Journal Zone Publishing, Ilford, United Kingdom

SUBSTANTIATION AND EVALUATION OF THE EFFECTIVENESS OF DIET THERAPY FOR FOOD ALLERGIES IN CHILDREN

Kobiljonova Sh. R. Jalolov N. N. Ibodullayeva R. R.

Annotation

Allergic diseases and especially diseases of the respiratory tract are environmentally dependent diseases, since the phenotypic realization of hereditary predisposition to them is always carried out under the influence of environmental factors. That is why, for example, bronchial asthma, especially in children, is a sensitive marker of air pollution.

Keywords: diet therapy, food allergy, childhood allergy, bronchial asthma, especially in children

The growth of bronchial asthma noted in recent years is associated to a large extent with environmental pollution by xenobiotics [Kaganov S.Yu., et al., 2002]. In modern conditions, the health of society is largely determined by the real provision of its rights to a safe environment and disease prevention. According to the WHO, the state of health of the population depends on 50-60% of the level of socio-economic development, 20-30% - on the solution of environmental problems, and only 15-20% - on the development of the healthcare system. The Declaration, adopted at the 2012 UN Conference on Environment and Human Development held in Rio de Janeiro, contains a number of fundamental principles that are directly related to the preservation and enhancement of public health as a condition for the sustainable development of the state. The program of action "Agenda for the 21st century" noted that all states need to have programs to identify environmental factors that threaten health and reduce related risks. The demographic situation and the state of health of the population of the Russian Federation are alarming and pose a great threat to the national security of the country. Thus, the incidence of the respiratory organs of the population of the Russian Federation in 2020 was 296.8 in the adult population, 688.9 in adolescents, and 1182.5 in children per 1000 of the corresponding age. The primary morbidity of the adult population with chronic bronchitis increased by 1.7 times compared to 1996. The frequency of consultations of the adult population with attacks of bronchial asthma increased by 30%. Chronic diseases of the respiratory system are becoming increasingly common among children and adolescents. The incidence of bronchial asthma increased 1.5 times, in adolescents - by 40%; chronic diseases of the tonsils and adenoids with a diagnosis established for the first time were registered in 2018 in children by 40.5%, in adolescents by 35% more than in 2016.

One of the fundamental features of a city is its high urban concentration. The city of Krasnodar can serve as a typical example of the adaptation of the natural landscape to

Journal Zone Publishing, Ilford, United Kingdom

the conditions of the city. In the process of city development, the level of anthropogenic pressure on the environment is constantly increasing.

Studies carried out as part of the development of the master plan for the city of Krasnodar proved a quantitative relationship between the spread of respiratory diseases in the population and the degree of air pollution with lead, benzo(a)pyrene, dust and other substances. It is air pollution, according to health authorities, that causes up to 30% of common diseases. In the structure of morbidity, the main place in different age groups is occupied by diseases of the respiratory system, nervous system and sensory organs. There was an increase in the number of diseases of tuberculosis, scabies, and pediculosis. The structure of the morbidity of the child population in Krasnodar is characterized by the predominance and growth of bronchial asthma and other allergic diseases. Over the past 15 years, their level has increased by more than 4 times [16, 22]. For the child population, bronchial asthma and allergic diseases are endemic, which is explained by the spread of the quarantine weed ragweed. This is largely due to social reasons, the lack of control of the quarantine weed - ragweed. From 1971 to 2003 the concentration of ragweed pollen in the air of Krasnodar increased more than 8 times from 350-400 to 2800-3500 pollen grains per m3 of air [13].

Hay fever occupies a significant place in the structure of allergic diseases in children. Increasing incidence in childhood, polymorphism of the clinical picture of pollen sensitization, the possibility of disease progression with the development of severe forms of bronchial asthma, Meniere's syndrome, epilepsy, and other forms of the disease indicate the importance of this problem [14, 20, 24, 26, 32, 35].

