ISSN: 3106-0668
e-ISSN: 3104-4700

https://doi.org/10.36719/3104-4700/2/20-24

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Adopted Standards For Human Health

Abstract

The World Health Organization (WHO) defines health as: "Health is a state of complete physical, mental and social well-being and the absence of disease or infirmity". Human health also varies depending on the availability of living conditions and resources, including a place to live, adequate education, food security, material income, peace and security, social justice, equality and a healthy environment. One of the main factors characterizing health is the interaction of a person's own internal health with the external factors that determine it. Regardless of the influence of these external factors, the main responsibility lies with each individual and each person must ensure his or her own health.

Many factors affect the normal life and functioning of people in the world. The most important of these is human health. If a person is not healthy, there can be no talk of any normal activity and development. A healthy person means not only the health of his body, but also his mental health. Since health is a dynamic concept determined by society, there is no specific and standard definition of it. If we take it more broadly, health means the coexistence of many of the following conceptual models: – the presence of external and internal balance of the human body – the absence of diseases in the human body – the ability to live and function normally – the presence of social well-being.

Keywords: *human health, environment, medical factors, WHO, accepted standards for health, physical health*

Introduction

Many factors affect the normal life and functioning of people in the world. The most important of these is human health. If a person is not healthy, there can be no talk of any normal activity and development. A healthy person means not only the health of his body, but also his mental health. Since health is a dynamic concept determined by society, there is no specific and standard definition of it. In a broader sense, health means the presence of many of the following conceptual models: – the presence of external and internal balance of the human body – the absence of diseases in the human body – the ability to live and function normally – the presence of social well-being.

The World Health Organization (WHO) defined health as follows: "Health is a state of complete physical, mental and social well-being and the absence of disease and infirmity". Human health also varies depending on the degree of availability of living conditions and resources, which include a place to live, adequate education, food security, material income, peace and security, social justice, equality and a productive environment. One of the main factors characterizing health is the interaction of a person's own internal health with the external factors that determine it. Regardless of the influence of these external factors, the main responsibility lies with each individual and each person must ensure his or her own health. People, regardless of their economic and political power, individually manage and regulate their social environment.

ISSN: 3106-0668
e-ISSN: 3104-4700

The main factors that determine human health are divided into three parts:

- lifestyle,
- environment,
- bio-medical.

Research

Lifestyle includes individual decisions about living. Although these decisions are made with the aim of living a normal life, they can sometimes lead to illness or death. Environmental factors include external factors that affect people's bodies. These factors are not individually controllable by people. These include air, water, climate and other environmental factors (Hategeka et al., 2020, pp. 3–6).

Biomedical factors include medical factors that are genetically determined in people's bodies, as well as existing in people, including physical and mental health. These include various diseases, viruses or vital elements necessary for the body to function. Ensuring health is usually carried out in various combinations of three factors – physical, mental and social well-being, and all of them together are called the "health triangle". Physical health means that people have a healthy body. To maintain physical health, it is necessary to engage in regular physical activity (sports), eat properly and get normal rest. If people eat normally, their living standards increase, and they are provided with quality health care, their bodies will be physically healthy.

As a result of the negative impact of environmental factors, various problems arise in people's health. These effects occur mainly through polluted water, food and atmosphere, carbon dioxide, high radiation and other means. Environmental factors later manifest problems in human health. Continuously living with polluted water or being exposed to radiation later creates conditions for the development of diseases in the body. According to the World Health Organization, 24% of diseases and 23% of deaths (early deaths) in the world occur as a result of the influence of environmental factors. This figure is higher in child deaths, at 36 %. Environmental factors have an impact on the development of 85 of the 102 diseases that are widespread in the world. Diseases that are spread by the wider influence of the environment include gastrointestinal disorders (diarrhea), lower respiratory tract infections, malaria and other diseases caused by contact with the environment. In the world, the risk of environmental factors is 5 times higher in children than in adults. This situation is even more deplorable in developing countries and underdeveloped countries. In such countries, premature mortality among children is many times higher (Zaikov et al., 1991).

