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31-YEAR DYNAMICS OF THE SCREENING LEVEL OF AWARENESS OF THE ABORIGINAL AND IMMIGRANT POPULATION REGARDING HYPERTENSIVE CONDITIONS AND PHARMACOLOGICAL PRESCRIPTION (EXAMPLE OF ANDIJAN REGION)

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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, territory

Introduction

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.

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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].

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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 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 level of awareness of hypertension among Aboriginal people aged 18-89 and its dynamics from 1989 to 2020 are presented in Table 1 and Figure 2.

The 4 types of screening and pharmacovigilance characteristics of the level of awareness according to I- and II-screening are confirmed in the Aboriginal population with the following detection frequencies: AHN – from 52.6% and 14.5%, with a decrease to 37.1% ($P<0.001$); AHsd – from 13.2% and 7.0%, with a decrease to 6.7% ($P<0.05$); ABmde – from 3.5% and 2.1%, with a decrease to 1.4% ($P>0.05$).

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Table 1 Level of awareness of hypertension among the Aboriginal population aged 18-89, 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=1754)	556	52,6	547	51,8	139	13,2	37	3,5
$P_{1,2}$	<0,001		<0,001		<0,05		>0,05	
II sc (n=956)	282	14,5	279	14,4	136	7,0	40	2,1
GenP (n=2710)	838	27,9	826	27,5	275	9,2	77	2,6
RR=1,03; 95% ИИ = (1,52-0,79); χ^2 =45,6								

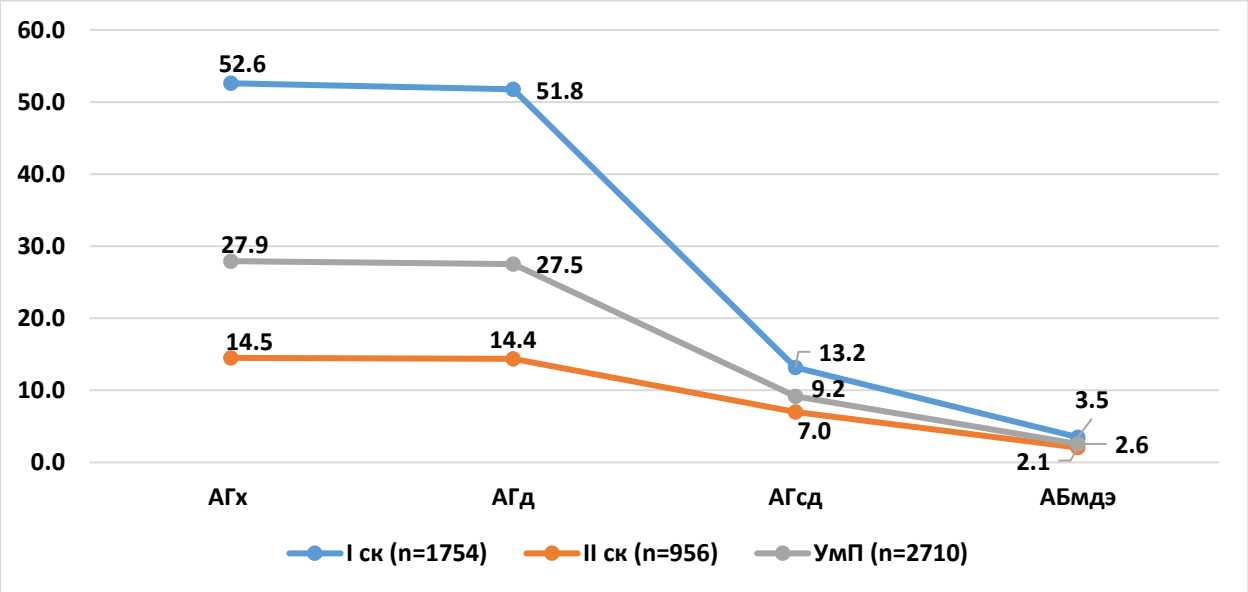

Figure 2. A 31-year description of hypertensive awareness in the Aboriginal population (in %)

In the Aboriginal population, AHN is reported at prevalence rates of 27.9%, AHd is reported at 14.4%, AHsd is reported at 7.0%, and ABmde is reported at 2.1%. The incidence of variation is 20.9% [RR=1.03; 95% CI=1.52-0.79; γ2=45.6].

