

**FEATURES OF THE SPREAD OF SECONDARY DISABILITY DUE TO ARTERIAL  
HYPERTENSION IN THE KHOREZM REGION**

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✓ *Resume*

*One of the most important and serious medical and social problems is hypertension and its spread in the developed countries of the world, including our republic, as well as in the Khorezm region, where our research was carried out, where there was some unfavorable situation in relation to the environment.*

*In many scientific studies, only the epidemiology of arterial hypertension is indicated, special attention is paid to the clinical issues of its occurrence, but scientific materials on the degree of prevalence of disability associated with arterial hypertension have not been found.*

*The main goal of the study is to study and evaluate the occurrence and prevalence of secondary disability in patients suffering from arterial hypertension in the Khorezm region. The study revealed that hypertension is widespread in rural areas and it has a tendency to increase. It requires special attention that the highest rates of secondary disability in both rural and urban areas are in the 51-60-year-old age group.*

*Keywords: Arterial hypertension, disability, rehabilitation work, prevalence, working capacity, quality of life, mortality.*

**ОСОБЕННОСТИ РАСПРОСТРАНЕНИЯ ВТОРИЧНОЙ ИНВАЛИДНОСТИ ПРИ  
АРТЕРИАЛЬНОЙ ГИПЕРТЕНЗИИ В ХОРЕЗМСКОЙ ОБЛАСТИ**

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✓ *Резюме*

*Одной из важнейших и серьезных медико-социальных проблем является артериальная гипертензия и ее распространение в развитых странах мира, в том числе в нашей республике, а также в Хорезмской области, где проводилось наше исследование, где сложилась неблагоприятная ситуация в мире. отношение к окружающей среде.*

*Во многих научных исследованиях указывается только эпидемиология артериальной гипертензии, особое внимание уделяется клиническим вопросам ее возникновения, но научных материалов о степени распространенности инвалидности, связанной с артериальной гипертензией, не найдено. Основная цель исследования - изучить и оценить возникновение и распространенность вторичной инвалидности у пациентов, страдающих артериальной гипертензией в Хорезмской области. Исследование показало, что артериальная гипертензия широко распространена в сельской местности и имеет тенденцию к увеличению. Особого внимания требует тот факт, что самый высокий уровень вторичной инвалидности как в сельской, так и в городской местности приходится на возрастную группу от 51 до 60 лет.*

*Ключевые слова: артериальная гипертензия, инвалидность, реабилитационная работа, распространенность, трудоспособность, качество жизни, смертность.*

**XORAZM VILOYATIDA ARTERIAL GIPERTENSIYADA IKILAMCHI  
NOGIRONLIKNING UCHRASHI TAHLILI**

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## ✓ Rezyume

*Eng muhim va jiddiy tibbiy-ijtimoiy muammolardan biri bu gipertoniya va uning dunyoning rivojlangan mamlakatlarida, shu jumladan respublikamizda tarqalishi, shuningdek bizning tadqiqotlar olib borilgan Xorazm viloyatida, ba'zi noqulay holatlar bo'lgan joyda. atrof-muhit bilan bog'liqligi.*

*Ko'pgina ilmiy ishlarda faqat arterial gipertenziya epidemiologiyasi ko'rsatiladi, uning paydo bo'lishining klinik masalalariga alohida e'tibor beriladi, ammo arterial gipertenziya bilan bog'liq nogironlikning tarqalish darajasi to'g'risida ilmiy materiallar topilmadi.*

*Tadqiqotning asosiy maqsadi Xorazm viloyatida arterial gipertenziya bilan og'rigan bemorlarda ikkilamchi nogironlikning paydo bo'lishi va tarqalishini o'rganish va baholashdir. Tadqiqot natijasida gipertenziya qishloq joylarda keng tarqalganligi va uning o'sish tendentsiyasiga ega ekanligi aniqlandi. Ham qishloqda, ham shaharda ikkinchi darajali nogironlikning eng yuqori ko'rsatkichlari 51-60 yoshdagi yosh guruhiga to'g'ri kelishiga alohida e'tibor talab etiladi.*

*Kalit so'zlar: Arterial gipertenziya, nogironlik, reabilitatsiya ishlari, tarqalishi, ish qobiliyati, hayot sifati, o'lim.*

## Introduction

The widespread prevalence of diseases of the cardiovascular system, including arterial blood pressure, among the population, is one of the processes that seriously jeopardize people's lives. In most countries, 55-56% of the cause of death, and 46% of disability (55% in Uzbekistan) correspond to diseases of the same class.

In our republic, too, the average life expectancy of people has increased, especially after independence, and it has a tradition of growth. With the increase in the number of elderly people, it is possible to observe an increase in the prognosis of diseases of the circulatory system, especially hypertension, and this requires an in-depth scientific analysis and evaluation of the issue before the health system, as well as improvement of its profile, early diagnosis.

