

Student Health as a Key Aspect of Modern Education in Russia

Roman Idelevich Aizman^{1,2}

¹Institute of Natural and Social-Economic Sciences, Department of Human Anatomy, Physiology and Safety of Life, Novosibirsk State Pedagogical University, Novosibirsk, Russia

²Novosibirsk Research Institute of Hygiene of Rospotrebnadzor, Novosibirsk, Russia

Email: roman.aizman47@gmail.com

How to cite this paper: Aizman, R. I. (2025). Student Health as a Key Aspect of Modern Education in Russia. *Creative Education*, 16, 873-886.
<https://doi.org/10.4236/ce.2025.166054>

Received: April 23, 2025

Accepted: June 27, 2025

Published: June 30, 2025

Copyright © 2025 by author(s) and Scientific Research Publishing Inc. This work is licensed under the Creative Commons Attribution International License (CC BY 4.0).

<http://creativecommons.org/licenses/by/4.0/>



Open Access

Abstract

The main goal of this review is to present the state of health of modern students in Russia, the regulatory documents defining the activities of educational organizations to preserve the health and safety of students, as well as the reasons for the lack of effectiveness of their implementation in the education system. A model and technology for preparing future teachers to conduct health-saving activities in educational institutions and the system for monitoring the health of students using the developed electronic passports are proposed. The number of advantages of this approach compared to traditional preventive examinations are discussed.

Keywords

Students, Health Status, Health Monitoring, Regulatory Documents, Electronic Health Passport

1. Introduction

The most complex socio-economic transformations that have taken place in Russia over the past 20 years have revealed a number of phenomena that negatively affect the health and quality of life of the country's population (Aizman, 2015a; Ulumbekova, 2018; Ulumbekova & Medik, 2022).

According to demographic estimates, the population, especially in Siberia, is decreasing despite the influx of migrants from neighboring countries: the birth rate (per 1000 people) in the Russian Federation in 2024 was 8.7‰, and the death rate 11.9‰. The observed excess of mortality over birth rate leads not only to a decrease of the population, but also to an aging population due to a decrease

in the number of children

(https://mayaksbor.ru/news/society/rosstat_opublikoval_dannye_o_rozhdaemosti_i_smertnosti_v_rossii_ya_yanvare_noyabre_2024_goda/; [Denisenko, Kvasha, Mkrtchyan, & Harkov, 2024](#)). Only about 15% of children are born healthy, and the proportion of healthy children in schools is less than 20%. Over the years of schooling, the number of children with visual impairments has increased 10 times, up to 70% have musculoskeletal disorders, the number of children with mental health disorders has increased 4 times, digestive diseases have increased 3 times, etc. ([Kuchma & Suhareva, 2007](#); [Baranov, 2012](#); [Deev, Kobyakova, Starodubov et al., 2023](#); [Chicherin, Shchepin, & Zagoruychenko, 2024](#)). Over the last 5 years, the number of disabled schoolchildren has increased 2.4 times. More than 60% of teenage girls need the attention of gynecologists. More than half of young men 16 - 18 years of age need a deferral from conscription for health reasons.

The health situation of students in high schools is no better. Only from 2020 till 2024 there has been a further deterioration in student health indicators by 16% - 32% and an increase in neuropsychiatric diseases, the number of students with various psycho-social addictions and in suicide rates. Among high school students, the number of smokers reaches 70%, alcohol users—30%, and the number of drug addicts and substance abusers is growing progressively. More than 60% of students suffer from chronic diseases; 80% - 85% of teachers of schools and universities need health correction ([Baranov & Albitsky, 2018](#); [Sizova & Ismagilova, 2020](#); [Ganuzin, Maskova, Storozheva, & Sukhova, 2021](#); [Zagoruychenko & Karpova, 2022](#); [Terletskaya, Antonova, & Vinyarskaya, 2023](#)).

Therefore, the Address of the President of Russia to the Federal Assembly of the Russian Federation said in 2013 “We are facing extremely alarming trends: at the age of 14, two thirds of Russian children already have chronic diseases, half have disorders in the cardiovascular and respiratory systems; up to 40% of conscripts are unable to meet the minimum standards of physical fitness for military personnel,” is still relevant.

It is obvious that the current situation with the health of the population, especially children and adolescents, requires a radical change, since it is the younger generation that determines the quality of human resources, the future of the country's economy, its defense capability, and the health of future generations of Russians.

