25TH NATIONAL & 11TH INTERNATIONAL ANNUAL CONGRESS | ON RESEARCH AND TECHNOLOGY OF IRANIAN MEDICAL SCIENCES STUDENTS
URMIA UNIVERSITY OF MEDICAL SCIENCES, URMIA, IRAN

Impact of Climate Change on Human Health

Zeinab Hosseini[1], Maryam Gholami[2], Ziaeddin Bonyadi[3*]

[1]Student Research Committee, Department of Environmental Health Engineering, School of Health, Mashhad University of Medical Sciences, Mashhad, Iran
[2]Genetic and Environmental Adventures Research Center, Department of Environmental Health Engineering, School of Abarkouh Paramedicine, Shahid Sadoughi University of Medical Sciences, Yazd, Iran
[3]Department of Environmental Health Engineering, School of Health, Mashhad University of Medical Sciences, Mashhad, Iran

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***Corresponding Author:**
Dept. of Environmental Health Engineering, School of Health, Mashhad University of Medical Sciences, Mashhad, Iran

Citation:
Hosseini Z, Gholami M, Bonyadi Z. Impact of Climate Change on Human Health. *Iranian biomedical journal*. Supplementary (12-2024): 78.

ABSTRACT

Introduction: One of the challenges of the 21st century is climate change, a detrimental consequence of industrial growth and urbanization and one of the major environmental concerns of this century. Climate change has influenced various aspects of human life. Therefore, this study aimed to examine the effects of climate change on human health.

Search Strategy: The study reviewed 32 articles between 2011 and 2023. Research was conducted using databases such as Google Scholar and ScienceDirect, employing keywords such as “climate change,” “weather changes,” “human health,” and “disease.”

Results: Studies indicated that climate change and global warming could directly or indirectly cause many health problems. It was estimated that between 2030 and 2050, climate change will result in about 25,000 additional deaths per year due to malnutrition, malaria, diarrhea, and heat stress. Research conducted from 2011 to 2023 showed that climate change can contribute to the emergence or exacerbation of certain diseases and health issues. Among these health problems were changes in certain seasonal diseases, the spread of infectious diseases such as malaria and waterborne illnesses, and issues related to insects. Additionally, cardiovascular diseases, strokes, cholera, asthma, allergies, respiratory diseases, skin cancer, and bladder cancer were of concern. Other health issues included those caused by food and nutrition, heat-related illnesses, emerging fungal infections, heat stress, associated disorders, and complications arising from occupational exposures in hot outdoor environments. Mental health and stress-related disorders were also significant. Recent studies indicated that 37% of deaths associated with heat waves during the warmer months were linked to climate change. Furthermore, there was a notable correlation between climatic parameters and mortality rates from cardiovascular and respiratory diseases, with statistical significance at the 95% and 99% levels.

Conclusion and Discussion: Our findings revealed that global warming is causing significant climate changes, which can change the pattern of weather-related diseases. Although many factors contribute to the occurrence of diseases, extreme heat, increased sun exposure, and cold nights in regions with adverse weather conditions can lead to a rise in the prevalence and progress of human diseases.

Keywords: Climate change, Disease, Health

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[DOI: 10.61186/ibj.25th-11th-IACRTIMSS]