

younger than 18 years, or those who have liver disease). Finally, the role of rezafungin for the treatment of patients with infections with special considerations (septic arthritis and osteomyelitis, eye-involved infections, CNS infection, biofilm-associated infections [eg, endocarditis or situations in which indwelling catheters should be kept], and patients infected by moderately echinocandin-susceptible species, such as *Candida parapsilosis*) is an enigma. However, clinicians should be ready to welcome rezafungin, a new and promising antifungal drug for the management of patients with invasive candida infections.

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Climate change, health, and discrimination: action towards racial justice



The health impacts of climate change will affect everyone. But the consequences are unevenly distributed, falling much harder on some communities than others. Although discourse on climate change and health acknowledges principles of equity,¹ little attention is given to underlying structural discrimination and the need for racial justice. From vulnerable communities in Puerto Rico coping with the effects of hurricane Fiona, to excessive heat in racially segregated neighbourhoods in the USA, to the tens of millions of people who have been displaced by flooding in Pakistan during 2022, minoritised populations² bear the brunt of the health impacts of climate change, despite being least responsible for it. Racism kills,³ and climate change kills.⁴ Together, racism and climate change interact and have disproportionate effects on the lives of minoritised people within countries and between the Global North and the Global South.^{4,5}

Structural discrimination and racism can be traced back to colonialism, which is seldom mentioned in climate discourse. Only in 2022 did the Intergovernmental

Panel on Climate Change (IPCC) recognise “historical and ongoing patterns of inequity such as colonialism” as a factor in vulnerability to climate change.⁶ As Farhana Sultana observed: “colonialism haunts the past, present, and future through climate”.⁷ Colonialism

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Panel: Values to guide research and action on climate change, health, and structural discrimination

- Pursue research that acknowledges and repairs structural discrimination
- Measures of success in research, policy, and action should lie with accountability to the most affected people and areas
- Justice and equity need to be the starting point, not afterthoughts
- Centre the voices and solutions of the most affected people and areas in research, policy making, education, advocacy, and action
- Support initiatives that foster healing and repair, including calls for reparations
- Take a solidarity-driven approach, bringing intersecting issues together such as migrant and racial justice

has caused the decimation of land and resources, the enslavement of people, and plundered the wealth of colonised regions through continuing mechanisms of extraction and appropriation. Histories of colonial and neocolonial extraction have left low-income regions more vulnerable to, and less able to adapt to, the impacts of climate change.

Just as the health impacts of climate change are unequally distributed, so too is responsibility for causing the climate crisis. Countries of the Global North represent 14% of the world's population but are responsible for 92% of historical carbon dioxide emissions in excess of the safe planetary boundary.⁸ These nations have colonised the atmospheric commons for their own enrichment through forms of industrialisation and growth that have relied on colonial patterns of appropriation.⁹ Even within rich countries, responsibility lies primarily with the affluent and ruling classes, due to their higher levels of emissions¹⁰ and disproportionate control over energy systems and national legislation.

An example of these dynamics can be seen in the Niger Delta. Before Nigeria's independence in 1960, the oil company Shell began oil exploration in the Niger Delta, asserting corporate colonial control over the land.¹¹ The region was at the heart of Nigeria's agricultural economy. Since then, due to the degradation of the land through oil spills and contamination and subsequent militancy in the region during the 1990s and 2000s, people in the Niger Delta experience high levels of poverty and unemployment, and therefore poor mental and physical health.¹² Shell and other transnational oil companies continue to extract oil from the region for global markets.

These legacies of profit and power are also present in contemporary medical systems and influence unequal life outcomes of minoritised generations. For example, health-care workers in the UK are told to question people's migratory status upfront, and migrants who are ineligible can be charged for or denied care.¹³ The failure to equitably distribute COVID-19 vaccines globally has revealed power dynamics whereby patents prevent some countries from producing their own vaccines.¹⁴ Such events reflect racial capitalism, an economic system where capital accumulation in the core areas of wealth, and among elites, relies on leveraging racial ideology to dehumanise and justify the exploitation of racially minoritised people in various peripheries.¹⁵

What can the health community do? It is crucial that all those who work on climate change and health pay attention to these histories and inequalities. As Araceli Carmago highlighted: "as planetary dysregulation continues so will discrimination and oppressions".¹⁶ Minoritised people are disproportionately exposed to the social, political, and commercial determinants of health that are underwritten by unfair systems and maintained by oppressive structures and hierarchies.¹⁷ For example, white supremacy enables environmental racism—ie, racial discrimination in environmental policy making, the targeting of communities of colour in exposure to polluting industries, and the under-representation of minoritised people in environmental decision making and movements.^{18,19} The health community must adopt an expansive vision of climate change and health, bringing power analyses of colonial, white supremacist, patriarchal, and other oppressive structures into its work.²⁰

With this kind of vision, there will be increased opportunities for research on climate change, health, and structural discrimination. Although some national-level studies have monitored the unequal health impacts of climate change,^{21,22} data on health outcomes for people who are minoritised due to caste, skin colour, ethnicity, race, Indigeneity, migratory status, and religion are largely underexamined, especially in the Global South. It is crucial to work towards more data granularity to expose inequalities within countries, rather than homogenising entire national populations. Such an exercise could help guide policy actions that address loss and damage in accordance with treaties such as the Paris Agreement, and establish reparations owed to communities for health harms related to colonial legacies and ongoing damage.²³ Alongside quantitative research, inequalities must be highlighted using qualitative approaches such as testimonies and case studies that centre the voices and lived expertise of the most affected people and areas (MAPA) and young people. Beyond research, embedding anti-discrimination in climate change and health discourse can be done through education, policy, advocacy, art, public engagement, and more. The panel highlights values to guide evolving work in this field.

We must also recognise the rich body of work, led especially by Indigenous Peoples and front-line MAPA communities, to address structural discrimination and climate change, while fostering relational ways of being that respect planetary boundaries.²⁴ For example, scholars

in New Zealand and Canada are working on Indigenous Health Promotion—a process of healing rooted in Indigenous peoples' concerns including land-based learning, health equity, environmental sustainability, cultural integrity, and decolonisation.²⁵ Decolonisation requires the restoration of land and space for Indigenous knowledge and practice.²⁶ Calls for reparations must also be supported²³ to address the economic dominance of the Global North, repair past colonial harms, and build just futures.⁷ Voices that have been silenced and erased from dominant discussions on health and climate change must be restored and further oppression must not take place while engaging in these efforts.

By remaining technocratic and apolitical, scientists and the health community are complicit in perpetuating discrimination in this field. Every interaction with a person from a minoritised community is an interface with these legacies. Each interaction therefore becomes an opportunity for the health worker to acknowledge, reflect, and act at the individual, community, and systemic levels. Scientists and health workers must interrogate the narratives and practices that perpetuate the multiple intersecting forms of oppression that give rise to the systems and industries that fuel climate change and health inequalities. The health community can offer scholarship, skills, and solidarity, maximise its organising power, and be a strong voice for climate and racial justice. Such efforts must be part of a wider movement ecology for climate justice that is accountable to front-line MAPA communities as it mobilises for equitable climate and health action.

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