Hopes for modern medicine and the healthcare system as a panacea for ensuring health are not justified. The fact is that the level of organization of medical care affects physical and mental well-being by only 8% - 10% ([Aizman, 2015a](#)). Moreover, in conditions of a shortage of funding, a deficit of doctors and secondary medical professionals, modern medicine is increasingly turning from preventive to curative, and school medicine is practically absent ([Onishchenko & Voynov, 2023](#)).

In this regard, screening diagnostics of the health status of children and youth in the learning process is of great importance for the prevention of physical and

mental disorders.

2. Methodology

Strengthening the physical and mental health of the younger generation in modern conditions is becoming one of the priorities of state policy. Educational organizations of various levels, where personality formation and development take place, play a special role in solving these issues (Le-van, 2012; Markova, 2013).

It is no coincidence that in the last decade alone, a number of regulatory documents have been issued aimed at preserving the health and safety of all participants in the educational process. Here are just some of the most important ones:

- Order of the Ministry of Education and Science of the Russian Federation dated 12.01.2007 No. 7 “On the organization of health monitoring of students and pupils of educational institutions”;
- Order of the Ministry of Education and Science of the Russian Federation dated December 28, 2010 No. 2106 “On Approval of Federal Requirements for educational institutions regarding the protection of the health of students and pupils”;
- National Educational Initiative “Our new School” 04.02.2010;
- Decree of the President of the Russian Federation dated June 1, 2012 “National Strategy of Action in the interests of Children for 2012-2017”;
- Federal Law “On Education in the Russian Federation” dated December 29, 2012 No. 273;
- Order of the Ministry of Education and Science of the Russian Federation dated 06.16.2014 No. 658 “On the procedure for conducting socio-psychological testing of persons studying in general education institutions and professional educational organizations, as well as in educational institutions of higher education, aimed at early detection of non-medical use of narcotic drugs and psychotropic substances”;
- Resolution of the Chief State Sanitary Doctor of the Russian Federation No. 28 dated September 28, 2020 On approval of Sanitary Rules SP 2.4.3648-20 “Sanitary and epidemiological requirements for organizations of upbringing and education, rest and recreation of children and youth”.

Moreover, the new federal state educational standards include the following indicators that characterize the health-saving activities of educational organizations:

- Comprehensive health status of students;
- The degree of neuroticism, the prevalence of asthenic conditions and autonomic disorders;
- The level of individual’s readiness to lead a healthy and safe lifestyle, resistance to various types of addictions;
- Physical development of students;
- Student morbidity;
- Physical fitness of students;
- Control of sanitary and hygienic conditions of the environment and the regime of education, nutrition, physical culture and sports work and compliance with

sanitary and epidemiological rules and regulations.

What are the reasons for the discrepancy between the tasks set and the results obtained?

3. Results and Discussion

A summary assessment of the literature and our own data allows me to identify the key factors determining the low level of health of all participants in the educational process:

- Lack of a conscious need for health and a healthy lifestyle;
- Lack of necessary knowledge on health protection;
- Insufficient level of wellness programs and primary preventive care.

These results in lifestyle distortion, the spread of disease risk factors, and the formation of addictive and self-destructive behaviors include (Semenkova, Kasatkina & Kazin, 2011; Bezrukikh, 2012; Medvedeva, Gunina, & Urtenova, 2021; Terletskaya & Zelinskaya, 2022; Ulumbekova & Medik, 2022):

- Low level of motor activity;
- An unbalanced diet, which leads to a violation of the intake of nutrients, mineral salts and vitamins into the body;
- Information overload associated with the intensification of training, the widespread introduction of gadgets and an irrational work regime;
- High level of psycho-emotional stress, leading to increased anxiety, aggressiveness, disruption of communication, etc., that creates other psychological and psychosomatic problems;
- A loyal attitude towards the consumption of alcoholic beverages;
- Widespread tobacco use;
- Initiation into the use of narcotic substances.

Along with the factors of an unhealthy lifestyle, the problems of the organizational and regulatory plans should be highlighted:

- The lack of a mechanism for departmental and interdepartmental cooperation in maintaining and strengthening the health of students. Many educational institutions do not even have medical staff, or they are not competent enough in the psychological and pedagogical issues necessary to work with students of different age groups;
- Imperfection of the regulatory framework governing the implementation of health-saving activities in educational institutions.

