



Editor's Welcome

Dear colleagues!

We are pleased to present to you the 46th issue of the International Heart and Vascular Disease Journal, which features editorial, original, and review articles.

In the "Leading article" section, we offer a comprehensive review article analyzing the dynamics of cardiovascular disease (CVD) mortality across 12 regions of the world from 1990 to 2022. The article also discusses differences in CVD mortality based on countries' economic development and the impact of various risk factors.

While there has been a global decline in CVD mortality, the reduction is significantly more pronounced in economically developed regions compared to low-income countries. Public health policy must focus on the most impactful risk factors in specific country groups.

In the "Original Articles" section, two studies are presented. The first investigates the relationship between the autofluorescence index and residual risk based on different cholesterol-lowering regimens in patients with coronary heart disease (CHD). This prospective study involved 120 patients with CHD who underwent a cascade cholesterol inhibition therapy (monotherapy, dual, and triple therapy). The authors suggest that determining the autofluorescence index in clinical practice may serve as a convenient non-invasive tool for indirect assessment of residual risk in CHD patients and for tailoring lipid-lowering therapy. The second study assesses the impact of COVID-19 on the cardiovascular system of athletes and the dynamics of cardiovascular parameters during physical activity after recovery. A total of 62 marathon runners aged 43.8 ± 3.5 years, with training history ranging from 3 to 7 years, were examined. Despite a mild course of illness, changes in the cardiovascular system during physical activity peaked at 2–3 months post-COVID and persisted for at least six months. These findings are important for decision-making regarding return to training and competition.

The "Review Articles" section features three contributions. The first article presents modern categories of immunological markers of direct myocardial damage, secondary angiogenesis, myocardial fibrosis, and general vascular risk. These markers have significant potential for evaluating the course of chronic heart failure in the context of rheumatoid arthritis.

The second review explores the effectiveness of echocardiographic screening and discusses various indicators that may predict the development of CVD. These include assessments of systolic and diastolic function, as well as detection of hypertrophy and cardiac dilation. The article compares screening strategies, their clinical relevance, and implications for asymptomatic patients. The third review highlights the prevalence, risk factors, early predictors, and diagnostic features of childhood hypertension in South Africa. The prevalence ranges from 1.3% to 32.6%, with a particularly steep rise among adolescents. Family history of hypertension, low birth weight, and rapid weight gain during infancy and early childhood are the most important early predictors. Addressing childhood hypertension in South Africa requires committed engagement from the healthcare system, with a focus on prevention, early detection, and effective management.

We invite everybody to collaborate with the journal. Our team is waiting for your original papers, review articles, discussions, and opinions about problems, treatment and prophylaxis recommendations.

Mekhman N. Mamedov

Editor-in-Chief

President of the "Cardioprogess" Foundation