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INDICATORS OF THE LEVEL AND STRUCTURE OF ALLERGIC DISEASES AMONG THE POPULATION OF THE REPUBLIC OF KARAKALPAKSTAN

Kudaibergenova Ulbike Kallibekovna

*Doctor of Philosophy in Biological Sciences (PhD)
Nukus State Pedagogical Institute named after Ajiniyaza
Republic of Uzbekistan*

ANNOTATION

The article examines the main indicators of the level and structure of allergic diseases among the population of the Republic of Karakalpakstan. Modern air pollution salt-dust takeaway from the bottom of the dried Aral Sea bottom in real time, and dust storms lead to pathological changes in the respiratory system of the population, namely to exacerbation of chronic diseases, chronic bronchitis, bronchial asthma.

KEY WORDS: *bronchitis, bronchial asthma, Aral Sor, level, structure, atmospheric air.*

The population of the Republic of Karakalpakstan is 1.6 million people, of which 50% are women, 32% are children under 14. Particular attention on the part of the Government of the Republic of Uzbekistan is paid to expanding social protection of the population, primarily women and children. Among the problems related to the health status of the population of the Republic of Karakalpakstan, the steady growth of allergic diseases occupies a significant place. Note that there is a high increase in indicators of three forms of allergic diseases - allergic rhinitis, bronchial asthma and emphysema.

Negative environmental factors of anthropogenic and technogenic impacts are dangerous not only for the current generation, but also contribute to a decrease in health reserves at the individual level, stimulating the growth of specific pathology and contributing to the emergence of new forms of "environmentally caused" diseases [1; p. 260]. Distributing the forms of morbidity by classes of nosological classes separately, the highest percentages of diagnosed patients are determined mainly in the northern regions and somewhat less in the southern regions of the Republic of Karakalpakstan. Among the pathologies of the respiratory system, more than 85% are ARVI and ARI, the rest is associated with chronic bronchitis, pneumonia, diseases of the tonsils and

adenoids, chronic pharyngitis [8; p. 66-71, 10; p. 6, 11; p. 169].

Modern atmospheric air pollution salt-dust takeaway from the bottom of the dried Aral Sea bottom in real time, and dust storms lead to pathological changes in the respiratory system in the population, namely to exacerbation of chronic diseases, chronic bronchitis, bronchial asthma. The annual analysis of the incidence of bronchial asthma and status asthma showed that the highest intensive rate is observed in Karakalpakstan - 66.7 per 100 thousand populations, and this is almost 2 times higher than the national average [2; p. 1-19, 3; p. 58-59]. The incidence of bronchial asthma is based on genetic and environmental factors [6; p. 38-42, 7; p. 24]. There are studies in the course of which attempts were made to establish which factors and under what conditions play a leading role, but a definitive answer has not yet been found [16; p. 341-347].

According to scientists, bronchial asthma is nevertheless considered as an ecologically caused disease, since air pollution with various pollutants and xenobiotics can cause a "protest" of the disease [7; p. 24, 14; p. 28]. At the same time, nonspecific irritation of the respiratory system can be caused by aerosol substances in concentrations exceeding the permissible level of MPC, and the sensitivity of people to allergens

pathology, which is, apparently, a logical consequence of a radical change in a person's lifestyle [9; p. 23-25].

Allergic diseases are a globally complex and serious problem of all mankind and, according to the WHO forecast, in the 21st century they will occupy one of the first places in terms of prevalence in the structure of diseases. Every year about 35% of the world's population seek medical help with clinical manifestations of allergies [18; p. 222-224]. The analysis of the prevalence of allergic pathology on the example of the territory of the Republic of Karakalpakstan showed that the highest level was registered in the northern regions - Kungrad, Takhtakupyr, and also in the city of Nukus (Fig. 1).

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The large-scale urbanization process, the wide and intensified development of industry and the associated environmental pollution caused a massive "chemical attack" on the human body [4; p. 77-79, 5; p. 400].

allergic rhinitis and bronchial asthma [4; p. 77-79, 5; p. 400].

The analysis made it possible to present the dynamics of the incidence of allergic pathology among the population of the Republic of Karakalpakstan (Fig. 1-2). Thus, it was found that the maximum incidence of allergic rhinitis among the population was noted in 2008-2009. and 2015-2016, after which the indicator slightly decreased (Fig. 1).

