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COMMENT

An African Reading of the Covid-19 pandemic and the stakes of decolonization

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July 2021

The Covid-19 pandemic has so far revealed that the virus (SARS-CoV-2) does not only infect, weaken, and highlight weaknesses in human biological systems, but also the structural weaknesses of health systems at international and national levels. We may paraphrase a famous quote from the vice president of Ghana, Dr Mahamudu Bawumia, by saying, “When the fundamentals of health are weak, Covid-19 will expose you.” [1] Here ‘expose you’ refers to the increasing vulnerability to external forces and the resultant shaming. Just like a virus infects a living body and thrives on biological ‘weak fundamentals’ such as underlying health conditions and age, pandemics hit societies and thrive on public health ‘weak fundamentals’ such as inequality, poverty, and discrimination.

The Covid-19 pandemic has put to the test and revealed the weaknesses and strengths of the 'fundamentals' of national health systems across the globe. The health systems of many African countries cannot be fully comprehended without considering the how these countries emerged and continue to function. Many of today's African states emerged from colonialism in the second half of the twentieth of century. These countries, although politically independent, continue to contend with multi-faceted and multi-layered forms of neo-colonialism. [2] (Neo-) colonialism does not only produce a colonizer who exhibits paternalistic attitudes towards the colonized but also a colonized who develops a consistent lack of self-confidence; both feed on and perpetuate relations of dependency. [3]

In this paper we examine the Covid-19 pandemic in Africa through a decolonization lens. Keeping in mind that there are differences in history, culture, and health systems among the various African countries, we draw on commonalities to explain how the Covid-19 pandemic which from the onset destabilized high-income countries (HICs) has occasioned a disruption of the habitual paradigm of dependence of African countries on foreign donors to assist them in times of health emergencies. We argue that this disruption could be seized as a catalyst in Africa's process of health and healthcare decolonization. At stake in this process are the lives and livelihoods of millions of people whose health needs are governed by processes and structures immersed in what we describe as coloniality. Engaging with decolonization has not only become a necessity for survival, but also an occasion to radically transform global health systems at the service of life of all, including the global majority, rather than that of the "haves" over the "have nots".

We begin by unpacking the notions and vocabulary of decolonization. In the second section we examine the peculiarities surrounding the emergence and spread of the Covid-19 pandemic in African countries. The third section offers a synoptic reading of the response measures put in place by countries across the continent in three phases: initial knee-jerk reaction; the adaptive and creative phase; and the foundational steps towards future health autonomy. In each phase, we observe the dialectical tensions in practice between the drive towards decolonization and the pullback towards more familiar neo-colonial terrain. In the final section, we return to the notion of decolonization, explaining what it is not, and suggesting how it can be furthered in the light of the Covid-19 pandemic experience.

What is Decolonization (not) about?

COLONIZATION or COLONIALISM is usually understood as something to do with formally (legally and politically) taking over someone else's land and the people and resources in it. A 'flag-planting' exercise if you will. From this understanding, people are then quick to have the impression that we are speaking about something in the past. Because most territories have been formally returned to the previously colonized people. We often point at the 1960s as the watershed moment in which many colonies were successful in their struggles for independence. The term POST-COLONIAL is then used to literally mean the period after formal colonization, hinting that it is something that is behind us. A seemingly subtly different way to engage this is through the unhyphenated concept of the POSTCOLONIAL, to point at the fact that, while this period might be behind us, its effects are so profound that there is no way to make sense of the present without engaging with the consequences of colonialism. So, in a way, it is a push back against the idea that the colonial is in the past, on the contrary it is very much in the present.

Close to this argument, but a stronger assertion, is the concept of NEO-COLONIALISM. It speaks to the fact that in the post-colonial moment, we do not only deal with just the consequences of a colonial

past, but also with the continuation and reproduction - albeit more covertly – of the structures and relations of extraction, dispossession and imposition between the former colonizers and the colonized peoples. What is more, the colonizing practices and institutions of the flag-planting days, are continued by national and economic elites. This reinforces the fact that for the majority of the previously colonized peoples, the conditions of colonization persist, even in the absence of the White colonizer. Colonization models are thus perpetuated by fellow citizens, former colonizers, and other external actors, as well as through institutions of global governance.

The concept of COLONIALITY as developed by Latin American decolonial thinkers captures this idea most usefully. It is a way to engage colonialism in the present and anywhere (internally, bilaterally, globally) as a (re)production of extreme power inequality and the different institutions created to perpetuate this. These power relations both sanction and invisibilise how they produce premature death, violence against and destruction of peoples and their life, environment, and knowledges. As such, coloniality has been described by decolonial scholars like de Sousa Santos [4] as a triple destructive force of *ecocide*, *epistemicide*, and *genocide*, respectively the killing/destruction of life environments including all the non-human species; knowledges and ways of sense-making; and peoples.

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These different ways of understanding colonization mean that DECOLONIZATION is not simply fighting formal imposition or flag-planting, but very much the more subtle continuations of exploitation, extraction, dispossession, and imposition of one particular - projected as universal - way of knowing, doing politics and governance, organizing our economies, including health and healthcare systems.

So, decolonization is then both about attending to the very concrete material aspects of coloniality (*ecocide*, *genocide*) as well as the immaterial ones: the violences, impositions and disposessions of our knowledge systems and ways of sense making (*epistemicide*).

