Pandemics and the illumination of "hidden things"

Lessons from South Africa on the global response to Covid-19

N. Dearden

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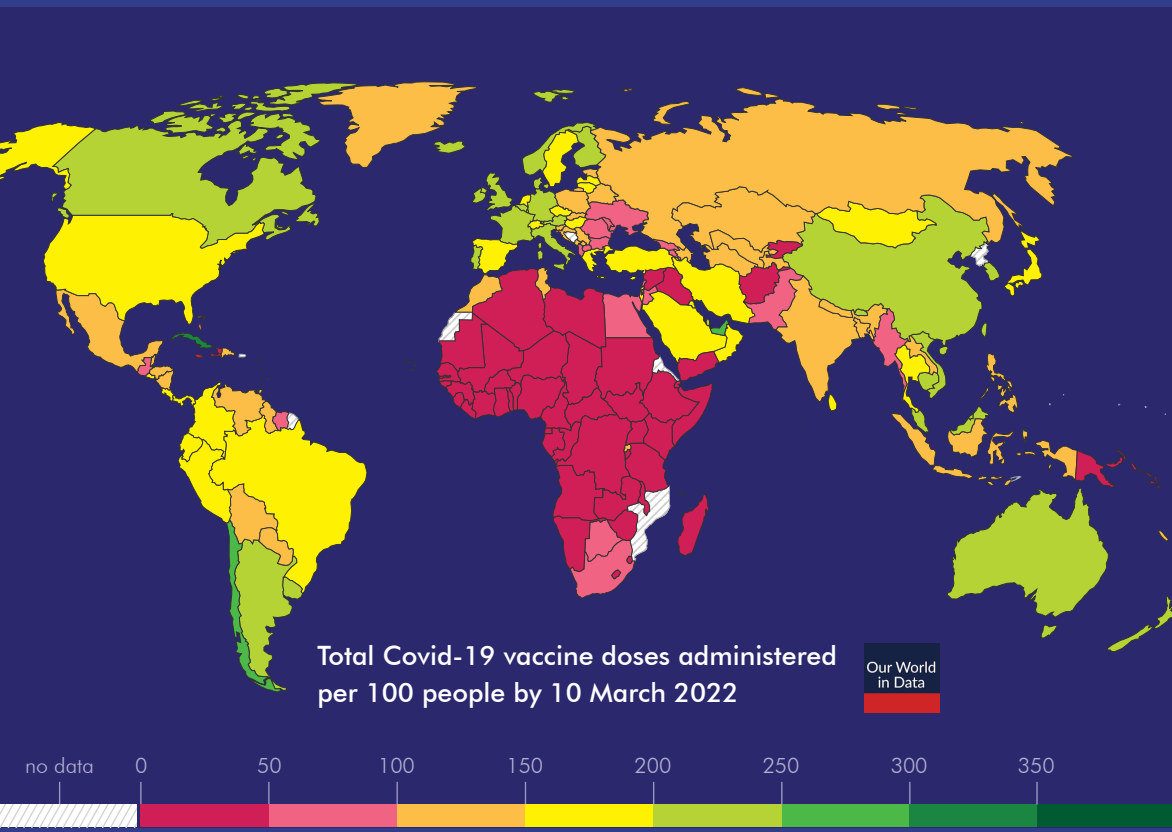

HEALTH JUSTICE INITIATIVE

Suggested citation: Health Justice Initiative *Pandemics and the illumination of "hidden things" – Lessons from South Africa on the global response to Covid-19*. Edited Volume. June 2023.

Editor: Laura Lopez Gonzalez
Project Lead: Marlise Richter
Proofreader: Sigwabusuku Mafu
Lay-out & Design: Jaywalk Design
Funding: The Health Justice Initiative is grateful to all its organisational and individual donors for funding and supporting its work. We would like to acknowledge the contributions of the Rockefeller Brothers Fund, the Joffe Trust and the Claude Leon Foundation towards funding this Compendium in particular.

