PROMOTION AND PROPHYLAXIS OF CHILDREN'S CARDIAC HEALTH - LONG-TERM INVESTMENT IN THE HEALTH OF THE FUTURE GENERATION

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Abstract: Over the past 30 years there has been an outbreak of cardiovascular disease. This necessitates a search for the causes in childhood and adolescence and conducting timely health promotion and prophylaxis.
The aim of the present study is to study and analyze the existing health-prevention programs and the need to conduct health education on the prevention of cardiovascular diseases in children and adolescents.
In order to achieve the stated goal a sociological method was used - a direct, individual, anonymous questionnaire was conducted, using questionnaires elaborated especially for the purpose. The survey includes 1349 respondents, of whom 530 parents of children aged 3 to 12 years, 113 students from the Medical University of Sofia at the Faculty of Public Health, specialty "Nurse" - parents of children aged 3-12, 706 pupils aged 13 to 18 years. A documentary method, a statistical method and a method of graphical analysis of the results were used.
The conclusions we made in the course of the study are that, despite the many health-prophylactic programs, there is virtually no systemic algorithm for the promotion and prevention of cardiovascular diseases in children. There is a need and desire to raise awareness among young parents, their children and students about issues related to the prevention of cardiovascular risk.
The role of the nurse in conducting health promotion and prevention is neglected. It is important for children's heart health to avoid the impact of risk factors and a prophylactic program, following clear goals and priorities to be done by nurses present in children's life from birth, crèches, kindergartens and schools.
Keywords: prophilaxis, children, cardiac health

The World Health Organization defines health promotion as a process in which people get the opportunity to increase their health control by increasing personal and public responsibility. [1, 3] The focus of health promotion is on people in society who can provide a better and healthier lifestyle. Health promotion is also defined as a process of empowering people through self-regulating health behaviors to improve and strengthen their own health and not to be passive consumers of health services. [1, 21]
Prophylaxis, in turn, includes a set of measures aimed at preventing a disease and its complications by limiting the negative risk factors. The main goals of prophylaxis are to increase the life expectancy without disease and to improve the quality of life. [1]
In our country over the last 30 years, there has been a cardiovascular disease (CVD) epidemic that is becoming increasingly threatening. [6, 18] The cause of CVD is the widespread prevalence of risk factors, which in many cases originate from childhood and adolescence, with a tendency to increase with age. There is an obvious "rejuvenation" in the risk of cardiovascular health. [2,20,22,18]
These facts require health promotion and early childhood prophylaxis to build a mature person with health education and a worldview aimed at reducing risk factors for heart health and increasing factors that have a protective role for their heart health. The need for early child health education is conditioned by the fact that in this early childhood health is laid and future health behavior is formed. These facts determine the promotion of health and disease prevention as fundamental in the fight against chronic non-communicable disease, some of which are cardiovascular.

Objective, tasks and methodology:

The aim of the present study is to study and analyze the existing health-prevention programs and the need to conduct health education on the prevention of cardiovascular diseases in children and adolescents.

The tasks we set up are:

1. Investigate and analyze the health-prevention programs, related to the prevention of children's cardiac health;

2. Investigate and analyze the awareness of parents and students about the need for early CVD prevention.

3. Investigate and analyze the need and willingness to conduct health education for parents and students on the prevention of cardiovascular risk.

The subject of the study is the health-prophylactic programs related to the prevention of heart health in children and the awareness, necessity and willingness to carry out health education on issues related to the prevention of children's cardiac health.

The objects of the study are children and adolescents aged 3 to 18 years old from 10 settlements in Bulgaria, distributed as follows:

• Children in the age group of 3 to 12 years, and in order to obtain reliable information, the survey was conducted among their parents;

• Nursing students, parents of children aged 3 to 12;

• Children and adolescents aged 13 to 18 years.

The study was conducted in a University Hospital, schools and kindergartens across the country between October 2016 and May 2017.

The survey includes 1349 respondents, of whom 530 parents of children aged 3 to 12 years, 113 students from the Medical University of Sofia at the Faculty of Public Health, specialty "Nurse" - parents of children aged 3-12, 706 pupils aged 13 to 18 years.

