

HEALTHY LIFESTYLE. PREVENTION

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**THE STUDY OF VARIATIONS
IN ADHERENCE TO THE PRINCIPLES
OF HEALTHY LIFESTYLE
AND PERCEPTION OF ITS CONCEPT
AMONG MEDICAL AND NON-MEDICAL
STUDENTS OF M.K. AMMOISOV
NORTH-EASTERN FEDERAL UNIVERSITY**

The purpose of the study was to evaluate and compare the observance and understanding of the concept of a healthy lifestyle among students of medical and non-medical specialties of M.K. Ammosov Northeastern Federal University (NEFU). Research hypothesis: We assume that students studying in medical and non-medical specialties have different attitudes towards the concept of a healthy lifestyle and, therefore, adhere to it in different ways. Research materials and methods: Theoretical, verbal-communicative and statistical research methods were used. The survey was conducted using a standardized selective remote survey method developed by the authors on the Google Forms Internet resource. The 434 students (aged 17 to 27) of M.K. Ammosov NEFU took part in the survey. The respondents were divided into two groups: the first group – students of the medical institute (n=216), the second – students of other faculties and institutes of NEFU (n=218). The statistical method was performed in the software application Microsoft Excel and SPSS Statistics version 22.0. Research results: The conducted research has shown that modern students generally adhere to the basic principles of a healthy lifestyle. There was a lower proportion of people with bad habits among medical students and a higher number of students who adhere to the principles of healthy eating. At the same time, students of non-medical specialties are 2.48 times more likely to study in sports sections. It has been established that in the group of students of non-medical specialties, there are those who do not perceive a healthy lifestyle as a success factor in various spheres of human activity and consider compliance with the principles of a healthy lifestyle not mandatory. Conclusion: The hypothesis of the present study has been confirmed. Students studying in medical and non-medical specialties have different attitudes towards the concept of a healthy lifestyle and, therefore, adhere to it in different ways. The results obtained dictate the need to popularize the versatility of a healthy lifestyle as a foundation for the formation of a full-fledged, harmonious personality in all spheres of life.

Keywords: students, healthy lifestyle, questionnaire, learning profile.

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Introduction: Youth, as a social stratum of society, performs many important functions of social development and is a key potential for the progress of modern society. The younger generation is a dynamic organism that subtly reacts to any fluctuations in global trends and transforms them. Due to their susceptibility, young people are easily susceptible to harmful influences, in particular, blind fashion adherence [4, 9]. These fashion trends often run counter to the principles of a healthy lifestyle and can have long-term, irreversible consequences for

health and social life [3]. It is believed that medical students demonstrate a more positive attitude towards a healthy lifestyle than students of other specialties [1, 2]. However, both of them may face obstacles in its observance, which dictates the need to take into account the variety of factors determining the choice of their lifestyle. A multidimensional study of the student youth's attitude to the concept of a healthy lifestyle is essential for developing effective strategies to support students in their pursuit of a healthy lifestyle.

The purpose of the study: To evaluate and compare the observance and understanding of the concept of a healthy lifestyle among students of medical and non-medical specialties of the NEFU named after M.K. Ammosov.

Research hypothesis: We assume that students studying in medical and non-medical specialties have different attitudes towards the concept of a healthy lifestyle and, therefore, adhere to it in different ways.

Research materials and methods:

The following research methods were used in this study: theoretical, verbal-communicative and statistical. The theoretical method included analysis, generalization of scientific literature on the problem and drawing up a questionnaire based on the information received. The verbal and communicative method was implemented using the Internet resource "Google Forms". The questionnaire developed by the authors consisted of 20 dichotomous questions and questions with a choice of answer. The questionnaire included questions aimed at obtaining information about the respondents' social characteristics, attitudes towards a healthy lifestyle, including smoking, proper nutrition, and sports. The survey was conducted in compliance with the principles of anonymity and voluntariness. The survey was conducted using a standardized method of selective remote survey of full-time students of M.K. Ammosov NEFU in 2025. The exclusion criteria were ques-

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tionnaires with a significant number of missing answers (more than 20%) and duplicate questionnaires. The survey involved 434 respondents aged 17 to 27, of whom 398 were students of youth age (17-21 years old - youth; 16-20 years old - girls) and 36 of the first period of adulthood (22-35 years old - men; 21-35 years old - women). The overwhelming majority (85,7%) of the respondents were female. 98.2% of the respondents were residents of the Republic of Sakha (Yakutia). According to the objectives of the study, all respondents were divided into two groups: the first group was students of the Medical Institute (n=216), the second group was students of other faculties and institutes (n=218), such as the Institute of Psychology, Natural Sciences, Engineering, Institute of Mathematics, historical and geological faculties.