Credit front-page image:

Adaption of *World in Data*. Image shows Total Covid-19 vaccine doses administered per 100 people, as of 11 March 2022 (two years since the WHO declared Covid-19 a "pandemic").

Credits for republished pieces and quotations:

Bhekisisa
Groundup
Spotlight
News24
People's Vaccine Alliance
Arundhati Roy
World Health Organization
Our World in Data
The Lancet

A short history of a big problem: The undue influence of the pharmaceutical industry and profiteering in shaping the Covid-19 pandemic

Nick Dearden

The term "Big Pharma" has become nearly synonymous with profiteering. There is a public revulsion that anyone could make vast sums of money from life-changing or even life-saving medicines, diagnostics or vaccines. But during the Covid-19 pandemic, this underlying revulsion turned into an outpouring of anger when it became clear that the immense profits of a few corporations had only been possible thanks both to vast sums of public money and by controlling the supply of those medicines, overwhelmingly to the richest countries. This created an inequality of access so great that it became known as "vaccine apartheid".

But although Covid-19 was an extreme and very high-profile example of Big Pharma's exploitation, it was not unusual. The industry's power over our political system, healthcare and academic institutions is vast. This power, of course, derives to some degree

from the size of the industry's marketing budgets. But it goes much deeper.

In this chapter, I will explore the history of Big Pharma's entrenched power over governments and how it uses this power and influence to shape domestic and global trade policies in a way that set the stage for the vaccine apartheid and other inequities seen during the Covid-19 pandemic. The result was suffering for much of the world, but massive profits for Big Pharma.

In turn, this has created a reality in which the pharmaceutical sector does not simply profiteer off products that would not exist without those same companies. Rather, the sector, increasingly does not actually make these medicines in the first place. Instead, it privatises and monopolises public knowledge, and squeezes the maximum value out of it — even if that entails epidemic levels of overprescribing or leaving most of the world's health needs unmet.

Covid-19 should be a wake-up call, showing us the dangers of relying on a dysfunctional and monopolistic industry to deal with life and death issues.

How scientific breakthroughs became mass market consumables

In the middle of the 20th century, Big Pharma was making major medical breakthroughs that were rapidly transforming the way people lived, particularly in the West. Antibiotics, steroids, chemotherapy drugs, the polio vaccine, tranquillisers and antidepressants — medicines like these allowed us to imagine a world in which many forms of suffering might be consigned to history.

But there was a dark side to these products too, perhaps best shown by the way American psychiatrist Arthur Sackler devised methods of mass marketing medicines to doctors and patients. Sackler's firm, Purdue Pharma, would bear the "lion's share" of blame (Keefe, 2017) for the US's opioid epidemic, during which more than 564,000 people died from overdoses between 1999 and 2020 (US Centers for Disease Control and Prevention, 2022) — a figure that includes both illicit opioids and prescription drugs and was fuelled, in part, by a wave of over-prescribing.

But the techniques that gave rise to that epidemic were invented much earlier and used to promote other medicines such as Valium — used to treat anxiety for instance — or the mental health medication, Lithium. The duo, although important drug developments, were massively over-prescribed across Europe and the US (Waldron, 1977).

The transformation of important scientific breakthroughs into mass market consumables relied on campaigns of misinformation and deception, kickbacks to doctors, dodgy marketing techniques and the medicalisation of the human condition in general. This generated a series of blockbuster drugs that made huge amounts of money for the industry, money that was used to further cement the power of that same industry.

The power of Big Pharma — more than money

Big Pharma's power takes multiple forms. Most obviously, its lobbying spend is vast.

In the US, the pharmaceutical industry donated to two-thirds of Congressional representatives in 2020 (Facher, 2020). Pfizer alone donated to 228 American lawmakers.

