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31-YEAR DYNAMICS OF SCREENING AND PHARMACOCONTROL DESCRIPTION OF AWARENESS LEVEL OF HYPERTENSIVE CONDITIONS IN THE POPULATION OF ANDIJAN REGION AMONG ADOLESCENTS AND YOUTHS

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Abstract:
The analysis of the literature data on the use of modern organizational technologies for the prevention of hypertension is carried out. The basic principles and stages of diagnosis of this pathology, risk groups for the development of arterial hypertension, and features of the organization of preventive programs are considered. The basic principles of the application of the blood pressure selfmonitoring system in organizations and public places are considered.

Keywords: arterial hypertension, prevention of cardiovascular diseases, organizational technologies, self-monitoring of blood pressure, patient education, hypertension, prevention, scientific basis, screening, territor.

LOGIN. Many researchers have confirmed that the death rate from cardiovascular diseases has been increasing and is characterized by sharp changes since the end of the 20th century.

Based on the analysis of epidemiological studies conducted, researchers such as G.Ya. Maslennikova, Oganov R.G. (2018), Ye.V. Akimova et al. (2006), M.M. Kayumova et al. (2023), N.V. Pogosova et al. (2018), A.M. Akimov (2023) convincingly confirm that such trends are observed in most countries due to social and economic changes and psychosocial factors, most of which are recorded in relatively economically active age groups [8., 9, 7., 10., 1].

A.M. Akimov (2023) confirmed the importance of the type of work among the risk factors in the Arctic region, indicating its importance in maintaining the health of the population. The author indicated that in this region, high labor intensity, relatively long work hours, few days off, and minimal social and household welfare are among the risk factors [1].

Therefore, the need to conduct and/or continue epidemiological studies to develop a comprehensive program for the prevention of cardiovascular diseases in specific geographical and ecological regions, for example, in the Arctic, is also recommended by other researchers [5., 2., 3., 4., 12., 13., 15].

We believe that these opinions contain scientific logic and promising topics. Because over the years, the scope of certain diseases is expanding, while others are narrowing, and their accurate, mainly epidemiological studies and analysis are considered an extremely important scientific and practical direction. The reason is that the "new foundations" of medicine are built on the basis of such information and conclusions.

Until the beginning of the new century, for example, the idea that the Northern population, the indigenous population, did not suffer from diabetes was "dominant" in scientific sources.

According to data provided by the WHO, international migration has been showing a steady growth trend in recent years [14].

Therefore, the development and improvement of screening and prevention programs in this established migrant population (MAP) is an urgent issue or will become even more urgent in the future. The existing research leads or encourages this conclusion.

According to data published by the Federal State Statistics Service of Russia (2025) and A.S. Andreeva, I.S. Ivanova, Varshaver Ye.A. (2024), the migration flow in the Russian Federation averages 0.5 million people annually, and in most cases, the arrivals are from the CIS countries [11, 8].

Purpose of the study - The aim of the project is to develop regional scientific foundations for innovative prevention of hypertensive cases in Uzbekistan based on the 31st annual screening, taking into account scientific characteristics, and to implement new technologies that have improved treatment and control measures.

MATERIAL AND METHODS

As an object of research A population of 3,001 people (1,421 men and 1,580 women) was selected from the unorganized population aged 18-89 in Andijan region using a 10% random sample based on a table of

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random numbers and involved in AG monitoring from 1989 to 2020.

As a subject of research Venous blood and serum of patients were taken for biochemical analysis; international criteria for diagnosing AB and GH and analyzing risk factors for comorbid diseases, as well as full statistical modeling indicators were obtained, which serve as a scientific justification for regional prevention.

Research methods. Epidemiological, general clinical, instrumental (cardiac echocardiography, ECG, UTT, anthropometric measurements, tonometry), biochemical, pharmacoepidemiological, pharmacoeconomic, pharmacosurveillance, and statistical methods were used.

RESULTS

The 31-year dynamics of screening and pharmacocontrol descriptions of the level of awareness of hypertensive conditions in the population of different ages were studied.

Table 1 and Figure 1 and Table 2 and Figure 2 summarize, interpret and represent the data obtained in this regard in the population of different ages.

From them, it can be seen that in the general population, among young people aged 18-22 years of Andijan region, the level of awareness of the population on hypertensive conditions in I- and II-screening was 33.3% and 40.0% (P>0.05), the level of effective treatment of the population with arterial hypertension was 33.3% and 40.0% (P>0.05), the level of effective treatment of the population with arterial hypertension was 0.0% and 20.0% (P>0.05), the detection frequency was determined.

