

From De-Emphasizing Public Health and Social Measures for Covid-19 to Vaccine Acceptance: An Analysis of Two Tanzanian Administration's Responses to Covid-19

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DOI:10.56279/tajoso.v9i2.146

Abstract

Recent global public health literature on politics and pandemics has explored the diversity of African political leaders' responses to COVID-19. In this article, analysis is done of two Tanzanian administrations' responses to COVID-19 to show how they departed from each other. For instance, the late President John Magufuli's administration promoted 'Afrocentric' medical knowledge, endogenous initiatives, and spiritual prowess while de-emphasizing 'Western' biomedical and public health measures to prevent the spread of COVID-19. His successor, President Samia Suluhu Hassan's administration, however, favoured and promoted public health and social interventions and authorized the importation and use of COVID-19 vaccines in Tanzania. Drawing on document analysis and in-depth interviews, argument is built on the concept of 'Contested Truths' and geopolitics of power and knowledge to argue that the approach taken by President Magufuli's administration in curbing the spread of COVID-19 appeared as progressive because it articulated a decolonial turn, and gave people moral and practical orientation to navigate a highly uncertain time in their lives. However, it lacked the robustness for controlling the pandemic as it drew on a non-evidence-based approach. The intervention of President Hassan's administration, instead, drew on evidence-based medicine and public health measures to curb the spread of COVID-19, as championed by global North epistemologies. This article emphasizes the significance of considering diverse COVID-19 responses and the various aspirations these responses serve within a nation and internationally.

Keywords: Afrocentrism, evidence-based medicine, COVID-19 vaccines, geopolitics, Tanzania

1. Introduction

Since the outbreak of COVID-19 in Huwan, China, in late 2019, African political actors, including those in Tanzania, have implemented different interventions that reflect specific political and public health aspirations. Since recording its first COVID-19 case on 16th March 2020 (Tarimo & Wu 2020), Tanzania's COVID-19 responses have changed reflecting the perspective of, and corresponding with, specific administrations. Two administrations, each drawing on different ideological and scientific perspectives, have led Tanzania through and implemented different responses to COVID-19 pandemic. COVID-19 broke out when Tanzania's President John Magufuli was getting into the final year of his first 5-year term in office. Tanzania holds general elections to elect its President and National Assembly after every 5 years; thus, 2020 was an election year. Elections were held amid COVID-19 on 25th October 2020. Vying for the second term, incumbent John Magufuli won the presidential elections and was inaugurated on 5th November 2020. From December 2019, throughout 2020 and early 2021, President Magufuli either downplayed the extent and effects or denied the presence of COVID-19. During this period, he implemented public health and social measures to prevent the pandemic, selectively. In the first half of 2020, his administration released COVID-19 data; closed education institutions; suspended sporting events and other large gatherings; created awareness on preventive measures such as washing hands, using hand sanitizer and facemasks; traced and quarantined suspected cases; and restricted travel to and from countries largely affected by the pandemic. President Magufuli fiercely rejected lockdown. His administration's signature intervention, however, was promoting 'Afrocentric' forms of medical knowledge and endogenous initiatives, particularly medicinal organic herbs that he claimed would prevent and treat COVID-19. He and his administration also promoted steaming with medicinal herbs, a procedure locally known as *kupiga nyugu*.¹ He also encouraged all Tanzanians to pray to God so that He would intercede and end the pandemic. President Magufuli believed that prayer was the most powerful weapon to fight against COVID-19 (Kamazima et al., 2020).

Following President Magufuli's death on 17th March 2021, his Vice President, Samia Suluhu Hassan, succeeded him and took oath of office on 19th March 2021.² After assuming power, President Hassan's administration steadily, but firmly, started departing from her predecessor's position on and response to COVID-19. Weeks after laying President Magufuli to rest, President Hassan formed a taskforce (committee of experts) to delve into the COVID-19 issue and recommend how the administration would best deal with the pandemic. Following the recommendations of the taskforce, President Hassan's administration put much emphasis on implementing public health and social measures to prevent COVID-19 including wearing masks, sanitizing hands, and keeping social distance in all gatherings. Unique to her administration, was authorizing the use of COVID-19 vaccines, and embarking on a vaccination campaign throughout Tanzania. In addition, her administration resumed publishing COVID-19 data and implementing entry requirements including mandatory testing (see Meek, 2021).

President Hassan's departure from her predecessor's COVID-19 denialism, de-emphasis on public health and social measures for COVID-19, and contestation over the safety of COVID-19 vaccines marked a change of the government efforts and responses to the pandemic.

¹ This refers to the practice where different herbs, medicinal roots, leaves, shrubs, and tree barks, are boiled together in a pot, locally called *nyungu*, and one covers himself/herself with the blanket or bed sheet over the boiling utensil in order to inhale the steam produced by the boiling mixture of herbs. This practice has come to be popularly known in Kiswahili as *kupiga nyungu*.

² This happened in accordance with the Constitution of the United Republic of Tanzania, 1977.

Emphasis was no longer on the use of local herbs and praying to God as a means of preventing and treating COVID-19. At a more practical level, this also meant that people across Tanzania had to grapple with these administration's contradictory COVID-19 responses. Thus, what Tanzania went through provides a unique opportunity to examine the diverse COVID-19 responses and the aspirations they represent. For instance, Meek (2021) calls for attending to the multiplicity of COVID-19 responses and the various political, public health, and spiritual aspirations they serve in Africa and beyond. It is against this backdrop and a first step to Meek's call that the diversity of COVID-19 responses in Tanzania have been examined in this article.

