



## EVALUATION OF MEDICAL-SOCIAL EXAMINATION METHODS IN CHILDREN DIAGNOSED WITH ALLERGIC DISEASES

Achilova Donohon Nutfilloevna

Bukhara State Medical Institute named after  
Abu Ali ibn Sino, Uzbekistan

<https://doi.org/10.5281/zenodo.7952190>

**Resume.** The increase in the prevalence of allergic diseases among children and adolescents remains one of the most important medical and social problems and causes serious damage to the health economy of many countries of the world (Vishneva E.A., Namazova-Baranova L.S., 2014). Allergic diseases have a negative impact on physical and psychological condition, social life, participation in school, reduce the quality of life of patients themselves and their families. However, despite the high prevalence of the disease, the problem of allergy is often neglected: in pediatrics, sick children do not receive the necessary medical measures at all, or are treated only occasionally with symptomatic drugs; in addition, self-medication is also common.

**Keywords:** Medical-biological, allergy club, organizational-methodical, cultural-educational, medical-social.

In recent years, local and foreign researchers have been conducting a lot of scientific and research work on the clinical, immunological, medical and social aspects of allergic diseases in children, the intensity of the spread and formation of these diseases in children, various treatment methods, and the prevention of complications.

The results obtained on the development of new methods of diagnosing allergic diseases in children allowed to identify risk factors leading to allergic diseases, including food allergy in children.

A comprehensive, conceptual approach to the study of the formation and development of allergic diseases in rural areas is still not available. In addition, there are unfortunately few epidemiological, comprehensive studies on the prevalence of allergic diseases among children in rural areas of our republic and the intensity of study. The spread of these diseases, the comprehensive study of the clinical and immunobiological aspects of allergic diseases in children are rarely found, although the works in this direction are full about the risk factors of the disease, their effects, the specific characteristics of the course of allergic diseases in children, and the current state of medical services for allergic diseases. provides information and creates a basis for the development of various effective measures for early diagnosis and treatment.

In this regard, research on a conceptual approach to the complex clinical, immunological, medical-social study of allergic diseases among children living in rural conditions, as well as the development of new criteria for early diagnosis, prognosis of their course and consequences, is one of the urgent problems.

According to the WHO report, 100-150 million people suffer from asthma, and 180,000 people die from this disease every year. In Sweden, 8% of the population has asthma, in Germany there are 4 million asthmatics, and in India there are 15-20 million children. Severe

forms of atopic pathology remain one of the urgent problems of internal medicine, and according to leading Russian scientists in immunology, allergology, pulmonology, its solution depends on the results of scientific research in the field of genetics, molecular and ecological biology.

No scientific sources were found on predicting the prospects of socio-psychological adaptation of children with asthma in society. The complex pathogenetic mechanisms underlying bronchial asthma also determine the effective and timely control of allergic inflammation, as well as the treatment method, which should include the emotional state and quality of life not only of the sick child, but also of his family members. cannot be achieved without effective training programs that help to form a partnership between the doctor and the patient, without which the treatment program developed by the doctor for the patient will not be successful. The available scientific information does not fully answer the comprehensive prevention of the exacerbation and severity of bronchial asthma, including psychological rehabilitation, educational programs and polyclinics that require long-term monitoring of the child for asthma and allergies.

Fundamentals of statistical analysis in medical and biological research. Statistics is one of the social sciences, and it is a science that studies quantitative changes in the phenomena occurring in the society by connecting them with qualitative changes. The results obtained in the research work are reliable, true, all the conclusions are reasonable, the representativeness of the groups in case of randomization of the research mainly depends on the processing of the collected clinical or experimental material from a statistical point of view. It is important to choose methods for statistical work, to choose modern computer programs, to draw up variational series, to determine the level of reliability, and to use methods of corrective organization. Its main purpose is to study the magnitudes of the events occurring among the society in certain regions in a certain period of time, the quantitative changes, in connection with the laws of their origin.

Statistics that study issues related to medicine, hygiene, and health are called medical or sanitary statistics. Medical statistics studies all phenomena of human activity in connection with his social life. No process in the human body occurs without the influence of the social environment. This applies not only to indicators such as morbidity, death, injury, disability, physical development, which are directly related to the biological and social environment, but also to all reactions in the human body that occur through the positive and negative effects of the external environment.

The main tasks of medical statistics are:

population health studies; the number, composition, natural movement of the population (birth, death, natural reproduction), physical development, prevalence of various diseases among the population and their course, average life expectancy, etc.;

To study general morbidity, mortality rates or certain diseases and causes of death among certain groups of the population in relation to their lifestyle, external environment, socio-economic, conditions and develop specific scientifically based measures to further improve the health of the population based on the results of the conducted research. exit and put it into practice;

in order to properly plan health care, to properly organize the work of sanitary-epidemiological and treatment-prophylactic institutions, to study their activities, the quality and effectiveness of medical services provided to the population, to collect information about

the type and number of medical institutions, the number of employees working in them, and the number of beds in inpatients and in-depth analysis;

to evaluate the treatment and prevention works used in the experiment, to study their effectiveness;

planning, organizing and conducting scientific research works in clinical, laboratory and experimental conditions, evaluating the accuracy of the obtained results, determining the laws of various events and processes in the body of a healthy and sick person or an experimental laboratory animal, evaluating the effectiveness of new treatment and prevention methods.

