Vaccine Politics: Comparison of Acceptance of COVID-19 Vaccines Produced by Democratic and Non-Democratic Countries

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Vaccine Politics: Comparison of Acceptance of COVID-19 Vaccines Produced by Democratic and Non-Democratic Countries

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ABSTRAK


ABSTRACT
The unequal distribution of the COVID-19 vaccine worldwide is one of humanity's global challenges due to political factors entering and influencing the distribution of vaccines to countries worldwide. Vaccine-producing countries are fragmented into two sides: democratic and non-democratic countries. This article aims to answer how political factors can influence the distribution of the COVID-19 vaccine globally and which vaccine is the global favorite. This article uses vaccine politics theory as its basis and uses descriptive-comparative methods in the data analysis process. The results of this research found that there were indications that illiberal democratic practices...
were widespread during the COVID-19 pandemic, followed by the decision of the head of state to regulate the distribution of vaccines in their country, which tended to be authoritarian during the pandemic. Apart from that, vaccines produced by democratic countries are the favorite of the global community compared to vaccines produced by non-democratic countries. The transparency factor in the production process is the primary benchmark in assessing product quality in addition to the country of origin.

Keywords: Vaccine, COVID-19, Political, Democratic countries, Non-Democratic countries.

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INTRODUCTION

The uneven distribution of the COVID-19 vaccine globally was challenging worldwide vaccine distribution (Wouters et al. 2021; Halabi and Rutschman 2022). The inequality in vaccine distribution between poor and rich countries has a massive impact on vaccination rates worldwide. The same thing also happens in the vaccine development process. There is competition between democratic and non-democratic countries in developing the COVID-19 vaccine (Burgess et al. 2021; Gleeson et al. 2023). This competition in development and distribution was later termed the “vaccine race.” The vaccine race is not solely motivated by human health. However, there are also various factors behind the occurrence of the vaccine race worldwide. Two other motives that are often attached to the development and distribution of the COVID-19 vaccine in the world are political and economic (Suzuki and Yang 2022).

As a new threat to global health, the COVID-19 pandemic has changed the world order and resulted in many new habits being adopted by humans globally. From December 2019 to April 2020, this virus was recorded to have spread in 210 countries (WorldOMeter 2023). This massive spread could occur due to world conditions that were increasingly integrated with the very high mobility of global society due to globalization. The pandemic, which initially was a health problem, then branched out to other problems such as economic, social, and even threats to a country’s security (Donthu and Gustafsson 2020). In order to accelerate the production of COVID-19 vaccines, WHO granted emergency permits for the COVID-19 vaccines, which
were not licensed or were being developed by a laboratory, to be tested as a temporary measure so that the vaccine could be distributed to vulnerable people and need the COVID-19 vaccine quickly (Akther and Nur 2022).

Furthermore, vaccination is the most effective intervention that humanity can carry out to control the COVID-19 pandemic (Lazarus et al. 2023). Accelerating vaccine production is one of the efforts made by the World Health Organization as a global health institution in dealing with the COVID-19 problem in the world. Many countries competed to develop vaccines (Burgess et al. 2021; Rutschman 2021; Halabi and Rutschman 2022). The types of vaccines being developed also come from various kinds of experimental tests conducted by virologists worldwide, such as inactivated viruses, live attenuated viral vectors, and mRNA (Centers for Disease Control and Prevention 2023). These methods are used to find the most effective formula for developing and producing the COVID-19 vaccine.

Apart from developing the COVID-19 vaccine worldwide, it is also essential to educate the global community so they can receive the COVID-19 vaccine to achieve herd immunity. Vaccine acceptance is absolute and confident acceptance (Macdonald 2015). Vaccine acceptance is important in the context of the COVID-19 pandemic because of the high level of public confidence in receiving the COVID-19 vaccine; faster the achievement of herd immunity throughout the world will be achieved (Sarathchandra et al. 2018). So, as an effort to achieve vaccine acceptance, it is not uncommon for countries in the world to implement regulations that urge their citizens to vaccinate by discriminating against people who have not been vaccinated from entering public facilities, as well as implementing mandatory vaccination requirements when traveling long distances and entering the territory of a country (Lazarus et al. 2023). Openness to information regarding the vaccine development process, technological updates, education for people with low educational and economic levels, and easy access to vaccines are several factors that can encourage increased vaccine acceptance throughout the world (Akther and Nur 2022).
The country of origin is another significant factor in vaccine acceptance worldwide (Vo et al. 2022b). It cannot be denied that the reputation of the vaccine-producing country was highly regarded. It is considered a form of uniqueness in distributing the COVID-19 vaccine worldwide (Ghorbanzadeh and Shabbir 2023). In mid-2020, the vaccine testing process began to be intensively carried out. During this period, the vaccine from China developed by Sinopharm-Beijing received attention from various countries because the vaccine product had undergone phase 1 to phase 3 testing in the country of origin and several marketing destination countries such as Malaysia, Indonesia, Brazil, Thailand, and Canada (Cohen 2020). The United States then responded to this through the U.S. Food and Drug Administration (FDA), which issued an Emergency Use Authorization (EUA) for the Pfizer-BioNTech vaccine to carry out Phase 3 trial in the United States in November 2020 and be tested in other destination countries, marketed in December 2020 (U.S. Food and Drug Administration 2020).

