

# NURSES' ROLE IN THE CONTROL AND TREATMENT OF ARTERIAL HYPERTENSION

To be able to talk about arterial hypertension, we must first explain how it occurs. The human heart works on the principle of a pump. The heart pumps blood through the body's arteries. Blood goes to the arteries where they continue to collapse into smaller arterioles and even smaller capillaries responsible for oxygen supply. After this process, the blood is returned to the heart via the vein. So, the human heart is spilling blood through the aortic flap in the aorta. From the aortic blood flows and is distributed to the smallest branches. When the blood circulates, it exerts pressure on the blood vessels. Pressure must ensure adequate perfusion of the tissue during diastole and systole. If capillaries are sufficiently wide open blood can easily pass through them. The problem arises when the capillaries are too narrow and when the blood passes through them, the pressure in the capillaries is growing. When the heart pumps more blood, and the arteries are absorbed, then the pressure is higher. This results in arterial hypertension. Arterial hypertension is defined as a permanent increase in systolic and diastolic blood pressure. Moderate hypertension is considered to be in systolic pressure higher than 140 mmHg and diastolic up to 90 mmHg. Arterial hypertension is a cause of coronary artery disease (angina pectoris, myocardial infarction), chronic kidney disease, and potent stroke. It is part of essential or primary hypertension and secondary hypertension. Increased cardiac volume or peripheral resistance causes increased blood pressure. Reducing blood pressure is harder for older people. Asthenia causes changes in the arteries. Risk factors that may affect the onset of hypertension include age, sex, alcohol consumption, tobacco product consumption, physical inactivity, etc. The kidney is one of the responsible organs responsible for renin excretion and salt regulation. When there is a disorder in salt retention and increased water drain there is a risk of arterial hypertension. Diagnosis can only be established after several consecutive blood pressure measurements. The degree of hypertension is determined by the physician. Blood pressure is measured when the patient is sitting in a sitting or lying position.

The measurement should be repeated several days in order to diagnose arterial hypertension. Once the pressure is measured it is necessary to write down and inform the patient and the physician. The biggest option for action here there is a patrons who have the opportunity to visit the patient at home and identify the risk factors for the onset of hypertension. The cuff and arm must be at the height of the heart. Blood pressure in most people begins between 35 and 45 years. Symptoms appear inconspicuously for what it is start with treatment early on. Treatment of arterial hypertension is carried out with antihypertensive and by changing the style of life. The most common antihypertensive agents are  $\beta$ -blockers, calcium channel blockers, ACE inhibitors, angiotensin receptor blockers. It is often necessary to use 2 or more antihypertensive to achieve target arterial pressure below 140/ 90 mmHg. AH is the leading public health problem. In Croatia, AH is more common in women than in men. The nurse deserves to educate the patient about hypertension itself, education about the risks that exist and how to avoid them and what causes them. She is in charge of supporting the patient and her family in changing the style of life. Surgical diagnoses that occur most frequently with the diagnosis of arterial hypertension include incontinence, anxiety, acute pain, obesity, reduced fatigue.

AH in today is one of the leading issues and is the main factor increasing the risk of cardiovascular, cerebrovascular and renal diseases. The greatest challenge for healthcare professionals is education of patients on the health consequences of arterial hypertension, and on ways of proper control and the implementation of procedures for lowering blood pressure. According to the latest classification criteria of 2007 ESH - ESC under the concept of arterial hypertension implies blood pressure in values greater than 140/90 mmHg, measured by the calibrated live blood pressure monitor in the clinic.

In the elderly, it is harder to achieve AT values of less than 140/ 90 and synergistic hypertension is isolated. By treating AH in older people, it not only reduces the mortality rate but also the total mortality rate. The American Society for Hypertension introduces a new term: "prehypertension", which implies systolic pressure ranging from 120 mmHg to 139 mmHg, and a diastolic pressure of 80 mmHg to 89 mmHg. According to ESH - ESC people are divided into two groups. One group includes people with normal blood pressure, and the other group with high normal blood pressure. These two groups of people are distinguished by the fact that people with high normal blood pressure have an increased risk for STD if there are still associated diseases. Such a group of patients requires therapy, which is not the case with people with normal pressure. Apart from therapy, in such patients with "prehypertension" it is important to change the way of life that can significantly affect blood pressure.

Treatment of arterial hypertension can be performed by medication and by changing the style of life. Medication includes antihypertensive drugs that are recommended for a high-risk hypertensive group. The decision on whether a patient should start a medication treatment depends on the values of systolic and diastolic pressure and other risk factors. If the patient has blood pressure higher than 140/90 mmHg, and the pressure is measured for several consecutive days then such a patient is a candidate for antihypertensive treatment. The goal of treating AH is to reduce the risk factors for cardiovascular disease and reduce the blood pressure below 130/80. MmHg. With medical treatment, the role of a nurse is also helping the patient to change their lifestyle and controlling other risk factors.

The nurse's task is to identify the risks of developing cardiovascular disease and to act preventively. In the present-day population, younger generations go into bad habits like smoking, drinking alcoholic beverages, and entering high-calorie foods (fast foods). Together with the patient, the nurse must determine the degree of risk of developing cardiovascular disease, analyze harmful habits, and encourage it to change the life style. Changes that the patient has to spend in his daily life include smoking cessation, reduced body weight (controlled diets), reduced salt intake, increased body activity, increased intake of fruit and vegetables, and reduced saturated intake and decreased total fat intake. A nurse needs to educate the patient about the importance of life-style changes that can help lower hereditary hypertension. It is necessary to encourage the patient to take antihypertensive drugs, educate him on blood pressure self-control and control the body weight. The same education of the patient depends on the character of the same patient, about his cognitive abilities, his age, and the conditions in which he lives and about the motivation to heal. Patients with weaker cognitive characteristics will be weaker and slower to learn how to regulate their diet. Nurse diagnosis is used by nurses to define a current or potential health problem that they are authorized to treat according to their intended purpose. Sister diagnosis is formulated by PES model, which indicates (P) problem, (E) etiology, and (S) symptom. The benefits of using nurse diagnosis are to facilitate communication between healthcare professionals and serve as evidence for their sister work. Among the most common diagnoses that arise with arterial hypertension are anxiety, obesity, unavailability, high risk for reduced fatigue and acute pain. Anxiety occurs in patients who may not be well educated in order to cure arterial hypertension. It can be reported at the beginning of knowledge about the illness. One of the reasons for obesity is ignoring the calorific value of certain foods. A high risk of reduced fatigue is reported in very obese patients who are at risk of cardiovascular disease. With the acute pain that may appear in the chest, a person may have frequent headaches.

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