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COVID-19 pandemic and vaccine geopolitics: A perception related to countries

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Abstract---COVID-19 investigates and reveals the intersections of public health and geopolitics at various scales and locations. The existing literature focuses on geopolitical health determinants. It has also been demonstrated how populist nationalism influences public responses to disease. COVID-19 is being portrayed in a popular geopolitical context, with expertise being called into question, conspiracies being spread, lockdowns being contested, mask-wearing and vaccination being mocked. Calls to keep "foreign" pathogens and viruses out of national territory enable extraordinary measures, xenophobic politics, and increased border and border-related surveillance. Aside from the COVID-19 pandemic, the world was in the grip of a COVID-19 vaccination crisis. COVID-19 vaccines were previously only available in limited quantities and were only available to high-income countries with bilateral agreements with vaccine pharmaceutical manufacturers. Because some countries and pharmaceutical companies prioritized bilateral agreements, the quandary over vaccine quantities and accessibility had reached critical levels of inefficiency. There has been a "moral failure," leaving the world's most vulnerable people behind. As a result, rich and poor countries must collaborate to establish priorities based on a geopolitical-epidemiological approach that first identifies countries that are most vulnerable and bear the brunt of the pandemic's burden. Because of the limited number of COVID-19 vaccines available globally, standardized mortality ratios (SMR) should be used to prioritize COVID-19 vaccine access, leaving most countries (developed and developing) with small numbers of vaccines that will hardly contribute to controlling, mitigating, or suppressing the pandemic. Almost 8.6 billion (8,563,904,063) COVID-19 vaccine doses had been administered worldwide as of December 15, 2021, The United States accounts for nearly 487 million of this total (India 1.3 billion, China 2.6 billion, EU 691 million, U.K 122 million, Russia 137 million) We're in the midst of a storm, so it's difficult to predict what's

going to happen. As a result, the issues in the situation are frequently only partially addressed. As a result, the purpose of this manuscript is to provide a comprehensive view of the crisis's issues. This chapter proposes a discussion of the vaccine crisis based on an examination and comparison of the most pressing unresolved issues in general public health, economics, and the environment. The intersection of public health and geopolitical contexts complicates the World Health Organization's role in global health security. We investigate how COVID-19 has produced three geopolitical narratives by utilizing three themes from within and outside the WHO: public health as a symbol of great power rivalry, virus bordering, and vaccine as a power source. Our paper concludes by assessing the significance of tracking and tracing the relationship between health and geopolitics.

Keywords---COVID-19 pandemic, vaccine geopolitics, perception related.

Introduction

To combat COVID-19, governments around the world are implementing unprecedented levels of lockdown and social distancing, as well as trillions of dollars in monetary and fiscal policies. These can only help to slow the spread of the disease while scientists develop a vaccine to stop it. This concludes the discussion. Because of the contagious element's prevalence and seasonal peaks, everything else is transient.

The goal of this paper is to go beyond the discussion of articles currently proposed in academia and examined in geopolitical reviews that deal with health, economics, and environmental issues separately. This integrated analysis allows us to provide a more forward-thinking answer to the questions raised by the COVID crisis, while also accounting for geopolitics, which was previously overlooked in the analysis. In addition to the COVID-19 pandemic crisis, the SARS-CoV-2 virus (the COVID-19 virus name) continues to challenge the world with its frequent mutations, raising the possibility that one of these mutations will result in a virus vaccine escape; the world is also facing a COVID-19 vaccination crisis.

Vaccine scarcity is influencing the geographical dimension of country interactions, their socioeconomic determinants, and the implementation of foreign policies that prioritize national interest or geopolitics and, whenever possible, establish a geopolitical alliance to gain access to vaccines. According to Foreign Affairs magazine, between 80 and 100 percent of vaccines produced by Pfizer/BioNTech, Moderna, and Johnson and Johnson have already been reserved for a small number of countries or economic blocs (e.g., the United States, Japan, Australia, Canada, and the European Union). The vaccines that these countries have reserved can be used to vaccinate their entire populations more than once. Hopefully, once these countries realize they can share their COVID-19 vaccine excesses, they will do so through a globally coordinated mechanism such as the World Health Organization (WHO) to maximize the positive impact of the COVID-

19 vaccines. Some middle-income countries have also entered into bilateral agreements with vaccine manufacturers (e.g., Mexico, Argentina, Brazil, and Chile). With the addition of new platforms such as Sputnik V, Sinopharm, CanSino, AstraZeneca, and others, vaccine supply is expected to increase, albeit slowly, as existing production capacity is under development. However, the number of vaccines they are receiving is insufficient to meet their needs.

