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ANALYSIS OF THE INCIDENCE STATE OF MAIN CARDIOVASCULAR DISEASES BY DISTRICT OF TASHKENT CITY (FOR 2022)

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ABSTRACT

Cardiovascular diseases (CVD), including coronary heart disease, stroke, heart failure, peripheral arterial disease, and a number of other cardiovascular diseases, are the leading cause of global mortality and a major contributor to decreased quality of life [1]. In 2017, cardiovascular diseases were estimated to cause 17.8 million deaths worldwide, corresponding to 330 million years of life lost and an additional 35.6 million years of life lived with disability [2]. Nearly 80% of cardiovascular disease deaths worldwide occur in low- and middle-income countries (LMICs), where the burden of cardiovascular disease and risk factors is increasing as a result of the ongoing coronavirus-related epidemiology [3].

When combined with data on the prevalence of cardiovascular diseases and risk factors, aggregated health indicators can prove invaluable for cardiologists, other clinicians, and public health experts. They provide important population-level information that can guide actions to prevent, treat, and control cardiovascular diseases and risk factors at the global, regional, national, and subnational levels.

In this regard, regular analysis of cardiovascular disease incidence is an important component of the CVD control system. This determined the relevance and purpose of this study.

The aim of the study was to examine the incidence of major cardiovascular diseases among the population of Tashkent city by district in 2022.

Material and methods: The study was conducted from January to December 2022. Data from the Agency of Statistics under the President of the Republic of Uzbekistan and the Main Health Department of Tashkent City were used for the analysis. The frequency of registration of cardiovascular diseases in general and for individual nosology was analyzed in the context of districts of Tashkent city.

Results and discussion: The overall pattern of cardiovascular pathology in Tashkent in 2022 is as follows (Fig. 1).

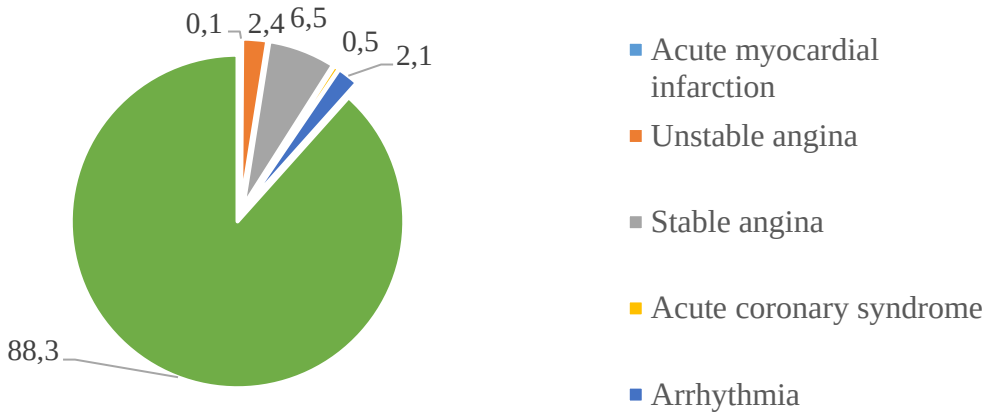

Figure 1. Share of various nosologies in the overall incidence of cardiovascular diseases in Tashkent in 2022.

As the diagram shows, hypertension leads to the overall incidence of cardiovascular diseases (88.3%), while the share of other nosology does not exceed 15%.

We then analyzed the incidence of cardiovascular diseases by district in Tashkent (for 2022). The data obtained are presented in Figure 2.

