EDITORIAL

Climate Change and Health: Preparing for the Future

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Climate change is an environmental problem and a significant public health crisis. It expands the range of health effects and affects communities worldwide. The impacts are often disproportionate in vulnerable populations as the world moves forward toward responses to climate change[1]. There is a need to understand the risks to health, develop and put in place adaptation measures, and enforce mitigation policies that guarantee security to health equity.

The health outcomes of climate change are massive and varied[2]. High temperatures have been linked to an increased number of heat-related illnesses and fatalities. Older adults, young children, and people with pre-existing medical conditions are vulnerable during this period. The additional risk to urban areas from the 'heat island' effect underscores the need for heat action plans and increasing urban green space[3]. Apart from that, global climate change exerts a negative influence on air quality. Rising temperatures facilitate the forming processes of ground-level ozone, which is one of the components of smog[4].

Furthermore, wildfires that happen more and more often and on an increasingly larger scale due to climate change release vast quantities of pollutants into the atmosphere[5]. Those pollutants are capable of exacerbating respiratory and cardiovascular diseases, which may lead to an increase in admissions to hospitals and additional premature deaths. Climate change enhances contagious diseases. Changes in temperature and rainfall patterns alter the habitats of disease-carrying vectors like mosquitoes and ticks, enabling them to transmit diseases like malaria, dengue, and Lyme to new areas. Additionally, there is an increase in waterborne diseases because of changes in the weather, wherein heavy rains and floods deteriorate water quality.

Despite climate change affecting everyone, certain groups are particularly vulnerable. Low-income communities find themselves in precarious positions, lacking the resources needed to adapt[6]. These communities often live in areas prone to flooding or lack access to essential services, including healthcare and cooling resources during heatwaves. Indigenous populations, who rely heavily on natural ecosystems for their livelihoods, face significant disruptions[7].

Preparation for the health impacts of climate change is complex and involves multiple facets[8]. It necessitates bolstering health response capacity to climate-related health issues. This includes enhancing disease surveillance, training health professionals to recognize and manage such conditions, and ensuring healthcare facilities are resilient to extreme weather events. Community-based adaptation strategies are crucial, with urban planning needing to prioritize green space development to counter the urban heat island effect and enhance air quality[9].

Infrastructure improvements focusing on better drainage systems can also mitigate flooding impacts. Public health campaigns are essential for raising awareness about the health risks associated with climate change and promoting practices to reduce vulnerability, such as staying hydrated during heatwaves or using mosquito repellents[10].

The unique role that healthcare professionals and organizations can play in climate advocacy is undeniable. They are positioned to highlight the human health effects of climate change, influencing both public opinion and policy-making. Thus, medical societies and public health organizations are crucial in advocating for more robust climate policies and integrating climate considerations into health education and practice.

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