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PREVALENCE OF ALLERGIC REACTIONS AMONG MEDICAL UNIVERSITY STUDENTS

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Abstract
Epidemiological studies over the past decades show that the prevalence of allergic diseases continues to increase, especially in developed countries. Diseases such as atopic dermatitis, allergic rhinitis, and bronchial asthma affect a huge number of people around the world. Factors leading to allergic reactions include hereditary predisposition, disorders of the nervous and endocrine systems, frequent infections, bad habits, and environmental pollution with various xenobiotics.

Keywords: allergy, types of allergic reactions, signs of allergy.

Introduction

Allergy refers to multifactorial diseases caused by a combination of genetic and exogenous factors, primarily environmental and social [3].

As a rule, allergies occur in ecologically developed countries and large cities.

The main reasons for this phenomenon include such factors as: environmental pollution with industrial waste, the use of dyes and stabilizers in the food industry, household chemicals, as well as the widespread use of medications [6, 8].

All these and other unfavorable influences of the external environment on a person's health cause overstrain of the body's adaptation systems, contribute to the accelerated growth of sensitization and the development of allergic diseases.

In addition to environmental factors, the cause of the development of allergic diseases is a genetically determined predisposition. This is evidenced by the increase in atopic allergic diseases in children [4].

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Among the most frequently observed nosological forms, the first place is occupied by respiratory tract diseases (bronchial asthma and allergic rhinitis), as well as atopic dermatitis and food allergies.

These diseases affect people of all ages, and if not treated effectively, they can affect the quality of life.

Allergic diseases are one of the main causes of impaired social activity and early disability in children and the young working population.

This, in turn, causes enormous economic damage and determines the medical and social significance of this type of disease [5].

The relevance of this study is due to the fact that in recent decades there has been a steady trend towards a deterioration in the health status of student youth, including an increase in the incidence of allergic diseases [1,2,6].

Since the body's increased sensitivity to environmental factors underlies the manifestation of allergic diseases in humans, the situation will only get worse every year.

In addition, the allergenic load on humans due to natural factors is often supplemented by industrial and agricultural allergens, which can lead to disruption of the functioning of many organ systems.Of particular interest is the health status of medical students.

The specifics of medical training presuppose the disunity of training bases with a frontal form of organization of the educational process, the association of training in clinical departments with negative associations (pain, injury, death), the influence of physical, chemical and biological factors of the hospital environment on the body's defense mechanisms.

In addition, factors such as irregular, unbalanced nutrition, non-compliance with the daily routine, adaptation to new conditions and a heavy academic load can dramatically undermine the resistance of students' bodies, leading to various diseases, including allergic origin.

In connection with the above, the purpose of this study is to establish the prevalence of allergic diseases among medical students.

The purpose of the study was to identify the prevalence of allergic diseases among students of the Faculty of Medicine of Gulistan State University, to determine the forms of manifestation of allergies among respondents, to establish the age of manifestation of signs of allergy, and to detect hereditary prerequisites for the manifestation of allergic reactions in students.

Materials and methods. Students of the Faculty of Medicine of Gulistan State University, 17-20 years old, of both sexes took part in the study. A survey was conducted among the participants.

The study lasted for 3 months. During this period, 711 students were surveyed.

Statistical processing of the obtained data was carried out using methods of mathematical and medical statistics using the Microsoft Office Excel data analysis package. Results were considered reliable at $p < 0.05$.

Results and discussion. The objects of the study were GulSU students aged 17-20 years. During the study, a total of 711 people were interviewed.

After studying the personal data of the volunteers, the following results were obtained: out of 711 students surveyed, an allergic reaction occurred in 405 people (57.01%), and 220 (39.09%) of them consulted a doctor with this problem.

Of the students suffering from allergies, the majority have food allergies - 133 people (18.69%), epidermal manifestations occur in 113 people (15.89%), allergies to pollen in 86 students (12.15%), and allergic manifestations to household dust in 73 people (10.28%).

It was found that 193 people (27.10%) suffer from one form of allergy; 66 (9.34%), 20 (2.80%), 27 (3.74%) people suffer from two, three and four forms, respectively.

According to clinical manifestations, the following allergic reactions predominate: rash - 179 people (25.23%), itching and sneezing - 120 people (16.82%), choking and coughing - 47 (6.54%) and 33 people (4.67%), respectively.

According to the literature, it is known that one person can simultaneously exhibit several clinical signs of allergy [3,6].

For the majority of respondents, the first signs of allergies appeared between the ages of 0 and 5 years - 146 people (20.65%), 106 people (14.95%) first encountered allergies in the period from 6 to 12 years, and in 53 people (7.48%) allergies appeared for the first time at 13-18 years.

According to our data, out of 711 students examined, 431 people (60.75%) had relatives suffering from various forms of allergies.

When analyzing personal data, it was found that more than 50% of respondents had encountered various manifestations of allergies in their lives, and many of them did not turn to specialists.

The predominant form of allergy among the examined students is an allergic reaction to food.

It is known that the occurrence of food allergies is often associated with the nature of nutrition at the age of 17-20 years.

In addition, food products may contain various xenobiotics, which can subsequently cause disturbances in biochemical and physiological processes in the human body [5].

A fairly large number of students exhibit epidermal allergies, as well as reactions to pollen and house dust.

Some students have several forms of allergies, but most have one form. The dominant manifestations of allergies are rash, itching and sneezing.

A large number of students surveyed had a hereditary predisposition to allergies.

Conclusions. As a result of this study, allergens that could lead to allergies in students were identified using a questionnaire; the main clinical manifestations of this disease are noted; the age at which the first allergic reactions first appeared was established; and also determined the hereditary predisposition to allergic manifestations in students.

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