



GLOBAL SOLIDARITY UNDER
CONSTRAINT: TECHNOLOGY TRANSFER AND THE FAILED
RESPONSIBILITY OF BIG PHARMA



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THE WORLD WE LIVE IN

- 10 billion Covid-19 vaccines have been administered globally (Zakiyah, 2022).
- ONLY 61% of the world's population were fully vaccinated as of June 2022
- The vaccination rate in many LMICs remains extremely low, some countries as low as 1.5% e.g. Burundi, Congo, Haiti, Chad and Yemen (Holden, 2022)
- Most African countries the rate remains below 15% (Zakiyah, 2022).
- These figures are chiefly caused by vaccine supply shortages, e.g. Africa imports 99% of the vaccines (Ekström et al., 2021)



GLOBAL HEALTH

- Vast inequalities exist in healthcare worldwide (Paiva and Miguel 2021)
- Fair and equitable access to healthcare is a key human right (World Health Organization, 2017).
- Given their role in global health, pharmaceutical companies have a moral duty to reach beyond the scope of economic profit (deWildt and Khoon, 2008).
- Not to forget that current Covid-19 mRNA vaccines were developed through considerable public funding!



BIG PHARMA AND INTELLECTUAL PROPERTY RIGHTS (IPRS)

- IPRs(patents) has been around in Europe and the US since the 14th century but not on medications/health-related products (only started post 2nd world war)
- International provisions such as the Trade-Related Aspects of Intellectual Property Rights (TRIPS) agreement have **harmonized, cemented and scaled** property rights
- Patents have given big pharma a legal platform to ring-fence intellectual property and sell vaccines in the most profitable markets (Cox, 2012; Lezaun and Montgomery, 2015)
- Knowledge monopolies pay off: Pfizer and BioNTech US\$37 billion for Covid Vaccine in 2021 alone; Moderna US\$12 billion (Murphy 2022) – 9 new ‘Covid pharma billionaires’ (Ziady, 2021)





TECHNOLOGY TRANSFERS AND SOLIDARITY

- IRPs, know-how and technical expertise should be shared as a global public good – need for solidarity
- ‘Technology transfers’ (“a process by which commercial technology is disseminated”, Sampath and Roffe, 2012) could allow manufacturers in low and middle income countries to produce vaccines
- Solidarity has been defined as an “enacted commitment to carry costs to assist others” (Prainsack and Buyx, 2017)
- Solidarity: (1) ties people, organizations or even nations together; (2) state of mutual dependence through common adversity, goals or the sharing of situations; (3) voluntary in nature (Prainsack and Buyx, 2021)



SOLIDARITY AND COVID 19

- 3 tiers of solidarity (Prainsack and Buyx, 2021):

(1) Tier I / Interpersonal: People standing up for each other, e.g. Unicef ‘buy one give one vaccine’

(2) Tier II / Group-level: Shared and group-commitments, e.g. Local contact tracing and vaccine programmes

(3) Tier III / Contractual/legal level: Policy-led arrangements or institutionalized assistance, e.g. National healthcare systems or international laws (e.g. TRIPS)

- Premise of ‘no-one is safe until everyone is safe’ with Covid BUT the crisis has affected solidarity (Prainsack, 2020) with nations focusing on their own people’s health and safety first (‘vaccine nationalism’)

TECHNOLOGY TRANSFERS AS SOLIDARITY-BASED SOLUTIONS

Tier I/'Individual' Level: Unilateral or bilateral tech transfers

- Premise of big pharma voluntarily sharing IRPs - uncommon practice but demonstrated in the past by Eli Lilly's multidrug-resistant tuberculosis (TB) programme
- There are 7 factories in Africa ready to go and 100 LMICs worldwide could be upskilled to produce mRNA vaccines (Human Rights Watch, 2021) but Moderna and Pfizer/BioNTech still insist that the technology is "too complex" (Nolen, 2021) amongst other excuses
- Problematic is that who they want to share technology with, when, and under what conditions is at **complete** discretion of pharma
- Argument that technology transfers are only interesting to pharma if they translate into 'caring capitalism'



