



# Water As a Factor in the Formation and Development of Medical Culture of the Rural Population

**Yusupov Muradali Sunnatovich**  
Samarkand Institute of Economics and Service  
Senior Lecturer at the Department of Social Disciplines

**Abstract.** The article emphasizes that water is a source of life and health, playing an important role in the human body. The author examines various aspects of water, its composition and properties, as well as the influence of the environment on the quality of water available to rural residents. Particular attention is paid to water supplied to agriculture through rivers, canals and dams and its use by residents. The author also emphasizes the importance of distinguishing water into harmless and harmful types to ensure healthy consumption and use. In conclusion, the article notes that synergistic changes in water composition have a significant impact on human health, and regulating water intake is essential to maintaining balance in the body.

**Keywords:** medical culture, rural population, water, energy change, health, water consumption.

## INTRODUCTION

One of the objective factors that actively influences the formation and development of the medical culture of the rural population is water. Because water, especially clean water, is the source of life, the guarantee of health, without which the human world, the animal and plant world cannot exist.

We would not be mistaken if we said that the appearance of water as a gift of nature, as well as the processes occurring in the human body as a result of its consumption, are largely synergistic.

So the question arises, what is water, what is this substance?

Water is a colourless, transparent, odourless, binary inorganic compound consisting of hydrogen and oxygen. In the liquid state, water is transparent, odourless and tasteless; in solids - ice, snow, frost; in gaseous-vapour. 71% of the Earth's surface is located in the ocean, rivers, lakes over 1400 million km. covering more than cubic meters of water, 97.54% of it is found in the world's oceans and is considered unsuitable for agricultural use and drinking. Suitable water is found in glaciers (1.81%), groundwater (0.63%) and partially (0.009%) in rivers and lakes.

Taking into account that water in Uzbekistan comes mainly from the mountains, its use in agriculture is through rivers, canals and dams, we see that rural residents live in areas located in close proximity to these water sources.

### **Materials and Methods**

When referring to the water flowing in front of the village, first of all, villagers evaluate the transparency, colour, taste, temperature, hardness and smell of water through vision, smell, taste, skin sensations, hearing, which are the sense organs. As a result, villagers divide water into: fresh water, sweet water, clear, odourless water, healing water, fresh water; at the same time, muddy, coloured, smelly, bitter, sour water is consumed accordingly.

So it is not an exaggeration to say that the formation and development of the medical culture of the rural population begins with the division of water into harmful and harmless types and its use for consumption and other purposes.

### **Results**

The process of synergistic changes in the composition of water in nature (an unexpected increase or decrease in the volume of water, a change in its composition and the accumulation of fluctuations; a spontaneous transition at speed to another state, etc.) greatly affects human health. It is known that when a person eats food, water plays an important role in maintaining the balance of body temperature, allowing it to enter the body tissues and exit the skin and respiratory tract at rest. As a result, all physical, chemical and biological processes occurring in the material body of a person occur due to the synergistic flow of the composition of water entering the human body, that is, due to self-organization. This is why it is important for every person to know how much liquid is contained in their daily food intake at this stage when it comes to proper distribution and organization of drinking water. For example, fresh milk contains 87% water, fresh vegetables and fruits - 96%, potatoes, meat - 75%, bread - up to 47%. At this point, drinking too much water or thirst-inducing drinks is harmful to the individual, causing the heart rate to increase and the process of assimilation and dissimilation to become intense. As a result, the removal of water from the body is accelerated, especially through the skin, a large amount of liquid is released, which, together with sweat, removes water-soluble vitamins, table salt and mineral salts from the body.

The gastrointestinal tract is much more active when water is exchanged for salt, releasing about 8 liters of juice per night, most of which is reabsorbed and excreted in the feces when taken at a ratio of only 2% juice by volume.

A person consumes between 100 ml and 3000 ml of water per night, depending on age, including 1200-1300 ml (48%) of water in liquid form and 1000-1100 ml of water in food form.

Water in the body is constantly renewed: in an adult, within 15 days, and in children, within 3-5 days, all water molecules are renewed. The kidneys, lungs, gastrointestinal tract, and skin take an active part in water metabolism. At high ambient temperatures, 4-5 liters of water are lost through the skin along with sweat, and therefore the need for water increases even more. At average temperature, 300-400 ml of water is released through the skin. Depending on environmental conditions and the amount of fluid drunk, from 0.5 liters to 2.5 liters of water are released through the kidneys per night. The amount of water consumed per day to quench thirst is 2.5-4 liters for able-bodied (on-the-go) people.

When the amount of water lost increases, a person begins to feel unwell. Losing 10% of

body water seriously affects metabolism. And the release of 15-20% of water from the body at an air temperature of 30° and above leads to death. This condition can also cause death if the body expels 25% of its water when the air temperature drops significantly.

In the north-eastern part, where 85% of the fresh water sources in our country are located, the total river water is used by 15% of the population, and the river water in the southern and south-western parts, where 14% is located, is used by 35% of the population. To effectively use water in such an uneven situation, it is important to pay attention to its chemical composition. At the same time, as the content of mineral salts increases, the taste of water worsens, which negatively affects the functioning of the gastrointestinal tract and other organs. For example, salt solutions contained in water, such as nitrites, nitrates, fluorides, in certain quantities have a toxic effect on the human body.

Rural residents often use water from natural sources, the danger of which lies in the fact that it contains various chemical compounds: microflora, worms and their eggs, the presence of viruses and radioactive particles that can cause poisoning of the human body, the occurrence of endemic and epidemic diseases.

