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Responding to the climate crisis – bridging the gap between public health ethics and environmental ethics

Ethik der Klimakrise – Wie und warum eine Kluft zwischen Public Health-Ethik und Umweltethik überbrückt werden sollte

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Abstract: The climate crisis is a major public health ethics problem that needs to be addressed using a broad set of ethical tools to analyse the manifold ethical issues. To enrich the discourse, we suggest to bridge the gap between environmental ethics and public health ethics. A planetary health ethics could help to develop a holistic perspective and create awareness about the multiple ethically relevant interactions between humans and the environment.

Keywords: climate change; environmental justice; inequalities; planetary health; public health ethics.

Zusammenfassung: Die Klimakrise ist ein aus gesundheitsethischer Sicht komplexes Problem, das mit verschiedenen ethischen Instrumenten angegangen werden muss. Um den Diskurs zu bereichern, sollten wir die Kluft zwischen Public Health-Ethik und Umweltethik überbrücken. Eine planetare Gesundheitsethik könnte helfen, eine ganzheitliche Perspektive zu entwickeln und ein Bewusstsein für die vielen ethisch relevanten Wechselwirkungen zwischen Mensch und Umwelt zu schaffen.

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Is the climate crisis a public health ethics problem?

The climate crisis is a threat to global public health [1]. Now, what constitutes a public health *ethics* problem? We are tempted to say that any issue of public health is also a public health ethics problem. This is because the goals of public health research and practice almost invariably concern questions of equity and justice in the attempt to achieve the best-possible health outcomes for all [2]. Public health goals are thus inherently value-based. Public health ethics explores goals and values, discusses moral dilemmas and analyses how to achieve goals under conditions of resource scarcity, different value systems, multiple forms of discrimination, and competing interests. As we will demonstrate, the climate crisis stipulates a range of moral issues that public health ethics is concerned with.

Whilst most emissions to date have been produced by the wealthiest nations, the public health impacts of the changing climate primarily affect nations with lower income levels [3]. This is a problem of *global inequalities*. Unequal contributions to the climate and other environmental crises by different population groups over time imply injustices with future generations facing threats to their opportunities for a flourishing life [4]. Within and across nations, certain population groups face higher forms of health risks than others, including e.g. the elderly, pregnant women and young children, people with pre-existing mental or physical impairments, forced migrants, and people with low socioeconomic status [1].

Other normative dimensions that characterise environmental crises can be summarised as *recognition failures*. These include the recognition of the various types of benefits that people enjoy from common goods such as clean air, forests and coral reefs. Another example is the failure to recognize the epistemic injustice in whose voice is heard when it comes to negotiating responsibilities, establishing priorities, and the identification of diverse needs [5].

The role of public health ethics therefore is to support the identification of the normative aspects of the climate and other environmental crises, and develop guidance on how to deal with them. Uncovering and describing these normative dimensions is indispensable in order to hold ourselves accountable against the moral frameworks that we claim to adhere to as a global society. There are ample resources in public health ethics that can help to analyse potential moral conflicts and guide decision-making based on considerations of justice, disadvantage, and more recently intersectionality [8–12].

Addressing the unfolding environmental changes requires a profound transformation of various areas of human activities globally, starting from a shift to net zero carbon energy sources, changes in food production and consumption patterns and in means and frequencies of transportation [13]. These systemic changes can affect individual liberties which might be justified for the common good. Without an accompanying shift in norms and value systems, societal changes on the scale necessary will likely not be achievable [14].

In summary, the climate and other environmental crises expose and exacerbate existing shortcomings in equitable opportunities to spend a flourishing life – which includes health and wellbeing – both globally and within nations. Furthermore, they constitute a case of inter- and intragenerational injustice in intersecting areas including race, ethnic background, and gender. Lastly, they compound the classic moral dilemma of public health and liberal democracies: the need to limit individual liberties to achieve collective wellbeing. To justify profound changes and encourage cooperation to address the climate crisis, we need a stronger interaction between ethical discourses regarding the environment and public health.

Bridging the gap: environmental ethics and public health ethics

How can public health ethics analysis on the climate crisis be strengthened? We suggest addressing a gap we

see between environmental ethics and public health ethics.

The field of environmental ethics was born from interrogating the nature of humankind's relationship with its (animate and inanimate) natural environment. In its early literature, a strong anthropocentric perspective on this matter was prevalent. As a response to the failure of insufficiently assessing the importance of non-human sentient beings and the inanimate environment, various strands of environmental ethics emerged that attempted to shift the focus of inquiry from humans to the value of all sentient beings or even whole ecosystems. This shift gave birth to important work on the imperative to respect non-human sentient beings and valuing living organisms irrespectively of their use for humans [15]. The relationship between humans and the environment is becoming again a major field of inquiry, stimulated by novel approaches, for instance the capabilities approach [16] and Rozzi's concept of biocultural heritage [17], that offer new defences on the need of relating to nature, either as something we may value on itself, or to be able to interact with nature and pass on biocultural knowledge.

Public health ethics has been shaped from early on by the ethical analysis of health-related concerns on a population level, especially in relation to prevention and health promotion, and also regarding health systems and health care. The central focus is on the health of human beings. Typical public health ethics discussions are concerned with normative concepts such as population benefit, stigma, solidarity, or questions of social justice in relation to tobacco, infectious diseases and vaccination, non-communicable diseases, health behaviour, amongst others. Many of these early studies are related to human beings and their socio-political environment, including poor working conditions, poverty, poor nutrition, and living in densely populated areas. Only recently public health ethics has started to discuss the climate crisis [18–20], but contributions remain few.