TECHNOLOGY TRANSFERS AS SOLIDARITY-BASED SOLUTIONS

Tier II/ 'Group' level: Multilateral technology transfers

- Technology access pools and technology transfer hubs
- Access pools (e.g. the Medicines Patent Pool): multiparty public-private partnerships which manage intellectual property and outsource to generic manufacturers in LMICs - was slow to take off, recently though it succeed in licensing two Covid-19 treatments for a limited set of countries
- COVID-19 Technology Access Pool (C-TAP) was established in May 2020 as a 'solidarity call for action' (WHO, 2022) but as per today, the pool remains empty
- Africa's mRNA hub (Jan 2022) recently reverse-engineered Moderna's Covid-19 vaccine (Davies, 2022) but did not receive any help from pharma (would have saved time/money to bring to market) - big pharma actually actively worked against/undermined the hub (Davies, 2022)

TECHNOLOGY TRANSFERS AS SOLIDARITY-BASED SOLUTIONS

Tier III/ 'Legal/Contractual' level: Multilateral technology transfers

- 'Voluntariness' of solidarity (Prainsack and Buyx, 2021) would slide into a mandatory commitment to solidarity that has been institutionally or societally agreed upon

Solution I: A TRIPS waiver

- TRIPS was agreed at the height of the AIDS crisis; it harmonized the global patenting system and granted solid legal rights
- This waiver would temporarily remove the IRPs for Covid-19 related health technologies – been asked for by civil society and advocacy groups since the pandemic began but it is still not fully agreed
- EU blocked it initially (Stiglitz, 2021) and now a draft text is developed by WTO (Thambisetty et al, 2022) – watered down and contested: (1) scope (Covid 19 /countries), (2) waiving beyond compulsory licensing and (3) technologies beyond patents for vaccines

TECHNOLOGY TRANSFERS AS SOLIDARITY-BASED SOLUTIONS

Tier III/ 'Legal/Contractual' level: Multilateral technology transfers

Solution 2: Compulsory licensing

- The TRIPS text makes provisions that IRPs can be suspended if the patent violates moral principles or threatens social structures; can be enforced on case-by-case basis (long legal process!) → not invoked for Covid-19 yet
- Resistance through national protectionism of a powerful pharmaceutical industry - TRIPS as well as a lack of an International Code of Conduct on the Transfer of Technology have set the tone
- Under Tier 3 solidarity would become conventionalized, which means costs would become unavoidable for pharmaceutical firms (lower/no royalties, lack of control and learning curve for competitors)

TECHNOLOGY TRANSFERS AS SOLIDARITY-BASED SOLUTIONS

Tier IV/ ‘Global solidarity’ is needed

- Solidaristic efforts to transfer technologies across Tiers 1, 2, and 3 have so far yielded little tangible improvement to vaccine inequity
- Apathetic response of pharmaceutical manufacturers has resulted in what can only be termed a failure of many voluntary solidarity initiatives, including COVAX and C-TAP
- Need to reorient the current biomedical business model towards a focus on the ‘global public interest’ (Swaminathan et al., 2022)

TECHNOLOGY TRANSFERS AS SOLIDARITY-BASED SOLUTIONS

Tier IV/ 'Global solidarity' is needed

Short-term:

- Empowerment and funding of global institutions such as the WHO
- Prioritize local, resilient pharmaceutical supply chains and regional capacity building (see Paiva and Miguel 2021)
- Support for legal mechanisms (for instance through a TRIPS waiver)
- Capacity building (e.g. the WHO-backed African mRNA hub)

TECHNOLOGY TRANSFERS AS SOLIDARITY-BASED SOLUTIONS

Tier IV/ 'Global solidarity' needed

Long-term:

- Presence of WHO Pandemic Preparedness Frameworks to prevent health inequalities in future pandemics -> built around the notion of global solidarity
- Commitments of governments to an open science approach
- Commitments of private industry to legally binding guarantees for certain quantities of vaccines to be distributed globally (Swaminathan et al. 2022).
- Limits to the prices the industry can charge for new drugs (Bourgeron and Geiger, 2022)



CONCLUSION

- Voluntariness is a hallmark of most definitions of solidarity, but it has proven woefully inadequate in the current pandemic
- Paper is a call for societal agreement at a global level to institutionalize a level of global solidarity
- Technology transfers remain within the imaginaries of the current capitalist regime— though other solutions are available (e.g. to re-orient the pharmaceutical system from € toward human rights/global public good)
- Paper is currently under review in ‘Organization’ in the ‘Speaking out’ section (wish me luck!!!)