

Problems of Early Detection of Cardiovascular Diseases among Youth

Murtazayeva Khadicha Nuriddinovna

Teacher of Termez branch of Tashkent State Medical University

*Istatov Abdumumin Uktamovich, Bekjanov Azatbek Mayrambekovich,
Bektemirova Feruza Shuxratovna, Sherniyozova Xonzoda Farxodovna*

Students of Termez branch of Tashkent State Medical University

Annotation: This article provides an in-depth analysis of the problems of early detection of cardiovascular diseases among young people. In recent years, an increase in heart-related diseases has been observed worldwide, including among young people in Uzbekistan. According to statistics, arterial hypertension, arrhythmias, cardiac dystrophies, dyslipidemia, and the initial stages of atherosclerosis are becoming increasingly common among the population aged 15–35. A distinctive feature of these diseases is that they often proceed latently and are detected only when severe complications occur.

Also, among young people, non-adherence to a healthy lifestyle, an abundance of stress factors, malnutrition, inactivity, smoking, and the use of energy drinks have a negative impact on the cardiovascular system. This makes it difficult to detect diseases at an early stage. Lack of regular medical examinations, insufficient screening programs, low medical culture, and disregard for family history also limit the possibilities of early diagnosis.

The article discusses the existing problems in a scientifically and theoretically grounded manner and makes proposals for the introduction of early screening programs in maintaining the health of young people, strengthening cardiological monitoring in educational institutions, forming a healthy lifestyle, and increasing the effectiveness of preventive measures. The results of the study show that this issue is relevant from a social, medical, and pedagogical perspective.

Relevance of the topic: Today, cardiovascular diseases are becoming more common not only among middle-aged and elderly people, but also among young people aged 15–35. Stress, poor diet, lack of exercise, smoking, and increased consumption of energy drinks contribute to the early development of these diseases. The most dangerous thing is that these diseases are hidden in most people, so early detection is often impossible. As a result, the number of serious conditions such as sudden cardiac arrest, stroke, and arrhythmias is increasing among young people.

Purpose of the topic: The main purpose of the article is to identify problems that prevent the early detection of cardiovascular diseases among young people, to shed light on their pathogenic factors, to propose effective diagnostic methods, and to show scientifically based methods of preventive measures.

Keywords: Cardiovascular diseases, youth health, early diagnosis, arterial hypertension, atherosclerosis, stress, screening, prevention, heart failure, arrhythmia. Cardiovascular diseases, youth health, early diagnosis, arterial hypertension, atherosclerosis, stress, screening, prevention, heart failure, arrhythmia.

Main part: The lack of early detection of cardiovascular diseases among young people is one of the most pressing problems of modern medicine. Many diseases, including hypertension, myocardial dystrophy, arrhythmias, congenital heart defects or the initial stages of atherosclerosis, are almost imperceptible at a young age. It is this latent course that prevents the timely detection of the disease.

Another important problem is the indifferent attitude of young people to their health. Many do not pay attention to their symptoms, for example: headache, weakness, rapid heartbeat, short pain in the chest, shortness of breath during exertion. Such symptoms are considered temporary and do not require medical attention.

There are also problems with the diagnostic system. Regular cardiological screening is not conducted in schools and higher education institutions. Examinations such as blood pressure measurement, ECG examination, and cardiac ultrasound are performed only when there is a complaint. This leads to hidden diseases remaining undetected for many years.

Negative lifestyle habits of young people also contribute to the early development of diseases. Fast food, fatty foods, and high sugar consumption create the basis for the onset of atherosclerosis. Smoking and the use of e-cigarettes narrow blood vessels, disrupting the stable rhythm of the heartbeat. Energy drinks cause the heart to work harder, cause arrhythmias, and even sudden cardiac arrest. Psychological factors also have a significant impact. The level of stress, depression, insomnia, and emotional stress is high among young people. High levels of stress hormones — cortisol and adrenaline — increase blood pressure, strain the heart muscle, and increase inflammation in the blood vessels. All of this creates the basis for the early development of a heart attack in the future.

Heart disease is also observed among young people who are professionally involved in sports. Heavy loads, improper training regimens, improper use of sports drugs, and supplements can lead to pathological enlargement of the heart or arrhythmias.

Another problem with early detection is the lack of attention to family history. If parents have hypertension, diabetes, high cholesterol, or a heart attack before the age of 50, such young people should definitely undergo regular medical examinations. But in practice, this does not happen.

Low medical literacy also causes young people to not monitor their own health. There is a lack of knowledge about cardiological prevention, and there is almost no information about what to eat for a healthy heart and what exercises are recommended among schoolchildren and students.

As a result of the lack of screening programs and regular examinations, cardiovascular diseases among young people are detected at a late stage - that is, when serious complications have arisen.

Conclusion: The lack of early detection of cardiovascular diseases among young people is one of the serious social and medical problems, the consequences of which negatively affect not only individual health, but also the general demographic and economic situation of society. The conducted analyses show that the increase in diseases is mainly due to several factors: the widespread prevalence of harmful habits, insufficient attention of young people to their own health, constant stress, lack of sleep, unhealthy diet, and a sedentary lifestyle.

The latent course of diseases, as well as the lack of a system of regular cardiological examinations in educational institutions, seriously limit the possibilities of early diagnosis. Undetected disease in the future leads to dangerous consequences such as heart failure, stroke, myocardial infarction, severe arrhythmias. This increases the risk of reduced labor activity of young people, increased disability and mortality.

Therefore, experience shows that an integrated approach is important in preventing cardiovascular diseases among young people. It is necessary to promote a healthy lifestyle in schools, colleges and higher educational institutions, strengthen psychological support services, and introduce mandatory cardiological screening programs for young people. It is also necessary to strengthen advocacy efforts to reduce smoking and energy drink consumption among young people. In conclusion, strengthening the health of young people, early detection and prevention of cardiovascular diseases are of strategic importance for the long-term development of society. Prevention, early diagnosis, a healthy lifestyle and regular medical supervision will lead to a decrease in these diseases. Only through the harmonious cooperation of medical professionals, families, educational institutions and state policies can heart health among young people be effectively protected.

References:

1. Braunwald E. *Heart Disease: A Textbook of Cardiovascular Medicine*.
2. World Health Organization. *Cardiovascular Diseases Fact Sheet*.
3. European Society of Cardiology Guidelines, 2022–2024.
4. Yusuf S., Hawken S. *Global Burden of Cardiovascular Diseases*.
5. ACC/AHA Clinical Practice Recommendations on Youth Hypertension.