In our conversation about the Covid-19 pandemic, this means attending to the reality of a global health system that, principally, is epistemically and economically owned, driven, and governed by a single very narrowly defined - claimed “Western” (whereas in fact it is a result of millennia global conversations and cross-fertilization)- framework. This health system which is proclaimed superior and universal generates a dependency of the former colonized on resources that are in the hands of actors - governments and private companies - that are not accountable to persons living within the former colonized territories. Decolonization means actively retrieving and cultivating agency in health and healthcare, including unearthing erased and delegitimized health systems. Decolonization is then about both *de-silencing* those knowledges and de-mythologizing some of the falsehoods around Western superiority and African inferiority, as well as notions of so-called aid and dependency in north-south relations. [5]

Equally, if not more important, decolonization is not just about inclusion and diversifying knowledges and participants (that is a minimum but insufficient condition) but very much about a

radical dislocation of power, at the service of repair and redress and the radical re-imagination of global and local relations wedded to a *will-to-life* rather than a *will-to-power*. [6]

Finally, another way to engage decolonization is to ask why colonization is morally unacceptable? Colonization often comes with injustice, oppression, pilfering of resources, racism, and other evils. Yet, these evils can also occur in situations that we would not normally describe as colonization. Communities within countries may become victims of these evils without necessarily being described as colonized. Also, colonized people can still feel morally wronged even when none of the above-listed evils are more prevalent in their communities than others. According to M. Renzo, colonialism is wrong because it “undermines the capacity of political communities to exercise their self-determining agency in a particular way. When political communities are treated in this way, they suffer a distinctive wrong, independently of whether this treatment is accompanied by any of the other crimes listed above.” [7]

Thus, from a health perspective, Africa as a political community will remain colonized for as long as her self-determining agency in healthcare is undermined by the agency of powers that lie outside her borders and are beyond her control. The task of decolonization is one of recovering and exercising that self-determining agency that has for long been undermined. From the analysis above, it is clear that, similar to inclusion and diversification, control and self-determination are the minimum rather than sufficient conditions of decolonization. Once control is returned to the peoples concerned, decolonization is the lens through which we can adjudicate whether their choices and systems are at the service of life of all, or whether they produce coloniality’s extreme power inequalities and the violences, and premature deaths it sanctions.

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In this vein, health and healthcare decolonization means not only equitable access to existing healthcare resources, but also taking the step further to become generators of health knowledge and resources that can contribute to global health.

The Covid-19 African Peculiarities

A DIFFERENT STORY TO TELL

As the dust begins to settle on the initial global response to the Covid-19 outbreak, a question that begs for an answer is why countries that ranked highest in the Global Health Security Index in 2019 became so vulnerable within a space of a few months in 2020, especially given the abundance of literature and resources on *Preparedness for High-Impact Respiratory Pathogen Pandemics*. [8] Martha Lincoln points to a form of hubris, especially prevalent in the political climate of countries that perceived themselves as outliers at the time of the outbreak of the pandemic. She cites the UK, the USA, Brazil, and Chile as examples of countries that have fared poorly in their response to the pandemic. [9] Even as Europe and the United States were reeling under heavy daily death and infection tolls; a gloomier figure was being projected about what would happen in Africa with Melinda Gates fearing that deaths were going to be so many on the continent that dead bodies will be found on the streets. [10] The United Nations Economic

Commission for Africa (UNECA) also projected that without aid and intervention, up to 1.2 billion of the 1.6 Africans would be infected and between 300,000 to 3.3 million would die of Covid-19. A more realistic projection was presented by a group of African scholars led by Joseph Cabore and Humphrey Karamagi, using a Markov chain predictive model, that estimated 150,078 deaths by May 2021. [11]

As of 2nd July 2021, with nearly 4 million lives lost worldwide as result of Covid-19, Africa's recorded infection numbers and death toll stand at 5,394,709 and 140,976 respectively. Africa which counts about 17% of the world population, as of June 2021 counted for less than 3% of the world's total Covid-19 fatalities. [12] These figures which are more in line with the projections of Cabore et al. may be challenged by citing low levels of testing and reporting. Yet the overall picture shows a less catastrophic image than was predicted by UNECA and Melinda Gates. It is also worth keeping in mind that even though infection rates across the continent may be more difficult to determine because of low testing capacity, the same cannot be said of deaths since an exceptional increase in deaths in any given location would be more noticeable.

From a decolonization perspective, the point to highlight here is how some global actors uncritically assumed that if the pandemic has caused large numbers of deaths in HICs, it would harvest even more fatalities in the formerly colonized African countries. True enough, the pandemic is not yet over, and African countries have had casualties and are suffering from the socio-economic fallout of Covid-19. However, after more than 15 months into the pandemic, the common colonizing narrative that sees Africa faring worse in terms of mortalities has so far not yet been verified.

A HEALTH THREAT FOR THE MIDDLE AND UPPER CLASSES

Health emergencies are not new to the African continent. Apart from endemic challenges like HIV/AIDs, malaria, sickle cell anaemia, and the rise of non-communicable and life-style diseases like diabetes, hypertension, African countries are used to dealing with periodic outbreaks of disease that place an increased burden on healthcare systems. In the past decade alone, there have been 2 major outbreaks of Ebola, periodic outbreaks of cholera, cerebrospinal meningitis, dengue fever in Guinea, Liberia, Sierra Leone, Nigeria, Democratic Republic of Congo, Ghana among others. Most epidemics in Africa start among rural remote communities or poorer classes of society.

