

Lifestyle Impact on the State of Emotional Balance among Medicine University Students. A Questionnaire Bases Study

Mara Nemes, Student

Ioana-Maria Niculici, Student

Faculty of Medicine, University of Medicine, Pharmacy, Science and
Technology G.E.Palade, Tirgu Mures, Romania

Alexandra Mihaela Stoica, Lecturer, DMD, PhD

Department of Odontology and Oral Pathology, Faculty of Dental Medicine,
University of Medicine, Pharmacy, Science and Technology G.E.Palade,
Tirgu Mures, Romania

Assist. Prof. Ancuta Victoria Nyulas, PhD

Department of Hygiene, Faculty of Medicine, University of Medicine,
Pharmacy, Science and Technology G.E. Palade, Tirgu Mures, Romania

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Abstract

Objectives: This article analyzes the emotional balance of the student with such an important role in his life as well as the link between lifestyle and the conscious, independent choices that can influence this balance. Our study was conducted among the students who study at the Faculty of General Medicine, UMFST G.E. Palade from Targu Mures, Romania. **Material and methods:** We conducted an anonymous survey using a questionnaire that included 21 questions. All the 132 participants from all medicine specialties studying at Faculty of General Medicine from Targu-Mures. The completed questionnaires were collected and the results were evaluated and statistically analyzed using chi-square test. **Results:** Most students have a chaotic lifestyle during their university years. Only 71 (54%) of the students say they have a healthy diet, 46% (61) use to eat fast food once a week, 64% (85) claim to sleep less than 8 hours a day, 30% are smokers and 62% have tried smoking marijuana. On the other side, based on the questions that concerned

the emotional balance, most students, 65% consider to be stressed during the university period and only 14% are willing for Monday to come in order to start doing their usual activities. Conclusions: A healthy lifestyle can give us good emotional health, which helps us to effectively manage stress, to improve relationships with those around us, giving us the opportunity to connect better with others, to express our empathy and compassion in the life situations we are exposed to.

Keywords: Emotional health, students, lifestyle, diet, stress

Introduction

The lifestyle represents a model according to which someone chooses to live. Lifestyle includes as the main determining factors nutrition, activity, rest, addictions (tobacco, alcohol, other substances) and communication (relationship with family, friends and colleagues). These factors contribute to the development of individual qualities.

The state of health is closely related to the lifestyle, a fact that once again determines the importance of promoting a healthy lifestyle, being indispensable to the state of health, as an absolute necessity and an intrinsic part of the basic values that must be implemented in among the students. Therefore, the healthy lifestyle must be approached seriously from the student, because otherwise, a chaotic lifestyle can attract multiple health problems that, although they can still be tolerated in the first part of youth, they can degenerate on during life (Zhang 2021).

During all 6 study years, in the absence of a well-organized program, there is no time to follow a well-organized food program, with meals rich in nutrients, based on a well organised food schedule. Thus, frequently students, due to the lack of time, end up eating strictly as needed (when hungry become acute) or worse, in the presence of the stress of the exams period, they overeat, compulsively consuming fast-food products, sweets and energy drinks, out of the desire to save time or to maintain energy for as many hours of study as possible (Almojali 2017). Of course, these incorrect eating practices invariably lead to unhealthy habits/addictions.

Addictions are equally part of the routine of the social landscape (Charmberlain 2021). In this category, during the student period, the most frequently encountered addictions, in addition to smoking, are alcohol and drug use, which are mainly used at student parties, in moments of socialization and recreation, but also for repulsion in unsuccessful situations at exams or simply as methods of "treatment" of states of anxiety and depression determined by various reasons (Cattano K 2020, Meier 2019, Puthran 2016).

Sports, despite all the well-known advantages of physical activity, became less of a priority among students, often due to a crowded daily routine with courses and activities dedicated to academic studies (O’Flynn 2018).

Sport is closely connected with rest, as sports activities and physical exercise help to regulate sleep and have beneficial effects on those who suffer from sleep disorders or sleep deficiencies. At the same time, both parameters positively influence the lifestyle and have an impact on well-being and comfort (Snedden 2019).