The study of hay fever is of particular importance in connection with the increasing scale of urban landscaping, as well as the creation of large areas of forest parks, lawns and boulevards.

The etiology of pollinosis is diverse, it depends on the climatic and geographical zones and vegetation cover. It has been proved that the regional features of the region significantly affect the prevalence and course of hay fever in children. It should be noted that persons suffering from hay fever in different climatic and geographical conditions have different threshold sensitivity to pollen allergens. In the light of these data, for the organization of specialized care for children with allergic diseases and the implementation of adequate preventive measures, it is of particular relevance to study the prevalence of clinical variants and risk factors for the development of hay fever in hot regions of the country. However, in the literature, there is still very little such information in relation to a hot climate. [12, 33]. Practically unexplored are the prevalence and risk factors that determine the formation of pollinosis in childhood in the hot climate of Tajikistan. There are no clear data on the prevalence and structure of clinical variants of hay fever, the influence of premorbid factors, and the features of the clinical course in children in hot climates.

Advances in the field of health have made it possible to achieve significant success in the fight against many diseases, especially infectious ones. However, the changes in human life that have taken place in recent decades under the influence of the development of

industrial, technological, environmental, socio-political and other processes are changing the structure and nature of morbidity [23, 25]. Currently, there is a steady increase in cardiovascular, allergic and tumor diseases. In the southern region of the country, pathology of the respiratory system predominates; diseases of allergic origin are in third place among all diseases. The prevailing climatic, geographical and botanical conditions in the south of the country are the most favorable for the development of allergy to plant pollen. Most of the works devoted to the study of pollen allergy in this region describe in detail the clinical aspects and treatment of hay fever. However, there are few studies on the role of factors of exogenous and endogenous nature involved in the pathogenesis of pollen allergy in the south of the country.

Recent years are characterized by a certain bias towards the regional aspect of the studied pathology, which can be explained not only by the changing prevalence of nosological forms, but also by the solution of the etiology and pathogenesis of the pathological process in the process of epidemiological studies of non-communicable diseases. Epidemiological studies of allergic diseases have already gone beyond studies of only the prevalence and etiology of pathology. It was the epidemic studies of the last decades that made it possible to formulate the dominant theories of the pathogenesis of atopic reactions - "genetic" and "hygienic"[3, 5].

The pathogenesis of pollen allergy, as an atopic reaction, is associated with functional changes in the immune system. The development of monoclonal technology and methods for assessing allergy cytokines is constantly changing the understanding of the mechanism of the relationship between immunity parameters. With pollen allergy, the immune system, as part of the allergic inflammatory process, simultaneously responds to allergenic irritants and non-allergenic factors. For example, seasonal changes in the environment, which creates additional difficulties in determining the functional state of the immune system in various atopic processes. At the same time, the immune system is in close connection with other organs and systems of the body, among which the neuro-endocrine system plays the main role in immune processes. Therefore, it is relevant to study the mechanism of development of allergic reactions, taking into account its relationship with other systems and the influence of environmental factors [13, 15].

Considering the regional nature of pollen allergy, the study, evaluation and development of adequate and effective methods for the diagnosis and treatment of pollen allergy, taking into account regional features, is also an urgent task. The most effective method of treating atopy remains specific immunotherapy, the mechanism of therapeutic action of which has not been fully described. In addition, the method itself needs further improvement, because it requires a lot of time for its implementation and creates a lot of inconvenience for the patient.

The prevalence of allergic diseases (AD) has turned allergy into a medical and social problem. According to WHO data, at present, about 5% of the adult population and 15% of children suffer from AD. Every year, the world registers an increase in AZ: up to 40% of patients with this pathology are noted in the population, every tenth inhabitant of the planet is sick with bronchial asthma (BA), every third with allergic rhinitis (AR). Over the past 30 years, the prevalence of AD has doubled globally (every 10 years). In Russia, the frequency of BA, according to the Ministry of Health and Social Development, increased by 32.3% over a 4-year period from 1991 to 1994, and from 1998 to 2002 there was a further increase in this indicator by 28.2 % [3, 15].

