Editorial

# The Storm Has Passed, The Crisis Has Not: Climate Change is a Public Health Emergency

As Hurricane Melissa enters the meteorological record books, its legacy is measured in more than wind speeds; it is measured in shattered health systems and shattered lives. This storm, whose trajectory was predicted by advanced artificial intelligence, Google DeepMind[1], is a clear warning of our new reality…a reality where technology offers powerful tools, but the root challenge is fundamentally human and environmental[2].

Our national health research community has been steadily working to illuminate these areas. For example, at the 2022 Trinidad & Tobago National Health Research Conferences, the featured speaker, Professor Jonathan Patz, laid out the clear and present danger of "*The Climate Crisis: Implications for both Infectious and Non-Communicable Diseases*". The following year, the discussion evolved to include the tools for our response, with Dr. Wayne Frederick's timely feature presentation on "*A.I. and Healthcare*." These were not isolated topics. They were precursors, building the case that now converges with undeniable urgency at this 6th Annual Conference under the theme: *Climate Change: Impacts on Public Health*.

The vulnerability of our small island developing states is no secret. Rising sea levels and warming oceans are supercharging hurricanes, making them more destructive and ferocious[2]. But the actual cost is measured not just in damaged infrastructure, but in the collapse of clinical care, disrupted medicine supply chains, and power outages that jeopardize life-saving treatments. In the storm's aftermath, limited access to clean water, sanitation, and hygiene invites outbreaks of gastroenteritis and leptospirosis, creating a second wave of suffering.

This crisis weighs heaviest on the most vulnerable. Our elderly, often with pre-existing conditions like asthma or heart disease, face immense peril in the chaotic recovery after a disaster. Children are particularly susceptible to dehydration and the diseases that follow floods.

Yet, the impacts cut even deeper than the immediate physical threats[3]. We are facing a profound and growing mental health toll. The trauma of the experience, the anxiety of an uncertain future, and the grief for a lost way of life—what experts call "solastalgia"—are becoming widespread, as documented by the Lancet Countdown on Health and Climate Change[4]. Furthermore, there is an increased threat of food and water insecurity as rising temperatures and erratic rainfall disrupt agriculture, leading to crop failures and rising food prices. This not only exacerbates malnutrition but also pushes people towards cheaper, processed foods, worsening the regional epidemic of diabetes and hypertension.

To face this multifaceted threat, we cannot rely on instinct alone. We need robust, inter-disciplinary research to map the specific health impacts, identify the most vulnerable communities, and evaluate the cost-effectiveness of interventions. The impact and solutions must be investigated through mixed methodologies involving professionals with expertise in public health, data science, engineering, sociology, and more. High-quality and actionable data is our most powerful tool. Evidence-informed decisions must guide how we fortify our health systems[5–7], design early warning systems, and integrate mental health support into disaster response. This aligns with the Trinidad and Tobago National Health Research Agenda[8], as climate change is a priority topic under the two Strategic Priority Area of '*Health Emergencies*' and '*Prevention, Care and Treatment of Non-Communicable Diseases*'.

The climate crisis is no longer a future forecast; it is our present reality. As we empathize and support our neighbors as they rebuild, we must recognize that protecting the health of Caribbean people is now inextricably linked to the fight against climate change. Our resilience depends on our willingness to recognize this truth and act decisively. Our very survival is at stake.

## REFERENCES


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