In contrast, Covid-19 came into the continent with international travellers. This means that the first persons to be infected were the elite as most African cannot afford international travel outside the continent or would not be granted travel and entry visas to many HICs. The first victims of Covid-19 were persons who have a voice in the African countries: the middle and upper classes, expatriates, diplomats, businessmen, and other high-ranking professionals coming in through international airports. For example, the first two cases reported in Ghana were a senior diplomat at the Norwegian Embassy and a UN Official who had both just returned to the country,[13] in Kenya, the first case was a citizen who had returned from the US travelling through the UK,[14] in South Sudan, one of the last African countries to record infections, the first case was a UN member of staff who had just entered the country from the Netherlands. [15]

The early cases of Covid-19 that were detected, being among persons belonging to the upper classes who are capable of being heard, contributed to the swift responses which were also more tailored to the social and living conditions of these persons. This illustrates decolonization's central focus on extreme power inequality. The choice for lockdowns, shows the coloniality at the centre

of the Covid-19 response, tailored on the life and survival of the “haves”, first and foremost even if they are the global minority.

STRUGGLING DONORS AND A TIME ADVANTAGE

A third peculiarity is the fact that Covid-19 did not appear on the world scene as yet another disease emerging from Africa. By the time the pandemic hit Africa – first case was in February 2020, but most countries began seeing cases in March/April – HICs like Italy and Spain were already facing critical conditions threatening the collapse of their healthcare systems. Other HICs like the USA, Germany and the UK were also seeing a dramatic rise in infections and deaths, whilst preparing themselves for the worst. This meant that HICs were so preoccupied with trying to save their own populations that saving Africa was not a priority at the time. What is more, countries like Germany and the US had already started blocking the exportation of vital Covid-19 tools like PPEs, making procurement so difficult and expensive that African countries had to resort to pool buying. [16]

Nevertheless, from a pandemic timeline view, most African countries had a time advantage of about 4 weeks compared to other parts of the world. Unlike like China, Korea, Spain, and Italy which were hard hit from the early stages of the pandemic, African countries had at least a small window to act to avert the looming possibility of arriving at the critical conditions that were already manifesting themselves in Europe, the USA and in Latin American countries like Mexico, Ecuador, and Brazil.

The sum of these initial peculiarities meant that African countries had to act quickly, learn from countries that were experiencing a severe wave of Covid-19 infections, adapt, and discount the possibility of over reliance on external support to combat the SARS-CoV-2 virus. From a decolonization perspective, it is here that the potential of both *desilencing* the African continent as a place from which solutions emerge and *demythologizing* stereotypes of inferiority come into view.

A dialectical decolonial response

The response to Covid-19 in many African countries can be grouped in three stages: the initial knee-jerk reaction phase, the emerging phase of adaptation and creativity; and a phase of restructuring towards future health autonomy.

PHASE I: INITIAL KNEE-JERK REACTION

By March 2020, it became clear that the spread of the SAR-CoV-2 virus was global, and that no country would be immune. On 11th March, the WHO declared the novel coronavirus outbreak a global pandemic. African governments, conscious of the fragility of own their health systems, and witnessing apparently advanced health systems cave in under the pressure of the outbreak, responded swiftly to prevent the worst. Ghana, for example, recorded the first case of Covid-19 on March 12th. By March 24th, there was 1 death and 24 positive cases in the country. On that same day, the government announced the closure of land, sea, and air borders to all in-bound passengers except for citizens returning home by air who were required to quarantine under surveillance in government approved hotels for two weeks upon arrival at the international airport. Rwanda, a country of 12 million people with a universal health-care structure, implemented a lockdown shortly after the first detected case of Covid-19 (reported on March 8, 2020). The government also introduced a programme to supply 20,000 households with free food through a social protection scheme. Ethiopia, one of Africa's largest countries with over 100

million people, declared a state of emergency, postponed highly anticipated elections, and closed borders, but did not implement a lockdown of movement in the country. [17] If we compare this to the UK which went into lockdown on March 23rd after recording 335 deaths and more than 6,500 confirmed cases, [18] we see the differences in the reaction times. Many other African countries also responded in a timely manner to the outbreak. The few isolated exceptions were the leaders of Burundi and Tanzania, who tried to deny the reality of the threat of the pandemic but have both since died amidst unconfirmed suspicions that they died of Covid-19 infections.