To collect the primary information in the survey was applied a historical method, a documentary method, a sociological method - a direct, individual, anonymous questionnaire was conducted, using questionnaires elaborated especially for the purpose, among parents of children aged 3 to 12 and among students from 13 to 18 years of age, statistical method and method of graphical analysis of the results obtained.

Quantification is done with a statistical suite of application programs - SPSS 17.0.

Analysis results:

The prevention of cardiovascular risk and health in children is enshrined in the European Health Charter, according to which "Every child born in the new millennium has the right to live at least 65 years of age without suffering from preventable cardiovascular disease" and "A comprehensive approach to risk factors should be started in childhood." [9,7]

According to the CVD prevention recommendations of the European Society of Cardiology and the European Association of Preventive Cardiology, it is a lifelong approach that starts with young parents and continues with children over the years at school. Here too, emphasis is placed on primary prophylaxis, which is defined as the "absolute core" of the messages in the Prophylactic Recommendations, 2012. The nursing-led prophylactic program for the patients is discussed and the error of the nurse's lack in the realization of the these activities so far. [4]

The promotion of health and disease prevention is enshrined in a number of legislative documents - National Health Strategy 2014-2020, National Program for the Improvement of Maternal and Child Health 2014-2020, National Program for Prevention of Chronic Non-Communicable Diseases 2014-2020, National Programs for Restriction of smoking in the Republic of Bulgaria, Health 2020: European Policy Framework and Strategy of the 21st Century, Ordinance No 39 of 2004 on Preventive Examinations and Dispensary, Ordinance No 3 of the Ministry of Health of 7.02.2014 on the approval of medical Pediatrics standard, Ordinance No 37 of 21 July 2009 on healthy eating of pupils [5, 8, 10, 11, 12, 13, 14, 15, 16, 17, 19]. A number of risk prevention programs for children and adolescents related to lifestyle - smoking, nutrition, alcohol use, physical activity have been prepared and adopted, but they address the issue of CVD prophylaxis in part. There is no mention of activities aimed at early detection of CVD in children and adolescents, assessment of cardiovascular risk in children with 2 more risk factors during prophylactic examinations and referral to a child cardiologist.

In the course of the study, we investigated the awareness of parents of children aged 3-12 and pupils aged 13-18 about the need to early prevent childhood cardiovascular risk.

Analysis of parental study data shows that the highest (41.1%) was the relative share of respondents who were informed about the need to prevent the cardiovascular risk of their children from the GP, at a polling place (26.9%). those who are informed via the Internet and third (3.9%) of a nurse. A relatively high proportion (28.1%) have no information on the need for early prevention. The data are graphically represented in Fig. 1.

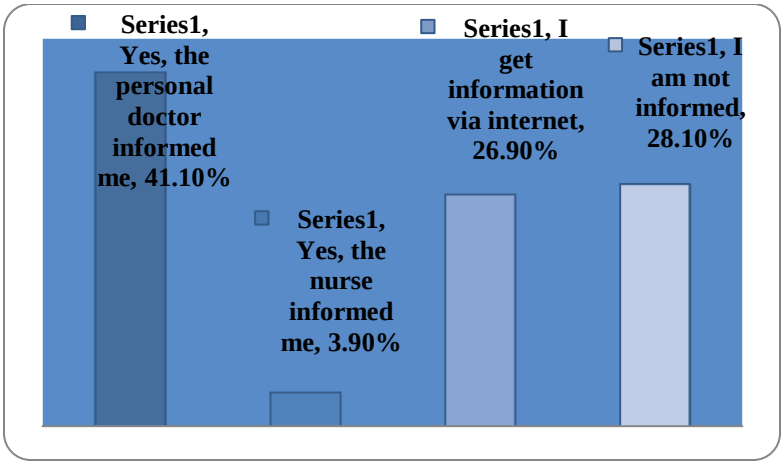

Fig. 1 Awareness of parents about the need to prevent cardiovascular risk from early childhood

Data analysis shows that less than half of respondents are informed by a doctor or healthcare professional, more than ¼ of them, they get information from the Internet or have no information at all. In a modern society, with regulated professional competencies of nurses, some of which are conducting patient health education, it is necessary that it is carried out by healthcare professionals - in order to guarantee the reliability and scientific knowledge of the information. Increasing the health culture of parents is essential as it will contribute to the quality of preventive measures in the healthcare system on the one hand, and on the other hand it will help them reduce their risk factors in order to preserve as much as possible, long-term good health of the most precious to them - their children.