Effective communication is essential for building personal and professional relationships, which are beneficial to general well-being by maintaining one's emotional balance (Supervia 2021). It is natural to have different opinions with colleagues, friends or even in the family and it is okay to express our points of view, what matters, however, is the way in which we know each other formulate the message.

Methods

In the present work, we relied on an observational, prospective, cross-sectional study on students from the University of Medicine and Pharmacy, Sciences and Technology ‘George Emil Palade’ from city of Târgu Mureş, Romania, aged between 18-25 years old (93.94%-124 students) or over 25 years old (6.06%- 8 students), in the period April-May 2022.

The 132 participants in the study had to complete an online questionnaire, consisting of 25 questions, structured in three parts. The interviewed persons were informed from the beginning what is the purpose of the study, ensuring anonymity and data confidentiality.

In the first part we have focused on general data, in the second part on questions with reference to lifestyle, and in the last part questions related to the feeling of happiness or anxiety towards certain statements.

The target group of the questionnaire was students with different specialization profiles. The questionnaire was distributed to various university groups through the Facebook social media platform and was completed by 132 people, all answers being validated and used in the study. The completed questionnaires were collected and the results were evaluated and statistically analyzed using chi-square test.

Results

From all 132 dentists who agreed to participate to our study, 75% (99) of participants follow the General Medicine profile, 10.6% (14) follow the Dental Medicine Profile, and the remaining 14.4% (19) follow other profiles within this university. Regarding the height and weight data of the respondents, we calculated the body mass index (BMI) based on the

information received, according to the international standard formula (weight/height squared).

The participants were asked if they have a healthy and balanced eating style and the answers were predominantly negative, 53.8% (71) answered no. When asked how often do they usually eat products from the fast-food category, 13.6% (18) eat several times a week and almost half of them - 46.2% (61) use to eat such products once a week. Regarding the consumption of sweets, 28.8% (38) of answers were associated with a daily consumption. Students were asked how they proceed with serving the meal a worrying percentage - 59.1% (78) eat in a hurry, whatever they can get, whenever they have time.

The participants in the questionnaire were asked how many hours of sport they do weekly, and the answers showed that 66.7% (88) of the respondents practice less than 5 hours of sport per week. When asked how they go to courses, 65.9% (87) answered that they walk, and 34.1% (45) answered that they use various transportation means. When asked what sport they prefer, 75% (99) mentioned that they choose walking as a form of exercise, 15.2% (20) opt for team sports, and 9.8% (13) prefer 'the sport of the mind'. In the questionnaire almost half of the participants - 46.2% (61) deny the need of exercise after a long day full of classes.

When asked about the number of hours slept per night, the answer was that 64.4% (85) sleep less than 8 hours per night. A percentage of 41.7% (55) states that they wake up rested in the morning.

Participants were asked if they have a fair communication and a good relationship with their family, and the results showed that a predominant percentage of 81.8% (108) confirmed a good understanding with their own family. Asked if they have friends they meet and socialize with frequently, 81.1% (107) answered yes. The students were asked if they had a stable partner and 64.4% (85) answered that they were engaged in a personal relationship.

The smokers 30% (40) were asked which way of smoking they prefer - 67.5% (27) prefer classic cigarettes but 15% (6) use Iqos type devices and 17.5% (7) prefer Glo type devices. They, were also asked the number of cigarettes they smoke daily. 33.3% (13) consume between 1-5 cigarettes per day, 25.6% (10) consume 5-10 cigarettes per day, 25.6% (10) consume more than 10 cigarettes and 15.4% (8) consume one packet per day.

Regarding the feeling they have when smoking, 51.2% (21) answered they have a feeling of relaxation during smoking. The students who gave up smoking - former smokers, current non-smokers, when asked what was the reason that led them to this decision, answered as follows: reasons related to health 51.6% (16), self-discipline 29% (9), reasons related to aesthetics and

smell 9.7% (3), reasons related to the costs involved 9.7% (3). When asked if they had ever used drugs, a majority of 75% (99) answered yes.