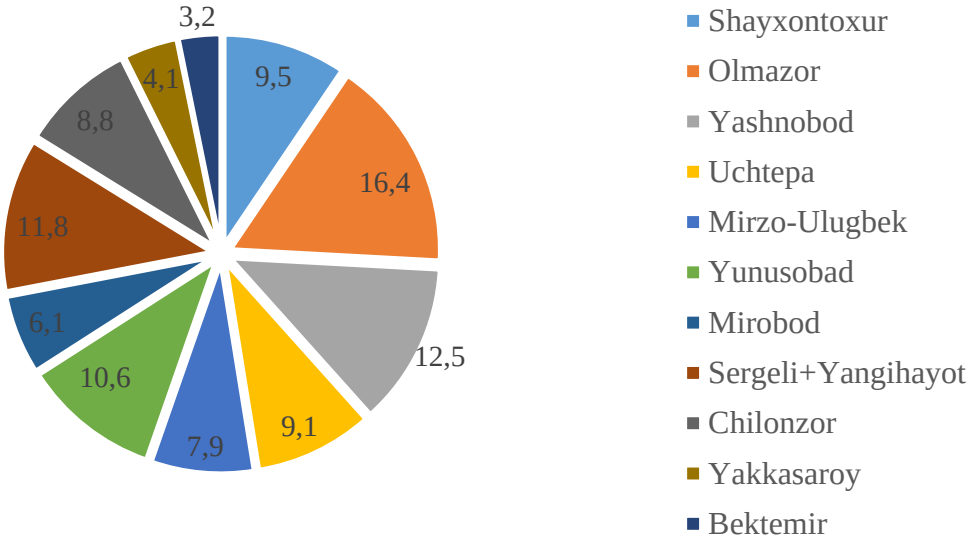

Figure 2. Incidence of cardiovascular diseases by district in Tashkent (for 2022).

As can be seen from the diagram, cardiovascular diseases were recorded somewhat more frequently (but not significantly, $p \leq 0.05$) in Olmazor (16.4%), Sergeli and Yangikhayot (11.8%), Yashnabad (12.5%), and Yunusabad (9.1%) districts, which is likely explained by the relatively large populations living in these districts.

The next stage of the study was to determine the proportion of individual

cardiovascular diseases in the overall structure by district in Tashkent (for 2022).

The distribution of acute myocardial infarction rates by district in Tashkent is presented in Figure 3.

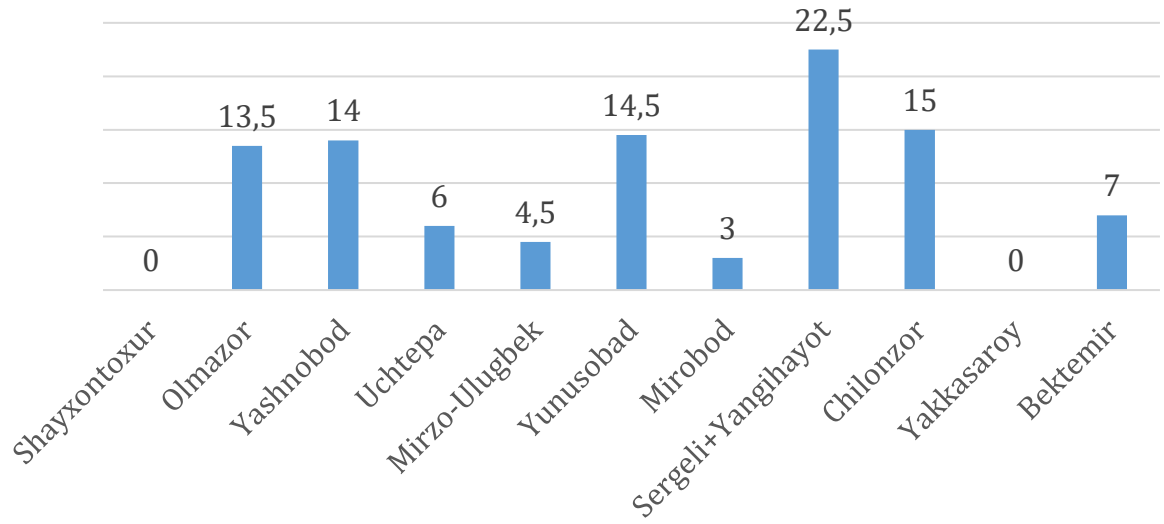

Figure 3. Share of registered acute myocardial infarctions (%) in Tashkent city districts in 2022.

The data in the figure shows that the Sergeli, Yangikhayot, Chilanzar, and Yunusabad districts of Tashkent city had the highest proportion of acute myocardial infarctions.

