### **IJCRT.ORG**

ISSN: 2320-2882



## INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

# Climate Change And Human Health: A Global Challenge

1VEENA.R, 2BHADRA.S.NAIR

1Assistant Professor, 2Staff Nurse

1Sree Sudheendra College of Nursing,

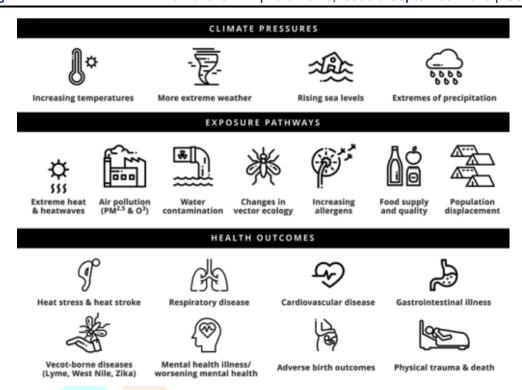
2Amrita Institute of Medical Sciences, Kochi

Climate Change means any change in climate over time, due to natural variability or as a result of human activity.

Climate change is one of the greatest health threats of the twenty-first century. According to the World Health Organization (WHO), rising global temperatures, more frequent extreme weather events, and disruptions to ecosystems directly and indirectly affect human health. Climate change is not merely an environmental concern; it is also a moral, national security, and public health challenge. Understanding its impacts and finding solutions are critical for building a healthier and more sustainable future.

#### **Global and National Context**

The health risks linked to climate change are already visible. A recent Lancet report highlighted that in 2023, people worldwide experienced an average of 50 additional days of health-threatening temperatures compared to a climate without global warming. India, in particular, suffered record-breaking heat-related health impacts in the last decade. Extreme droughts have also become widespread, affecting nearly half of the world's land area, leading to food and water shortages, forced migration, and economic instability. These statistics illustrate that climate change is not a distant threat but a current crisis.



#### **Health Impacts of Climate Change**

Climate change affects health in multiple ways, both direct and indirect.

#### Injury and mortality from extreme weather events:

Floods, cyclones, heatwaves, and cold waves cause injuries and fatalities worldwide. Disasters disrupt emergency services, delay treatment, and leave vulnerable populations such as children, the elderly, and those with chronic illnesses at highest risk.

#### **Heat-related Illnesses:**

Exposure to prolonged heat can cause heat cramps, exhaustion, dehydration, and in severe cases, heat stroke—a life-threatening condition. Physical activity, lack of hydration, and certain medications increase vulnerability.



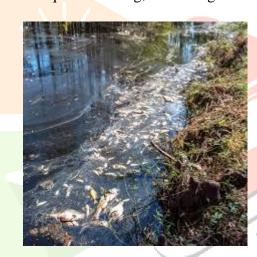
#### **Cardiovascular and Respiratory Diseases:**

Air pollution and extreme temperatures increase the risk of cardiovascular disease and respiratory problems. Studies show that switching to low-emission transportation systems could prevent premature deaths from heart disease and respiratory illness.



#### **Water-borne Diseases:**

Flooding and poor sanitation lead to outbreaks of diseases like cholera, typhoid, and hepatitis A. Contaminated water also facilitates mosquito breeding, increasing the risk of malaria and dengue.



#### **Malnutrition and Food Security:**

Climate change reduces crop yields and diminishes nutritional quality. Studies indicate that staple crops grown under elevated carbon dioxide levels lose essential nutrients such as protein, iron, and zinc. This trend poses severe risks of malnutrition, especially for children and vulnerable communities.

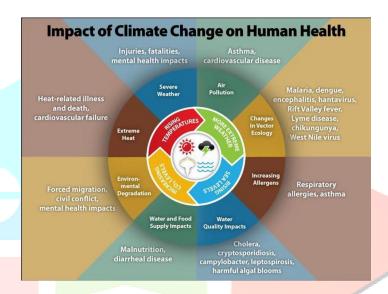
#### **Vector-borne and Zoonotic Diseases:**

Mosquitoes, ticks, and other vectors thrive in warmer and wetter climates, spreading diseases such as dengue, zika, chikungunya, and malaria. Additionally, as humans encroach on wildlife habitats, zoonotic diseases like Ebola, SARS, and avian flu become more likely to emerge.



#### Mental and Psychosocial Health:

The psychological toll of climate-related disasters is significant. Survivors often face depression, anxiety, post-traumatic stress disorder (PTSD), and substance abuse. Farmers and communities dependent on natural resources are particularly vulnerable, as environmental instability threatens their livelihoods.



#### Impact on healthcare facilities healthcare systems

Extreme weather can damage hospitals and clinics, disrupt energy and water supplies, and interrupt medical supply chains. Power outages threaten critical care such as ventilators, dialysis, and vaccine storage. Health workers also face occupational hazards including extreme heat, wildfire smoke, infectious diseases, and mental strain during crises. A resilient healthcare system must be climate-proofed to ensure reliable care during emergencies.

#### The Role of Nurses and Health Professionals

Health professionals, especially nurses, play a vital role in climate response.

- Work with your employers, unions and associations to reduce emissions and to 'green' your workplace.
- Know about climate change science and help educate patients and the general public about it.
- 3. Be aware and plan for the emerging patient needs resulting from climate change and help them take action to support a healthy planet.

- 4. Be prepared for extreme weather events.
- Promote active transportation and local healthy agriculture and food system that reduce emissions.



#### Strategies for Global and National Action

Governments and institutions must integrate health into all aspects of climate policy. This includes:

- Building climate-informed health surveillance systems to track and predict disease outbreaks.
- Strengthening laboratories, data collection, and early-warning mechanisms.
- Climate-proofing healthcare infrastructure to withstand extreme events.
- Reducing reliance on fossil fuels, deforestation, and unsustainable land practices.
- Prioritizing vulnerable groups in adaptation and mitigation strategies.

Addressing climate change requires systemic change across energy, agriculture, urban planning, and healthcare. Countries must recognize that protecting the environment is inseparable from protecting human health.

#### **Conclusion**

Climate change is real, it is happening now, and it is solvable. The health consequences are already visible, but proactive measures can reduce suffering and save lives. By integrating health considerations into climate policies, empowering healthcare professionals, and building resilient systems, we can work toward a safer and healthier future for all. The challenge is urgent, but with coordinated global action, the solutions are within reach.

#### Reference

- 1. Abel DW, Holloway T, Harkey M et al. (2018). Air-quality-related health impacts from climate change and from adaptation of cooling demand for buildings in the eastern United States: an interdisciplinarymodelling study. PLoS Medicine 15 (7), e1002599.
- 2. Achebak H, Devolder D and Ballestar J (2018). Heat-related mortality trends under recent climate warming in Spain: a 36-year observational study. PLoS Medicine 15, e1002617.
- 3. Cook J, Ellerton P and Kinkead D (2018). Deconstructing climate misinformation to identify reasoning errors. Environmental Research Letters 13, 024018.
- 4. Koh H. Communicating the Health Effects of Climate Change. JAM2016;315(3):239240.doi:10.1001/jama.2015.18271

5. 2014 National Climate Assessment.Global Change Research Program. http://nca2014.globalchange.gov/report