Any organized statistical research is based on the same scheme and consists of the same statistical steps. Sanitary - statistical research consists of 4 consecutive stages.

Stage 1 - drawing up a research plan and program.

Step 2 - statistical data collection and monitoring.

3rd stage - grouping, summarization and calculation of the obtained statistical data.

Stage 4 - statistical analysis, drawing conclusions and their implementation.

The first stage is to create a research plan and program. This is the main stage of preparation, the result of the research depends on the implementation of a specific plan and program that is correctly prepared in advance;

the second stage - collection and correction of statistical information. This involves statistical observations or statistical data collection. This stage is carried out by filling out certain registration documents in medical institutions;

third stage - grouping, summarization and calculation of the obtained statistical data. It consists of dividing the collected statistical data into groups, transferring them to tables, summing them up and deriving relative values from absolute values;

the fourth stage - statistical analysis, conclusions and their implementation. It consists in comparing, comparing, evaluating and applying the received quantities. At this stage, various mathematical methods (correlation, standardization, assessment of accuracy of obtained data) are used to study the influence of factors on the studied phenomenon and to determine their regularities.

The statistical research ends with the analysis of the obtained results, the implementation of the research conclusions.

Development of long-term monitoring of children with allergic diseases.

In order to optimize and improve integrated approaches to solving the problem of long-term monitoring of children with allergic diseases, the Allergy Club (AS), the "Allergy Help" hotline was created. AS were united doctors (allergist, immunologist, rehabilitologist, pulmonologist, otorhinolaryngologist, physiotherapist), psychologist, parents and their children. Activities at AS were based on the mutual interest of all participants, the wishes of sick children and their parents. We recommended a system of organization of AS activities and directions. This system should consist of the following parts:

1. Organizational and methodological: formation of a data bank on the newest traditional and non-traditional methods of allergy prevention; organization of allergy education for parents, children and teenagers; delivering various handouts to allergy sufferers.

2. Cultural and educational: organization of allergy days; conducting public events and promotions; organization of visits to theaters, exhibitions and cinemas; holding children's

drawings, craft competitions, concerts, quizzes, theatrical performances. It is to ensure the participation of members of the EC in cultural and educational events.

3. Treatment and prevention: and prevention: involvement of medical specialists for treatment and rehabilitation of children suffering from allergies; organization of classes on breathing exercises, massage classes; preparation of documents for treatment at a sanatorium-resort.

4. Psychological: conducting seminars and trainings for parents; formation of psychological support groups for children and adolescents (from 3 to 18 years old); daily analysis of psychological rehabilitation of the whole family.

5. Medical - social: organization of contact with social service; formation of a drug fund at the expense of voluntary donations; respiratory monitoring devices (peak flow meters) for asthmatics.

6. Information support: registration and accounting of members of the EC; notification of public events; pediatric service of the hospital, interaction with the administration, mass media, establishment of a telegram channel and monitoring of its continuous activity.

Allergists, pediatricians, immunologists, pulmonologists, rehabilitation specialists, otorhinolaryngologists, and physiotherapists are used to conduct training programs in the AK. The training program consisted of 22 hours, and the classes were held twice a week for 45 minutes in a group of 10-15 people (mothers, fathers, grandmothers, teenagers).

Subjects of lectures in AK (45 minutes per topic):

1. Understanding of allergy, allergens, risk factors for asthma;
2. Principles of allergy diagnosis; understanding of the immune system and immunodeficiency conditions, their treatment and prevention;
3. Types of allergic conditions, sensitization;
4. Symptoms of exacerbation of allergies, tactics to help, anti-inflammatory therapy for allergic conditions;
5. Methods of physical rehabilitation of patients (exercise therapy, massage, hardening);
6. Psychological rehabilitation of the sick child and his family;
7. Nonspecific hyposensitization methods;
8. Allergic rhinitis, hay fever, atopic dermatitis (principles of local therapy);
9. Principles of specific therapy for allergic diseases; sanitation of the upper respiratory tract;
10. Physiotherapy methods at home;
11. Practical training (teaching children the correct use of inhalation drugs and breathing control).

Simultaneously with seminars in AK, parents and children watched videos about allergic diseases, studied printed and electronic methodological literature on allergies. E-books are sent to the telegram group and the use of members is monitored.

During the last 3 years, 560 children (children and their family members) were trained as an object of the research, a total of 2360 visits were made. Before the start of training, parents filled out 2 different questionnaires. The first questionnaire included 14 questions about the passport part, medical history, heredity for allergic diseases, and the influence of external risk factors. The second questionnaire was aimed at determining the initial level of knowledge of the respondents about allergies.



At the end of the training, the second questionnaire was re-administered and the results were compared.

According to the results of the first questionnaire, 78.90% of children (n=442) were diagnosed with bronchial asthma, allergic rhinitis, atopic dermatitis, hay fever. This confirmed the correctness of the principle of a complex, conceptual approach to the preparation of educational programs.