Table 1. COVID-19 Vaccine Product Profiles from Five Countries and First Authorization in More than 10 Countries

<table>
<thead>
<tr>
<th>Vaccine Name</th>
<th>Making-Method/Technology</th>
<th>Country of origin</th>
<th>First Authorization (&gt;10 Countries)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sinopharm BIBP</td>
<td>Inactivated Virus</td>
<td>China</td>
<td>July 2020</td>
</tr>
<tr>
<td>Sputnik V</td>
<td>Adenovirus Vector</td>
<td>Russia</td>
<td>August 2020</td>
</tr>
<tr>
<td>Oxford-Astrazeneca</td>
<td>Adenovirus Vector</td>
<td>United Kingdom</td>
<td>December 2020</td>
</tr>
<tr>
<td>Moderna</td>
<td>mRNA</td>
<td>United States</td>
<td>December 2020</td>
</tr>
<tr>
<td>Pfizer-BioNTech</td>
<td>mRNA</td>
<td>United States, Germany</td>
<td>December 2020</td>
</tr>
</tbody>
</table>

Source: Vaccination Metadata WHO (2022)

Phase 3 was the vaccine testing stage, which involved taking samples to other countries (generally to marketing destination countries). In the early days of vaccine distribution, the vaccine from China, Sinopharm, became the favorite for low to middle-income countries (Carmela et al. 2021). Indeed, it makes sense because apart from the lower price, the
stock provided by the Chinese government in procuring this vaccine is relatively abundant (Suzuki and Yang 2022). Another influence was the vaccine diplomacy carried out by the Chinese government. However, this condition did not last long; vaccines from the United States and the United Kingdom soon challenged the dominance of vaccines from China. One of the main selling points that had been used as a weapon in fighting the dominance of vaccines from China was openness in the vaccine development process and the country of origin of the vaccine, which can give rise to global perceptions and product trust in a vaccine product, mainly because the vaccine was produced from a country that tends to democratic (United States, United Kingdom, and Germany) compared to non-democratic China (Burgess et al. 2021).

This research grouped the criteria for COVID-19 vaccine-producing countries into democratic and non-democratic countries. In measuring the level of democracy, we use one indicator of democracy, namely the accountability index. The accountability index is a scaled index based on three sub-indicators: state transparency, community participation, and state responsiveness (Harrison and Sayogo 2014; V-Dem 2017).

Figure 1 Accountability index in 2010-2022, which indicates the level of democracy in a country
The graph above is the accountability index released by V-Dem in 2023. The graph above shows that the United States, Germany, and the United Kingdom have a constant accountability index close to the maximum value, showing that the level of democracy in these three countries is high enough to be worthy of being called a democratic country. Meanwhile, Russia and China show low accountability index figures, below 0.5 in 2010-2022. The democratic level of these countries is relatively low and can be categorized as non-democratic.

The choice of country of origin for the COVID-19 vaccine by the recipient country is fascinating to research. This article assumes that vaccines produced in democratic countries have a higher acceptance rate than those produced in non-democratic countries, owing to several factors, such as transparency in the vaccine manufacturing process, the latest vaccine development technology, and the level of global public trust in the country of origin of the COVID-19 vaccine, which still tends to be a country that tends to be democratic. This article will discuss The existence of factors other than health factors that significantly influence the distribution of the COVID-19 vaccine worldwide. This article tries to find political correlations in the development and distribution of COVID-19, with the main instrument being the country of origin of the vaccine. Comparisons between vaccines produced by democratic and non-democratic countries will also be the main focus.

LITERATURE REVIEW

VACCINE POLITICS

The theory of Vaccine Politics is the study of how political actors and institutions affect the production, distribution, and acceptance of vaccines (Guasti and Bílek 2022). This theory covers various issues, from government policies regarding vaccine development and procurement to societal attitudes toward vaccination and the role of scientific expertise in decision-making. Paul Offit introduced the vaccine politics theory in his book “Deadly Choices: How the Anti-Vaccine Movement Threatens Us All” in 2011. In his work, Offit argued that the anti-vaccine movement was one of the political movements carried out
by a handful of people/groups who fear and distrust government and science (Offit 2011). Initially, this theory only looked at the influence of political movements on vaccine refusal in the United States, which was motivated by particular political preferences, especially between followers of the Democratic and Republican parties.

As time passes, this theory seems increasingly relevant in explaining how politics contributes to vaccine development, distribution, and acceptance. In the context of the COVID-19 pandemic, this theory has been developed by many experts, and the context has also been expanded not only in the United States but throughout the world. Sorell and Butler (2022), in their article entitled “The Politics of Covid Vaccine Hesitancy and Opposition,” stated that political influence spread through social media significantly influences people’s views of the COVID-19 vaccine. Certain political tendencies and religious aspects are why people reject the vaccination program (Sorell and Butler 2022). Fidler (2020), in his article entitled “Vaccine Nationalism’s Politics,” also explains that political aspects significantly influence all forms of vaccination decisions. Politics plays a role in forming health policies and strategies for distributing vaccines in a country (Fidler 2020). Each individual’s political affiliation also has a significant role in determining a person’s stance in accepting or being hesitant about a vaccine (Fidler 2020).