The level of awareness of the foreign population about the presence of hypertensive conditions, according to I- and II-screening, i.e., according to the results of the 31-year epidemiological monitoring of the unorganized population

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of the Adygea region aged 18-89 (such data are presented and numerically interpreted in Table 2 and Figure 2), is characterized by the following detection frequencies: AHN - from 31.1% and 33.7% (P>0.05), with an increase of 2.6%; AHd - from 31.1% and 33.7%, i.e., with an increase of 2.6% (P>0.05); AHsd - from 8.9% and 10.9%, i.e., with an increase of 2.0% (P>0.05); ABmde - from 2.1% and 3.0%, i.e., with an increase of 0.9% (P>0.05).

Table 2 Level of awareness of hypertension among the immigrant population aged 18-89, dynamics in 1989-2020

Screening year, HS screened population	Indicators of HS awareness study								Indicators of HS awareness study
	AHN		AHd		AHsd		ABmde		
	n	%	n	%	n	%	n	%	
I sc (n=190)	59	31,1	59	31,1	17	8,9	4	2,1	
P	>0,05		>0,05		>0,05		>0,05		
II sc (n=101)	34	33,7	34	33,7	11	10,9	3	3,0	
GenP (n=291)	93	32,0	93	32,0	28	9,6	7	2,4	
RR=1,14; 95% ИИ = (2,14-0,60); χ^2 =3,84									

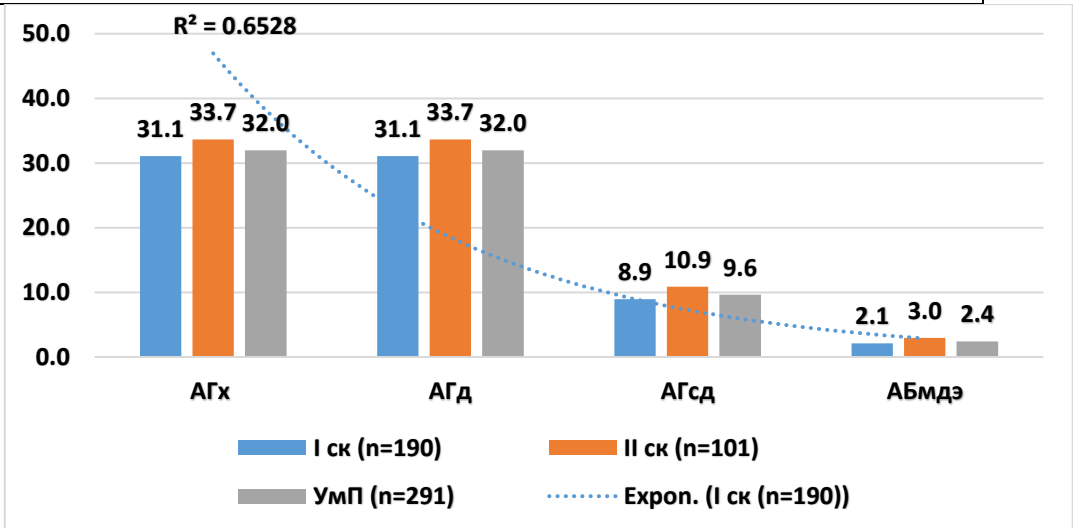

Figure 2. Expression of the level of awareness of hypertensive conditions in the female population at the age of 31 (in %)

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The study of awareness in the newly diagnosed GenP was confirmed by a 16.0% difference in the prevalence of hypertensive cases: AHN – 32.0%, AHd – 32.0%, AHsd – 9.6% and ABmde – 2.4% [RR=1.14; 95% CI=2.14-0.60; $\chi 2$=3.84].

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.

