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RESULTS OF STUDY AND ASSESSMENT OF MODERN CLINICAL COURSE OF BRONCHIAL ASTHMA IN FERGANA VALLEY

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Annotation
A review of the literature is presented and the "global burden of bronchial asthma" in different regions and populations is presented based on a large-scale analysis. Ways to improve the disease prevention system are described and recommended. Scientific materials are important in determining preventive research and practices.

Keywords: Bronchial asthma, prevention, screening strategies.

Annotation
Адабиётлар шархи баён қилинган ва кенг – кўламли тахлил асосида «бронхиал астманинг глобаль юки» турли минтақа ва популяцияларда кўрсатилган. Касалликка қарши профилактика тизимини такомиллаштириш йўллари баён

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қилинган ва тавсия этилган. Илмий материаллар профилактика йўналишидаги тадқиқотлар ва амалиётларни белгилашда ахамият касб этишади.

Keywords: Bronchial asthma, prevention, screening strategies.

Abstract

According to the recommendations of WHO and ARIA (2002, 2008), in any research on bronchial asthma (BA), first of all, its accurate etiological and pathogenetic diagnosis should be ensured. To evaluate the traditional clinical course, the following are recommended: 1) history, examination of external respiratory function (TNF) and physical examinations to determine the possibility of bronchial obstruction and its recovery; 2) study and evaluation of traditional (XOS) symptoms (expiratory shortness of breath -(ENQ), wheezing, cough, chest fullness - (CHF), night symptoms) [1, 2, 3, 4].

In this way, the features of the modern clinical course of bronchial asthma were studied and evaluated in the conditions of the Fergana Valley in one direction of 20-year epidemiological monitoring.

Research material and methods: Research materials were taken from Andijan branch departments of the Republican Scientific Center for Emergency Medical Care, which represents the entire valley. Epidemiological monitoring of patients with BA was organized during 2001-2020. A total of 1,663 patients (594 men and 1,069 women) were involved: 321 18-44-year-olds, 504 45-59-year-olds, 570 60-74-year-olds, and 268 75-90-year-olds. Complex examination methods (epidemiological, clinical, biochemical, instrumental) were used.

GINA criteria (2009) were used to diagnose and evaluate BA. BA control level was assessed according to the number of points on the AST test (Asthma Control Test): • 25 points indicate full control of BA; • 20-24 points- BA partially controlled; • ≤19 points confirms the passage of uncontrolled BA [Chichkova N.V. et al., 2019].

The statistical significance of the research data was studied using Epi info, SPSS statistics and Excel 2021 of the Microsoft office suite of programs. Since the disease was evaluated by qualitative indicators, quantitative factors were divided into strata and converted into qualitative indicators, and in order to determine the statistical significance of the data, 95% confidence interval (95% II) was taken to extrapolate the risk ratio (RR) in order to determine the statistical significance of the data, according to the Pearson test Xi2 and R were calculated. Hazard ratios and 95% confidence intervals determined in quality indicator factors were compared in logarithmic increments in Forest Plot diagrams.

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Obtained Results and Conclusions

Table 1 shows the 20-year changes in the characteristics of the clinical course and traditional symptoms of BA in the population of women aged 18-90 years.

1 – table 20-year changes in the clinical course of bronchial asthma among the 18-90-year-old population in the conditions of Andijan

Audit years	Traditional symptoms of BA										Total course of symptoms	
	ЭНҚ		wheezing		Cough		KQT		Nocturnal symptoms			
	n	%	n	%	n	%	n	%	n	%	n	%
2001 year	75	16,5	77	17,00	110	24,2	62	13,7	130	28,6	454	37,93
P value	<0,05		<0,05		<0,05		<0,05		<0,05		<0,05	
2020 year	116	16,00	123	17,00	181	25,00	98	13,60	205	28,40	723	60,40
2001 – 2020 y.y	191	16,23	200	17,00	291	24,70	160	13,60	335	28,50	1177	100,0

The traditional course of BA is confirmed by the prevalence of 37.93% at the first examination and is observed at the level of 60.40% after 20 years, that is, an increase of 22.5% (R<0.05). In 2001 and 2020, the traditional symptoms of BA are described comparatively differently: ENQ from 16.5 and 16.0 percent (0.5 decreased by percent; R<0.05), wheezing from 17.0 and 17.0 percent, cough from 24.2 and 25.00 percent (increased by 0.8 percent, R<0.025), ENT from 13.7 and 13.6 percent (0, with a decrease of 1%; R<0.05) and night symptoms from 28.6 and 28.4% (with a decrease of 0.2%; R<0.05).