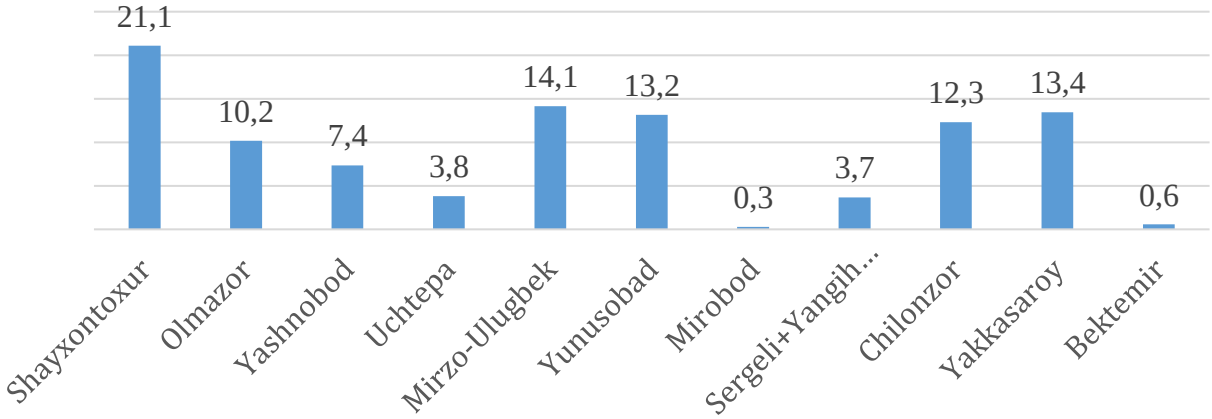

Fig. 4. The share of registrations of acute coronary syndrome (in %) in the districts of Tashkent city in 2022.

When analyzing the frequency of registration of acute coronary syndrome (Fig. 4), it was found that this diagnosis was most frequently registered in the Shaykhontohur region (21.2%), Mirzo-Ulugbek and Yakkasaray regions.

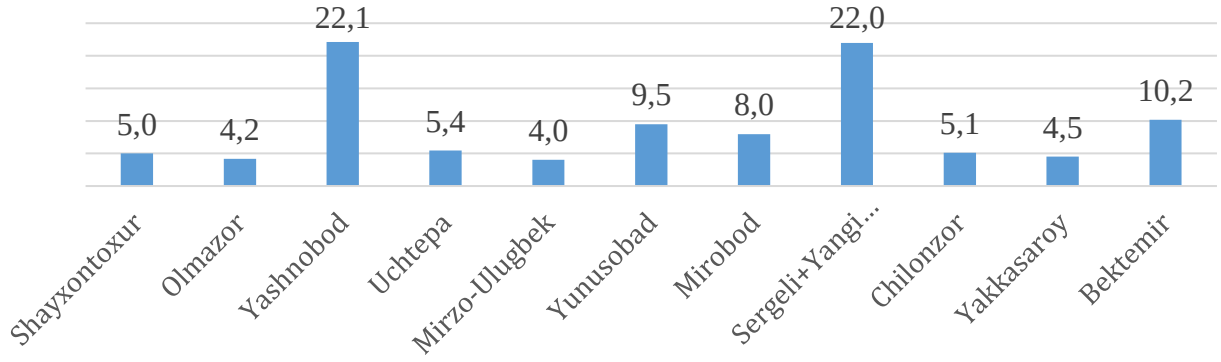

Fig. 5. Proportion of registered cases of coronary heart disease and unstable angina (%) in Tashkent city districts in 2022.

The proportion of coronary heart disease and unstable angina (Fig. 5) was higher in the Yanshnabad (22.1%) and Sergeli and Yangikhayot (22%) districts of Tashkent.

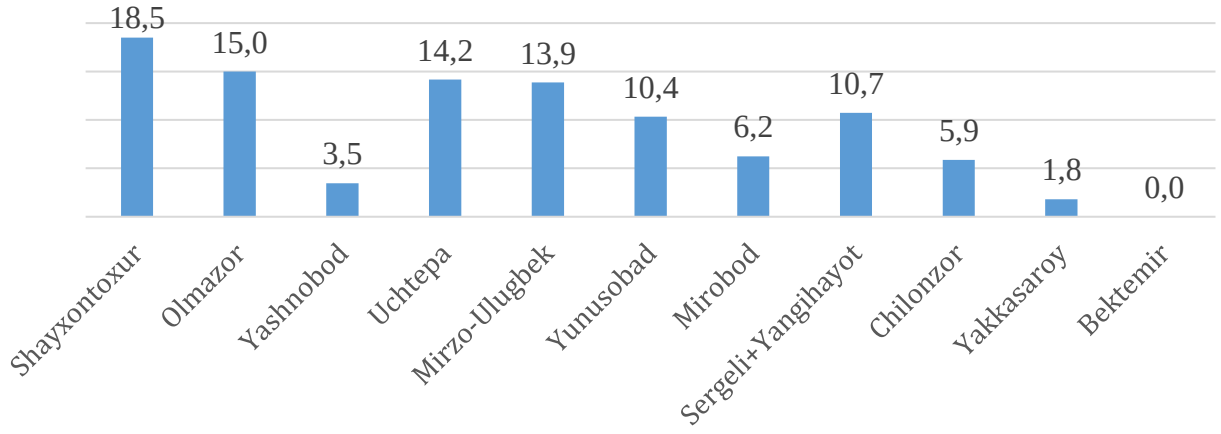

Fig. 6. Percentage of cases of coronary heart disease and stable angina registered (in %) in Tashkent city districts in 2022.