REFERENCES

1. Акимов А.М. Некоторые факторы хронического социального стресса у мужчин, занятых экспедиционно-вахтовой формой труда на арктических территориях Тюменского региона (пилотное исследование). Сибирский научный медицинский журнал. 2023;43(3):104-112.
2. Акимов А.М. Физическая активность и ҳарактер труда в популяции мужчин трудоспособного возраста. Омский научный вестник. 2015; 2(136):238-240.
3. Акимов А.М., Гакова Е.И., Каюмова М.М. и др. Табакокурение и его ассоциации с отношением к здоровью мужчин 25—54 лет, работающих экспедиционно-вахтовым методом в Арктическом регионе Западной Сибири. Профилактическая медицина. 2024;27(4):32-37.
4. Акимов А.М., Каюмова М.М., Гакова Е.И. и др. Отношение к своему здоровью в открытой популяции среднеурбанизированного города Западной Сибири, ассоциации с распространенностью ИБС: гендерные особенности. Сибирский научный медицинский журнал. 2021;41(4):95-102.
5. Акимова Е.В., Гафаров В.В., Каюмова А.Р. Физическая активность и отношение к профилактике среди мужчин, занятых мобильным трудом в Арктической зоне России. Международный журнал сердца и сосудистых заболеваний. 2024;12(43):19-26.

Modern American Journal of Medical and Health Sciences
ISSN (E): 3067-803X
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Website: usajournals.org

6. Акимова Е.В., Кузнецов В.А., Гафаров В.В. Риск сердечно-сосудистой смерти в различных социальных группах открытой популяции Тюмени. Профилактика заболеваний и укрепление здоровья. 2006;9(4):33-37.
7. Каюмова М.М., Акимов А.М., Бессонова М.И. и др. Ассоциации стресса в семье, параметров отношения к здоровью и его самооценка у работающих экспедиционно-вахтовым методом в Арктике. Профилактическая медицина. 2023;26(10):49-54.
8. Масленникова Г.Я., Оганов Р.Г. Выбор оптимальных подходов к профилактике неинфекционных заболеваний в рамках международного сотрудничества. Кардиоваскулярная терапия и профилактика. 2018; 17(1):4-9.
9. Оганов Р.Г., Масленникова Г.Я. Демографические тенденции в Российской Федерации: вклад болезней системы кровообращения. Международный журнал сердца и сосудистых заболеваний. 2013;1(1):4-9.
10. Погосова Н.В., Бойцов С.А., Оганов Р.Г. и др. Клинико-эпидемиологическая программа изучения психосоциальных факторов риска в кардиологической практике у больных артериальной гипертонией и ишемической болезнью сердца (КОМЕТА): первые результаты российского многоцентрового исследования. Кардиология. 2018;58(9):47-58.
11. Федеральная служба государственной статистики. Информационноаналитические материалы. Численность и миграция населения Российской Федерации. Ссылка активна на 06.02.25.
12. Curry SJ, Krist AH, Owens DK, et al. US Preventive Services Task Force. Risk Assessment for Cardiovascular Disease with Nontraditional Risk Factors: US Preventive Services Task Force Recommendation Statement. JAMA. 2018;320(3):272-280. https://doi.org/10.1001/jama.2018.8359.
13. Tunstall-Pedoe H, Kuulasmaa K, Mahonen M, et al. Contribution of trends in survival and coronary-event rates to changes in coronary heart disease mortality: 10-year results from 37 WHO MONICA project populations. The Lancet. 1999;353:1547-57.

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ISSN (E): 3067-803X
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Website: usajournals.org

14. World report on the health of refugees and migrants: summary. Geneva: World Health Organization; 2022. Accessed November 27,2024. https://iris.who.int/bitstream/handle/10665/360466/9789240054868-rus.pdf.
15. Yao B-C, Meng L-B, Hao M-L, et al. Chronic stress: a critical risk factor for atherosclerosis. Journal of International Medical Research. 2019;47(4): 1429-1440. https://doi.org/10.1177/0300060519826820.