

Editorial

Climate change: A Global Public Health Challenge

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Introduction

Climate change threatens people with increased flooding, extreme heat, increased food and water scarcity, more disease, and economic loss. Human migration and conflict can also be a result¹. The World Health Organization (WHO) calls climate change one of the biggest threats to global health in the 21st century². Societies and ecosystems will experience more severe risks without action to limit warming^{3,4}. Adapting to climate change through efforts like flood control measures or drought-resistant crops partially reduces climate change risks, although some limits to adaptation have already been reached⁵. Poorer communities are responsible for a small share of global emissions, yet have the least ability to adapt and are most vulnerable to climate change^{6,7}.

Climate change

The World Health Organization identifies climate change as the most significant health threat facing humanity in the intermediate term⁸. With increasing temperatures and other climate change-related environmental issues, the global disease profile is changing. First, more infectious diseases are emerging and/or reemerging in certain regions, such as dengue in North and South America and Ebola in Africa. The climate is becoming increasingly suitable for the growth of disease vectors such as *Aedes aegypti*, with transmission increasing by almost 10% between 1950 and 2018⁹. Additionally, climate change also results in more frequent and severe environmental disasters. The 2022 monsoon flooding in Pakistan affected over one

third of the country's population and was thought to be particularly severe due to climate change¹⁰. Heat waves are also becoming more common, with a UNICEF report estimating that 23% of children (538 million) are exposed to high heat wave frequency, and by 2050, 1.6–1.9 billion children will be affected, threatening their health and well-being¹¹. Heat waves are associated with greater risks of respiratory and cardiovascular diseases, reduced access to quality food and nutrition, and a higher risk of mortality¹¹. A study found that the odds of heat stroke hospitalization increase by 37% for every additional day of heat wave exposure, highlighting the serious impact of heat waves on the health outcomes of older adults¹².

Despite these impacts of climate change, the inclusion of health into climate management programs (and vice versa) is still minimal. Health has only been included as a global goal on climate adaptation at the 27th UN Climate Change Conference of Parties (COP27) in 2022¹³. The real impact of this decision on the climate health landscape remains to be seen. In addition, although the WHO includes health-specific climate financing as one of the 10 key components of climate-resilient health systems¹⁴, a separate funding facility for health within the climate financing framework has yet to be pledged. Because of this, climate change remains one of the top public health challenges that must be dealt with utmost urgency.

Conclusion

In conclusion, climate change is the most significant problem facing the world. Global warming is increasing

day by day. If we cannot prevent it as soon as possible, our world will face undesirable consequences.

Identifying the top public health challenges is key to developing responsive, effective, and sustainable health delivery systems. As the conundrum of global health challenges expands, a high degree of prioritization, financial investment, international cooperation, and collaboration in tackling these challenges is needed to accomplish 2030 universal healthcare targets.

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