The early response measures adopted by several African countries, largely followed the rubber stamp of the measures that were being adopted in HICs. The solutions adopted were severe lockdowns in cities with higher numbers of confirmed cases, social distancing, stay at home policies, a rush to procure PPEs from countries outside the continent and increased public expenditure that required further borrowing by countries that were already reeling under the burden of debt. These measures soon revealed themselves to be unsustainable over a period of time. Lockdowns of metropolis, largely supported by the middle and upper classes, turned out to be disastrous for the poor. Many urban and rural poor persons in Africa live subsistence lifestyles that require leaving home daily to earn enough income to feed themselves and their families. Poorer people do not have access to clean water to practice the prescribed Covid-19 hygiene protocols, they cannot afford to buy enough food to stock up, and if even they could, they do not have fridges and constant supply of electricity to preserve food in the African tropical climate. A pandemic like Covid-19 brings people together in the shared vulnerability, but it also highlights social inequalities that shift a disproportionately higher burden on poorer and marginalized sectors of society. The public in many countries initially obeyed, but after a few weeks, there was tension as captured in the words of a *tro-tro* (public minibus also called *matatu* in Kenya or *danfo* in Nigeria) driver in Ghana's second largest city Kumasi: 'hunger virus is stronger than coronavirus'. Some governments resorted to repressive measures to ensure public compliance of lockdown measures and cases of police brutality on citizens were recorded in several African countries including South Africa, Nigeria, Kenya, Ghana, and the Democratic Republic of Congo. [19] On 17th April 2020, a group of African Intellectuals, including Wole Soyinka, Kwame Anthony Appiah, Cornel West, and Rosa Cruz e Silva, published an Open Letter calling on leaders to 'govern with compassion' and to take the Covid-19 pandemic as an opportunity for a 'radical change' in thinking and acting. [20] Among other things, the signatories of the Open Letter called an African leaders to "to break with the outsourcing of our sovereign prerogatives, to reconnect with local configurations, to break with sterile imitation, to adapt science, technology and research to our context, to elaborate institutions on the basis of our specificities and our resources, to adopt an inclusive governance framework and endogenous development, to create value in Africa in order to reduce our systemic dependence."

Aside public health measures, and still following the example of other countries outside the continent, attention in this early phase was focused on the procurement of PPEs and diagnostics equipment. As African countries rushed to procure protective equipment for frontline and healthcare workers, they were met with protectionist measures by countries such as the US, Germany, Switzerland. [21] On the diagnostics front, the Covid-19 outbreak caught several African countries unprepared. Whilst the WHO was recommending massive testing, tracking and tracing, some countries did not have the capacity to test for the SARS-CoV-2 virus. According to the Ken Awuondo of the Global Health Network, in January 2020 when the pandemic had not yet hit the continent, only South Africa and Senegal had the capacity to test for Covid-19. [22] When countries started recording cases of Covid-19, Nigeria had only 12 laboratories capable

of testing for Covid-19 among a population of 196 million people, Ghana had 1 for a population of 30 million.

Testing for SARS-CoV-2 requires infrastructure, equipment, trained human resources, and above all reagents. This meant that the continent had to rise to a herculean task of creating infrastructure, purchasing equipment, training personnel and acquiring enough reagents to be able to test widely for the virus. The needed equipment and consumables were available outside the Africa. It took the energetic leadership of the Africa CDC, the WHO Regional Office, and other actors to ramp up the capacity for testing especially in the face of protectionism and commercial speculation by some suppliers. By June 24th all African countries had acquired testing capacities. [23] Yet, even with these efforts, not all countries were able to embark upon massive testing of their populations. By the end of 2020, 10 out of 54 countries in Africa accounted for 70% of all tests done on the continent: South Africa, Morocco, Ethiopia, Egypt, Kenya, Ghana, Nigeria, Uganda, Rwanda, and Cameroon.

If the path to ramping up the diagnostics capacities of African countries was daunting, therapeutics also turned out to yet another challenge. In HICs, governments were ramping up ICU capacities especially with the acquisition ventilators and even new specialized structures (Nightingale, UK; Rho, Italy). ICUs are not only labour intensive but also expensive. Prior to the outbreak of the pandemic, hospital beds in many urban hospitals in Africa were already insufficient. In Ghana's leading hospitals, Korle Bu Teaching Hospital and Komfo Anokye Teaching Hospital, there is a chronic lack of beds in emergency units. Several countries in Africa do not have enough ventilators, as of 17th April 2020, Kenya had 259, Ghana 200, Liberia 7, and ten countries including Somalia had 0. The cost of ICU ventilator ranged from \$5000 to \$25000[24] and can consume up to 60,000 L of oxygen per patient per day. [25]

Although there has been a notable increase across the continent in doctor to patient ratios in recent decades, many African countries still have fewer doctors and nurses than required. Even if African countries had a higher number of functioning ICUs, the continuous electricity supply, the oxygen needed and, above all the personnel required, it would be unsustainable and possibly damaging to run these centres as it might require redeploying doctors and nurses from other vital services. As Farai Madzimbamatu concludes, "From an African perspective, these interventions are not feasible." [26]

It did not take long before the economic impact of these measures started weighing on national budgets. The closure of national borders, schools, restaurants, markets, and the prohibition of public gatherings brought about income losses to small-scale businesses that are the source of livelihood for many Africans. Extra budgetary expenditures were needed not only to ramp up healthcare systems but also to provide a survival safety net for the poorest sections of the population that no longer had the possibility to earn an income. In an Op-Ed published on April 16th in the *Financial Times*, titled 'What does an African Finance Minister do now?', Ghana's finance minister Ken Ofori Atta, chronicled a typical day that included struggles to purchase surgical and N95 face masks and ventilators; discussing the South African led joint initiative to call for a debt relief for poor countries; filing an application for an IMF fast track loan. Representing the sentiments of many Africans at that time, he wrote: "there is a lump in my throat as I think of Africa's predicament. I question the unbalanced nature of the global architecture. I have, in one fell swoop, lost more than \$1bn of revenue as domestic taxes continue to shrink, compounded by lost productivity and job losses. We still have an obligation to service our debt portfolio." He adds, "This is not a passing blizzard, as a friend said; more like a long winter, even a mini ice

age. But there are some structural elements that need fixing; our health sector, digitalisation of the continent to formalise our economies; and Africa's debt — the most controversial element and the topic of much discussion. Africa's external debt stock is more than \$700bn. Africa needs to pay \$44bn to service our debt this year." [27]

We have described this initial phase as a knee jerk reaction because even though African countries generally showed swiftness in the response to the pandemic, the dominant paradigm was looking for help and assistance from outside the continent and emulating the solutions put in place by HICs which soon revealed to be inadequate and unsustainable.

