

Ischemic Heart Disease and Comorbidity of Diseases in Doctors: Problems and Challenges in Modern Medicine

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Abstract The uniqueness of our research is the study of ischemic heart disease and comorbid diseases by 1497 doctors of the Fergana Valley with the study of risk factors, living and working conditions, physical data, the study of instrumental and laboratory data of patients. The results of our study show a prognostic predisposition and risk of developing heart disease in medical personnel is 12% and therefore preventive measures and timely treatment play an important role.

Keywords Ischemic heart disease, Comorbidity of diseases, Coronary heart disease, Physicians heart disease, Prognosis

1. Introduction

Coronary heart disease (CHD) remains one of the leading causes of morbidity and mortality among the adult population. In recent years, the number of patients with CHD suffering from comorbid diseases has increased, which significantly complicates diagnosis and treatment. According to the World Health Organization (WHO), CHD annually claims the lives of more than 9 million people worldwide. At risk are not only patients with a genetic predisposition and comorbidities, but also individuals exposed to high stress in the workplace. Particular attention should be paid to health workers who, despite their professional awareness, often face high levels of stress, chronic fatigue and an unstable work schedule. Increased stress, irregular work schedule and lack of physical activity are the most important risks for health workers. Another important problem is the lack of self-monitoring and timely diagnosis by doctors, which leads to late detection of CHD and other chronic diseases. These factors can significantly increase the likelihood of developing coronary heart disease and other comorbid diseases such as hypertension, diabetes, obesity and depression.

Literature review. *Coronary heart disease and risk factors:* Coronary heart disease includes diseases such as angina pectoris and myocardial infarction, and is characterized by impaired blood circulation in the heart. The main risk factors for the development of coronary heart disease are hypertension, high cholesterol, smoking, diabetes, obesity and a sedentary lifestyle. According to the Framingham Heart Study, patients with high stress levels have a 25% higher risk of developing coronary heart disease.

Perk J. et al. (2012), based on the analysis of a number of large studies conducted in different countries, found that the contribution of primary cardiovascular prevention to the elimination of infection exceeds the contribution of treatment [6, p. 177, 582-583].

Shamnova S.A. and co-authors (2011) estimate that the impact of risk factors on cardiovascular diseases reduces mortality by an estimated 59.6%, and treatment measures alone by 29.4%, with 11% of causes remaining unspecified [2, pp. 769-806]. Scientific evidence obtained to date has largely led to similar conclusions, and recommendations have been made [5, pp. 151-111; 4, pp. 2460-2470; 1, pp. 22-28; 203, pp. 1625-1630; 8, pp. 2025-2029; 3, pp. 1068-1070; 7, p. 100, p. 2057-2060]. Perk J. et al., (2012).

Comorbidity in physicians: Comorbidity, as a combination of several diseases in one patient, significantly worsens the prognosis for coronary heart disease. Studies show that physicians have an increased risk of not only coronary heart disease, but also other chronic diseases. According to research published in the journal *Occupational Medicine* (2019), about 30% of physicians suffer from hypertension, and 18% from type 2 diabetes. These factors, combined with professional stress, significantly increase the likelihood of developing coronary heart disease. The role of stress and work routine: According to the World Health Organization (WHO), workplace stress is an important risk factor for the development of cardiovascular diseases. Chronic stress leads to increased levels of cortisol and adrenaline in the blood, which contributes to increased blood pressure and heart problems. Doctors, especially those working in emergency and high-stress conditions, are exposed to high levels of stress, which, according to research, increases the risk of developing coronary heart disease by 30-40%.

2. Objective of the Study

The objective of this study is to assess the relationship between coronary heart disease and comorbidity among physicians of various specialties, as well as to analyze the factors that contribute to the development of these diseases.

3. Materials and Methods

The study was conducted using a questionnaire survey of 1,497 physicians working in medical institutions of the Andijan, Fergana and Namangan regions of the Republic of Uzbekistan. The sample included physicians of various specialties: family doctors, therapists, cardiologists, surgeons, anesthesiologists and others.

The main variables of the study were:

- Age of participants (aged 30 to 65 years).
- Work schedule (shift work, night shifts, work with high emotional stress).
- Stress factors (assessed using a questionnaire).
- The presence of chronic diseases, including hypertension, diabetes, hyperlipidemia, depression.
- Physical activity (assessed based on a questionnaire).

4. Results

The following statistical data were obtained during the study:

Prevalence of coronary heart disease among doctors:

- * About 12% of doctors in the study group suffer from coronary heart disease.
- * Among cardiologists and therapists, this figure was 15%, which is 3% higher than in the general population.
- * For doctors working night shifts, the risk of coronary heart disease increases by 20%.

Comorbidity:

- * 38% of doctors suffer from hypertension.
- * 23% have signs of type 2 diabetes.
- * 18% of study participants were obese.
- * 15% were diagnosed with depression or anxiety disorder, which also affects the development of cardiovascular diseases.

Stress factors:

- * 40% of doctors noted a high level of stress in the workplace.
- * 35% of doctors reported regular overloads, which worsens their psychoemotional state and leads to a decrease in physical activity.
- * Physicians working in emergency services (such as intensive care or surgery) have a 30% higher risk of CHD compared to physicians working in non-emergency settings.

Physical activity and nutrition:

- * 55% of doctors are physically inactive, which increases the risk of obesity and hypertension.
- * 60% of doctors do not follow a diet, often skip meals, which increases the risk of metabolic disorders.

5. Discussion

The data obtained confirm that professional factors such as high stress, unstable work schedule and overload play a significant role in the development of coronary heart disease and other comorbid diseases in doctors. Studies show that professional stress is an important determinant for increasing blood pressure, which in turn increases the risk of coronary heart disease. It should also be noted that there is a high incidence of chronic diseases among doctors, such as hypertension and diabetes, which increase the likelihood of developing coronary heart disease.

6. Conclusions

Coronary heart disease and comorbidity are a serious problem for health workers, which requires an integrated approach. The medical profession, with its high level of stress and physical exertion, is associated with the risk of developing cardiovascular diseases. Timely diagnosis and prevention of coronary heart disease, as well as management of comorbid diseases, can significantly improve the health of health workers and reduce morbidity. It is important to develop and implement special prevention programs for doctors in the health care system to reduce the incidence of coronary heart disease and other chronic diseases among health workers.

Recommendations for the prevention of coronary heart disease and comorbid diseases among physicians:

1. Regular medical examinations: Physicians should undergo regular screening examinations, including monitoring of glucose, cholesterol and blood pressure levels, for the early detection of coronary heart disease and other diseases.
2. Stress reduction: It is important to implement stress reduction programs in the workplace, including psychological support, stress management and relaxation classes.
3. Maintaining physical activity: Physicians are advised to find time for regular physical exercise, which helps improve blood circulation, reduce blood pressure and control weight.
4. Healthy nutrition: Physicians should follow a balanced diet with: follow a diet to avoid hypoglycemia and other metabolic disorders.
5. Educational programs: It is important to organize educational programs for health care workers that would focus on the prevention of cardiovascular diseases and other chronic diseases.

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