Furthermore, due to some countries and pharmaceutical companies prioritizing bilateral agreements, the dilemma regarding vaccine quantities and accessibility has reached critical inefficiency levels. In this regard, WHO Director-General Dr. Tedros Adhanom Ghebreyesus has made claims about the "me-first approach." "I must be blunt: the world is on the verge of a catastrophic moral failure, and the cost of that failure will be lives and livelihoods in the world's poorest countries." Even in the richest countries, 'theme-first approach' is unattainable; there are currently insufficient vaccines to meet their own needs. Second, to assist decision- and policymakers, decisions should be made based on epidemiological evidence.

The WHO Member States adopted a Resolution in 2020 that acknowledges the COVID-19 vaccine as a public good. Such access to the vaccine should be provided at no cost, but this is insufficient because without the allocation of the financial, distribution, logistical, cold chain network, and human resources required to vaccinate millions of people, the Resolution becomes merely a goodwill gesture. Not every country has the resources to carry out a vaccination project of this scope and complexity. Many low-income countries need technical and financial assistance to improve their capacity. As a result, a COVID-19 vaccine coordination effort is required to assess their capabilities and identify the most critical needs. This is not the time to waste resources on bilateral and political agreements because the world is not only in the midst of a health crisis, but also of an economic one, as well as an unforeseeable predicament associated with the collateral non-COVID-19 health effects that have resulted from health care services being reoriented to provide care to COVID-19 cases, resulting in an increase in maternal and child mortality, a decrease in routine vaccination coverage and compromise in fighting HIV Aids. The non-COVID-19 collateral effects are expected to manifest years after the pandemic has ended.

According to the WHO director-general, the global community needs to establish a COVID-19 coordination mechanism that supports collaborative efforts of sharing vaccine doses and any other supplies needed to implement vaccination campaigns, or even more, as the Global Alliance on Vaccines Initiative (GAVI) suggests that the global community should create a cost-sharing effort to cover up vaccine doses, which means that the receiving country, donor, and vaccine manufacturers all contribute.

In this paper on Vaccine Geopolitics in the Current Pandemic, We concentrate on the factors that legislators must address immediately in order to take a competitive position in addressing vaccine geopolitical activity. All of these factors must be explained ahead of time for our Research Objective to get a clear picture of the current Covid-19 scenario on which we conducted our study. The current

contribution employs a geopolitical analysis method to examine whether and how the pandemic is altering the international landscape.

