

**HEALTH DISORDERS, INCLUDING PHYSICAL DEVELOPMENT AMONG
YOUNG PEOPLE IN THE CONTEXT OF THE COVID-19 PANDEMIC**

Nazarov Firuz Yusufovich

Yarmukhamedova Saodat Khabibovna

Samarkand State Medical University

Department of Propaedeutics of Internal Diseases

ABSTRACT

It is known that persons of adolescent and adolescent age are vulnerable from the standpoint of health-saving due to both pronounced eco-sensitivity, physical and mental instability, and the difficulties of adaptation to sudden changes in living conditions that are inherent in a young growing organism, despite the physiological slowdown in the processes of morpho-functional development in late puberty. At the same time, the issues of correlation of biologically regular reference standards of physical parameters of development as indicators of health status are of particular importance in scientific research. The value of studies of morpho-functional features increases in relation not only to social, economic, environmental factors, but also risk factors that have arisen as a result of the spread of COVID-19.

Keywords: COVID-19, youth, medical and social support, "SF-36" and HPLP-II.

INTRODUCTION

It should be noted that the full scientific picture of the impact of the COVID-19 pandemic on the physical and psychological well-being of students is still being formed, since scientific works are mainly devoted only to private aspects of the health of young people during the pandemic. The deterioration of the health indicators of young people and the existing problems of organizational regulation during the COVID-19 pandemic determine the objective need for a comprehensive analysis of this issue, including detailed prevention of disorders in physical development, the development of programs of medical and social support for young people during the COVID-19 pandemic. All of the above determines the relevance and relevance of this study, which is one of the first comprehensive medical and social studies of students in the context of the spread of COVID-19.

MATERIALS AND METHODS

The reliability and objectivity of the results obtained is confirmed by the use of adequate data collection methods, the representativeness of the sample, modern approaches to statistical processing and analysis of the information received. The article is devoted to the study of the influence of medical and social factors on the development of physical development disorders of young people in the conditions of the COVID-19 pandemic, forecasting issues, the development of a program of medical and social prevention. Two international questionnaires



"SF-36" and HPLP-II were used in the study, as well as a specially developed questionnaire on medical and social factors.

It was found that the average level of the physical component of health in accordance with the methodology of the questionnaire "SF-36" among young people is higher than the psychological one; at the same time, there is no statistically significant relationship between the physical and psychological components of the health of young people.

The analysis showed that according to the physical component of health, the largest percentage of respondents with a norm was observed in young people with a body weight deficit – 74.36% (in young people with a normal body weight – 69.51%, with an excess of 70%). The physical component of health below the norm reached the highest value among young people with excess body weight – 25.00% (students with normal body weight – 14.63%, with deficiency – 15.38%).

It was revealed that among people with a deficit or excess of body weight compared with those with normal body weight, young people with a low level of severity of all 6 components of the overall health level under consideration according to the HPLP-II questionnaire were significantly more common: responsibility for health, physical activity, nutrition, spiritual growth, interpersonal relationships, stress management.

The low degree of involvement of students in taking care of their health, physical activity and maintaining a healthy lifestyle determines the need for information and consulting work, including the work of social institutions on the development of behavioral models focused on healthy nutrition, physical activity among the younger generation.

RESULTS

In order to study the influence of medical and social factors on the formation of disorders in the physical development of young people, an online survey was conducted on a specially designed questionnaire consisting of 126 questions with suggested answers. The questions were conditionally divided into 4 groups: medical and biological (age, gender, presence of a chronic disease, frequency of colds), social and hygienic (family composition, living conditions, material security), behavioral (sleep duration, time spent outdoors, daily duration of use, smartphones) and factors of actual nutrition (regime nutrition, frequency of meals, frequency of consumption of specific products).

The most significant medical and social factors served as the basis for the development of prognostic tables-matrices in order to obtain objective and comparable indicators of the prevalence of signs, in this case, the development of deficiency or excess body weight among young people. The tables contain lists of risk factors that can affect the level of a quantitatively predicted phenomenon. The significance of the factors and their gradations is determined by the application of a coefficient or indicator of relative risk. The higher this indicator, the more significant the factor for the occurrence of this type of risk. The extreme values of the degree of risk are calculated by dividing the sum of the minimum and maximum values of the predictive coefficient by the sum of the relative risk indicators. The resulting possible range is divided into three sub-ranges: 1 – the lowest probability of risk – includes all its values up to 30.0%; 2 – with an average degree of risk – from 30.0 to 60.0%; 3 - the highest probability of



risk – from 60.0 to 100%. Each sub-range corresponds to a forecast group: favorable forecast, attention and unfavorable forecast, which allows you to determine the probability of the risk of developing a deficit or excess body weight in each student.

