

# Medical ethics and the climate change emergency

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The editors of the *Journal of Medical Ethics* support the call of the UK Health Alliance on Climate for urgent action to ensure that the current Conference of the Parties to the United Nations Framework Convention on Climate Change ‘finally delivers climate justice for Africa and vulnerable countries’.<sup>1</sup> As they note ‘Africa has suffered disproportionately although it has done little to cause the crisis’.

The burden of climate change has thus far fallen disproportionately on Global South countries. The monsoon in Pakistan this year killed over 1100 people and the public health implications of the flooding might affect the health of over 5 million people.<sup>2</sup> The South Asian monsoon impacts the lives of a billion people and the flooding associated with wet seasons is likely to occur eight times more frequently in future years than at present.<sup>3</sup>

For many pacific islands such as Kiribati, the Marshall Islands and Tuvalu, increasing sea levels mean the inhabitants could in effect become refugees when these islands are submerged or their aquifers and arable land are flooded by seawater.<sup>4</sup> The countries facing the worst climate change induced threats are relatively minor emitters of carbon, yet have been the first to suffer the resulting health, economic and social burdens.

A BMJ editorial on health professionals

and their role in meeting the challenges of the Anthropocene describes how journals should prioritise publications that address the climate change and its health impacts. Examples of this include research on the health effects of particulates and working towards decarbonising the National Health Service (NHS) and other healthcare systems.<sup>5</sup>

The JME is a forum for the ethical analysis of issues that arise in healthcare. Accordingly, we must ask how ethical analysis can contribute to solutions to the climate change emergency, and help to identify those ethical issues that should be prioritised in order to generate productive discussions that will spur action.

Moving beyond the well-canvassed issues of medical ethics such as abortion, informed consent and euthanasia will require some imagination and reflection, but there are examples of ethical analysis turning productively to issues raised by the climate emergency.

The NHS and other healthcare systems are moving toward becoming carbon neutral and Joshua Parker in his forthcoming Feature Article analyses the implications of the NHS moving to ‘green’ asthma inhalers.<sup>6</sup> The JME will prioritise papers that provide a normative analysis of the issues raised by healthcare systems adapting to the demands of the Anthropocene.

Richie reports that 8% of US emissions are produced by its healthcare system and pharmaceuticals, making these major contributors to this source of carbon.<sup>7</sup> She considers the normative reasons for why change is necessary and some of the challenges to effectuating change.

Conscientious objection has been subjected to rigorous and extensive ethical debate over the last twenty years. There is no doubt that it is an important issue because of its significance for ‘aid in dying’ legislation and termination of pregnancy. Nonetheless, there are similar and related concepts that are relevant to the climate emergency. For example, more healthcare professionals will resort to civil disobedience as the climate emergency worsens, and

there are relatively few analyses of when that is ethically defensible.<sup>8</sup> A related example involves the question of when and under what circumstances it is ethically defensible to nudge or coerce individuals or institutions to become carbon neutral or green.

The health needs of populations are also likely to change, as climate change affects their nutrition, the transmissibility of waterborne and other diseases, extreme weather events and air pollution, as well as economic and social precarity due to migration, and as result likely increases in mental health burdens. This raises difficult questions about how healthcare systems will continue to meet the demands of such patients. Alistair Wardrope, for example, examines the moral challenges facing health workers in ensuring just healthcare in spite of these changing conditions, stressing the importance of acknowledging the land community as part of our moral community as a first step to realising this.<sup>9</sup>

The JME would like to see papers that analyse the normative aspects of responses to climate change. Areas for consideration could include, but are not limited to, duties and responsibilities of healthcare professionals, healthcare providers, institutions, regulators and governments to address climate change and issues of global justice in concrete and actionable ways in policy and practice. Given that the Global North is overwhelmingly responsible for historical emissions, and the Global South is overwhelmingly facing the health effects of the climate crisis, authors from Global South nations are strongly encouraged to contribute papers.

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#### REFERENCES

- 1 Zielinski C, authorship group listed below. COP27 climate change conference: urgent action needed for Africa and the world. *J Med Ethics* 2022;**48**:e2.
- 2 Bhamani S. Record flooding in Pakistan poses major health risks. *BMJ* 2022;**378**.
- 3 Katzenberger A, Levermann A, Schewe J, *et al*. Intensification of very wet monsoon seasons in India under global warming. *Geophys Res Lett* 2022;**49**(15).
- 4 Kirsch S. Why Pacific Islanders stopped worrying about the Apocalypse and started fighting climate change. *Am Anthropol* 2020;**122**(4):827–39.
- 5 Haines A, Scheelbeek P, Abbasi K. The health case for urgent action on climate change. *BMJ* 2020;**368**.
- 6 Parker J. Barriers to green inhaler prescribing: ethical issues in environmentally sustainable clinical practice. *J Med Ethics* 2022. doi:10.1136/jme-2022-108388. [Epub ahead of print: 18 Aug 2022].
- 7 Richie C. Environmental sustainability and the carbon emissions of pharmaceuticals. *J Med Ethics* 2022;**48**(5):334.
- 8 Bennett H, Macmillan A, Jones R. Doctors and civil disobedience. *Lancet* 2020;**395**(10220):248.
- 9 Wardrope A. Health justice in the Anthropocene: medical ethics and the land ethic. *J Med Ethics* 2020;**46**(12):791–6.