In this article specifically, the Government of Tanzania's responses to COVID-19 are examined. Data was collected through convenience sampling, based on virtual textual data in the social media. Practically, the researcher obtained various public speeches and statements of the two administrations, between the end of 2019 and 2022. Ethnographic data collected in Dar es Salaam between April and August 2021 was also used. Interlocutors were recruited from the commercial outlets selling Tanzanian-made COVID-19 herbal remedies, premises offering steam inhalation services, and informal street corner gatherings where people exchanged information and discussed different matters including COVID-19. During fieldwork, 15 in-depth interviews and numerous informal conversations were conducted with various people including COVID-19 survivors.

Theoretically, the researcher builds on the essays in the series, "*Contested Truths over COVID-19 in Africa*"³ and particularly geopolitics of power and knowledge. By the concept 'contested truths', Lee et al. (2021:1) refer to "the many and varied ways in which official, institutional, and/or scientific facts and recommendations about COVID-19 are challenged, ignored, or subverted at multiple scales, from the individual to the state." Drawing on this concept, it was important to examine how the late President Magufuli's COVID-19 position was contested by President Hassan administration's responses. It also shows how COVID-19 responses by two different Tanzanian administrations had competing knowledge claims that served different interests, values and epistemologies. In other words, the article examines the diversity of COVID-19 responses in Tanzania and the various aspirations and epistemologies they serve from Africa-centred perspectives (see Oloruntoba et al., 2020). Hence, the article foregrounds Africa as a starting point to interrogate existing evidence-based medicine and global health driven interventions. Building on the politics and pandemics scholarship (Parker & Ferraz, 2021), this article contributes to diverse aspects of the politics of COVID-19 in Tanzania and beyond.

In the first section, there is an account of Tanzania's COVID-19 response during the late President Magufuli's administration, focussing on the Afrocentric forms of medical knowledge and healing such as *kupiga nyungu* (steam inhalation or steam therapy) and a nationwide call for prayer to God. Secondly, his contestation is situated in the ongoing efforts of decolonizing global health. The third section, deals with President Hassan's departure from her predecessor's approach and the role of her political leadership in this departure. Finally, the article shows how her administration, largely influenced by the public health discourse, has implicitly framed her predecessor's approach non-evidence-based in managing COVID-19. Lastly the article concludes by showing how politics and political intentionality have been great drivers of COVID-19 responses in Tanzania.

2. "No Coronavirus in Tanzania": President Magufuli's COVID-19 denialism

³ <http://somatosphere.net/2021/contested-truth-covid19-africa-introduction.html/>

Although the Tanzanian government's position to curb the spread of the virus adhered to the World Health Organization (WHO) recommendations⁴ at the beginning of the pandemic, it did not take long for President Magufuli to downplay and deviate from the global public health standards. As part of the broader efforts to curb the spread of COVID-19, the Tanzanian government under the late President Magufuli emphasized *kupiga nyungu* and participating in nationwide prayers at the expense of global health protocols, lockdown, and taking COVID-vaccines. For example, on 22nd March 2020, during a Sunday Service in Tanzania's capital Dodoma, the late President Magufuli declared that he would not implement lockdown measures; he, instead, declared three days of national prayer (VOA, 2020)⁵. As cases of COVID-19 increased across the country, President Magufuli's administration stopped reporting any COVID-19 statistics. Up until late April 2020 when reporting COVID-19 statistics was stopped, there were 509 cases, 21 deaths, and 183 recoveries (WHO, 2020). COVID-19 denialism became an official narrative of the pandemic. In June and July 2020, higher learning institutions and other schools re-opened. Sporting events resumed and a ban on international flights was lifted. Although partial implementation of the biomedical and public health measures was maintained, it appeared as though the pandemic was over and life was coming back to normal. Unfortunately, this was not the case. COVID-19 was still around and perhaps spreading at a higher pace than ever before.

On 3rd May 2020, President Magufuli publicly questioned the accuracy of the imported coronavirus test kits used in the National Health Laboratory.⁶ He divulged that his team had secretly obtained several non-human samples, including a pawpaw, jackfruit, quail, goat, sheep, and oil, which had been assigned human names, age, and sex, and submitted to the National Health Laboratory for testing. Unaware that they were working on non-human samples, the laboratory technicians obtained the results. President Magufuli reported that surprisingly the samples obtained from the pawpaw, jackfruit and goat tested positive for COVID-19. He concluded: "...so many times, I have insisted that not everything that you are given is good. There could be people being used (as spies) ... equipment could be used... but it could also be sabotage because we are in a warfare."⁷

Likewise, the Brazilian President Jair Bolsonaro and U.S. President Donald Trump were reluctant to implement lockdown measures as a way of protecting their countries' economies (da Fonseca et al., 2021). President Magufuli rejected implementing lockdown measures on a similar basis. For instance, when swearing in Mr. Mwigulu Nchemba, the Minister of Legal and Constitutional Affairs on 3rd May 2020, Magufuli emphasized:

...let us not associate this crisis with our economy...let us not panic. Let us work hard and produce more during the pandemic...Someone is proposing to place Dar es Salaam and Tanga on lockdown, but I have already said, "no lockdown." We, Tanzanians, must continue working while taking necessary precautions.