PHASE II: ADAPTATION AND CREATIVITY

Phase I, which corresponds roughly to the first two-three months of the outbreak of the Covid-19 pandemic in Africa, shifted to a new phase characterized by a greater awareness of the fact that the continent could not rely on foreign aid paradigms to address the challenges of the pandemic. In an emotional discourse to the nation, on 19th April 2020, the President of Ghana, Nana Akuffo Addo, announcing the government's decision to lift the 3 week-long lockdowns that had been implemented in parts of the country said: "Lifting these restrictions doesn't mean we are letting our guard down.... We will tailor our solutions to our unique social, economic and cultural conditions. There is no one-size-fits-all approach." [28] Along with the tailoring of solutions to meet the unique conditions of African societies came a surge in finding home-grown solutions to the many challenges posed by the pandemic. In this section we give some examples of the creative surge that emerged in various African countries.

The second phase in Africa's response to the pandemic was characterized by renewed spirit of collaboration between African countries, a greater spirit of self-reliance, increased internal dialogue between local researchers and governments, internally generated philanthropy and, on the whole a creative drive towards finding home-grown solutions to the challenges posed by Covid-19. This surge had to contend with the underlying weaknesses that persist in many African countries such as corruption, political authoritarianism, epistemic and systemic lack of confidence in home grown solutions and products.

The African continent arrived at the fight against Covid-19 with a baggage of experience drawn from combatting outbreaks of Ebola, HIV, tuberculosis, Lassa fever, cerebrospinal meningitis, cholera and a range of other sporadic outbreaks of disease. These outbreaks arguably strengthened the disease response capacity of the continent in a way that had perhaps never been fully recognized until the Covid-19 outbreak. An important step in Africa's disease response capacity was the creation of the Africa Centres for Disease Control and Prevention (Africa CDC) by the African Union in Addis Ababa in January 2017. The Africa CDC has quickly become a focal point for the coordination of efforts between African countries and also serves to unite and strengthen African voices in negotiating with partners outside the continent. Compared to similar organizations, for example, the European Centre for Disease Prevention, 16 years old, with an annual budget of over 60 million pounds sterling, 269 members of staff, or the WHO Regional Office for Africa, with a cumulative annual budget of over 120 million pounds and a work force of 2,500 across the continent, the Africa CDC is a small organization with fewer than a 100 staff mainly in Addis Ababa, which receives modest funding from the African Union and is heavily donor reliant. [29] Yet, this modest and young organization has been described in *The Lancet Infectious Diseases* as "leading the efforts to control Covid-19" [30] on the continent alongside the WHO Regional Office for Africa, and its director Dr John N. Nkengasong – himself a former Head of Virology at the WHO – has been recognised by the Bill & Melinda Gates Foundation as

“a central voice for Africa’s scientific community” for his “significant commitment” to the pandemic response. Among the many achievements so far of the Africa CDC are training programmes to enhance capacities of members states, pooled purchasing to promote and ensure price competitiveness, transparency in procurement, intra-African trade, through the Africa Medical Supplies Platform (AMSP), and the establishment of a Partnership to Accelerate Covid-19 testing (PACT) with a goal of distributing 1 million test kits in April 2020. The Africa CDC has also created important partnerships to secure resources to tackle Covid-19 on the continent. For example, the recent partnership agreement with the Mastercard Foundation to invest 1.3 billion dollars towards the procurement and delivery of vaccines to support the CDCs target of vaccinating 60% of the continent’s population by the end of 2022. [31] The Africa CDC also offers continuous rapid updates of the evolution of the pandemic on the continent. Even though the pandemic is still raging in the continent and there will be time later to assess the efficacy of the Africa CDC, these and other the partial results show how much can be achieved through greater intra-African collaboration.

The strategy for African countries with overstretched and under equipped hospitalization capacities was to focus on prevention. After the initial phase of trying to procure hand sanitizers and PPEs in a competitive international market space, many African countries turned to locally generated solutions. Innovative solutions like portable hand washing units -Veronica buckets- [32] were introduced for handwashing in places without running water. Factories and universities laboratories repurposed themselves to produce sanitizing gels. Local producers also stepped up to the challenge of producing face masks, often with a touch of colour to match African dress-styles. Citizens increased patronage of traditional local and natural foods claiming that these contain less chemicals and have a capacity to boost immune systems.