As can be seen from the diagram (Fig. 6), coronary heart disease and stable angina were most frequently registered in the Shaykhontohur (18.5%) and Olmazor (15%) districts.

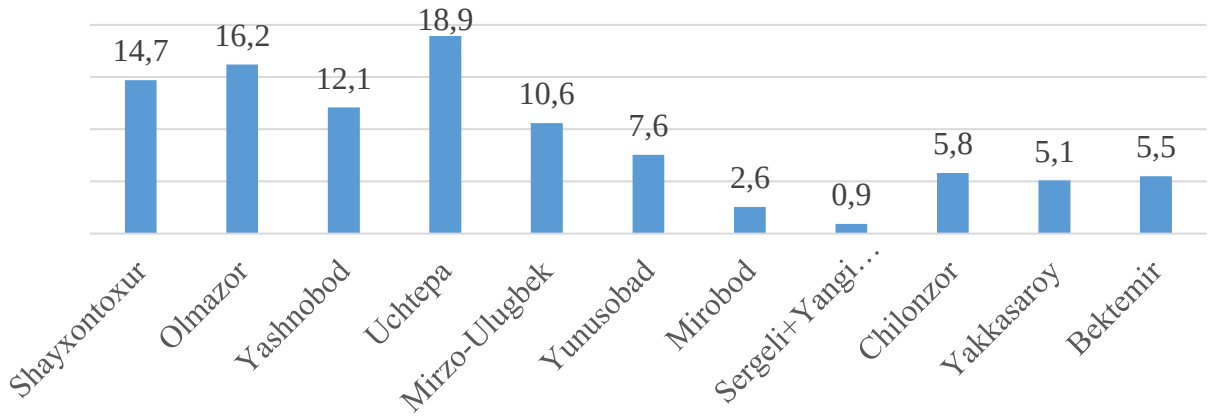

Figure 7. Share of registered coronary heart disease and rhythm disturbances (%) in Tashkent city districts in 2022.

Regarding the proportion of coronary heart disease with rhythm disturbances (Figure 7), the Uchtepa (18.9%) and Olmazor (16.2%) districts led the way.

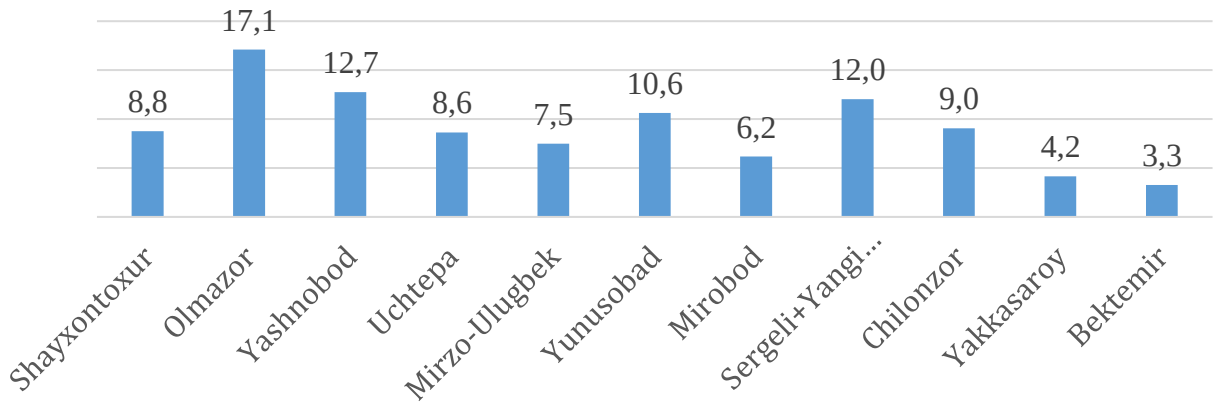

Figure 8. Share of hypertension cases registered (%) in Tashkent city districts in 2022.

The share of hypertension cases registered (Figure 8) was higher in the Olmazor (17.1%) and Yashnabad (12.7%) districts.

Thus, the distribution of the shares of cardiovascular disease cases registered was quite uneven across Tashkent city districts. However, the Olmazor, Yashnabad, and Sergeli/Yangikhayot districts of Tashkent city had the highest incidence of cardiovascular disease in 2022.

Conclusion: Thus, hypertension was the leading cause of cardiovascular disease in Tashkent in 2022 (88.3%), with the Olmazor, Yashnabad, and Sergeli/Yangikhayot districts of Tashkent having the highest incidence of cardiovascular disease. This necessitates further in-depth study of the causes and risk factors to reduce the risk of complications and improve quality of life.

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