## Vaccines against Covid-19: the disease and the vaccines as weapons in colonial oppression

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At the end of March 2021, there were 87 new vaccines in laboratory prospecting or trials with experimental animals against Sars-CoV-2 registered in the world by the World Health Organization (WHO)<sup>1</sup>. Most of the vaccines – 28 – under test or prototype are of the type that contain protein subunits of the virus envelope, followed by 12 with viral vectors without replication of recombinant DNA/RNA; 10 with laboratory synthesis DNA; 12 with inactivated viruses; 12 with viral RNA; 4 with replicating viral vectors – recombinant technology; 4 with virus-like particles; 2 with viral vectors replicating with antigen presenting cells; 2 with live attenuated virus; and 1 with a non-replicating viral vector with antigen presenting cells<sup>1</sup>.

In addition to laboratory work and experimental animals, another 186 vaccines were already in phase III or randomized clinical trial in humans to verify effectiveness after phase II efficacy trials. The majority – 56 – was designed for inoculation by two doses, and 11 were designed for a single dose. One of the vaccines was designed for three doses. Two vaccines were designed for oral use, and at least 72 were injectable<sup>2</sup>. Thirteen did not yet have reports on how administration should take place. The universe of technologies is wide, the laboratory and research strategies are based on the competence of public, private laboratories; and the majority, private with public funding<sup>1,3-5</sup>. The international fight will be against attempts to revoke ethical impediments and experiment with vaccines in poor and colonized populations compared to placebos, even though there are already efficient and effective vaccines. This struggle even contaminates the permissiveness of international institutions and forums<sup>6</sup>.

In May 2020, the Covid-19 Technology Access Pool (C-TAP) was launched by the WHO, in partnership with several Member States, designed to encourage the global community to voluntarily share knowledge, data and intellectual property, with a view to accelerate the development of products necessary to combat the pandemic. Unfortunately, Member States appear to be reluctant to demand the sharing of knowledge and intellectual property as a condition for companies to receive public funding mobilized to support relevant research. On January 21, 2021, the People's Vaccine Alliance and Health Action International (HAI) sent an open letter to the Director-General of the WHO, expressing concern about the progress of C-TAP, as well as making recommendations related to the publication of periodic monitoring reports, guidance and data transparency and information on technology transfer agreements<sup>7</sup>.

As part of the Access to Covid-19 Tools (ACT) Accelerator initiative (global collaboration to accelerate the development, production and access to technologies for Covid-19), the WHO promoted, in 2020, the institution of a multilateral office to promote the purchase

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This article is published in Open Access under the Creative Commons Attribution license, which allows use, distribution, and reproduction in any medium, without restrictions, as long as the original work is correctly cited. and worldwide distribution of vaccines – the international multilateral warehouse or 'Covax Facility' for global action in centralizing financing, ordering, purchasing and equitable distribution called the 'Covax mechanism'<sup>1,2</sup>. Covax's motto is 'no one will win the race against the virus until everyone wins'.

The Covax initiative, which is more limited than the others and which is restricted to the financing of large pharmaceutical companies in exchange for supplying limited doses of vaccine against Covid-19 to previously identified countries, has received greater support from countries, organizations and companies. However, the initiative does not provide for agreements for the transfer of technology, maintaining the knowledge gap of technological development, as well as it does not provide for the sharing of intellectual property or transparency in agreements with other countries<sup>8</sup>.

Only four vaccines produced in what was conventionally called 'the west' during the 'cold war' (1946-1989) were listed as approved until March 2021 for worldwide use by Covax, excluding the vaccines Sputinik V (Russia – Vector Viral Adenovirus with Replicating RNA); Sinovac and Coronavac (China-Brazil – Virus Inactivated), which appears to be a geopolitical criterion rather than the publication of results from the respective phases III.

As a consequence, Europe, North America and part of the Middle East, including Israel, entrusted their national policies to the four vaccines: Pfizer – BioNTech BNT162b2 and Moderna mRNA-1273 (messenger RNA); AstraZeneca – Oxford University AZD1222 ('Covishield' – RNA inserted by replicating technique in a chimpanzee viral vector – (ChAdOx1-S [recombinant]); and the Janssen Ad26.COV2.S single dose vaccine containing adenovirus viral vector serotype 26 (Ad26), in which complete stabilized RNA was introduced that generates the Sars-CoV-2 viral spike protein.

Only issues of a geopolitical nature can explain the exclusion of Russian and Chinese vaccines from the Covax Facility, since the national certification bodies for good industrial practices, ethics in experiments with human beings, randomization procedures and anonymity in population experiments, and scientific quality phase III tests, are internationally well established<sup>9</sup>.

