CARDIOVASCULAR DISEASE AND THE MAIN STRATEGIES FOR ITS PREVENTION

Modern society has brought with it many changes in lifestyle and an increased incidence of cardiovascular disease (CVD) which is the number one cause of death in all the countries of the European Region and worldwide. In Belarus CVD is estimated to account for 63 % of all deaths. The lifetime risk of atherosclerotic CVD for persons at age 50 years, on average, is estimated to be 52% for men and 39% for women, with a wide variation depending on risk factor burden.

The findings of numerous studies which revealed that much of the premature mortality due to CVD and stroke occurred in individuals generally prone to atherosclerosis encouraged physicians to place a greater emphasis on prevention, as well as on detecting and treating other risk factors. The main recognized risk factors for cardiovascular disease in general, and coronary heart disease in particular, are hypertension, high blood cholesterol, and tobacco smoking. Interrelated factors include obesity, inadequate physical activity and faults of diet. Assessing patients' CVD risk may be used for targeted preventive treatment.

Current guidelines provide advice on screening and identifying asymptomatic individuals at risk of developing CVD. The objectives of these guidelines are to reduce the incidence of first or recurrent clinical events due to coronary heart disease, ischemic stroke, and peripheral artery disease. The focus is on prevention of disability and early death. Therefore, the current guidelines address the role of lifestyle changes, the management of major cardiovascular risk factors and the use of different prophylactic drug therapies in the prevention of clinical CVD. The first step in this process is the calculation of individual cardiovascular risks which may help physicians to rationalize the selection of patients to implement different possible primary prevention strategies and their intensity.

Considering that cardiovascular diseases continue to be the leading cause of mortality worldwide, more efforts are required to reduce the burden of these diseases. In this context, lifestyle modifications based on avoiding smoking, taking regular physical exercise and improving control of hypertension could be the most effective intervention at the population level. According to certain estimates avoiding smoking and promoting physical activity could reduce the number of coronary heart disease deaths by 20% and 18% respectively; controlling hypertension could reduce the number of cerebrovascular disease deaths by around 20%-25%.

Appropriate intervention, guided by risk assessment, has the potential to bring about a significant reduction in population levels of risk.

Tasks to the text

"Cardiovascular disease and the main strategies for its prevention"

I. Read the following words and give their Russian equivalents:

- 1. incidence
- 2. to estimate (the risk is estimated to be 50%; according to certain estimates)
- 3. to account for
- 4. findings
- 5. premature mortality
- 6. to occur
- 7. to be prone to smth
- 8. to detect risk factors
- 9. to place (make) emphasis on smth
- 10. interrelated factors
- 11. faults of diet
- 12. to identify asymptomatic individuals
- 13. current guidelines
- 14. recurrent clinical episodes due to coronary heart disease
- 15. ischemic stroke
- 16. lifestyle changes
- 17. to implement
- 18. to reduce the burden of disease/mortality
- 19. to promote health

II. Answer the following questions:

- 1. What is the main cause of death worldwide?
- 2. What is the proportion of CVD in overall mortality in Belarus?
- 3. In what groups of population is the risk of CVD higher?
- 4. What did the Framingham Heart study reveal regarding CVD?
- 5. What are the main risk factors for CVD?
- 6. Are there any interrelated factors?
- 7. What are the objectives of current guidelines on screening individuals at risk of developing CVD?
- 8. What do researchers recommend to reduce the incidence of CHD?
- 9. What should lifestyle modifications include?

III. Complete the sentences:

- 1. CVD is the main ... of death throughout the world.
- 2. It ... for 63% of all deaths in our country.
- 3. Premature mortality due to CVD may ... in people with atherosclerosis.
- 4. Current guidelines ... on prevention of disability and early death.
- 5. Different prevention strategies can be
- 6. To reduce the rate of cardiovascular disease more ... are required.
- 7. Appropriate ... can bring about a significant reduction in CVD cases.