

OPENNESS AND TRANSPARENCY IN COVID-19 FINANCING, VACCINE PROCUREMENT AND DEPLOYMENT: A COMPARATIVE ANALYSIS FROM SELECTED AFRICAN COUNTRIES

Research paper series

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Report 2 from the series of research into transparency, integrity, corruption or accountability in the global financing or deployment of COVID-19 vaccines.

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INTRODUCTION

Covid-19 has brought unprecedented global turmoil leading to millions of infections and deaths. Public procurement is a core element of government responses to the pandemic. In the bid to stop the pandemic, it is critical to secure and deliver lifesaving Covid-19 tools across the health pillars. Extant evidence has, however, shown that public procurement is generally prone to corruption, notably pharmaceutical and health-sector-related procurements which historically have been associated with higher corruption risks (Gaitonde *et al.*, 2016; Kohler and Dimancesco, 2020; Chang, Rusu and Kohler, 2021). There are indications that Covid-19 may have further increased the risk of procurement corruption with a large inflow of funding disbursed hurriedly and urgently. A strong case has been made on how disasters and crises generally raise the risk and opportunity for corruption (UNODC, 2020; Erameh and Ojakorotu, 2021; Sanderson *et al.*, 2022), as crisis situations create opportunities to circumvent existing anti-corruption measures.

The flood of corruption scandals that have arisen from the Covid-19 pandemic are a demonstration of the corruption risks in procurement. In Africa, Covid-19 brought about widespread corruption scandals, especially in procurements, with corruption allegations happening across several jurisdictions. For instance, South Africa's and Zimbabwe's Ministers of Health were both accused of abuse of office in the award of Covid-19 contracts and were consequently removed from office (Aikins, 2022). In Uganda, public officials were found to have inflated the prices of food relief items, and the Kenya Medical Supplies Authority was enmeshed in the misappropriation of US\$400 million in the procurement of medical equipment (Aikins, 2022). In Nigeria, Covid-19 food relief items were hoarded, leading to massive warehouse looting across states and cities, following a narrative that the groceries meant for the citizen are being hoarded or used to further political ends/patronage.

This study is motivated by the research gaps on Covid-19 procurement and the need to analyse and shed light on the extent of openness in Covid-19 vaccine procurement. Research on Covid-19 vaccine financing, procurement and deployment is scarce in Africa. Information on financing, procurement details and processes, deployment, and access to information relating to them is opaque, and there is a huge knowledge gap. The information that is publicly available is scattered across media, government platforms, and processes, hidden and not accessible in a way that can be useful for knowledge and advocacy. This study aims to fill some of these gaps by collating, analysing, and documenting the nature of openness and transparency in the Covid-19 financing, procurement and vaccine deployment using data from Ethiopia, Ghana, Kenya, Nigeria, Senegal, and South Africa.

The study is focused on three main questions. The first is 'What is the nature of Sub-Saharan African (SSA) countries' multilateral agencies financing for the Covid-19'? Covid-19 is an unprecedented health emergency with global implications. Prior to Covid-19, African countries already suffered from chronic health sector underfunding, and they were often heavily reliant on donor support to provide essential health services. During the Covid-19 pandemic, African government received support from the International Financial Institutions (IFI). The funding supports usually in form of budget support and loans from multilateral organisations including the International Monetary Fund (IMF), The World Bank and the European Union. This question relates to assessing IFI funding support for Covid-19 and determining the extent that money from IFI can be tracked past the announcements and how this compares across selected African countries.

The second question is: How open are the vaccine procurement contracts? To mitigate Covid-19 spread and impact, governments have been spending huge amounts of public funding in closed emergency

procurement processes which are especially susceptible to corruption. We aim to assess where information can be found on the key contract items, and how accessible the information is to the public. Where information is unavailable, to what extent does this represent a risk or opportunity for corruption? Finally, the third question focuses on the corruption risks in vaccine deployment and specifically on how corruption manifests itself in the vaccine deployment, as ultimately, for a successful pandemic response, the vaccines also need to be successfully administered.

