Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

The state inoculates: vaccines as soft power

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International collaboration among scientists has boomed during the COVID-19 pandemic. However, now that COVID-19 vaccines have been developed, we are leaving the realm of scientific investigation and entering that of geopolitics. The importance of strengthening global trust and cooperation between nations is glaring—such strengthening is imperative to tackle future pandemics and other looming planetary (and inherently transnational) crises, such as climate change. The history of vaccine diplomacy shows how scientific advances have bridged borders, including the Iron Curtain. But vaccines have also driven deep wedges into international agreements, especially when their benefits are perceived to be inequitable. Precedents being established around inequitable vaccine distribution, such as export controls and backstage bilateral deals, should cause unease. Bad behaviour by high-income countries has also left low-income and middle-income countries vulnerable to political coercion.

The use of vaccines in building diplomatic ties dates back to 1801, when the first White House physician, Edward Gantt, vaccinated Native American diplomats against smallpox on their visit to Washington, DC.[1] The impasse of the Cold War was bridged by Mikhail Chumakov and Albert Sabin, who collaborated to vaccinate 100 million people in the Soviet Union against polio, just 5 years after the vaccine was first tested in the USA. Chumakov was a Soviet scientist working on poliomyelitis who, on a visit to the USA, was invited to visit Sabin's laboratory, sparking a decades-long friendship. Both scientists were strictly supervised by the US State Department and FBI, as well as the Kremlin and KGB, throughout their relationship, undergoing intensive interrogations before cross-border visits.[2] The enormous project of mass vaccination required dogged persuasion of governments on both sides. Were it not true, it would be inconceivable that such a political divide could be overcome by scientists armed with mere vaccines.

Regrettably, vaccine relations are not solely benevolent scientific missions. In 2006, the Indonesian Ministry of Health withdrew from WHO's influenza sample sharing network amidst the H5N1 bird flu epidemic. This withdrawal was in retaliation to leaked information of an Australian company developing a vaccine based on Indonesian samples. Indonesia was an epicentre of the outbreak, and its withdrawal at the time was a blow to WHO and the global cooperative network it had built. Indonesian officials responded that "disease affected countries, which are usually developing countries, provide information…then pharmaceutical industries of developed countries obtain free access to this information and specimens, produce and patent the products [vaccines], and sell them back to the developing countries at unaffordable prices…what has been emphasised by the current global system is merely the responsibilities of developing countries, leaving a big hole in the 'rights' of these nations."[3] Some countries, particularly low-income countries, are repeatedly left at the end of the vaccine queue during epidemics. This is dangerous not simply because it is unfair, but because it fosters the suspicion that international agreements are exploitative, thereby undermining them.

The inequity of global vaccine access has also turned vaccines into diplomatic bargaining chips. China, India, and Russia have all seized the opportunity to use access to their COVID-19 vaccines to curry favour with friends and foes. The wish to persuade and attract through the soft power of vaccines should be considered an all-round improvement compared with the use of military hard power. But power imbalances in these deals cannot be ignored. On one side is a low-income country snubbed by countries with higher incomes, facing a worsening pandemic and tired of waiting for COVID-19 vaccine doses, and on the other are large countries that have nationalist political agendas.

It is unlikely that we will be able to turn back the clock on the securitisation of pandemic vaccines. Vaccines are increasingly seen as national security assets, and decisions regarding their use has shifted from the vaccine sub-department of public health institutions, to the highest levels of government. At the most tactical level, the public health community should continue to advocate for uncoupling of, or at least transparency of, military and security involvement in vaccine programmes. In the long term, this will also mean debunking the idea that the Global North is charitably delivering their technology for a chosen developing nation, a legacy of colonialism. In fact, it is low-income countries who should now be doing the choosing, which new allyships they will form to secure

the vaccines they need, whether they wish to stay in transnational partnerships, and whether their trust in global cooperation remains untarnished.

We declare no competing interests.

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