The result for the third part of our questionnaire related to emotional state are as follows in these charts:

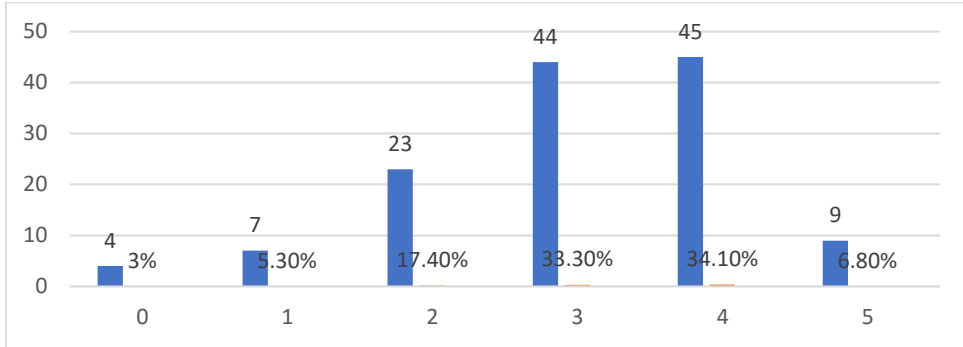


Chart I. I like going to university

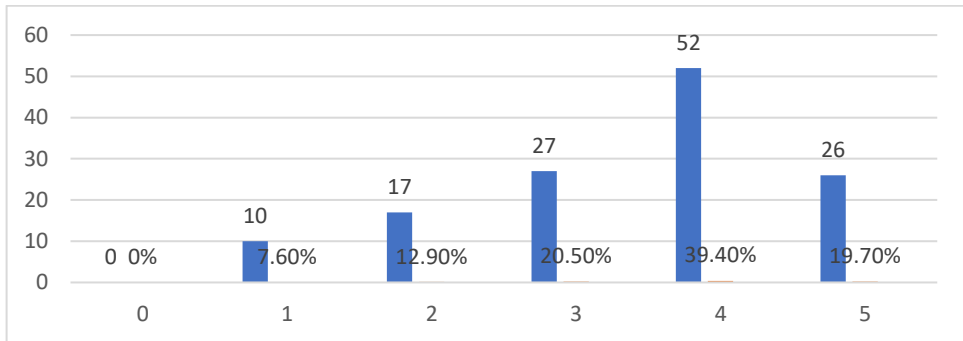


Chart II. I feel well integrated among the university students

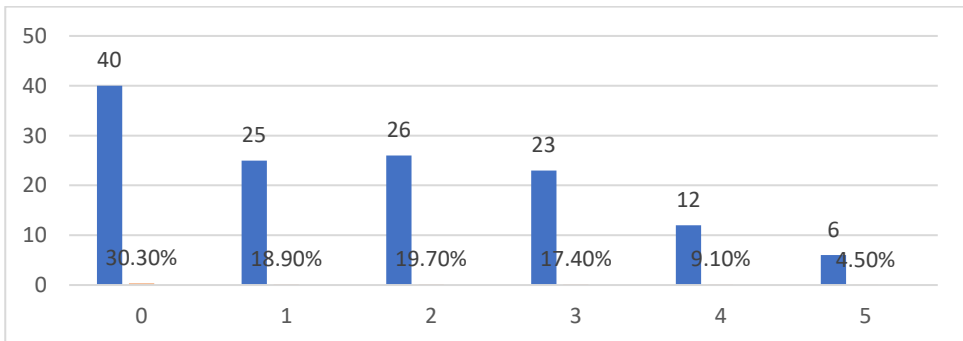


Chart III. At the weekend I wait until Monday to resume to my usual activities

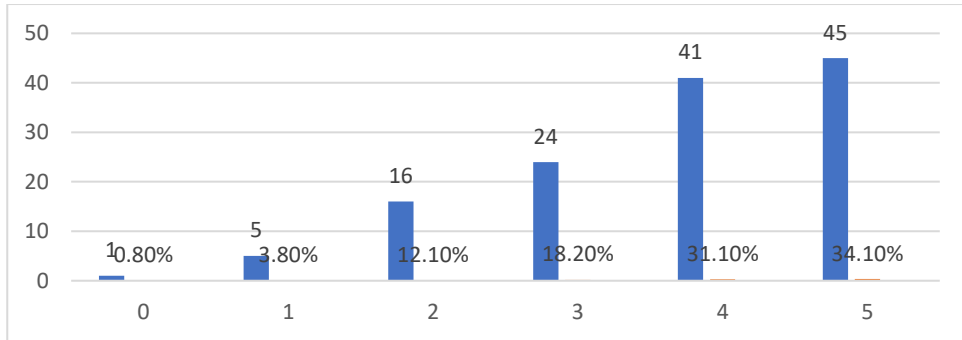


Chart IV. I feel stressed during the academic year

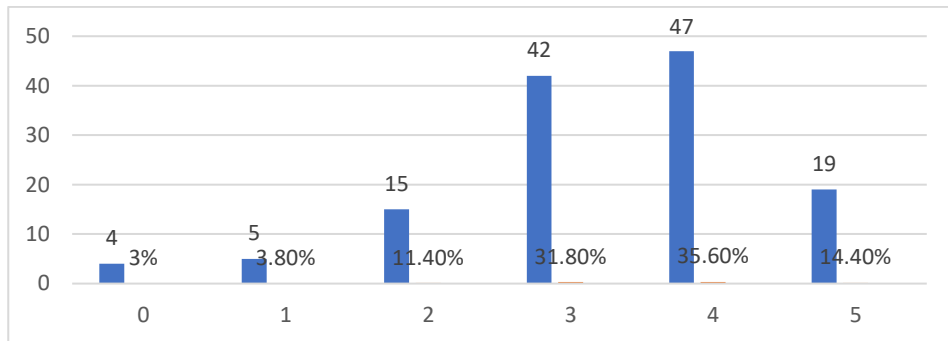


Chart V. I generally consider myself a happy person

Next, we did a comparative analysis was performed according to diet, between two groups: group 1 - people who do not have a healthy and balanced diet and group 2 - people who have a healthy diet.

