EDITORIAL

Climate-Resilient Healthcare Facilities: Time for a National Policy in India

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Climate change is no longer a distant threat climate change has emerged as one of the most devastating environmental threat. Climate change is increasingly impacting public health in India, leading to increased prevalence of heat-related illnesses, vector-borne diseases, and other climate-sensitive conditions. India needs a national policy for climate-resilient healthcare facilities to address the growing threat of climate change on public health. Various studies have demonstrated that there is an urgent need to address climate related health hazards in the medical education.[1] Climate change is also an immediate and growing risk to public health infrastructure in India. Numerus incidents shown that India's healthcare system is increasingly vulnerable to the consequences of climate change, including extreme weather events, rising temperatures, and water scarcity. These environmental shifts threaten the delivery of health services, damage critical infrastructure, and compromise patient safety. Despite this, the concept of climate-resilient healthcare remains largely under-addressed in national health policies. This editorial calls for the urgent development and implementation of a national policy in India to build climate-resilient and low-carbon healthcare facilities. Drawing from global examples and aligning with India's existing public health and environmental frameworks, such a policy would be a significant step toward safeguarding health systems against future climate shocks. The growing frequency of extreme weather events—floods, heatwaves, cyclones, and droughts—poses a dual threat: to public health and the healthcare facilities themselves. Healthcare institutions, meant to be sanctuaries during crises, are increasingly becoming victims of climate-related disasters.

India is one of the most climate-vulnerable countries in the world. According to the

Global Climate Risk Index 2021, India ranked 7th among the most affected countries by extreme weather events between 2000 and 2019.[2] These events have direct and indirect effects on health systems such as heatwaves increase the incidence of heatstroke and cardiovascular emergencies, floods disrupt access to healthcare, contaminate water supplies, and increase the risk of vector- and water-borne diseases, droughts and famines contribute to food insecurity and malnutrition while air pollution, exacerbated by climate change, is a major cause of respiratory illness. These effects are compounded by the fragile state of health infrastructure in many parts of the country, particularly rural and tribal regions. A 2019 study noted that only 15% of Primary Health Centres (PHCs) in India meet Indian Public Health Standards for infrastructure.[3]

To properly address this pressing issue we need to climate-resilient health system. The World Health Organization (WHO) defines a climate-resilient health system as one that is capable of anticipating, responding to, coping with, recovering from, and adapting to climate-related shocks.[4] A climate-resilient healthcare facility, therefore, encompasses several features comprising of infrastructure resilience facilities designed or retrofitted to withstand floods, cyclones, and heatwaves, energy security utilizing renewable sources such as solar energy, with adequate backup systems. It also encompasses water and sanitation and its availability even during droughts and disasters, waste management with environment-friendly disposal mechanisms. Disaster preparedness with early warning systems and emergency response plans and sustainability using low-carbon technologies to reduce the facility's environmental footprint are also key components. The SMART (Safe, Green, and Climate-Resilient) Hospitals initiative by PAHO and WHO in the Caribbean is a powerful example of integrating climate resilience and environmental sustainability in health systems.[5]

India’s has made initiatives in this regard but current efforts are fragmented and insufficient. India has several ongoing programs that touch upon components of health and climate as National Action Plan on Climate Change (NAPCC) with its Health Mission added in 2015, State Action Plans on Climate Change and Health (SAPCCH), Swachh Bharat Abhiyan addressing sanitation and hygiene in health facilities and most recent PM-Ayushman Bharat Health Infrastructure Mission (PM-ABHIM) aimed at improving health infrastructure. However, these efforts are often fragmented, lack intersectoral coordination, and do not directly address climate-proofing of health facilities.

We need a comprehensive national policy on climate-resilient healthcare facilities which mandate climate-risk assessments in all new and existing health infrastructure projects, promote Green Building designs for hospitals and PHCs, incorporating local climate considerations, incentivize Renewable Energy integration, especially in off-grid and rural health centers, create Emergency Preparedness Protocols for all types of climate events, integrate Health into Urban Planning, ensuring hospitals are located in low-risk areas and develop a Green Hospital Certification System aligned with India's environmental and health standards. India can draw inspiration from global practices from examples like United Kingdom’s NHS has committed to becoming the world’s first net-zero national health service by 2040 [6] and Thailand’s Green and Clean Hospitals Initiative promotes sustainable healthcare through green procurement, waste reduction, and renewable energy.[7] Country like Philippines incorporated

climate-resilient design in the construction of its rural health units following Typhoon Haiyan. These models demonstrate that low- and middle-income countries can also implement scalable and context-specific climate-resilient strategies.

To our advantage, India is uniquely positioned to lead in this domain due to its large public health system, which can serve as a testing ground for scalable pilots, strong disaster response capacity, which can be linked with health facility preparedness, commitment to renewable energy, including a target of 500 GW by 2030 under the Paris Agreement and growing interest in environmental health, with multiple academic and research institutions engaged in related studies with recently launched PM-ABHIM and digital health initiatives under the Ayushman Bharat Digital Mission can incorporate climate resilience as a key pillar.

To conclude with, climate change is rapidly emerging as the greatest public health threat of the 21st century. India, with its vast and diverse healthcare infrastructure, must act now to prepare for this reality. Climate-resilient healthcare facilities are no longer optional—they are essential for ensuring uninterrupted, equitable, and quality care in the face of climate disasters. A dedicated national policy will signal India's commitment to protecting both its people and its health systems. A national policy is crucial to ensure a coordinated and comprehensive approach to building climate-resilient healthcare systems. The policy should provide a framework for assessing risks, strengthening infrastructure, and enhancing the capacity of healthcare systems to cope with climate-related health challenges. The time to act is now.

Declaration of Generative AI and AI Assisted Technologies in the Writing Process

The authors haven't used any generative AI/AI assisted technologies in the writing process.

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