



Challenges in tracking climate, health, and justice over time and large geographical areas

In their Comment in the *Lancet Public Health*, Panagiota Kotsila and Isabelle Anguelovski¹ highlighted the importance of historical injustice and inequity relating to the health impacts of climate change, stressing the need to go beyond analysing susceptible populations as so-called monoliths and treating climate change as an equalising threat.¹ We fully agree.

Existing climate–health indicators aim to track historical and projected trends in climate-related health risks consistently and at different spatial scales to allow communication of complex climate–health trends in a more accessible format to inform research, advocacy, and decision making. However, the specific framework for tracking change in a measurable way across political boundaries is often restricted in its ability to encompass many aspects of justice. Although indicators are useful, other research and monitoring approaches (eg, qualitative data collection and case studies) can be better suited for analysing injustice in depth.

The *Lancet* Countdown indicators often depend on publicly available data, collected for purposes other than addressing problems at the climate–health nexus.^{2–4} Where possible, the *Lancet* Countdown indicators are disaggregated by the UN Development Programme Human Development Index at the global level.³ Some indicators lend themselves to sex or gender disaggregation. However, the absence of (standardised) disaggregated health burden or population data (eg, by sex, gender, ethnicity, race, occupation, income, disability, and other social identifiers) is a major barrier to uncovering inequalities, inequities and injustices, between and within countries.^{2–4}

The *Lancet* Countdown regional centres in Asia,⁴ South America,⁵ Small Island Developing States, and Europe² focus on the health implications of climate change, considering specific regional contexts. Health implications are considered in terms of exposure to, susceptibility to, and ability to cope with and recover from climate hazards and their health impacts, and responsibility for greenhouse gas emissions. The regional centres aim to continuously identify data gaps, including those needed to place justice adequately at the centre of their research.

Europe is one of the major contributors to the climate crisis. Yet, other regions suffer the worst consequences and have less adaptive capacity. Therefore, the *Lancet* Countdown in Europe emphasises Europe's global responsibility to climate action and the transition to low-carbon economies.² Subsequent reports will include a crosscutting focus on inequalities, inequities and injustices by firstly providing indicators disaggregated across susceptible population groups underpinned by high-resolution European datasets, secondly discussing the equity context around each indicator, and lastly highlighting data gaps that hamper efforts to explore inequalities. In addition to innovating *Lancet* Countdown in Europe indicators, the related Horizon Europe projects CATALYSE and IDAlert are working to further understand underlying vulnerabilities and inequalities related to climate–health impacts, adaptation, and mitigation in Europe. For example, considering low-income households, populations on the move, gender minorities, and those with occupational climate hazard exposure, which, as Kotsila and Anguelovski¹ point out, are often migrants with barriers to accessing health care.

The *Lancet* Countdown^{2–5} aims to continuously improve data, methods, and communication approaches and welcomes proposals for new indicators

and methodological innovations to capture the multiple dimensions of equity and justice at the intersection of climate change and health.

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