Unfortunately, most of the documents listed above do not define the technology and methodology of comprehensive health assessment, the criteria for monitoring it are not specified, the functional responsibilities of teachers in this activity are not defined, therefore, health monitoring is carried out mainly by the level of morbidity of students, and in each region educational organizations use their own methodological approaches and criteria, which generally makes it impossible to compare their level of health-saving activities across the country and even the region;

- Teaching staff have an insufficient level of competence in the field of health

care and student's health control (which is required under art.41 of the Federal Law "On Education in the Russian Federation");

- Lack of control over the dynamics of students' health and the health-saving potential of the educational organization. The lack of uniform criteria at the federal level for assessing the health of students and the health-saving potential of an educational organization allows educational system managers to use any indicators acceptable to them for reports without taking into account scientific and practical validity;

- Insufficient use of the potential of such academic subjects as biology, physical education, fundamentals of life safety and others) for the formation of knowledge and skills in students of following a healthy lifestyle.

In this regard, there is a need to solve these tasks at all stages: from the training of teaching staff at universities to education management at the regional and federal levels (Aizman & Abaskalova, 2015; Sukharev, Stan, & Ignatova, 2016; Sokolova, Goncharova, Kuvshinova, & Goncharova, 2021).

First of all, let's define the concept and structure of health-saving activities in the education system. *Health—saving activities are a system of regulatory, organizational, managerial, scientific, and educational solutions aimed at creating conditions for the preservation and strengthening of the physical, mental and moral health of participants in the educational process, the full-fledged personal development of students and pupils, taking into account their individual capabilities and characteristics, which contribute to the professional self-determination of high school students* (Bezrukikh & Sonkin, 2002; Kazin, 2015; Aizman, Melnikova, & Kosovanova, 2017).

The main objectives of health-saving activities in educational institutions are the following:

- To create sanitary, hygienic, social and psychological conditions for the preservation and strengthening of health, personal, intellectual, and social development of students, pupils, and other participants in the educational process;

- To carry out diagnostic and monitoring studies of the level of physical and mental development, the formation of a culture of health and a safe lifestyle, and the state of the educational environment;

- To provide comprehensive psychological, pedagogical, medical and social assistance and support to students, pupils, their parents, teaching staff, and the administration of an educational organization to identify, prevent, and overcome developmental, learning, and socialization disabilities in the process of implementing the Federal State Educational Standard;

- To carry out educational activities for the development of a culture of healthy and safe lifestyle;

- To promote the dissemination and implementation in the practice of educational organizations of the latest achievements in the field of domestic and foreign pedagogy, age physiology and psychology in order to increase the competence of the teaching staff in the field of health preservation (Mityaeva, 2008; Abaskalova

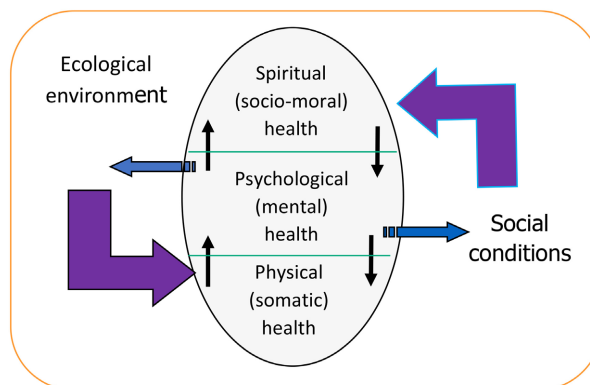
& Zverkova, 2016).

The most informative criterion for evaluating the effectiveness of health-saving activities in the education system is the level of health of participants in the educational process (Aizman, 2015b).

Therefore, first of all, it is important to substantiate the principles for assessing human health and its methodical support. Our approach is based on the following principles (Aizman, 2012).

Health is an integral state that includes the physical, mental and social essence of a person, ensuring his adequate adaptation to the conditions of life, opportunities for development and self-realization. This definition is based on the idea of the integrity of the body and the unity of its systems, which characterize the capabilities and abilities of a person to satisfy their biological, spiritual and social needs with perfect adaptation to external environmental factors and social conditions—the holistic principle (Figure 1);

2) The body and its habitat are a single whole, which determines the mutual influence of each other, and on environment;



Arrows show the direction of interaction within the organism and the mutual influence of the organism and the external environment.

Figure 1. Holistic model of health.