This study has a clear regional focus. Sub-Saharan Africa offers a Covid-19 dimension that is arguably different from most other parts of the world. Covid-19 infections, death patterns, vaccine procurement, and vaccine deployment manifested differently. The Covid-19 infections and death patterns were lower compare to countries in Europe, and this has been attributed to low testing, early response, previous experience and existing pandemic capacity and community resilience (Sotola, Pillay and Gebreselassie, 2021). In addition, Africa remains a region where corruption is pervasive despite considerable efforts over the last decades to curb corruption. Covid-19 vaccine financing, procurement, and deployment may experience an untypical pattern of corruption, contributing to the low public confidence and vaccine uptake. In August 2022, only about 22% of Africans have received the full initial vaccination protocol (i.e., two doses) (Africa Centre for Disease Control, 2022; Our World in Data, 2022), and there have been global challenges across the chains of deployment that have led to limited vaccine access. A substantial part of the stock-pilling occurred through regional arrangements involving global and regional development agencies, that is, the AVATT & COVAX alliances (Africa Centre for Disease Control, 2020, 2022). Over 2.8 billion vaccines were obtained through these alliances, and not all African countries have independently procured vaccines (World Health Organization, 2022).

A study of these issues can help not only to advance knowledge generally on procurement corruption and how to tackle it, especially in a pandemic, but it can also help save more lives. A poorly executed or corrupted vaccine procurement and deployment reduces equitable access to the vaccine and thus can lead to the loss of lives.

Furthermore, this research can also add value in providing a useful evidence base to help civil society actors advocate for better fiscal transparency and improve public trust. To achieve herd immunity, a large share of the population must be vaccinated. Vaccinating such a high number of people hinges on enough people trusting the programme to seek vaccination, which they are less likely to do if there is good reason to believe that the vaccine was produced, procured and/or delivered by corrupt means. Thus, apart from the good governance benefits that come from a high level of transparency, procurement openness is useful to build public trust, which is essential for the success of the vaccination programme.

The remainder of this report is structured as follows: The next section provides a theoretical discussion of the relevant themes and their interconnectedness. This is followed by a brief discussion of the study design and methodology. Next, we present the study results, followed by a discussion of the findings. The last section provides a conclusion and policy recommendations.

COVID-19, CORRUPTION AND MULTILATERAL FUNDING IN SUB-SAHARAN AFRICA

Corruption is a pervasive challenge in most developing countries. It leads to misallocation of resources and undercuts the achievement of development goals. It has been an object of research and advocacy for a long time, and significant international development resources have been expended on reducing it. One particularly vulnerable area is public procurement. It is estimated that public procurement accounts for between 15-30 percent of GDP in many countries (UNODC, 2013), and procurement bribes constituted more than half of foreign bribery cases analysed by the Organisation for Economic Corporation and Development (OECD, 2014).

The relationship between crises and corruption has been noted in the literature, with studies concluding that crises often increase the risk of corruption (Dupuy and Divjak, 2015; Duri, 2021; Sanderson *et al.*, 2022). Crises response and post-disaster recovery measures have been shown to present opportunities for corruption which may, in turn, build up vulnerability to future disasters (Sanderson *et al.*, 2022). Humanitarian, economic and health interventions often create a perfect storm for corruption to thrive. COVID-19 created global turmoil, with countries imposing emergency rules and systems. Though the spread, infection, and death rates vary across Africa (Figure 1), it has, however, created substantial social, economic, and public health turmoil to justify intervention. The comparatively lower infection and death rates on the continent have been linked to early response, existing epidemiological capacity, and regionally pooled interventions (Lamptey, 2020; Sotola, Pillay, and Gebreselassie, 2021). Covid-19, however, still poses a significant challenge on the continent, including the persistent corruption risks. Covid-19 further opens up lots of windows for corruption as funds are being reallocated to containment and palliative measures.