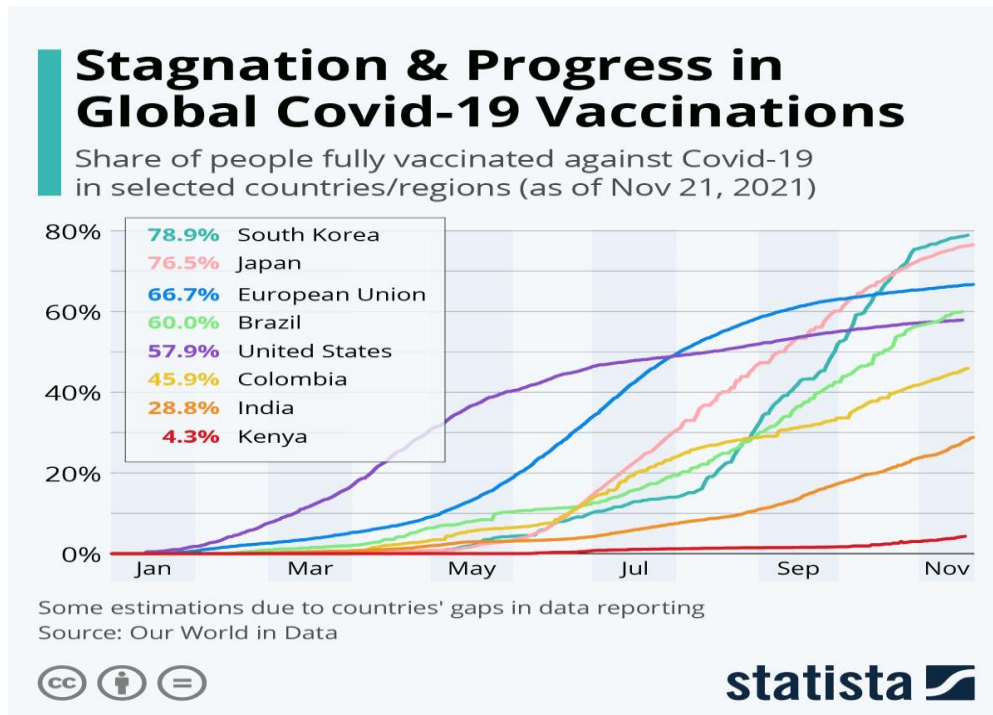


Fig1. Covid-19 vaccination on a global scale

The European Union and Covid19 vaccine geopolitics in the Western Balkans

The ongoing corona virus pandemic has spawned geopolitical games centered on gaining access to Covid19 vaccines. The initial impression may be that Russia and China have made significant progress in this area, particularly in the Western Balkans. Instead, the European Union (EU) is seen as having lost relative power in the geopolitics at hand, bogged down by the difficulties of ensuring adequate vaccine distribution to its member states. However, the EU has not only been present in the Western Balkans during this crisis, but it has also been the largest donor, which few appear to be aware of.

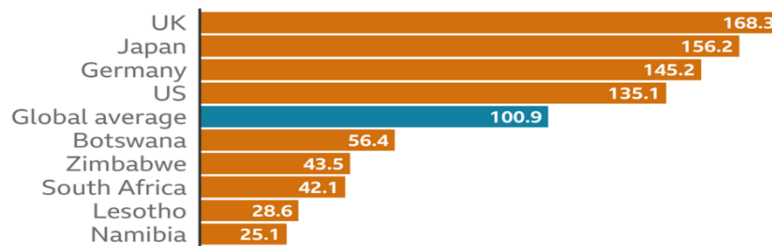
Given the scarcity of vaccines, the EU has been slow to respond to immediate needs, focusing instead on the long-term socioeconomic consequences of the pandemic in the Western Balkans. The Western Balkan region, on the other hand, is severely affected by the pandemic, with Covid19 cases and deaths on the rise. As a result, it is still in desperate need of international assistance with short-term problems.

With vaccine distribution to member states on track, now is the time for the EU to step up and prioritize the delivery of much-needed Covid19 vaccines in the Western Balkans, a region where the EU's promise of enlargement still lingers. However, as in any other race, timing is critical in this one. The geopolitics of

Covid19 vaccines has revealed some of the EU's long-standing shortcomings in foreign vaccine policy. For starters, it has emphasized the importance of being faster and more adept at reacting. Responding quickly would allow the EU to bridge the emergency gaps at any given time (first masks and then the gap that primarily China but also Russia was quick to fill during this crisis). Second, it has demonstrated the importance of the EU communicating its actions more effectively and forcefully, especially when recipient governments fail to do so. China, in particular, appears to be prepared to provide vaccines that countries cannot obtain on the international market and that multilateral mechanisms are slow to provide.

Vaccinations in southern Africa lag behind global average

Reported vaccine doses administered per 100 people in selected countries



Note: Total vaccinations refers to the number of doses given, not necessarily the number of people vaccinated

Source: Our World In Data, 10:45 GMT on 29 Nov with latest available data **BBC**

Health Diplomacy in India as a Soft Power Tool in Africa: A Geopolitical Analysis

Since the ancient civilizations, India and Africa have had a multifaceted relationship of cooperation and friendship. The COVID-19 pandemic has opened up new avenues for India to use soft power diplomacy in Africa. India had gained the support and affection of Africans through humanitarian assistance and geopolitical influence. Furthermore, through global health diplomacy and vaccine diplomacy, India has established itself as a global healthcare provider on the African continent. India has made significant gains through soft power diplomacy and has established itself as a compassionate and benevolent actor on the African continent.

