

Research funders must join the fight for equal access to medicines

Pandemic treaty is a rare opportunity to ensure pandemic-related technologies are accessible and affordable to all.

For almost a year, nations have been negotiating the terms of an international agreement to better prepare the world for future pandemics. The talks are due to conclude this year, but countries are poles apart on key issues. In a statement last week, the World Health Organization (WHO)'s director-general Tedros Adhanom Ghebreyesus acknowledged that the talks are in trouble, meaning that the deadline might not be met.

The ideal outcome would be for high- and low-income countries to have the same access to life-saving vaccines, drugs and other tools to combat a global health emergency, at a fair and transparent price. Although memories of the COVID-19 pandemic are fading, many people in low- and middle-income countries (LMICs) will never forget that people died because they had to wait for scarce vaccines, while leaders of high-income nations paid large sums to ensure more than adequate supplies. LMIC negotiators have an idea for how to stop this from happening in the future. The research community should consider backing it.

The best way to extinguish competitive behaviour in vaccine and drug procurement during a pandemic is to prevent such behaviour happening in the first place. During the COVID-19 pandemic, countries agreed to work with the WHO and with pharmaceutical companies to distribute drugs, vaccines, tools and technologies equitably through COVAX, a global vaccine-sharing scheme. But this scheme failed, because wealthy countries did not honour their pledges.

As part of the treaty discussions, LMICs are asking for public funders of scientific research to require that any pandemic-related drugs, vaccines or life-saving technologies that result from those organizations' grants be shared equitably during a global health emergency. Funders should agree to this. It would be a one-time move, with the potential to save many lives.

Funders could, for example, require grantees to openly share study results. They could also require that products arising from those studies be priced affordably. Moreover, funders could retain certain intellectual property (IP) rights to be used only when there's a necessity to develop and distribute products equitably.

Researchers played, and continue to play, an important

part in the evolution of our understanding of SARS-CoV-2 and COVID-19 by openly sharing research findings. Shared data on genome sequences and protein structures was necessary to create the vaccines and drugs that eventually controlled the pandemic. LMICs are asking for the same spirit from research-funding agencies and companies that researchers work with.

Groundhog Day

However, the latest version of the treaty text does not include such provisions. Some European countries say that the World Trade Organization (WTO), not the WHO, is the organization to host discussions relating to IP rights. However, this disregards how, during the pandemic, WTO member states failed to temporarily waive IP rights for COVID-19 vaccines and therapies, despite a focused campaign led by India and South Africa, which *Nature* supported.

Other high-income countries say that it could be complicated to include such conditions in research-funding contracts. Some funders might view these stipulations as burdensome on researchers. Moreover, in the United States at least, such a provision will almost certainly struggle to win the necessary approval from elected lawmakers.

The preferred approach of the United States and many European countries is to negotiate agreements without passing laws. But we know the limitations of the voluntary approach. The US government tried and failed to persuade the biotechnology company Moderna, based in Cambridge, Massachusetts, to license its COVID-19 vaccine to LMIC manufacturers, despite having given the company more than US\$1 billion of public funding to support its vaccine research.

Attaching conditions to public funding is, in itself, not new – and in this instance, it would be for pandemic emergencies only. One example is the Coalition for Epidemic Preparedness Innovations (CEPI), an international non-profit organization based in Oslo that is a leading funder of vaccines against epidemic and pandemic threats. CEPI asks for commitments to data sharing and affordable pricing, among other things in its research-funding contracts. It did as much for the COVID-19 vaccines that it funded, including four that received WHO emergency-use listing.

One of these was the Moderna vaccine, which CEPI supported with a modest grant of almost \$1 million early in its development. But the company never returned to CEPI for support, instead turning to US government funding, which did not come with access conditions. That shows the limitations of such individual agreements, and why a global and legally binding approach is needed, Frederik Kristensen, CEPI's deputy chief executive, told *Nature*.

Ticking clock

Time is running out. A preliminary draft of the pandemic agreement, published in February 2023, proposed some conditions to be included in research-funding contracts, including on prices of products, data sharing and the transfer of technology during a pandemic. The latest draft, published in October, omits this and instead says that governments should “publish the terms of

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government-funded research and development agreements for pandemic-related products". This move will at least make it possible to know which, if any, governments are including pandemic-related conditions in their research grants. The problem is that demanding that the terms of the contracts are made public, without specifying what these terms should be, is not enough.

