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# THE QUALITY OF DRINKING WATER AS AN ENVIRONMENTAL AND MEDICAL PROBLEM

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Annotation: The main purpose of writing this scientific article is to study trends in the development of the influence of water on human health in Uzbekistan and assess the mechanism of its support. Based on the goal, the following tasks were solved: This educational and methodological manual is intended to prepare a future practicing physician for practical exercises and sanitary examination of water sources for the hygienic, endemic, epidemiological significance of water, bacteriological, sanitary and chemical examination, methods of water sampling, analysis of water samples. , which a doctor may encounter in his work, as a result of which they are aimed at the hygienic assessment of drinking water, the organization of drinking water supply, methods for improving water quality, sanitary protection of water bodies and environmental problems.

**Keywords:** sanitary protection, water quality, environmental problems.

Introduction. Water in the human body helps to convert food into energy, helps the body absorb nutrients, moisturizes oxygen for breathing, regulates body temperature, participates in metabolism, protects vital organs, lubricates joints, removes various waste products from the body. Water, the most common substance on Earth and the most common inorganic compound in living organisms. In our body, water is an important chemical for the vital activity of the body, and its content must be replenished. The quality of drinking water is a global environmental problem of modern mankind. Water is one of the main factors of human health. Almost all of its sources are exposed to anthropogenic and man-made effects of varying intensity. The problem of drinking water quality is relevant both globally and within a separate region or settlement. Currently, drinking water is a social, political, medical, geographical, environmental, engineering and economic problem. Drinking water is water in its natural state or that meets the

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established regulatory requirements (cleaning, decontamination) and is intended for the drinking and household needs of a person or for the production of food products. We are talking about the requirements for the set of properties and composition of water, in which it does not adversely affect human health, both when consumed orally and when used for hygienic purposes, and in the manufacture of food. Quality drinking water is water without impurities that are harmful to human health. The normal functioning of the human body is impossible without regular consumption of clean drinking water. In the absence of fluid, the human body ceases to function in the desired way. Subsequently, this can lead not only to malfunctions of vital organs, but also to their complete failure. Therefore, it is very important to monitor the level of fluid in the body.

The purpose of the work. Based on some studies, it is possible to determine which water is the safest to consume.

Materials and research methods. Experimentally, it was found that the adult body consists of 70% water. To maintain water balance per day, you need to drink at least two liters of liquid. Thus, excessive concentrations of toxins can be avoided. However, it should be noted that the recommended 2 liters is a very subjective indicator. An adult should consume water in the amount of 40 ml per 1 kg of weight every day. So, an average man with a weight of 80 kg should drink more than three liters of liquid every day. If this norm is not met, there is a risk of dehydration, which can lead to metabolic disorders and later overweight. And what kind of water do we drink? When normalizing substances in drinking water (GOST -2874 - 82), the epidemiological safety of water, the harmlessness of the chemical composition and the convenience of organoleptic properties should be taken into account. For drinking water, GOST ensures its safety in relation to substances of natural and anthropogenic origin. Requirements for the organoleptic properties of water include: the smell and taste of water should not exceed 2 points (on a five-point scale); chromium should not exceed 20 ° on a scale; turbidity on a standard scale; specific odors and flavors that appear during chlorination should not exceed 1 point. When determining the purity of water, they work with physical properties such as turbidity, color, smell and taste. For clean water, the following indicators are characteristic: turbidity - 2.5 EMF (turbidity units by formazine), lack of smell (in laboratory conditions, the indicator is the intensity of smell), taste does not exceed 1 (according to a five — point system, determined by laboratory way), Chroma-no more than 20 degrees PT-Co scale. Chemical properties of water include: hydrogen indicator, general mineralization, hardness, acidity, alkalinity, permanganate oxidation, etc. Hydrogen indicator for Clean Water: 6 units. pH, total mineralization — 1000 mg/l, oxidation of permanganate-no more than 5 g of oxygen per liter. In

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addition, bacteriological indicators, the presence of inorganic and organic mixtures, radiological indicators, etc.are used in determining the purity of water.

Conclusions and suggestions: the solution to the problem of drinking water pollution is a complex struggle, which consists in: 1) increasing the culture of General water use and respect for the environment among the population. 2) when cleaning clean waters from household waste. 3) when installing filters on urban drains. 4) in reducing emissions from industrial and chemical enterprises. 5) when neutralizing water using chemical reagents. 6) pump water that cannot be cleaned and store it in special containers. 7) in improving the system of environmental monitoring of freshwater. Perhaps, most of the problems associated with drinking water pollution will be solved in the future by the introduction of new technologies for the treatment of industrial production and waste of vital activity and the rational use of Natural Resources.

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