We have studied the need for parents to provide training on cardiovascular risk prevention in children. In answer to the question "Do you consider necessary to carry out health education for parents regarding the prevention of cardiovascular risk?" The highest relative share of the respondents (92.7%) strongly affirmed the need for health education. 5.8% do not consider it necessary to carry out health education because there is no risk for their cardiovascular health in children. These children are most vulnerable because their parents do not think they need to be trained, on the other hand, they think there is no risk to their children. The lowest relative share (1.5%) of respondents indicated they had information and did not need further training. The data are graphically represented in Fig. 2.

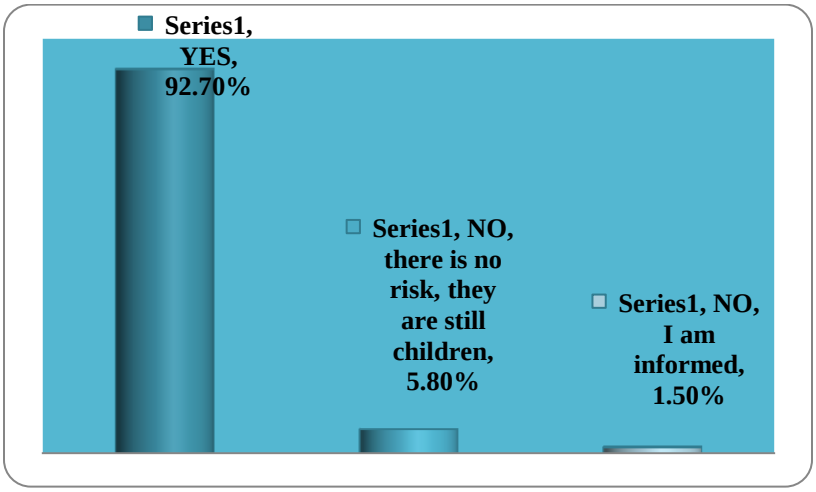

Fig. 2 Need to carry out health education on the prevention of childhood cardiovascular risk

The analysis of the data shows that there is a strong need for health education of these parents on the prevention of cardiovascular risk.

We have studied the awareness of students about the awareness and the need to prevent early-childhood cardiovascular disease. The highest relative share (35.4%) responded that they did not receive information on the need to prevent cardiovascular morbidity from early childhood. Second and third place are students who are informed by GPs and their parents - 27.1% and 21%, respectively. The lowest is the relative share of respondents who are informed by a nurse - 5.2%. The data are presented graphically in Fig. 3.

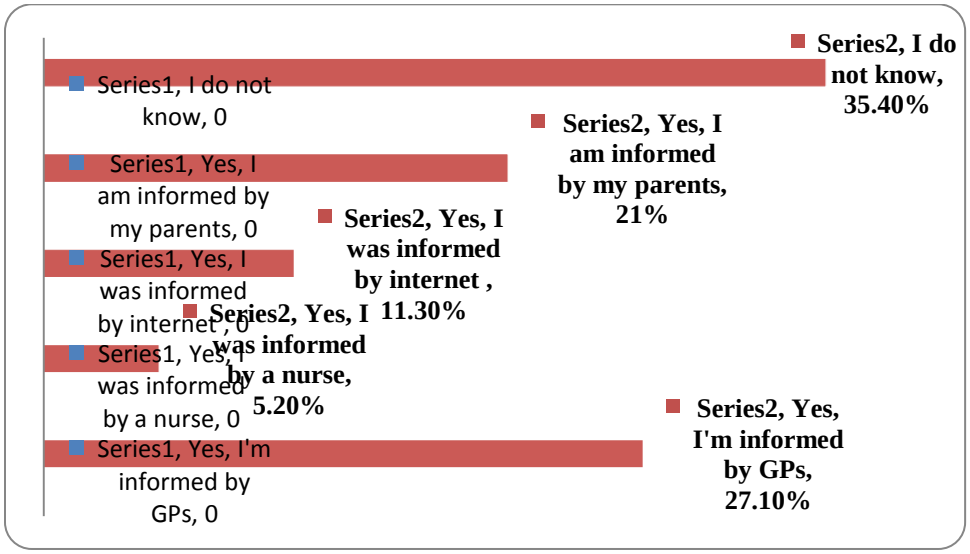

Fig. 3 Awareness of students about the need to prevent early-childhood cardiovascular disease