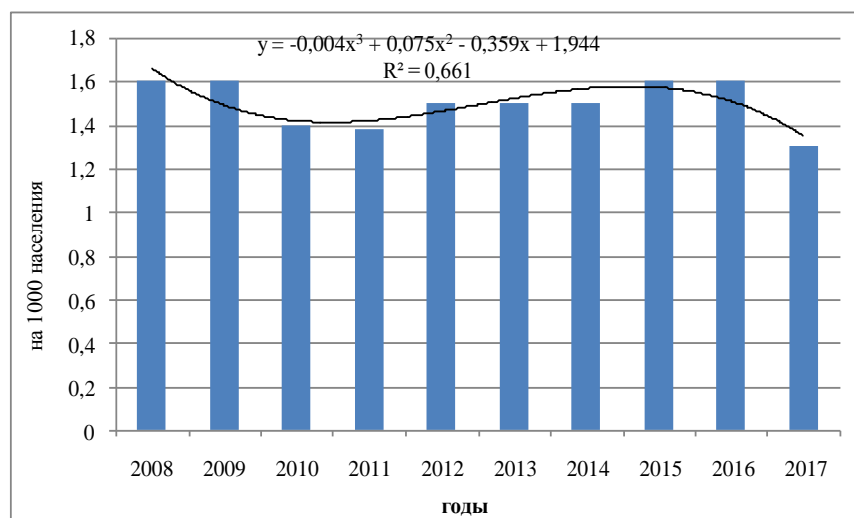


Fig. 1. Dynamics of the incidence of allergic rhinitis among the population of the Republic of Karakalpakstan (indicator per 1000 people)

The analysis of the dynamics of the incidence of bronchial asthma (Fig. 2) also shows a steady decrease

in the incidence of bronchial asthma among the population of the Republic of Karakalpakstan.

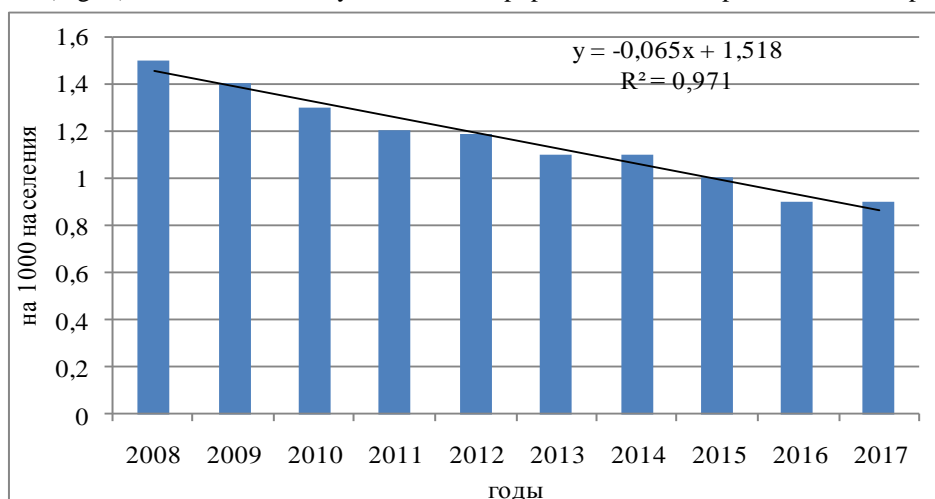


Fig. 2. Dynamics of the incidence of bronchial asthma among the population of the Republic of Karakalpakstan (indicator per 1000 people)

Further, we revealed a tendency of an increase in the incidence of emphysema among the population

of the Republic of Karakalpakstan during the study period (Fig. 3).