Amidst the flurry of preventive initiatives, African laboratories also came up with innovations to increase the capacity to test for Covid-19, especially given the high cost of reagents for standard PCR tests. Notable among these was the system of pooled sampling introduced by the Noguchi Memorial Institute at the University of Ghana. Working round the clock in 12-hour shifts, the institute “decided to deploy ‘pooled sampling’ to meet demand. Each pool has 10 samples, and 100 pools are tested at a time. Instead of testing one person at a time, samples from multiple individuals are put together and tested as one pool. If the pooled test comes back negative, everyone in the pool is declared negative. But if it is positive, each member of the pool is then retested individually for the infected person to be identified. This method increased the testing capacity of the country, reduced waiting time for test results, saved the amount of testing reagents that were needed if tests were done individually and reduced overcrowding in isolation centres.” By mid-July, Ghana had conducted over 370 thousand tests, one of the highest testing rates per population on the continent. [33]

The innovation drive on the continent was so alive and sometimes original that on 16th August 2020, the BBC published a list of “Ten African innovations to help tackle Covid-19.” [34] Among these were ‘doctor car’ robots, automatic handwashing machines, portable ventilators, solar-powered hand washing sinks, wooden money sanitizers, socially distant haircuts, and a Rapid 65-minute Covid-19 testing kit. Many of these inventions did not receive enough institutional support to improve and upscale. However, they are an illustration of the drive to look for home-made solutions that accompanied the second phase of the pandemic.

Across the world, the field of Covid-19 therapeutics has been filled with many purported cures that turned out to be fakes. Since the outbreak of the ongoing pandemic, on every continent there

have been new ‘cures’ for Covid-19, most of which have, to date, turned out to be fraudulent. [35] Toothpastes, certain religious practices and USB flash drives purportedly offering protection from the non-existent threat of infection transmitted via 5G mobile telephone radio waves are some of the many ‘cures’ that have emerged over the months from across the globe. [36] Africans also came up with products that claimed to cure Covid-19. For example, Madagascar’s President Andry Rajoelina, presented a newly discovered cure called ‘Covid-Organics’ at a press conference on April 20th. Whilst taking a swig, he claimed that “this herbal tea gives results in seven days. ... Tests have been carried out—two people have now been cured by this treatment.” [37] In Cameroon, the Roman Catholic Archbishop of Douala, Monsignor Samuel Kleda, declared that he had created a herbal cure for Covid-19. In an interview with state media CRTV on April 25th, he claimed that “he could confirm that his 30 years of medicinal plant research experience, especially on herbal treatment, had enabled him to find a cure for Covid-19. He said he was very happy because everyone who had taken the herbal remedy had been cured of Covid-19. He added that that his goal as a servant of God was to help poor and suffering people, and that was why he gave away the cure, which he named Essential Oils, free of charge.” [38] In the Eastern Cape Province of South Africa, farmers began making large incomes from selling leaves of *Artemisia afra* — or African wormwood — as a cure. [39]

Two things are worth noting about this multiplication of Covid-19 therapeutics on the continent. On the one hand, there is an increased demand for traditional medicine among Africans. On the other hand, the normative frameworks for testing, approving and eventually promoting these types of cures, as Emile Cloatre points out, has largely been modelled on Western biomedical standards, thereby pushing traditional herbalists with little or no formal education towards the illegal and fake medicine spaces. [40] Even though, up to 70% of Africans recur to traditional herbal medicines as a source of primary healthcare,[41] a history of ‘othering’ and silencing this form of medicine has led to a situation whereby there are few standardized and favourable normative frameworks for approving and promoting safer versions of these drugs. Nevertheless, progress has been made in this field. In February 2021, the Ghana Food and Drugs Authority (FDA) approved clinical trials of a local herbal medicine called *Nibima*, or technically, *Cryptolepis sanguinoleta*. This alkaloid traditionally used as a cure for malaria, had already shown some positive results in killing melanoma and leukaemia cells in vitro and is produced and drunk locally as a “bitter tea”. [42] Clinical trials are still ongoing. In September 2020, the Regional Expert Committee on Traditional Medicine for COVID-19 formed by the World Health Organization (WHO), the Africa Centre for Disease Control and Prevention and the African Union Commission for Social Affairs endorsed a charter and terms of reference for the establishment of data and safety monitoring board for herbal medicine clinical trials. [43]

Another ongoing example of an African response in therapeutics is the participation in the ANTICOV Consortium of clinical trials across 19 sites in 13 countries. Describing this initiative, the Director of the Africa CDC said, ‘African countries have mounted an impressive response so far to Covid-19 and now is the time to prepare for future waves of the disease. We welcome the ANTICOV trial led by African doctors because it will help answer one of our most pressing questions: With limited intensive care facilities in Africa, can we treat people for Covid-19 earlier and stop our hospitals from being overwhelmed?’ [44]

Just as in the case of prevention and diagnostics, the second phase of the pandemic witnessed a drive by African countries both individually and collectively to find contextually sustainable solutions. In this phase which broadly covers the period from May to December 2020, the question of vaccines had not yet come to fore.

The second phase also generated greater attention to public health in Africa. In some cases, the general public and even the armed forces were tasked with cleaning up dirty and choked gutters in cities. Regular exercises of fumigation of markets and schools were instituted in an overall attempt to promote hygiene. The results of these initiatives that go beyond the Covid-19 threat are yet to be measured.