"Even after years of criticism from Congress and the White House over high prices, it remains routine for the elected officials who regulate the healthcare industry to accept six-figure sums," authors warned in a report (Facher, 2021).

But there are myriad other ways in which Big Pharma builds power, including direct marketing both to the health professionals and potential patients. In countries such as the US, this activity is extreme, with the industry providing doctors with honorariums, professional association funding or special "educational" conferences at high profile destinations and top restaurants, for example.

In 2012, the industry spent US$24 billion in marketing aimed at American doctors (Pew Charitable Trusts, 2013). The problem persists in even more regulated markets, with drug companies spending around £40 million a year on British doctors in service fees, flights, hotel and other travel expenses (Boseley, 2013).

As one study recently concluded: "The power that lobbying and unconstrained political donations give the pharmaceutical industry is hard to overstate" (Humphreys et al., 2022).

But it is not just about the money.

In reaction to regulatory attempts to crack down on profiteering in the 1960s, the pharmaceutical industry developed a series of political arguments that appeared to align them directly with the interests of Western governments. Without new medicines — they contended — the US and other countries, risked being outcompeted by other economies.

"Your country is only as strong as its national champions," decision-makers were told in essence, "and therefore you better back these champions, whatever the cost".

University of Virginia Professor and writer Dominique Tobbell has documented how the industry's growing power was built through a network of influence that spanned medical science students, university administrations, health workers, patients, politicians and regulatory bodies. She presents Big Pharma less as an external actor exerting a powerful pull over Western governments, and more as a network of influence deeply intertwined in the state itself, undermining whatever regulation legislators manage to pass (Tobbell, 2011).

Public money, private patents

The power of the pharmaceutical industry helped it to secure new powers that made it even stronger. The US Bayh-Dole Act, passed in 1980, gave private bodies the right to patent their discoveries, for instance — even when those discoveries were contracted and funded by the government. The result was an explosion of patents (Hanna, T. et al., 2020). Then, in 1984, the Hatch-Waxman Act, although supposedly about making it easier to register generic medicines, actually gave patent holders a tighter form of market exclusivity and longer patent terms.

Heftier pharma monopolies help explain the eye-watering price of new medicines — prices that seem to bear no relationship to the costs of making or even researching the drugs.

Just look at AbbVie's cancer drug Imbruvica. While a standard three pill-a-day course in the US would have come to a cool US$98,000 a year in 2013, that price had nearly doubled eight years later (Higgins-Dunn, 2021).

During a 2021 congressional hearing, US congressional representative Katie Porter grilled AbbVie's CEO about how such a price jump could be justified.

"AbbVie took zero risk to develop this drug, you bought it approved for the market knowing it would be profitable," she said. "You hiked the price to pay for [research and development] but you haven't made the drug any better even as you doubled the cost" (US House of Representatives, 2021).

Indeed, AbbVie filed 165 patents for Imbruvica to keep competitors outside the market, giving the firm an additional nine years on what is considered a normal exclusivity period (I-MAK, 2020).

Bad policies for export: Pharma's influence on the global trade system

It is no wonder, that after winning change in the US, the pharmaceutical industry set about extending these monopolies to the rest of the world. This was done particularly through trade deals, especially the foundational agreement at the WTO known as TRIPS.

TRIPS extended very high, US-style intellectual property protection to the whole world. That meant, for example, every country implementing a minimum 20-year period of protection on patents.

Of course, there were patent laws before TRIPS, but in many countries they tended to be, at most, fairly weak. Patents on medicines were particularly controversial — even in countries like the UK — until well into the 20th century. Meanwhile, in much of the Global South, they did not exist at all until TRIPS.

University of Leeds Professor Graham Dutfield has detailed the history showing how patents on early pharmaceutical products in Germany were resented in Britain and the US, which had a less developed industry (Dutfield, 2020). In 1919, the American

Pharmaceutical Association denounced "unfair monopolies on medicinal chemical and dyes" arguing patents should be "primarily designed to benefit the public at large". The First World War gave the US the excuse it needed to override German patents, opening up a world of technologies to their own industries. But many European countries did not allow the patenting of drugs until the late 20th century, and very few would have argued that developing countries needed to have the same patent laws as rich countries (Ibid, 2020).

