Eating behavior among patients with hypertension

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ABSTRACT

Purpose of the study. The purpose of this research was to show the healthy and non-healthy dietary behaviors among patients with high blood pressure.

Material and methods. The research was conducted in The Independent Public Clinical Hospital No. 4 on Jaczewskiego Street in Lublin, from December 2012 until February 2013. The interviewers completed one hundred questionnaires, all of which were classified for a statistical analysis. The study used an auditorium survey technique. Surveys were distributed personally among randomly selected people diagnosed with a hypertension.

Results. Analyzing the research material collected from respondents of all ages group, it can be concluded that it is characterized by a very high rate of salt intake, white bread, salted and smoked fish, and moderate intake of meat. However, there are not enough vegetables, fruits, marine fish, dairy, and multigrain products in the diet of the respondents.

Conclusions. The majority of surveyed patients with hypertension in all age groups tested (up to 40 yr.; from 41 to 60 yr.; over 60 yr.) exhibits moderate eating habits. Respondents to 40 years of age reveal the most negative eating behaviors, compared with an other age groups. However, in the respondents above 60 years of age the most positive eating behaviors were observed.
INTRODUCTION

Hypertension is a cardiovascular disease. It is classified as a chronic diseases requiring long-term treatment [1]. The concept of hypertension is associated with various disease states and means a common symptom, which is elevated blood pressure. It provides one of the most important risk factors for coronary heart disease, stroke and peripheral vascular atherosclerosis. It also causes an increase in the frequency of incidence of ventricular arrhythmias and cardiac death. Currently, the WHO Expert Committee criteria are accepted and used: the upper limit of normal blood pressure is 139/89 mmHg [2]. In addition to pharmacological treatment, adequate nutrition plays an important role in the treatment of hypertension. Rational nutrition, adapted to the age, sex, and activity is not the main element of the pharmacological treatment of hypertension. Scientific research confirms that Mediterranean Diet and DASH [3] are the most effective in prevention and treatment of hypertension, as well as improving the lipid profile. The Mediterranean Diet is an alternative to low-carbohydrate diets. It lowers blood pressure by affecting a significant reduction in body weight and improves blood lipid profile. Similarly, the DASH Diet lowers blood pressure and reduces total cholesterol and LDL-cholesterol [3]. The most common nutritional mistakes include: excessive consumption of fats, simple sugars and table salt, consuming more energy than the body needs, uneven distribution of meals during the day, drinking too much coffee and strong tea [4].

Purpose of the study. The purpose of this research was to show the healthy and non-healthy dietary behaviors among patients with high blood pressure.

MATERIAL AND METHODS

The research was conducted in The Independent Public Clinical Hospital No. 4 on Jaczewskiego Street in Lublin, from December 2012 until February 2013. Respondents completed a questionnaire survey in the presence of the interviewer (in this way they could get more information when in doubt). They were able to see the exact instructions provided in the questionnaire, as well as the object and purpose of the study and the method of including the answers. Interviewers responded to 100 questionnaires, all of which were accepted for statistical analysis. More than half of the respondents (55%) were over 60 years old. 36% of the respondents was from 41 to 60 years old, 9% of the surveyed group was under 40 years old. Age of the patients ranged between 24 to 90 years; average age age - 61 years. The group characterized by predominance of women, which accounted for just over half of the respondents (55%). Surveys were distributed personally among randomly selected people diagnosed with hypertension. The collected research material was analyzed using the statistical package STATISTICA for Windows 9.0.

RESULTS

In the analysis of eating behavior in the aspect quality of the most consumed products, 44% of respondents reported consumption of white bread „at least once a day”, the rarest answer was „once a week” (2%). Whole grain bread is eaten „several times a day” by 22% of respondents, only 7% of them consumed it „a couple of times a month”. These results indicate a very high intake of white bread and still too low wholemeal intake, in relation to current dietary recommendations. 25% of respondents consume low fat dairy „several times a week”, a little less 23% „a few times a month „, just 6% of respondents „several times a day”. In contrast, 28% of respondents „do not include in the diet” fat dairy products, and only 2% eats these kind of products „several times a day”. These results indicate a low intake of lean dairy, which is negative. 41% of the respondents eat cooked eggs „several times a month”, no one replied „at least once a day” and „several times a day”. 38% of the respondents eat egg yolks and fried eggs „a few times a month”, no one replied „at least once a day” and „several times a day”. From these results, it can be concluded, that among the surveyed patients, some continue to eat fried eggs, which is not recommended in hypertensive disease. Lean meats are eaten „several times a week” by 36% of respondents, while 2% do not include lean meat in the diet . 36% of respondents answered that they „do not include fatty meat in the diet”. The rarest response was „several times a day” (2%). These results indicate that the majority of respondents moderately eat meat, which is a positive eating habit. More than a half of the respondents, that is 54%, eats lean marine fish, freshwater fish and oily sea fish „several times a month”. None of the respondents eat fish „at least once a day” and „several times a day”. Similarly, respondents declared their consumption of salted, smoked, and canned fish. 51% consume these products „several times a month”, while none of the respondents eat fish „at least once a day” and „several times a day”. From those results we can see that fish is very rarely included in the diet of the respondents, which is a negative phenomenon, in relation to marine and freshwater fish, and positive when it comes to salted and preserved fish. Soft margarine, fresh butter and vegetable oils are consumed „at least once a day” by 43% of respondents, only 1% does not include this type of product in the diet. 35% of the respondents do not include saturated fat in the diet, and 4% eats saturated fat „several times a day”. These results relating to fat intake, both unsaturated and saturated, are preferred nutritional behavior. Boiled and roasted potatoes are consumed „several times a week” by 42% of respondents, while none of the respondents eats potatoes „several times a day”. Fried potatoes and chips are eaten by 39% of respondents „a few times a month”, the same number of people, that is 39%, answered that they do not include these products in the diet. The rarest answers were „at least once a day” (2%), and „se-
Adequate nutrition plays an important role in the treatment of hypertension. Our study found that the vast majority of respondents positive habits, such as frequent use of dietary unsaturated fat and low-fat dairy products was also found, as well as frequent consumption of meat, saturated fats and sweets - a few times a month or never. Similar results were obtained while evaluating the consciousness of the lifestyle change need among the inhabitants in Szczecin, both persons with and without hypertension. This study also demonstrated low intake of fish, brown bread and vegetables. However, it found a much higher consumption of fruit among respondents, both in patients with hypertension as well as in people without diabetes [5]. In a study of health behaviors among the residents of Warsaw, rare intake of fish and dairy products was also found, as well as frequent consumption of meat, saturated fats and sweets. Less than a half (49.6%) of the people eat fruit and vegetables several times a week [6].

CONCLUSIONS

Most of the surveyed patients with hypertension in all age groups tested (up to 40 years of age, from 41 to 60 years of age; over 60 years) show moderately adequate eating habits. Respondents up to 40 years old have the most negative eating behaviors, as compared with other age groups. However, the respondents above 60 years old show moderately positive eating behaviors. Analyzing all age groups studied, we can conclude that they are characterized by excessive salt, white bread, salted and smoked fish intake frequency, as well as a moderate intake of meat. The diet is poor in vegetable, fruit, marine fish, dairy products, and lean multi-grain products. In the vast majority of the respondents positive habits, such as frequent use of dietary unsaturated fat and low intake of sweets were found.

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LIST OF THE FIGURES

FIG. 1. DISTRIBUTION OF ANSWERS ON FOOD CONSUMPTION DURING LAST MONTH

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