By the end of first year of the pandemic, Africa was beginning to appear in a different light compared to other epidemics like Ebola or HIV, where the continent seemed almost totally dependent on the assistance of foreign aid and knowledge. Writing in *The Guardian* in May 2020, Afua Hirsch questioned why Africa's "examples of innovation aren't getting the fanfare they would do if they emerged from Europe or the US?" [45]

PHASE III: RE-STRUCTURING TOWARDS FUTURE HEALTH AUTONOMY

In the third phase of the pandemic, which is still ongoing, vaccinations to combat the ongoing pandemic and building more self-reliant health systems have been the principal concerns in Africa and worldwide. With richer countries practicing vaccine nationalism, through pre-buying and hoarding of available vaccine doses, African countries have had to rely initially on the WHO backed COVAX scheme to be able to vaccinate their citizens. The COVAX scheme whose initial goal was to purchase and distribute 2 billion doses to ensure that LMICs have a share of available vaccines, has so far been hampered by lack of funding, scarcity of supplies, producer countries banning the exportation of vaccines, and HICs recurring to direct contracts with producers. As of June 2020, COVAX had only been able to distribute 88 million doses of the targeted 2 billion.

African countries, under the leadership of the African Union, realized that even if COVAX were to function fully, a large part of the continent's population would still go unvaccinated. They set up the African Vaccine Acquisition Task Team (AVATT) which has been able to sign a procurement agreement of 400 million additional doses of vaccines from Johnson & Johnson for the continent. [46] The AU and the Africa CDC have launched the Partnership for African Vaccine Manufacturing (PAVM) whose goal is to leverage pan-African and global partnerships to scale-up vaccine manufacturing in Africa up to the point of locally manufacturing 60% of Africa's routine immunisation needs on the continent by 2040. [47]

For a continent that imports 90% of its drugs, African countries have joined the initiative led by India and South Africa to campaign for and negotiate a TRIPS (Trade-Related Aspects of Intellectual Property Rights) waiver at the WTO that will allow more countries to be able to manufacture Covid-19 vaccines without having to rely solely on a few companies. The Indian-South African initiative has so far received the backing of the USA and many other countries. The DG of the WTO has also expressed a willingness to re-examine the current TRIPs agreement and to find ways of increasing the current number of vaccine manufacturers. The initiative has also met with resistance from strong voices like the Gates Foundation, Germany and the EU. [48]

Irrespective of the final outcome of these and many other initiatives that are currently being discussed and implemented to boost the health systems of African countries, what has so far emerged is a more decisive and pragmatic approach by members states of the AU to gain greater autonomy in healthcare through enhancing both human and technical capacities across the continent.

Conclusion and recommendations towards decolonized healthcare systems in Africa

Recapping the lessons learned from the Covid-19 pandemic have highlighted the inevitable need for Africa to decolonize and take greater responsibility and control of its healthcare. African countries have also become much more conscious, *ex necessitate rei*, of their own capacities to manage health emergencies without having to rely principally on external assistance. The journey has also revealed some of the challenges that African countries still have to resolve if the process of decolonization is to be successful. In the next paragraphs, we offer some reflections on pluriversality, access, and the value gap of life that need attending to on the African and global journey towards decolonized healthcare systems.

Decolonization is a complex and long process that requires a pluriversal approach at different levels. Pluriversality steers away from mono-systemic approaches such as modelling the future of healthcare in Africa on HIC frameworks or retreating into an African *kulturkampf* of tradition and power.

Decolonization is a complex and long process that requires a pluriversal [49] approach at different levels. Pluriversality steers away from mono-systemic approaches such as modelling the future of healthcare in Africa on HIC frameworks or retreating into an African *kulturkampf* of tradition and power. If we are to imagine a world in which African countries can boast not only of robust healthcare systems but also making a positive contribution to global health, these interventions need to occur at a macro, meso and micro level. In the next paragraphs we outline the principal challenges at each level and offer some recommendations as steps to overcoming them. The project of decolonization that we have laid out in this essay hints at the fact that it is about being profoundly and radically transformative. This endeavour does not translate into the usual piecemeal, easily digestible/implementable policy recommendations. Instead, we offer thoughts and examples, and invite readers to investigate how they (could) speak to their concrete (policy) practices.

1 At the **macro level**, which is principally the relationship between African countries and HICs that are the leaders in the production of healthcare knowledge and resources, three main challenges need to be addressed: neo-liberal profit driven model of healthcare that advantages the rich; cultural and commercial imposition of unsustainable healthcare models and products that reduce African countries to perpetual dependence; and unreliability of HIC partners to practice solidarity and equity during pandemics and global health emergencies.

At this level, the task of decolonizing healthcare generates duties for both Africans and HICs. For the latter, decolonization here means, **deimperialization** [50]. Deimperialization requires a departure from the assumptions of cultural superiority on a humbler position of seeing others, albeit economically poorer others, as equals. It cannot be limited to diversity or inclusion. Or at least not just about that. Inclusion and diversity are a minimum but insufficient condition for decolonization. South-south cooperation or the rise of the so-called emerging powers on the global stage, the diversification of that stage, or the inclusion of 'new' players, does not automatically mean that we are on a path toward decolonization of the global order. Similarly,

our institutions of global governance are staffed with decisionmakers of all the colours of the rainbow but not necessarily all walks of life. Thus, this form of visual inclusion and diversity perpetuates global power inequalities, a process which Dylan Rodriguez describes as multiculturalist white supremacy; [51] because it can serve to bolster, rather than to challenge the epistemic underpinnings of the colonial paradigm.