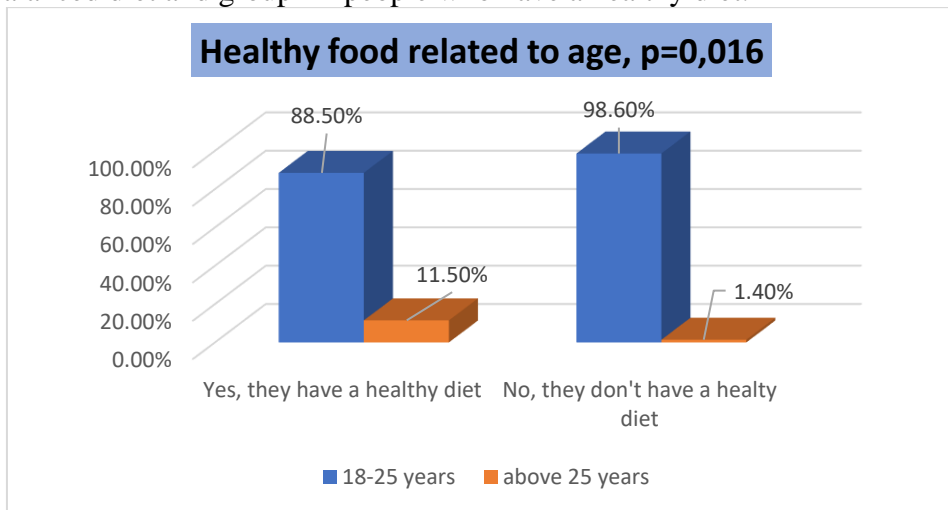


Fig.1- Healthy food according to age

After analyzing the answers given by the interviewed subjects to the reference question - healthy diet, extracting the statistical elements revealed by the graph presented (Fig.1), we can conclude that unhealthy diet is specific to the age between 18 and 25 years (98.60%) , an age that has not reached full maturity, which perceives things superficially, subjects being more willing to accept something easy immediately or in the short term, versus a disciplined conduct, which involves effort and organization, with perceived long-term results (1.40%).