The statistical method was performed in the software application Microsoft Excel and SPSS Statistics version 22,0. The χ^2 criterion and the Fischer criterion (F) for small samples were used to determine the intergroup differences. The results were considered reliable at $p < 0,05$.

Results and discussion: Statistical analysis of the obtained material showed that among the surveyed students, there are people with and without bad habits with the same proportion. The intergroup comparison did not reveal significant differences ($p = 0,786$), as 50% of medical students and 52,29% of students from other faculties noted the presence of harmful habits. At the same time, it should be noted that from 47.71% to 50% of modern students indicate the absence of bad habits. According to the All-Russian Center for the Study of Public Opinion, the portrait of a smoker has changed since 2009. At that time, 48-50% of the smoking population was between 18 and 44 years old; today, the proportion of smoking youth aged 18-24 has decreased by 1,7 times from 48% to 29% [10]. This fact shows that there is a tendency to promote a healthy lifestyle among young people. The analysis of the prevalence of smoking among students revealed a significantly lower ($\chi^2 = 4,151$; $p = 0,042$) number of them among medical students (22,22%). At the same time, the proportion of smokers in the second group was 11,72% higher. The result obtained may be due to the fact that students of medical specialties have a more in-depth knowledge of the dangers and consequences of smoking, including its connection with a wide range of diseases, which serves as a motivating factor for prevention and quitting smoking [6,7, 8]. Medical education promotes

the formation of professional self-awareness, within which a healthy lifestyle is perceived as an important component of professional competence and ethics, creating a positive example for the public.

Analyzing attitudes to nutrition, significant differences in eating habits among students of medical and non-medical specialties were established. To the question "Do you follow a proper diet?" The majority of respondents in both groups (57,41% and 59,63%) answered "not always", the answer "yes" was presented in a minimal proportion in both groups (Table 1).

According to the survey, there are 2,4 times more healthy foods in the diet of medical students. Due to the trend of the times, fast food as an affordable way of eating is quite common among young people. According to the survey data, the respondents of the first and second groups indicated that fast food is often present in their diet (several times a week) (29,64% and 43,12%, respectively). It should be noted that medical students consume it significantly less frequently ($\chi^2 = 3,987$; $p = 0,046$) and 3,70% of fast food is not present in the diet.

An interesting fact is that the majority of modern students (57,45% and 64,22%) take complex medications as an additional source of vitamins and minerals. In recent years, vitamin intake has been widely advertised among the population, and many doctors recommend supporting the body with vitamin and mineral complexes, especially during periods of increased stress.

A study of students' physical activity showed that the vast majority of students do morning exercises rarely or not at all, while students of non-medical specialties are significantly more likely to exercise daily (Table 2).

The majority of the students surveyed are not involved in any kind of sport. The prevailing reason for this, according to the answers, is the lack of free time. We assume that the insufficient physical activity of modern students is due to the fact that student life is associated with high academic, psycho-emotional and socio-adaptive loads [5]. It is noteworthy that medical students had the answer "I can't because I don't have time" 1,8 times more often ($p < 0,001$). At the same time, there are 2,48 times more students who regularly attend sports clubs among the respondents of non-medical specialties ($p = 0,003$). It is possible that students of medical schools, faced with a high mental and emotional workload, frequent exams, internships and night shifts in hospitals, are limited in their free time.