3) The level of health can be quantified if we take as a basis the amount of reserve capabilities of the body that ensure the preservation of homeostasis of its internal environment while adapting to the constantly changing conditions of the outside world (or stress);

4) The child's body goes through stages of constant growth and development, therefore, the parameters characterizing its health change in ontogenesis. So, when assessing the health of children and adolescents, it is necessary to take into account not only the presence or absence of any signs of disorders, but also their changes in the course of life and education;

5) When characterizing health, an integrative approach is important, taking into account the dynamics of physical development, the functional, psycho-emotional state of the body and the learning environment, which should be health-

preserving.

Each of the health levels can be assessed by objective criteria, which are characterized by the following parameters (**Table 1**):

1) *Physical (somatic) health* determines the body's capabilities and includes genetic, biochemical, morphological and functional indicators that characterize the level of physical development and functional reserves of the body (anthropometric data, the state of various organs and systems, especially cardiorespiratory, at rest and after exercise, endocrine status, etc.);

2) *Mental (psychological) health* includes an assessment of neurophysiological processes (the level of socio-psychological adaptation, various types of memory, attention, mental performance, neurodynamic properties of the nervous system); characteristics of the psycho-emotional state (levels of anxiety, stress tolerance, motivation for success, aggressiveness; personal characteristics), which allow the body to fulfill its needs and desires;

3) *Socio-moral (spiritual) health* determines a person's fulfillment of their duties, compliance with moral, ethical and legal norms, which is assessed by goals set, values and ideals identified, behavior in various, especially critical, situations.

To assess health-saving activities, it is also important to determine the state of social, ecological, and sanitary-hygienic conditions of the learning and living environment that affect human health (Aizman, 2012).

It is clear that the list of indicators used for monitoring can be adapted for each educational institution, depending on the human and logistical potential. When characterizing health, an integrative approach is important, taking into account the complex of all indicators.

From these positions, it is of particular importance to create universal and accessible tools for use in the education system to monitor the dynamics of students' physical and mental health, identify individuals with a tendency to various psychosocial addictions and suicidal behavior. Early detection of people with violations of these characteristics will allow for timely correction and treatment of students, ensure the formation of an individual training route and career guidance.

Table 1. Structure and parameters of health at different levels.

Level of Health	Structure of Health	Parameters of Health
1. Physical (somatic) —reflects possibilities	Genetic	Genotype
	Biochemical	Blood and tissue parameters
	Morphological	Height, body mass, somatotype, physical development
	Functional	Cardio-pulmonary system (heart rate, blood pressure, parameters of lung ventilation)
2. Psychological (mental) —reflects desires	Emotional-volitional	Anxiety, aggressiveness, stress resistance, negativism.

Continued

	Cognitive	Memory, attention, level of mental performance.
	Intellectual	Type of thinking, motivation, self-control.
	Personal	Social-psychological adaptability, temperament, psychotype.
3. Spiritual (socio-moral) —reflects responsibilities	Moral, ethical, and legal standards	Purposes, values of life, ideals, responsibility

These principles formed the basis for the monitoring of students' and pupils' health that we have developed. *Health monitoring is a dynamic screening diagnosis of physical development, functional reserves of the body, neurodynamic parameters of the nervous system, mental state, individual constitutional features, adaptive (reserve) capabilities, lifestyle and heredity that determine the viability of the body* (Aizman, 2015b).

The purpose of monitoring: based on data on the individual characteristics and capabilities of the body of students to ensure:

- Preservation of health in the process of individual development and learning;
- Assessment of individual psychophysiological, characterological, typological and personal characteristics of students for correction and development of professionally significant qualities;
- Prompt identification of subjects with physical and mental health disorders, a high risk of developing mental addictions and a tendency to suicidal behavior;
- Professional orientation of students for a conscious and adequate to their health choice of profession;
- Assessment of the health-preserving activities of the educational institution;
- An individual approach to the organization of the educational process.

Monitoring indicators have a high diagnostic value, as they objectively reflect the state of health of the subject, allow comparing parameters in the dynamics of ontogenesis and between different groups, as well as predicting its development in the future.

Based on these principles, we have developed computer versions of methods for comprehensive assessment of students' and pupils' health (Aizman, Lebedev, Aizman, & Rubanovich, 2011, 2020).

These electronic passports of health have received appropriate registration certificates from the Ministry of Information Technology and Communications of the Russian Federation, Moscow (Aizman, Lebedev, Aizman, & Rubanovich, 2009; Aizman, Lebedev, Aizman, Pletneva, & Rubanovich, 2010; Aizman, 2019).