Particularly alarming is the significant increase in allergic pathology in children. In the period from 1998 to 2003 alone, the absolute number of children with AD under the age of 15 increased by more than 2.8 times, and among adolescents (15-17 years old) - by 3.6 times. The annual increase in AZ in the child population averages 4.8%. According to official data of the Ministry of Health and Social Development of Russia, the highest prevalence figures (in terms of referrals) are typical for BA in the Northwestern Federal District of Russia: children under 14 years old - 1.73%, adolescents (15-17 years old) - 1.97%. The frequency of allergic rhinitis (AR) in this region is lower compared to other regions: patients under 14 years old - 2.72%), from 15 to 17 years old - 4.43%. Low prevalence (in terms of negotiability) may indicate insufficient detection and underdiagnosis of this pathology in children. The true prevalence of AD significantly exceeds the official medical statistics on referrals [8, 12].

In terms of frequency, severity, medical and social significance, bronchial asthma occupies a leading position among environmentally caused lung diseases in children. Information about the prognosis of BA in children, the possibility and frequency of its transition to BA in adults is rather contradictory. In long-term studies, it has been found that asthma disappears in 30-50% of children (especially males) at puberty, but often reappears in adulthood. It has been shown that bronchial asthma, which began in

reappears in 30-50% of children (especially males) at puberty, but often reappears in adulthood. It has been shown that bronchial asthma, which began in childhood, continues in 60-80% of cases in patients who have reached adulthood, and also that an early onset is associated with more significant pulmonary disorders and persistence of symptoms in adults [8, 12].

The data of official statistics registering A3 differ significantly from the data obtained in epidemiological studies. In the 90s, the ISAAC program was created, the purpose of which was to study the causes of the increase in the incidence of A3 among schoolchildren by applying a standardized methodology in the child population. However, the results of studies using this program do not always reflect the true picture of the prevalence of allergic pathology in children due to false positive responses, so special attention deserve work, including questionnaire screening at the 1st stage and medical verification of the diagnosis at the 2nd [9, 16].

An epidemiological study on the prevalence of A3 among Moscow adolescents showed that the frequency of BA was 5.1%, AR and atopic dermatitis (AtD) 10.4 and 6.9%, respectively. Modern treatment of patients with A3 includes: allergen elimination, allergen-specific immunotherapy, pharmacotherapy (anti-inflammatory and treatment exacerbations), educational programs for patients and their families. The severity of clinical manifestations of A3 is directly related to the concentration of causative allergens in the environment. Reducing exposure to the allergen is the first and necessary step in treatment. Recommendations for limiting exposure to allergens

correspond to a high level of evidence A. In most cases, it is impossible to achieve complete elimination of contact with the allergen, but the implementation of recommendations for a hypoallergenic life significantly improves the course of the disease and reduces the need for medications. Allergen-specific immunotherapy (ASIT) is the only etio-pathogenetic method for the treatment of BA and AR with high clinical efficacy up to 80-90%, which is confirmed in special studies performed on the principles of evidence-based medicine. This method allows you to slow down the "atopic march" (the transformation of AR into BA) and slow down the expansion of the spectrum of causally significant allergens.

Since 2011, the classic method of ASIT has been the parenteral administration of water-salt solutions of allergens in increasing concentrations. In our country, immunotherapy was developed and implemented by Ado A.D. ASIT has been used in pediatric clinical practice in Russia since the 60s of the last century "Clinical recommendations" edited. In recent years, the attitude towards this method of treatment has fundamentally changed. At the end of the 20th century, WHO policy documents considered ASIT as an auxiliary method of therapy for AD and AR. Since the 80s In the 20th century, new variants of immunotherapy are used using the modification of allergens (allergoids), however, when the latter are administered parenterally, there is a high probability of developing systemic adverse reactions in patients [9, 17].