Living organisms can protect themselves from certain harmful substances and pollutants with the help of resistance in the fight for survival. As a result, the organism is protected from diseases. The amount of any substance that does not cause a disease reaction in the organism is called the threshold level of that substance. Each substance has a different threshold depending on its composition and properties. On the other hand, some pollutants and harmful substances have a long-term effect on living organisms. Their threshold level is lower than that of substances that have a rapid effect. However, bioaccumulative and radioactive substances are exceptions. Thus, the threshold level for radioactive substances is 0. This means that they pose a threat to the organism in the shortest possible time.

Bioaccumulation is the process of accumulation of pollutants in a living organism and occurs when the externality of harmful substances entering the body during nutrition is weakened (Oles et al., 2025, pp. 2–5). For example, the amount of mercury in fish can be 1000 times greater than the amount of mercury in the water in which the fish is fed. So, when a person eats such fish, poisoning can occur, which can result in death. When people live in an environment of harmful, polluting substances for a long time, they ingest harmful substances at an imperceptible level. When the amount of these substances reaches a certain level, changes (poisoning) occur in the human body. In medicine, the amount of effect of substances is determined by the dose. This word is derived from the Greek word dosus, which means exact weight. The amount of toxic substances is indicated by the letter L, which is the first letter of the Latin word Lethal (killer) (Kartashev, 1998; Korte, 1997).

If poisoning occurs through inhalation, then this time is determined by the concentration of toxic gases and the time of inhalation. Ct. Here C is concentration, t is time. The concentration of substances

ISSN: 3106-0668
e-ISSN: 3104-4700

is calculated in mg / m3. If poisoning occurs through the respiratory tract — through the stomach, intestines, skin, muscles and blood, then the dose of the chemical is calculated in mg / kg. Thus, there are different lethal (lethal) doses (Goldovskaya, 2005).

a) LCt50 – poisoning by inhalation

b) LD50 – poisoning by other routes.

The figure shown in the index indicates the probability of destruction of the human body — that is, it can result in 50% death. One of the necessary norms for human health is the determination of the amount of harmful substances in the natural environment. This is called the Permissible Concentration Limit (PCL) (Rozdin et al., 1997).

This limit means that the specified amount of the substance does not pollute the environment, the human body and future generations to the extent that it will harm them. The TLV is the main ecological norm and has a precisely defined value for air and water. It should be noted that despite the precise determination of the limit value for pollutants, their synergism (the effect of one on the toxic effect of the other) and accumulation have not been studied precisely and completely (Health and the Millenium Development Goals, 2005; World Health Organization, 2005).

Scientific and technical norms and standards have been developed on the basis of the EOI. For example, the permissible emission limit (PEL), the permissible discharge limit (PEL), etc. In accordance with these norms and standards, the amount of toxic substances released into the atmosphere and water bodies is determined and monitored.

Nuclear and thermal power plants can deviate from these norms. However, a temporarily agreed amount of waste (TD) is determined for them. There are also norms in residential areas. Thus, the average daily (OD) and maximum single (MSL) are determined for the atmosphere of a residential area. The maximum single limit is the amount of any substance in milligrams in 1m3 of air. At this time, the body does not show any reflex reaction and does not smell (Huicho et al., 2024, pp. 5–10).

The average daily (OD) limit is determined by the properties that it can cause in the body during the day, and the OD is expressed as mg/m3.

These norms are individual and constitute different amounts for each substance. It should also be noted that in order to protect the health of workers in various professions, workers in those professions use special protective clothing (gloves according to ГОСТ 12.4.010, protective glasses according to ГОСТ 12.4.4.013, special clothing according to ГОСТ 12.4.310, ГОСТ 12.4.103 and special shoes according to ГОСТ 12.4.137) in accordance with the approved standards (Ismayilova et al., 2024, pp. 129–130; Road bitumens. Technical requirements; Marhavilas et al., 2022, pp. 4–8).

Consumers are trying to produce products that are less harmful to human health and the environment. Food safety is the basis of human health. Because obtaining safe, healthy food and water plays the role of a basic function that strengthens human life and strengthens health. It is precisely food products containing dangerous bacteria, viruses and chemicals that cause the emergence of more than 200 diseases. Diarrheal diseases related to food and water cause the death of 2,000,000 people every year. In other words, food safety, nutrition and health protection have a closely interconnected chain link. As a result, the emerging diseases cause serious damage to socio-economic development and the health-sanitary system (Ismayilova et al., 2012).

