

In discussions about Covid-19 vaccine patent waivers, social utility factors should be prioritised

Public health considerations must take precedence over profit by corporations.

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Representational image. | Ernesto Benavides / AFP

The United State’s Joe Biden administration’s move to [support a waiver](#) of intellectual property in the World Trade Organisation on Covid-19 vaccines is a welcome step in the world’s fight against a surging pandemic.

The step also brings forth a much-needed and renewed conversation for richer nation-states to prioritise [“social utility” considerations](#) attached with processes of invention in a sector like healthcare. Back in 2016, I had [discussed](#) these in detail in context to India’s intellectual property rights policy.

Even though big pharma companies may act as monopolists or oligopolists with vested interests and discourage any process to democratise cross-company dissemination of “economically profitable” vaccine research knowledge, there are geostrategic and public health considerations at play now that need priority above any perceivable gains for profit by corporations.

Geostrategic considerations

First, on geostrategic considerations, America’s policy U-turn from last year on intellectual property waivers under Biden may help many developing countries – including India, Bangladesh, Ghana, Turkey, Brazil, Argentina, Indonesia and South Africa – to boost public and private investments in vaccine production and distribution capacity. This will encourage more small- and medium-scale firms to ramp up production using the information they can have on vaccine research.

This will help the world get vaccinated as fast as possible. The United States could anchor this global vaccination drive by building consensus amongst other developed countries to come together to share “vaccine knowledge”, helping less privileged nations.

For example, by making US’ Johnson & Johnson to share its “vaccine recipe” for boosting its production elsewhere, there is a distinct advantage. Johnson & Johnson has a single-dose vaccine with makes it easier in countries with strained resources.

Moderna’s own vaccine too is [based on a novel](#) mRNA technology that does not require the cultivation of biological material, including viruses and proteins, which traditional vaccine technologies rely on. This makes producing its vaccine less complex. Moreover, both, Moderna and Johnson & Johnson received millions of US taxpayer dollars as public funding to support their vaccine research last year-given the “risks” involved, and so, the state has a reasonable cause in releasing information on their vaccine recipes to the wider world now.



Representational image. Photo credit: Dado Ruvic / Reuters

Public-health considerations

Second, the public-health considerations of immunising the world as quickly as possible cannot be emphasised enough. The precarious spread of Covid-19 amidst rising infections from its multiple strains is not localised to any one nation. Lockdowns, border travel restrictions too are containment measures and are not suitable to “eradicate” the virus.

If large, populous nations like India are struggling at the moment with over 260,000 daily reported cases and a higher fatality rate, it is only a matter of time that the virus will spread – in more virulent strains – from one country to another. Mass global vaccination is our only recourse now to save as many people as possible from getting infected and from “waves of infections” to reduce over time.

The real question is: knowing what is the right thing to do, why is there a stiff resistance to do this amongst many richer nations? Why is Germany, even now, deciding not to back the US proposal to waive the intellectual property rights on vaccines?

Responding to this requires a closer look into the misplaced notions associated with the economic valuation of innovation. The commodification of information (attached to an invention and its process), combined with an effort to monopolise these, which is what intellectual property rights in principle seek to do.

Patents, as one form of intellectual properties, give innovating firms a short to medium term monopoly on production to cover the costs of development and encourage investment. The use of terms “monopoly”, “costs” and “investment” here must urge us to look into the public economics of innovation.

In a [classic article](#) written by one of the most influential economists of the 20th century, Kenneth Arrow, he said:

“The market value of the intellectual property often cannot be estimated in advance as a result of which the risk aversion may result in the underproduction of such property from a social standpoint.... [therefore] for optimal allocation to the invention, it would be necessary for the government or some other agency not governed by profit-and-loss criteria to finance research and invention... The bulk of basic research on any invention [is often] – especially in more applied fields like agriculture, medicine and aeronautics are – carried on outside the industrial system, in universities, in the government and by private individuals...”

Arrow’s [thesis](#) was based on the key fact that a “free” enterprise economy – dominated by private players who are guided by profit alone – is much likely to underinvest in invention and research (as compared with an ideal) because it is “risky” because the product can be appropriated only to a limited extent, and because of increasing returns in use.

This underinvestment will be greater for more basic research. Further, to the extent that a firm succeeds in engrossing the economic value of its inventive activity, there will be an underutilisation of that information as compared with an ideal allocation.

Social utility

To put it more simply, given the high degree of “uncertainty” and “risks” entailed in making some initial, optimal investment to drive an invention (say, for a vaccine against a virus), most private manufacturers will struggle to determine what this “optimal initial investment” may look like.

They rather “invest” more of their funds in building the distribution and production capacity of the commodity than “invest” in the invention itself. And, if an invention has a considerable social utility –and purpose – attached to it (say in the case of a vaccine), there is a strong case for the government or a non-profit organisation to step in and make a larger share of the initial investment for the invention.



The public-health considerations of immunising the world as quickly as possible cannot be emphasised enough. Photo credit: Ronen Zvulun/ Reuters

This is exactly what happened with the Covid-19 vaccine research as well last year. Most governments funded the vaccine research through taxpayer dollars while companies invested significantly in boosting the vaccine production-distribution infrastructure and arrange the inputs required for these.

If all funding or initial investment were to come from the private sector alone, the “risk premium” would be spread over by the firm(s) through a higher price on the commodity – and the knowledge on making it – for which intellectual property is created say through a patent.

That patent would do nothing more but act as a higher “price” on a given innovation. This is precisely the reason why private manufacturers of the vaccine in the US (Pfizer, Moderna and Johnson & Johnson) and in India too (Serum Institute and Bharat Biotech), are all differentially keeping a higher price on their commodities and are even less willing to share the “information on producing it”.

The central economic fact about the “processes of invention” and research is that they are devoted to the production of information. By the very definition of information, an invention must be a risky process, and in that, the output (information obtained) can never be predicted perfectly from the inputs alone.

State-guided public investment is key in covering the risks and when an “invention” happens, the “knowledge of processing it” too must be made publicly accessible for the social utility it accrues. Else, the abject monopolisation of “information on invention” will guide private interests and motives to maximise profits at the risk of people – and their well-being.

The US’ step to support an intellectual property waiver in the WTO must guide other nations, including India’s Bharat Biotech, to do the same now for the social utility considerations it implies for the world as a whole.

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