This theory then developed along with the times, and the contextualization of this theory produced several new theories, such as vaccine nationalism and the politics of vaccine hesitancy theory (Halabi and Rutschman 2022). The relevance of this theory during the COVID-19 pandemic is growing due to the increasing number of other political factors that are developing in influencing individuals’ perceptions of doubting vaccination, including the use of religious aspects, the use of social media, and the use of conspiracy theories to create a vaccine hesitancy movement in society (Akther and Nur 2022). Larson (2022) argues that beliefs influence societal aversion to vaccines in vaccines themselves and broader social, cultural, and political factors.
The theory of vaccine politics is also not free from counterarguments that assume that politics has no significant influence in shaping public perceptions regarding vaccination. The theory of vaccine politics is considered inconsistent and tends to oversimplify the problem of vaccine hesitancy (Salmon et al. 2015; Dubé et al. 2018). However, other factors influence vaccine refusal, such as low education level, personal experience, and consideration of a person’s health condition (Dubé et al. 2018; Wang et al. 2021a). However, it cannot be denied that this theory is quite relevant when applied in the context of the COVID-19 pandemic. Strong political influence, whether from the government, private sector, or individuals, can give a group or individual a tendency to accept or reject the vaccination program (Guasti and Bílek 2022).

**PANDEMIC ILLIBERALISM**

*Pandemic Illiberalism* is a concept that refers to authoritarian practices and policies implemented by a government during the COVID-19 pandemic (Guasti and Bílek 2022). This term describes how several governments have strengthened their control over society and institutions, citing a global health crisis. According to Guasti and Bílek (2022), Pandemic Illiberalism can be seen in the following forms:

1. Restrictions on civil and political liberties: Several governments have taken measures to restrict civil and political rights, such as freedom of speech, assembly, and religion, under the pretext of protecting public health. These actions have included arrests of activists, tighter online surveillance, and shutdowns of media that do not agree with the government.

2. Infringement of privacy: Several countries have strengthened surveillance and monitoring policies on their citizens, including location tracking and digital surveillance, to track the spread of the virus. It has led to concerns about individual privacy and the emergence of excessive power for the government.

3. Abuse of power: Several governments have used their power for...
political purposes, including dealing with the pandemic. These actions include unjust arrest and detention, persecution of journalists and government critics, and strengthening control over supposedly independent institutions.

4. Discrimination and injustice: Pandemic Illiberalism can create discriminatory and unfair conditions against certain groups, such as ethnic minorities or disadvantaged groups. These actions include ignoring their health needs and implementing policies that harm these groups.

Pandemic Illiberalism reflects concerns about the potential for abuse of power and human rights violations by governments during times of crisis (Keilitz 2020). The emergence of the COVID-19 pandemic is considered an extraordinary event that, in practice, allows the government of a country to carry out illiberal practices (Guasti and Bilek 2022). Human rights violations, oppression, repressive measures by the government, coercion of the will to carry out vaccinations, and certain restrictions imposed by the government under the pretext of controlling the spread of the virus are just a tiny part of the form of illiberalism carried out by the government (Anisin 2022; Sadowski 2022).

However, a counter opinion was expressed by Ababakr (2022), who considered that the pandemic condition did not mean shifting the order of liberalism completely. However, it creates a new order contextualized with pandemic conditions (Ababakr 2022). So, the condition of the government, which provides regulations in the form of restrictions to its citizens, is not interpreted as a permanent regulation. Instead, it is a form of adjustment to the extraordinary event of COVID-19 (Markowski 2020). After the pandemic passed, this new order was contextualized again, of course, while still being guided by the principles of liberalism (Parsi 2021). Therefore, it is essential to continue to monitor and strengthen oversight and accountability mechanisms to prevent abuse of power in dealing with the pandemic.
POLITICAL CALCULUS OF ILLIBERAL ELITES

The political calculus of illiberal elitists refers to the tendency of political elites in authoritarian and non-democratic countries to make political decisions based on calculations of more significant political and economic benefits for themselves and the interest groups they represent rather than based on values—democracy, human rights, and social justice (Guasti and Bilek 2022). In the context of the COVID-19 pandemic, this concept highlights how decisions taken by political elites in authoritarian and non-democratic countries during the pandemic are based more on political and economic considerations than on considerations of public health and human rights (Gramacho and Turgeon 2021). According to Guasti and Bilek (2022), some examples of political decisions taken by political elites taking into account the political calculus of illiberal elites during the pandemic are:

1. Ignoring human rights: Some authoritarian and non-democratic countries use the pandemic as an opportunity to tighten control over freedom of speech, movement, and assembly and crack down on citizens who criticize the government.

2. Prioritizing economic interests over public health: Some authoritarian and non-democratic countries prioritize reopening the country’s economy over ensuring public health and implementing adequate health protocols.