COVID-19 has been regarded as a strategic game-changer, not only in terms of healthcare challenges, but also in terms of the changing global order, with numerous geopolitical implications. In terms of geopolitical competitions and cooperation, COVID-19 has created opportunities and challenges for major and medium powers. In this context, India and China have been engaging African countries through their health diplomacies. China is one of the major players who have increased its geopolitical and geo-economics influence in Africa. During the ongoing pandemic, China has prioritized the African continent in its health diplomacy.

China had sent medical protective equipment, masks, ventilators, test kits, and protective suits, as well as a large number of medical and paramedical personnel, to more than 50 African countries to help with the pandemic response. The primary goal of this medical assistance is to elevate China's position as a leading provider of humanitarian aid and public health goods to African countries. As previously stated, China has been expanding its strategic footholds in Africa, outpacing India in the region through global health diplomacy. Though India and China's health diplomacy strategies and tactics differ, both are used to operate in the same region and compete for regional influence. In this context, China is one of the major competitors to Indian health diplomacy, posing geopolitical challenges to India.

Serbia analysis The Western Balkans' COVID-19 vaccine strategy

During the COVID-19 pandemic, Serbia's regional influence in the western Balkans strengthened strategic geopolitical partnerships with Russia and China. Serbian President Aleksandar Vucic strengthened strategic alliances with Russia and China in preparation for an immediate COVID-19 vaccination rollout in the western Balkans. Serbia has advanced strategic regional influence by geopolitically balancing among great powers, while Russia and China have gained favorable geopolitical influences in the western Balkans through strategic COVID-19 vaccine donations.

'On February 18, 2021, Serbia donated 2000 Sputnik-V vaccines to Montenegro, which was the country's first batch of vaccines.' The donation was personally escorted by Serbian Prime Minister Ana Brnabic, who was greeted solemnly by Montenegro's newly elected Prime Minister Zdravko Krivokapic. Due to a lack of timely delivery of EU-approved COVID-19 vaccines, the Montenegrin government recognized Serbia's COVID-19 diplomacy through Sputnik-V vaccine donations.

Serbia also gave North Macedonia 8000 Pfizer vaccines and 40 000 Sputnik-V vaccines two months later. Furthermore, Serbia began the process of vaccinating ethnic Serbs in the Republic of Kosovo's northwestern region, but Kosovo officials declared the project illegal, leaving locals perplexed. If this project is carried forward, the country will have a parallel public healthcare system. Despite the urgent need to accelerate COVID-19 vaccination programmes in the Western Balkans, Kosovo saw Serbia as exceeding its jurisdiction without following legal procedure on COVID-19 immunization.

Nonetheless, Serbia's COVID-19 vaccine strategy leveraged a strategic approach to its former adversary when President Vucic personally escorted 10,000 AstraZeneca vaccines donated to Bosnia. Serbia's growing regional influence through COVID-19 diplomacy is acknowledged in the midst of Balkan nations' efforts to end the COVID-19 pandemic. In his COVID-19 vaccine strategy, President Vucic positions himself as a "regional saviour and peacemaker." Bosnia simply had to accept this COVID-19 vaccines donation due to urgent need to inoculate its constituents. Thus, Serbia's COVID-19 vaccine strategy in context appears to be an 'inclusive approach' to inoculate western Balkans and to gain geopolitical influence, whereas Russia and China rose as collaborative global partners.

COVID-19 Vaccine, TRIPS, and Global Health Diplomacy: India's WTO Role

Following the devastation of COVID-19, the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) and vaccine research and development (R&D) have taken centre stage in global health diplomacy (GHD). In order to ensure timely affordability and accessibility to all countries, the majority of countries, international organizations, and charitable organizations have been involved in the research and development of COVID-19 vaccines. The temporary waiver issue, on the other hand, had become a geopolitical issue. Countries that used to take pride in their support for human rights, egalitarianism, and a healthy democracy have come out against this proposal.

