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The quality of life of children with allergic diseases

Key words: *children, allergy, the quality of life.*

The Assessment of the quality of life (QOL) is one of the priority directions of modern Pediatrics. For the first time the term «health-related quality of life» proposed by R. Kaplan and J. W. Bush in 1982, highlighting the medical aspects of the General concept of «quality of life». This term includes parameters that describe the state of health of the person, his attitude to his illness, quality of health care and social problems caused by the disease [6].

Study of the influence of the disease on the aspects of human life always interested physicians. Known clinicians M. E. Mudrov, S. P. Botkin, M. I. Pirogov, G. A. Zaharyin and others were actively interested in the attitude of the patients to their disease. Outstanding therapist M. E. Mudrov coined the phrase: «do not treat the disease but the patient», which fully reflects the humanistic orientation of medical science [3].

Despite the progressive views of individual outstanding physicians, during the last century was dominated by biomedical model of health and disease, according to which society and medicine were clearly focused on objective criteria (clinical and instrumental data) assessment of human health [1]. Therefore the doctor stopped to see the patient. But it is important to pay attention not only on the physical aspects of treatment, but also on correction of psychological state, to allocate social reasons behind diseases, to give recommendations about healthy life style, behavior of patients, as one of the most important functions of a doctor is to return them to society, not only to restore physical health [5]. That why Biomedical model of health and illness replaced by biopsychosocial (global) model, where the patient is viewed as a person, with his subjective notions about the disease, fears and worries, personal observations and experiences [1].

There are various definitions of QOL. However, the General acknowledged that the quality of life is a multidimensional concept and reflects the impact of the disease and treatment on the well-being of the patient. QL patient describes how the physical, emotional and social well being of the patient changes under the influence of the disease or its treatment (D .F. Cella, A. E. Bonomi, 1995). In some cases, this concept includes economic and spiritual aspects of life of the patient.

WHO determines the quality of life as «subjective value of the position and role of the individual in society (including culture and value systems of the society) with the purposes of this man, his plans, and degree of common disorder». In Pediatrics, the concept of quality of life takes on a slightly different mean: «Quality of life is the perception and evaluation of the child in different spheres of life and the feelings that are associated with problems in the functioning» [3].

Assessment of QOL is an integral part of the complex analysis of new methods of diagnostics, treatment and prevention, an important component of pharmacoeconomic calculations, allowing to establish the relation cost - effectiveness of new drugs or treatments for children and justify the most appropriate standards of therapy in Pediatrics [2].

In foreign Pediatrics indicator QOL is actively used in population studies for the development of age-and-sex ratios, monitoring different groups of children, evaluate the effectiveness of preventive measures, definition of the complex impact of chronic diseases on (Bisegger C., Cloetta B., Von Rueden U. et al., 2005; Svavarsdottir E. K., Orlygsdottir B., 2006; Varni J. W., Burwinkle T. M., Seid M., 2006; Wee H. L., Chua H. X., Li S. C., 2006; Norrby U., Nordholm L., Andersson-Gare B., 2006; Rajmil L., Alonso J., Berra S. et al., 2007; Saigal S., Stoskopf B., Pinelli J. et al., 2007).

In Ukraine, despite the global practice, the problem of QOL research remains poorly understood, work on the estimation of this indicator are minorities. The main prob-

lem of domestic researchers is the lack of unified methodological approaches, so that the results are unlikely and not comparable between them. Research methodology QOL should be based on the principles of evidence-based medicine, which is especially important when assessing the subjective opinion of a person, the results obtained through the use of international standards that may be considered relevant to modern requirements (D. Fairclough, 1998).

For the assessment of QOL in clinical and population studies they identify the following components: psychological, social, physical and spiritual well-being. Now the standard for the study of QOL is special questionnaires (questionnaire). The specificity of the assessment of QOL in children is that modules questionnaires differ by age, also in the research process involved both the child and his parents.

Example of diseases that greatly affect the quality of life of children is allergic diseases, medical and social value of which is determined by the growing prevalence, torpidly to therapy, large economic costs, the risk of social exclusion [3]. The normalization of QOL is considered as one of the key tasks in the treatment of many allergic diseases at the current stage of [5].

