

TEACHING STUDENTS THE IMPACT OF ENVIRONMENTAL FACTORS ON HUMAN HEALTH – IMPORTANT KEY IN TEACHING NATURE SCIENCE

Surayyo Radjabova

Researcher, Samarkand State University, Uzbekistan

ABSTRACT

The environment can affect the human body both positively and negatively. It is undeniable that many diseases are formed under the influence of unfavorable natural and anthropogenic factors. This article will set and study the following tasks as considering various environmental factors and assess their impact on human health, paying special attention to carcinogenic factors, as well as the influence of environmental factors on the health of children and of course, suggesting some measures to prevent the harmful effects of these factors.

Keywords and phrases: unusual diseases, rejuvenation, physical well-being, mental well-being, social well-being, values, attitudes, motives, harmful effects

INTRODUCTION

We live in a world in which we have a constant impact on our environment: transforming, creating, destroying, polluting. But such an impact is not limited to one-way contact, we also receive an impact from the environment in response. Sometimes these are natural processes of nature, which we cannot avoid, and sometimes it is a response to our actions, which makes us hostages to our own activities. Environmental factors begin to act on a person in the womb and act on his body even after death.

Under the influence of these factors, a person's phenotype is formed: his physique, level of health, features of biochemical processes in the body.

ENVIRONMENTALLY RELATED GROWTH AND DEVELOPMENTAL DISORDERS IN CHILDREN AND ADULTS

The child's body is highly sensitive to the effects of adverse environmental factors. This is due to a number of physiological characteristics:

Metabolism in children is significantly more intense than in adults. If the basal metabolic rate in an adult is 23 kcal / kg of body weight per day, then in a newborn - 38 - 42 kcal / kg, and by 1.5 years it reaches 55 - 60 kcal / kg. With age, metabolism gradually decreases and approaches that of an adult. Assimilation processes prevail in children. The leading plastic function in the body is performed by proteins, and therefore a positive nitrogen balance is observed in children during the period of growth and development. The non-simultaneous growth and maturation of individual organs and systems should be considered as the most important regularity. In the list of slowly maturing systems, the nervous, humoral and immune systems should be noted.

In ecologically unfavorable settlements, as a result of the chronic influence of a complex of pollutants of different natures, the following ecologically provoked disorders of the health of children are more often recorded:

- Decrease in the level, violation of the harmony of physical and neuropsychic development;

- Pre-painful symptoms of damage to various organs and systems;
- Increased level of general and newly diagnosed morbidity;
- The appearance of long-term, severe and atypical diseases that are difficult to treat with traditional methods;
- Mass appearance of "unusual diseases", as well as "rejuvenation" of diseases more typical for the adult population (stomach ulcers, hypertension, coronary heart disease, diabetes mellitus, etc.);
- Increase in the number of disabled children, as well as the progression of the process of disability of children as a result of chronic pathology and trauma.

Health is a state of complete physical, mental and social well-being, and not only the absence of diseases and physical defects. This definition is found in the Preamble to the Constitution of the World Health Organization as adopted by the International Health Conference, New York, June 19-22, 1946; signed on July 22, 1946 by representatives of 61 countries and entered into force on April 7, 1948. Since 1948 this definition has not changed.

According to this definition, the concept of health is integral, it includes three main components: physical health, spiritual health and social health. In this case, physical health is understood as the current state of the functional capabilities of the organs and systems of the body.

Mental health is considered as a state of the human mental sphere, characterized by general mental comfort, providing adequate regulation of behavior and conditioned by the needs of a biological and social nature. Social health is understood as a system of values, attitudes and motives of behavior in a social environment.

Quite often, in relation to all diseases of the population, in the etiology of which environmental factors play a certain role, the terms "ecological disease", "ecopathology", "diseases of civilization" are used. These definitions emphasize the ecological or social conditioning of many human diseases. However, the environmental factor can play a different role in the etiology of the disease. It is able to act as an etiological, causal factor that almost completely determines the development of a specific disease, in this case, exerting a deterministic effect.

An environmental factor can be a risk factor, that is, such a component of etiology, which, although important for development and progression, in itself, in the absence of other conditions (for example, a genetic predisposition) is not capable of causing a disease in a particular person. Thus, a risk factor is a factor of any nature that, under certain conditions, can provoke or increase the risk of developing health disorders.

The risk factor can play an inducing or modifying role, in some cases it can have a mixed effect. An example of the inductive role of risk factors is the development of a cancerous tumor of the skin under the influence of repeated X-ray irradiation. The modifying role is understood as the aggravation of the clinical picture of the disease under the influence of one or another environmental factor. When modified, the risk associated with a particular factor is modified depending on the presence of another factor or effect. For example, air pollution with nitrogen oxides provokes symptoms of respiratory tract dysfunction in patients with respiratory diseases.

Prevention of violations in the human body, especially the child, is a task of national importance. In this regard, the maximum permissible level or maximum permissible

concentration is developed for each harmful factor. The specified values must never be exceeded. To monitor compliance with the standards, the components of the environment (water, air, soil) are periodically examined. If the obtained data exceed the standards, then measures are immediately taken to eliminate this discrepancy.

In addition, it is necessary to strictly monitor the observance of sanitary and hygienic standards at industrial enterprises, the correct use of fertilizers in agriculture. The best way to reduce the harmful effects of production factors is to change the production technology, replacing it with a more progressive and environmentally friendly one. It is possible to develop and install protective filters on pipes of industrial enterprises, to introduce a waste-free production technology. In agriculture, it is preferable to use natural fertilizers instead of synthetic ones.

For the prevention of diseases in biogeochemical provinces, vitamin complexes containing the missing microelements are successfully used. With an excess content of a trace element in drinking water, you can change the water source or reduce the amount of consumed trace element by reducing it in food. Great importance should be attached to oncological hygienic prevention. Its main task is to identify and subsequently eliminate the possibility of carcinogenic environmental factors acting on a person, as well as the detection and use of environmental factors that reduce the danger of such an impact. An important component of prevention is the conduct of health education among the population. Informing about the dangers of certain environmental factors and how to protect against them.

CONCLUSION

The existence of mankind is possible only when it interacts with objects of the natural environment. In the article, I tried to reveal as much as possible the problem of the harmful effects of the environment on human health. I would like to believe that our descendants will not be as susceptible to negative environmental factors as they are at present.

However, we still do not realize the importance and globality of the problem facing humanity regarding the protection of the environment. All over the world, people strive for the maximum reduction of environmental pollution, and in Uzbekistan, for example, a criminal code has been adopted, one of the chapters of which is devoted to the establishment of punishment for environmental crimes. But, of course, not all ways to overcome this problem have been solved, and we should take care of the environment on our own and maintain the natural balance in which a person is able to exist normally.

REFERENCES

1. Alieva G. I., Hygiene. T., 2010, p. 32.
2. Pivovarov Yu. P. Guide to laboratory studies in hygiene and the basics of human ecology. M., 2001, p. 5.
3. Brewers Yu. P. Hygiene and human ecology (course of lectures). M., 2009 p. 9
4. Matveeva N. A., Hygiene and human ecology. M. 2005, p. 122
5. Matveeva N. A., Leonov A. V. The state of health of the child population in conditions of environmental pollution. // Medical problems of ecology. - N. Novgorod, 1992, pp. 153 - 162