Since then, public officials encouraged people to take medicinal organic herbs, *kupiga nyungu*, and pray to God to end the pandemic (see Kamazima et al., 2020). Officials from the Ministry

⁴ Recommendations by the WHO are a useful benchmark as they allow contributors to identify the extent to which populists adhere to or deviate from the standard recommended pandemic response (and are preferable to outcome measures like contagion, hospitalization, or fatality levels, which are generally outside the control of particular political actors) (Ringe and Rennó 2023: 11).

⁵ <https://www.voanews.com/a/covid-19-pandemic-tanzanian-president-declares-3-days-national-prayer-help-defeat-coronavirus/6187740.html>

⁶ <https://www.aljazeera.com/news/2020/5/3/tanzania-president-questions-coronavirus-kits-after-animal-test>

⁷ <https://www.theguardian.com/global-development/2020/may/19/tanzanias-president-shrugs-off-covid-19-risk-after-sending-fruit-for-tests>

of Health including the minister publicly drank a concoction made from medicinal organic herbs. The video clip of this demonstration went viral on social media. On a different occasion, the minister and her husband shared a video clip showing them undergoing steam therapy. The late Magufuli's approach to the pandemic was characterized by conspiracy theories, tight control over information (Devermont & Harris 2020), aversion to science, and metaphysical relativism (Maghimbi, 2022). Because of its nature, his approach made headlines in the media, both at home and internationally.

Besides promoting spiritual prowess, President Magufuli's administration emphasized and promoted the South-South 'Afrocentric' forms of healing. For example, he sent the Foreign Affairs Minister Prof. Palamagamba Kabudi to Madagascar to collect COVID-Organics, a herbal remedy made from sweet wormwood (*Artemisia annua*) and various other plants. On 8th May 2020, the Government of Tanzania received a shipment of COVID-Organics from Madagascar. Other African countries that received the same COVID-Organics include Central African Republic, Comoros, Democratic Republic of Congo, Equatorial Guinea, Guinea Bissau, Liberia, and Niger.

President Magufuli believed in the use and efficacy of medicinal organic herbs and steaming with *nyungu* to curb COVID-19. For example, speaking before a Catholic congregation on 17th May 2020 in his home Catholic Parish in Chato Town, President Magufuli testified that his son had recovered from COVID-19 after using steam inhalation and drinking a concoction of lemon and ginger juice⁸. He also claimed that the number of hospitalized COVID-19 cases had decreased in the country because God was answering the nation's prayers. On the previous day, President Magufuli had sacked the Deputy Minister of Health, Faustine Ndugulile, a trained medical doctor, who had argued that by emphasizing on prayer and steam inhalation, the government was mishandling the COVID-19 pandemic (Bloomberg, 2020).

During the second wave of the pandemic, in early 2021, the president encouraged people to continue relying on God's protection and medicinal herbs. In different occasions, he further insisted that by "putting God first" in fighting the pandemic, God had answered the country's prayers and Tanzania was coronavirus free (BBC News, 2021). This claim made him stand out unique from other science-contesting populist leaders like Jair Bolsonaro and Indian Premier Narendra Modi who claimed that they had also eradicated and defeated the pandemic (Paget, 2023:208). President Magufuli also contested the COVID-19 vaccines produced in the Global North; he considered them unsafe and dangerous to human beings. For instance, on 27th January 2021, he blamed Tanzanians who had been vaccinated in other countries as being the source of a new coronavirus variant spreading in Tanzania. He made the following accusation:

...some Tanzanians recently travelled to look for COVID-19 vaccines. These people brought the virus into our country on their return. Let us stand firm. This vaccine is not good at all...We need to put God first in fighting this dangerous disease and take precautions to protect ourselves as advised by our health experts. We have lived over a year without the virus and the evidence is that most of you here do not wear masks.

During President Magufuli's administration, the government had no plans for importing COVID-19 vaccines. He warned the Minister of Health to not rush and order vaccines before ascertaining their effectiveness. Citing some historical examples of medical malpractices in Africa (see also Tilley, 2016; Haruyama, 2021), he warned against the use of COVID-vaccines,

⁸ <https://blogs.lse.ac.uk/africaatlse/2020/08/12/role-religion-traditional-medicines-covid19-tanzania-herbs-magufuli/>

suggesting that Tanzanians would be used as guinea pigs. On 27th January 2021, he gave the following advice:

*You [Tanzanians] should stand firm. Vaccines are dangerous. If the whites (wazungu) had that ability, they would have produced vaccines for HIV/AIDS, tuberculosis, malaria and cancer by now... Tanzanians must be mindful. Do not think that other people like you that much.*⁹

In early February 2021, the Minister of Health, Dorothy Gwajima, a trained medical doctor, said the country would not order COVID-19 vaccines because they were yet to be convinced of their safety. She also said that the Government Chemist was testing and approving natural local remedies to help deal with the pandemic.