According to the results of the second questionnaire, 16.07% of parents (n=90) do not know what allergy is, 41.96% (n=235) could not answer the question of what bronchial asthma is, 40.89% (n=235) =229) could not tell the reasons for exacerbation of allergic diseases, 28.04% (n=213) do not know how to relieve allergies, 51.96% (n=291) do not know about allergy treatment, 38% do not know how to carry out treatment; 52% have no idea about allergies.

Half of the parents believed that allergic diseases are treatable diseases. At the same time, 80% of the parents who responded had completed the basic level of education.

Evaluation of the quality of parents' education (using additional information about asthma and allergies) through a questionnaire at the developmental stage showed that 19% of respondents could not give the definition of allergy, 14% did not know how to provide first aid for allergic diseases.

In AK, the educational process for parents ended with allergy days, during which pictures and an allergy contest were held. Children and parents participated in a special quiz on the knowledge of allergy treatment and self-control issues. The participation of parents consisted of preparing children for allergy day, decorating the hall, holding contests and concerts. In addition, creative efforts of parents were demonstrated on allergy days.

10 children aged 12 to 14 years, 10 adolescents aged 14 to 16 years participated in group 1 of psychological rehabilitation in AS conditions. training was held 2 times a week for 2 hours. A number of factors are taken into account when conducting psychological rehabilitation: dependence on diseases, low self-esteem, low resistance to disappointment, loss of the patient's previous position in the family, school, age characteristics, temperament, character, personality.

Techniques and methods of interaction with children. Working with children in support groups was mainly based on group methods and consisted of several stages:

1. Psychodiagnosis - carried out during an individual interview between a psychologist and a teenager, and we relied on the use of tests and projective methods to assess his emotional sphere.

2. Pedagogical observation is aimed at determining the characteristics of a teenager's behavior and recognizing his character in communication with peers (working with a group).

3. As a result of long-term observations, the adolescent's personality and social development were analyzed (the child's behavior with his parents, at home, at school, among friends, the adolescent's attitude to the surrounding environment was studied). During the analysis, the adolescent personality formation system was identified: value orientations, social ideas, attitudes, beliefs, self-esteem, self-criticism, behavioral characteristics, etc.

4. Individual and group forms of psychotherapy - built taking into account the information obtained by us in the previous stages and, as a rule, focused on the positive qualities of the teenager identified during the observation.

### References:

1. Ачилова Д.Н. Клинический анализ морфофизиологических изменений иммунных органов у детей после перенесенных заболеваний // Tibbiyotda yangi kun. - Бухара, 2021. - № 5 (37). - С. 111 - 114. (14.00.00; 22)
2. Achilova D.N. Specific course of allergic reactions in children // Web of scientist international scientific research journal. ISSN: 2776-0979 Vol. 2 No. 09 (2021), Indonesia. - P. 10 – 17. (Impact factor 7,565)
3. Achilova D.N. Modern assays for the treatment of allergic skin diseases in children // International journal of formal education. Polsha, 2021. Volume: 01 Issue: 04. - P. 6 – 17. (14.00.00; 17)
4. Achilova D.N., Amonov R. A., Sharipova L. Kh., Yomgurova O. R., Rustamov B. B. Clinical, Immunological and Medico-Social Aspects of Allergic Diseases in Children // Annals of the Romanian Society for Cell Biology. Romania, 2021: Vol 25: Issue 3. - P. 6736 – 6740. (Scopus)
5. Achilova D.N., Yomgurova O.R. Clinical-immunological and medico-Social aspects of allergic diseases in children, development of criteria for early diagnosis and prognosis of the course of the disease (literature review) // British medical journal. London, 2022. Vol-2, No 2. - P. 46 – 53. (14.00.00; 6)
6. Achilova D.N. Current issues of food allergy diagnostics in pediatric practice // International Journal of Early Childhood Special Education. Warsaw. Issue 02 2022. (INT-JECSE) DOI: 10.9756/INT-JECSE/V14I2.677 ISSN: 1308-5581 Vol 14, - P. 5991 – 5995. (Scopus)
7. Achilova D.N., Khushvaktova M.F. Clinical-Immunological Methods of Clinical-Immunological Research of Atopic Dermatitis in Children Permanently Residing in the Area of Oil Refining Enterprises // American Journal of Medicine and Medical Sciences. USA, 2022, 12(10): DOI: 10.5923/j.ajmms.20221210.05. - P. 1034-1038. (14.00.00; 2)
8. Ачилова Д.Н., Нуралиев Н.А. Изучение клинико-диагностических особенностей различных проявлений аллергических заболеваний у детей // Медицина и инновации. - Ташкент, 2022. - №4(8). - С. 297 - 303. (14.00.00; ).
9. Ачилова Д.Н., Нуралиев Н.А. Изучение эффективности длительного наблюдения, лечения и профилактики бронхиальной астмы и аллергических заболеваний у детей // Медицина и инновации. - Ташкент, 2022. - №4(8). - С. 261 - 267. (14.00.00; ).