The political calculus of illiberal elitists can harm the development of democracy and human rights in authoritarian and non-democratic countries. Consequently, it leads to unequal distribution of resources and power internationally (Guasti and Bilek 2022). Elitist tendencies in making decisions in urgent conditions such as the COVID-19 pandemic cause pressure that must be faced by a country’s leaders (Montiel et al. 2021). So, they are forced to immediately make decisions based on their idiosyncrasies to demonstrate their role as heads of state with integrity (Hartwell and Devinney 2021). Elites also shape society’s perspective regarding society’s seriousness in facing extraordinary situations (Moniz 2020).
However, the counterargument of Merkley et al. (2020) said that decisions during the pandemic were not only based on the decisions of specific leaders or groups but also on preserving citizens’ health. Decision-making remains based on shared interests by actualizing the policy direction of a country in the face of a pandemic emergency (Bizberg 2021). It is crucial to strengthen supervision and transparency in political decisions taken by political elites, especially during the pandemic crisis. Civil society, media, and international institutions can play an essential role in strengthening supervision and accountability for the practices of the political calculus of illiberal elites.

METHODS

The research entitled “Vaccine Politics: Comparison of Acceptance of the COVID-19 Vaccine Produced by Democratic and Non-Democratic Countries” employed descriptive methods. Descriptive methods aim to provide a general description of a phenomenon through a systematic flow based on certain quantifications to explain a phenomenon (Sugiyono 2018). Researchers used descriptive statistical analysis to describe the relationship between the level of democracy of the COVID-19 vaccine-producing country and the distribution of vaccine products worldwide. This research utilized descriptive procedures to analyze the comparison of vaccine efficacy and vaccine distribution levels of vaccine products by making direct comparisons concerning secondary data. Descriptive data is also presented regarding other factors influencing the acceptance of the COVID-19 vaccine.

This research has a worldwide scope by looking at the spread of vaccines produced in Moderna from the United States, Pfizer BioNTech from the United States and Germany, Oxford AstraZeneca from England, Sinopharm-Beijing from China, and Sputnik V from Russia. The research period is limited to determining the PHEIC status of the COVID-19 outbreak by WHO (2020-2022 period).
DISCUSSION OR ANALYSIS  

VACCINE ADOPTIONS AND RACE  

The world’s demand for COVID-19 has encouraged vaccine adoption from all countries. The government has made various efforts in each country to increase vaccine adoption for its citizens. It is challenging because several factors influence public vaccine adoption, and each country has different societal characteristics. Religious influence, influence from circulating information, coercion from the government, and influence from the family are the four most significant factors that influence the level of vaccine adoption in most countries in the world (Tolia et al. 2022).

The state’s role in providing education regarding vaccine applications and various information regarding the COVID-19 vaccine is quite vital (Su et al. 2021). It encourages a country to be proactive in providing a sense of security for its citizens. One of his efforts is to ensure that all citizens receive the COVID-19 vaccination. So, countries must be able to meet their national vaccine needs through vaccine-recipient countries trying to approach and establish agreements with vaccine-producing countries (Su et al. 2021). The goal is to achieve the country’s national security target regarding the global health threat of COVID-19 and the herd immunity target.

The proportion of vaccine producers and consumers was unbalanced. Of the 195 countries worldwide, only 35 can produce a COVID-19 vaccine that meets WHO standards (WHO 2023a). Of the 35 countries, only six produce vaccines in large quantities, namely the United States, United Kingdom, Germany, Russia, China, and India. This inequality has become a new gap in fulfilling the supply of the COVID-19 vaccine worldwide. As a result, there is a race to develop and market the vaccine itself. This phenomenon is known as the vaccine race, caused by the high demand from recipient countries to fulfill vaccine adoption in their countries (Wong 2021).

Vaccine races are often carried out by vaccine-producing countries competing to distribute their vaccines to recipient countries. Vaccine races are carried out by countries such as the United States, Russia, and...
China to show the superiority of their health technology to the world. Apart from that, the vaccine race is carried out to instill influence from the country of origin of the vaccine to the receiving country (Wong 2021). Because the world was in a state of crisis, it was an opportunity for large countries to influence other countries and gain new income from sales of the COVID-19 vaccine.

Figure 2. COVID-19 Vaccine Supply Agreement by Vaccine Recipient Countries Worldwide

<table>
<thead>
<tr>
<th>Vaccine Supplier</th>
<th>Doses (in Billion)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pfizer-BioNTech</td>
<td>5.27</td>
</tr>
<tr>
<td>Moderna</td>
<td>1.87</td>
</tr>
<tr>
<td>Sinopharm-Beijing</td>
<td>1.57</td>
</tr>
<tr>
<td>Oxford-AstraZeneca</td>
<td>1.04</td>
</tr>
<tr>
<td>Sputnik V</td>
<td>0.63</td>
</tr>
</tbody>
</table>

Source: UNICEF (2023)

The figure above explains the agreement between producing and receiving countries for the COVID-19 vaccine in supplying worldwide vaccine supplies. From the data above, it can be seen that vaccines produced by democratic countries dominate global supply. However, data from UNICEF (2023) shows that numerous vaccine supplies from Pfizer-BioNTech and Moderna are concentrated in the European Union and the United States. The same thing also happened to the distribution of the Sinopharm-Beijing and Sputnik V vaccines, each concentrated in its country of origin. Hence, its distribution was uneven throughout the world. It differs from Oxford-AstraZeneca, which has a
relatively even distribution level with a relatively small number of doses and many recipient countries (see Fig. 4).