In the course of the study, we asked the students questioned whether they considered necessary to carry out health education on the prevention of cardiovascular risk. The highest relative share (74.1%) is categorical that there is a need for health education, followed by (13.2%) responding that there is no risk as they are still children and (12.7%) consider that such training is necessary. (Fig. 4.)

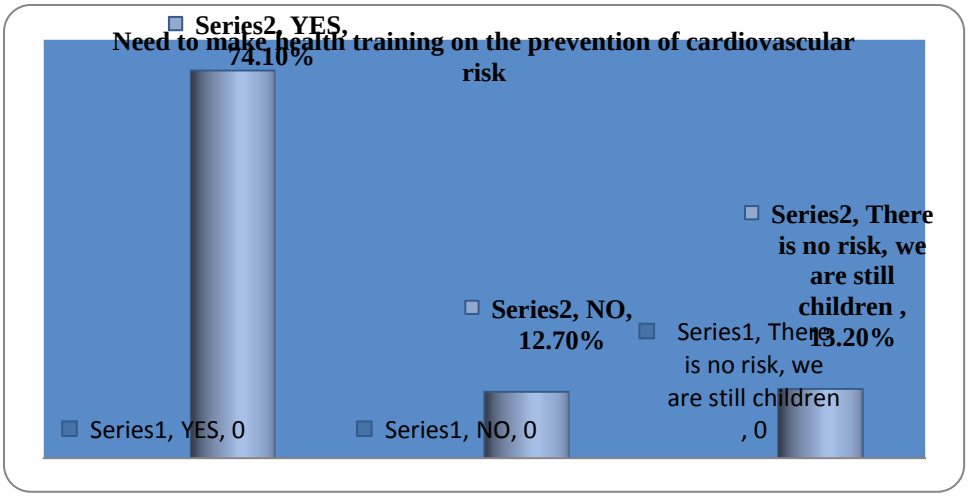

Fig. 4 Students' opinion on the need to conduct health education to prevent cardiovascular risk

The need and desire of students to undertake health education is indicative. Special attention is paid to respondents who consider that there is no risk because they do not realize that their future cardiac health depends on

the impact and duration of the impact of risk cardiovascular risk factors. Today's children, tomorrow's adults, are the future of the nation, and the prevention of risk factors are fundamental to their health and development.

The conclusions we made in the course of the study are:

1. Despite the many health-prophylactic programs, there is virtually no operating system algorithm to promote and prevent CVD among the youngest - our children.
2. There is a need to raise awareness among young parents, their children and students about issues related to the prevention of cardiovascular risk. 28% of parents and 36% of students have no information.
3. There is a need and desire to conduct health education on the prevention of future cardiovascular risk for children and adolescents and for parents. 92% of parents and 74% of pupils (13-18 years) strongly confirm the need for health education.
4. Only 3.9% of the parents and 5.2% of the students indicate that they are informed about the issues concerning the prevention of CVD by a nurse.
5. 13% of pupils and 5.8% of parents consider that there is no risk to children's heart health as they are still children.

Cardiovascular disease is a serious social and health problem that obliges both the state and society and parents and medical professionals to pursue targeted and sustained efforts to prevent GCC from earliest childhood rather than to actions aimed at treating them after they have already occurred. Prevention should be complex. Start with young parents, continue with childbirth and raising children to build them as mature individuals with a healthy and healthy lifestyle.

Unfortunately, the role of the nurse in performing CVD prophylaxis in children and adolescents is heavily neglected. The nurse, as a highly qualified medical practitioner with statutory competencies for health education, is not included in any program concerning the prevention of CVD. It is of utmost importance for children's health to promote health, prevent the impact of health risk factors and a prophylactic program, following clear goals and priorities to be done by a nurse present in childhood from birth, crutch, the kindergarten and the school.

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