

# Quantifying health impacts of air pollution in low- and middle-income countries

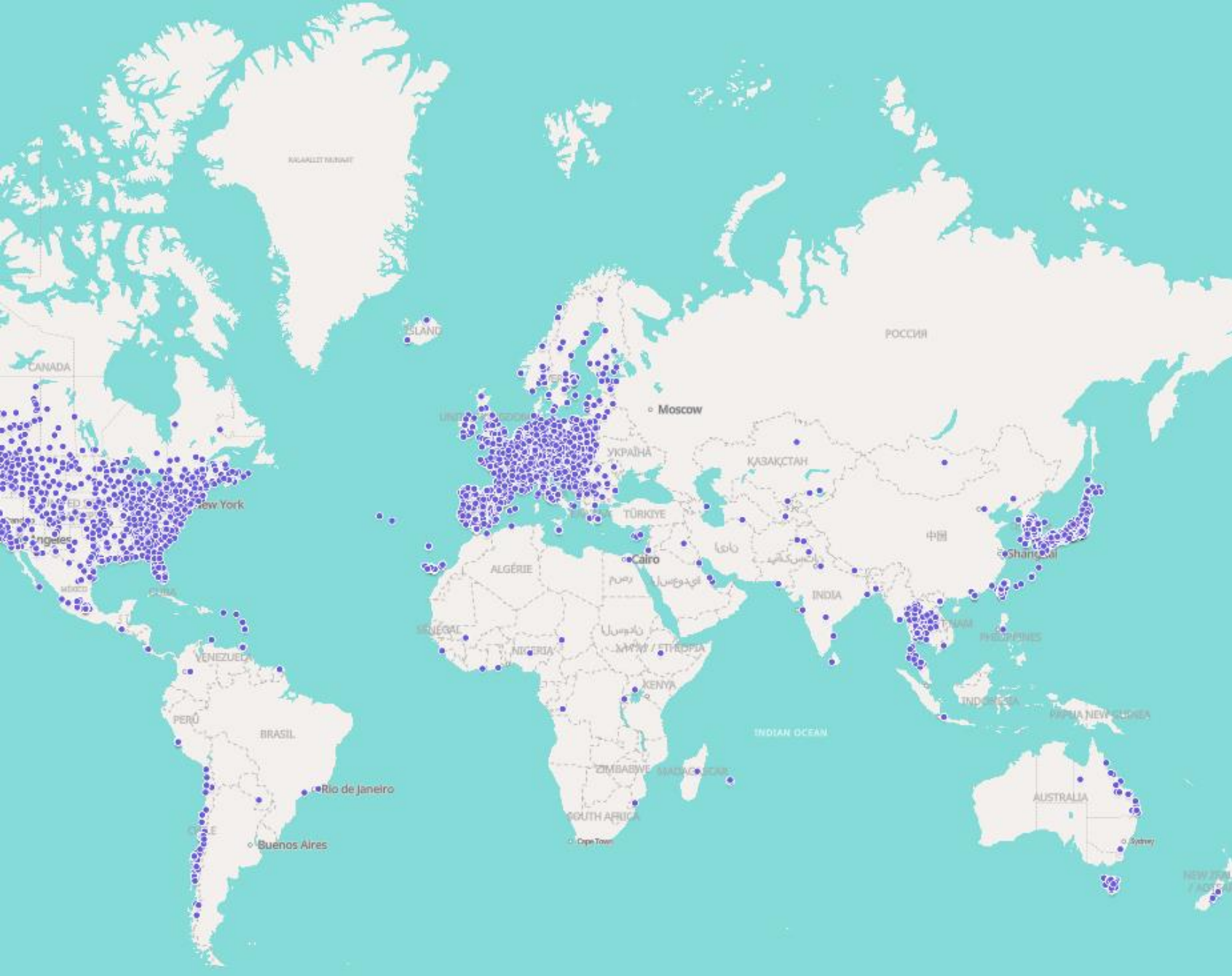
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Pallavi Pant, PhD

