The race for COVID-19 vaccines: voices from the UK and global South

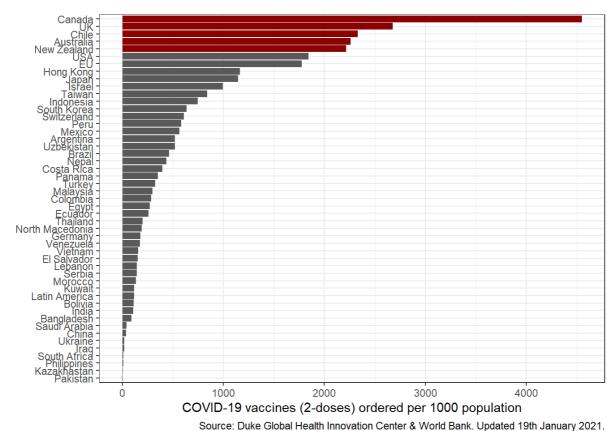
The arrival of several vaccine candidates against the Sars-CoV-2 virus is a global and scientific feat to be commended. Hopes remain high with eventual population immunity from vaccination or at least protection of those at risk meaning health systems can potentially recover, economies resume activity and restrictions on mixing be relaxed. However, as international attention focuses on which nation will achieve widespread COVID-19 vaccine coverage first, we would like to join a growing chorus of public health and clinical policy observers in highlighting the short-sightedness and moral consequences of not distributing the first vaccines equitably around the world.

Many have pointed to the miscalculations involved in failing to disseminate COVID-19 vaccines worldwide. 1,2,3 Uncontrolled international viral circulation risks further mutation of the virus to become more pathogenic. It also increases the chances of immune escape variants that are resistant to existing vaccines and re-importation of infection to high-income countries including from mutated strains of the virus. Economic analyses suggest up to \$9 trillion could be lost in the global economy, if high-income countries vaccinate their own populations while leaving low- and middle-income country (LMIC) populations unprotected. Vaccinating citizens in high-income countries without parallel delivery globally is likely to prolong the pandemic and yield fewer gains: around 50% fewer deaths averted by one analysis.

Above all, access to COVID-19 vaccines we feel is a human right; ¹³ we feel it morally reprehensible that health and care workers in one region of the world and citizens most atrisk from complications of COVID-19 infection may achieve full protection, while such individuals in another region are uncovered because vaccine is being used to vaccinate low-risk populations in wealthy countries. With adequate financing and a coordinated global response, we believe governments can chart a more positive and equitable path through COVAX, the global mechanism to distribute vaccines to 90% of the global population.

We propose three key actions for governments to take now: vaccine sharing/exchange, monetary commitments to Covax, and fostering collaboration between vaccine manufacturers. These actions align with the Public Health Emergency of International Concern (PHEIC)-status of the pandemic, the WHO Director General's guidance, and the 2005 International Health Regulations, an instrument of international law that is legally-binding on all 194 WHO member states.

First: vaccine sharing. High-income countries have bought vaccine doses far in excess of what they require to protect priority groups; ¹⁰ as figure 1 below illustrates, in cases such as Canada, up to four times the total number needed to cover their entire population. Whilst pre-purchasing is not bad in itself, high-income governments should only use the doses they need to vaccinate their high risk groups in 2021. Excess doses produced this year should be shared equitably to protect all vulnerable populations internationally based on epidemiologically sound criteria including population counts, viral circulation, numbers of workers and citizens in vulnerable groups, among others. ² Canada for instance has already pledged to donate or exchange excess doses; ¹² discussions between countries and agencies coordinating COVAX should progress further and more widely this with immediate effect.



Doses in excess of what is needed to cover at-risk groups in a countries that have overordered should be shared without delay until all vulnerable populations are covered everywhere. Only then should high-income countries begin vaccinating low risk populations.

Second: Funding to COVAX, the WHO/GAVI platform for global vaccine purchasing and equitable distribution also needs attention. While pledges by high-income countries and private finance institutions appear positive, with funding calls by GAVI all largely met to date, vaccine delivery to LMICs has been undermined by the fact that the first wave of vials has been almost entirely hoovered up by rich nations. Governments have shown willingness and the ability to fund their own economies and COVID responses to around 11% GDP, compared with merely 0.004% GDP to global COVID-19 distribution. Furthermore, COVID-19 isn't the only health crisis affecting the world; distributing vaccines equitably worldwide in a way that buys confidence among communities and health workers is critical to addressing wider health programmes, improve health worker recruitment programmes with technical support where needed. Countries around the world still lack access to Personal Protective Equipment, COVID-19 testing technology and other essential products needed to tackle local epidemics. 6 The renewed commitment from the USA to WHO and COVAX is a welcome announcement: the G7 and other global for a should clearly prioritise COVAX in upcoming meetings and seize this opportunity to place global health security at the centre of policy and strategy.