List of Used Literature

- Abdukadirova, L. K., Jalolov, N. N., Nozimjonova, M. N., & Narzullayeva, U. S. (2022). EVALUATION OF PRACTICAL NUTRITION OF PATIENTS WITH CHRONIC HEPATITIS.
- 2. Abduraimovna, A. D., Turg'unboyevna, Y. N., & Rustamovna, Q. S. (2023). QIZLARNI OILA VA JAMIYATDA O 'ZO 'RNINI TOPISHDA PSIXOLOGIK KO 'NIKMA VA MA'NAVIY YETUKLIKNI SHAKLLANTIRISH. Scientific Impulse, 1(7), 310-313.
- 3. DS, K. S. R. X. (2022, May). PREVALENCE OF ALLERGIC DISEASES IN CHILDREN UNDER HOT CLIMATIC CONDITIONS. Materials of International Scientific-Practical Conference. «Only English: Topical Issues of Healthcare».
- 4. Jalolov, N. (2018). Сурункали гепатитларда маҳаллий дуккакли маҳсулотлар асосидаги диетотерапияни клиник-иммунологик самарадорлигини ўрганиш.
- 5. Jalolov, N. (2022, April). Умумтаълим мактаблари бошланғич синф ўқитувчиларнинг саломатлиги бўлажак авлодни тарбиялашнинг асосий мезони. Республиканской научно-практической конференция "ДНИ МОЛОДЫХ УЧЕННЫХ".
- 6. Jalolov, N. N., Imamova, A. O., & Sultonov, E. Y. (2023). Proper nutrition of athletes, martial arts.
- 7. Jalolov, N. N., Niyazova, O. A., & Khairullaeva, L. G. (2023). Studying the actual nutrition of students of technical institutions (uzbekistan, germany).

- 8. Jalolov, N., & Parpiboeva, D. A. (2017). Лечебное питание при хронических заболеваниях печени.
- 9. Jalolov, N., & Solihov, M. (2017). Сурункали жигар касалликларида хаққоний овқатланиш холатини ўрганиш.
- 10. Kobiljonova, S. R., & Jalolov, N. N. (2023). REPRODUCTIVE AND PERINATAL OUTCOMES BORN BY CAESAREAN SECTION.
- 11. Kobiljonova, S. R., Jalolov, N. N., Sharipova, S. A., & Tashmatova, G. A. (2023). Clinical and morphological features of gastroduodenitis in children with saline diathesis.
- 12. Mirrahimova, M. X., Kobiljonova, S. R., & Sadullayevna, X. A. (2022). Prevalence and risk factors of allergic disease in children (Doctoral dissertation, INDIA).
- 13. Salomova, F. I., Mirrahimova, M. X., Sadullayeva, X. A., & Kobiljonova, S. R. (2022, November). Prediction and prevention of food allergies in children. Uzbekistan-Japan International Conference «Energy-Earth-Environment-Engineering», November 17-18, 2022, Uzbek-Japan Innovation Center of Youth, Tashkent, Uzbekistan Uzbekistan-Japan International Conference «Energy-Earth-Environment-Engineering», November 17-18, 2022, Uzbek-Japan Innovation Center of Youth, Tashkent, Uzbekistan tezis Bet 81.
- 14. Zokirkhodjayev, S. Y., Jalolov, N. N., Ibragimova, M. M., & Makhmudova, I. A. (2019). THE USE OF LOCAL LEGUMES IN THE DIET THERAPY OF CHRONIC HEPATITIS. Toshkent tibbiyot akademiyasi axborotnomasi, (1), 64-68.
- 15. Жалолов, Н. Н., Нуриддинова, З. И., Кобилжонова, Ш. Р., & Имамова, А. О. (2022). Главные факторы развития избыточного веса и ожирения у детей (Doctoral dissertation, O 'zbekiston Respublikasi Sog 'liqni Saqlash vazirligi, Toshkent tibbiyot akademiyasi, Koryo universiteti "Atrof muhit muhofazasining dolzarb muammolari va inson salomatligi" xalqaro ishtirok bilan Respublika 9-ilmiy-amaliy anjumani materiallari to 'plami 153 bet).
- 16. Жалолов, Н., Зокирходжаев, Ш. Я., & Саломова, Ф. И. (2022, Мау). Сурункали гепатит билан касалланган беморларнинг ҳақиқий овқатланишини баҳолаш. «Тиббиётдаги замонавий илмий тадқиқотлар: долзарб муаммолар, ютуқлар ва инновациялар»//мавзусидаги халқаро илмий-амалий конференция.
- 17. Закирходжаев, Ш. Я., Жалолов, Н. Н., Абдукадирова, Л. К., & Мирсагатова, М. Р. (2023). ЗНАЧЕНИЕ ПИТАНИЯ ПРИ ХРОНИЧЕСКИХ ГЕПАТИАХ.
- 18. Зокирходжаев, Ш. Я., Жалолов, Н. Н., Ибрагимова, М. М., & Махмудова, И. А. (2019). Сурункали гепатитлар пархезтерапиясида махаллий дуккакли махсулотларни қўллаш.
- 19. Имамова А.О., Тошматова Г.О. и Хобилжонова Ш.Р. (2023). Охранные работы и гигиеническая оценка питания детей дошкольного возраста в Ташкенте.
- 20. Кобилжонова, Ш. Р., Жалолов, Н. Н., & Журабоев, М. Т. (2022). Тугри овкатланиш спортчилар юкори натижалари гарови.
- 21. Кобилжонова, Ш. Р., Миррахимова, М. Х., & Садуллаева, Х. А. (2022). Распространенность и факторы риска бронхиальной астмы у детей.

