

Kyr D., Garlyyeva A.

ANALYSIS OF THE PREVALENCE OF CARDIOVASCULAR RISK FACTORS AMONG MEDICAL STUDENTS

Tutor: PhD, Associate professor Chepelev S.N.

*Department of Pathological Physiology
Belarusian State Medical University, Minsk*

Relevance. With the lifestyle changes happening in developed countries the incidence of cardiovascular diseases (CVD) has drastically increased. Many of these lifestyle changes happen to students, especially to those that have a large academic load such as medical students. As such to decrease the risk of development of these diseases awareness about them and early testing for risk factors needs to be carried out.

Aim: to assess the CVD risk of Belarussian state medical university students using a questionnaire based on different risk factors.

Materials and methods. For the purposes of this research, we have used publicly available questionnaire which was developed for assessing risk of CVD based on different risk factors. The questions were made to assess the presence of following risk factors: excess weight, smoking, age, sex, hereditary factors, level of physical activity, dietary habits and blood pressure. Each answer was assigned an appropriate score which was later tallied to get the risk of CVD. The questionnaire was given to volunteers from student body of Belarussian state medical university, the students received no incentive and the survey was conducted in an anonymous manner. The interpretation of the students' answers was done by use of methods of descriptive statistics and Microsoft Excel to which all answers were manually transferred. A total of 315 students answered our survey. After checking for the correctness of filling in the blanks there were 301 left respondents among whom 66.67% were female and 28.89% were male, with an average age of 20.05 ± 1.73 .

Results and their discussion. Out of the 301 respondents, to the question if they had a person in their family die of cardio vascular disease 190 (60.32%) answered as no, 61 (19.37%) as one relative in the ages between 40 and 50, 44 (13.97%) as two relatives at any age, and 5 (1.59%) as three relatives at any age. Based on the answers given by the respondents we can make the conclusion that majority of them did not have an evident hereditary disposition to a CVD. When asked about their lifestyle choices that affect the risk of CVD development; 44 (13.97%) indicated that they smoked between 1 and 10 cigarettes daily, 3 (0.95%) that they smoked more than 10 cigarettes a day, 253 (80.32%) that they didn't smoke. Most of the students (278; 88.25%) said they had a daily physical activity of walking for 30 minutes at a brisk pace or its equivalent, while 23 (7.30%) didn't. When asked if they were leading a stressful life 87 (27.62%) said yes, 180 (57.14%) said periodically and 34 (10.79%) said no. Which is most likely caused by the periodic assessments of knowledge and skill that they need to pass as medical students in form of control works, colloquiums and exams that occur in a periodic fashion. When asked about their dietary habits: 69 (21.90%) indicated that they had a healthy diet which included a large amount of vegetables and fruits, nuts, oats, fish, lean meat, skimmed milk and its products, 1-3 eggs a week and exclusion of alcohol, 149 (47.30%) that they ate a very moderate amount of meats, fats, baked goods, and sweets 49 (12.38%) that they had a somewhat excessive nutrition and 44 (13.97%) that they didn't limit their diet in any way. The respondents were also asked to assess their weight using the formula $\text{height (in cm)} - 110 = \text{optimal weight}$. The results showed that 181 (57.46%) students had no excess weight, 52 (16.51%) had an excess weight of up to 5 kg, 28 (8.89%) up to 10 kg, 12 (3.81%) up to 15 kg, 10 (3.17%) up to 20 kg and 17 (5.40%) more than 20 kg. None of the respondents had a blood pressure above 140/90 mmHg, likely on the account of their young age.

Conclusions. As a result of the questionnaire, it was found that among 301 respondents, 9 (2.86%) had no risk of cardio vascular disease, 223 (70.79%) minimal, 64 (20.32%) explicit, 5 (1.59%) pronounced and none had the maximal possible risk. The obtained data on the prevalence of cardiovascular risk factors in medical students may help in developing methods for their prevention.