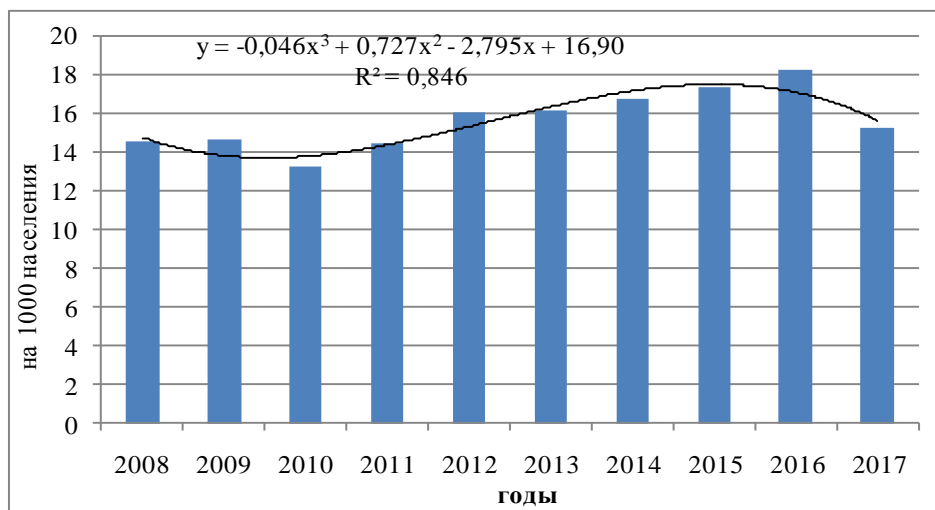


Fig. 3. Dynamics of the incidence of emphysema among the population of the Republic of Karakalpakstan (indicator per 1000 inhabitants)

So, since 2010, a sharp rise in the incidence rate (up to 16.0 per 1000 people) has been revealed, after which there is again a stable increase in this indicator. At the same time, we also examined the dynamics of the

incidence of allergic rhinitis among the population of Karakalpakstan, depending on territorial differentiation for 2008 - 2017. (fig. 4).

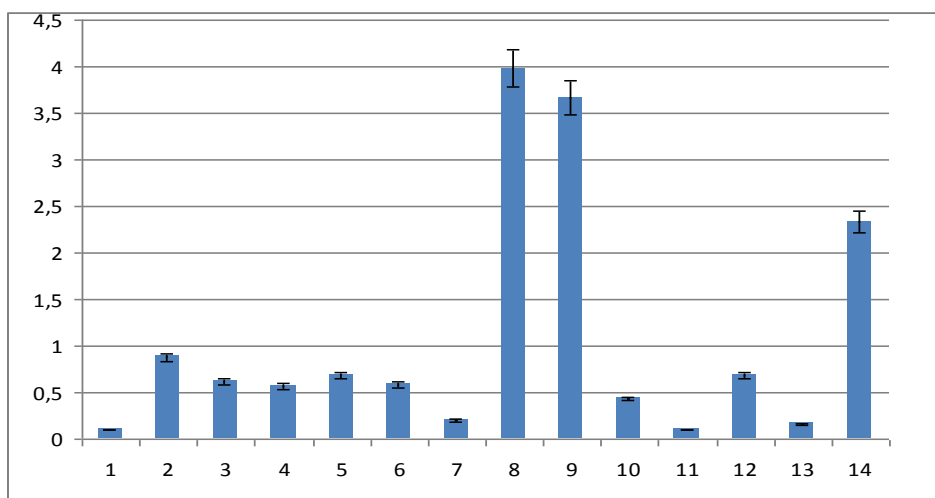


Fig.4. Dynamics of the incidence of allergic rhinitis among the population of the Republic of Karakalpakstan, depending on the areas of residence (rate per 1000 population)

Note:

- | | |
|----------------------|------------------------|
| 1. Turtkul district | 8. Kungrad district |
| 2. Beruniy region | 9. Muynak region |
| 3. Ellikkala region | 10. Nukus region |
| 4. Amudarya region | 11. Kegeyli region |
| 5. Khojeli region | 12. Chimbay region |
| 6. Shumanai district | 13. Karauzyak district |
| 7. Kanlykul district | 14. Takhtakupyr |



The obtained results of the analyzes showed that the analysis of the dynamics of the incidence of three forms of allergic diseases (allergic rhinitis, bronchial asthma and emphysema) revealed that the highest level of these diseases is detected among the population of the northern regions in territories with high aerogenic pollution - Kungrad, Muynak and Takhtakupyr regions.

The increased level of three forms of allergy morbidity among the population has the main reasons associated with air pollution by various natural and anthropogenic pollutants. For the correctness of our conclusion, it is necessary to identify the most sensitive and informative tests to identify the risk of the development and spread of allergological processes in the inhabitants of the Southern Aral Sea region. Next, we analyzed the indicators of the peripheral blood of BSA to identify biological indicators of the ecological disadvantage of the region's environment.

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