According to the results of a study conducted in 45 countries of the world, in 2002, 972 million hypertensive patients were registered in the land registry in 2025, according to forecasts, this figure is 1.6 by 2025 mlrd.ni it is expected to organize. Scientists explain this situation with an increase in the number of adults of the same age, and it is predicted that their number (65 and above) will increase by 2030 year to 2 mihrab.

The prevalence of hypertension among women is to some extent related to the number of pregnancies and births. In those who gave birth to three children, this figure was 24,9%, in six – 26,8%, and in ten – 38,4%. Even in women who have had an abortion, a convincing increase in hypertension was observed (42,2%). Among those who did not observe the status of abortion, the rate was equal to -29,3% ( $R=0,005$ ).

This, in turn, requires greater attention to the population of the city and its lifestyle in improving the profile of hypertensive disease. Despite the fact that the complications of the

disease are significantly more severe, 58.9% of patients after medical and social rehabilitation with the say movement of doctors in treatment-prophylactic institutions were found to be suitable for Labor, 27% of patients were third and 13.9% of patients went out to II group disability, despite the hard actions taken.

Almost in most countries, the main part of the diseases of the circulatory system is blood pressure (melancholy) (later referred to as hypertension) and ischemic diseases of the heart. Arterial hypertension and, as among a dozen of its consequences, disability, definitely occupies a special place, which has a negative impact, first of all, on the normal life of the patient [1]. It was found that in some countries of the world with high labor productivity, 50% of people over 60 years of age were diagnosed with arterial hypertension. In the countries of Eastern Europe and Russia, an increase in the level of mortality, disability and stroke was found, which was 40.8% for men and 45.4% for women. [2].

According to research by L. E. Kuzmishin and others (2004) in the Russian Federation, the ratio of patients with arterial hypertension increased from 22,783 to 44,262 by 2002. In the same period, this figure increased from 3.45% to 6.98% among pensioners. It has significantly increased among the rural population-by 1.8 times, the main part of which was disabled people of group II. Among patients suffering from diseases of the circulatory system, 90-95% are patients with a diagnosis of arterial hypertension. The study of mortality among people diagnosed with diseases of the circulatory system showed that the highest level is mortality with a diagnosis of "Arterial hypertension". [4].

In 2010, 7634.4 cases of cardiovascular disease were recorded in every 100,000 adult population of the Republic, 40,6% of which was

hypertension (up to 3099.7) disease. This figure is equal to 33.1% in the Khorezm region, with every 100000 population – 3159.1 hypertensive patients registered. In Uzbekistan, the death rate from hypertension in 2009 was 17.7%. The number of recorded patients with hypertension increased by 1.4 mihrab in 2010 compared to 2005

According to the data of the cardiology center of the Republic of Uzbekistan, it is noted that the prevalence of hypertension is equal to 26.6% in the city, 14.4% in the village, as well as to 12.6% among men and 15.7% in women.

The severity of the course of hypertension and some of its complications is, again, its occurrence in most cases in combination with Ischemic heart disease and according to the results of a scientific study conducted by others (2015) in Tashkent, in 40-89-year-old population 64.2% of cases, hypertension was associated with another Ischemic heart disease.

Old population. In the remaining young groups, its difference is not so great. According to the results of the study conducted in the Novogorod region, the prevalence rate of hypertensive disease is 46.8%, on average, 7% higher than in Russia. Understand this situation with excess body weight in people. Especially its high level is observed in 60 – 69 years of age, with excessive body weight in women and the degree of hypertensive disease is noted to be 1.5 marotaba higher than in men.

In the majority majority literature it is noted that hypertension is more prevalent in older adults than it is exceeded by an increase in age. Its prevalence rate is 60 – 65%, in some cases 70% and above, especially among the population aged 55 and 60 - 65 years. Especially at this age, they note the fact that hypertension is combined with other concomitant diseases (Ischemic heart disease, diabetes, diseases of the endocrine glands), and in these cases the effectiveness of treatment is relatively low, as well as the course of the disease with irreversible complications

According to the scientific findings of others (2015), the prevalence rate of hypertension in the city of Tashkent was 35.7%, including 28.1% in men, 40.6% in women, and its increase was a convincing increase of 8.2% among the population of the population aged 20 – 29, 70 and over – 71.9% among adults.

The prevalence rate of the disease was 48.0%, the rate of its I was 24.7 %, the rate of II was 15.4 %, the rate of III was 7.3%. Another feature of hypertension is its relatively high incidence of adverse effects on the quality of life and lifestyle of patients. In the first place, the

disease negatively affects the physical, mental management, life, social activity, general health, feelings and psyche of the patient, and, most importantly, mental health, mood.

