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FEATURES OF ADHERENCE TO PHARMACOTHERAPY AMONG LONG-LIVED URBAN AND RURAL RESIDENTS WITH CORONARY HEART DISEASE

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Abstract: This study is devoted to assessing the level of adherence to pharmacotherapy and its characteristics among long-lived urban and rural residents of different ages with coronary heart disease. The study examines patients' regular intake of prescribed medications, adherence to treatment recommendations, as well as differences between urban and rural populations. The obtained results will contribute to increasing the effectiveness of treatment in long-lived individuals, improving adherence to pharmacotherapy, and enhancing the quality of medical care based on an individualized approach.

Keywords: coronary heart disease, long-lived individuals, pharmacotherapy, medications, treatment effectiveness, urban population**,** rural population, age characteristics, medication adherence.

Introduction: The increase in life expectancy is making the issue of effective management of chronic diseases and adherence to treatment among long-lived individuals increasingly relevant. In particular, regular and appropriate adherence to prescribed pharmacotherapy in coronary heart disease is of great importance in preventing disease complications, improving quality of life, and ensuring treatment effectiveness. The social, medical, and lifestyle characteristics of long-lived individuals living in urban and rural settings may differ from each other. Therefore, studying the level of adherence to pharmacotherapy among long-lived individuals of different ages and assessing it in terms of urban and rural residence is of considerable importance for improving rational treatment approaches and enhancing the quality of medical care.

Objective: The objective of the study was to investigate the characteristics of adherence to pharmacotherapy among long-lived urban and rural residents with coronary heart disease.

Materials and Methods: As the study population, a representative sample of 824 individuals aged 90 years and older from an unorganized population group residing in the Bukhara Region of Uzbekistan was selected and analyzed **(**517 long-lived women and 307 long-lived men).

Results: The frequency of occurrence of individual levels of treatment adherence among long-lived rural and urban residents with CHD differs significantly and is characterized by the following distribution indicators: 1) DTRQB — 87.2% and 12.8%**,** i.e., differing by 74.4% [$p<0.05$; RR = 1.69; 95% CI = 2.43–1.18; $\chi^2 = 8.41$; r++ = 0.11]; 1**)** DERQmB — 81.6% and 18.4%**,** i.e., differing by 63.2% [$p<0.05$; RR = 1.08; 95% CI = 1.27–0.92; $\chi^2 = 1.15$; r++ = 0.04]; 2) DRQmB — 75.5% and 24.5%**,** i.e., differing by 51.0% [$p<0.05$; RR = 1.08; $\chi^2 = 1.02$; r++ = 0.04].

Due to the low level of treatment adherence, the risk of developing life-threatening coronary events among long-lived rural residents with CHD is 75.5%**,** whereas among long-lived urban residents it is 24.5% ($p<0.01$)**.** As can be seen from the presented data, the proportion of "patients adherent to treatment" was 95.7% in the >90–99-year age group, 4.3% in the >100-year age group, and 22.7% in the >90–100-year age group [$p<0.05$; RR = 1.0; 95% CI = 1.89–0.53; $\chi^2 = 0$; r++ = 0].

The detection frequency of "long-lived patients with CHD who are insufficiently adherent to treatment" in the indicated age groups was 95.1%, 4.9%, and 42.1%**,** respectively [$p<0.05$; RR = 0.88; 95% CI = 1.41–0.55; $\chi^2 = 0.39$; r++ = 0.02].

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"Patients non-adherent to treatment" among long-lived individuals with CHD were identified with a frequency of 96.2% in the >90–99-year age group, 3.8% in the >100-year age group, and 35.2% in the >90–100-year age group [$p<0.05$; RR = 0.93; 95% CI = 1.6–0.54; $\chi^2 = 0.12$; r++ = 0.01].

Conclusion: Among long-lived individuals with CHD, according to the level of inadequate adherence to treatment, the >90–99-year age category is considered a relatively high "risk factor" for the development of acute cardiovascular events.

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