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from the Water Protectors. First, addressing the social determinants of health requires dismantling the upstream systems of power that structure society, such as racial capitalism and settler colonialism.⁴ Second, working upstream requires a collective, longitudinal pursuit of justice. The movement to resist Line 3 has been organising for 13 years, building restorative communities and germinating relationships of trust among multisectoral coalitions. Third, human and natural ecosystem health is inter-related and we must prioritise addressing climate change as essential health work. Fourth, just as some Water Protectors risk arrest or danger to their bodies, so too must health-care workers risk confrontation with power holders in our health-care and political systems.

In our efforts to deeply engage with the social determinants of health, Water Protectors, who prevent the destruction of life and assert the sovereignty of Indigenous people, are an exemplar of truly upstream health and healing.

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Vaccine scarcity in LMICs is a failure of global solidarity and multilateral instruments

To address COVID-19 vaccine scarcity, Ivan Sisa and colleagues¹ justify placebo-controlled trials in low-income and middle-income countries (LMICs), arguing that these countries have “less capacity to negotiate and purchase vaccines than do high-income countries” and that the global shortage can be overcome with more vaccine producers coming from such trials. We are concerned that this reasoning sets the wrong precedent because approving such a trial should show that evidence can only be reached with this design.² Furthermore, LMICs should not ignore the urgent need to increase production and distribution³ of already efficacious vaccines.

In the interest of saving people’s lives, vaccine development demands working towards improved capacities on the road from discovery (free of patent restrictions) to manufacturing and equitable distribution. Therefore, clinical trials should be done simultaneously, engaging volunteers and researchers across a broad range of LMICs and high-income countries. Furthermore, study protocols should provide robust assurances that participants will have access to the vaccine when their priority group is eligible in the general population. Finally, emphasis should be made on other pressing issues, such as adopting low dead space syringes to prevent discarding residues, thus improving vaccine volume.⁴

Ensuring efficacious vaccines are made widely available and at fair cost, when high-income countries are hoarding up to five times what they need⁵ and prices are speculative, would require making alliances with countries (eg, Brazil or India) with the capacity to produce generic vaccines, alongside efficient syringes, and

means of storage and transportation. Notwithstanding, LMICs will need support from additional partners in other regions of the world.

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Global COVID-19 vaccine roll-out: time to randomise vaccine allocation?

The global COVID-19 vaccine roll-out might be the largest public health exercise ever done. COVAX, the vaccines access pillar of the COVID-19 Tools Accelerator, supported by WHO, UNICEF, and others, expects to deliver two billion doses to 190 countries in 1 year. At present, 13 vaccines have received approval in various jurisdictions. The roll-out provides an opportunity, unparalleled in human history, to learn about vaccines.