A COVID-19 outbreak occurred in December 2019 in Wuhan, China. As a result, on January 30, 2020, the WHO declared the situation a Public Health Emergency of International Concern (PHEIC) and a "Pandemic." Concurrently, the World Trade Organization (WTO) has issued a warning that the "Pandemic represents an unprecedented disruption to the global economy and global trade, as production and consumption are scaled back globally." The global scarcity of vaccines and medicines to combat the ongoing pandemic has become a pressing concern. In this scenario, there was overwhelming support for international collaboration to accelerate vaccine development, manufacturing, and the supply of effective medical technologies to protect all patients around the world. Several heads of state have urged global leaders to consider COVID-19 medical products to be global public goods.

Because of its role in the production of generic medicines, India has been dubbed the "world's pharmacy." Global health diplomacy has long been a cornerstone of India's foreign policy. During the pandemic's peak, India took a similar path and contributed to the Global Alliance for Vaccines and Immunization's funding (GAVI).

Hypothesis

This analytical study on Vaccine Geopolitics in Relation to the Current Pandemic investigates the Corona virus vaccine crisis, in which various countries are currently grappling with the coercive circumstances of this pandemic. The paper examines current political and economic developments, as well as the future scopes and threats that may affect them and other nations around the world.

Study Objective

The research on the Vaccine Geopolitics of the Current Pandemic with different countries identifies and analyses the post-Covid-19 pandemic power politics that are exerted on one another. In this paper, we focused on the country's position and observed its shortcomings as well as its prospects for becoming a world power. It also assesses how other Asian countries, such as India, are involved in the vaccine diplomacy struggle.

Related Work

Rutschman (2021a) [1], the novel corona virus (COVID-19) outbreak was declared a global pandemic by the World Health Organization (WHO) on March 11, 2020. The rapid spread of COVID-19 has also accelerated the development of vaccines, which has previously taken 10–15 years on average.

Callaway (2020) [2], Despite the fact that no vaccine had been approved, high-income countries (HICs), which account for only a small proportion of the global population, had already ordered more than half of the projected early supply of doses. By mid-August 2020, the US had purchased 800 million doses of at least six vaccines in development; the UK had purchased 340 million doses, with approximately 5 doses per capita; and the European Union (EU) and Japan had each ordered hundreds of millions of doses.

Bhutto (2021) [3], While the world's richest countries have reserved enough doses of the best vaccines to immunize their own populations several times, projected global manufacturing capacity means that low-income countries (LICs) will have limited and delayed access to this critical healthcare resource.

S. Zhao (2021) [4], this study will examine how rising economic and geopolitical competition is affecting public goods provision via 'vaccine diplomacy' between China and the United States. Vaccine distribution is being used for soft power and influence among developing countries in ways that pose both risks and benefits to pandemic management. State-to-state systemic competition between the two largest economies has been reignited.

Methodology Design

This analytical study on Vaccine Geopolitics in Relation to the Current Pandemic is based on a review of the literature as well as fact studies that have been made available to the public all over the world. Based on the background research done on the factors mentioned in the Introduction Section of this paper, we gathered related relevant information that supports or contradicts them and then conducted our analysis. Our study combines fact observations made during the Covid-19 pandemic, which are divided into the following study areas:

- EU- Western Balkans (Russia-China) vaccine geopolitics
- Soft power tools between India and Africa
- COVID-19 Vaccine, TRIPS, and Global Health Diplomacy: India's WTO Role.
- The geopolitics of pandemic vaccines with various countries.

Our conclusions are based on the aforementioned analytical observations, which allow for future extensions/predictions based on the consequences or requirements related to the subject of our study.

Study Area and Data Collection

As a result, official portals, research/survey/journal references in this field, opinion polls, and review reports formally published by affiliated

agencies/institutions/functioning bodies/research organizations are used to gather information, statistical records, and data. To track trade and political transitions, data and information are collected between 2020 and 2021, during the Covid-19 pandemic period. The credibility and methodology stated in those information sources are used to confirm the reliability of these data/information, and they are thoroughly checked to ensure there are no contradictory or misleading facts that could harm social/political/economic or other platforms.

Findings and Conclusion

This perplexing situation Worst of all is so-called "vaccine diplomacy," which in some cases forces countries without the financial resources to buy vaccines or develop the technological capacities to manufacture vaccines, or to establish economic or geopolitical agreements that benefit one side while leaving the other side at the mercy of making the sometimes-unfavorable decision to access vaccines. Some countries, including China, India, the European Union, Russia, and the United States, will use vaccine diplomacy to maintain and strengthen their geopolitical spheres of influence around the world.