In the 20-year follow-up, in the examined contingent, i.e., in Andijan population aged 18-90, traditional symptoms of BA are noted with a significant difference and high frequency; ENQ 16.23 percent, wheezing 17.0 percent, cough 24.70 percent, CTE 13.60 percent, and nocturnal symptoms 28.50 percent. For comparison, no such study was found in the literature, that is, a study devoted to the study of the clinical course of BA in 20-year monitoring.

1 – the analyzes carried out in the content mentioned in the picture are shown and described in women.

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1 – picture. Frequency and 20-year evolution of traditional symptoms of BA in the female population

The analysis proved that the detection of traditional symptoms of BA in women aged 18-90 increased from 23.89% to 39.43% or increased by 14.5% in 20 years (R<0.05).

Lead symptoms were typically reported during the follow-up years: ENQ 15.30 percent, wheezing 18.1 percent, cough 24.8 percent, CTE 13.5 percent, and nocturnal symptoms 28.4 percent.

According to the 20-year monitoring analysis, the traditional symptoms of BA are confirmed with the following level and evolution between 2001 and 2020: ENQ from 16.1 and 14.8 percent, that is, with a decrease of 1.3 percent (R<0.05); wheezing from 17.5 and 18.4 percent (with an increase of 0.9 percent; R<0.05), cough from 24.5 and 25.0 percent (with an "increase" of 0.5 percent; R<0.05), CQT was 12.9 and 13.8 percent (with a 4.8 percent increase; R<0.05) and nocturnal symptoms were 29.0 and 28.0 percent (with a 1.0 percent decrease; R<0.05).

The clinical description of the 20-year epidemiological monitoring of BA in the male population is presented in Table 2.

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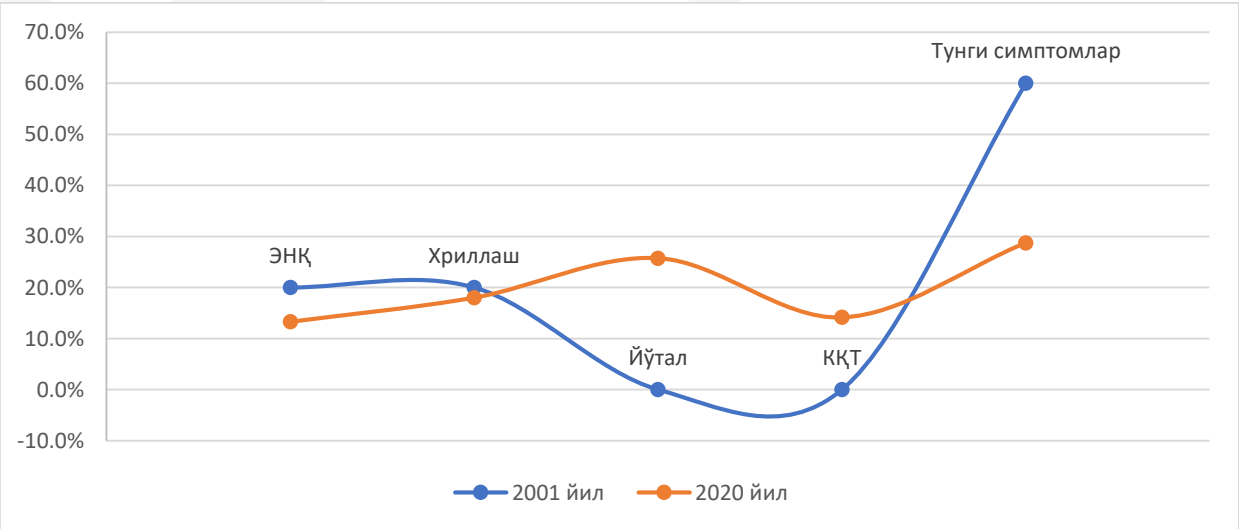
2 – table.A 20-year description of the clinical course of BA with characteristic changes in the male population