Especially serious microbes that because infectious diseases have the ability to fully support their vital functions in water. Naturally, when drinking such water, a person will become ill with an infectious disease.

Through rivers flowing near villages, formed ponds, lakes, reservoirs, etc., ichthyosis, cholera, brucellosis, Botkin's disease and other enteroviruses can be transmitted. Pathogens of these diseases arise when secretions (feces) of patients and carriers of bacilli enter the water, as well as when hospital waste and other various wastes enter the water of infectious patients. Accordingly, open water sources are especially dangerous from an epidemiological point of view.

### **Conclusion**

Mass bathing in open bodies of water, dumping garbage on their banks and washing them away with rainwater, washing clothes, building and operating toilets, the entry of pathogenic microorganisms from dirty buckets into wells, etc. are causes of water damage.

A great danger to the health of the rural population is the spread of all kinds of worms and their eggs in water bodies. Bathing and rinsing fruits in untested, unreliable open water sources also causes various infectious diseases.

The above considerations indicate that providing the rural population with a sufficient amount of clean water in quantities that meet the requirements of purity standards, and for this purpose, maintaining the purity of water, which is a gift of nature, careful use, not polluting the environment, throwing various objects into the water, is a big step towards the formation and development of the medical culture of the rural population.

### **References**

1. Тураев Б.О. Синергетика: моҳияти ва қонуниятлари // Тўраев Б.О., Эргашева М.Х., Раҳманов Б.У., Мўминова З.О., Очилов Ж.. Синергетика: моҳияти, қонуниятлари ва амалиётда намоён бўлиши. Монография.– Тошкент: Наврўз нашриёти, 2017. – 140 б.
2. Аршинов В.И. Синергетика как феномен постнеклассической науки. –М.: ИФРАН, 1999. –203с.

3. Rizaev I. I. The structure of the social system as the basis for the self-organization of society //Scientific and Technical Journal of Namangan Institute of Engineering and Technology. – 2019. – Т. 1. – №. 7. – С. 190-195.
4. Бозоров Д. Синергетик парадигма. Монография. – Т.: Тафаккур, 2010. – 160 б.
5. Тўраев Б.О. Ҳозирги замон табиатшунослиги концепциялари фани бўйича асосий тушунчаларга изохли луғат. – Тошкент:Тафаккур, 2009.–128 б.
6. Моисеев В.Н. Философия науки. Философия биологии и медицины. – М.: ГЭОТАР–Медиа, 2008. – 560с.
7. Yusupov M. S. FEATURES AND RULES OF PROFESSIONAL ETHICS OF MEDICAL PERSONNEL //International journal of conference series on education and social sciences (Online). – 2023. – Т. 3. – №. 2.
8. Ризаев И. И., Хаккулов Н. К. ВЛИЯНИЕ ЦИФРОВОЙ КУЛЬТУРЫ НА НЕПРИКОСНОВЕННОСТЬ ЖИЗНИ ЧЕЛОВЕКА В ОБЩЕСТВЕ //Оргкомитет. – 2023. – С. 342.
9. ХАККУЛОВ Н. К., РИЗАЕВ И. И. Цифровая культура и неприкосновенность личности //Новые технологии в учебном процессе и производстве. – 2023. – С. 605-606.
10. MADATOVICH R. S. Aesthetic Features of the Formation of a Healthy Environment in the Upbringing of Children in the Family //JournalNX. – 2020. – Т. 6. – №. 04. – С. 88-90.
11. Ruzimurodov S. M. Ethnomadonian, Ethnoesthetic Aspects Of The Formation Of A Healthy Lifestyle In Society //The American Journal of Social Science and Education Innovations. – 2021. – Т. 3. – №. 05. – С. 188-194.
12. Рўзимуродов С., Юсупов М. ЎЗБЕКИСТОНДА ФАЛСАФИЙ ФИКРЛАР ИБТИДОСИ ХУСУСИДА //Проблеми та перспективи розвитку науки на початку третього тисячоліття у країнах СНД. – С. 253.
13. Azizqulov A. A., Yusupov M. S. Gazali on the essence of the human spirit //Europaische Fachhochschule. – 2014. – №. 5. – С. 106-108.
14. Yusupov M. S. ФИЛОСОФСКИЙ АНАЛИЗ, ОПРЕДЕЛЕНИЯ И КЛАССИФИКАЦИЯ ПОНЯТИЯ “ЗДОРОВЬЕ” //Theoretical & Applied Science. – 2020. – №. 10. – С. 180-184.
15. Narboyevich A. A. Aristotle and Husayn Waiz Kashifi: Harmony in Moral Views //Texas Journal of Philology, Culture and History. – 2022. – Т. 11. – С. 27-29.
16. Алимов А. Н., Узбекистан С. ХУСЕЙН ВАИЗ КАШИФИ О СОВЕРШЕНСТВОВАНИИ ЧЕЛОВЕЧЕСКОЙ МОРАЛИ HUSSEIN WAIZ KASHIFI ON IMPROVING HUMAN MORALITY //Ответственный редактор. – 2021. – С. 13.
17. Akbar A. Rationality In Moral Philosophy Husayn Kashifi //European Journal of Humanities and Educational Advancements. – 2021. – Т. 2. – №. 10. – С. 132-134.
18. Сафаров А. И., Ризаев И. И. Этапы самоорганизации социальной системы. In В поисках социальной истины. – 2021.
19. АЗИЗИҚУЛОВ А. А. Илмий ижодиётида рационаллик ва нораціоналлик: концептуал таҳлилий ёндашувлар: Дис //Фал. фан. – 2007. – №. 2007.