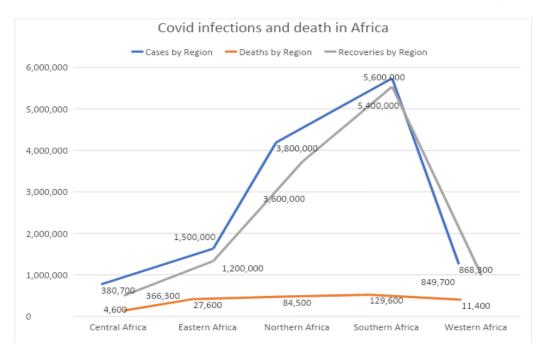


Figure 1 Covid-19 infections, recoveries, and death in Africa (March 2020-Aug 2022

Data Source: Africa Centre for Disease Control (August 2022)

Historically, bilateral and multilateral organisations are common funding sources in developing countries. Over the years, international development support has emerged as a non-negligible source of funding for public goods. In health, budgetary allocation is low and poor in much of Africa, and funding support from the international financial systems is often sought to fight public health crises. This was the case for earlier cases like Ebola and HIV/AIDS. But corruption has been associated with these efforts and was identified to have played a role in the inability to quickly contain Ebola in Liberia and Sierra Leone, where diversion of relief funding and supplies was a major undermining factor in Ebola mitigation measures (Dupuy & Divjak, 2015). The audit report for the Sierra Leonean Ebola response shows a high

level of mismanagement in the disbursement of donations made to the government towards the Ebola relief efforts and other contract irregularities (Dupuy & Divjak, 2015). Evidence was provided that the appropriate procurement procedures were not followed, procurement procedures were widely disregarded with payments made to private individuals rather than to organizations and duplicated and undocumented payments for supplies and sensitization (Dupuy & Divjak, 2015).

There has been increased public scrutiny on international organisations and a rising standard of accountability in the use of development resources (Chang, Rusu, and Kohler, 2021). For example, the Global Fund to Fight AIDS, Tuberculosis and Malaria was enmeshed in corruption scandals in the forms of procurement fraud, contract irregularities, and drug theft that eventually lead to the initiation of a pooled procurement mechanism to improve procurement quality and reduce procurement fraud (Chang, Rusu and Kohler, 2021). Recent analysis shows that the measures reduced the corruption irregularities associated with the Fund (Chang, Rusu and Kohler, 2021).

Significant amounts of international funding have been allocated towards the Covid-19 mitigation: The International Monetary Fund (IMF) and World Bank created a window of support for developing countries from which Sub-Saharan Africa benefited. But the extent to which these funding mechanisms are transparent is not obvious, and reports from some NGOs show transparency is an issue in managing these funds (CovidfundAfrica, 2022). Experience from the past also supports that such funds can be mismanaged and misallocated (Dupuy & Divjak, 2015).

The main corruption concern would most likely not lie with the IFIs, as there are usually systems and processes put in place that limit the corruption risks on their end. In their Covid-19 funding mechanisms, the IFIs recognised the risk of corruption and raised concerns about the fund not meeting its objective. Therefore, the IMF specifically asked countries to spend all needed, but they should keep the receipt (Wendling *et al.*, 2022).

"Notwithstanding the need for speed and flexibility, the design of the support package should follow standards of transparency. This is needed to maintain public support and build institutional legitimacy, ensure the effectiveness of the package, and avoid any misappropriation of funds disbursed in an emergency situation" (Wendling et al., 2022).

The measures suggested to be put in place include allowing for parliamentary scrutiny, securing legal authorization for policy measures, specifying crisis-related measures in the budget with clear eligibility criteria and ensuring granularity of information. An optimal procurement quality cannot be achieved in the presence of one-sided openness and transparency. It is not sufficient for IFIs to adhere to the best transparency standards. There is a need for mutual transparency and accountability on part of the partner countries using the fund.

