

## THE ORIGIN OF CONGENITAL HEART DEFECTS AND THE BASICS OF MODERN CLINICAL DIAGNOSIS

Yusupov Ziyodulla

Lutfullin Said

Raxmatillayev Rabbonjon

Samarkand State Medical University Clinical Resident 1st year.

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**The urgency of the problem:** At least three-quarters of deaths from cardiovascular disease worldwide occur in low- and middle-income countries. People in these countries often lack access to primary care programs for early detection and treatment of those with cardiovascular risk factors. Patients suffering from cardiovascular disease and other noncommunicable diseases in low- and middle-income countries have less access to effective and equitable health services that meet their needs. As a result, the disease is often diagnosed at an advanced stage in these countries, and many people die from CVD and other noncommunicable diseases at a younger age, often in the most productive years of life. The poorest people in low- and middle-income countries are hardest hit. At the individual household level, there is growing evidence that cardiovascular disease and other noncommunicable diseases contribute to household poverty through devastating health care costs and high out-of-pocket costs. At the macroeconomic level, CVDs impose a significant burden on the economies of low- and middle-income countries.

A key measure to reduce CVD rates is to integrate cardiovascular disease interventions into health care packages as part of universal health coverage, although in many countries health systems require significant investment and focus to effectively address CVD.

Data from 18 countries show that hypertension control programs can be implemented effectively and cost-effectively at the primary care level, resulting in reduced cardiovascular disease and stroke. Patients with cardiovascular disease need access to appropriate technologies and medications. Essential medications that should be available include:

**Research methods and objects:** Cardiovascular diseases (CVD) are a group of diseases of the heart and blood vessels. They include:

coronary heart disease - a disease of the blood vessels that supply blood to the heart muscle;  
cerebrovascular disease - a disease of the blood vessels that supply blood to the brain;  
peripheral artery disease - a disease of the blood vessels that supply blood to the arms and legs;

rheumatic heart disease - damage to the heart muscle and heart valves as a result of rheumatic fever, which is caused by streptococcal bacteria;

Congenital heart disease - structural deformities of the heart present from birth that affect its normal development and function; and

Deep vein thrombosis and pulmonary embolism - blood clots that form in the veins of the legs and can travel to the heart and lungs.

Heart attacks and strokes are usually acute illnesses that are primarily caused by a blockage in a blood vessel that blocks the flow of blood to the heart or brain. The most common cause is the formation of fatty deposits on the inner walls of the blood vessels that supply blood to the heart or brain. A stroke can occur as a result of bleeding from a blood vessel or the formation of a blood clot.

The most important behavioral risk factors for heart disease and stroke are poor diet, low physical activity, and harmful use of tobacco and alcohol. One important environmental factor is air pollution. Behavioral risk factors can include high blood pressure, high blood glucose or lipids, and being overweight or obese. These “intermediate risk factors” can be identified in primary care and indicate an increased risk of heart attack, stroke, heart failure, and other complications.

**Results:** An estimated 17.9 million people died from cardiovascular disease in 2019, accounting for 32% of all deaths worldwide. 85% of these deaths were due to myocardial infarction and stroke.

More than three-quarters of deaths from CVD occur in low- or middle-income countries.

Of the 17 million premature deaths (under the age of 70) from non-communicable diseases in 2019, 38% were attributed to cardiovascular disease.

Most cardiovascular diseases can be prevented by addressing behavioral and environmental risk factors such as tobacco use, unhealthy diet and obesity, physical inactivity, harmful alcohol consumption, and air pollution.

It is important to detect cardiovascular disease as early as possible so that help can begin with counseling and medication.

Quitting tobacco use, reducing salt intake, eating fruits and vegetables, being physically active, and avoiding harmful alcohol consumption have been shown to reduce the risk of developing cardiovascular disease. Public health strategies that promote healthy lifestyles and create affordable environments, as well as improving air quality and reducing pollution, are essential for promoting health-promoting behaviors. In addition, there are a number of underlying causes of CVD.

These reflect the main driving forces behind social, economic, and cultural change—globalization, urbanization, and population aging. Other determinants of CVD include poverty, stress, and genetic factors.

**Conclusion:** In 2013, WHO Member States agreed on a global framework for reducing the burden of preventable NCDs, including the Global Action Plan for NCD Prevention and Control 2013–2020. The plan aims to reduce premature deaths from NCDs by 25% by 2025 through nine voluntary global targets. Two of these targets are directly aimed at preventing and controlling cardiovascular diseases. The study allows us to identify genetic risks for cardiovascular disease, heart attack, stroke, hypertension, thrombophilia, metabolic syndrome, obesity and folic acid cycle disorders, as well as assess individual sensitivity to drugs for the treatment and prevention of cardiovascular diseases. Based on the results of the study, a genetic specialist's conclusion is issued with recommendations for minimizing existing risks. Coronary artery disease, Folate metabolism, heart attack, hereditary thrombophilia, Hypertension, Hypertensive heart disease, Individual efficacy of warfarin, Ischemic stroke, Metabolic syndrome, Myocardial infarction, Obesity, hypertension, hypertension, heart disease, myocardial disease, individual efficacy of warfarin, ischemic stroke, folic acid metabolism, metabolic syndrome, hereditary thrombophilia, obesity.