Promoting a global distribution of vaccines, quickly, safely, without geopolitical, ethnic, class or gender discrimination, could be an important task for the transition to another sociability based on the care for life. However, from the market point of view, global vaccine distribution is jargon for an access mechanism without interrupting the logic of the pharmaceutical industry, of business alliances, of deciding which companies will receive contracts, and selection of market priorities. access in accordance with capital conditionalities. Therefore, vaccines for Covid-19 have formed an arena between ethno-nationalism, ecofacist genocide, soft power from central countries and 'vaccine hunger' from peripheral and dependent countries, as well as 'benevolence' from transnational corporations and actors such as the World Economic Forum (WEF) and the Gates Foundation<sup>8</sup>.

Covax co-chairs are the Coalition for Epidemic Preparedness Innovations (Cepi), which is a Norwegian association with the participation of investors, independent members and observers, and Gavi, The Vaccine Alliance, a Swiss foundation with activities also in the United States of America (USA). Covax is financed through the International Immunization Financing Fund (IFFIm), a fund to be repaid with interest to investors or cost-sharing agreements with the recipient<sup>8</sup>. This structure, on the one hand, is not at all participatory, especially for the countries and populations that need it most; on the other hand, it puts the vaccine industry at the top of global decision-making, and the already weakened United Nations System is defeated in taking over that leadership. Covax has become a vaccine management strategy with capital protection for the pharmaceutical market that indirectly hinders other strategies, such as the proposal filed by India and South Africa at the World Trade Organization (WTO) with the objective of temporarily exempting some obligations of the Agreement on Trade-Related Aspects of Intellectual Property Rights (Trips) in relation to the prevention, containment or treatment of Covid-19 (Trips Waiver), to which Brazil was not a signatory; therefore, it generates scarcity. With Covax, there is no obligation for data transparency, and it is still a long way from delivering 2 billion doses and ensuring equitable access to end the acute phase of the pandemic by 2021.

This scarcity structure is reproduced in the proportion that maximizes profits, not life<sup>10</sup>. There is no effective solidarity in equitable access by vaccine producing countries. This is reflected in other aspects: scarcity of food without poison, scarcity of drinking water, scarcity of life without violence. This scarcity is the result of the North-South dependency structure that fuels imperialism, in which it produces aberrations like the super rich, even in countries of extreme poverty. What to do with populations without the right to the vaccine? The same as with populations without rights to self-determination? Will they be crushed and discarded as it is done with native peoples, with people 'without papers'?

Military and political economy tensions – such as Britain's withdrawal from the European Union, 'low intensity' wars in the Gaza Strip, Lebanon, Syria, Turkey, Iraq, Azerbaijan, Nagorno-Karabach, Crimea, Yemen, Republic Saharawi Arab (Polissario Front), Nigeria, Mozambique and Myanmar – may explain why recent studies on the occurrence of blood vessel embolism in people vaccinated with the AstraZeneca vaccine in 11 European countries have led to the temporary halt in the use of that vaccine benefit of the other 3 vaccines, without, however, interrupting the launch of its mass vaccine programs ('Vaccine Rollouts'). Countries in Africa, Asia and Latin America are also subject to the same conditions of difficult access to vaccines, and statistics from the WHO itself suggest that they will have great difficulty in vaccinating their populations at the rate necessary to eradicate Covid-19<sup>2</sup>.

Brazil declared, still in May 2020, that it would not join the Covax Facility by express order of the President of the Republic to its Minister of Foreign Affairs and ambassadors under the silence of the rotation of at least four Ministers of Health of the last government. Even with Brazil's important purchase power, in relation to most countries in the Global South, the President of the Republic also made the decision to seek 'herd' immunity, allowing the disease to spread, aiming at reaching more than 70% of infected people with the desired Covid-19 interruption for exceeding a theoretical threshold of collective immunity, in case the virus was not capable of mutating and causing new waves. They did not care that, in order to reach that cruel theoretical goal, around 3% of the population that fell ill would die – around 4.4 million people would have to die for the country to reach the threshold of collective immunity.

As opposed to adhering to the 'lockdown', the Brazilian government practiced its first act of genocide when vaccines were not yet ready. It ignored that China zeroed the transmission and the initial focus on Wuhan only with the national population confinement. Brazilian bankers, businessmen and lobbyists said that "*Brazil cannot stop*" and unleashed the first wave of Covid-19 in the country without checks or balances. On April 10, 2020, there were 20,000 cases and 1,073 deaths from Covid-19 in Brazil, and nine months later, when England started vaccinating with the Pfizer vaccine on December 21, 2020, there were, in Brazil, 7.2 million cases and 187 thousand deaths, indicating that at least 180 thousand Brazilians were killed by the decision not to practice lockdown. The elderly, the poor and workers from the Brazilian periphery died in the first wave of the genocide<sup>11</sup>. There are rumors of rejoicing among administrators of the Brazilian public social security, because the deaths meant a large 'savings' of retirements, pensions and health care leaves that would be paid by the National Institute of Social Security (INSS) under the Ministry of Economy.