2.1 President Magufuli's approach to COVID-19: An Ignorant or Calculated Move?

Paget (2020, 2023) and Patterson (2022) have argued that President Magufuli's approach to COVID-19, particularly his mobilization of herbal healing remedies and praying to God, resemble that of populist political actors such as Donald Trump, Hugo Chavez and Jair Bolsonaro who ignored or denigrated medical expertise during the pandemic (see also Maghimbi, 2022). These scholars characterize President Magufuli's general attitude, rhetoric and mobilization repertoire with populist discourse. Indeed, populist leaders, including President Magufuli, believe in conspiracy theories of the COVID-19 pandemic. They have contested the severity of COVID-19, the effectiveness of lockdowns, and the efficacy of vaccines. Do their contestations represent certain political, global health and spiritual aspirations? What are these aspirations and how can they be analysed?

President Magufuli's appeal to Afro-centric medical forms of healing, endogenous initiatives and mobilization of prayers must be understood as a calculated move, especially during the early days of the pandemic where the hard-hit Global North would not help Africa even if they wanted to (see Ndlovu-Gatsheni 2020). As Bump et al. (2021:1) have argued, COVID-19 suddenly made, "many of these countries [Global North] with a strong presence in global health, focus on their own domestic vulnerabilities." It became apparent that countries in the Global North were scrambling and outbidding for newly produced vaccines to guarantee supply and access for their citizens (Fofana, 2021). In addition, denial of the proposed waiver of intellectual property by wealthy countries in the Global North and pharmaceutical industries limited the access of these vaccines in countries in the Global South (Chaudhuri et al., 2021).

What would President Magufuli's COVID-19 approach look like in this situation of competitive colonialism, coupled with the persistent influence of coloniality on predictions of massive COVID-19 deaths in Africa due to poor health infrastructure, lack of sufficient resources to fight the pandemic, and multilayered effects of previous epidemics such as HIV/AIDS? Given this context, President Magufuli's COVID-19 approach appears to be calculated and informed by experiences of dealing with epidemics, rather than ignorance and incompetence as argued in some studies (see Maghimbi, 2022). The worst effects of COVID-19 were predicted to hit Africa in terms of infection rate, number of hospitalizations, and deaths. President Magufuli did not sit back and wait for his people to die in large numbers as predicted. He acted strategically, by drawing on and mobilizing African medical knowledge to combat the pandemic. In doing so, he controlled fear and panic because these would have perhaps killed more people than the virus itself.

⁹ https://www.voanews.com/a/africa_tanzanian-president-expresses-doubt-coronavirus-vaccines/6201304.html

Without keenly analyzing Magufuli's COVID-19 denialism and mobilization of Afrocentric medical forms of healing, one is likely to arrive at conclusions that reinforce the persistent influence of colonial attitude that is generally represented in the Euro-American hegemonic world and specifically in global health interventions. Neill (2012) and Fofana (2021) have elucidated how the history of modern global health is embedded in the aspects of colonialism. Tilley (2016), for example, has analysed and documented how health interventions in colonial Africa in the late 19th century were characterized by structural violence. This was evident in four aspects: a) the epidemiological and bodily harms caused by conquest and economic development; b) the uneven and inadequate health infrastructures established during the colonial era, including certain iatrogenic consequences; c) the ethical ambiguities and transgressions of colonial research and treatment campaigns; and d) the concerted and inadvertent efforts to undermine African healing practices, which were not always commensurable with introduced medical techniques (Tilley, 2016:743).

Under the banner of international health, philanthropic institutions such as the Rockefeller Foundation joined colonial medicine in the early 20th Century (Fofana, 2021). The harmful effects of colonial medicine have persisted even in the current international/global health era. As Fofana (2021) indicates, although global health appears to be inclusive, the intellectual, financial, and political centres of global health remain firmly ensconced in the First World. In the global system, where knowledge production is intensely political and often defined by the unequal power dynamics and hierarchies (Olorunfoba et al., 2016), one would rather ask, "Whose political and spiritual aspirations do President Magufuli's COVID-19 serve? And which knowledge and epistemological framework is privileged?"

Global health and planetary health paradigms are problematic and aprotic (David et al., 2021). Following the inheritance of colonial medicine, "the global health model presumes a North to South diffusion of ideas and resources" (Bump et al., 2021:1). As such, global health still maintains the logic of coloniality, which is receiving technical support and capacity building from global health centres and international health bodies from the Global North. By challenging COVID-19 interventions, President Magufuli challenged the persistent influence of coloniality embedded in global health interventions. As such, he challenged the Afro-pessimist views that were being mobilized by external actors from international development bodies, insisting upon the urgency for the international community to intervene in Africa's COVID-19 crisis.

A closer look at President Magufuli's COVID-19 stance reveals a decolonial case aimed at overcoming both the colonial logics inherent in global health interventions and tilted geopolitics of power and knowledge production. In particular, his anti-imperialist attitude that either the laboratory technicians were influenced by western imperialists, that testing itself could be sabotaged, or that COVID-19 vaccines were unsafe present decolonial efforts to "destabilizing the colonial tropes of Africa" (Meek 2021:6) and "immoral histories of anti-Black biomedical practices in Africa" (Haruyama, 2021:5). The late Magufuli shifted the geopolitics of knowledge by questioning the efficacy of imported COVID-19 testing kits. Various scholars such as Affun-Adegbulu and Adegbulu (2020), Fofana (2021), as well as Abimbola et al. (2021) have called for decolonizing global health in the time of COVID-19. Indeed, President Magufuli joined the efforts by practically challenging global health protocols for COVID-19 and promoting Afrocentric forms of medical knowledges of healing such as *nyungu*, endogenous initiatives and spiritual healing. It must be noted that President Magufuli was a scientist with a PhD in Chemistry. One would expect that he would have easily taken a public health perspective in dealing with COVID-19. Yet, at the time of the pandemic,

he backed local organic herbs and concoctions purported to curb the pandemic from an emic perspective as opposed to etic viewpoints, which often impose evidence-based standards from the Global North.