The aim*:* Improvement of the quality of medical aid to children with allergopathology by assessing their quality of life and improving of individual and group programs, treatment and prevention of allergic diseases on the basis of the revealed problems..

Materials and methods

Ninety six children with allergopathology were questioned at the Allergy center of the Kharkiv Regional Children Hospital №1. Based on the Questionnaire the quality of life of patients with asthma with standardized activities (AQLA(S)) adapted "Questionnaire" was created for all types of children with allergy from 5 to 17 years. It considered type of pathology (respiratory allergosis – bronchial asthma, allergic rhinitis; skin lesions – atopic, allergic dermatitis, chronic urticaria), its duration, frequency of exacerbations, discomfort for a condition, restriction of activities and its degree. The questionnaire consists of several blocks: a limitation of physical activity (sports, cycling, motor activity), psycho-emotional limitations (communication with friends, communication with animals, fatigue, mental and emotional limits, phobias), restrictions of social life (participation in social activities, visiting public places), domestic difficulties (restrictions on food, clothing, household assistance). All the signs were evaluated on a 5-point scale: the higher point is for the better quality of life. Along calculation of QOL score for all the questions, an average score for each of the aspects of QOL was calculated. The data were processed by methods of variation statistics.

Results and discussion

Among the surveyed children even distribution by gender (50 / 50 % of boys and girls) was noted. When stratified by age, the majority (43 %) were the children of younger school age, 32 % of pre-school, 25 % of senior school age.

Nosological forms 50 % of the cases were presented by respiratory allergies (RA) that included allergic rhinitis, bronchial asthma, in 32% chronic urticaria (CU) was diagnosed, 18 % of patients had suffered from skin lesions (SL) – atopic and allergic dermatitis.

One indication of the severity of the disease is the frequency of exacerbations that we evaluated in the patients (Fig.1).

The most often (more than 4–5 times a year) exacerbation of the disease was in children with respiratory allergies (28 %) and CU – 20 %. The majority of allergic diseases exacerbated 2–3 times a year.

Assessment of discomfort experienced by different groups of children, depending on the type of the disease, is shown in figure 2.

As can be seen from the figure, significant discomfort associated with the disease, felt children with SL (12 %, 68 % of them are children of younger school age) and RA (48, 6%), 76 % of them are patients of the senior school age.

Moderate stage of discomfort was reported more often in children with CU (44 %, 54 % of them are children of younger school age).