The program is developed in visual basic: computer requirements:

- Windows 1998.2000, XP or Vista operating system
- RAM of at least 64 MB
- Hard disk space of at least 60 mb.

-Availability of Office 2003 and higher.

All results are stored in a database and can be requested in any format (by gender, age, school, etc.).

It could be realized as a local version in school (university) or centrally by connecting to the server of our department.

The advantages of these electronic passports are:

-An integrative approach to health as a systemic condition, including indicators of physical, mental and social levels;

-Computerization of all data, which makes it possible to create a health bank for various age, gender and professional groups;

-Quantitative expression of indicators, which provides the possibility of dynamic monitoring of subjects and comparing the health level of various groups, educational organizations, districts, etc.;

-Relative simplicity of the survey, which does not require expensive equipment;

-The possibility of transmitting the results of the examination via the Internet;

-Involving the subject in the examination process, which increases his personal interest in maintaining and developing health;

-The ability to predict the risk of deviant behavior, temporarily identify psychosomatic disorders and correct them.

The implementation of these passports allows us to solve a number of scientific and applied tasks:

-To promote the preservation of health in the learning process through the correction of the educational programs and reasoned individual recommendations for the development of health based on the results of monitoring;

-To help pupils in vocational guidance for a conscious and adequate choice of profession;

-To evaluate the health-saving activities of an educational organization based on the available conditions;

-To provide an individual approach to the organization of the educational process, taking into account the psychophysiological characteristics of each student (Aizman, Lebedev, Aizman, & Rubanovich, 2013; Ondar, Aizman, Buduk, & Shyrapai, 2013; Lebedev, Rubanovich, Aizman, & Aizman, 2014).

The creation of a computer database of the studied indicators is extremely important for determining not only individual dynamics, but also population changes underlying the forecasting of the demographic situation and the health of future generations.

Such activities require the formation of new professional competencies among modern teachers related to the medical, psychological and pedagogical assessment of the health of pupils and the educational environment.

Therefore, further we want to present a model and technology for preparing future teachers to conduct health-saving activities in educational institutions in Russia.

First of all, we have identified those necessary disciplines that could compensate

for the lack of medical and biological training of students in pedagogical universities. Already at the bachelor's degree level, within the framework of the "Health-saving education" block, a team of professors from 11 pedagogical universities of Russia under my leadership included in the CORE of pedagogical education in 2022 the following federal-level disciplines: "Life safety", "Physical education", "Fundamentals of medical knowledge" and "Developmental anatomy and fundamentals of a healthy lifestyle", which allow to expand the range of competencies of graduates in the field of health care. Since 2023, this set of disciplines has been implemented in the pedagogical universities of the country. However, we realized that it is unrealistic to form students' competencies for health-saving education in future during the 1st - 2nd years of study. It's necessary to have a certain professional maturity and pedagogical practice to understand the role and participation of teachers in this activity.

Therefore, within the framework of the master's degree "Pedagogical Education", the profile "Safety and Health", that has been organized at our University we have got possibility to fully implement the block of disciplines that will allow the teachers, together with medical professionals, to participate effectively in the diagnostics, formation and preservation of school-children's health.

The following disciplines were included in this module: 1) Regulatory and legal support for the activities of teachers in the implementation of the School Medicine program; 2) Hygiene of school-age children and adolescents; 3) Basic diseases of school-age children and their prevention; 4) Modern concepts of health and methods of its assessment; 5) Methods of screening diagnostics and monitoring the health of participants in the educational process; 6) Health-saving pedagogical technologies; 7) Means and systems of rehabilitation in the educational system; 8) The basics of first aid in educational organizations.

In this article we present only one fragment of the master's degree training in this module (discipline 5) based on the developed computer program screening diagnostics and monitoring of students' health.