Partly, this came from an understanding, embedded in the post-war system of regulated capitalism, that some countries required different rules from others, particularly those countries that needed to develop their economies. Many East Asian countries developed successfully by disregarding Western intellectual property rules, importing technologies and reverse engineering them — sometimes literally taking stuff apart, seeing how it all worked and copying it.

Although giant corporations would like to convince us today that this is "theft", the truth is that this is how pretty much all countries have developed new industries. In fact, in a system already stacked against poorer countries, the ability to learn from other, richer countries was always seen as one of the main reasons to engage in trade by the development economists of the 1960s and 1970s.

But TRIPS made this nearly impossible.

Journalist Alexander Zaitchik describes the TRIPS backstory as "almost impossibly shallow and grubby; its founding documents younger than Justin Bieber" (Zaitchik, 2021). He details a process of negotiations in which pharmaceutical giants Pfizer, Johnson & Johnson and Merck Bristol-Myers worked with computer and car manufacturers to lobby for TRIPS (Sell, 2001). Ultimately, TRIPS, was "born as a brute and profoundly undemocratic expression of concentrated corporate power" he writes (Zaitchik, 2021).

Although TRIPS came into force in January 1995, campaigners secured a moderate weakening of TRIPS' language in the Doha Declaration. The declaration reaffirmed countries' right to use TRIPS safeguards such as compulsory licences or parallel importation to overcome patent barriers and promote access to medicines, for example. A compulsory licence allows another company to make the needed vaccine or medicine without the patent holder's

permission but with a royalty payment, nevertheless. Parallel importing, meanwhile, allows countries to import a cheaper version of a patented product from another country without the patent holder's permission. Either could potentially be used to solve a lack of access to drugs, vaccines or tests.

Still, Big Pharma argued for rules that went beyond TRIPS to be inserted into new trade deals which Global North countries signed with the Global South. With backing from the US, the EU and Japan, this became known as the "TRIPS-plus" agenda and it included even longer patent terms that went beyond the 20-year minimum, and limitations on a country's right to use compulsory licences or encourage generic competition, for example.

The financialisation of Pharma: Why taxpayers, not industry, fund some of the most important drug developments

Patent monopolies did not only mean higher prices. They started to transform the nature of industry. Pharmaceutical corporations realised that what was most important to their profits — and the interests of their financial investors — was not so much their research or their manufacturing, but the intellectual property they held. Research and manufacturing were scaled back while scientists were replaced by lawyers and financiers.

"Financialisation" refers to the extension of the logic of financial markets to the economy as a whole, subjecting wider society to financial motivations, with investors and creditors effectively forcing companies to prioritise maximising high returns to shareholders over all other considerations. If higher profits come from trading derivatives, or buying up and asset stripping other companies, so be it.

And Big Pharma was one of the industries at the forefront of the process.

To give an example of how far this has gone, I examined the annual reports of five Big Pharma giants — AbbVie, Gilead, Pfizer, GSK and AstraZeneca — all returned more to their shareholders than their net income between 2016 and 2020, with AbbVie returning

a huge 165%. A separate report confirms this trend, showing that shareholders' pay outs among the 27 biggest corporations increased by almost 400% from $30 billion to $146 billion annually between 2000 and 2018 (Fernandez and Klinge, 2020).

Far from investing in new medicines of the future, these corporations turned themselves into gigantic cash machines for financiers.

Research and development, meanwhile, is increasingly done by the public sector and by small businesses — particularly at early and most risky phases. But we are still dependent on Big Pharma's pipelines to get the resulting drugs manufactured. And while large quantities of this manufacturing does take place in countries such as India, ultimately Big Pharma ensures it retains full control over these drugs via patent monopolies.