This data shows that there were indications of a vaccine race being carried out by democratic and non-democratic countries, especially the United States and China. Consequently, it created competition for vaccine products in certain countries’ global markets. Apart from that, there were also vaccine monopolies in certain regions, such as vaccines from the United States (Moderna, Pfizer, J&J), which dominate the market in the European region, as well as vaccines from China (Sinopharm and Sinovac), which dominate the market in the African and Latin American regions (UNICEF 2023). So, similar to what happened in the trade war, the process of fulfilling the COVID-19 vaccine throughout the world cannot be separated from the economic factors of the vaccine-producing countries.

VACCINE HESITANCY: AS A CHALLENGE OF THE COVID-19 PANDEMIC

The development of vaccine production in the world is a positive signal for handling the COVID-19 pandemic. Many countries have recipient status that needs vaccine distribution from vaccine-producing countries. However, positive signals regarding massive vaccine production are not in line with the level of vaccine acceptance by people globally. The figure below illustrates the comparison between vaccine acceptance and vaccine hesitancy. Vaccine acceptance is defined as complete and confident acceptance of the vaccine.

Meanwhile, vaccine hesitancy is defined as the delay or rejection of vaccine products due to certain reasons that are influenced by factors such as complacency, convenience, and confidence (Macdonald 2015). Macdonald (2015) also stated that the level of education or economic conditions of the individual does not significantly influence vaccine hesitancy. However, this is due to poor and incomplete communication patterns regarding the identity of a vaccine and its effects on health. Vaccine hesitancy was the biggest challenge in the early days of COVID-19 vaccine development worldwide.
The rejection of vaccines that often occurs in the community is caused by widespread misinformation regarding vaccines, which is hyperbolic (Grossman 2021). It can be noticed from the case of decline in vaccination rates in the United States in 2021 is mainly caused by misinformation and the emergence of conspiracy theories regarding the COVID-19 vaccine (Islam et al. 2021; Loomba et al. 2021). Misinformation, mistrust, conspiracy theories, and lack of literacy are the leading causes of the decline in vaccine acceptance rates in the world in 2021 (Islam et al. 2021; Lazarus et al. 2022; Zimmerman et al. 2022). In fact, vaccination hesitancy is declared by WHO as one of ten global health threats (Lazarus et al. 2022).

One of the main factors causing high vaccine hesitancy is the relatively rapid development of the COVID-19 vaccine (Kashte et al. 2021; Barrett et al. 2022; Karafillakis et al. 2022). Generally, developing a vaccine against a particular disease outbreak requires many stages of clinical trials, lasting 5 to 10 years before the vaccine receives distribution authorization (Rokom 2020). However, this is not the case with COVID-19; the development of the COVID-19 vaccine tends to be carried out quickly in just one year due to the PHEIC conditions previously established by WHO. So, there is an opinion that the COVID-19 vaccine is premature and tends to be forced into its implementation (Rokom 2020).
Loomba et al. (2021), through a survey conducted in September 2020, stated that 46.9% of United States citizens and 58.5% of United Kingdom citizens were still doubtful about the vaccination program. The reason is that widespread misinformation regarding COVID-19 vaccine products is circulating in the region (Loomba et al. 2021). Another survey conducted by Wang et al. (2021b) shows that there was a spike in the level of vaccine hesitancy in Hong Kong during the first wave of the vaccination program in February 2020, which reached 53.8%, compared to the third wave in September 2020 which reached 65.2%, owing to the emergence of the anti-vaccine movement on social media (Wang et al. 2021b). Abbas et al. (2021), who surveyed vaccine hesitancy levels in Sindh, Pakistan, in December 2020, found that most respondents did not know about the existence of the COVID-19 vaccine. Some who understood the existence of the COVID-19 vaccine stated that the vaccination program was considered an effort to reduce the Muslim fertility rate (Abbas et al. 2021).

The many surveys collected in 2020-2021 show that many groups of people and individuals still refuse to use the COVID-19 vaccine for various reasons. Sabahelzain et al. (2021) explained that people still refuse vaccines because vaccines are misused to strengthen the political status of elites. So, the public views the vaccination program as merely an attempt to ‘show off’ rather than improve public health. The second is because the health body is unclear in regulating regulations regarding vaccination. Third is people’s doubts about new vaccines with minimal research, so they are still waiting for a ‘new vaccine’ that is more up-to-date.

VACCINATIONS: A HOT-BUTTON ISSUE

It cannot be neglected that vaccine procurement is not only due to health factors but also political factors (Guasti and Bilek 2022). Vaccine-producing countries tend to put their national interests first, such as practicing vaccine nationalism, limiting vaccine distribution to friendly countries, hoarding vaccines by rich countries, using vaccines as a political tool for other countries, and producing vaccines for economic
purposes (Bizberg 2021). The imbalance in vaccine distribution is the result of the behaviour of world countries, which includes political elements in handling the COVID-19 pandemic; WHO Director-General Tedros Adhanom Ghebreyesus called the political agenda carried out by rich countries, especially vaccine producers who are reluctant to provide vaccine assistance for humanitarian reasons to other countries a “catastrophic moral value” (United Nation 2021).