Of course, the effectiveness of such teacher's training can be seen in a few years, when these graduates of the master's degree will begin to work in schools and implement health-saving models of education and upbringing. However, it is already clear that even the integration of electronic health passports in educational organizations makes it possible to obtain not only scientific data on the age, gender, ethnonational, and regional characteristics of students' physical and mental development, but also helps teachers and parents to see deviations in children's health in a timely manner and begin their correction. The papers of my colleagues, students, and teachers from different institutions and schools are confirmed this idea (Gerasev, Aizman, Lebedev, Aizman, & Rubanovich, 2013; Zhomin, Rubanovich, & Aizman, 2013; Chanchaeva, Aizman, & Sidorov, 2016; Klimov & Aizman, 2016; Klimov, Rubanovich, & Aizman, 2016; Bazarbayeva, Dinmukhamedova, & Aizman, 2017, 2019; Bazarbayeva, Dinmukhamedova, Lebedev, & Aizman, 2017; Klimov & Aizman, 2017; Lebedev, Aizman, Subotyalov, Gerasev, & Aizman, 2017;

Mukatayeva, Dinmukhamedova, & Aizman, 2019).

Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

References

- Abaskalova, N. P., & Zverkova, A. Y. (2016). Scientific Review: A Systematic Approach in Health Pedagogy. *Pedagogical Sciences*, 2, 5-24.
- Aizman, R. I. (2012). Modern Concepts of Health and Criteria for Its Assessment. *Siberian Pedagogical Journal*, 9, 85-90.
- Aizman, R. I. (2015a). Medical, Biological and Social Aspects of Health. In R. I. Aizman (Ed.), *Physiological Foundations of Health* (pp. 6-39). INFRA-M.
- Aizman, R. I. (2015b). The Health of Participants in the Educational Process as a Criterion for the Effectiveness of Health-Saving Activities in the Education System. *Domestic and Foreign Pedagogy*, 5, 72-82.
- Aizman, R. I. (2019). Methodological Principles and Methodological Approaches to the Organization of Monitoring the Health of Students and Health-Saving Activities of Educational Organizations. *Bulletin of Pedagogical Innovations*, 1, 5-13.
- Aizman, R. I., & Abaskalova, N. P. (2015). Health and Safety of All Participants of Educational Process Are the Priorities of Modern Education System. *International Journal of Modern Education Research*, 2, 29-33.
- Aizman, R. I., Lebedev, A. V., Aizman, N. I., & Rubanovich, V. B. (2009). *Technique of Complex Assessment of Physical and Mental Health, Physical Fitness of Students of the Highest and Average Professional Educational Institutions: Methodical Edition* (p. 100). REEF Novosibirsk.
- Aizman, R. I., Lebedev, A. V., Aizman, N. I., & Rubanovich, V. B. (2011). Computer Program Screening for Monitoring the Health Status of Participants in the Educational Process. *Siberian Teacher*, 2, 36-39.
- Aizman, R. I., Lebedev, A. V., Aizman, N. I., & Rubanovich, V. B. (2013). Psychophysiological and Personal Characteristics of First-Year Students of a Pedagogical University. *Siberian Pedagogical Journal*, 6, 244-251.
- Aizman, R. I., Lebedev, A. V., Aizman, N. I., & Rubanovich, V. B. (2020). *Comprehensive Assessment of the Health of Participants in the Educational Process. A Textbook for Universities* (p. 207). Yurayt Publishing House.
- Aizman, R. I., Lebedev, A. V., Aizman, N. I., Pletneva, E. Y., & Rubanovich, V. B. (2010). Health Monitoring of Pupils and Teachers with the Help of Computers and Program Supply. *Public Education*, 6, 147-155.
- Aizman, R. I., Melnikova, M. M., & Kosovanova, L. V. (2017). *Health-Saving Technologies in Education: A Textbook for Academic Bachelor Course* (p. 241). Yurayt Publishing House.
- Baranov, A. A. (2012). State of Health of Children in the Russian Federation. *Pediatrics*, 91, 9-14.
- Baranov, A. A., & Albitskiy, V. Y. (2018). State of Health of Children in Russia, Priorities of Its Preservation and Improving. *Kazan Medical Journal*, 99, 698-705. <https://doi.org/10.17816/kmj2018-698>
- Bazarbayeva, S. M., Dinmukhamedova, A. S., & Aizman, R. I. (2017a). Comparative Characteristics of Morphological and Functional Indicators of Students Living in Different