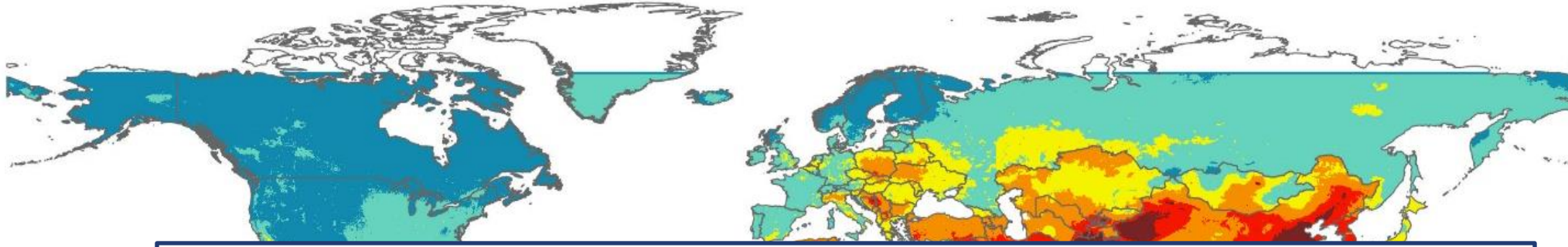
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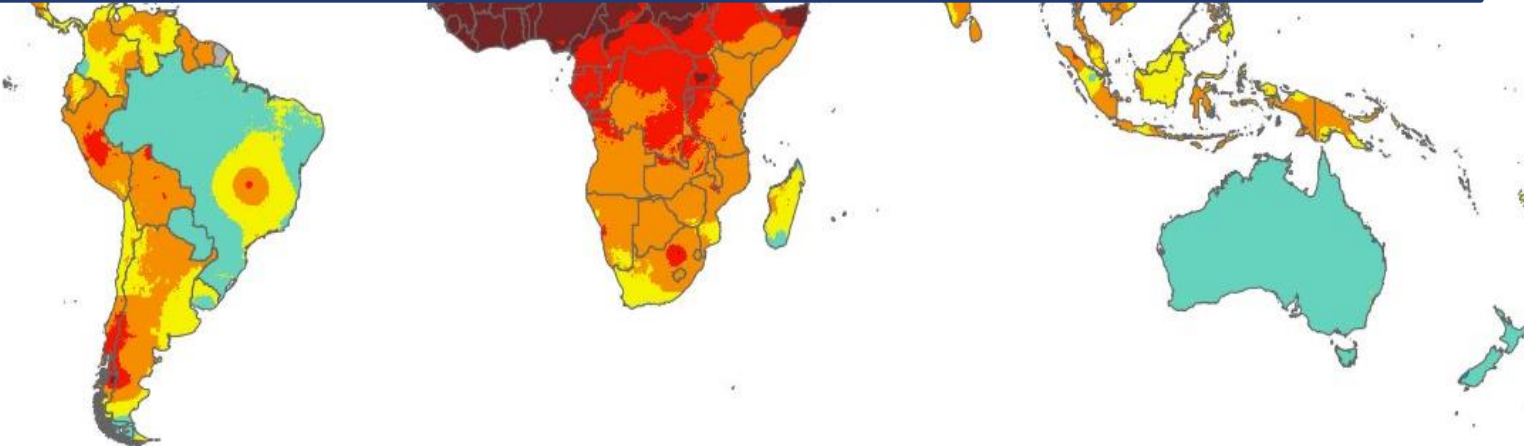
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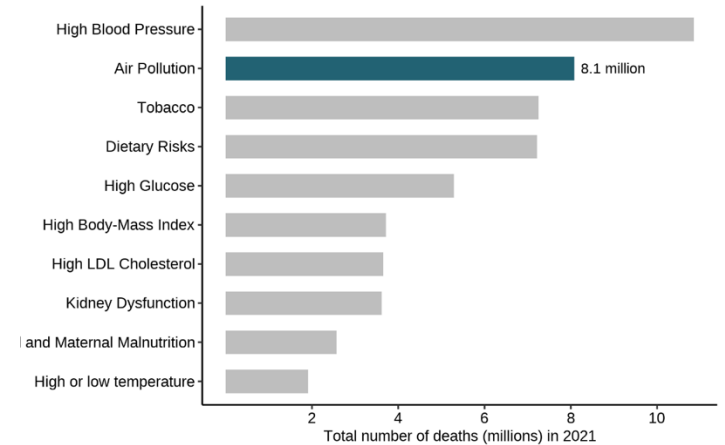
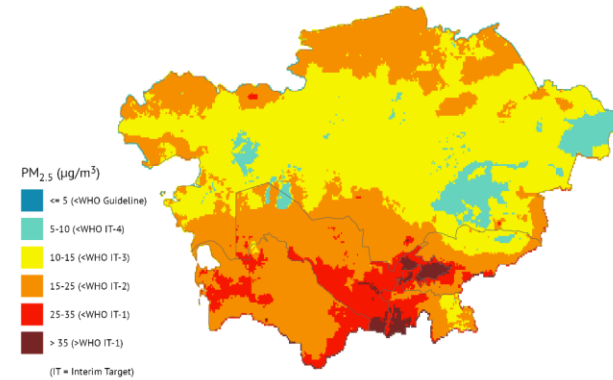
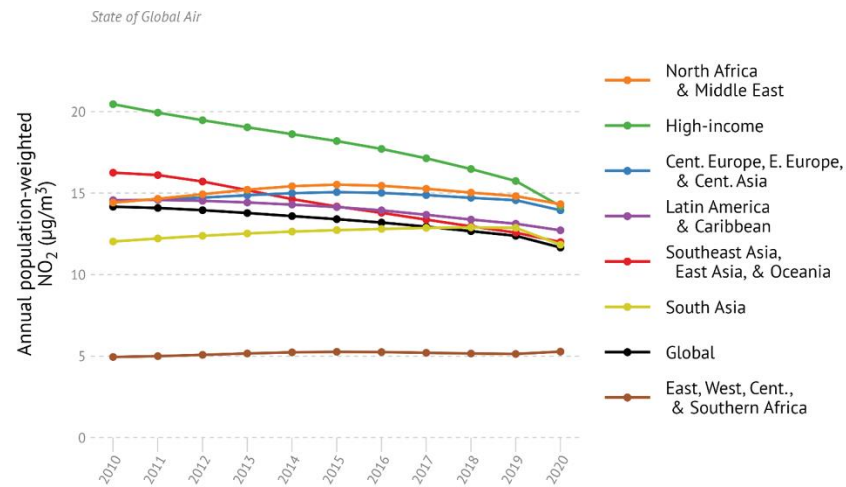
There continue to be air pollution hotspots with limited air quality data, especially in Asia, Africa and Middle East.



**Satellite-derived estimates provide an opportunity to assess spatial and temporal pattern of air pollution exposure.**



# TRACKING AIR QUALITY PROGRESS OVER TIME



Is the air quality improving in specific countries and regions? Are pollution levels improving in hotspots?

How do air pollution levels in countries compare against the national air quality standards, and international guidelines?

What are the health impacts of exposure to air pollution?

# APPLICATIONS FOR EPIDEMIOLOGICAL STUDIES

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More than **413 million people** across the region, rapid urbanization, expanding air quality monitoring and interventions

**24 of the 34** publications included in the review were published between 2019-2023.

**11 out of 34** studies investigating association between exposure to air pollution and health outcomes relied on satellited-derived PM<sub>2.5</sub> estimates.

Health outcomes included acute respiratory infections, stunting, anemia, cognitive development in children; pregnancy loss

Unpublished data, please do not cite

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