



## Global Conference on Medical and Health Sciences

Hosted Online from Madrid, Spain

Date: 14<sup>th</sup> February, 2026

Website: <https://econferencia.com>

---

### STUDYING THE TENDENCY OF PATIENTS WITH CHRONIC HEART-VASCULAR AND RESPIRATORY DISEASES LIVING IN THE VILLAGE TO BE TREATED

(on the example of Samarkand region)

Khusinova Sh. A.<sup>1</sup>

Turaqulov R. I.<sup>2</sup>,

Gadaeva N. A.<sup>2</sup>

<sup>1</sup>Samarkand State Medical University, Samarkand, Uzbekistan

<sup>2</sup>Tashkent State Medical University, Tashkent, Uzbekistan

#### Abstract

The article examines the inclination of the rural population to treat cardiovascular and respiratory diseases using the example of the Samarkand region. This indicator was assessed using the widely used Morisky-Green questionnaire in the world. It is indicated that patients have a low propensity for treatment, one of the reasons for which is non-compliance with indications, as well as insufficient communication between the doctor and the patient. Successful management of chronic diseases requires not only effective medical procedures but also the active participation of patients in the treatment process. The main factor determining the effectiveness of treatment for non-communicable chronic diseases is predisposition to treatment. Therefore, it is advisable to accelerate the integration of modern technologies into practical medicine.

**Keywords:** Cardiovascular diseases, healthcare system, arterial hypertension, ischemic heart disease, chronic heart failure, bronchial asthma, chronic obstructive pulmonary disease, propensity for treatment.



## Global Conference on Medical and Health Sciences

Hosted Online from Madrid, Spain

Date: 14<sup>th</sup> February, 2026

Website: <https://econferencia.com>

World Health Organization experts are calling the increasing spread of non-communicable chronic diseases the epidemic of the 21st century [1]. Among these, diseases of the cardiovascular system and respiratory organs, including ischemic heart disease, arterial hypertension, chronic heart failure, bronchial asthma, and chronic obstructive pulmonary disease, occupy a leading position. In most cases, these diseases cause a sharp deterioration in patients' quality of life, an increase in the number of hospital readmissions, a steep rise in treatment costs, and death.

In most cases, arterial hypertension and ischemic heart disease, which are considered the main cardiovascular diseases, ultimately lead to complications of chronic heart failure. According to 2016 data, the number of patients affected by this condition exceeded 26 million people worldwide [2]. The expenditures constitute 2-3% of healthcare costs, and these figures are expected to double in the next 20 years [3]. Worldwide, including in our republic, due to the increasing number of elderly people, a sharp rise in expenses for this condition is predicted by 2030, similar to the United States of America (69.7 billion US dollars). According to 2016 data, more than \$208 billion was spent on the treatment of chronic heart failure by the global healthcare system [4].

### **Purpose of the study:**

Study of the propensity of patients with widespread chronic diseases to treatment in primary health care medical institutions in the villages of the Samarkand region.

### **Research materials and methods:**

Our study involved 1,043 patients residing in rural areas of the Samarkand region, diagnosed with hypertension (HT), coronary heart disease (CHD), chronic heart failure (CHF), bronchial asthma (BA), and chronic obstructive pulmonary disease



## Global Conference on Medical and Health Sciences

Hosted Online from Madrid, Spain

Date: 14<sup>th</sup> February, 2026

Website: <https://econferencia.com>

(COPD). Their average age was  $59.5 \pm 3.92$  years, comprising 515 men and 528 women. Among them, 211 patients with hypertension, 204 with coronary heart disease, 200 with chronic heart failure, 210 with bronchial asthma, and 218 with chronic obstructive pulmonary disease were observed. In accordance with the goals and objectives set in our scientific work, the adherence to treatment of patients with common chronic diseases in primary healthcare institutions was assessed using the Morisky-Green Medication Adherence Scale (MMAS-8). Table 1 below presents the widely recommended and generally accepted Morisky-Green questionnaire.

