I. Title/Topic

India's Maitri and the Geopolitics of Science, Technology, & Medicine in the Global South

II. Introduction

In early 2020, the COVID-19 pandemic dramatically disrupted the global economic networks and uprooted many people's everyday lives. Close to COVID-19's place of origin, India was thrust into a particularly precarious position because of the pandemic. Despite India's economic and social transformation in the post-Cold War period, the country is commonly characterized as poverty-stricken and low-income by outsiders. As a densely populated of ~1.4 billion people, epidemiologists and "the international media had little faith in the Indian government's efforts in coping with the COVID-19 pandemic" (Rana et al., 2021). After all, the pandemic was a vexing transnational problem, and India had the cards stacked against it.

Despite Western narratives of impending crisis, India evaded widespread infection and rapidly developed a vaccine in 2020 and early 2021. Attempting to play a constructive role in the international system, Indian policymakers primarily distributed vaccines to low-income states in their geopolitical backyard. When Western powers were unwilling to proliferate their precious biomedical innovations, India stepped up as a non-Western great power, filling a void for its local partners. Even though the vaccine diplomacy efforts succeeded, the bilateral nature of the *Maitri* program caused these vaccines to end up in the hands of neighborly states, reinforcing the asymmetric distribution of vaccines throughout different regions of the Global South along geopolitical fault lines.

III. India's Place in the Global Sociology of Health?

Disseminating from the Global North in the late 20th century, vaccines, pharmaceuticals, and other biomedical innovations have been commercialized for international markets. At the

end of the European colonial project, Western medicine was firmly embedded into global health systems (Harris & White, 2019). When states many Global South won their independence in the postwar period, a focus on international trade and liberal economic practices caused transnational medical and pharmaceutical commercial networks to develop (Clarke et al., 2003). In states with enough economic capacity and competitive labor rates, the diffusion of medical and biomedical innovations has been more pronounced than in others. Strong non-Western states carved out a unique role in the post-war international political economy by capitalizing on the opportunity provided by new technoscientific innovations. Transnational technological, scientific, and economic produced robust, globally competitive pharmaceutical industries in certain countries in the Global South.

After suffering from the high cost of pharmaceutical imports, Indian scientists, business people, and policymakers coalesced to develop a competitive domestic manufacturing base for immunobiologicals. From the late 20th century onwards, India's pharmaceutical industry exploded in size, and the country is now home to the largest vaccine producer on the planet, the Serum Insitute of India (Basu & Mukherjee, 2022). The impact of India's medicalization has arisen from the fact that resistance to medicine "in the Global South contributes to medical experiences that are fundamentally defined by the use of pharmaceuticals" (Harris & White, 2019). As an influential state in the Global South, India's pharmaceuticalization shaped the infusion of biomedicine in domestic and postcolonial states' health systems. As Fredrick Engels assessed, inequality is associated with poorer health outcomes, and because international health systems are stratified, low-income countries lack access to domestic biomedical bases (Gonsalves & Kapczynski, 2022). As the "world's pharmacy," India's pharmaceutical industry is deeply integrated into the Global South's medical infrastructure and interaction with medicine

in low-income countries. Since finding a place at the production stage of the global biomedical hierarchy, India has leaned into its emerging competitive advantage.

IV. Data: Interactive Cloropleth of India's Vaccine Distribution by Country

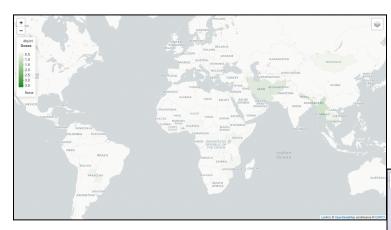


Figure 1: *Maitri Vaccine Distribution*(World Bank 2022; Government of India 2022).



Figure 3: COVAX Vaccine Distribution

(World Bank 2022; Government of India 2022).



Figure 2: Commercial Vaccine Distribution
(World Bank 2022; Government of India 2022).

V. Understanding the *Maitri* program as a Realization of India's New Foreign Policy

Traditionally embracing "'Sabka Saath, Sabka Vikas, and Sabka Vishwas' (together, for everyone's growth, with everyone's trust)," India's emergence on the global stage during the

past three decades has reshaped this grand strategy (Rana et al., 2021). Under Narendra Modi's authority, Indian foreign policy has shifted away from championing noninterventionist foreign policy and towards bilateral engagement with states of geostrategic importance. As India has globalized, the country has begun to play "an active role in Africa, Central Asia, and Southeast Asia due to rapid economic growth" (Bharti & Bharti, 2021). Primarily, Indian strategists have reorientated the state's international focuses towards the Eastern Middle East and South/South East Asia, as evidenced by the distribution of *Maitri* doses (Figure 1). India's influence as an emerging global power has resulted in the country's increasing focus on constructive and normative foreign policy approaches that yield geopolitical influence (Bharti & Bharti, 2021). These constructive and normative policy approaches include foreign aid, sovereign financing, and other policy measures that are mutually beneficial to involved actors. Indian policymakers believe that following these approaches will allow the country to further its international position when there is space for transformation in the international system.