Audit years	Traditional symptoms of BA										Total symptomatic course	
	ENQ		wheezing		Caugh		KQT		Nocturnal symptoms			
	n	%	n	%	n	%	n	%	n	%	n	%
2001 year	29	17,3	27	16,1	40	23,8	25	14,9	47	28,0	168	14,04
P value	<0,05		0,13		<0,05		0,16		<0,05		<0,05	
2020 year	46	18,3	36	14,3	63	25,1	33	13,1	73	29,1	251	20,97
2001 – 2020 Years	75	17,90	63	15,0	103	24,6	58	13,8	120	28,6	419	100,0

14.04 percent (in 2001) and 20.97 percent (in 2020) of male population with traditional symptoms of BA. This is a significantly lower rate compared to women. But it is necessary to make a comment, in 20 years, the percentage of traditional passing has increased by 6.9% among men (R<0.05). Traditional symptoms are confirmed in the following frequencies: ENQ 17.90 percent, wheezing 15.0 percent, cough 24.6 percent, CTE 13.8 percent, and nocturnal symptoms 28.6 percent.

In the first year of the investigation (2001) and the last year (2020), the main symptoms of BA are observed with changes and differences: ENQ from 17.3 and 18.3 percent (R<0.05), wheezing from 16.1 and 14.3 percent (R = 0.13), cough from 23.8 and 25.1 percent (R<0.05), ENT from 14.9 and 13.1 percent (R = 0.16), and nocturnal symptoms from 28.0 and 29.1 percent (R<0.05). Therefore, in most cases, the expression of BA with a traditional clinical picture is increased in men.

20-year changes in the clinical course of BA were also evaluated in different age groups. (Figure 2 shows the epidemiological description of this process in young people).



2 – picture. Clinical course and 20-year changes of BA in a young population

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It is clear from the linear review that the prevalence of BA with traditional symptoms in the population aged 18-44 years is determined by the frequencies of 0.42 percent (in 2001) and 19.47 percent (in 2020), or increased by 19.0 percent over 20 years (R<0.05). Its main symptom reporting rate was: ENQ 13.45%, wheezing 18.1%, cough 25.2%, CTE 13.9% and nocturnal symptoms 29.4%.

In 2001 and in 2020, the detection and evolution of traditional symptoms in young people is expressed as follows: ENQ is detected in 20.0 and 13.3 percent (6.7% decrease; R<0.05), wheezing is recorded in 20.0 and 18.0 percent (decreased by 2.0%; R<0.05), cough from 0.00 and 25.8% (increased to more than 25.0%, R<0.05), ENT from 0.00 and 14.2% (14, 0% increase; R<0.05) and nocturnal symptoms from 60.0 and 28.8% (27.0% increase; R<0.05).

The detection of traditional symptoms decreased to 60.0 percent, and 40.0 percent of the points were represented by "growth" over 20 years.

Epidemiological description of the modern course of AD in the adult population (45-59 age group) is presented in the following table 3.

3 – table Clinical course of BA in the adult population and its 20-year changes

Audit years	Traditional symptoms of BA										Totally traditional	
	ENQ		wheezing		Cough		KQT		Nocturnal symptoms			
	n	%	n	%	n	%	n	%	n	%	n	%
2001 year	29	16,3	34	18,9	43	23,9	24	13,3	50	27,8	180	15,04
P value	<0,12		0,05		<0,05		0,19		<0,05		<0,05	
2020 year	32	15,2	41	19,4	52	24,6	28	13,3	58	27,5	211	17,63
2001 – 2020 Years	55	15,28	67	18,6	88	24,4	49	13,6	101	28,1	360	100,0

In the adult population, numerically interpreted in table 5.3, traditional withdrawal symptoms are confirmed at the following levels: ENQ 15.28%, wheezing 18.6%, cough 24.4%, CTE 13.6% and nocturnal symptoms 28.1%.