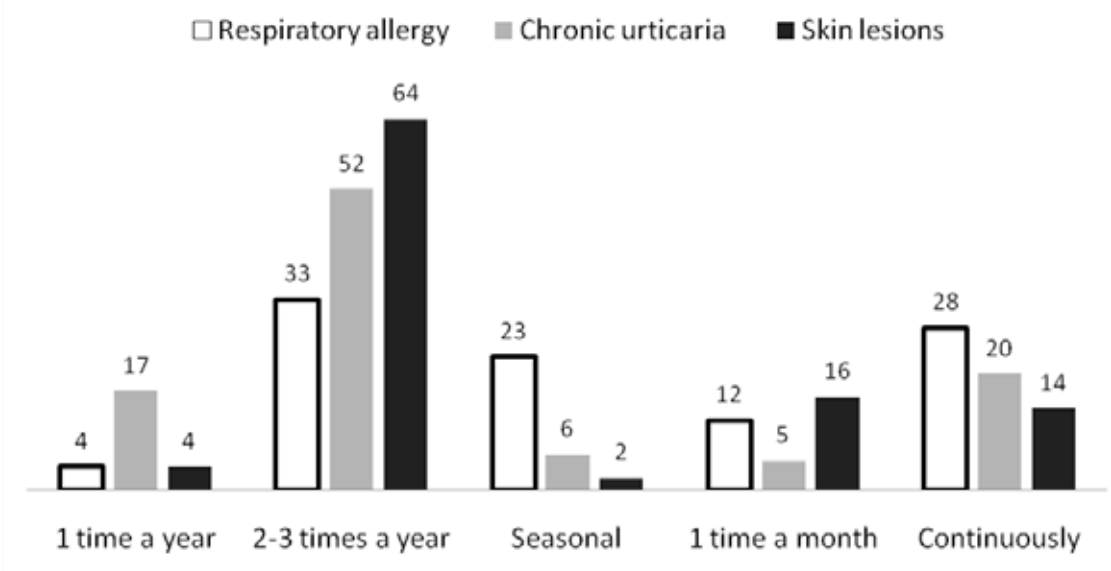

Figure 1. **The frequency of allergic diseases exacerbations (%)**

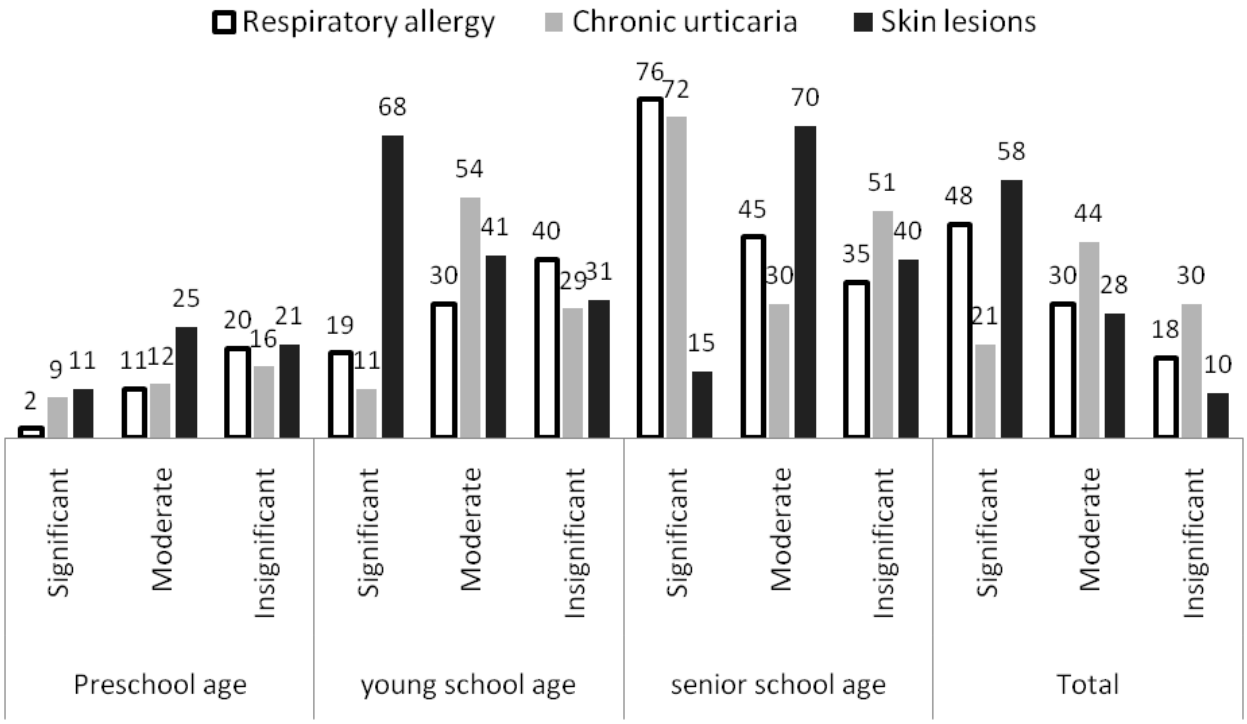

Figure 2. **The discomfort degree depending on the age and type of allergic diseases (%)**

The results of the survey regarding limitations on the physical, social activity and household discomfort which we have combined in integrated blocks (domestic, physical activity, emotional and social) in dependence on the type of allergic pathology is presented in figure 3.

Children with RA often felt discomfort associated with sports (71 %, 87 % of them were children of school age), equally often through limitations in dealing with animals and participation in public events (14 %).

