

# Why addressing inequality must be central to pandemic preparedness

Sherin Varkey,<sup>1</sup> Eeshani Kandpal,<sup>2</sup> Sven Neelsen<sup>1</sup>

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The COVID-19 pandemic brought to the fore long-standing inequities that resulted in certain already-vulnerable groups bearing a disproportionate burden of the disease. The poor have worse health outcomes and access to care, and live and work in inferior conditions, leading to a greater risk of severe illness and death.

Establishing how the virus successfully exploited existing disparities is not an easy task given the paucity of income-disaggregated data on testing, infection rates, and mortality due to COVID-19. Nonetheless, experiences in the USA and other high-income contexts have shown that race and ethnicity are markers for elevated risk, and capture systemic deprivations in socioeconomic status, access to healthcare and occupational exposure to the virus. Even among front line, essential and critical infrastructure workers, black, Hispanic and Asian racial groups experienced substantially higher rates of infection, hospitalisation and death than white individuals.<sup>1</sup> Refugees<sup>2</sup>

and immigrant workers<sup>3</sup> were most vulnerable to the economic and health shocks of the pandemic. These trends, coupled with recent social events,<sup>4</sup> have brought public attention to health inequities in the USA. The issue must also receive equal prominence elsewhere, particularly in low-income and middle-income countries, where already-high inequality was further exacerbated by the pandemic.

To illustrate, we document global trends in between COVID-19 outcomes, captured through excess deaths in 2020 and 2021,<sup>5</sup> and income and health inequalities. Excess death per 100 000 population estimates come from the Economist and are adjusted for differences in country age structures. Inequalities are measured using two concentration indices: (1) the Gini coefficient, a widely used concentration index of income inequality<sup>6</sup> (figure 1) and (2) a measure of concentration in access to quality healthcare,<sup>7</sup> specifically socioeconomic inequity in pregnant women



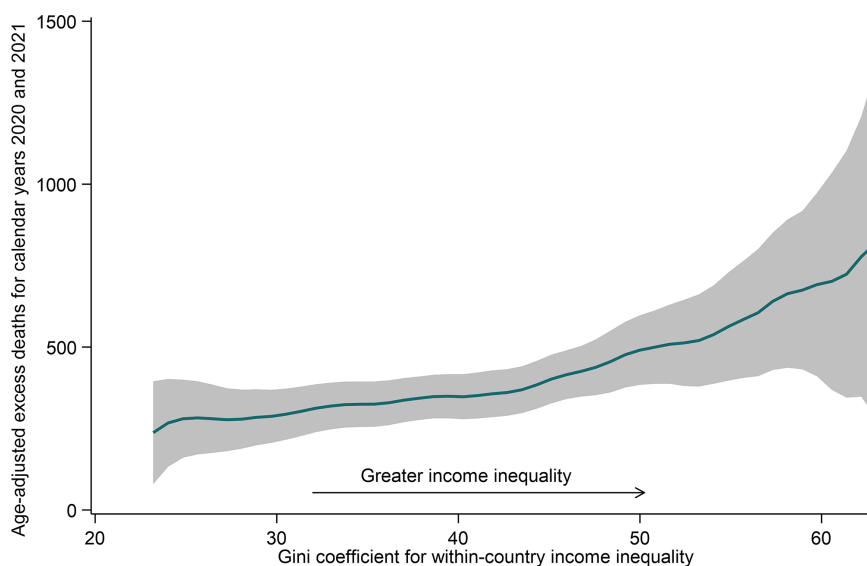
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<sup>1</sup>Health, Nutrition, and Population, World Bank Group, Washington, District of Columbia, USA

