

## **Building Resilient Health Systems in the Wake of Climate Crisis in South Asia**

### ***This panel is not accepting abstracts***

Climate change poses the greatest threat to global health systems, altering the physical environment and profoundly affecting both natural and human systems. Its impacts on human health are both direct and indirect, leading to a heightened risk of noncommunicable diseases, spread of pathogens, and increase in infectious diseases - all contributing to a rising global mortality rate. For instance, World Economic Forum (2024) estimated additional 14.5 million deaths associated with climate change by 2050. Climate change significantly impacts healthcare systems by disrupting infrastructure and reducing the capacity of the workforce, hindering their ability to deliver effective health coverage.

Healthcare system challenges are particularly severe in Asia, where temperature is rising two times faster than the global average (Dabla-Norris et al., 2021) and posing significant human health hazards. In 2023 alone, recurring climate events including floods, landslides, heat waves, cyclones have affected a significant population in Asian countries, particularly Bangladesh, India, Iran, Nepal and Pakistan (WMO 2024). Each of these countries faces unique challenges to healthcare systems due to climatic changes.

In Pakistan, majority of the population lives in rural areas which are highly vulnerable to flooding and droughts. The healthcare system in these areas generally lacks proper infrastructure, medical equipment, diagnostic facilities, treatment and human resources (Khan et al., 2023).

The situation is no different in other South Asian countries. India, the largest economy of South Asia, faces challenges of inadequate infrastructure and number of healthcare professionals; urban-rural disparities; limited health insurance coverage; and insufficient public healthcare funding (Kumar 2023). These challenges are compounded by erratic climate changes, which place additional strain on already inadequate funding, exacerbate the uneven distribution of healthcare workers between rural and urban areas (Ghia and Rambhad 2023), and worsen issues related to poor transportation and limited access to healthcare facilities (Chawla 2023).

Nepal, on the other hand, faces significant health system challenges, including a shortfall in health system inputs that affects service delivery and results in low standards of care (Dumka et al., 2024). Similarly, Bangladesh's healthcare system is troubled by a fragmented national health infrastructure, coordination and capacity issues, inadequate facilities, regional disparities, low health expenditure, and underutilised medical equipment in public hospitals (Shahen et al., 2020).

Climate change exacerbates existing challenges within each country's healthcare system, where health policy and systems research is already limited (Marten et al., 2020). In this context, this session is planned as part of a project funded by the Alliance for Health Policy and Systems Research (AHPSR). It will focus on 'building back better' to enhance achievement of Sustainable Development Goal-3 (SDG3), while

also contributing to the broader objectives of the other 16 SDGs. The discussion will address the following key questions:

- What are the key barriers in leadership, governance, infrastructure, human resources, data and evidence, and technology that hinder progress toward climate-resilient health systems in South Asian countries?
- What are the current policy responses to climate-health vulnerabilities in South Asia, and what has been effective or ineffective?
- What is required to establish a climate-resilient and environmentally sustainable healthcare system at the local and state levels?

## References

- Chawla, N.S. 2023, 'Unveiling the ABCs: Identifying India's Healthcare Service Gaps', *Cureus*, vol. 15, no. 7, <<https://www.cureus.com/articles/167440-unveiling-the-abcs-identifying-indias-healthcare-service-gaps#!/>>.
- Dabla-Norris, E., Nozaki, M. and Daniel, J. 2021, 'Asia's Climate Emergency', International Monetary Fund, <<https://www.imf.org/en/Publications/fandd/issues/2021/09/asia-climate-emergency-role-of-fiscal-policy-IMF-dabla>>.
- DARA and the Climate Vulnerable Forum 2012, 'Climate Vulnerability Monitor: A Guide to the Cold Calculus of a Hot Planet', Second Edition, <<https://daraint.org/wp-content/uploads/2012/09/CVM2ndEd-FrontMatter.pdf>>.
- Dumka, N., Gurung, A., Hannah, E., Goel, S., and Kotwal, A. 2024, 'Understanding Key Factors for Strengthening Nepal's Healthcare Needs: Health Systems Perspectives', *Journal of Global Health Reports*, vol. 8, e2024010.
- Ghia, C. and Rambhad, G. 2023, 'Implementation of Equity and Access in Indian Healthcare: Current Scenario and Way Forward', *Journal of Market Access & Health Policy*, vol. 11, no. 1, 2194507.
- Khan, S. J., Asif, M., Aslam, S., Khan, W. J. and Hamza, S. A. 2023, 'Pakistan's Healthcare System: A Review of Major Challenges and the First Comprehensive Universal Health Coverage Initiative', *Cureus*, vol. 15, no. 9, <<https://www.cureus.com/articles/168957-pakistans-healthcare-system-a-review-of-major-challenges-and-the-first-comprehensive-universal-health-coverage-initiative#!/>>.
- Kumar, A. 2023, 'The Transformation of the Indian Healthcare System', *Cureus*, vol. 15, no. 5, <<https://www.cureus.com/articles/156574-the-transformation-of-the-indian-healthcare-system#!/>>.
- Marten, R., Yangchen, S., Campbell-Lendrum, D., Prats, E. V., Neira, M.P. and Ghaffar, A. 2021, 'Climate Change: An Urgent Priority for Health Policy and Systems Research', *Health Policy and Planning*, vol. 36, no. 2, pp.218-220.

Shahen, M. A., Islam, M. R. and Ahmed, R. 2020, 'Challenges for Healthcare Services in Bangladesh: An Overview', *IOSR Journal of Nursing and Health Science*, vol. 9, pp.13-24.

WMO 2024, *State of Climate in Asia 2023*, World Meteorological Organization, <[https://library.wmo.int/viewer/68890/download?file=1350\\_State-of-the-Climate-in-Asia-2023.pdf&type=pdf&navigator=1](https://library.wmo.int/viewer/68890/download?file=1350_State-of-the-Climate-in-Asia-2023.pdf&type=pdf&navigator=1)>.

WEF, 2024, "Quantifying the Impact of Climate Change on Human Health, World Economic Forum, <https://www.weforum.org/publications/quantifying-the-impact-of-climate-change-on-human-health/>

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