The health sector ranks among the sectors with the highest corruption levels and is technically complex (Cohen, Mrazek and Hawkins, 2007). Their products are lucrative, and the final buyers, patients, and their families are vulnerable and often have low bargaining power. In addition, there is a booming market for illegal sales such as counterfeits and substandard products. The sector is highly regulated for obvious reasons, and the sector currently works through a complex interplay and interface between the private and public sectors. In essence, there are multiple corruption red flags when public procurement is being undertaken in the health-related sector, during a public health emergency, and in the continent with an overall high level of corruption.

There have been public procurement reforms in recent times across most parts of Africa following the global anti-corruption movement and evidence that stringent disclosure is a remedy to corruption. In recognition of the role that transparency can play in limiting corruption in public procurement, many countries in the region reformed their procurement laws and procedures and deployed tools that ease access to procurement documents and information (Chêne, 2012; Adam, Dávid-Barrett and Fazekas, 2020; Ozor and Nyambane, 2020). These reforms are nascent, and the extent that these reforms have taken root is not obvious. While the legal framework establishing the procurement procedure has been strengthened, and there are open platforms in place for publishing procurement information, there is still a prevalence of corruption in the form of tender fraud, mismanagement, collusion, and bribery. This suggests there is still a gap between law and practice.

In addition, whilst these reforms are oriented towards achieving good governance outcomes, the core elements of these reforms, such as open contracting and a competitive bidding process, seem to have been promoted as cost-saving tools rather than as accountability mechanisms. This has implications for their implementation, especially in emergencies and crises. Adam et al. (2020) stated that framing procurement reform as cost-saving and efficiency tool may make it more palatable and thereby enjoy wider public support than when framed as an accountability tool. One implication is that the accountability value will be under-marketed. In research terms, little is known about how much the procurement reforms are robust to crises, the level of adherence, especially in a public health crisis, and to what extent they are side-stepped. Covid-19 provides an opportunity to examine these questions and assess to which extent the procurement procedure is robust to crises, especially in the context of weak institutional structure and poor accountability norms.

METHODOLOGY AND STUDY DESIGN

This study is based on a comparative design that collates, analyses, and compares the data on the key questions across selected African countries. The countries included in the study were purposely selected to incorporate the sub-regions in Sub-Saharan Africa. The countries included in the study are Ethiopia, Ghana, Kenya, Nigeria, Senegal, and South Africa.

The data for this study was collected in two phases. In the first phase, data was sourced and collated through an online search for information relating to IFI Covid-19 funding support and financing and vaccine procurement details. The process included direct online searches including key websites, procurement portals and dashboards, Covid-19 portals and dashboards, media publications, and reaching out to NGOs and other sector stakeholders. We also received audit, parliamentary and government reports.

In the second phase, we conducted Key Informant Interviews (KII) with purposively selected samples. Our KII samples were stakeholders in healthcare in each country. Overall, we conducted 12 KIIs with government officials, public health professionals, NGO representatives and public health researchers (see appendix 4 for breakdown).

The data was analysed descriptively and thematically. Categories, typologies, and comparatives were created as informed by the data. The analysis of the interviews was in the form of content analysis, and we looked out for thematic patterns on the possible manifestation of corruption and the potential for corruption. The analysis of the KII was anonymised entirely.

PRESENTATION OF RESULTS

This section presents the result of the research. The results are presented in sub-sections arranged in line with the research questions.

IFI Covid-19 support in Africa

We found that African countries received substantial Covid-19 funding support in various forms from the International Financial Institutions (IFI). From our research, all major IFI (IMF, The World Bank and the European Union) signed and implemented Covid-19 response projects and programmes. Tables 1 and 2 provide summary information indicative of the range of donor support and international multilateral instruments supporting Covid-19 response efforts.