One of the reasons that cause hypertension in the Republic of Kazakhstan is the increase in excess body weight. Uttered in schools showed that 14.4% of schoolchildren found body weight available. In 7 classes 19% of ida, from 11 classes-30,4 ida, among adults 10% of IDA risk in 9 people, and in 7 classes -14,3% ida, in 11 classes -21,7% ida depression was observed and was registered as a predisposition to hypertensive disease. According to the results of separate scientific studies, after medical and social rehabilitation measures, 58.8% of patients recovered their ability to work, 27% of patients identified the III group of disability, 13.9% of patients identified the II group of disability.

If the prevalence rate of hypertensive disease in the Republic of Tajikistan is 15-24 years old - 4.7% in men, 25-34 years old – 5.5%, 35-44 years old – 16.0%, when observed an increase in age, this indicator in women is suitable 4.4%, 7.0%, 18.9%, 28.9%, and aged equal to 47.6 %.(2015)

In many studies analyzed literature, it is noted that the prevalence of hypertension among women, as well as women and children of the age of fertil, is even more frequent than in men. Although in men, the level of risk factors is relatively high, the prevalence of hypertension in women is shown with special emphasis in many literature

According to the World Health Organization, due to maternal mortality, hypertension is the second leading cause of morbidity after embolism and accounts for about 20 – 30% of maternal mortality. In developed countries, hypertension is noted in 5 – 15% of pregnant women. Currently, 41.1% of women with hypertension are observed and one of the most common diseases in diseases of the circulatory system is brought to take the first place for the causes of disability and death. It is noteworthy that in women who gave birth to diseases of the circulatory system, more than threeeraydi

On materials of the studied literature determined that many scientific studies reported only the epidemiology of hypertension, special attention was given to clinical questions when it occurs, however, the scientific material on the incidence of disability associated with hypertension, almost was not detected.

**The main purpose of our** study is to study and evaluate the occurrence and prevalence of

secondary disability in patients suffering from arterial hypertension in the Khorezm region.

### Material and methods

In order to study secondary disability due to arterial hypertension in the Khorezm region, extracts of patient reports from the medical labor expert Commission (MLEC) of two rural localities in the Khazarasp and Yangibazar districts and Urgench registered in the period 2014-2018 were studied, which amounted to an average of 747 patients, 582 of them received secondary disability.

Sanitary-statistical and social-hygienic methods were used for research and statistical processing of the obtained data.

### Result and discussion

In the study of statistical data for 2014-2018, 582 cases were registered, which amounted to 77.9% of people with disabilities due to arterial hypertension, i.e.  $49.7 \pm 2.05$  cases for every 10,000 population. We consider it appropriate to note that these indicators are significantly higher than those described in the studied literature. Primary disability is  $22.08 \pm 1.37\%$  of the total disability.

According to the results of the study, secondary disability due to arterial hypertension in men was 63.5%, for every 10,000 – 63.76, in women (36.5%) - 36.0, which in General in men,

secondary disability was shown to be higher by 1.8 times. This makes it possible to confirm that arterial hypertension is more widespread in men than in women. The presence of secondary disability due to arterial hypertension up to 20 years has not been registered. Also, there were no disabled groups I and II of men and women under the age of 30. It was confirmed that secondary disability in the population of both sexes also increases due to the increase in age to 60 years. It is reliably established that a high level of it is reached by the age of 51-60 years in men-375.0, in women-278.0 (per 10,000 population of these populations). We pay special attention to the fact that secondary disability (in men – 76.8%, in women – 96.4%) is observed among the able-bodied population, many of whom have completely or partially lost their ability to work, but do not need outside help. From the studied literature, it is reliably confirmed that many people with group II disability, after a number of rehabilitation measures, have improved their performance and can engage in easier work activities. In our study, it was determined that none of the disabled people were engaged in any kind of work at all. It was found that after the age of 60, the disability of patients in both sexes decreased due to their quality of life. This is especially evident for women who are aged 51-60 years, which is 278.0, and for women over 60 years old, it has decreased to 22.6.

**Table 1**

**Prevalence of secondary disability in different sex populations by age (per 10,000 population) (P±m)**

Gender	Age						Total
	up to 20 years	21-30	31-40	41-50	51-60	older than 60	
Men	-	$3,94 \pm 2,2$ $2,3 \pm 1,55$	$5,7 \pm 2$ $,51$	$288,0$ $\pm 4,61$	$375,0$ $\pm 4,44$	$242,1 \pm 3,73$	$63,7 \pm 3,30$
Women	-		$10,8$ $\pm 3,41$	$136,4$ $\pm 4,26$	$278,0$ $\pm 4,73$	$22,6 \pm 2,8$	$36,0 \pm 3,26$
Total	-	$3,12 \pm$ $1,87$	$8,25$ $\pm 2,96$	$182,2$ $\pm 4,43$	$326,5 \pm$ $4,58$	$132,35 \pm 3,26$	$49,85 \pm 2,88$

Data from table 1 show that at the age of 21-30 years and from 41-50 years-in 1.7, at the age of 51-60 years – in 1.3, at the age of 60 years - in 10.7 times secondary disability is more common in men than in women. Therefore, it is necessary to study in depth the social and hygienic conditions of the main prerequisites for the occurrence of arterial hypertension in men.