The levels of awareness of HS are confirmed by an increase of 6.7% in the AHN, a similar increase in the AHd, a trend of "growth" of 20.0% in the AHsd, and a 20.0% increase in the ABmde, with a 31-year change rate in adolescents [RR=0.73; 95% CI=1.64-0.33; χ2=0.29].

Table 1
Level of awareness of hypertension among the population aged 18-22, dynamics in 1989-2020

Screening year, HS screened population	Indicators of HS awareness study							
	AHN		AHd		AHsd		ABmde	
	n	%	n	%	n	%	n	%
I sc (n=6)	2	33,3	2	33,3	0	0,0	0	0,0
P	>0,05		>0,05		>0,05		>0,05	
II sc (n=5)	2	40,0	2	40,0	1	20,0	1	20,0
GenP (n=11)	4	36,4	4	36,4	1	9,1	1	9,1
RR=0,73; 95% ИИ = (1,64-0,33); χ^2 =0,29								

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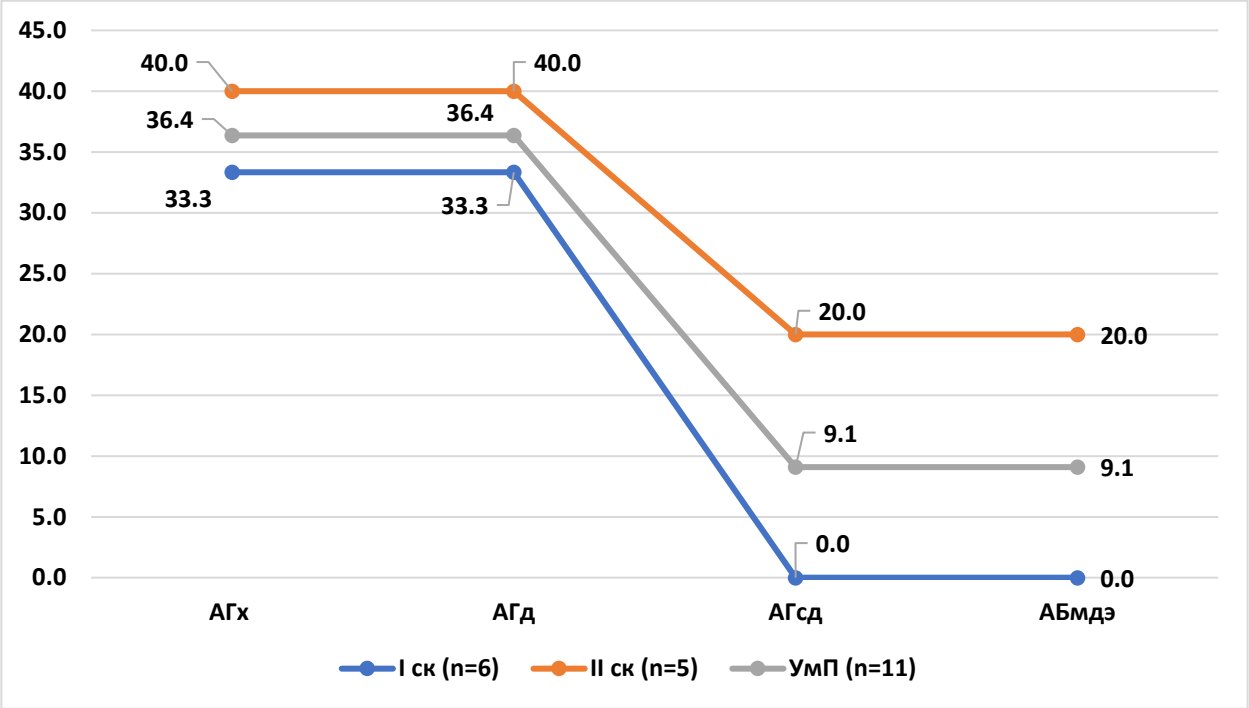

Figure 1. 31-year description of the level of awareness of hypertensive conditions in the population aged 18-22

In the general adolescent population, HS awareness studies report the following detection frequencies: 36.4% (AHN), 36.4% (AHd), 9.4% (AHsd) and 9.1% (ABmde).

