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ЭКОЛОГИЯ ЖИЛЫХ ПОМЕЩЕНИЙ В АСПЕКТЕ РАЗВИТИЯ АЛЛЕРГИЧЕСКОГО РИНИТА

Аллергический ринит – это широко распространенное заболевание, которое по решению Всемирной организации здравоохранения является индикатором здоровья населения. Исследования велись в период с 2013-2015 годы, оценивали заболеваемость детей в возрасте от 0-13 лет. Развитие аллергического ринита зависит от основных параметров помещения, в котором ребенок проводит большую часть дня. При средней температуре воздуха в 23 °С и влажности 60 % количество детей с развитым аллергическим ринитом составляет 9 %, в то время как при влажности воздуха ниже 40 % и его температуре выше 27 °С количество заболевших вырастает многократно. Полученные данные продемонстрировали прямую зависимость развития отоларингологических заболеваний от таких параметров помещения как температура и влажность. Соблюдение рекомендуемых параметров для обозначенных показателей позволит сократить число детей страдающих аллергической формой ринита.

Ключевые слова: ринит, аллергия, экология помещений, влажность воздуха.

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ECOLOGY OF LIVING QUARTERS IN THE ASPECT OF THE DEVELOPMENT OF ALLERGIC RHINITIS

Allergic rhinitis is a widespread disease, which according to the decision of the World Health Organization, is an indicator of the health of the population. Researches were conducted in the period from 2013-2015, evaluated the disease of children aged 0-13 years. The development of allergic rhinitis depends on the basic parameters of the room in which the child spends most of the day. With an average air temperature of 23 °C and a humidity of 60%, the number of children with developed allergic rhinitis is 9%, while with air humidity below 40% and its temperature above 27 °C, the number of sick children grows in many times.

Allergy remains one of the most urgent problems of modern medicine. According to who, ' the prevalence of allergic diseases, occupying 3rd place after cardiovascular and oncological diseases during the last decade has increased and has no tendency to decrease. An important reason for this is that most of the factors' causing allergic reactions, and also non-allergenic factors contributing to development of allergies are related to our way of life, nutrition, micro-ecology of residential premises, the conditions of professional activity. The data obtained showed a direct dependence on otolaryngological diseases on such room parameters as temperature and humidity. Observance of recommended parameters for all other types of allergic rhinitis.

Key words: rhinitis, allergy, ecology of living quarters, air humidity.

The health of the childish population is the most important type of safety in the field of public health. It has been established that after the immaturity of the processes of differentiation of cells children are susceptible to the development of allergic reactions [1]–[3].

By the decision of the World Health Organization, it is allergic diseases which are indicators of public health.

The purpose of this research was to study the environmental characteristics of air and to analyze

its interrelation with the development of allergic rhinitis. The researches were conducted on the territory of Bishkek in Kyrgyzstan from 2013 to 2015, the frequency of children aged 0–13 years was evaluated.

In the process of analyzing the methods used to analyze the room and identify its parameters with the development of allergic rhinitis.

Allergic rhinitis is a widespread disease that affects 18–38% in Russia [4]–[8]. According to the literature in the United States, various forms of

Table 1 – Dependence of the development of allergic risk from children aged 0 to 13 years (averages for 2013-2015)

District of educational institution location	Humidity,%	Air temperature, °C	Number of patients,%
Oktyabrsky region	59	21	13
Leninsky region	39	27	27
Pervomaisky region	63	25	8
Sverdlovsk region	62	23	6

allergic rhinitis suffer from 40% of the population, and the morbidity is recorded at an early school age [9]–[11].

It is diagnosed as a disease due to the presence of allergen-specific antibodies of antigen class IgE. External symptoms are sneezing, itching and stuffiness, as well as the discharge from the nose [12]–[15].

The information, which obtained for allergic rhinitis and analysis of characteristics of the rooms, are presented in the table.

So, after conducting of researches we can say, that the development of allergic rhinitis depends on the basic parameters of the room in which the child spends most of the day.

With an average air temperature of 23°C and a humidity of 60%, the number of children with developed allergic rhinitis is 9%, while with air hu-

midity below 40% and its temperature above 27°C, the number of cases grows in many times.

It's connected to the fact that the desiccation of mucous membrane of nose with dry air leads to the appearance of microcracks, which causes the bleeding. Inside the nose, painful crusts begin to form and also evolve a general deterioration of well-being, which manifested by headache and frustration.

The altered mucous layer is the ideal environment for the propagation of any microorganisms, so inflammatory reactions often develop and secondary infections are attached.

Improvement of the actual situation and prevention of new diseases can be prophylactic measures, for example: the installation of humidification and conditioning systems for refrigeration of overheated air, isolation of children in saline rooms or salt-mines.

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