## REFERENCES

1. Andryev S. et al. Experience with the use of memantine in the treatment of cognitive disorders //Science and innovation. – 2023. – T. 2. – №. D11. – C. 282-288.
2. Antsiborov S. et al. Association of dopaminergic receptors of peripheral blood lymphocytes with a risk of developing antipsychotic extrapyramidal diseases //Science and innovation. – 2023. – T. 2. – №. D11. – C. 29-35.
3. Asanova R. et al. Features of the treatment of patients with mental disorders and cardiovascular pathology //Science and innovation. – 2023. – T. 2. – №. D12. – C. 545-550.
4. Begbudiyeve M. et al. Integration of psychiatric care into primary care //Science and innovation. – 2023. – T. 2. – №. D12. – C. 551-557.
5. Bo'Riyev B. et al. Features of clinical and psychopathological examination of young children //Science and innovation. – 2023. – T. 2. – №. D12. – C. 558-563.
6. Borisova Y. et al. Concomitant mental disorders and social functioning of adults with high-functioning autism/asperger syndrome //Science and innovation. – 2023. – T. 2. – №. D11. – C. 36-41.

7. Ivanovich U. A. et al. Efficacy and tolerance of pharmacotherapy with antidepressants in non-psychotic depressions in combination with chronic brain ischemia //Science and Innovation. – 2023. – T. 2. – №. 12. – C. 409-414.
8. Nikolaevich R. A. et al. Comparative effectiveness of treatment of somatoform diseases in psychotherapeutic practice //Science and Innovation. – 2023. – T. 2. – №. 12. – C. 898-903.
9. Novikov A. et al. Alcohol dependence and manifestation of autoaggressive behavior in patients of different types //Science and innovation. – 2023. – T. 2. – №. D11. – C. 413-419.
10. Pachulia Y. et al. Assessment of the effect of psychopathic disorders on the dynamics of withdrawal syndrome in synthetic cannabinoid addiction //Science and innovation. – 2023. – T. 2. – №. D12. – C. 240-244.
11. Pachulia Y. et al. Neurobiological indicators of clinical status and prognosis of therapeutic response in patients with paroxysmal schizophrenia //Science and innovation. – 2023. – T. 2. – №. D12. – C. 385-391.
12. Pogosov A. et al. Multidisciplinary approach to the rehabilitation of patients with somatized personality development //Science and innovation. – 2023. – T. 2. – №. D12. – C. 245-251.
13. Pogosov A. et al. Rational choice of pharmacotherapy for senile dementia //Science and innovation. – 2023. – T. 2. – №. D12. – C. 230-235.
14. Pogosov S. et al. Gnostic disorders and their compensation in neuropsychological syndrome of vascular cognitive disorders in old age //Science and innovation. – 2023. – T. 2. – №. D12. – C. 258-264.
15. Pogosov S. et al. Prevention of adolescent drug abuse and prevention of yatrogenia during prophylaxis //Science and innovation. – 2023. – T. 2. – №. D12. – C. 392-397.
16. Pogosov S. et al. Psychogenetic properties of drug patients as risk factors for the formation of addiction //Science and innovation. – 2023. – T. 2. – №. D12. – C. 186-191.
17. Prostyakova N. et al. Changes in the postpsychotic period after acute polymorphic disorder //Science and innovation. – 2023. – T. 2. – №. D12. – C. 356-360.
18. Prostyakova N. et al. Issues of professional ethics in the treatment and management of patients with late dementia //Science and innovation. – 2023. – T. 2. – №. D12. – C. 158-165.
19. Prostyakova N. et al. Sadness and loss reactions as a risk of forming a relationship together //Science and innovation. – 2023. – T. 2. – №. D12. – C. 252-257.
20. Prostyakova N. et al. Strategy for early diagnosis with cardiovascular diseaseisomatized mental disorders //Science and innovation. – 2023. – T. 2. – №. D12. – C. 166-172.

21. Rotanov A. et al. Comparative effectiveness of treatment of somatoform diseases in psychotherapeutic practice //Science and innovation. – 2023. – T. 2. – №. D12. – C. 267-272.
22. Rotanov A. et al. Diagnosis of depressive and suicidal spectrum disorders in students of a secondary special education institution //Science and innovation. – 2023. – T. 2. – №. D11. – C. 309-315.
23. Rotanov A. et al. Elderly epilepsy: neurophysiological aspects of non-psychotic mental disorders //Science and innovation. – 2023. – T. 2. – №. D12. – C. 192-197.
24. Rotanov A. et al. Social, socio-cultural and behavioral risk factors for the spread of hiv infection //Science and innovation. – 2023. – T. 2. – №. D11. – C. 49-55.
25. Rotanov A. et al. Suicide and epidemiology and risk factors in oncological diseases //Science and innovation. – 2023. – T. 2. – №. D12. – C. 398-403.
26. Sedenkov V. et al. Clinical and socio-demographic characteristics of elderly patients with suicide attempts //Science and innovation. – 2023. – T. 2. – №. D12. – C. 273-277.
27. Sedenkov V. et al. Modern methods of diagnosing depressive disorders in neurotic and affective disorders //Science and innovation. – 2023. – T. 2. – №. D12. – C. 361-366.