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Sustainable development and human health

At the end of the 20th century, mankind was faced with a necessity to manage a subsequent control of the results of their technical activities. Its harmful influence on the environment is rapidly increasing and consists of the greenhouse effect, loss of ozone layers in the atmosphere, acid rains, accumulation of heavy metals in soil and water, pesticide usage, contamination of large areas by radioactive substances and a loss of variety in the biosphere. Undoubtedly, these factors not only affect human health but they are life threatening to mankind worldwide.

It has been proven statistically that the contaminated environment affects the health of children's. Children are more susceptible to the effects of such poisons because of the immaturity of their immune system. Clinical signs of damage depend on the type and dose of the particular poisoning factor. In our investigation, we found out that the contamination of air by toxic gases from emissions in the city of L'viv, causes allergic diseases in children. These children with acute respiratory viral infections often develop allergic complications such as croup and obstructive bronchitis. Nevertheless, human health depends not only on environmental-specific factors, but also on social, political and economic conditions of a given community. The combined action of all of those factors is reflected in the environmental condition and health indices, such as: disease incidence, death rate, children's mortality, growth rate etc. Now it is known that this data is becoming worse, and environmental contamination can be considered as an ecological catastrophe in Ukraine.

Health indices and data on environmental conditions are dependent on each other. Therefore, they are used as main criteria to evaluate the sustainable development of the society. Infant mortality, prevalence of the diseases, stillbirth and intrauterine developmental defects are some of the most significant indicators of the influence of harmful environmental factors on human health. These indices are increasing in some areas in Ukraine. This prompts us to evaluate other environmental-related data, such as: water resources, including clean drinking water, levels of carbon monoxide, nitric oxides, and sulfur oxides in the air as well as contents of industrial wastes in contaminated areas.

It is not insufficient only to establish these facts and to control them passively. An effective emergency protection system must be created. Existing state establishments in Ukraine fail to provide this function adequately. It is certain, that the main role of the environmental protection policy can be played by non- governmental organizations. They are able to be involved in different spheres of society and make certain decision. Therefore, they should be able to have access to information regarding the environment.

Unfortunately, there is no effective system, which can provide easy access of this information to the general population of Ukraine. Therefore, it is rather a difficult to adhere to the Orchus Convention, which was ratified in 1999 in Ukraine. Medical specialists, particularly pediatrics, therapists, and family doctors should always have access to environmental-related data because of their preventive activity. Monitoring of the main indicators of sustainable development of society, especially ecological and social indices, can play a significant role in the creation of preventive measures to predict and prevent many diseases and intrauterine defects.