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EPIDEMIOLOGICAL TRENDS AND REGIONAL VARIABILITY OF ISCHEMIC HEART DISEASE AMONG WOMEN IN UZBEKISTAN

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Abstract. *Cardiovascular diseases remain the leading cause of mortality globally, with a steadily increasing prevalence among women. This study aimed to assess epidemiological trends and regional differences in ischemic heart disease (IHD) among women in Uzbekistan. A retrospective analysis of national healthcare data from 2022 to 2024 was performed. A significant rise in cardiovascular morbidity was observed, accompanied by a marked increase in IHD prevalence among women. The findings demonstrate pronounced regional disparities, highlighting the need for targeted preventive strategies and early diagnostic interventions.*

Keywords: *cardiovascular diseases; ischemic heart disease; women; epidemiology; regional variability.*

Introduction. Cardiovascular diseases represent a major public health burden, particularly in low- and middle-income countries [1-3]. Ischemic heart

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disease is the most common cardiovascular condition and a leading cause of adverse clinical outcomes. Among women, the disease is often underdiagnosed due to atypical presentation and delayed clinical recognition, which contributes to increased morbidity and mortality [3-5].

Objective. To evaluate temporal trends and regional variability in the prevalence of ischemic heart disease among women in Uzbekistan.

Materials and Methods. A retrospective epidemiological study was conducted using official national healthcare statistics for 2022–2024. The analysis included total cardiovascular morbidity, the proportion of ischemic heart disease, and regional distribution among women. Statistical analysis involved calculation of growth rates, comparative analysis, and assessment of significance using χ^2 test, with $p < 0.05$ considered statistically significant.

Results. The total number of cardiovascular disease cases increased from 2,618,312 in 2022 to 2,712,791 in 2023, corresponding to a 3.6% increase ($p < 0.05$). Among women, the total burden of cardiovascular diseases rose by 11.6%, indicating a disproportionate growth in this population.

The prevalence of ischemic heart disease among women demonstrated a significant upward trend, increasing from 133,325 cases in 2022 to 162,800 in 2023 ($p < 0.05$), with a further rise to 181,998 cases in 2024, reflecting an overall increase of 36.5% over the study period.

Regional analysis revealed substantial heterogeneity. The highest prevalence rates were observed in Tashkent region (up to 29.4%), followed by Kashkadarya and Namangan regions, where a rapid increase in incidence was noted. In particular, Namangan region demonstrated a more than twofold increase in 2023, representing one of the most pronounced growth patterns.

Conversely, relatively low and stable rates were identified in Syrdarya and Navoi regions (approximately 2–2.5%). Statistical analysis confirmed significant interregional differences ($p < 0.05$), indicating the influence of

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demographic, socioeconomic, and healthcare-related factors on disease distribution.

Conclusion. A significant and progressive increase in the prevalence of ischemic heart disease among women in Uzbekistan has been identified. The observed regional disparities suggest the need for differentiated public health strategies. Targeted prevention programs, improved early diagnosis, and region-specific healthcare planning are essential to reduce the burden of cardiovascular diseases in the female population.

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