

# The world needs an intergovernmental panel on pandemic risk

**To the Editor**—Even as immunization programs race against new viral variants, scientists and policymakers around the world are trying to learn from the COVID-19 pandemic about how to better prevent, or at least contain, future pandemics. Multiple reviews are underway, including a Lancet Covid-19 Commission and a High Level Independent Panel on Financing the Global Commons for Pandemic Preparedness and Response. Other studies and commissions will follow. These efforts are vital but should be considered initial steps toward a greater goal: a sustained program to build knowledge on pandemic risk, akin to the role of the Intergovernmental Panel on Climate Change (IPCC) in systematically assessing scientific research on climate change.

There are four reasons the world needs an intergovernmental panel on pandemic risk.

First, the fundamental science on pandemic risk is evolving. Knowledge in this field has advanced considerably, but there is much to learn about the range of real and potentially pathogenic hazards, the probability of future pandemics, and effective response strategies<sup>1</sup>. Research on pandemics is fragmented and episodic: large research projects have been launched, only to end when governmental and philanthropic priorities shift. A sustained and holistic scientific effort to properly assess current and future risk is needed.

Second, pandemic risk itself is changing. Like climate change, pandemic risk is anthropogenic, driven by human factors ranging from travel and trade to agricultural practices and deforestation<sup>2,3</sup>. The actual rate of change of key risk factors is unknown, which exposes humanity to considerable peril. An intergovernmental panel could quantify the impacts of human activity on the drivers of pandemic risk, and report on trends. It could clarify the unseen costs of current socio-economic models, and inform policy to reduce risk.

Third, a standing scientific body could keep pandemic risk on the global agenda.

There is a tendency to think about the next pandemic as a problem for another generation. It is not<sup>4</sup>. Mutation and antigenic drift could ignite an influenza pandemic next year, as could zoonotic spillover of another virus. Ongoing global assessments could drive political will to address pandemic risk. Holistic assessments that clarify the risk could also increase the public's scientific understanding, which is critical to catalyzing action<sup>5</sup>.

Fourth, an intergovernmental panel could help shield scientific assessment from political pressures. Infectious diseases are easily politicized. Countries that host reservoirs for zoonotic diseases rightly worry about the potential for stigma, or travel and trade restrictions. Assessments of the risks posed by cultural practices and economic activity, from the consumption of wild game to intensive logging and agriculture, are sensitive. But clear-sighted and unbiased assessments of these risks are urgently needed, and should be produced by an organization that has global standing and scientific transparency.

There are multiple efforts to assess preparedness for threats to global health, including the recently created Global Preparedness Monitoring Board<sup>6</sup>. However, there is no sustained effort to track and report on pandemic risk, which could guide and focus efforts to prepare.

An intergovernmental panel on pandemic risk could help build scientific consensus on the drivers of pandemic risk and their change over time. Such a panel could assess the evidence on strategies for prevention, mitigation, response and recovery. The panel should have broad representation from major public-health agencies, as well as representation from both public sectors and private sectors, with experts on aspects of risk (virology, ecology and epidemiology) and impacts (food security, finance, commerce, education and governance), as well as preparedness, mitigation and response strategies. One critical lesson of COVID-19 has been

that pandemics are not just health events but are disasters that affect the whole of society. Accordingly, the science of the risk, and requirements for preparedness, must be understood across every sector. These aspects of pandemic risk could be studied by interlinked working groups, emulating the operating model of the IPCC.

Climate change and pandemics are two of the great existential perils facing humanity. The IPCC was needed to clarify basic scientific questions on climate change. It has proven critical in its ability to mobilize scientific knowledge to shape collective action on a planetary scale. The current global health-security architecture is fragmented. There is no scientific center of gravity that can help policymakers understand the choices before them, and the urgency of action. An IPCC is needed for pandemic risk, if the world is to be ready for the next crisis. □

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## References

1. Carroll, D. et al. *Science* **359**, 872–874 (2018).
2. Morse, S. S. *Emerg. Infect. Dis.* **1**, 7 (1995).
3. Keesing, F. et al. *Nature* **468**, 647–652 (2010).
4. Madhav, N. et al. in *Disease Control Priorities: Improving Health and Reducing Poverty* 3rd edn., Vol. 9 (eds. Jamison, D.T. et al.) Ch. 17 (The International Bank for Reconstruction and Development/The World Bank, 2017).
5. Bostrom, A. et al. *J. Risk Res.* **23**, 902–911 (2020).
6. Global Preparedness Monitoring Board. *World Health Organization* [https://apps.who.int/gpmb/assets/annual\\_report/GPMB\\_annualreport\\_2019.pdf](https://apps.who.int/gpmb/assets/annual_report/GPMB_annualreport_2019.pdf) 2019.

## Competing interests

The authors declare no competing interests.