Sensing the geopolitical opportunity of being in that position provided, Prime Minister Modi said, "after the pandemic, a new world order is about to take shape, and India has a big role to play in the emerging new world order" (Bharti & Bharti, 2021). Evading widespread infection during 2020, India's biosecurity measures were highly successful. In just eight months, a joint partnership between biomedical scientists at the University of Oxford, AstraZeneca, and the Indian Serum Institute produced Covisheild (AstraZeneca, 2021). Additionally, India domestically developed the COVAXIN vaccine to protect against the severe health risks caused by COVID-19 infection (Rana et al. Deb 2021). With the country already producing 60% of the world's vaccines, India was in an ideal position to engage in vaccine diplomacy during the COVID-19 pandemic (Basu & Mukherjee, 2022). About three weeks after

these vaccines were developed, the Indian government established the *Maitri* program and began distributing vaccines to friendly, low-income and middle-income Eastern Middle Eastern, South, and South East Asian states (Figure 1). For Modi and other Indian politicians, the *Maitri* program became a vector to develop an influential and global India. Additionally, India's ability to create *Maitri* served as a cultural artifact, which allowed the government to evade blame for the mismanagement of outbreaks in 2021 and promote its triumph against the pandemic (Basu & Mukherjee, 2022). Through the lens of India's new foreign policy outlook, the *Maitri* program can be understood as a tool that Indian policymakers use to increase their country's regional influence.

VI. Social Change Spotlight: How a Policy or Organization Addresses the Problem

While the *Maitri* was undoubtedly unsuccessful in helping proliferate vaccines to low-income countries, the program's primary focus on the Eastern Middle East, South, and Southeast Asia states is evidence that bilateral vaccine diplomacy efforts can hinder the equitable distribution of vaccines (Figure 1). As identified in a comparative analysis of other international vaccine donation efforts, "The upshot of the geopoliticization and nationalization of COVID vaccine diplomacy is that it has been conducted with little regard for the resulting inequalities in distribution, the associated perversities of building-up surpluses in strategically valuable countries even as other countries remained without any reliable supply at all" (Sparke & Levy, 2022). When comparing the distribution of vaccines on different layers of the interactive geospatial tool, the *Maitri* program seemingly corroborates the theory that vaccine diplomacy programs have not been concerned with the equitable distribution of vaccines (Figures 1, 2, & 3). In the visualization layer displaying India's COVAX charity, the distribution of these vaccines is much more in line with the reality of global public health

(Figure 3). Overall, India's *Maitri* program can be understood as a foreign policy tool whos architects had little regard for promoting a fair distribution system for vaccine donations.

Through the analysis of *Maitri*, the drawbacks of bilateral vaccine diplomacy programs become increasingly evident. For international biomedical aid programs to be critically impactful, these engagements should occur multilaterally so that powerful states' geopolitical intrigue can be constrained.

VII. Bibliography

- AstraZeneca. 2021. "Serum Institute of India Obtains Emergency Use Authorisation in India."

 AstraZeneca.
- Basu, Ambar, and Parameswari Mukherjee. 2022. "India's COVID Vaccine Gestures: From *Maitri* to Coloniality." *Communication and Critical/Cultural Studies* 19(2): 134–39.
- Bharti, Simant Shankar, and Sushant Shankar Bharti. 2021. "India's Vaccine Diplomacy: Role in New Order and Challenges." *Torun International Studies* 1(14): 93–104.
- Clarke, Adele E. et al. 2003. "Biomedicalization: Technoscientific Transformations of Health, Illness, and U.S. Biomedicine." *American Sociological Review* 68(2): 161–94.
- Gonsalves, Gregg, and Amy Kapczynski. 2022. "Alone Against the Virus." Boston Review.
- Harris, Joseph, and Alexandre White. 2019. "The Sociology of Global Health." *Sociology of Development* 5(1): 9–30.
- Government of India. 2022. "Vaccine Supply."
- Rana, Vishal, Parth Patel, Syed Mohyuddin, and Prajit Deb. 2021. "Vaccine Maitri: India Faces a Balancing Act with Its COVID-19 Diplomacy." *LSE Business Review*.
- Sparke, Matthew, and Orly Levy. 2022. "Competing Responses to Global Inequalities in Access to COVID Vaccines: Vaccine Diplomacy and Vaccine Charity versus Vaccine Liberty." *Clinical Infectious Diseases* 75(1): 586–92.
- World Bank. 2021. "[Population, Total] Data by Country from 1960 2021."