From March 2020 onwards, 40 African countries received financial assistance in the aggregate sum of \$36.5 billion from the IMF through its various instruments, mainly the Rapid Financing Instrument, the Rapid Credit Facility and the Extended Credit Facility (IMF, 2022). The World Bank, the African Development Bank (AfDB) and the European Union (EU) similarly provided Covid-19 support.

	IMF: Instruments & sum	World Bank
	Rapid Financing Instrument	
Ethiopia	\$411 million	\$207 million
	Rapid Financing Instrument	
Ghana	\$1 billion	\$430 million
	Rapid Financing Instrument;	
	Rapid credit facility, &	
	extended credit facility	
Kenya	\$3.083 billion	\$130 million
	Rapid Financing Instrument	
Nigeria	\$3.4 billion	\$400 million
	Rapid Financing Instrument;	
	Rapid credit facility, &	
	extended credit facility	
Senegal	\$1.05 billion	\$134 million
	Rapid Financing Instrument	
South Africa	\$4.3billion	\$480 million
Sourco: IME 2022		

Table 1: IMF & World Bank Covid-19 Financing in Selected Countries

Source: IMF 2022

We found that IFI funding supports constitute a substantial share of Covid-19 financing in most African countries. As provided in Table 2, it constitutes up to 69% and 49% of Kenya and South Africa's Covid-19 budget respectively.

The health sectors in most African countries were ill-prepared to handle the Covid-19 pandemic due to chronic underfunding over the years and poor governance. On average, Sub-Saharan Africa spends 1.9% of its GDP on health compared to the global average of 5.9% (Covid 19 Transparency and Accountability Project (CTAP), 2022). The financial help from the IFIs is crucial to ending the pandemic. Even if the high-income countries can halt the spread of the virus, poorer countries will continue to pose a global threat

until a similar halt is brought to the virus, as the vaccines are necessary to reduce viral transmission and reduce the risk of mutations.

	Covid-19 Budget	IFI support
Ethiopia	\$232.2 Million (ETB 12.3 Billion)	\$894 million
Ghana	\$3.33 Billion (GC 19.3 Billion)	\$1.4 billion
Kenya	\$4.81 Billion (KSH 572.7 Billion)	\$3.213 Billion
Nigeria	\$1.4 Billion (N500 Billion)	\$4.08 Billion
Senegal	\$1.7 Billion (CFA 1064 Billion)	\$1.28 Billion
South Africa	\$9.7billion (R145 Billion)	\$4.8 Billion

Table 2: Share of IFI support in Country	y Covid-19 financing
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Sources: The funds are collated from the major IFIs: The World Bank, IMF, EU and AfDB. The national Covid-19 budget is sourced from available figures from government documents and press releases.

The openness of vaccine procurement in Africa

Low contractual transparency permeated Covid-19 vaccine procurement across the continent. By the time the research was completed, none of the countries in our study had published their vaccine contracts, neither fully nor in redacted format. The contract document for the regional procurement arrangement, COVAX, and AVATT are not published either. We sought information on key contract items, like pricing and volume, contract value, and delivery timelines, and found limited procurement information on these contract items. Furthermore, in most cases in which information was found, it was made available through third party sites rather than through public procurement platforms or the vaccine manufacturers¹. The contracts for the COVAX and AVATT were similarly not published. While there is copious information on COVAX and AVATT that shows an indication of adherence to the best procurement standards, and low corruption risk, the lack of publication of the contracts with manufacturers constitutes transparency and accountability weaknesses in the procurement process.

Table 3: The extent of procurement contract information publicly available

	COVAX	AVATT	Bilateral Procurement	
Ethiopia	Partial	Partial	no	
Ghana	Partial	Partial	no	
Kenya	Partial	Partial	no	
Nigeria	Partial	Partial	no	
Senegal	Partial	Partial	no	
South Africa	Partial	n/a	no	

¹ Appendix 2 provides basic information on these sources.