Finally, rapid coverage of COVID-19 vaccines of at-risk populations worldwide is unlikely to be successful using current manufacturing capacity. The announcement that Sanofi and

Novartis, French and Swiss multinational pharmaceutical companies respectively, would produce vaccine doses originally developed by Pfizer/BioNtech is the kind of collaborative approach that is needed from manufacturers and governments. Intellectual property rights are a recognised method that allow pharmaceutical manufacturers to recoup their investment; there are however established protocols to sharing technology to allow generic production at lower cost, for instance using World Trade Organisation TRIPS protocols. 11 Manufacturers and governments in LMICs are ready and willing to support the global drive to scale up production of COVID-19 vaccines and should be supported and enabled to do so because it is in everyone's 'interest and will help to shorten the pandemic, and they should not prohibited due to a desire to maximise profits. Licensing arrangements and technology transfer, such as those between AstraZeneca and Serum Institute and other parties in should be encouraged. LMIC should be able to access vaccines at a fair price: the example of South Africa being asked by the Serum Institute of India to pay almost twice the price paid by the EU for the Astra Zeneca vaccine⁷ is an example of unfair purchasing arrangements created by the present market structures and lack of transparency. Greater transparency called for in the WHO Resolution on the transparency of markets for medicines, vaccines and medical products and reiterated by the European Commissioner is key to fair distribution of Covid-19 vaccine in a way that best supports the goal of ending this pandemic.

The COVID-19 pandemic has shown the need for responsive and coordinated global health responses. No country can tackle this challenge alone. Protecting the citizens of some countries and not of others, is not good public health policy as the eventual arrival of new variants in one region puts everyone everywhere at risk. Stopping the spread of the pandemic everywhere is ultimately the only way to guarantee the safety of people globally. We call on governments, international institutions, health worker and patient organisations around the world to renew their partnerships with friends and colleagues around the world, and begin delivering an equitable strategy to COVID-19 vaccine delivery without delay.

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References

- 1. Lowcock M. Farrar J. Diverting some of Britain's vaccines to the global rollout is a scientific, economic and moral imperative. The Telegraph. 26 January 2021. Available from https://www.telegraph.co.uk/global-health/science-and-disease/diverting-britains-vaccines-global-rollout-scientific-economic [Accessed 29 Jan 2021].
- 2. Herzog LM. Norheim OF. Emanuel EJ. McCoy MS. Covax must go beyond proportional allocation of covid vaccines to ensure fair and equitable access. BMJ 2021; 372:m4853.
- 3. Bump JB. Baum F. Sakornsin M. Yates R. Hofman K. Political economy of covid-19: extractive, regressive, competitive. BMJ 2021; 372:n73.
- 4. Independent SAGE. Will new variants compromise vaccines? 4 Jan 2021. Available from: https://www.independentsage.org/new-statements-on-the-uk-vaccine-strategy [Accessed 29 Jan 2021].
- 5. Cakmakl A. Demiralp S. Kalemli-Ozcan S. Et al. International Chamber of Commerce. The Economic Case for Global Vaccinations. Available from: https://iccwbo.org/publication/the-economic-case-for-global-vaccinations [Accessed 29 Jan 2021].
- 6. WHO. Pulse survey on continuity of essential health services during the COVID-19 pandemic. Available from: https://www.who.int/publications/i/item/WHO-2019-nCoV-EHS continuity-survey-2020.1 [Accessed 30 Jan 2021].
- 7. Reuters. S.Africa to pay big premium for AstraZeneca COVID-19 vaccine from India's SII. Reuters (Johannesberg). 21st January 2021. Available from: https://www.reuters.com/article/health-coronavirus-safrica-vaccines/safrica-to-pay-big-premium-for-astrazeneca-covid-19-vaccine-from-indias-sii-business-day-idUSL1N2JW0DH [Accessed 30 Jan 2021].
- 8. Chinazzi M. David JT. Dean NE. et al. Estimating the effect of cooperative versus uncooperative strategies of COVID-19 vaccine allocation: a modeling study. Available from: https://www.networkscienceinstitute.org/publications/estimating-the-effect-of-cooperative-versus-uncooperative-strategies-of-covid-19-vaccine-allocation-a-modeling-study [Accessed 30 Jan 2021].
- 9. Currie J. No-one is safe until everyone is safe: analysing global COVID-19 vaccine distribution and spending. Available from: https://rpubs.com/jonnycurrie/712839 [Accessed 30 Jan 2021].
- 10. Duke Global Health Innovation Center Speedometer Team. MAPPING COVID-19 VACCINE PRE-PURCHASES ACROSS THE GLOBE. January 25 2021. Available from: https://launchandscalefaster.org/COVID-19 [Accessed 30 Jan 2021].

- 11. Bassi LL. Gwenda L. COVID-19: time to plan for prompt universal access to diagnostics and treatments. Lancet Global Health 2021; 8(6): E756-757.
- 12. WHO. COVAX Announces additional deals to access promising COVID-19 vaccine candidates; plans global rollout starting Q1 2021. Available from: https://www.who.int/news/item/18-12-2020-covax-announces-additional-deals-to-access-promising-covid-19-vaccine-candidates-plans-global-rollout-starting-q1-2021 [Accessed 1 Feb 2021].
- 13. UN OHRC. HUMAN RIGHTS AND ACCESS TO COVID-19 VACCINES. 17 December 2020. Available from: https://www.ohchr.org/Documents/Events/COVID-19-AccessVaccines-Guidance.pdf [Accessed 1 Feb 2021].