Industry decides who produces medicines, who buys it and at what price. Big Pharma has us in a headlock, doing less of what made them useful in the first place but still remaining in control of the production of medicines.

This was the situation when the world encountered the worst pandemic in a century.

Covid-19 strikes

In 2016, the WHO had issued a warning "intended to be a call to arms for the world's largest pharmaceutical companies," healthcare journalist Charlotte Kilpatrick wrote in 2021 (Kilpatrick, 2021).

The WHO had identified 16 pathogens, including coronaviruses, that posed a serious threat to global health but said that all were seriously under-researched. "Two years later, in 2018, the pharmaceutical giants had zero research projects in development to fight coronaviruses," Kilpatrick noted.

Research into the medicines that could rapidly deal with such a pandemic was minimal precisely because there was no guarantee that such work would produce profitable drugs.

Even today, while the coronavirus has obviously become a major concern for the industry, Big Pharma is doing almost nothing about

the other emerging infectious diseases like Rift Valley Fever or the Zika Virus. Outside coronavirus, there are still only 15 projects targeting the other diseases on the WHO's priority list. Ten diseases languish with no research and development in the pipeline at all (Hazel, 2021).

In fact, vaccines of any sort — once a mainstay of the industry — had become uninteresting to Big Pharma until Covid-19. Out of the 20 largest pharmaceutical companies, only four of them still had major vaccine programmes of any sort. These four controlled some 80% of the vaccine market (Pluess, 2020).

Vaccines just do not make enough for the profit-maximising pharmaceutical industry, bringing in "only" $54 billion in 2019 (t'Hoen, 2020).

To deal with these market failures, governments and philanthropists began to pour money into pharmaceutical research. For instance, foundations including the Bill & Melinda Gates Foundation, the Wellcome Trust, and a host of governments in 2017 set up the Coalition for Epidemic Preparedness Innovations (CEPI) to finance research into vaccines against emerging infectious diseases. There would have been no reason to do this if the industry was responding to the world's needs.

Even Bill Gates, a fierce proponent of the pharmaceutical industry, admitted at CEPI's launch: "The market is not going to solve this problem because epidemics do not come along very often — and when they do you are not allowed to charge some huge premium price" (Cookson and Bradshaw, 2017).

The biggest spender on research is actually the US government, doing the bulk of work on coronaviruses until 2020 and without which we would have few medicines of any sort. By April 2020, it was clear this money would need to be multiplied many times over. The US government established Operation Warp Speed, a public-private partnership to facilitate and accelerate the development, manufacturing, and distribution of Covid-19 vaccines, medicines, and diagnostics. Operation Warp Speed alone put US$18 billion forward to "incentivise" Big Pharma to pivot to this type of research. Although more than a billion dollars was given out to smaller companies, the biggest chunks went to Big Pharma, see Table 1.

US$2.5 billion to Moderna, US$2 billion to Sanofi and GSK for a vaccine, nearly US$2 billion to Pfizer and BioNTech, with Novavax getting $1.6 billion, Johnson & Johnson US$2 billion and AstraZeneca US$1.6 billion (Baker, 2020).

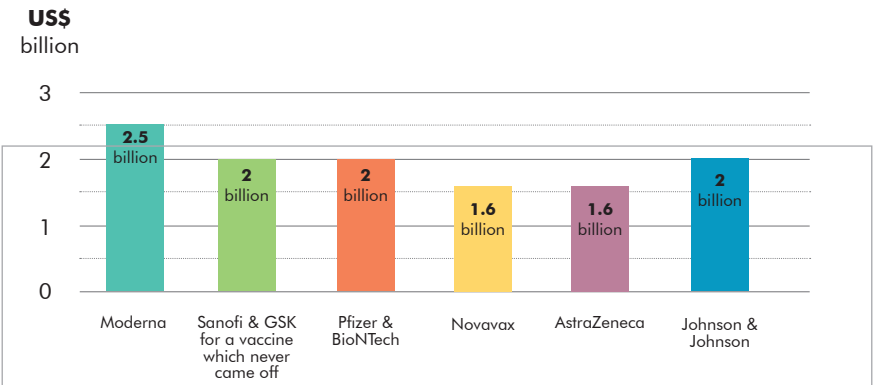

Table 1: Total amounts given to leading pharmaceutical companies as part of Operation Warp Speed.