When analyzing the duration of use of

mobile and computer devices, non-medical students use it more than 12 hours a day 2,5 times more often (27,52% and 11,11%, respectively; $\chi^2 = 1,719$; $p < 0,001$). We believe that students of non-medical specialties, in particular, technical and mathematical profiles, use mobile and computer devices more hours a day due to the peculiarities of their educational process. This is due to the need to perform time-consuming calculations, visualize and model complex objects and phenomena, develop computer programming languages, algorithms and software, and much more. There were no significant intergroup differences in the duration of mobile and computer devices use "less than 6 hours" and "from 7 to 11 hours per day". The constant use of mobile devices and computers is an integral part of modern people's daily lives, providing communication, information storage, entertainment, and access to various information.

Having studied the sleep duration of the respondents, there were no significant differences between students of medical and non-medical specialties. The vast majority of respondents (70,37% and 71,56%) indicated that they sleep less than 8 hours a day. There is no doubt that student life is accompanied by factors that affect sleep duration, among which the most common are intense academic loads, active social and social life, psychophysiological stress during the session, and much more.

Having considered the issues of students' attitude to a healthy lifestyle, it was found that non-medical students in 4,59% of cases do not believe that a healthy lifestyle contributes to success in other areas of human activity (study, work, etc.). Also in this group of respondents, 5,50% believe that it is possible to do without observing the principles of a healthy lifestyle (Table 3). We believe that it is necessary to popularize the promotion of a healthy lifestyle, not only as the absence of bad habits, but also as a foundation for the formation of a full-fledged, successful personality in all spheres of life.

An interesting fact is that 72,22% of medical students believe that creating an absolutely healthy nation is a reality. At the same time, only 31,19%, which is 2,32 times less ($p < 0,001$), of non-medical students support the same point of view. Such a positive attitude of the younger generation of doctors gives hope that they will become a key potential for the implementation of the concept of a "healthy nation".

Conclusion: The hypothesis of the present study has been confirmed. Stu-

Table 1

Students' attitude to nutrition issues

| № | Question | Answer option | Group 1 n (%) | Group 2 n (%) | p |
|---|--|------------------------------------|------------------|------------------|-----------------------------|
| 1 | Are you following a proper diet? | yes | 20 (9.26) | 20 (9.17) | p=0.978 |
| | | no | 72 (33.33) | 68 (31.20) | p=0.733 |
| | | not always | 124 (57.41) | 130 (59.63) | p=0.810 |
| 2 | Are there healthy foods (fruits, vegetables, etc.) in your diet? | always | 52 (24.08) | 22 (10.09) | $\chi^2 = 10.660$; p=0.002 |
| | | often enough | 92 (42.59) | 110 (50.46) | p=0.321 |
| | | rarely | 72 (33.33) | 80 (36.70) | p=0.611 |
| | | no | 0 (0) | 6 (2.75) | $\chi^2 = 5.866$; p=0.016 |
| 3 | Do you take additional vitamin complexes? | yes | 64 (29.63) | 54 (24.77) | p=0.390 |
| | | sometimes | 60 (27.78) | 86 (39.45) | p=0.070 |
| | | no | 92 (42.59) | 78 (35.78) | p=0.337 |
| 4 | Do you have fast food in your diet? | very often (daily) | 8 (3.70) | 14 (6.42) | p=0.220 |
| | | quite often (several times a week) | 64 (29.64) | 94 (43.12) | $\chi^2 = 3.987$; p=0.046 |
| | | rarely | 136 (62.96) | 110 (50.46) | p=0.167 |
| | | no | 8 (3.70) | 0 (0) | $\chi^2 = 7.929$ p=0.005 |

Table 2

Students' attitude to physical activity issues

| № | Question | Answer option | Group 1 n (%) | Group 2 n (%) | p |
|---|--|---|------------------|------------------|-----------------------------|
| 1 | How often do you do morning exercises? | daily | 0 (0) | 10 (4.59) | $\chi^2 = 9.692$; p=0.002 |
| | | sometimes | 64 (29.63) | 82 (37.61) | p=0.215 |
| | | never | 152 (70.37) | 126 (57.80) | p=0.202 |
| 2 | Do you practice any kind of sports? | yes | 64 (29.63) | 86 (39.45) | p=0.134 |
| | | no | 152 (70.37) | 132 (60.55) | p=0.326 |
| 3 | Can you afford to visit various sports sections, gyms, swimming pools, etc.? | I can, I visit regularly | 16 (7.41) | 40 (18.35) | $\chi^2 = 8.941$; p=0.003 |
| | | I can, but I don't see the point | 32 (14.81) | 38 (17.43) | p=0.529 |
| | | I can't because I don't have free time | 136 (62.96) | 76 (34.86) | $\chi^2 = 11.879$; p<0.001 |
| | | I can't because I don't have enough money | 28 (12.96) | 64 (29.36) | $\chi^2 = 11.410$; p<0.001 |

