behaviors of the students [13, 17, 23]. Thus, as well as the education level of the parents, it should be considered that the interaction of the person with the external environment can play a role in the healthy lifestyle behaviors.

In this study, total HLBS-II and the majority of the subscale scores (nutrition, spiritual growth, interpersonal relationships, stress management subscales) were found to be significantly higher for non-smoking students. Bhuiyan et al. reported that non-smoking students had significantly better scores in terms of health responsibility, spiritual growth and total HLBS-II compared to smokers [24]. Furthermore, nutrition score was found to be significantly higher for non-smokers in the study conducted by Ganasegeran at al. [25]. Although there are studies with opposite results, it can be said that smoking mostly is an important indicator for negative lifestyle behaviors [21, 23].

Similar to non-smokers, total HLBS-II and some subscale scores (nutrition, spiritual growth and stress management subscales) were observed to be higher in the students who were not drinking alcohol. In contrast to our findings, many studies reported that alcohol consumption did not affect healthy lifestyle behaviors significantly [16, 19, 26]. Considering the personal differences regarding alcohol use, more detailed studies on the amount and frequency of alcohol use will provide a better understanding of the effect of alcohol use on healthy lifestyle behaviors.

Surprisingly, total HLBS-II, physical activity, spiritual growth, and interpersonal relationships scores were observed to be significantly higher among the first-year medical students than the senior medical students. Similarly, in the study conducted by Nacar et al. on medical students, it was determined that the total HLBS-II and the majority of the subscales scores were significantly higher for the first-year students than the senior students [16].

In various studies conducted in nursing and health schools, it is observed that healthy lifestyle behaviors generally increase as the education years of the students increase [27, 28]. It is naturally expected that students who are trained within the scope of health protection and promotion have adopted more healthy lifestyle behaviors as their education years increase. While this expectation is largely met in nursing and other health school students, it cannot be met in medical students and even some negative health behaviors increase as the education year increases. The prevalence of smoking and alcohol use among medical students in our study also supports these results. Similarly, in the study conducted by Majra, it was reported that the percentage of smoking and alcohol use increased significantly during the education process of medical students [29].

The healthy lifestyle behaviors of the participants were evaluated based on their own statements and this can be considered as a limitation. However, HLBS-II has a high level of validity and reliability and is a frequently used scale in the literature. Therefore, it allowed us to compare our findings with many similar studies.

CONCLUSION

In this study, it was revealed that the healthy lifestyle behaviors of medical students did not develop at the desired level despite the education they received. In the last year of the education period, medical students work at a high tempo for long hours, attend night shifts and prepare for medical specialty exam, therefore they experience intense stress and future anxiety. The negative health habits that may develop depending on these factors will become permanent in later periods of life and will become an important factor for many chronic diseases. Periodically evaluating the healthy living habits of medical students and implementing multi-sectoral projects that support healthy life on campus within the scope of protecting and improving health should be considered as an important opportunity to increase the health gains of both students and society.

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