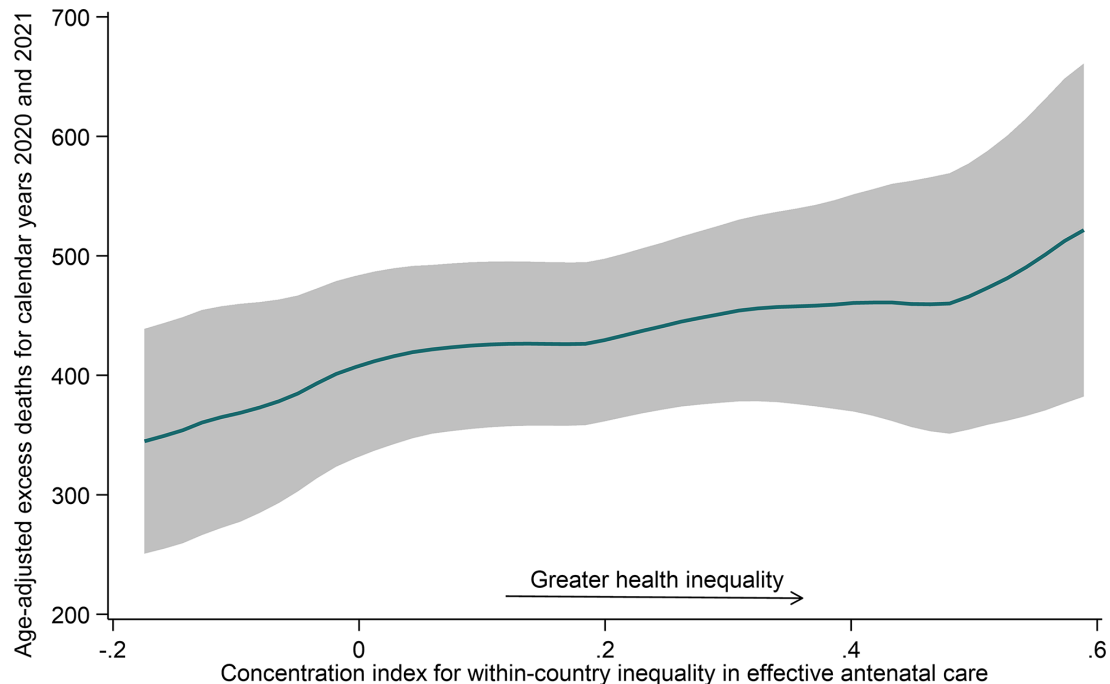
<sup>2</sup>Development Research Group, World Bank, Washington, District of Columbia, USA

#### Correspondence to

Dr Eeshani Kandpal;  
ekandpal@worldbank.org



**Figure 1** Within-country income inequality and excess deaths in 2020–2021. Adjusting countries' estimated excess deaths using the ratio of their expected demography-adjusted infection fatality rate to that of the world median. Countries with younger populations are adjusted upward, older downwards. Source: Excess deaths for 2020 and 2021 are from The Economist. The Gini coefficient is from the World Development Indicators database.



**Figure 2** Within-country inequality in access to high-quality preventive (antenatal) care (ANC) and excess deaths. Adjusting countries' estimated excess deaths using the ratio of their expected demography-adjusted infection fatality rate to that of the world median. Countries with younger populations are adjusted upward, older downwards. Source: Excess deaths from *The Economist*. Effective ANC: authors' own computations from DHS and MICS for 107 countries (most recent value). DHS, demographic and health surveys; MICS, multiple indicator cluster surveys.

receiving effective antenatal care (ANC) (figure 2). New research demonstrates that, in parts of sub-Saharan Africa, inequality in access to effective ANC is several times that in access to any ANC.<sup>8</sup> In other words, even in the developing world, most individuals have access to basic care,<sup>9</sup> but the rich are much likely to have access to care that adheres to global protocols. Such trends jeopardise the goal of Universal Healthcare.

By both metrics, the message is clear: the greater the inequality in income or in access to high-quality care within a country, the greater were excess deaths during the first 2 years of the pandemic. Particularly striking, income inequality is a stronger predictor of excess COVID-19 mortality than inequality in access to effective ANC, perhaps because it captures deprivations along a variety of dimensions.

Nonetheless, a recent *Lancet* comment highlights that health equity remains absent from pandemic preparedness.<sup>10</sup> By tying overall inequality to COVID-19 mortality, we illustrate how broad this omission is, and thus why it is particularly dangerous. Indeed, addressing inequality should be integral to pandemic preparedness planning. We propose a few concrete steps below: (1) Inequality is both a cause and effect of disease spread. Pandemic preparedness assessments and resilience scores could thus include inequality such as the Gini but should also invest in tracking new metrics of health inequality globally: for instance, risk factors for non-communicable diseases, which can increase the incidence of severe illness and death in most disease outbreaks.<sup>11</sup> (2) In the

aftermath of the pandemic, various pandemic prevention, preparedness and response (PPR) plans have been announced, including the Gates Foundation's Global Epidemic Response and Mobilisation team<sup>12</sup> and the World Bank's new Financial Intermediary Fund<sup>13</sup> for PPR that partners with governments, the WHO and other international agencies. Alongside improving capacity for essential public health functions and maintaining core services, country PPR plans should invest in health equity.

(3) Pandemic preparedness efforts should focus on the relationship between health inequity and broader social and economic vulnerability. COVID-19 revealed how poor families suffered from multiple deprivations—from greater exposure to the virus to larger income losses,<sup>14</sup> worse access to information and government safety nets<sup>15</sup> and delays in vaccine roll-out.<sup>16</sup>

The COVID-19 pandemic demonstrates that pandemic PPR planning cannot be divorced from the fight against inequality. Addressing these dual challenges will require investment and political will. Gaps in countries' capacity to finance health were large before the pandemic and have further widened in its wake, creating a fault line that threatens COVID-19 recovery and health security for all.<sup>17</sup> Centring health equity in pandemic preparedness planning is not just the right thing to do but also the smart one.

**Twitter** Eeshani Kandpal @eeshani\_kandpal

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