Data as of March 2023 states that around 5.55 billion people worldwide have received at least one dose of the COVID-19 vaccine (Holder 2023). This number is equivalent to 72.4 percent of the total global population, showing a positive signal for vaccine acceptance worldwide. Individual awareness, social habits, and government recommendations that work in harmony globally are the determining factors in the high vaccine acceptance rate worldwide. It then creates a collective security called herd immunity throughout the world. Herd immunity can be achieved when the vaccine acceptance rate in an area has reached 70 percent or more (R.I. Ministry of Health 2021).

No country has fulfilled the vaccination requirements of every country in the world in producing the COVID-19 vaccine, and the doses meet its national needs. All countries depend on each other to fulfill their people’s COVID-19 vaccinations (Wouters et al. 2021). So, in this case, the COVID-19 vaccination program creates interdependence between countries worldwide. However, on the other hand, it also creates new competition for vaccine-producing countries to try to be at the forefront of the development and distribution of the COVID-19 vaccine in the world.

All countries can be categorized as vaccine recipient countries, regardless of whether the country is a vaccine producer. It occurs because the population of each country and vaccine needs differ; recommendations from WHO not to hoard vaccines for humanitarian reasons and vaccine equity reasons to promote and see the reaction of the vaccine when it is distributed throughout the world. The concept of vaccine equity states that the COVID-19 vaccine created and developed must be distributed fairly and evenly to each population,
regardless of each individual’s background. It means there should be no vaccine nationalism or hoarding of vaccines carried out by large countries for any purpose because the COVID-19 pandemic crosses national borders. So, the world needs global herd immunity without fragmenting it to certain countries.

VACCINES AS A POLITICAL ISSUE: THE CASE OF THE UNITED STATES, BRAZIL, AND VIETNAM

Vaccines are health products. However, vaccine distribution cannot be separated from political aspects. Offit’s vaccine politics theory (2011) has answered how political instruments enter people’s vaccination program preferences. In the context of the COVID-19 pandemic, there is the concept of pandemic illiberalism, which states that a country tends to act illiberally in determining vaccine preferences entering their country (Guasti and Bilek 2022). Apart from countries, there are also idiosyncratic factors from state elites/leaders in determining the priority of vaccines entering their country based on consideration of many aspects behind it (Guasti and Bilek 2022). The main aim of interfering with political aspects in the distribution of the COVID-19 vaccine is to reduce the spread of COVID-19 in the country and quickly increase herd immunity.

Identical to vaccine-producing countries, countries receiving the COVID-19 vaccine also have specific preferences in choosing vaccines that enter their country. Recipient countries do not only receive the COVID-19 vaccine based on its high level of efficacy. In various cases, there are many factors that the recipient country can review in receiving vaccines from the producing country (Wouters et al. 2021; Barrett et al. 2022). This phenomenon can be analysed using the concept of the political calculus of illiberal elites. For example, the United States is one of the countries producing the COVID-19 vaccine. However, the United States still needs vaccines from other countries to meet the needs of the COVID-19 vaccine doses in the country. As the country with the third largest population in the world, the United States is estimated to need 750 million doses of the COVID-19 vaccine, assuming the
entire population receives two COVID-19 vaccinations. Therefore, the United States opened its import faucet to vaccines produced by other countries to accelerate the achievement of herd immunity in the United States (Mello et al. 2022). The selection of foreign vaccines carried out by the United States, of course, is based on particular preferences, and during the administration of Donald Trump, the United States strictly implemented an “anti-China” foreign policy. So, it is tough for vaccines from China, such as Sinopharm, to enter the U.S. (Bolsen and Palm 2021). In fact, President Trump’s speech regarding the vaccination program stated that the United States firmly gave distribution permits to three primary vaccines, namely Pfizer BioNTech, Moderna, and AstraZeneca (Bolsen and Palm 2021).

Another example came from Brazil during President Bolsonaro’s leadership. President Bolsonaro categorically did not oblige his citizens to vaccinate because he was very skeptical of vaccines (Gramacho and Turgeon 2021). Even President Bolsonaro, in his speech, stated that Brazil does not trust vaccines made by non-democratic countries such as China and Russia (Gramacho and Turgeon 2021). Then, it led to the cancellation of President Bolsonaro’s purchase of 46 million vaccine doses from China that had been previously ordered. Finally, it led to skepticism from the Brazilian public towards vaccines from China and Russia (Gramacho and Turgeon 2021).

Other countries in the world also have other preferences in choosing the COVID-19 vaccine that enters their country, Vietnam. As a recipient country, Vietnam is more inclined to use the Sputnik V vaccine from Russia, Sinopharm from China, and AstraZeneca from the U.K. (Vo et al. 2022a). These three vaccines were chosen because they were considered to have the most extensive stock and ease of distribution to Vietnam. Vietnam’s interest in becoming the first Southeast Asian country to achieve herd immunity has led to the faucet for importing COVID-19 vaccines being opened wide by the Vietnamese Ministry of Health (Vo et al. 2022a). Implementation of the COVID-19 vaccine in Vietnam tends to be swift because the vaccination promotion carried out by the Vietnamese government tends to be effective, and various
new regulations made by the Vietnamese government discriminate against people who have not received the vaccine (Huynh et al. 2021; Khuc et al. 2021).