When studying secondary disability due to arterial hypertension among all disability groups of both populations, the main part falls on the II

disability group. As a result, for secondary disability, it is 90.7% for men and 85.4% for women. Group III disability is 7.0% for men and 3.6% for women. The specific weight of group III disability is 1.9%, 1.2%.

According to the results of scientific research conducted in the European part of the Russian Federation, the prevalence rate of GK is 39.7%, it is noted that it is equal to I – 49.2%, II – 29.4% and III - 14.1% .

Table 2

**Prevalence of secondary disability due to arterial hypertension among disability groups (per 10,000 population) (P±m)**

Age	Men			Women		
	I	II	III	I	II	III
up to 20 years	–	–	–	–	–	–
21 - 30	–	–	–	–	–	–
31 - 40	–	3,94± 1,7	–	–	2,4± 0,6	–
41 - 50	0,3 ± 0,3	4,75±1,29	0,3± 0,03	–	9,75±1,82	1,1±0,05
51 - 60	2,0 ± 0,3	207±4,5	19,0± 1,7	2,5± 0,6	116,5±3,74	17,1±1,73
older than 60	8,3 ± 1,3	338± 4,84	27,6±2,3	2,9±0,74	232,9±3,94	42 ± 2,44
	7,8 ± 2,7	220± 3,74	19 ± 2,33	–	22,6 ± 2,44	–
Total	1,2±0,07	57,8±3,14	4,5±1,34	0,43±0,01	30,0 ± 2,74	4,7 ± 1,1

In this situation, we draw attention to the fact that 98-90% of patients with secondary disability of group II due to arterial hypertension have a complete or partial loss of performance, this is a consequence of inadequate rehabilitation work with patients. We draw your attention to the fact that the transition of disabled people from one group to another has not changed during the studied years, the dynamics of recovery of patients and the transition from one group with

an increased risk of disability to another with a reduced risk of secondary disability has not changed in a positive way. As previously stated, in a number of disability groups, the highest rate is typical for the age group of 51-60 years, in particular, this is typical for men. When studying the place of residence of patients with disabilities, a number of characteristic features were also revealed.

Table 3

**Conditions of prevalence of secondary disability due to arterial hypertension in urban and rural areas**

Place of residence	Men			Total	Women			Total
	I	II	III		I	II	III	
town	1,4 ±0,45	37,8±2, 35	5,1±0, 86	45,1±2, 57	0,5±0,2 6	28,0±2, 0	9,4±1, 16	38,0±2,34
village	1,25±0, 48	83,0±3, 93	6,0±1, 06	90,4±4, 10	0,25±0, 021	36,15±2 ,57	2,3±0, 65	28,9±3,80

The table shows that the city has a high level of disability group I for men, and disability group III for women. Group II disability is more common in rural areas: men (83.0±3, 93) – 2.2 times, women (36.15±2.57) – 1.3 times. If we take secondary disability due to arterial hypertension, we find that both populations have significantly higher disability in rural areas and,

accordingly, it is revealed that both men and women have twice as high disability. From the above, we conclude that in rural areas, arterial hypertension is widespread and has a tendency to increase. It requires special attention that the highest rates of secondary disability in both rural and urban areas are in the 51-60-year-old age group.

## Conclusions

1. In the Khorezm region, secondary disability due to arterial hypertension per 10,000 population is  $56.7 \pm 3.10$ . Its prevalence is significantly higher than the data described in the literature we studied.

2. It was determined that secondary disability due to arterial hypertension in men ( $63.7 \pm 3.30$ ) compared to women ( $36.0 \pm 2.46$ ) is 8.1 times greater, in rural areas ( $78.3 \pm 3.80$ ) compared to cities ( $38.0 \pm 2.34$ ) was significantly higher.

3. The study of secondary disability due to arterial hypertension in a number of populations has shown that the highest level is in the age category of 51-60 years and accounts for 51% of the total number of registered disabled people. 75-80% of the disabled correspond to the able-bodied population.

4. The main part (89-90%) of secondary disability due to arterial hypertension was made up of group II invalids, among whom 99.1% previously also had group II disability.

5. It is significant that during all the years of the study, there were no significant changes in the disabled groups, which, in turn, requires special attention to strengthen rehabilitation measures for patients with arterial hypertension.

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**Entered 09.04. 2021**