- 22. Кобилжонова, Ш. Р., Миррахимова, М. Х., Садуллаева Х. А. (2022). Значение экологических факторов при бронхиальной астме у детей.
- 23. Миррахимова, М. Х., Нишонбоева, Н. Ю., & Кобилжонова, Ш. Р. (2022). Атопик дерматит билан касалланган болаларда панкреатик етишмовчиликни коррекциялаш.
- 24. Миррахимова, М. Х., Садуллаева, Х. А., & Кобилжонова, Ш. Р. (2022). Значение экологических факторов при бронхиальной астме у детей (Doctoral dissertation, Россия).
- 25. Мирсагатова, М.Р. (2023). Особенности микрофлоры желудочно-кишечного тракта при хронических воспалительных заболеваниях верхних органов пищеварения у детей.
- 26. Ниязова, О.А., и Имамова, А.О. (2023). Совершенствование организации оказания медицинских услуг и Цифровой среды. Европейский международный журнал междисциплинарных исследований и управленческих исследований, 3 (02), 41-46.
- 27. Саломова Ф.И., Миррахимова М.К., Кобылжонова С.Р. (2022, апрель). Влияние факторов внешней среды на развитие атопического дерматита у детей. Серия конференций Европейского журнала научных архивов.
- 28. Саломова, Ф. И., Садуллаева, Х. А., Миррахимова, М. Х., Кобилжонова, Ш. Р., & Абатова, Н. П. (2023). Загрязнение окружающей среды и состояние здоровья населения.
- 29. Саломова, Ф., Садуллаева, Х., & Кобилжонова, Ш. (2022). Гигиеническая оценка риска развития аллергических заболеваний кожи у детского населения. Актуальные вопросы профилактики стоматологических заболеваний и детской стоматологии, 1(01), 88-91.
- 30. Юлдашева Ф.У. и Имамова А.О. (2022). Роль спорта в формировании здорового образа жизни у молодежи. Европейский международный журнал междисциплинарных исследований и управленческих исследований, 2 (11), 85-89.