Suerie Moon, a global-health policy researcher at the Geneva Graduate Institute in Switzerland, rightly asks: "Do we want to take an approach that helps countries to structure their collaboration with each other? Or do we want to maintain the status quo, where countries are essentially competing with each other?" High-income countries might feel that they're better off on their own, she says. "But for most countries in the world, there's a huge advantage to collaborating and agreeing on the rules of that international collaboration."

An international treaty is a rare opportunity for countries, companies and researchers to commit to making pandemic-related technologies accessible and affordable to all. Funders should take this opportunity and play their part in making that happen.

Making the most of trust in scientists

How can researchers capitalize on the public's trust in them and help to address concerns about government interference in science?

People around the world have high levels of trust in scientists, but are concerned about governments interfering in research. These are among the findings reported by the global communications giant Edelman in its Trust Barometer, an annual survey that, in its latest iteration, consulted more than 32,000 people across 28 countries, from Mexico to Japan (see go.nature.com/4bgsipa).

The report, published in mid-January, shines a spotlight on public trust in science and innovation. It follows several tumultuous years dominated by the COVID-19 pandemic, impacts resulting from climate change, falling standards of living and increasing global instability – and comes as the world grapples with a new challenge from innovation, the explosive rise of artificial intelligence (AI).

Scientists are among those most trusted by the survey's respondents to tell the truth about innovations and new technologies, with 74% of respondents saying they trust scientists to tell the truth. A similar proportion said that they wanted the introduction of innovations to be led by scientists. By comparison, just 47% of respondents said that they trusted journalists and 45% trusted government leaders to tell the truth on innovations.

However, the survey also hints at a growing challenge for

scientists and governments alike, with 53% of respondents saying that science in their country has become politicized, referring to interference in science by politicians. Globally, some 59% said that governments and research funders have too much influence on how science is done – with the proportion rising to 70% and 75% in India and China, respectively. And nearly 60% of all respondents think that their government lacks the competence to regulate emerging innovations.

The findings suggest both an opportunity and a challenge for scientists. How can researchers leverage people's trust in them to improve the likelihood of government policy and decisions being evidence-based, while helping to address the public's concerns about government interference and the lack of confidence in regulatory processes?

The report is certainly timely. Governments worldwide have long looked to science and innovation to boost economies, but the pandemic has added a sense of urgency. Approaches being tried include clustering universities in cities in the hope of yielding the next Amazon or Google; policies that encourage entrepreneurial ideas from faculty members and students; readily available finance for every stage of a business idea; and relatively light-touch regulation so products can quickly reach consumers.

The latest such proposal came last week from the Tony Blair Institute for Global Change, an influential policy-research think tank in London set up by the former UK prime minister. Its report on innovation in biosciences proposes a much bigger role for AI in medical science and clinical practice (see go.nature.com/3ugt3gh). To this end, the institute is urging the UK government to reform regulatory structures that govern how researchers and companies can access anonymized patient data. But if the Edelman report is correct, and people are concerned about governments interfering in science and having poor regulatory competence, then ways must be found to turn that around.

In this context, the social sciences present an invaluable and underused tool. In January, a report by the UK Academy of Social Sciences rightly reminded governments of the need to embed social science in their science, technology, engineering and mathematics policymaking as one way to enhance public trust (see go.nature.com/4bioq0i). Data scientists, economists, ethicists, legal scholars and sociologists are among the social scientists who are skilled at studying the strengths and limitations of new technologies, as well as different economic and regulatory models – and communicating their findings, along with all the attendant uncertainties.

If people think that science has become politicized and that governments are interfering too much in research, that is a problem not only for science, but also for society, because it could affect public confidence in governments' ability to deliver the benefits of science and innovation, while simultaneously protecting people from harm.

Scientists should make the most of the public's trust in them as a source of information on innovation. And they should work with governments to dissuade them from overly politicizing science. Governments have an equal part to play in this – and *Nature* hopes they are listening.



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