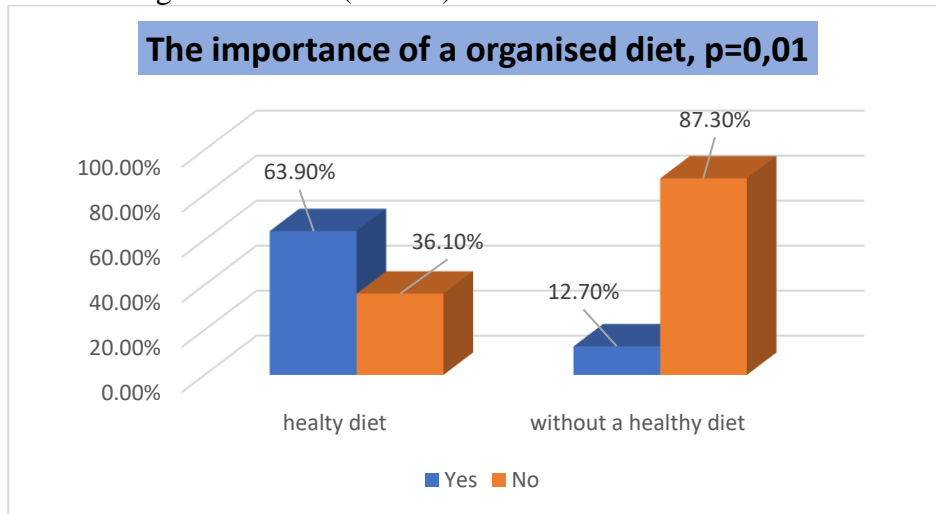


Fig.2– The influence of a food programme

Related to the food program, from the analysis of the obtained results, it appears that an organized food program gives practicing subjects a much higher (almost double) perspective of healthy and balanced nutrition compared to unorganized ones (63.90% vs 36.10%). At the same time, a chaotic food schedule creates the premises of unhealthy eating almost 700% higher (12.70% vs 87.3%) – see fig.2.

Discussion

Emotional balance plays an essential role in student life and provides that solid foundation for academic success. In the context of our days, however, we have an increased frequency of stress, which is a cause of the development of anxiety and depression (Lemay 2019).

In order to have a wider statistical view, in 2019 a meta-analysis [Travis Tian-Ci Quek et al 2019] was carried out which united and analyzed the results obtained from 69 studies including 40,348 participants. This analysis was meant to quantify the global prevalence of depression among medical students, resulting in an anxiety prevalence rate of 33.8%, more

prevalent in the Middle East and Asia. In fact, approximately one in three medical students globally suffer from anxiety.

The results in our group were varied, thus to the questions related to academic stress more than half of the participants (65.2%) answered that they strongly feel this feeling during the academic year and a minor percentage (4.5%) expect to be returns on Monday to resume his academic activities.

A healthy, balanced and diversified diet is the basis of a healthy lifestyle, ensuring the energy substrate necessary for study and daily academic activities.

70% of our cohort has a body mass index within the normal range. However, more than half of the participants believe that they do not have a healthy diet and an organized food schedule, and 46% eat junk food once a week. When asked how they proceed with serving meals, 60% stated that they cannot organize themselves and eat in a hurry, what they can get. As for sugar, a third of students feel the need to eat sweets every day.

When it comes to sports, our study includes students with moderate physical activity who, predominantly, go to college by foot, not using any type of transport, but who do not practice more than 5 hours of sports per week, preferring in a majority percentage walks, in exchange for dynamic and demanding team sports. Thus, half of our students feel the need to do some exercise after a full day of classes at college.

Addictions such as tobacco, alcohol and other substances generally start in early youth, being very popular among all young people, including students (Hasin 2015, Reen 2016).

In our sample, student participants were predominantly non-smokers (70%). Smokers are mostly consumers of classic cigarettes, and a third of them prefer Iqos or Glo devices. The number of cigarettes consumed daily varies from case to case, the majority affirming a feeling of pleasure (51.2%) that motivates their gesture. The ex-smokers in the group report that the reasons for quitting were predominantly health-related, followed by the desire for self-discipline, and last but not least, related to costs. (Papagiannis 2021)

As for alcohol consumption, it has become an increasingly common topic among students, so multiple studies have been created to better observe the phenomenon. Between 2018 and 2019, using an anonymous online questionnaire, data were collected from 17 universities in Italy with the aim of assessing alcohol consumption among students (Marisa Patrizia Messina et al 2021). The results showed that 53.3% were high-risk drinkers, and 13.1% admitted binge drinking behavior at least once a month.

Compared to our group, more than half of the study participants used to drink alcohol, predominantly at events and on weekends.