Magufuli's sentiments on decolonizing global health in the times of COVID-19 date back to Tanzania's first President Mwalimu Julius Nyerere, who fought for independence and promoted unrelenting decolonial practices of promoting endogenous knowledges in Tanzania and Africa. Patterson (2022) opined that President Magufuli's approach to COVID-19 reflected President Julius Nyerere's centralized, paternalistic state, which emphasized and promoted self-reliance, national unity, Pan Africanism, and anti-imperialism. Magufuli's act of ordering COVID-Organics from Madagascar reflected the spirit of Pan Africanism that was popular during Julius Nyerere's presidency (Richey et al., 2021). As Mutebi (2022) strongly believes, Tanzania's colonial history and post-colonial political positioning towards this history informed President Magufuli's response to COVID-19.

3. Vaccines are Safe: President Samia Suluhu Hassan's Approach to COVID-19

On 6th April 2021, President Samia Suluhu Hassan indicated how her administration's COVID-19 approach would look like. Addressing the public and new ministers and deputy ministers who had shortly taken oath of office, she said:

I intend to form a committee of experts who will closely look at (COVID-19), look at the remedies suggested professionally and advise the government on the best way to deal with the pandemic. It is not proper to keep quiet about it, reject it or accept it without conducting research. We can neither isolate ourselves as if we are an island nor accept everything brought to us without conducting our own research.

After taking oath of office, President Hassan consistently appeared in public wearing a facemask. In all the events in which she was involved, she observed social distancing and all attendees wore facemasks. For example, at a meeting with senior citizens (the elders) from Dar es Salaam Region on 7th May 2022, the President, her aides and most people at the event wore facemasks. The President began addressing the meeting by saying:

My elders, I apologize today that our lifestyle here [at the event] has changed. We have come here today in facemasks. This is because the elderly are at a higher risk of contracting this disease (COVID-19). So, we have to protect them. This is also a big event with many people, and we might fail to keep appropriate social distance. We felt that by wearing facemasks, we can protect you, our elders, from contracting the disease because we do not know who has coronavirus and who has not. We, your children, are travelling a lot across our country. It is better to protect ourselves and protect you too.

On May 17th 2021, the committee of experts (of biomedical doctors, epidemiologists, virologists and biomedical medical researchers) released its report with 19 recommendations. The committee advised President Hassan's administration to give a statement to acknowledge that there was COVID-19 in Tanzania. It also advised all concerned to strengthen interventions, to prevent the third wave of COVID-19. Concerning COVID-19 vaccines, the committee had 5 recommendations, all of which indicated that vaccines were a safe and effective measure to fight the pandemic. The committee also advised the government to order COVID-19 vaccines and make them available first to frontline workers, the elderly, and people who were immunocompromised, travellers, and civil servants in defence forces, and then to the rest of the citizens. However, the committee emphasized that COVID-19 vaccination should be given on individual free will.

The committee's findings and recommendations, as such, mitigated the endogenous initiatives and self-care practices advocated during the late Magufuli's administration. Rather, the committee's findings put emphasis on global health protocols, and particularly COVID-19 vaccine, its efficacy and importance in curbing the deadly virus. Following the committee's recommendations, President Hassan launched a COVID-19 vaccination campaign on 28th July 2021 at the State House in Dar es Salaam. On a live televised event, she got her Johnson & Johnson shot. The Prime Minister, Chief Justice, other dignitaries, and religious leaders in attendance also got their shots on live television. The intent of this event was to raise awareness and assure citizens that COVID-19 vaccine was safe. Giving her remarks, the President urged all Tanzanians to be vaccinated and promised that the government would order more doses of COVID-19 vaccines that were approved to be used in Tanzania: Pfizer/BioNTech, Gamaleya, Johnson & Johnson, Sinopharm, and Sinovac. The government also resumed reporting COVID-19 data for the first time since 29th April 2020 and began implementing entry requirements including mandatory testing (see Meek, 2021). As such, her administration largely relied on epistemologies of the global North in responding to the COVID-19 pandemic.

President Hassan took oath of office amidst fears that Tanzania could experience its third wave of COVID-19 with the new and more deadly variant. Several statements and predications on the high transmissibility of the virus were increasingly being made about how the deadly variant would cost thousands of lives in the country. It is logical to assume that the need to keep a big proportion of Tanzania people living on subsistence economy afloat, together with Afro-pessimistic discourse on limited health care resources in African countries, and Tanzania in particular, influenced President Hassan's decision to adopt all necessary precautions at that time including joining the COVAX facility, to ensure that Tanzanians got access to COVID-19 vaccines.¹⁰ This intervention to curb the spread of COVID-19 was advocated by international health actors, who put emphasis on a technical-medical focus, the biological and viral modalities of COVID-19 (Bashizi et al., 2021). Because of President Hassan's administration commitment to global health measures as advocated by WHO, Tanzania received funds from the International Monetary Fund (IMF) to save her economy from the negative effects of COVID-19. The following section, focusses on the hidden geopolitics of power and knowledge in these interventions from the Global North and show how its subscribers could frame the late Magufuli's response to the pandemic.