Patients with CU bothered with dietary limitations (77 %, 49 % of them are children of preschool age, and 36 % of primary school age), sports (33 %), communication with animals (28 %).

Skin lesions are the most important in the limitation of contact with animals (60 %), food-limitation (40 %), less often (24 %), of participation in public life.

Conclusions

The quality of life of children with allergic diseases often reduced due to limitations in sports, participation in public life and communication with animals.

The dietary limitations and communication with animals have the greatest influence on the quality of life of children with skin lesions and chronic urticaria.

The greatest psychological discomfort caused by allergic disease, have children with lesions of the skin.

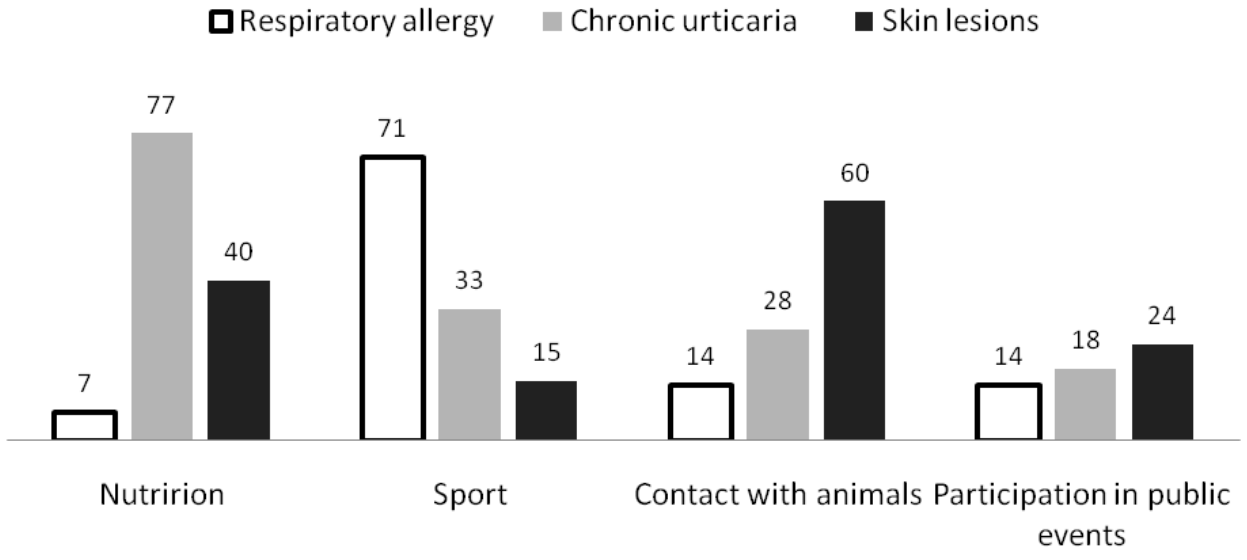

Figure 3. **Limitation depending on the type of allergic pathology (%)**

The identified social and psychological problems should be taken into consideration when organizing work of school of allergy.

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КАЧЕСТВО ЖИЗНИ ДЕТЕЙ С АЛЛЕРГИЧЕСКИМИ ЗАБОЛЕВАНИЯМИ

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Резюме. *В статье представлены результаты оценки качества жизни (КЖ) 96 детей в возрасте 5–17 лет с аллергическими заболеваниями по данным модифицированного опросника качества жизни больных бронхиальной астмой по стандартизированным видам деятельности – AQLA(S). Установлено, что больше всего КЖ нарушено у детей с поражениями кожи за счет ограничений в питании и общении с животными.*

Ключевые слова: *дети, аллергия, качество жизни.*

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THE QUALITY OF LIFE OF CHILDREN WITH ALLERGIC DISEASES

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Summary. *The assessment of the quality of life according to the data Questionnaire the quality of life of patients with bronchial asthma under standardized activities – AQLA(S) was performed in article. 96 children with allergic pathology in age from 5 to 17 years were questioned. The quality of life impairment was revealed children with lesions of the skin due to dietary and contact with animals restrictions.*

Key words: *children, allergy, quality of life.*

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