One of the significant problems in modern medicine is the incomplete adherence to generally accepted and recommended treatments by patients with chronic diseases, meaning low compliance with treatment, or the failure of doctors to prescribe them according to standards. Considering the great importance of disruptions in all links of this chain, we conducted a comparative study of treatment compliance among patients living in rural areas using the Morisky-Green questionnaire, and the obtained results are presented in Figure 1.

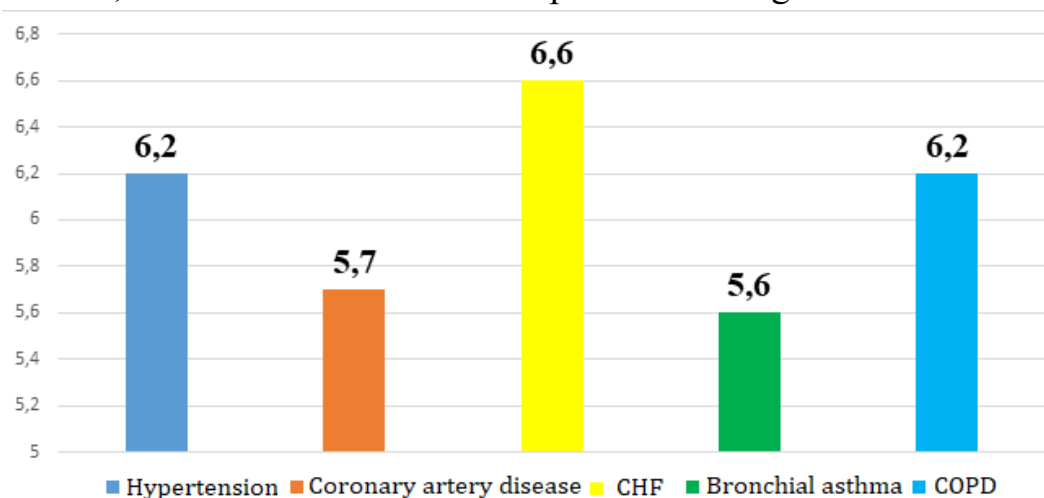


Figure 1. Treatment adherence indicators among patients residing in the observed village, as determined using the Morisky-Green questionnaire (score).



## Global Conference on Medical and Health Sciences

Hosted Online from Madrid, Spain

Date: 14<sup>th</sup> February, 2026

Website: <https://econferencia.com>

As shown in the figure, according to the results of a survey on hypertension, the inclination towards treatment among the rural population was  $6.2 \pm 0.25$ , for coronary heart disease  $5.7 \pm 0.3$ , for chronic heart failure  $6.6 \pm 0.3$ , for bronchial asthma  $5.6 \pm 0.3$ , and for chronic obstructive pulmonary disease  $6.2 \pm 0.2$  points. When these indicators were comparatively studied among the diseases, no significant difference ( $p > 0.05$ ) was observed.

### References

1. World Health Organization. Preventing chronic diseases: avital investment. WHO global report. - Geneva, Switz: World Health Organization, 2005.
2. Lee, D. S., Lee, J. S., Schull, M. J., Grimshaw, J. M., Austin, P. C., & Tu, J. V. (2016). Design and rationale for the Acute Congestive Heart Failure Urgent Care Evaluation: The ACUTE Study. *American Heart Journal*, 181, 60–65
3. Brown, D. A., Perry, J. B., Allen, M. E., Sabbah, H. N., Stauffer, B. L., Shaikh, S. R., Cleland, J. G. F., Colucci, W. S., Butler, J., Voors, A. A., Anker, S. D., Pitt, B., Pieske, B., Filippatos, G., Greene, S. J., & Gheorghiade, M. (2017). Expert consensus document: Mitochondrial function as a therapeutic target in heart failure. *Nature Reviews Cardiology*, 14(4), 238–250. <https://doi.org/10.1038/nrcardio.2016.203>
4. Angkananard, T., Anothaisintawee, T., Eursiriwan, S., Gorelik, O., McEvoy, M., Attia, J., & Thakkinstian, A. (2016). The association of serum magnesium and mortality outcomes in heart failure patients: A systematic review and meta-analysis. *Medicine (United States)*, 95(50), Article e5406. <https://doi.org/10.1097/MD.00000000000005406>