4. The Geopolitics of the Global Health Protocols

While some Tanzanians regarded President Magufuli's position on COVID-19 as positive because it gave people moral and practical orientation amid a highly uncertain context, the supporters of global health protocols regarded him as downplaying public health measures to prevent the spread of COVID-19. For instance, some studies (e.g. Devermont & Harris 2020; Kangwerema et al., 2021; Patterson, 2022) have indicated that under President Magufuli's denialism, there was a dearth of information about COVID-19. This had negative public health implications for example COVID-19 preventive and control measures, including increased potential mistrust and confusion among communities and reluctance of some people to take global health protocols seriously (Kangwerema et al., 2021). Due to censoring health information, it has also been difficult for non-governmental health organizations and civil society organizations to deliver health messages on COVID-19 and hold the state accountable for its response to the pandemic (Patterson, 2022). While these factors indicated President Magufuli administration's struggle for nationalism, sovereignty, and legitimacy in dealing with

¹⁰ COVAX was a global alliance which was established to accelerate the development and manufacturing of COVID-19 vaccines and ensure that there was fair and equitable access to these vaccines for all countries (WHO, 2020).

COVID-19 from the Global South perspective, they indicated weakness and downplaying Western standards of ‘evidence-based medicine’ in dealing with the pandemic, from the global health perspective.

According to Timmermans (2010), Western standards of evidence-based medicine has its origins in the rise of scientific medicine in the 19th Century, at the time of epistemological change from descriptive, religious, and traditional explanations to ‘scientific’ evidence-based explanations of medical conditions (see also Adams, 2013). In relation to global health, evidence-based medicine aims to improve health care delivery based on better scientific evidence. Adams (2013:55) sums up the goal of evidence-based medicine as “to create a stronger scientific foundation for clinical work by focusing on new forms and meanings of evidence”. This evidence is derived from population-based, epidemiological studies such as randomized controlled clinical trials. Evidence-based medicine considers the statistical, experimental, and epidemiological models of evidence as the *gold standard* (Adams 2013:55). In brief, evidence-based medicine emphasizes objectivity derived from evidence-based research rather than perceptions (Timmermans, 2010). According to evidence-based medicine, reliable and valid evidence is derived primarily from quantitative methodologies on population-based, epidemiological, and experimental studies with randomized controlled trials, and can be generalized to other populations in different locations.

Looking at the COVID-19 global health protocols from the perspective of Western standards of evidence-based medicine, one understands why countries in the Global North and international health bodies like WHO always contested people’s perceptions and experiences of using ‘unproven’ local remedies to prevent and treat COVID-19. For instance, some interlocutors in this study had chewed ginger, taken concoctions of lemon juice, lemon grass, and steamed themselves with *nyungu* or prayed to God. From these interlocutors’ perspectives, both local herbs for self-care practices and prayers helped them fight COVID-19. For instance, some of the respondents gave the following testimonies:

Personally, the remedies that helped me were only natural remedies - using lemon extracts, ginger, and kujifukiza/kupiga nyungu. The only treatment I know that helped were these natural ones because we see the results until now and we continue to use them (Male, 57 years).

I recovered from COVID-19 related symptoms by drinking a lot of water, taking ginger mixed with lemongrass, and steaming up (Female, 51 years).

Yes, I used a boiled mixture of organic herbs like aloe vera, lemon leaves, eucalyptus and chewed lemon peels and ginger...I also prayed to God... (Female, 23 years).

Unfortunately, all these testimonies of people recovering from COVID-19 after using African endogenous remedies, which come largely from experiential and experimental knowledge remained contested and were often framed as ‘anecdotal’ information in the eyes of Western standards of evidence-based medicine. As such, studies (e.g. non-experimental and descriptive) which generate findings on perceptions of recovery are regarded as least useful and their findings are often relegated to a level below five (5) in the evidence-based medicine scale of evidence. As Adams (2013:63) remarks, testimonies and experiences of people’s recovery “would merely be a subjective observation until one added in measures of comparison, control, randomization, and large populations that can be powered.” This explains why some manufactured herbal concoctions like NIMRCAF, Covidol, Covotanxa, Bingwa, Planet++, Uzima and Bupiji, which were approved by the Traditional and Alternative Health Council of

Tanzania, did not get approved by relevant international authorities like WHO despite the manufacturers being trained scientists and who were applying principles of conventional medicine.