- Climatic and Geographical Conditions. *Bulletin of L.N. Gumilyov Eurasian National University*, 4, 282-287.
- Bazarbayeva, S. M., Dinmukhamedova, A. S., & Aizman, R. I. (2019). Regional Features of the Morphofunctional Development of Students of Kazakh Nationality. *Hygiene and sanitation*, 98, 449-454. <https://doi.org/10.18821/0016-9900-2019-98-4-449-454>
- Bazarbayeva, S. M., Dinmukhamedova, A. S., Lebedev, A. V., & Aizman, R. I. (2017b). Comparative Physical Health Evaluation of Kazakh and Russian First Year Undergraduate Students. *Novosibirsk State Pedagogical University Bulletin*, 7, 241-252. <https://doi.org/10.15293/2226-3365.1703.15>
- Bezrukikh, M. M. (2012). Health of Schoolchildren, Problems, Solutions. *Siberian Pedagogical Journal*, 9, 11-16.
- Bezrukikh, M. M., & Sonkin, V. D. (2002). *Health-Saving Technologies in Secondary Schools: Methodology of Analysis, Forms, Methods, Application Experience* (p. 346). Triada pharm.
- Chanchaeva, E. A., Aizman, R. I., & Sidorov, S. S. (2016). Gender Variability of Morphofunctional Indices in Adolescents of Mountain Altai. *Hygiene and sanitation*, 95, 269-273. <https://doi.org/10.18821/0016-9900-2016-95-3-269-273>
- Chicherin, L. P., Shchepin, V. O., & Zagoruychenko, A. A. (2024). Trends in the Mental Health in Children and Adolescents in Russia. *Health Care of the Russian Federation*, 68, 123-130. <https://doi.org/10.47470/0044-197x-2024-68-2-123-130>
- Deev, O. S. Kobayakova, V. I., Starodubov, G. A., Alexandrova, N. A., Golubev, Y. I., Oskov, A. V., Polikarpov, E. A. S. et al. (2023). *General Morbidity of the Russian Child Population (0-14 Years Old) in 2023: Statistical Materials* (p. 156). FSBI "TSNIIOIZ" Ministry of Health of Russia.
- Denisenko, M. B., Kvasha, E. A., Mkrtychyan, N. V., & Harkov, T. L. (2024). Demography and Migration: Trends, Events, Figures. *Information Bulletin*, 1, 14.
- Ganuzin, V., Maskova, G., Storozheva, I., & Sukhova, N. (2021). Analysis of Health Dynamics in Children and Adolescents Based on the Results of Regular Medical Check-Ups. *Российский вестник гигиены*, 3, 8-11. <https://doi.org/10.24075/rbh.2021.019>
- Gerasev, A. D., Aizman, R. I., Lebedev, A. V., Aizman, N. I., & Rubanovich, V. B. (2013). Health Monitoring System, Personal Potential and Risk of Mental Addictions among Students of Pedagogical University. *Teacher Education and Science*, 5, 65-69. https://mayaksbor.ru/news/society/rosstat_opublikoval_dannye_o_rozhdae-mosti_i_smertnosti_v_rossii_ya_yanvare_noyabre_2024_goda/
- Kazin, E. M. (2015). *Health-Saving Infrastructure in the Education System: Textbook* (p. 442). Omega-L.
- Klimov, V. M., & Aizman, R. I. (2016). Assessment of Physical Health of Schools Graduates Going to the Universities. *Bulletin of Siberian Medicine*, 15, 41-47. <https://doi.org/10.20538/1682-0363-2016-3-41-47>
- Klimov, V. M., & Aizman, R. I. (2017). Assessment of Socio-Psychological Adaptation and Psycho-Emotional State of Students of the 1st-2nd Courses of the Technical University. *Siberian Pedagogical Journal*, 2, 114-120.
- Klimov, V. M., Rubanovich, V. B., & Aizman, R. I. (2016). Morphological and Functional Characteristics and Physical Preparedness of the First Year and Second Year Female Students of Technical University Engaged in Aerobics. *Novosibirsk State Pedagogical University Bulletin*, 6, 109-120. <https://doi.org/10.15293/2226-3365.1601.10>
- Kuchma, V. R., & Suhareva, L. M. (2007). State and Forecast of Health of School Students (Results of 40 Years' Supervision). *Russian Pediatric Journal*, 1, 53-57.
- Lebedev, A. V., Aizman, N. I., Subotyalov, M. A., Gerasev, A. D., & Aizman, R. I. (2017).