The developed and tested program of medical and social prevention of physical development disorders among young people in the conditions of COVID-19 includes proposals for leveling the effects of adverse risk factors in the conditions of study and residence, as well as a list of forms of correction of physical development disorders.

First of all, young people with physical development disorders, who have chronic diseases, frequent colds, as well as young people from social risk groups should be referred to a general practitioner, a general practitioner.

The implementation of the program of medical and social prevention of physical development disorders using the prognostic tables developed by us makes it possible to conduct purposeful activities to choose rational forms of recovery and reduce the influence of negative factors in order to reduce the prevalence of morphological disorders and improve the health status of young people.

DISCUSSION

This program has been successfully implemented in the activities of Health Centers and departments of medical prevention of urban medical organizations providing medical care in outpatient settings, as well as in the activities of higher educational institutions. Functional and organizational model of prevention of disorders of physical development of youth. The program of medical and social prevention of physical development disorders among students in the conditions of COVID-19 developed by us includes:

- information and educational sector (thematic lectures and consultations of specialists, including psychologists, conducted remotely);
- the sector of interactive education and trainings on healthy lifestyle issues;
- the sector of health, rehabilitation and rehabilitation measures includes the correction of diets with the inclusion of functional products with a high protein content and vitamin-mineral complexes in accordance with the guidelines of the Ministry of Health of Uzbekistan "Sanatorium treatment of patients who have undergone COVID-19" and methodological recommendations "Comprehensive wellness programs and nutrition system in medical organizations and at home for patients, those who have suffered COVID-19", exclusion from the diet of fast food, high-calorie, sugar-containing foods, the use of herbal extracts, respiratory gymnastics complexes, physical therapy, physiotherapy procedures, etc.;
- the physical education sector (compulsory physical education classes within the curriculum, elective and sectional classes according to medical recommendations and personal choice, taking into account restrictions, sports and gaming activities, running, walking outdoors in the park area and sports grounds etc.);
- the sector of medical monitoring and support on the basis of Health Centers and departments of medical prevention of urban polyclinics, to which universities are attached, and at the place of residence of young people. In the course of the study, the results of the implementation of the program of medical and social prevention of disorders in the physical development of



young people were evaluated, in which 118 young people with normal body mass index indicators participated, and 47 students with a body weight deficit and 69 with an excess of body weight participated in health improvement programs. After two months of their participation in this program, a survey was conducted on the subjective assessment of its impact. It was found that the subjects with initially normal body mass index indicators retained them in the dynamics of observation within the age norm. At the same time, 67.8±5.1 per 100 examined patients noted a decrease in complaints of increased fatigue, 29.7±5.0 – for increased irritability, 48.3±5.4 – for headache, 21.2±4.4 – for discomfort from the gastrointestinal tract, 14.4±3.8 - for discomfort from the musculoskeletal system, 58.5±5.4 – for a bad mood.

Almost all participants of this group (96.6 ±1.7) expressed positive motivation to continue participating in the program, every third (32.2±5.1) expressed a desire to join the volunteer movement to implement the program of medical and social prevention. Similar positive results were determined in groups with deficiency and excess body weight. To objectify the control of the effectiveness of the medical and social prevention program, quarterly monitoring of health indicators is planned based on sociological, anthropometric, bioimpedance and other studies. The implementation of the program of medical and social prevention of disorders in the physical development of students is carried out in the continuity of the work of medical organizations, medical and social assistance services, as well as the educational sector with the direct participation of regional management structures.

CONCLUSION

It was found that the average level of the physical component of health in accordance with the methodology of the questionnaire "SF-36" among young people is higher than the psychological one; at the same time, there is no statistically significant relationship between the physical and psychological components of the health of young people. A low level of the physical component of health was significantly more common in the group of students with excess body weight compared to other groups. Among the youth who had a deficit or excess body weight compared to those who had normal body weight, significantly more often there were young people with a low level of severity of all 6 components of the overall health level under consideration according to the HPLP-II questionnaire: responsibility for health, physical activity, nutrition, spiritual growth, interpersonal relationships, stress management.

LITERATURE

1. Totlibayevich, Y. S., Alisherovna, K. M., Xudoyberdiyevich, G. X., & Toshtemirovna, E. M. M. (2022). Risk Factors for Kidney Damage in Rheumatoid Arthritis. *Texas Journal of Medical Science*, 13, 79-84.
2. Alisherovna, K. M., Totlibayevich, Y. S., Xudoyberdiyevich, G. X., & Jamshedovna, K. D. (2022). EFFICACY OF DRUG-FREE THERAPY OF HYPERTENSION DISEASES IN THE EARLY STAGE OF THE DISEASE. *Spectrum Journal of Innovation, Reforms and Development*, 7, 82-88.



