

# Climate change and health research – lessons from COP26

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## ABSTRACT

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The COP26 in Glasgow received a huge amount of advance publicity, with the media in the UK outlining the importance of these negotiations in securing the commitments and investment needed from the Global North to really drive a move to a low-carbon economy. These commitments must be honoured if there is to be any hope of staying below the critical 1.5° of global heating. Above this threshold, runaway positive feedback loops are predicted to make irreversible changes to the way we live our lives, and we will see the reality of the climate emergency in unfolding health emergencies.

Evidence-based policy is essential to avoid ideology derailing the progress of climate science. In 2008 the World Health Assembly adopted a resolution calling for research into the effects of climate change on health. The resolution outlined five priority areas to focus on: health vulnerabilities, health protection strategies, health impacts of adaptation and mitigation strategies, decision support, and surveillance and monitoring. Since these have been set out, the pace of research into the health effects of climate change has accelerated and expanded, with over 375 articles published in 2019, compared with fewer than 75 in 2008.<sup>1</sup>

In an analysis of the published literature, presented at a fringe event in the Health Pavilion,<sup>1</sup> the World Health Organization (WHO) highlighted a very clear bias towards research into health vulnerabilities associated with global heating, and a relative lack of information on the economics of protecting health from climate change. In addition, there appears to exist in the research agenda an ‘inverse research law’, whereby those communities where the impacts of climate change are predicted to be most severe attract the least amount of funding. In response to the research gaps identified in the climate/health nexus, the UK used their presidency of COP26 to develop the Adaptation Research Alliance (ARA) – a global coalition of researchers and action communities. This was formally launched at COP26, with the aim of bringing together funders, researchers and other actors who will co-create and develop solutions to climate-related health problems that can have tangible effects on people’s daily lives.

While the aims are laudable, and the end products are likely to address some of the knowledge gaps that have been highlighted,

there remain key steps that need to be taken to make this project a success, as acknowledged by the ARA and WHO. In discussion at the Health Pavilion, capacity building in the Global South and the need to disaggregate data to support gender-focused analyses were raised as key priorities for large funding bodies such as the National Institute for Health Research (NIHR) and Wellcome Trust to incorporate into their work as they undertake the vital task of commissioning research that produces evidence on which policy can be built.

The ARA, together with the UK Health Security Agency, is keen to build on these gaps, especially in approaches to research and the need to secure sustained investment. Suggested priority research areas include health information systems (for example health early warning systems utilising artificial intelligence), improved service delivery, and climate-sustainable diagnostic technology, among others. Equally, funders including the Green Climate Fund were keen to ensure that gender equality was a key feature of any proposal and, importantly, that there was sufficient consultation from the population that the proposal was seeking to study. As one example, in order to apply for the Adaptation Fund ([www.adaptation-fund.org](http://www.adaptation-fund.org)), proposals must be country-led, be linked to a specific health issue and be gender-sensitive, with a particular emphasis on nutritional deficits.

It is important to define clear health outcomes to build on evidence of causality at exposure level. In fact, health outcomes can be used as a metric to drive climate change mitigation and adaptation strategies. The applied gaps highlighted in the WHO special report encourages collaborative efforts among centres of excellence. In the UK, the NIHR has committed to a £20 million call on global health research<sup>2</sup> and the Wellcome Trust has climate change and health as one of its three priorities.<sup>3</sup> There is desire to support vulnerable groups through specific interventions with clear health outcomes, linking meteorological variations with health. The final link is to convert research findings into policy. Herein lies the difficulty, as there appears to be a language barrier between researchers and policy makers; this is where the RCP can step in to help translate and facilitate this process.

The NHS is the world’s first health system that has committed to a net zero target by 2040.<sup>4</sup> The NHS contributes 4–6% of the UK carbon footprint, with procurement making up a major part of this.<sup>5</sup> Efforts are already underway to address this, including the purchase of electric and hydrogen-hybrid ambulance fleets. The RCP has also highlighted in its revised outpatient pathway<sup>6</sup> the need to optimise patient care and reduce unnecessary travel, thereby directly addressing carbon emissions.

The COVID pandemic has forced innovation in terms of research delivery. Several NIHR trials sought to be innovative and switched

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their delivery to be wholly remotely delivered, with good feedback from participants.<sup>7</sup> This suggests that we should rethink research design and delivery to incorporate remote options where possible and to ensure both resilience and sustainability. Given the NIHR interest in supporting global health research, we would hope that all proposals include a section on how action has been taken to minimise carbon consumption, in line with NHS targets.

As health professionals, we are duty bound to advocate for the vulnerable, and steward resources wisely for the benefit of the populations we serve. In doing so, in both academic and clinical pursuits, we can reduce the contribution of healthcare practices to the climate emergency, and therefore avoid contributing to the impending global health emergency. ■

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