Table 3

Students' attitude to a healthy lifestyle

| № | Question | Answer option | Group 1 n (%) | Group 2 n (%) | p |
|---|---|---------------------------------|------------------|------------------|-----------------------------|
| 1 | Do you think a healthy lifestyle contributes to success in other areas of human activity (study, work, etc.)? | yes | 196 (90.74) | 180 (82.57) | p=0.504 |
| | | no | 0 (0) | 10 (4.59) | $\chi^2 = 9.692$; p=0.002 |
| | | I can't answer | 20 (9.26) | 28 (12.84) | p=0.287 |
| 2 | Your personal attitude to a healthy lifestyle: | it's great | 200 (92.59) | 174 (79.82) | p=0.294 |
| | | can live without it | 0 (0) | 12 (5.50) | $\chi^2 = 11.581$; p<0.001 |
| | | Sometimes it should be observed | 16 (7.41) | 24 (11.01) | p=0.237 |
| | | I can't answer | 0 (0) | 8 (3.67) | $\chi^2 = 7.787$; p=0.006 |
| 3 | What do you think is an absolutely healthy nation: | illusion | 60 (27.78) | 150 (68.81) | $\chi^2 = 25.968$; p<0.001 |
| | | reality | 156 (72.22) | 68 (31.19) | $\chi^2 = 23.746$; p<0.001 |

dents studying in medical and non-medical specialties have different attitudes towards the concept of a healthy lifestyle and, therefore, adhere to it in different ways. The conducted research has shown that modern students generally adhere to the basic principles of a healthy lifestyle. However, there are differences between students of medical and non-medical specialties in the observance of its individual components. Thus, there was a lower proportion of people with bad habits among doctors, and a greater number of students who adhere to the principles of healthy eating. At the same time, students of non-medical specialties are 2.48 times more likely to study in sports sections. Unfortunately, the implementation of such components of a healthy lifestyle as sleep duration, regular physical activity among students is difficult due to academic and socio-social stress, and psychophysiological stress.

After analyzing the students' attitude to a healthy lifestyle, it was found that there are students of non-medical specialties who do not perceive a healthy lifestyle as a success factor in various fields of human activity and consider compliance with the principles of a healthy lifestyle optional. This fact is alarming and dictates the need to popularize the versatility of a healthy lifestyle as a foundation for the formation of a full-fledged, harmonious personality in all spheres of life. It should be noted that the overwhelming majority of medical students consider the creation of an absolutely healthy nation to be a reality. The obtained result allows us to make a cautiously optimistic forecast

that the younger generation of doctors will become the driver of the development of a new model of a "healthy nation" in the future.

The authors declare that there is no conflict of interest.

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DIET OF PATIENTS WITH PERIODONTAL DISEASES: ANALYTICAL DESCRIPTIVE STUDY

The article presents the results of a study of the nutritional characteristics of patients with chronic generalized periodontitis. According to the World Health Organization, more than one billion people in the world suffer from severe periodontal diseases. Periodontal pathologies are closely associated with a number of major chronic non-communicable diseases, which determine their high medical and social significance.

A cause-and-effect relationship was revealed between the degree of manifestation of periodontitis symptoms and nutritional factors of patients. It was found that the less essential nutrients in the diet, the more pronounced the clinical signs of periodontal damage become. Increased body weight can be considered as one of the signs of metabolic syndrome involved in the development of periodontitis. Thus, with an increase in body weight, the severity of the clinical course of periodontitis steadily increases, and the revealed dependence is statistically highly significant ($p = 0.01$). With an increase in the number of proteins, carbohydrates and dietary fiber in the diet, a decrease in the degree of periodontitis is observed. An increase in the number of vitamins (A, B1, C) and a number of macro- and microelements (Cu, Zn, K) has the same effect.