The method used by the Vietnamese government is one application of the concept of pandemic illiberalism. The government uses illiberal methods to ‘force’ its citizens to vaccinate immediately, and there are threats in the form of discrimination, such as a ban on entering public spaces if you have not been vaccinated and a ban on boarding public transportation if you have not been vaccinated. It is a practice often carried out by countries to reduce the number of vaccine hesitancy in their country. According to data published by WHO (2023), vaccination rates in Vietnam have increased rapidly due to the promotion of the vaccination program carried out by the National Government. At least 92% of Vietnamese people, or the equivalent of more than 90 million citizens, have been fully vaccinated (Chu et al. 2022; VnExpress 2023).

The influence of political trends on vaccine-producing countries is very significant in marketing the vaccines they produce to recipient countries. They use the term “vaccine diplomacy” as a form of political and economic interest in developing and distributing the COVID-19 vaccine (Suzuki and Yang 2022). However, COVID-19 vaccine products from countries that tend to be democratic have a higher selling value than non-democratic countries (WHO 2023). It is proved by data from WHO, which states that products from democratic countries dominate the level of distribution of the COVID-19 vaccine worldwide.

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This is closely related to the country of origin (COO) concept, which has been closely attached to COVID-19 vaccine products since the distribution of the COVID-19 vaccine throughout the world was permitted. The global community has trust in vaccine products produced by countries that are transparent and have the latest technology. Meanwhile, COVID-19 vaccines produced in non-democratic countries tend to have a stigma as products that lack transparency, have a low level of trust, and have unsuccessful empirically tested success
rates (Ojikutu et al. 2020; Opel et al. 2020; Oldeweme et al. 2021). Therefore, it makes the global community distrust vaccines produced by non-democratic countries.

The international community generally considers COVID-19 vaccines from countries with solid pharmaceutical research and development reputations and high-quality standards, such as the United States and the United Kingdom, more trustworthy (Dror et al. 2021). This strong reputation is based on the country’s track record in making pharmaceutical products, openness in product development, and the presence of pharmaceutical experts in the country. On the other hand, the public may question the safety and efficacy of vaccines from countries with a lower reputation regarding quality standards, such as China or Russia (Vo et al. 2022a). COO focuses more on the public perception of a product, which can influence public trust and openness towards the COVID-19 vaccine (Vo et al. 2022a).

Figure 4. Vaccine Distribution per country and Vaccine Efficacy per 2023

The figure above directly compares the five vaccines based on the level of country distribution and vaccine efficacy. Vaccine efficacy is a percentage obtained based on test results regarding the level of vaccine protection against human test samples (Weinberg and Szilagyi 2010; Tentori et al. 2021). Vaccine efficacy measurements are carried
Vaccine politics is a competition for big countries such as the United States, Germany, England, China, and Russia to show their superiority in facing the COVID-19 pandemic. Democratic countries such as the United States, Germany, and England are trying to develop their vaccines and distribute them throughout the world in order to block vaccines from non-democratic countries such as China and Russia and vice versa. Vaccines originating from democratic countries highlight openness regarding vaccine development methods, essential vaccine ingredients, and the results of trials on varied samples. The goal is for the global community to believe in their vaccine. As a result, vaccines produced by democratic countries such as AstraZeneca, Pfizer BioNTech, and Moderna can be accepted in more than 140 countries. However, it has nearly the same efficacy as vaccines from China and Russia, which have above 70% efficacy. A different thing is shown by vaccines from non-democratic countries, which tend to be developed behind closed doors, such as Sinopharm and Sputnik V. So, the acceptance rate is only under 90 countries. However, the advantage is the vaccine’s efficacy rate, which is claimed to be high, reaching above 90% (case of Sputnik V).

It is interesting to see the efficacy of vaccines from non-democratic countries (Sputnik V), which have a higher level of efficacy than vaccines produced by democratic countries. It can be understood because the vaccine efficacy level is determined during the trial period, so it is only measured based on the results of sample tests in the destination countries that received the vaccine. The more countries receive vaccines, the less likely it is for a vaccine to obtain a high efficacy value (Weinberg and Szilagyi 2010). Then, the results of this level of protection are called vaccine efficacy and are represented in percentage form.
Szilagyi 2010). This is because other factors influence the effectiveness of vaccines, including the epidemiological conditions of COVID-19 in each country, the level of vaccine transmission, community behavior, and the natural characteristics of a country (Weinberg and Szilagyi 2010).