The traditional clinical course of BA in these ages increased from 15.04 percent (in 2001) to 17.63 percent (in 2020) (R < 0.05). Separate symptoms are also confirmed with such evolution, according to 20 years of follow-up, with different frequencies: ENQ from 16.1 and 25.2 percent (with an increase of 9.1 percent; R = 0.12), wheezing in 18.9 and 19.4 percent (with an increase of 0.5 percent; R < 0.05), cough from 23.9 and 24.6 percent (with an increase of 0.7 percent; R < 0.05), ENT from 13.3 and 13.3 percent (R = 0.19) and nocturnal symptoms from 27.8 and 27.5 percent (with a decrease to 0.3 percent; R < 0.05).

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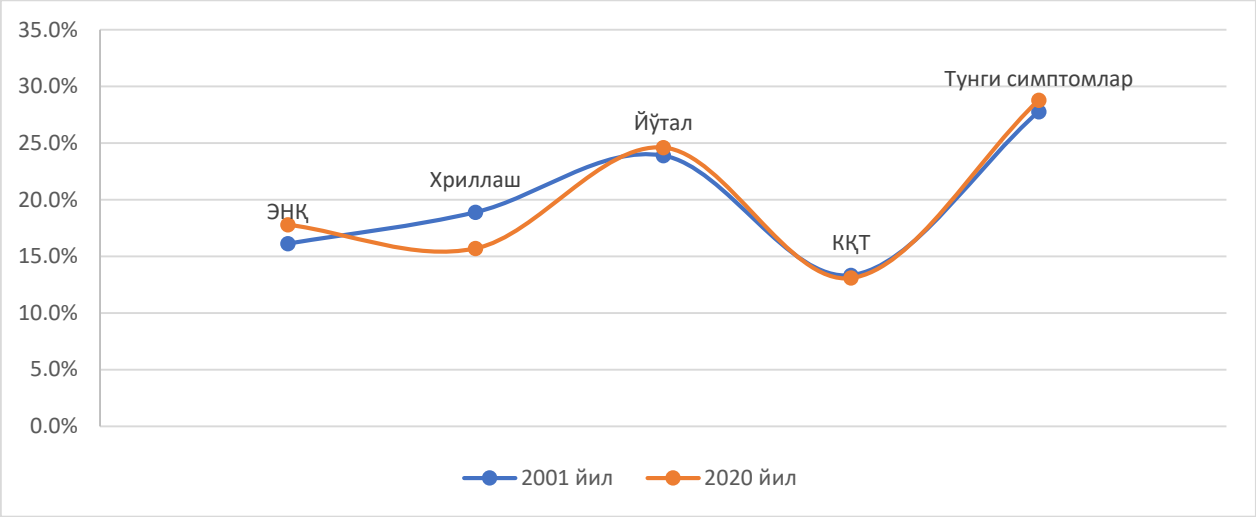
Figure 3 shows a 20-year description of the modern course and traditional symptoms of BA in the population of gerontological age (60-74 years old) in Andijan conditions.



3 – picture. A 20-year description of the clinical course and changes of BA in a gerontological age population.

It has been confirmed that the traditional symptoms of BA are noted in the following frequencies in the population of Andijan aged 60-74: • ENQ - 16.98 percent (from 16.1 percent in 2001 and 17.8 percent in 2020; R = 0.39); • wheezing - 17.3 percent (from 18.9 percent in 2001 and 15.7 percent in 2020; R = 0.46); • cough 24.3 percent (from 23.9 percent in 2001 and 24.6 percent in 2020; R = 0.56); CQT was 13.2 percent (13.3 percent in 2001 and 13.2 percent in 2020; R = 0.84) and nocturnal symptoms were 28.3 percent (27.8 percent in 2001 and 28.8 percent in 2020; R = 0.50). In the 20-year monitoring, the traditional prevalence of BA in the population of this age increased from 15.04% to 15.96% (R = 0.41). Table 5.4 presents a 20-year description of the clinical course of BA in the elderly population