Within the framework of multilateral international cooperation in the field of protecting the health of the population, the Republic of Azerbaijan has further developed its bilateral relations with the countries of the world and continues its activities in this field successfully. However, it should be noted that in the context of the development of health and medical science, the protection of public health is carried out within the framework of international documents with various regulatory subjects (Ibrahimov et al., 2010).

From this perspective, as well as from the point of view of establishing norms for the protection of public health in one form or another, bilateral international documents can be classified in terms of the subject of regulation as follows: bilateral international documents related to cooperation in the field of health and medical science; bilateral international documents defining mutual relations on friendly relations and strategic partnership, which, however, include norms for the protection of

ISSN: 3106-0668
e-ISSN: 3104-4700

public health; bilateral international documents providing for cooperation in the field of sports; bilateral international documents adopted in the fields of communications, transport and information technology, including those expressing norms in the field of public health and healthcare; bilateral international documents regulating relations on cooperation in the field of economy and finance; bilateral international agreements reflecting norms for cooperation in the field of science and education as a whole, as well as various aspects of the aforementioned fields, and also establishing norms affecting the development of healthcare; bilateral international documents on rescuing people during natural disasters, man-made accidents and emergencies, and protecting public health; bilateral international documents that include provisions on protecting the health of certain categories of persons (military personnel, migrant workers, the disabled, tourists, etc.) (Global Development Goals, 2013).

The primary legal basis for protecting the health of citizens of the Republic of Azerbaijan is Article 41 of the Constitution of the country, which guarantees the right of everyone to protect their health and receive medical care. At the same time, according to Article 12 of the Constitution of the Republic of Azerbaijan, the supreme goal of the state is to ensure the rights and freedoms of man and citizen, and a decent standard of living for citizens of the Republic of Azerbaijan. It should also be noted that the Constitution of the country, which establishes an adequate legal basis for the domestic implementation of international law, including international human rights standards, and other normative and legal acts adopted by the Republic of Azerbaijan in the field of human rights, are based on the principle of respect for international law. However, the legislative acts of the Republic of Azerbaijan, which include norms on the protection of the health of the population, as well as existing ones in the field of health protection, can be classified in several directions:

1) Legislative acts, which include norms on the provision and protection of the right to health protection, along with other areas (for example, national security, youth protection, socio-economic development of regions, poverty reduction and sustainable development, increasing efficiency in the field of human rights protection, etc.). For example, the "National Security Concept of the Republic of Azerbaijan", approved by the relevant decrees and orders of the President of the Republic of Azerbaijan, "National Action Plan for Increasing the Efficiency of Protection of Human Rights and Freedoms in the Republic of Azerbaijan", "State Program for Poverty Reduction and Sustainable Development in the Republic of Azerbaijan in 2008-2015", "State Program for Socio-Economic Development of the Regions of the Republic of Azerbaijan in 2014-2018", "Azerbaijani Youth in 2011-2015", "State Program for Reliable Provision of the Population with Food Products in the Republic of Azerbaijan in 2008-2015", "Azerbaijan 2020: A Look into the Future" Development Concept, etc. (Aliyev, 2000).

2) Sectoral internal state documents directly regulating various aspects related to health protection. For example, the Law "On Sanitary and Epidemiological Safety" dated November 10, 1992, the Law "On Medical Insurance" dated October 28, 1999, the Law "On Immunoprophylaxis of Infectious Diseases" dated April 14, 2000, the Law "On Combating Tuberculosis in the Republic of Azerbaijan" dated May 2, 2000, the Law "On Psychiatric Assistance" dated June 12, 2001, the Law "On Salt Iodization for the Purpose of Mass Prevention of Iodine Deficiency Diseases" dated December 27, 2001, etc. Currently, measures to protect human health, as well as work in this area, are being continued.

Conclusion

Currently, a number of important works are being carried out in Azerbaijan in the field of public health protection. Thus, within the framework of multilateral international cooperation, the Republic of Azerbaijan has further developed its bilateral relations with world states and continues its activities in this field successfully. However, it should be noted that in the context of the development of healthcare and medical science, public health protection is carried out within the framework of international documents with various regulatory subjects. It is from this point of view, as well as from the point of view of establishing norms for public health protection in one form or another, that it reflects bilateral international documents.

ISSN: 3106-0668
e-ISSN: 3104-4700

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Received: 28.08.2025
Accepted: 30.11.2025