



RISK BEHAVIOUR FACTORS FOR THE DEVELOPMENT OF SOME CARDIOVASCULAR DISEASES – PRESENTATION OF THE RESULTS OF A STUDY MADE BY STUDENTS OF MEDICINE

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ABSTRACT

PURPOSE: The aim of this study is to present data for the main behavior risk factors among the population participating in the public and health initiatives of the Faculty of Medicine for the prevention of the cardiovascular risk.

METHODS: For this purpose the interview has been used as a method of a sociological study

DISCUSSION: According to the leading world experts in the domain of the cardiovascular diseases in order to prevent a cardiac attack it is necessary to undertake adequate measures for a decrease of the blood pressure, the serum cholesterol, to carry out prophylaxis and to lead a fight against the fatness and the abuse of smoking. One of the priorities of the health sector should be the prophylaxis and the treatment of the people with a high risk of cardiovascular diseases, as well as one of the leading tasks of the specialists is to find early the predisposition toward such diseases. The firm opinion of the European Parliament is that the whole approach toward the risk factors should begin even in the childhood.

CONCLUSIONS: The factors for a good health and a prevention of the risk behaviour factors represent a priority. The objective is to give a possibility to the people to make their choice for a healthy behaviour in their way of life using different strategies which will bring together medical people, non governmental organizations, mass medias, local authorities etc. The health initiative of the students of medicine from the Faculty of Medicine of the Trakia University, supported by the management body and the local authority is in this direction..

Key words: prevention of the cardiovascular risk, behaviour factors, initiative of the students of medicine

INTRODUCTION

The risk represents an event, a condition or a characteristic of the individual or of the environment which has a statistically based relation to a specific issue which may be expressed in a different health effect – an incident, a disease, a permanent incapacity for work or a dead.

The risk factors are as follows:

- endogenous – factors which have been developed in the very organism and which

are an expression of its biology. These factors may be called hereditary /genetics, biologic and acquired/.

- exogenous – factors of the environment – natural /mechanical, chemical, physical/ and social /public and domestic, occupational and labour/.
- related to the behaviour – related to the way of life – a feeding, harmful habits, a stress, a succession of the work and the respite etc.
- The World Health Organization has published a report in which it is said that a great part of the chronic diseases may be avoided if four behaviour risk factors are reduced – the smoking, the lack of a physical activity, the alcohol and the unhealthy feeding.

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AIM AND TASKS

To present data for the main behaviour risk factors among the population participating in the public and health initiatives of the Faculty of Medicine for the prevention of the cardiovascular risk.

The following behaviour factors have been observed:

- a/ the harmful habits – the smoking, the alcohol;
- b/ the lack of a physical activity;
- c/ the feeding – a regime and a type of feeding;
- d/ the psycho-traumatic experiences related to the stress.

METHODS AND MATERIALS

For this purpose the interview has been used as a method of a sociological study.

The main instrument is a structured questionnaire with a couple of themes including socio-demographic characteristics, behaviour factors and the life style, as well the presence of diseases diagnosed by the health service. Together with the interview each person has undergone a blood pressure measurement and a Doppler examination made by the students, as well a weight and a height measurement in order to determine the Body Mass Index.

The examinations have been made by students of medicine under the aegis of the management body of the Faculty of Medicine and with the participation of the local authority. The examinations have been made on a terrain in the center of the city of Yambol. The persons participating in the examinations represent a part of the population which has been formed spontaneously and voluntarily and who have shown interest in the examination as an occasion to verify their heart health. The examinations have been made by students of medicine under the aegis of the management body of the Faculty of Medicine and with the participation of the local authority. The examinations have been made on a terrain in the center of the city of Yambol. The persons participating in the examinations represent a part of the population which has been formed spontaneously and voluntarily and who have shown interest in the examination as an occasion to verify their heart health. A determination of the Body Mass Index by measuring the weight and the height on a terrain with standardized balances. A waist

measurement in cm in order to determine the abdominal fatness. The blood pressure measurements have been made by a sphygmomanometer. The classification of the European Cardiology Society has been accepted for the determination of values above the norm – above 130 – 139 mmHg SAP/ 85 – 99 mmHg DAP. Measurements with portable Doppler apparatus designed for the screening of an arterial insufficiency of peripheral vessels in the initial medical aid.