3. Toshtemirovna, E. M. M., Alisherovna, K. M., Totlibayevich, Y. S., & Xudoyberdiyevich, G. X. (2022). Anxiety Disorders and Coronary Heart Disease. *The Peerian Journal*, 11, 58-63.
4. Xudoyberdiyevich, G. X., Alisherovna, K. M., Toshtemirovna, E. M. M., & Totlibayevich, Y. S. (2022). Characteristics Of Neuropeptides-Cytokines in Patients with Cardiovascular Pathology Occurring Against the Background of Anxiety and Depressive Disorders. *The Peerian Journal*, 11, 51-57.
5. Alisherovna, K. M., Totlibayevich, Y. S., Xudoyberdiyevich, G. X., & Jamshedovna, K. D. (2022). PSYCHOSOMATIC FEATURES AND THE LEVEL OF DEPRESSION WITH CHRONIC HEART FAILURE IN PATIENTS WITH ARTERIAL HYPERTENSION AND CORONARY HEART DISEASE. *Spectrum Journal of Innovation, Reforms and Development*, 7, 89-95.
6. Alisherovna, K. M., Totlibayevich, Y. S., Xudoyberdiyevich, G. X., & Jamshedovna, K. D. (2022). CLINICAL FEATURES OF HEART FAILURE IN PATIENTS WITH ISCHEMIC HEART DISEASE AND THYROTOXICOSIS. *Spectrum Journal of Innovation, Reforms and Development*, 7, 108-115.
7. Totlibayevich, Y. S. (2022). THE QUALITY OF LIFE OF PATIENTS WITH CIRRHOSIS OF THE LIVER DEPENDING ON THE TONE OF THE AUTONOMIC NERVOUS SYSTEM. *Web of Scientist: International Scientific Research Journal*, 3(5), 589-596.
8. Alisherovna, K. M., Jamshedovna, K. D., Totlibayevich, Y. S., & Xudoyberdiyevich, G. X. (2022). FEATURES OF THE QUALITY OF LIFE OF PATIENTS WITH CHRONIC RENAL FAILURE IN THE TREATMENT OF HEMODIALYSIS. *Spectrum Journal of Innovation, Reforms and Development*, 7, 76-81.
9. Назаров, Ф. Ю., & Ярматов, С. Т. (2022). SHIFOXONADAN TASHQARI ZOTILJAMNING KATTALARDAGI KLINIK XUSUSIYATLARI. *Журнал кардиореспираторных исследований*, (SI-2).
10. Бекмурадова, М. С., Гаффаров, Х. Х., & Ярматов, С. Т. (2021). ОШҚОЗОН-ИЧАК ТРАКТИ ЗАРАРЛАНИШИ УСТУНЛИГИ БИЛАН КЕЧГАН КОРОНАВИРУС ИНФЕКЦИЯСИДАН КЕЙИНГИ ҲОЛАТНИ ДАВОЛАШНИНГ ЎЗИГА ХОСЛИКЛАРИ. *Scientific progress*, 2(1), 489-493.
11. Xudoyberdiyevich, G. X. (2021). ASSESSMENT OF SIGNS OF MYOCARDIAL DYSFUNCTION IN PATIENTS WITH LIVER CYRROSIS. *Web of Scientist: International Scientific Research Journal*, 2(11), 197-201.
12. Nazarov, F. Y., & Bekmuradova, M. S. (2022). RESEARCH OF LOCAL CONTRACTABILITY OF THE MYOCARDIAL WITH THE HELP OF TISSUE DOPPLERA STREETS SUFFERING WITH DILATED CARDIOMYOPATHY. *Galaxy International Interdisciplinary Research Journal*, 10(1), 317-319.
13. Nazarov, F. Y., & Makhmudova, K. D. (2022). THE USE OF STATINS AND DRUGS THAT INHIBIT THE ABSORPTION OF CHOLESTEROL IN PATIENTS WITH CORONARY HEART DISEASE. *Galaxy International Interdisciplinary Research Journal*, 10(1), 306-309.