One of the most inequitably distributed Covid-19 vaccines was overwhelmingly funded by taxpayer money.

But while Operation Warp Speed was necessary, it was not sufficient because it was still about trying to correct, rather than replace, the market. Money was thrown at Big Pharma with little transparency and seemingly, few conditions.

Big Pharma might be dysfunctional, but it was still the gatekeeper.

Moderna is perhaps the best example of the problem. Moderna specialises in mRNA technology, which has revolutionised vaccines and holds the possibility of cutting-edge treatment for a wide range of diseases including HIV, cystic fibrosis, and TB.

But the story of mRNA goes back decades before Moderna was established. As so often, the earliest and riskiest research was carried out in public universities with public backing, starting its life in the 1990s as such a scientific backwater that it struggled to get any funding. One of the scientists who played a role in the mRNA revolution put it succinctly when talking about his own contribution to the mRNA delivery system: "You really can't claim

credit, we're talking hundreds, probably thousands of people who have been working together" (Dolgin, 2021).

What is clear is that the US government, through the National Institutes of Health (NIH), played a critical role in the development of Moderna's vaccine, funded the overwhelming majority of the vaccine's development.

Public Citizen said of Moderna's vaccine, "This is the people's vaccine. The NIH's vaccine," (Public Citizen, 2021). Or, as economist Adam Tooze makes clear, "Given Moderna's heavy dependence on public funding, it is astonishing that the company should have any bargaining power whatsoever. It would not exist as a serious vaccine producer without public support of every kind" (Tooze, 2022).

And yet, Moderna and many of its executives made incredible fortunes. At one point during the pandemic, Moderna CEO, Stéphane Bancel, was worth more than US$12 billion, and while the stock on which that fortune is based has been volatile, he was still worth US$5 billion at the start of 2022 (Dearden, 2022a).

In 2021, PVA calculated that the Covid-19 vaccines had actually created nine new billionaires, with Bancel topping the list, but two of Moderna's founders and Moderna's chair were also included (PVA, 2021).

In early 2022, Moderna announced sales on its Covid-19 vaccine the previous year had brought in US$17.7 billion (Langreth, 2022). Of this, Moderna's US$13 billion pre-tax profit — around $36 million a day in 2021 — means it had a profit margin of around 70%, the kind of margin you should find on luxury goods, not essential medicines (Dearden, 2022b).

Does this matter? Yes, because despite this public funding, Moderna ultimately got to decide who could buy its vaccine. And it has proved to be one of the most inequitably distributed vaccines in the world. In September 2021, 85% of Moderna's total supply had been delivered to the richest countries, with almost no doses at all going to the lowest income countries (Amnesty International, 2021). The company sold a tiny 3% to COVAX, but did not appear to have delivered them as of October 2021 (Malpani and Maitland, 2021).

As of March 2023, Moderna was engaged in numerous lawsuits in the US to protect its intellectual property, and had refused to collaborate with research facilities such as the mRNA Hub in SA, which could still ensure a rapid scaling up of vaccine production.

Vaccine apartheid

Thanks to the massive injection of public funding, effective vaccines and other treatments were produced fairly rapidly. But then, we hit the next problem: how to produce the quantity of vaccines the world needed in an equitable way?

The answer, according the decisions makers in the North, was COVAX (Covid-19 Vaccines Global Access) a partnership between the WHO, the Gavi vaccine alliance, and CEPI to provide poorer countries with vaccines.