DISCUSSION

Socio-demographic characteristics of the examined group:

Total number of people participated in the examination – 330, average age of the participants – 65.26

Structure by sexe:

Men – 71 /22%/, average age – 68.34

Women – 259 /78%/, average age – 64.42

Education

- elementary education – 32 /10%/
- secondary education – 203 /64%/
- college education – 25 /8%/
- higher education – 59 /18%/

Smoking among the examined group

- The smokers are 53, 12 of them – men /17% from the men/ and 41 – women /16 % from the women/
- From the persons suffering from hypertension which is controlled by medicaments and these ones with a blood pressure above the norm found on the terrain – 25% are smokers

Smoking among the examined group by ages:

- A relative part of the smoking among the young people up to 44 years – 70%
- A relative part of the smoking among the examined group by ages, net among the people of mature age from 45 to 59 years – 32.8%
- A relative part of the smoking among the elderly people from 60 to 74 years – 8.6%
- A relative part of the smoking among the old people over 74 years – 4.1%

The smoking represents a risk factor in the behaviour of ¼ of the people suffering from hypertension, controlled and not controlled.

Alcohol drinking among the examined group by ages

- A relative part among the young people up to 44 years – 42%
- A relative part among the people of mature age from 45 to 59 years – 16.9%

- A relative part among the elderly people from 60 to 74 years – 16.1%
- A relative part among the old people over 74 years – 11%

Physical activity of the examined group

- During the inquiring about the physical activity it was ascertained that only 79 persons /24%/ walk more than 2 km per day – 26 men or 37% from all men and 52 women or 20% from all women.
- And these are mainly representatives of the age group between 59 and 75 years.

The small part of the “physically” active persons /walking more than 2 km per day/ from the whole examined group is mainly among the persons between 60 and 75 years old. Regardless of the small number of the representatives of the young age it is indicative that among them there is no one who walks more than 2 km every day.

Dietetic regime among the examined group

- 124 persons /37%/ have confirmed that they observe a dietetic regime with a low content of fats and carbohydrates. From them 25 are men, which is 36% from all men and 99 are women which is 40% from all women.
- A healthy diet is observed mainly by the people who are over 60 and 75 years old and the group over 75 years – respectively 25% and 28%.
- Among the other two groups the part of the people feeding healthily is significantly lower – about 10%.

Measuring of the Body Mass Index

- Fatness presented according to the indicator BMI > 30 point – from the persons participated in the screening 72 /24%/ have fatness, 17 from them are men or 24% from all men and the others 55 are women or 21% from all women, all of them are more than 60 years old.
- A weight above the standard with an index between 25 and 30 is the main factor for the men and the women from all age groups, except the young age group. Among this group the tendency is the following – the women have an index in the norm and the men have a weight above the standard.

About the weight above the standard as a risk factor according to the BMI the relative part of the people with fatness is about 25%.

Abdominal fatness according to the waist measurement

Abdominal fatness /for values in the norm are considered waist measurements up to 88 cm for the women and up to 102 cm for the men/ among the persons examined by us have 212 persons /69%/, from them 39 men /57%/ and 173 women /72%/. Almost 70% have abdominal fatness according to the waist measurements.

The stress as a risk factor among the examined group

- 55 persons /16%/ inform about the presence of professional stress and 53 /15%/ about the presence of family stress. From the last ones 45 are women /85%/.

CONCLUSIONS

According to the leading world experts in the domain of the cardiovascular diseases in order to prevent a cardiac attack it is necessary to undertake adequate measures for a decrease of the blood pressure, the serum cholesterol, to carry out prophylaxis and to lead a fight against the fatness and the abuse of smoking. The measures on behalf of the state should be directed to the population as a whole, personally to every one as well special cares should be taken and a special attention should be paid to the high risk groups.

In order to decrease significantly the weight of the cardiovascular diseases the European Health Network and the European Society of Cardiology have made together the European Heart Health Charter. On the World Heart Day – the 29 September 2008 Bulgaria joined the member-countries which had signed the European Heart Health Charter. By this act our country joins officially the other countries which apply the policy and the measures for overcoming the cardiovascular diseases.

The healthy heart depends on the way of life. The effective strategies for prevention should be focused on factors such as the smoking, the feeding and the physical activity as well the consumption of alcohol and the psycho-social stress.

One of the priorities of the health sector should be the prophylaxis and the treatment of the people with a high risk of cardiovascular diseases, as well as one of the leading tasks of the specialists is to find early the predisposition toward such diseases. The firm

opinion of the European Parliament is that the whole approach toward the risk factors should begin even in the childhood.

The European Union aims at stimulating the researches, the collecting and the exchange of information and the good practices for the cardiovascular health preservation. The factors for a good health and a prevention of the risk behaviour factors represent a priority. The objective is to give a possibility to the people to make their choice for a healthy behaviour in their way of life using different strategies which will bring together medical people, non governmental organizations, mass medias, local authorities etc. The health initiative of the students of medicine from the Faculty of Medicine of the Trakia University, supported

by the management body and the local authority is in this direction.

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