Table 3 summarises the extent to which the procurement information is available. The procurement contracts are not available on the designated procurement publication platforms, but we adjudged there is partial compliance with the requirements of open contracting, as some information is available from other sources, e.g., media and dashboards. The nascent procurement norm is anchored on the standard that public procurement data must be open by law and in practice, which means related documents must be placed in the public domain or under liberal terms of use with minimal restrictions. It must be published in electronic formats that are machine-readable and non-proprietary so that anyone can access and use the data using common software tools. Data must also be publicly available and accessible on a public server without password or firewall restrictions (World Bank Open Data Tool Kit, 2022) - standards which none of our focus countries complied with.

Most countries instituted emergency measures as part of their Covid-19 response, movement and gathering restrictions, economic and social interventions, and also emergency or ad-hoc procurement processes or bodies. This can also be in activation of the emergency procurement processes already provided for in the legal frameworks. Emergency procurement is necessary in situations in which there is a need for rapidly procuring large quantities of an in-demand good or service, as was the case with medical equipment such as personal protective equipment (PPE) for health workers during the pandemic, or later, the vaccines. In emergency responses, an open tendering process is too time-costly, which allows for public procurement regulations to be ignored in this case. Emergency contracting hence at least partially accounts for the observed limitation in the transparency in vaccine procurement. We could not establish if the lack of publication were due to a non-disclosure agreement or similar conditions stipulated by the vaccine manufacturers, as this is not currently publicly disclosed in our focus countries. Experience from Europe and America, however, suggests this could be the case as contracts have non-disclosure clauses or redact important contract information (Transparency International Health Initiative, 2021).

Most Sub-Saharan African countries entered into bilateral vaccine agreements with manufacturers, and these country-level arrangements complemented the regional arrangements with a varying share in their national vaccine stock (Tables 4 & 5). In these cases, once again, contractual secrecy takes precedence, as the full contract information is not publicly available, and important information such as the contract value, delivery timelines, and price per dose remains unknown.

	Ethiopia	Ghana	Kenya	Nigeria	Senegal	South Africa
Contract	Not	Not	Not	Not	Not	Not
document	published	published	published	published	published	published
Contract	Not	\$88.8m	Not	Not	\$3.7 m (2	Not disclosed
Value	disclosed	(GC775.8m) ²	disclosed	disclosed	billion CFA)	

Table 4: The extent of openness of Bilateral Covid-19 Vaccine Contract

² This was extracted from the Minister of Finance's statement to the Parliament of Ghana in response to parliamentary inquiries.

Timetable for delivery	partial information	partial information	partial informatio n	partial informatio n	partial information	partial information
The						
quantity bought (%						
of country vaccine						
stock)	29	8	21	1	8	77
Price per		\$19			\$18	
dose	No info	(Sputnik-v)	No info	No info	(Sinopharm)	\$10 (Pfizer)

Sources: Africa Centre for Disease Control, 2022; UNICEF, 2022

Table 5 provides information on the range of vaccine manufacturers with which bilateral contracts were reached across the continent. It indicates a substantial spread of manufacturer access and quantity of vaccine as per each arrangement. We extrapolated the quantity of vaccines bought independently from sources other than country-level public data. Third-party sources, especially dashboards and portals from global health organisations by African Centre for Disease Control (Africa CDC), the World Health Organisation (WHO), and UNICEF, provide relevant information.

						South
	Ethiopia	Ghana	Kenya	Nigeria	Senegal	Africa
			AstraZeneca		AstraZeneca	
	AstraZeneca	AstraZeneca	Sinopharm	AstraZeneca	Sinopharm	
	Sinopharm J&J	Sputnik V	SputnikV	Sinopharm	SputnikV	
Vaccine	Moderna	J&J	J&J	Biontech	Pfizer	Pfizer
types	Biontech	Pfizer	Pfizer	J&J	J&J	J&J
AVATT						
(%)	3	19	5	20	9	n/a
(,	-		-		-	
COVAX						
(%)	68	72	74	79	83	23
Bilateral						
(%)	29	8	21	1	8	77
(//)	29	5	<i>2</i> '	•	5	,,

