

HYGIENIC FOUNDATIONS OF ORGANIZING SYSTEMATIC SPORTS ACTIVITIES IN CHILDREN AND ADOLESCENTS BASED ON THE ANALYSIS OF THE STRUCTURE OF ILLNESS

Akhmedov M.R., Kamilov J.A.

Tashkent State Medical University, Tashkent,
Uzbekistan

Abstract

The morbidity structure of 482 student-athletes aged 12–17 was analyzed. Digestive diseases (84.75%), skin diseases (36.88%), circulatory disorders (19.86%), injuries (18.79%), nervous system diseases (16.31%), respiratory diseases (15.96%), and eye diseases (9.9%) were most common. Dental pathology predominated within digestive diseases (82.62%). Hygienic recommendations aimed at preventing health disorders and injuries in young athletes were developed.

Keywords: Young athletes, morbidity, sports hygiene, dental pathology, medical supervision, injury prevention.

Аннотация

Проведен анализ структуры заболеваемости 482 учащихся-спортсменов в возрасте 12–17 лет Республиканского колледжа олимпийского резерва. Установлено, что наиболее распространенными являются болезни органов пищеварения (84,75%), кожи и подкожной клетчатки (36,88%), системы кровообращения (19,86%), травмы (18,79%), болезни нервной системы (16,31%), хронические заболевания органов дыхания (15,96%) и болезни глаза (9,9%). В структуре заболеваний органов пищеварения доминирует стоматологическая патология (82,62%). Разработаны гигиенические рекомендации, направленные на профилактику нарушений здоровья и травматизма у юных спортсменов.

Ключевые слова: юные спортсмены, заболеваемость, гигиена спорта, стоматологическая патология, врачебный контроль, профилактика травматизма.

Introduction

Systematic engagement in physical education and sports contributes to harmonious physical development, the formation of the body's adaptive reserves, and an increase in athletic performance. However, if hygienic requirements are disrupted and training loads do not correspond to age-related capabilities, functional and chronic disorders may develop.

Studying the structure of young athletes' morbidity is a scientific basis for developing preventive measures and optimizing the organization of the training process.

Purpose of the research

Develop scientifically based hygienic recommendations for organizing systematic sports activities in children and adolescents based on the analysis of morbidity patterns.

Materials and methods

482 student-athletes aged 12-17 were examined.

An in-depth medical examination was conducted with the participation of specialists of various profiles. The study included:

- clinical examination;
- Analysis of anamnesis;
- functional tests;
- assessment of physical development;
- laboratory and instrumental methods.

Diseases are classified according to ICD-10.

The indicators are presented in percentages (%). It should be noted that the total percentage exceeds 100%, as one examined person may have had several classes of diseases.

Results

The following prevalence rates were identified in the morbidity structure:

- Diseases of the digestive system - 84.75%;
- Diseases of the skin and subcutaneous tissue - 36.88%;
- Diseases of the circulatory system - 19.86%;
- Injuries, fractures, and hernias - 18.79%;
- Diseases of the nervous system - 16.31%;
- Chronic respiratory diseases - 15.96%;
- Eye diseases - 9.9%.

Within the structure of digestive system diseases, dental pathology (caries, soft and hard dental plaque) plays a leading role, detected in 82.62% of the students. Overall, 82.6% of those examined require dental care.

Among skin diseases, acne, onychomycosis, and seborrhea were predominant.

In the group of circulatory system diseases, functional disorders (autonomic dysfunction, elevated blood pressure) were more frequently noted.

In terms of medical history, traumatic injuries requiring surgical intervention occurred in 9.2% of students, with repeat operations (2-3 times) occurring in 0.7%.

Discussion

The high prevalence of dental pathology indicates an insufficient level of oral hygiene and requires systematic preventive efforts. The presence of chronic foci of infection can reduce the body's functional reserves and negatively affect athletic performance.

The significant incidence of skin diseases indicates the need to strengthen sanitary and hygienic control in sports facilities and to instill sustainable personal hygiene habits.

Functional disorders of the cardiovascular system require regular medical supervision and the individualization of training loads.

The frequency of injuries confirms the necessity of strict adherence to the principles of phased sports training, taking into account biological age and regulating participation in competitions.

Conclusions

1. In the structure of morbidity among young athletes, diseases of the digestive organs (84.75%), predominantly dental in nature, prevail.
2. More than 80% of students require dental repair.
3. Skin diseases, functional disorders of the cardiovascular system, and injuries constitute a significant proportion.
4. Prevention should be based on strengthening medical supervision and adherence to hygienic standards of sports training.

Practical recommendations



1. Allowing only healthy and practically healthy children to engage in sports.
2. Conducting in-depth medical examinations at least 2 times a year.
3. Mandatory sanitation of chronic infection foci.
4. Individualization of physical loads, taking into account biological age and the level of preparedness.
5. Strict adherence to age norms for starting classes and participating in competitions.
6. Strengthening the prevention of sports injuries.
7. Conducting systematic sanitary and educational work.

References

1. Kuchma V.R. Hygiene of Children and Adolescents. - Moscow: GEOTAR-Media, 2020.
2. Makarova G.A. Sports Medicine. - Moscow: Soviet Sport, 2016.
3. Physical Culture and Sports Hygiene / ed. V.A. Levin. - Moscow: GEOTAR-Media, 2018.
4. International Classification of Diseases of the 10th Revision (ICD-10). Geneva: WHO, 2016.