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Measures taken to ensure the fair distribution of the COVID-19 vaccine

As the COVID-19 pandemic devastated the world in 2020, laboratories across the world started working on a vaccine to contain the spread of the emerging threat to global public health. Nonetheless, as vaccines emerged, so did the issue of equity in distribution – More Economically Developed Countries, or MEDC's, undeniably had earlier access to the vaccines due to increased acquisition power, in comparison to their Less Economically Developed Countries, or LEDC counterparts. Member States must guarantee the equitable and just distribution of the COVID-19 vaccine across the globe, as the pandemic will never cease until all countries, regardless of developmental or economic status, are able to immunize their citizens.

In order to guarantee a coherent and prosperous debate, it is of the utmost importance that delegates understand several concepts to their entirety, such as but not limited to the development and distribution of the vaccine and initiatives such as COVAX and the ACT-Accelerator partnership- aiming to distribute the vaccine equitably across the world, as "with a fast-moving pandemic, no one is safe, unless everyone is safe" ("COVAX").

First and foremost, some basic information about vaccines is needed for further comprehension. As defined by the United States Food and Drug Administration (FDA), "Vaccines work by mimicking the infectious bacteria or viruses that cause disease" ("Vaccine Development"). There are a multitude of different types of vaccines, such as whole virus, protein subunit, viral vector, and nucleic acid vaccines, each aiming to protect from different diseases in a different manner. Whole virus vaccines inoculate the whole virus to activate an immune response, and work in two ways – live attenuated vaccines inoculate a weak form of the virus to not get people sick, and inactivated vaccines destroy the virus' genetic material so that it cannot replicate but nonetheless activates an immune response. Protein subunit vaccines utilize parts of pathogens, or "protein fragments", to activate immune responses. Nucleic acid vaccines inoculate genetic material, be it DNA or RNA, to instruct the organism to make antigens for said disease. Viral vector vaccines work similarly to the abovementioned nucleic acid vaccines, however, using a safe virus to transmit those instructions, rather than using the same virus the vaccine seeks to immunize a person from ("There are four"). These are the four main vaccine types used in COVID-19 vaccines, with Pfizer-BioNTech and Moderna being nucleic acid vaccines, AstraZeneca/Oxford and Janssen being viral vector vaccines, Sinovac, Sinopharm and Bharat Biotech being inactivated whole virus vaccines, and Novavax, still undergoing clinical trials, being a protein subunit vaccine ("Types of Vaccines").

One of the main points of the debate will be focused on which Member States developed the vaccines, as that highly contributes to the vaccine inequality present worldwide right now. As MEDC's undeniably have more resources that make it feasible for vaccines to be developed, they automatically get an upper hand in the process. The vast majority of vaccines that have been approved either permanently or for emergency use by many nations currently come from MEDC's – the United States government initiated Operation Warp Speed in 2020, spending 12.4 billion dollars in order to fund further development and distribution of the COVID-19 vaccine ("The Trump"). The figure shown below, by the Council on Foreign Relations, gives us insight on what countries host the main developers of the vaccines – unsurprisingly, they are mostly MEDC's, which undoubtedly influences what countries will have access to vaccines first. If MEDC's develop the vaccines, said Member States will have earlier access to the doses ("A Guide").

Leading COVID-19 Vaccines

Developer	Country	Clinical phase	Efficacy	Doses	Approved in at least one country
CanSino	China	3	66%	1	Yes
Sinopharm (Beijing)	China	3	78%	2	Yes
Sinopharm (Wuhan)	China	3	73%		Yes
Sinovac	China	3	51%-91%	2	Yes
Bharat	India	3	78%	2	Yes
Gamaleya	Russia	3	92%	2	Yes
Vector Institute	Russia	3		2	Yes
Oxford-AstraZeneca	United Kingdom, Sweden	2 and 3	76%	2	Yes
Pfizer-BioNTech	United States, Germany	2 and 3	91%	2	Yes
Johnson & Johnson	United States	3	64%-72%	1	Yes
Moderna	United States	3	>90%	2	Yes
Novavax	United States	3	90%	2	

Note: Efficacy can depend on dosage, severity of infection, and COVID-19 variant.

Source: New York Times.

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Another important factor to take into consideration during the debate is the inequality in acquisition of vaccines. The image below, courtesy of the New York Times, shines a light on the inequities of vaccine distribution based on country income (("Tracking Coronavirus"). Delegates should investigate said inequities and debate on efficient measures to bridge the economic gap between MEDC's and LEDC's to achieve mass vaccination in developing countries, to accelerate the end of the pandemic.



With the rise of booster shots in order to strengthen immunity in previously vaccinated patients, the issue of vaccine inequity becomes more prominent, as MEDC's increase demand for extra shots, whereas LEDC's have extremely slim access to vaccines to immunize their population for the first time. This furthers the disparities between MEDC's and LEDC's, as unvaccinated populations cannot go back to a pre-pandemic life while boosting the economy to bridge abovementioned gaps. The World Health Organization, or WHO, has expressed disapproval of booster shots in function of LEDC's to bridge vaccine inequity gaps, as WHO Director General Tedros Adhanom Ghebreyesus mentioned, "to share what can be used for boosters with other countries so [they] can increase their first and second vaccination coverage" ("Citing Vaccine").

It is of paramount importance that delegates understand solutions used in past pandemics, although recent pandemics have not been of this magnitude, and solutions that have been used in this pandemic. The ACT Accelerator, or Access to Covid-19 Tools (ACT) Accelerator, or a "ground-breaking global collaboration to accelerate development, production, and equitable access to COVID-19 tests, treatments, and vaccines" ("What is the ACT-Accelerator"), consists of five so-called pillars: access and allocation, diagnostics, health systems, therapeutics, and vaccines – each involving different organizations to battle COVID-19 ("The Access"). Its most famous branch is COVAX, an initiative that aims to equitably distribute vaccines and support their development and distribution. Their goal is to distribute two billion vaccine doses by the end of 2021, mainly to least developed countries, or LDC's. Delegates should do further research on said initiative to understand each Member States' role and contribution to the distribution of vaccines.

An excellent source for information on this topic is the World Health Organization (WHO), as they are behind a plethora of initiatives to ensure vaccine equity and end the pandemic, giving Member States the support that they need. Another good source for statistics is Our World in Data, as they give specific insight on per-region information with frequent updates. Reliable per-region sources include the African Union Africa CDC (Centre for Disease Control and Prevention) for information on African nations, the Centre for Disease Control (CDC) for information on North America, and the ECDC, or the European Centre for Disease Prevention and Control, for Europe information.

Key Member States in this issue include the United States, the United Kingdom, Russia, China, Germany, Sweden, Brazil, India, as well as other LEDC's that have been severely harmed with the lack of vaccine distributions.

Delegates should take into consideration factors such as sites of development, distribution, acquisition power and economic status to achieve an efficient solution to this very complex, nuanced issue faced by our current society.

5

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