COVAX failed, however, precisely because it, too, refused to stand up to the power of Big Pharma (MSF, 2021). Its founders refused to call for intellectual property to be waived and, instead, worked with Big Pharma to try to ensure a reasonable flow of vaccines went to the Global South. Ultimately, the body provided governments with less than half of the two billion doses it aimed to get out in 2021: 907 million vaccines (Unicef, 2021).

In fact, the situation was far worse than this figure suggests. COVAX was saved from utter disaster by US donations from its own supply, and by a massive increase in production only towards the end of 2021. A full third of the COVAX doses for 2021 came only in December 2021, creating its own problems, with many governments overwhelmed by bulk orders arriving all at once.

By and large, COVAX was a low priority for Big Pharma. In 2020, as major Covid-19 vaccine producers — Pfizer and Moderna — raced to get authorisation for their products, both companies had already sold the majority of their prospective vaccines to the richest countries (Global Justice Now, 2021a) (Global Justice Now, 2021b).

Even when you added in other leading vaccine candidates that had been sold somewhat more equitably, including the Oxford/Astra Zeneca vaccine, the Russian Sputnik vaccine and the Chinese Sinovac vaccine, it was still the case that more than half of overall

sales made had gone to the wealthiest countries, which account for less than 10% of the world's population (Oxfam International, 2021). Countries like the US , the UK and Canada had procured several times what they needed — hedging their bets to ensure they ended up with the best candidates, while most other countries had secured no vaccines at all.

By early summer 2021, G7 nations — which include the EU, Japan and Canada for instance — were vaccinating their citizens at a rate of 4.6 million people a day. Low-income countries were only able to manage 63,000 people per day. While the G7 was on track to have vaccinated almost all its citizens by the end of the year, low-income countries would be waiting 57 years if the current trend were to continue, (Oxfam, 2021).

Of course, vaccine nationalism and hoarding were a problem. But, at a deeper level, the real scandal of the pandemic was the refusal to countenance a proposal, supported by the majority countries in the world, to waive intellectual property (known as the TRIPS waiver) and allow all factories that could safely make vaccines to do so.

A single company in Bangladesh had already promised that it could produce between 600 and 800 million vaccines a year if it were given the know-how (Lerner and Fang, 2021). Bearing in mind the G7 countries had still only donated 865 million doses by February 2022, this could have made an enormous difference (Oxfam International, 2022).

Bangladesh was not alone. Indonesia also said it could produce 600 million a year. Meanwhile Indian activists identified 34 manufacturers who could have produced the Johnson & Johnson vaccine(Menghaney et al., 2021).

But intellectual property was at the heart of Big Pharma's profits. As such, it was regarded as sacrosanct.

In fact, the industry went into an all-out panic when US President Joe Biden moved to partially support the TRIPS waiver proposal in May 2021, with industry lobby group the Pharmaceutical Research and Manufacturers of America (PHRMA), complaining, "multilateral organisations that once served as custodians of the international rules-based system increasingly are seeking to undermine and even

eliminate intellectual property protections." Unsurprisingly, they urged the US to provide "leadership" to prevent the "weakening or even eliminating the intellectual property protections that drive America's innovation economy", (Pharmaceutical Research and Manufacturers of America, 2022).

Some might counter that one company, UK-based AstraZeneca, surely disproves the thesis. AstraZeneca did not create its vaccine, which was the product of the Jenner Institute at Oxford University. But the vaccine was sold widely in the Global South and it was "cheap", costing only a few pounds. Even here, there were problems, though, with reports emerging of SA being charged two and a half times what the EU was charged (Reuters, 2021). Uganda was asked to pay even more (Nakkazi, 2021) (Raghavan and Anil, 2021).