In our study group, more than half (64%) of students average less than 8 hours of sleep per night. A quarter of the participants in the study mention that the time they usually fall asleep is after midnight and more than half have trouble falling asleep, burdened with many thoughts in the evening, before sleep. As a result, 58% report that they do not feel rested when they wake up.

According to the answers provided, the students participating in our questionnaire have good relationships based on effective communication. Thus, 80% mention good communication with family members and that they have friendly relations with people they meet frequently while socializing, and another considerable percentage, 64%, are engaged in a love relationship. Against this state of affairs, the declared good interpersonal relationship is obviously a solid and beneficial basis for maintaining personal emotional balance (Velten 2018).

Conclusion

The registered balance is nevertheless a vulnerable one, a decompensation being possible at any time due to the influence of other environmental or societal factors. Therefore, we believe that the development and implementation of preventive intervention policies and strategies is still required, to counteract the possible vulnerabilities generated by any emotional imbalance, by pursuing the increase of emotional intelligence. Besides that, in the present case we have been considered a segment of young people with an intelligence quotient above average, being students in general and medical students in particular.

Conflicts of Interests

The authors declare that they no conflict of interest regarding this article, and we did not receive any financial support from any organization or a research grant.

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Questionnaire

1. At which university do you study?
 - a. General medicine
 - b. Dental Medicine
 - c. Other profiles
2. Constitutional type:
 - a. height (cm):
 - b. weight (kg):
3. Do you think you have a healthy and balanced diet?
 - a. a.Yes
 - b.No
4. How often do you eat fast food?
 - a. Several times a week
 - b. Once a week
 - c. Once a month
 - d. A few times a year
5. How often do you eat sweets?
 - a. Daily
 - b. Once a week
 - c. 2-3 times a week
 - d. 4-5 times a week
 - e. Less than once a week
6. How do serve your meal during week?

- a. I have a sandwich from home
 - b. I put food prepared at home in the casserole
 - c. I eat at the faculty canteen
 - d. I order by courier
 - e. I eat what I can get
7. Weekly, how many hours of sports do you do?
- a. a. <5h
 - b. 5-10 hours
 - c. >10h
8. Do you use any means of transport to get to university, or do you walk?
- a. a. Yes, I use a means of transport
 - b. No, I'm walking
9. What sports do you prefer?
- a. a. Team sports
 - b. Walks
 - c. "The sport of the mind"
10. After a day of classes do you feel the need to exercise?
- a. a. Yes
 - b. No
11. How many hours of sleep do you get each night?
- a. a. <8h
 - b. 8-10 a.m
 - c. >10h
12. Do you feel rested when you wake up?
- a. a. Yes
 - b. No
13. Do you have a fair communication and good relationship with family members?
- a. a. Yes
 - b. No
14. Do you have friends with whom you meet and socialize frequently?
- a. a. Yes
 - b. No
15. Are you engaged in a personal relationship?
- a. a. Yes
 - b. No
16. Are you a smoker? If yes, what kind of cigarettes do you prefer?
- a. a. Classic cigarettes
 - b. b. Iqos
 - c. c. Glo
 - d. d. Rolled tobacco
 - e. e. Vaping devices

17. How many cigarettes do you smoke a day?
a. a.1-5 b.5-10 c.Over 10
18. What do you feel when you smoke?
a. a.Relaxation
b. b.Pleasure
c. c.A way to socialize with other smokers
d. d.The gesture of smoking attracts me
19. If you quit smoking, what were the reasons?
a. a.Health related
b. b.Related to the costs involved
c. c.Related to self-discipline
d. d.Related to aesthetics and smell
20. Have you ever used drugs? If so, what kind?
a. a.Marijuana
b. b.Cocaine or Morphine
c. c.Amphetamine
d. d.Other
21. Please read each of the statements below and choose a number from 0 to 5 that you think best describes how you feel about the following statements. The rating scale is as it follows:
0 – never
1 - very rarely
2 – rarely
3 – sometimes
4 – frequently
5 – always
1. I like going to university.
 2. I feel well integrated among the university students.
 3. At the weekend I wait until Monday to resume to my usual activities.
 4. I feel stressed during the academic year.
 5. I generally consider myself a happy person.