While environmental ethics has concentrated on how humans affect the environment, public health ethics has included a systematic study on how the environment affects human health, particularly under environmental health ethics [21]. A public health ethics that is informed by environmental ethics can embrace a more holistic perspective on the two-directional interaction between protecting the environment and human health. Under this perspective, the promotion of human health and the protection of the environment are not competing goals, but complement each other [22].

Responding to the climate crisis with a planetary health approach

We suggest bridging the gap between environmental and public health ethics could support the identification of solutions to the ethical dilemmas that arise from the climate and other environmental crises. This could be achieved by adopting a planetary health lens in both fields of applied ethics. Planetary health is both an attitude towards life and an emerging field of scientific inquiry which takes a transdisciplinary approach to examining the links between anthropogenic environmental crises and their impacts and developing solutions [4]. It puts a strong focus on the interconnectedness of humans with our natural environment and on the stability and functioning of all ecosystems which ultimately determine human health and wellbeing. In this sense, planetary health, similar to environmental ethics, recognizes the instrumental value of ecosystems for our survival and their irreplaceability. It is concerned with integrating human and animal health in a healthy environment whilst achieving equity in population health globally [23]. There have been attempts to define a planetary health ethical framework which reflects the holistic and encompassing view of the field on humanity's relationship with the environment [4, 24]. Part of the planetary health approach is the acknowledgement that many people are not indifferent regarding their relationship with the environment [25]. If we recognize that the environment also has intrinsic value, it is crucial that we live our lives without contributing to its destruction. Future developments need to take more seriously the demands from indigenous peoples to have opportunities to interact with nature for the purposes of appreciation and passing on biocultural heritage.

A public health ethics that is informed by environmental ethics and integrates a perspective of planetary health can address the ethical challenges posed by the climate crisis.

Autorenerklärung

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References

- Romanello M, McGushin A, Di Napoli C, Drummond P, Hughes N, Jamart L, et al. The 2021 report of the Lancet Countdown on health and climate change: code red for a healthy future. *Lancet* 2021;398:P1619–62.
- Abbasi M, Majdzadeh R, Zali A, Karimi A, Akrami F. The evolution of public health ethics frameworks: systematic review of moral values and norms in public health policy. *Med Health Care Philos* 2018;21:387–402.
- Hubacek K, Baiocchi G, Feng K, Castillo RM, Sun L, Xue J. Global carbon inequality. *Energy Ecol Environ* 2017;2:361–9.
- Myers S, Frumkin H. *Planetary health: protecting nature to protect ourselves*. Island Press, 2020.
- Lakhani N. Cop26 legitimacy questioned as groups excluded from crucial talks. *Guardian* 2021.
- Wu J, Snell G, Samji H. Climate anxiety in young people: a call to action. *Lancet Planet Health* 2020;4:e435–6.
- Ojala M, Cunsolo A, Ogunbode CA, Middleton J. Anxiety, worry, and grief in a time of environmental and climate crisis: a narrative review. *Ann Rev Environ Resour* 2021;46:35–58.
- Powers M, Faden RR. *Social justice: the moral foundations of public health and health policy*. New York: Oxford University Press, 2006.
- Venkatapuram S. *Health justice: an argument from the capabilities approach*. New York: Polity, 2013.
- Mielck A, Wild V. *Gesundheitliche Ungleichheit - Auf dem Weg von Daten zu Taten*. Weinheim: Juventa Verlag, 2021.
- Samra R, Hankivsky O. Adopting an intersectionality framework to address power and equity in medicine. *Lancet* 2021;397:857–9.
- Willison DJ, Ondrusek N, Dawson A, Emerson C, Ferris LE, Saginur R, et al. What makes public health studies ethical? Dissolving the boundary between research and practice. *BMC Medical Ethics* 2014;15:61.
- WBGU. *Welt im Wandel Gesellschaftsvertrag für eine Große Transformation*. Berlin: Wissenschaftlicher Beirat der Bundesregierung Globale Umweltveränderungen, 2011.
- Otto IM, Donges JF, Cremades R, Bhowmik A, Hewitt RJ, Lucht W, et al. Social tipping dynamics for stabilizing Earth's climate by 2050. *Proc Natl Acad Sci USA* 2020;117:2354–65.
- Brennan A, Lo Y-S. Environmental ethics. In: Zalta EN, editor. *Stanford Encyclopedia of Philosophy*, 2002.
- Nussbaum MC. *Frontiers of justice: disability, nationality, species membership*. Cambridge, Mass.: The Belknap Press: Harvard University Press, 2006. xiii, 487.
- Rozzi R. South American environmental philosophy: Ancestral Amerindian roots and emergent academic branches. *Environ Ethics* 2012;34:343–66.

18. Richie C. Guest Editorial: Sustainability and bioethics: where we have been, where we are, where we are going. *New Bioeth* 2020;26:82–90.
19. Macpherson CC, Smith E, Rieder TN. Does health promotion harm the environment? *New Bioeth* 2020;26:158–75.
20. Dwyer JF. Environmental Justice, Ethics, and Public Health. *The Oxford Handbook of Public Health Ethics*.
21. Resnik DB. *Environmental health ethics*. New York: Cambridge University Press, 2012.
22. Lee LM. A bridge back to the future: public health ethics, bioethics, and environmental ethics. *Am J Bioeth* 2017;17:5–12.
23. Foster A, Cole J, Farlow A, Petrikova I. Planetary health ethics: beyond first principles. *Challenges* 2019;10:14.
24. Drews S, Van den Bergh JC. What explains public support for climate policies? A review of empirical and experimental studies. *Clim Policy* 2016;16:855–76.
25. Redvers N. The value of global indigenous knowledge in planetary health. *Challenges* 2018;9:30.