4 – table Traditional symptoms of BA among 75-90 year old population distribution frequency and their 20-year changes

Audit years	Traditional symptoms of BA										Total conventional clinical course	
	ENQ		wheezing		Cough		KQT		Nocturnal symptoms			
	n	%	n	%	n	%	n	%	n	%	n	%
2001 year	22	18,3	16	13,3	31	25,8	17	14,2	34	28,3	120	10,03
P value	<0,49		0,05		<0,05		0,15		<0,07		<0,05	
2020 year	19	21,6	10	11,4	22	25,0	12	13,6	25	28,4	88	7,35
2001 – 2020 Years	41	19,71	26	12,5	53	25,5	29	13,9	59	28,4	208	100,0

From the data of table 4, it is known that in the population aged 75-90, the clinical course of BA is expressed by traditional symptoms with a prevalence of 10.03 percent (in 2001) and 7.35 percent (in 2020), that is, a decrease of 2.68 percent (R < 0.05). Alokhida symptoms are confirmed in the following frequencies: ENQ 19.7%, wheezing - 12.5%, cough 25.5%, CTE 13.9% and nocturnal symptoms 28.4%.

These results are important in coordination of preventive treatment plans with regard to BA and preventive activities based on forecasting, as well as "urgent-chronic" pharmacotherapy.

The results of the study and evaluation showed the following: • in the male population, ComF associated with chronic asthma (BAAComF) is detected with frequencies of 6.60 percent (year 2001) and 7.10 percent (year 2020), or represented by an increase of 0.5 percent (R = 0 ,5);.

UAE KomF components are noted in different prevalence percentages: AG 15.85 percent, YuIK 0.6 percent, OSOQ 69.5 percent, pneumonia 7.9 percent, BSK 6.1 percent and KD2 0.00 percent; • The 20-year evolution of BAAKomF components is confirmed by the detection of the following frequencies: AG from 26.6 and 5.9 percent (with a decrease of 20.7 percent; R < 0.05); UIK is more than 1.3 and 0.00 percent (with a decrease of no more than 1.3 percent), OSOK is more than 51.9 and 85.9 percent (with an increase of 34.0 percent; R < 0.05), pneumonia is 7.6 and 8, from 2 percent (with an increase of 0.6 percent; R = 0.7), BSK from 12.7 and 0.00 percent (with a decrease not exceeding 12.7 percent), and QD2 from 0.00 and 0.00 percent. In men, 85.4 percent contribution to the formation of BAAKomF are considered to be diseases of AG and OSOK. In conclusion, it can be said that in the modern formation and clinical course of BA, its risk factors and related comorbid diseases affect 100.0%. Taking these into account can dramatically reduce or eliminate the risk of short-term and long-term complications of BA.

Summary

1. 13 risk factors that have a significant impact on the origin and course of BA in the valley conditions are confirmed (allergens, genetic predisposition to atopy, infectious agents, age group 18-44, occupational factors, comorbidity, air pollutants, age group 60-74, obesity, age group 75-90 , male gender, female gender). 50.0 percent of these factors have increased steadily over the last 20 years, and the prevalence among the 18-50-year-old population is 62.07 percent. During the years of observation, the frequency of their detection increased by 2.2 times. 2. The traditional symptoms of bronchial asthma are confirmed by significant differences and the following frequencies: expiratory shortness of breath 16.23 percent, wheezing 16.23 percent,

cough 24.70 percent, chest congestion 13.60 percent, night symptoms are determined from 28.50 percent. The traditional clinical course increased by 14.5% in women (from 23.89% to 39.43%) and 6.9% in men (from 14.04% to 20.97%) over the last 20 years. In 60% of female patients and 80% of male clients, it is confirmed that the disease has an unusual clinical expression, and asthmatic comorbidity draws attention as the leading cause of this. 3. In every fifth patient, bronchial asthma arises and passes on the basis of comorbidity. In the comorbidity of asthma, the contribution of arterial hypertension and chronic obstructive pulmonary disease is confirmed by 70.8 percent. The contribution of other diseases (QD2, UIK, pneumonia) is determined at low frequencies.

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