The disapproval of the herbal concoctions was better captured during an interview with the Team Leader of the scientists who manufactured Fukiza UDANOL, Dr. Clarence Mgina (aged 59 years), an Organic Chemist from the University of Dar es Salaam. He explained how through valorization of indigenous knowledge they were able to develop Fukiza UDANOL- another herbal concoction in the treatment and control the spread of COVID-19. According to him, the process of preparing Fukiza UDANOL involved conducting a survey to identify the long-time used plants in the treatment of obstructive pulmonary diseases, collecting all the identified plants, documenting their chemical ingredients, identifying common compounds, chemical profiling and finally putting them in a sustainable way. As such, the process of manufacturing Fukiza UDANOL did not include trials in laboratory tests and animals to check first for their safety and efficacy before administering it to humans. This was the case with other herbal preparations for fighting COVID-19 in Tanzania (e.g. NIMRCAF, Covidol, Covotanxa, Bingwa, Planet++, Uzima, and Bupiji which have only remained at the level of observational prospective cohort studies (see Tarimo et al., 2023). Such herbal preparations have yet moved to the level of clinical trials. Hence, from the perspective of global health, such herbal preparations, as Adams (2013:57) indicates, are interpreted “as being of *poor quality* and, by default, unreliable, and therefore of little use in determining policy, practice guidelines, or fiscal support.” From this standpoint, herbal preparations in Tanzania can only be considered effective and efficacious after being tested in randomized controlled trials with a larger number of people to produce Western standards of evidence-based outcomes.

It is going to take some time before such herbal preparations achieve Western standards because of the inherent power imbalance between the global North and South. For instance, in responding to the emergence of new disease threats like COVID-19, Western countries have aggressively promoted evidence-based medicine and downplayed other approaches, and particularly African endogenous knowledges and epistemologies of the Global South. It is within this context that the international health institutions such as WHO Africa, and other philanthropic institutions under the banner of international health have issued statements warning against the use of herbal-based remedies for COVID-19 in Africa, which characterize a shift in geopolitics of knowledge production. For example, WHO Africa released a statement on 4th May 2022 to support the use of ‘scientifically-proven’ traditional medicine. Part of this statement reads thus:

Medicinal plants such as *Artemisia annua* are being considered as possible treatments for COVID-19 and should be tested for efficacy and adverse side effects. Africans deserve to use medicines tested to the same standards as people in the rest of the world. Even if therapies are derived from traditional practice and natural herbs, establishing their efficacy and safety through rigorous clinical trials is critical (WHO Africa, 2020).

On 13th July 2020, CDC Africa released a statement titled, *Herbal Remedies and Medicines for Prevention and Treatment of COVID-19*. Part of this statement reads thus:

As the pandemic continues to spread in Africa, there are increasing messages promoting the use of herbal-based traditional medicines for COVID-19. Currently, no herbal remedy has been validated for use to prevent or treat COVID-19. Herbal remedies or medicines are naturally occurring, plant-derived substances that are developed mostly through a process with minimal or no respect for Good Clinical Practice (GCP) (Africa CDC, 2020).

Thus, a declaration by the international health bodies, that herbal remedies and medicines for prevention and treatment of COVID-19 must not be used “before establishing their efficacy and safety through rigorous clinical trials” (WHO Africa, 2020) because they are “developed mostly through a process with minimal or no respect for good clinical practice (GCP)” (Africa CDC, 2020), speaks to both (i) the influence of Western standards of evidence-based medicine as a professional project “of countervailing powers vying for dominance in the health-care market” (Timmermans, 2010:311); and (ii) the geopolitics of knowledge production (Ndlovu-Gatsheni, 2020). For instance, in terms of maintaining authority and keeping competitors away, Dr. Mgina remarked as follows:

Now we are experiencing severe competition between our manufactured herbal remedy for COVID-19 and COVID-19 vaccines...we are living in a world full of competition. Our friends [in the Global North] are widely advertising vaccines and have given Tanzania a lot of money after importing their COVID-19 vaccines. Why all this money? Was it for clinical trials of their vaccines? This competition will continue even among themselves. Why did countries in Europe have their own vaccines, for instance Germany with Pfizer? ...They have managed to penetrate our markets [in the Global South] and brought their products such as COVID-19 vaccines. Let us continue valorizing our herbal remedies and struggle not only to dominate our markets but also to penetrate their markets too.

These remarks shed light on how COVID-19 vaccines are driven by power politics. In fact, rich countries in the Global North have taken a ride on the wave of COVID-19 vaccines and overt discrimination of others, and hence have got the economies of superpowers back on track (Vankovska, 2021). They also shed light on the tension and competition between rich countries in the Global North themselves over vaccine production. For example, Mlambo and Mlambo (2022:50) demonstrate how COVID-19 vaccine production in the East (e.g. Russia and China) and its stigmatization and criticism from the West “were not born out of Russia’s lack of scientific standards in vaccine production, but rather that geopolitical issues were at play, issues around Crimea, the poisoning of anti-corruption activist Alexei Navalny, Nord Stream 2, allegations of spying and espionage, and allegations of interfering in the US elections.” The same authors argued that, because the vaccine was from an adversary who did not conform to Western standards, allowing the vaccine to expand beyond Russian borders would expand that adversary’s sphere of influence (ibid. 50). Similarly, Dokmanović and Cvetičanin (2022) argue that COVID-19 vaccines are used for strengthening the influence of superpowers worldwide.