- Psychosocial Addiction Assessment among 17-18-Year Old Students of Novosibirsk. *Integration of Education*, 21, 695-708.
<https://doi.org/10.15507/1991-9468.089.021.201704.695-708>
- Lebedev, A. V., Rubanovich, V. B., Aizman, N. I., & Aizman, R. I. (2014). Morphofunctional Features of First-Year Students of Pedagogical University. *Novosibirsk State Pedagogical University Bulletin*, 4, 128-141.
<https://doi.org/10.15293/2226-3365.1401.11>
- Le-van, T. N. (2012). Managerial Functions of a Teacher in the Field Of Health Protection and Promotion from the Perspective of an Analysis of the Modern Regulatory Framework. *Modern Problems of Science and Education*, 3, 21-36.
- Markova, A. I. (2013). Schools of Health and the Health of Schoolchildren (an Analytical Review). *Hygiene and Sanitation*, 3, 60-70.
- Medvedeva, N., Gunina, S., & Urtenova, A. (2021). Contributions of Certain Lifestyle Factors to Health Status of Contemporary Schoolchildren. *Российский вестник гигиены*, 3, 18-22. <https://doi.org/10.24075/rbh.2023.064>
- Mityaeva, A. M. (2008). *Health-Saving Pedagogical Technologies* (p. 192). Akademiya.
- Mukatayeva, Z. M., Dinmukhamedova, A. S., & Aizman, R. I. (2019). Comparative Analysis of Schoolchildren's Morpho-Functional Development as the Basis for Health Monitoring (with the Main Focus on Northern and Southern Kazakhstan Regions). *Science for Education Today*, 9, 126-142. <https://doi.org/10.15293/2658-6762.1905.08>
- Ondar, A. O., Aizman, R. I., Buduk, L. K., & Shyrapai, U. V. (2013). Screening Assessment of the Health Level of First-Year Students of Tuvan State University. *Bulletin of Kostroma State University by N. A. Nekrasov*, 19, 101-105.
- Onishchenko, G. G., & Voynov, V. B. (2023). School Medicine: Relevance, Problems, and Development Prospects (Literature Review). *Hygiene and Sanitation*, 102, 474-481.
<https://doi.org/10.47470/0016-9900-2023-102-5-474-481>
- Semenkova, T. N., Kasatkina, N. E., & Kazin, E. M. (2011). "Risk" Factors Affecting the Health of Students in the Learning Process. *Bulletin of Kemerovo State University*, 2, 98-106.
- Sizova, N. N., & Ismagilova, Y. D. (2020). Analysis of the Health Status of Modern Schoolchildren. *International Scientific Research Journal*, 5, 133-137.
- Sokolova, N. V., Goncharova, I. G., Kuvshinova, N. M., & Goncharova, D. G. (2021). The Role of the School in the Formation of the Value of Health and a Healthy Lifestyle among Adolescents. *Культура физическая и здоровье*, 4, 117-120.
https://doi.org/10.47438/1999-3455_2021_4_117
- Sukharev, A. G., Stan, V. V., & Ignatova, L. F. (2016). The Role of an Educational Organization in the Formation of Students' Motivation for Health and a Healthy Lifestyle. *Issues of School and University Medicine and Health*, 2, 32-35.
- Terletskaia, R. N., & Zelinskaya, D. I. (2022). Suicide Mortality among Children in the Russian Federation. *Rossiyskiy Vestnik Perinatologii i Pediatrii (Russian Bulletin of Perinatology and Pediatrics)*, 67, 77-85.
<https://doi.org/10.21508/1027-4065-2022-67-4-77-85>
- Terletskaia, R. N., Antonova, E. V., & Vinyarskaya, I. V. (2023). State of Health of Russian Adolescents. *Russian Pediatric Journal*, 26, 327-336.
<https://doi.org/10.46563/1560-9561-2023-26-5-327-336>
- Ulumbekova, G. E. (2018). Healthcare of Russia: 2018-2024. What to Do? Healthcare Management: News, Views, Education. *Bulletin of VSHOUZ*, 1, 9-16.
- Ulumbekova, G. E., & Medik, V. A. (2022). *Public Health and Healthcare with the Basics of Medical Informatics*. GEOTAR-Media.

- Zagoruychenko, A. A., & Karpova, O. B. (2022). Modern Trends in the Health of the Child Population in Russia. *Glavvrač (Chief Medical Officer)*, 6, 14-19.
<https://doi.org/10.33920/med-03-2206-02>
- Zhomin, K. B., Rubanovich, V. B., & Aizman, R. I. (2013). Dynamics of Morphofunctional Indicators of Students with Different Motor Activity in the Process of Studying at a University. *Bulletin of the Chelyabinsk State Pedagogical University*, 12, 205-215.