Table 2. Comparison between COVID-19 Vaccines from Democratic and Non-Democratic Countries

<table>
<thead>
<tr>
<th>No</th>
<th>Vaccine from Democratic Countries</th>
<th>Vaccine from Non-Democratic Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Have a level of development research tends to be long (more than one year)</td>
<td>Has a fast level of vaccine development research (less than one year)</td>
</tr>
<tr>
<td>2.</td>
<td>Has a high level of global community trust</td>
<td>Has a low level of global community trust</td>
</tr>
<tr>
<td>3.</td>
<td>The price is more expensive</td>
<td>The price is relatively cheap</td>
</tr>
<tr>
<td>4.</td>
<td>It tends to be “exclusive” in its distribution to the public</td>
<td>They tend to be considered “cheap” vaccines in their distribution to the public</td>
</tr>
</tbody>
</table>

Source: Compiled from various sources

The comparison table above shows the differences between vaccines produced in democratic and non-democratic countries. The Sinopharm-Beijing and Sputnik V vaccines have had a relatively short trial and development period compared to vaccines produced by non-democratic countries. It was proven when the first doses of these two vaccines were launched in mid-2020, namely in July (Sinopharm-Beijing) and August (Sputnik V), conveying that vaccine development by China and Russia took less than one year. Different things were shown by the Pfizer-BioNTech, Oxford-AstraZeneca, and Moderna vaccines, which were launched in December 2020 with Emergency Use Authorization from the health authorities of their countries of origin. It then influences the global community’s second indicator regarding brand trust. Vaccines produced in non-democratic countries receive low trust because the development process is short, and there are concerns about defects (Opel et al. 2020; Vo et al. 2022). However, it differed from vaccines produced by democratic countries, which receive higher trust because they are considered to have had a more
extended research level and are assumed to have lower defects than vaccines from China and Russia.

However, vaccines produced in democratic countries have relatively higher prices than those produced in non-democratic countries. For example, the Moderna and Pfizer-BioNTech vaccines are priced at 18 USD and 12 USD per dose, respectively, in the European Union (Boseley 2020). Meanwhile, the Beijing Sinopharm vaccine costs 10 USD in Bangladesh, and Sputnik V costs less than 10 USD in the international market (ETHearthworld 2021; Times of India 2021). However, these prices may differ in each recipient country. In this case, politics plays a role in the vaccine diplomacy efforts that are intensively carried out by China and Russia (Suzuki and Yang 2022). Vaccine diplomacy is a new investment that provides the COVID-19 vaccine at a lower price than the market and with a dose that the manufacturer and the receiver have agreed on. The targets are countries close to vaccine-producing countries and poor countries (Suzuki and Yang 2022). The aim is to gain recognition as a strong country in the health technology field and provide foreign debt to other countries, which will benefit future vaccine-producing countries (China and Russia) (Halabi and Rutschman 2022).

There are also differences in vaccine exclusivity based on country of origin (COO). This vaccine exclusivity practice is mainly found in recipient countries, which tend to judge vaccines from democratic countries as better than non-democratic ones. The primary indicator that determines the perception of the global community in assessing vaccine exclusivity is the strong reputation of vaccine manufacturing countries that are known for their sophistication and information disclosure regarding the process of making and developing the COVID-19 vaccine (Dror et al. 2021; Vo et al. 2022).

Political factors influence the distribution of vaccines throughout the world. The decisions of state leaders who are “authoritarian” during the pandemic and the countries’ tendency to practice illiberal democracy are problematic regarding democracy (Guasti and Bilek 2022). Government authority that is too high, especially
when distributing vaccines within a country, has become customary worldwide when the pandemic is in effect. The decline in democracy can be seen in people’s lack of freedom in choosing what vaccine to inject into their bodies or even their unwillingness to get vaccinated. All vaccination regulations are mandatory worldwide under the pretext of health. Government authorities regulate all controls regarding the vaccine program, limiting people’s freedom of choice, and only the votes of the elite are relied upon in selecting vaccines that enter a country.

CONCLUSION

The distribution of the COVID-19 vaccine worldwide is not only based on health factors. However, there are also political factors that accompany it. The popularity of the COVID-19 vaccine, considered a life-saving drug during the pandemic, has made the country that produces it the country with the most up-to-date health technology. The existence of this stigma makes the vaccine race even more inevitable. Countries worldwide are trying to create COVID-19 vaccine products to be utilised as bargaining power with other countries in various political agendas. The influence of the Country of Origin (COO) in a COVID-19 vaccine product dramatically influences its distribution to recipient countries, resulting in vaccines produced by democratic countries spreading more widely worldwide.

Vaccines produced in democratic countries are more trusted than those produced in non-democratic countries because the number of democratic countries worldwide is greater than that of non-democratic countries. The openness factor in the COVID-19 vaccine research development process greatly influences the level of public trust in a vaccine product. So, with closed vaccine development methods, such as those by non-democratic countries, they tend not to gain the global community’s trust. Efforts made by non-democratic countries in marketing their vaccine products include offering low prices and making it easier to get the vaccine. However, this reduces the exclusivity of the vaccine, which increases the prestige and exclusivity of vaccines.
produced in democratic countries.

Elements of vaccine politics enter into the COVID-19 vaccine distribution process through various factors. The elite factor of a country is the most decisive factor influencing the entry of a vaccine product into a country. Political preferences of a country and distinctive relations between countries that tend to be autocratic during a pandemic influence the level of vaccine distribution in a country and determine which vaccine products are permitted to enter a country.

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