



THE RELATIONSHIP BETWEEN HEALTH AND CLIMATE CHANGE

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climate **Introduction.** Climate change is a change in the statistical distribution of weather patterns when it takes an extended period of time (i.e. from decades to millions of years). The Earth's climate system response might be rapid (e.g., a sudden cooling due to volcanic ash in the atmosphere by reflecting sunlight), slow (e.g., thermal expansion of warm ocean waters), or a combined response (e.g., sudden decrease of ice albedo in the Arctic Ocean, followed by more gradual thermal expansion of the water). The life quality in the population is largely conditioned by the environmental conditions which provide an optimal ecological balance between local, regional and global levels.

Material and methods. The present study was aimed to perform a literature review related to healthcare issues, climate change, as well as global warming. Data issued by WHO were analysed, as well as other relevant scientific studies. The bibliographic list accounted for 47 sources (articles, reports, monographs, and PhD theses), published in the Republic of Moldova, Romania, Ukraine, Russian Federation, Bulgaria, Portugal, France, USA, and Great Britain.

Results. As a result of literature review it became clear that climate change will inevitably affect the essential components in maintaining a healthy living environment, such as air and clean water and adequate food and shelter. There is a threat that higher temperatures and climate variability will raise the level of air pollutants, increase the incidence of disease transmission through contaminated water and food, endanger agricultural production in less developed countries and increase the possibility of extreme weather events.

Any climate change triggers some new challenges in the fight against infectious diseases, some of which are extremely sensitive to climate (such as extreme temperatures and rainfall), including cholera, diarrheal diseases, malaria, Dengue fever and other vectorborne infections. The effects of climate change are already visible in some countries.

Global warming has a significant impact on specific areas such as the health sector by increasing the incidence of infectious and parasitic diseases, as well as diarrheal diseases that spread through contaminated waters, thus increasing the mortality and morbidity rate among people with cardiovascular diseases, particularly due to an increase in temperature; the agricultural sector is also extremely susceptible to climate change. Global temperatures associated with increases in drought frequency will soon lead to malnutrition being the most acute problem in countries with large populations. The increase in temperature decreases the level of rainfall per year, which in turn leads to lowering of water, thus decreasing the dilution of wastewater and an increase in the number of infectious agents.

Conclusions. The extreme temperatures represent a health hazard. It has led to new healthcare challenges related to infectious disease control. To prevent these consequences, people should provide environmental protection against such pollutants as greenhouse gases. The environmental risk factors should be thoroughly considered by public health services. The government needs to give higher priority to PHC services, as well as provide a substantial health-related spending to patients' needs, particularly of vulnerable groups who might be affected by global warming.