Table 2
Level of awareness of hypertension among the population aged 23-44, dynamics in 1989-2020

Screening year, HS screened population	Indicators of HS awareness study							
	AHN		AHd		AHsd		ABmde	
	n	%	n	%	n	%	n	%
I sc (n=381)	61	16,0	59	15,5	24	6,3	7	1,8
P	>0,05		>0,05		>0,05		>0,05	
II sc (n=171)	22	12,9	22	12,9	6	3,5	2	1,2
GenP (n=552)	83	15,0	81	14,7	30	5,4	9	1,6
RR=1,11; 95% ИИ = (1,32-0,94); χ^2 =1,67								

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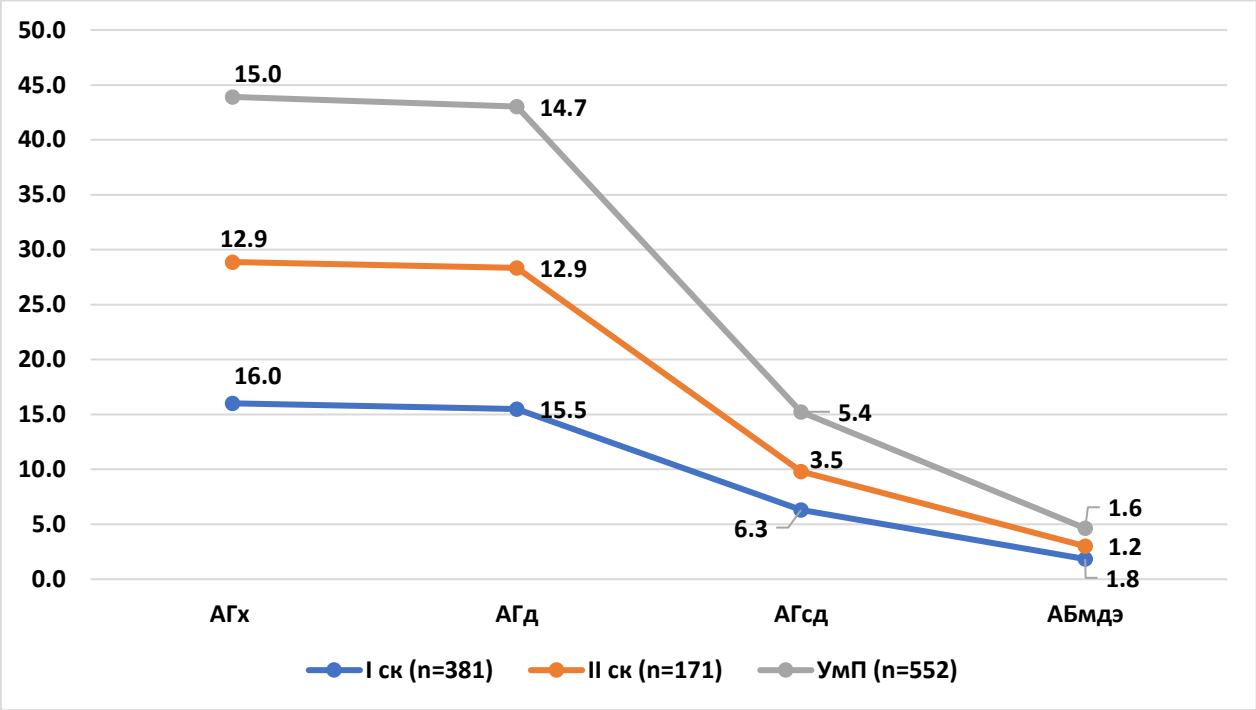

Figure 2. 31-year description of the level of awareness of hypertensive conditions in the 23-44-year-old population

The same substantive and directional statistical analyses were performed in a young population (23-44 years old) (Table 2 and Figure 2) and the levels of awareness of the presence of hypertensive conditions - the frequencies of detection of AHN, AHd, AHsd, and ABmde were studied or conclusions were drawn.

The frequencies of awareness of HS among the unorganized population of Andijan region aged 23-44 were determined as follows: AHN – from 16.0% (at I-screening) and 12.93 (at II-screening; with a decrease of 3.9%, (P>0.05); AHd – from 13.5% and 12.9%, with a decrease of 2.6% (P>0.05); AHsd – from 6.3% and 3.5%, with a decrease of 2.7% (P>0.05); ABmde – from 1.8% and 1.2%, with a tendency to decrease by 0.6% (P>0.05) [RR=1.11; 95% CI=1.32-0.94; χ2=1.67].

The level of awareness of hypertension in the 23-44-year-old population is observed with varying indicators: 15.0% (AHN), 14.7% (AHd), 5.4% (AHsd) and 1.6% (ABmde).

Taking into account these differences, the activation of primary prevention of HS in the young population makes it possible to increase the effectiveness of non-drug hypertension control, reaching 36.3%, according to our analysis.

CONCLUSION

According to the results of the 31-year screening study, hypertensive crisis, types GK-I and GK-II are confirmed with a frequency of 37.9% (with a decrease from 68.43% to 32.51%), 14.5% (with a decrease from 55.4% to 40.9%) and 14.5% (with an increase from 44.6% to 59.1%).

The manifestation of the crisis course is significantly different and is noted at higher frequencies in aborigines, men, 45-59, 60-74 and 75-89 years old.

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