What is more, AstraZeneca's "no profit" pledge only lasted as long as they decided there was still a pandemic. In November 2021, the company decided that was no longer the case and they would start profiting from new sales (Espiner, 2021). Most fundamentally, AstraZeneca refused the one thing it could have done to make a greater difference: share the publicly created knowledge behind the vaccine. Ultimately, it seems, this was a step that Big Pharma is constitutionally incapable of taking.

AstraZeneca was ultimately locked in a no-win situation, with investors complaining that CEO Pascal Soriot was trying to do "politics, rather than business", with shares tumbling in value, and campaigners complaining the company was keeping vitally needed public research to itself (Jack, 2021) (Vardi, 2021).

It seems unlikely a Big Pharma company would go as far as AstraZeneca in future, and impossible to imagine any could take such steps for more than a short length of time in an extreme situation. So perhaps in this example we have the most that could possibly be expected of the industry — and it is not enough.

Meanwhile, the highest profits were made by Pfizer. In a single year, 2021, Pfizer's Covid-19 vaccine brought in US$37 billion, making it easily the most lucrative medicine in any given year in history. Pfizer predicted that it would bring in US$54 billion in 2022 from both its vaccine and its Covid-19 treatment, Paxlovid (Mishra and Erman, 2022). Together these two medicines doubled

the company's total revenue.

It is not hard to see where Pfizer's profits come from. Pfizer claims that the cost price of its vaccine is just under £5 (US$6) per dose. Others have suggested it could be much cheaper, with experts arguing Pfizer's doses could be made for as little as 76p (US$1) (Channel Four, 2021). But the UK government paid £18 (US$22) a shot for its first order, and £22 (US$27) for its later purchase (Global Justice Now, 2021c). Even taking Pfizer's cost price as the true one, that meant the British National Health Service has paid a mark-up of at least £2 billion (US$2.5 billion) — six times the cost of the pay rise the UK government agreed to give nurses last year (Siddle, 2021).

Pfizer would argue that it must cover development costs, not simply the actual cost of production. But if that is the case, it seems counter-intuitive that prices would increase over time. But Pfizer raised the EU price by more than a quarter between its first and second set of purchases: from €15.50 to €19.50 (US$19 to US$24) (Pilling, Kuchler and Mancini, 2021). Since then, Pfizer announced it would raise prices to between US$110 and US$130 a dose in the US (Erman, 2022). It is unclear what economic rule justifies the quadrupling of prices for a product several years old, except the rule of the monopolist. The People's Vaccine called the new price "daylight robbery" and that it would give Pfizer a 10,000% mark-up on its medicine (Johnson, 2022).

Conclusion

The scandal of Covid-19 vaccine inequality was not a once-off aberration. It was rather an inevitable consequence of our reliance on an industry that no longer does what made it useful in the first place, but whose power allows it to go on holding us to ransom. Big Pharma's power reaches deep into society, but its wealth is increasingly based on an intellectual property model which has helped financialise the industry — making it both more profitable and less useful at the same time.

Such concerns have prompted governments in the Global South to begin building up their own medicine production capacity. In the most exciting case, mRNA research and development in SA is

being shared with certain countries around the world. In the US, the government has given itself new powers to negotiate on drug prices, with the threat of public production even sending insulin prices tumbling. This is a good start, but more will be needed, including stricter conditions on research produced with public money, public manufacturing and the creation of new governance systems for intellectual property.

Covid-19 will not be the last global health emergency. All signs point to a similar story developing around other issues, for instance, the growth of antimicrobial resistance which could overwhelm the antibiotics on which so much of our medical practice depends. It is in the interests of nearly everyone that we break Big Pharma's stranglehold.

Nick Dearden is the director of Global Justice Now in the UK, since 2013, and a campaigner against corporate globalisation and for global economic justice for over 20 years. He was a leading voice in the UK and European movement against the now abandoned EU-US trade deal (TTIP), and subsequently against the US-UK trade deal, about which he wrote a short book, Trade Secrets.

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