14. Yarmuxamedova, S. X., & Normatov, M. B. R. (2021). SURUNKALI GLOMERULONEFRIT BILAN OG'RIGAN BEMORLARDA MARKAZIY GEMODINAMIKA KO'RSATKICHLARINI BAHOLASH. *Scientific progress*, 2(2), 696-699.
15. Khabibovna, Y. S., Zhamshedovna, K. D., Davranovna, M. K., & Yusupovich, N. F. (2022). FUNCTIONAL STATE OF THE MYOCARDIA IN DEVELOPMENTAL PATHOGENESIS CHRONIC HEART FAILURE IN PATIENTS WITH HYPERTENSION. *Novateur Publications*, 1-72.
16. Khabibovna, Y. S., & Buribaevich, N. M. (2020). STUDY OF PARAMETERS OF CENTRAL HEMODYNAMICS IN PATIENTS WITH CHRONIC GLOMERULONEPHRITIS. *Достижения науки и образования*, (13 (67)), 57-59.
17. Khabibovna, Y. S., & Abdukodirovna, A. S. (2021). CHANGES IN THE DIASTOLIC FUNCTION OF THE RIGHT VENTRICLE IN ARTERIAL HYPERTENSION. *Web of Scientist: International Scientific Research Journal*, 2(11), 161-169.
18. Ярмухамедова, С. Х., & Афмирова, Ш. А. (2022). Изменения диастолической функции правого желудочка при гипертонической болезни. *Science and Education*, 3(11), 270-280.
19. Yarmukhamedova, S. (2020). SURUNKALI GLOMERULONEFRIT BILAN OG 'RIGAN BEMORLARDA ARTERIAL QON BOSIMINING SUTKALIK MONITORING KO 'RSATKICHLARINI BAXOLASH. *Журнал кардиореспираторных исследований*, 1(1), 103-108.
20. Nazarov, F. Y. (2021). CHANGES IN CYTOKINE SPECTRA AND THEIR SIGNIFICANCE IN COVID-19 VIRAL INFECTION COMPLICATED WITH PNEUMONIA. *Web of Scientist: International Scientific Research Journal*, 2(06), 62-69.
21. Nazarov, F. Y., & Makhmudova, K. D. (2022). THE USE OF STATINS AND DRUGS THAT INHIBIT THE ABSORPTION OF CHOLESTEROL IN PATIENTS WITH CORONARY HEART DISEASE. *Galaxy International Interdisciplinary Research Journal*, 10(1), 306-309.
22. Nazarov, F. Y. (2021). CORRECTION OF HEMODYNAMIC DISORDERS IN PATIENTS WITH OUTSIDE BILATERAL TOTAL PNEUMONIA. *Web of Scientist: International Scientific Research Journal*, 2(11), 151-155.
23. Toshtemirovna, E. M. M., Alisherovna, K. M., Totlibayevich, Y. S., & Xudoyberdiyevich, G. X. (2022). Anxiety Disorders and Coronary Heart Disease. *The Peerian Journal*, 11, 58-63.
24. Xudoyberdiyevich, G. X., Alisherovna, K. M., Toshtemirovna, E. M. M., & Totlibayevich, Y. S. (2022). Characteristics Of Neuropeptides-Cytokines in Patients with Cardiovascular Pathology Occurring Against the Background of Anxiety and Depressive Disorders. *The Peerian Journal*, 11, 51-57.
25. Xudoyberdiyevich, G. X., Alisherovna, K. M., Davranovna, M. K., & Toshtemirovna, E. M. M. (2022). FEATURES OF HEART DAMAGE IN PATIENTS WITH VIRAL CIRRHOSIS OF THE LIVER. *Spectrum Journal of Innovation, Reforms and Development*, 10, 127-134.



26. Toshtemirovna, E. M. M., Alisherovna, K. M., Erkinovna, K. Z., & Xudoyberdiyevich, G. X. (2022). DIAGNOSIS OF CIRRHOTIC CARDIOMYOPATHY. *Spectrum Journal of Innovation, Reforms and Development*, 10, 141-147.
27. Toshtemirovna, E. M. M., Nizamitdinovich, K. S., Tadjiyevich, X. A., & Xudoyberdiyevich, G. X. (2022). ASSESSMENT OF RENAL DYSFUNCTION IN PATIENTS WITH CHRONIC HEART FAILURE.
28. Вафоева, Н. А. (2020). Особенности клинической картины хронического пиелонефрита у женщины. *Вестник науки и образования*, (18-2 (96)), 92-94.
29. Kayumovna, A. S. (2022). NEPHROPTOSIS OR RENAL FAILURE. *Web of Scientist: International Scientific Research Journal*, 3(5), 949-956.
30. Habibovna, Y. S., & Kayumovna, A. S. (2021). STUDY OF THE FUNCTIONAL STATE OF THE MYOCARDIUM IN PATIENTS WITH HYPERTENSION. *Web of Scientist: International Scientific Research Journal*, 2(11), 170-174.