Vaccine diplomacy may be an impediment to the COVID-19 Vaccine Global Coordination mechanism playing a strong role in both coordinating vaccine distribution and purchasing negotiations; however, if this is the case in some situations, the Coordination may be very useful in the countries' internal vaccination process. At the moment, all countries are playing a political game to signal to their populations that everything is under control and that vaccines for everyone are on the way, or that they have already begun vaccinating their people, without explaining that the amounts of vaccines they have access to are crumbs. Given the aforementioned scenario and limited access to vaccines, the global community will need to take bold and unconventional steps to achieve at least 70% population coverage.

Whatever decisions are made about how vaccines are distributed and who gets the first shot, they will be subject to contentious ethical, political, economic, social, and equality access issues across countries, populations, and geographic areas. Inequities, however, can be reduced using the proposed approach. Finally, the role of the COVID-19 Vaccine, Global Coordination will be to save as many lives as possible in order to reactivate economies and social interactions, as well as to begin addressing the collateral health impact of health problems and public health interventions that were postponed due to the COVID pandemic, as well as the new health problems caused by this pandemic. Many countries lack a central coordination mechanism that oversees the COVID-19 vaccination process through a unified plan and strategies, instead delegating that responsibility to state or local authorities and, in some cases, multilateral organizations.

Finally, this text recognizes the need for autonomous action priorities for each territory, which must consist of small victories in economic, health, and environmental aspects within the territory. It is also important to include in the discussion the geopolitical influence that recognizes and encourages unequal access to vaccines, resulting in a disparity between rich, middle-income, and poor countries.

Recommendations and Suggestions

Because there is no central command for vaccine national coordination, many developed and developing countries should reconsider how vaccines are administered. When it exists, it is sometimes ineffective, leaving the COVID-19 vaccination procedures to the discretion of the states or provinces and resulting in different interpretations of the same recommended guidelines. Furthermore, many states or local governments lack the expertise to implement the recommendations or conduct an epidemiological analysis of the situation to assist them in identifying the highest priority groups and supporting vaccination programme management. Many of the countries' plans and strategies have been a political response to a pandemic that has outstripped global and national response capacity to a public health event of unprecedented magnitude in our current era.

What's more, despite the scarcity of vaccines around the world, many national vaccination plans fail to consider all options, including vaccine access and availability (including delays in vaccine production and shipments), prioritization, logistics, cold chain networks, additional supplies needed to vaccine people, and an army of trained vaccinators. The WHO recommended vaccination stages, and phases of the U.S that many countries use as a guide should be implemented in a stepwise fashion, that is, if vaccines are scarce, each group of each stage must be disaggregated to create subgroups within the group to vaccinate those who are at higher risk, and as vaccines become available, each phase/stage group can be expanded to cover other subgroups.

The global community and countries must accept that producing vaccines takes time and financial resources for their production and acquisition, as well as their distribution and administration, with the support of a robust logistic programme on a global and national scale. Waiving intellectual property rights is not sufficient. As the new COVID-19 vaccine manufacturing is a complex and highly skilled task, we also require international cooperation to strengthen laboratory vaccine production in those countries that may have the capacity. Finally, everyone must recognize that having vaccines isn't enough if there aren't programmes in place with the resources to carry out the vaccination process. The massive effort required to vaccinate everyone is as costly and time-consuming as obtaining vaccines.

In the developed world, having high vaccination coverage is insufficient. This does not preclude the strains from mutating and producing new variants with greater pathogenicity, virulence, and lethality in countries with low vaccination coverage against COVID-19. No one can be left behind; otherwise, the world will be in danger.

Acknowledgement

To give this research its proposed structure, we had to search for qualitative and quantitative data from reliable sources. We were fortunate to obtain the necessary information/resources for the official and research websites, which allowed for open access and reuse under a Creative Commons license. We are grateful to the

open access resources provided on the official website for statistical data and facts on geopolitics, demography, and the economy, among other things. The public/political opinions and polls that we needed for our practical analysis were obtained from relevant research-based surveys conducted in a few Research Centers.

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