From December 2020, the Brazilian government practiced its second wave of genocide by refusing to join the Covax Facility and delaying national industrial and technological autonomy programs for the manufacture of new vaccines, which emerged from October until March of 2021, in a total of five months of government promotion of miraculous and fake treatments with drugs readapted for use outside the prescription, with drugs intended to treat autoimmune diseases, malaria, ectoparasitic infestations, joint rheumatisms by gout, and countless 'home remedies' defended by anti-vaccine groups rooted and financed by the European and North-American far right. As of March 30, 2021, there were 12.7 million cases and 318 thousand confirmed deaths by Covid-19 in Brazil, representing an additional 91.7 thousand additional preventable deaths in the second wave, if we had made use of vaccines with 70% effectiveness<sup>11</sup>.

That way, Brazil totaled the genocide of at least 271 thousand preventable deaths due to previous policies of confinement and vaccination, not to mention additional measures of a non-pharmaceutical nature<sup>12-16</sup>. Brazilian mortality was such that the only international publication on hospital mortality in a single country with more than 250 thousand deaths by Covid-19 is from Brazil 'il, il, il, il!'<sup>17</sup>. Brazilian mortality was compared to the practice of the suicide game of random shots to the head using partially loaded revolvers referred to by Brazilian thugs as the 'Russian roulette'<sup>18</sup>. Serious hospitalizations killed intensely by Covid-19, either on the floor of emergency room corridors without beds, in precarious wards without oxygen, or in Intensive Care Units (ICU) devoid of curative medications, sedatives, major tranquilizers, myorelaxants, and even 'blackouts' due to lack of electricity, with serial deaths of patients intubated due to the stopping of artificial respirators.

In March 2021, the Brazilian government sought to join the Covax Facility, ten months later, when international dealings were advanced, with the international and the Brazilian press describing this late adherence as 'Brazil joining the end of the line'. As a result, by April 10, 2021, Brazil had vaccinated only 10.7% of its population despite having a universal health care system – Sistema Único de Saúde (SUS)<sup>19</sup>. The Brazilian vaccination that started slowly and late in February 2021, three months after the start of the vaccination campaign in Europe and the USA, was based on only two vaccines: the one from AstraZeneca (Covishield), imported and destined to be produced starting in May by the Oswaldo Cruz Foundation (Fiocruz-Rio); and the co-production with Sino-Brazilian Active Pharmaceutical Ingredient (IFA) from Coronavac (inactivated virus) produced by the Butantan-São Paulo Institute.

In 2021, denunciations were published in the mainstream media of the international press and in the so-called alternative or counter-hegemonic press about the use of vaccines as an instrument of pressure in international conflicts and civil wars, such as: border blocking, such as the maritime blockade of Gaza Strip by Israel; negotiation and exchange of prisoners; deliberate omission of international aid; blocking borders against receiving vaccines, on the grounds that vaccinated military personnel would be more dangerous; theft and kidnapping of vaccine lots by armed militias; smuggling and private illegal use of vaccines. There is no way to verify several other allegations, because they are subject to the international game of silence and denunciation in an environment of colonial wars of occupation and plundering of mineral reserves, in the middle of the 21st century.

The panorama of false and profitable solutions, of delay or lack of vaccination worldwide, will imply the occurrence of repeated epidemic outbreaks of Covid-19, with viral mutations that may escape vaccines and the emergence of planetary zones endemic to the disease, with eventual outbreaks crossing borders of vaccinated countries<sup>20</sup>. The global risk is to always go 'back to square one' for not vaccinating widely and turning vaccines into profitable sources, with high cost patents, paying royalties that are incompatible with the national economies of exploited and colonized countries.

Desperate attempts will be made to vaccinate only after serological tests and at certain ages in view of the lack of vaccines for all<sup>21</sup>. Vaccination certificates will be used as instruments of selection, containment and repression on international migrant workers, aggravating the humanitarian crises that existed at the beginning of this century<sup>22</sup>.

Universal access to vaccines for all is urgent. Furthermore, it is necessary to suspend public debts with countries in the global north, suspend military activities and police repressions, economic, commercial and financial blockades, de-mercantilize and regenerate planetary life and produce life combined with an energy and environmental transition<sup>23</sup>.

The end of the myth of an era of humanity without end/without limits was put in check with the pandemic by Covid-19 and with the environmental and climatic vulnerability that can no longer be hidden. It is necessary to dispute approaches of international solidarity and ethical principles for a transition based on the care for life – because a universal immunobiological management alone may not be enough against Covid-19 without a new ethics of care for all forms of planetary life. The time for a new history and a new economic model is now<sup>8,10,23</sup>.

The Brazilian Center for Health Studies (Cebes), with the publication of this journal 'Saúde em Debate', is part of the struggle to democratize access to the defense of life and health in this conflict environment. It has been struggling to insert Covid-19 as a disease mainly of occupational transmission and lethality in which the illness of the elderly, children and adolescents is a collateral factor<sup>24</sup>. The resources to study, research and publish are scarce and often mean the limit of survival for the Cebes itself, for the poor working class, for migrants and for the peripheries of a country that is reluctant to be thrown into the graveyard and civil war by its own rulers.

## Collaborators

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