Indeed, vaccine became a geopolitical issue. Writing from the Global South perspective, from day one of the pandemic, self-care practices such as steaming with *nyungu* and herbal preparations were never accepted in the West. In fact, COVID-19 vaccine production in the West reflects the continuing “struggle to establish a universal framework, especially through the violence of colonialism and globalization, in which as a consequent of struggle a more accommodating pluriversal epistemic dynamics is lost” (Oloruntoba et al., 2020:2). Global health narratives of the hegemony of Western standards of evidence-based medicine in dealing with COVID-19 have perpetuated what Santos (2016:92) called “epistemicide” or “the murder of knowledge” by undermining and devaluing non-western knowledge and epistemologies of the Global South (see also Ndlovu-Gatsheni, 2013; Oloruntoba et al., 2021). For example, Adams (2013:55) comments, “In this ordering of priorities, one finds a simultaneous discrediting of other forms of knowledge and evidence and other ways of conveying truth that

have historically been invested with value in both deciphering ill health and evaluating the clinical outcomes of health interventions, especially in the global health context.”

As such, the COVID-19 pandemic has also shed light on whose knowledge matters and for whom, in times of crisis. As Ndlovu-Gatsheni (2020:373) argues, “The geopolitics of power and knowledge are still tilted to the Global North as the only site of credible science and only space to look to as the world waits for vaccines.” This situation has demonstrated yet another context in which global health interventions are inextricably linked to Western standards of evidence-based medicine while at the same time marginalizing alternative sources of knowledge, innovation, and treatment coming from non-western societies. For example, most international health organizations located in the Global North did not advocate for African COVID-19 preventive and treatment endogenous initiatives. In addition, although some studies (e.g. Tarimo et al., 2023) have examined the safety of herbal remedies among COVID-19 patients in Tanzania, the information of their safety is still unacknowledged, undervalued or questioned in the Global North-based international journals like the *Journal of American Medical Association (JAMA)* and the *Lancet*.

However, the same initiatives, which the West was taking on the development of an effective and safe COVID-19 vaccines were not subjected to the same warning statements from the WHO or CDC. For example, timelines for COVID-19 vaccine development, and particularly clinical trial phases were shortened (Calina et al., 2020; Ralise et al., 2023). Worse still, some COVID-19 vaccines became available for use before their scientific evaluation and authorization. Although these scholars argue for greater beneficial impact on public health by saving the lives of many people due to accelerated development of a COVID-19 vaccine, the fact remains that vaccine superpowers (vaccine projects in Europe, America, and China) have revealed not only their superiority over the Global South but also the superiority of northern epistemologies over ‘other’ epistemologies. As such, COVID-19 vaccine development projects have revealed inequalities between the Global North and Global South. These vaccine projects have shown us that the geopolitics of power and knowledge, as COVID-19 vaccines, are coming out as evidence-based approaches to deal with the pandemic. Due to geopolitics of knowledge, epistemic privilege, and arrogance, the global North become difficult to listen and learn from the endogenous initiative on self-care practices and herbal preparations in the global South. According to Rutazibwa (2020), failure to listen and learn from African endogenous knowledge and epistemologies of the South are real practical implications of the eurocentrism many have been studying for so long. Endogenous knowledge and epistemologies in the global South could be supported. For instance, the information on safety of the herbal remedies was there clear and loud. However, the geopolitics of the pandemic shaped global health responses to the pandemic.

5. Conclusion

This article has analysed the responses to COVID-19 that the two Tanzanian administrations adopted and the various political and public health aspirations they served. It has been argued that geopolitics of power and knowledge underlay these varied responses. For example, President Magufuli’s administration mobilized Afrocentric forms of medical knowledge, endogenous initiatives, and spiritual prowess to prevent and treat COVID-19. Although some people have argued that the approach taken by President Magufuli’s administration to curb COVID-19 had negative public health outcomes, this approach provided the much-needed political and strategic leadership at a specific time of the pandemic. Political actors like the late President Magufuli were drawing from circumstances in their societies to forge some kind of countervailing powers from below to respond to the pandemic. For instance, Magufuli himself

questioned the efficacy of lockdown and he declared that he would not implement it because it was not feasible in Tanzanian societies. Therefore, the global health measures of COVID-19 are not gold standard; they need to be contextually understood. Geopolitics of power and knowledge have continued shaping public health responses adopted by President Hassan's administration, particularly authorizing COVID-19 vaccines to be imported and used in Tanzania.

Although it is true that global public health responses are driven by science and evidence, the COVID-19 pandemic has revealed how political leadership drives public health interventions. President Magufuli and Hassan's administrations in Tanzania have been the case in point. As shown, the key difference between approaches of the two presidents to COVID-19, is that the former promoted Afrocentrism while the latter advocated COVID-19 vaccine. Like most of the pandemics that happened in the past, COVID-19 has shown another encounter between Western epistemologies and African endogenous knowledge and epistemologies of the South non-Western medical approaches and practices. Thus, what is clear in the fight against COVID-19 in Africa in general, and in Tanzania in particular, is how the prioritized COVID-19 preventive and treatment responses "have remained stuck within complex global knowledge economy with creativity of Southern intellectuals and scientists silenced and marginalized" (Ndlovu-Gatsheni, 2020:373). Hence, the COVID-19 outbreak is another pandemic, which has exposed resilient colonial mentality. These inequalities which the pandemic has shown us deserve a decolonial turn, which enables decolonial envisioning of geopolitics of power and knowledge, epistemic privilege, and arrogance of the Global North epistemologies.

Acknowledgements

This article was written during my fellowship at the African Research Universities Alliance (ARUA) Centre of Excellence in Notions of Identities in Africa, based at Makerere University, Uganda. I am grateful to the the ARUA/Carnegie Early Career Research Fellowship Programme for their support during this fellowship.

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