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On the part of Africans, decolonization at the macro-level requires coming together as a group that has been colonized to have a stronger voice in demanding greater equity and autonomy in decisions and choices regarding healthcare. The work of the Africa CDC in promoting continent wide initiatives and negotiating agreements for and on behalf of various African countries during the Covid-19 pandemic is an example of how efficient this unity can be.

Another important avenue is the creation of stronger **South-South collaborations** since some of the global health challenges are shared. A good example of this is the current proposal spearheaded by India and South Africa to obtain a TRIPs waiver at the WTO. Irrespective of the outcome, this initiative is pushing a conversation that may have remained at the margins.

2 The **meso level** of decolonization refers to how African countries need to divest themselves institutionally of those structures inherited from colonialism that continue to operate against obtaining greater autonomy in healthcare. A key element of colonialism is that colonies exist to serve the interests of the colonizer. This principle created institutions and administrative structures in colonies where the peripheries exist to serve the interests of the powers at the centre. After independence, many African countries have not yet succeeded in transforming these structures. On the contrary, in some cases, the concentration of power in central governments has increased, thus leading to complex bureaucratic mechanisms that serve more the interests of those in government than those of the governed. Among the challenges of healthcare decolonization at the meso level, we would like to highlight here are: weak institutional capacity for supporting locally generated research and innovations; legal and bureaucratic frameworks that 'other' and impede the advancement of traditional healthcare; disproportionately higher investment in biomedical healthcare than basic public healthcare.

The failure of many of the potentially useful innovations by Africans to combat the Covid-19 pandemic in Africa can be attributed to a climate of low institutional support and uptake. African governments turned to local production of facemasks and PPEs only after realizing how the international markets were inaccessible and expensive. Across the continent, **investment in research** is notably low. Even though in 2007, African Union countries committed to investing 1% of GDP in research and development (R&D), by 2015 the average investment was only 0.4%. [52] African researchers and innovators constantly have to align their work to priorities to HIC funders in order to be able to access funding. This situation also means that researchers feel more accountable to funders, who set priorities, than to the specific needs of their local populations. Secondly, the legal and bureaucratic mechanisms for developing, testing and approving new drugs and healthcare tools are footprinted on the Western biomedical model, with technical and financial requirements that are beyond the reach of poorer practitioners and innovators.

In the case of **traditional medicine**, a concerted effort is needed to reach out to practitioners, guaranteeing them protection and sharing of benefits, that will allow them to open up their work to the scrutiny and testing required to identify and promote the good and useful content that may be found. This will allow African countries not only to decolonize by gaining greater control of healthcare resources developed by HICs, but also to add local knowledge and potentially add novelties to global health initiatives.

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Finally, another lesson learned across the world from the Covid-19 pandemic is the importance of **investment in public health**. African cities are famous for poor hygiene, sanitation, living conditions and high levels of air-pollution. Some of the public health measures that were put in place to combat the Covid-19 pandemic raised awareness about the importance of simple public health measures like handwashing, cleaning and fumigation of public spaces, ventilation of crowded spaces, and generally, the importance of healthy surroundings. These health gains need to be maintained over the future; investment in healthcare is not only about building new and better equipped hospitals as has been the predominant practice in many countries.

3 None of the above ideas we are proposing will occur in a durable way, leading to effective decolonization, if they are not accompanied by a **micro level** decolonization. Arguably, one of the greatest achievements of European colonization of Africa was to establish Europe—and the European—as the standard to which Africans must conform to be considered as civilized or ‘developed’. This meant delegitimizing and silencing indigenous populations as generators and possessors of knowledge, thus creating a cognitive empire [53] that extends to and goes beyond the realms of health and healthcare. The principal tool through which this was achieved, apart from violence, was education.

Two common characteristics of the colonial educational system, that are still present in many public-school systems in African countries are, first, a pedagogical system that insists more on uncritically acquiring knowledge and skills than generating knowledge and challenging established patterns. Second, a disproportionately Eurocentric curriculum, as was recently decried by students during the 2015 #RhodesMustFall demonstrations in South Africa. [54] The cumulative effect of this form of education is epistemicide; the killing, silencing, annihilation, or devaluing of non-European knowledge systems.

Micro level decolonization requires revisiting the **educational curricula** to ensure that African educational systems are able to equip students with the knowledge and capacity to engage meaningfully with their local contexts whilst at the same time being innovative and self-confident enough to contribute to global conversations and developments. Needless to say, this ideal that we envisage is not easy and will require investment and long-term planning.

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On the path of decolonization, the words of the Ghanaian poet, Kofi Awoonor, are worth keeping in mind each time difficulties and challenges make the path seem impossible:

(...)

Returning is not possible
And going forward is a great difficulty
The affairs of this world are like the chameleon feces
Into which I have stepped
When I clean it cannot go.
I am on the world's extreme corner,
I am not sitting in the row with the eminent
But those who are lucky
Sit in the middle and forget
I am on the world's extreme corner
I can only go beyond and forget.

(*Songs of Sorrow*, Kofi Awoonor).

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This commentary was commissioned by the **Covid–19: The Social and Human Costs of Pandemic Response** project of the Global Health Justice Partnership of the Yale Law and Public Health Schools and supported by Open Society Foundation.