Table 5: Vaccine types & share of vaccine procurement arrangements

Sources: African Centre for Disease Control (Africa CDC), the World Health Organisation (WHO), UNICEF

We found limited vaccine pricing information from third-party dashboards and documents. The UNICEF's Market Dashboard provides pricing information for limited vaccines and countries (UNICEF, 2022). The

pricing information provided in Table 6 indicates the varying prices of the vaccines. It is not comprehensive, of limited analytical use, and of limited accessibility to the country's public who may be interested in such data. The lack of pricing information may however indicate price obfuscation.

	Vaccine type	Price
COVAX	Ad26.cov2.5	\$7.5
African Union	Ad26.cov2.5	\$10
Ethiopia	No information	
Ghana	Sputnik	\$19
Kenya	No information	
Nigeria	No information	
Senegal	Sinopharm	\$18.6
	Pfizer	\$10
South Africa	Covishield	\$5.25
	Comirnaty	\$10

Table 6: Varying prices of Covid-19 Vaccine in Africa

Source: (UNICEF, 2022)

We compare the level of contract transparency and openness between the vaccine and other health pillars using the ACT-A (Access to Covid-19 Tools- Accelerator) pillars. The ACT-A is a collaborative platform that provides an end-to-end global solution to Covid-19 countermeasures (World Health Organization, 2022). The platform is made up of global health organisations, governments, and NGOs and is hosted by the World Health Organisation. The four health pillars are Diagnostics, Therapeutic, Vaccine and Health Systems Connector (HSC). We assess and compare funding levels against the openness in their procurements.

We found a contrasting degree of openness between the funding support and degree of openness in procurement for the different pillars. The extent of openness was assessed based on amount of procurement information available per pillar relative to other pillars. When the full contract was available and accessible, the level of openness was categorised as "fully open"; partial openness was assigned when the basic procurement details like value, company name and delivery date and timeline were available, and "not open" means that neither the contract nor basic information were available in the public procurement portal.

As shown in Table 7, we found that procurement related to the other pillars is relatively more open, and procurement information is likely to be available publicly than in the vaccine pillar. For instance, procurement for PPE, construction and refurbishing of hospitals are updated on the procurement portal of the Nigeria Bureau of Public Procurement (Bureau of Public Procurement, 2022). This is similar to Senegal, where the Senegal Public Procurement Regulatory Authority (*Autorite De Regulation Des Marches Publics* (ARMP)) conducted an audit of Covid-19 procurements conducted as part of the Force Covid-19 programme (Guèye, 2021).

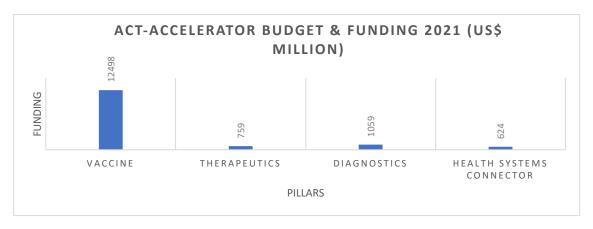
Table 7: Pillars of Funding in the ACT-A Objectives

		The openness of the
Pillars	Funding support Level	procurement

Vaccine	High	Not open
Diagnostic	Low	Partially Open
Therapeutic	Low	Partially Open
Health Systems	Low	Partially Open

There is generally more funding support for the vaccine pillar than for the other pillars. More than 60% of total donor support for the ACT-A is for vaccines, and it is the only pillar close to being fully funded (Darlberg, 2021). Figure 2 presents the share of fund for the health pillars.





Source: (Darlberg, 2021)

The higher openness and transparency in other health pillars can be linked to the different procurement environments for vaccine and the non-vaccine pillars.

Corruption and corruption risk in vaccine deployment

We find low corruption manifestation in the vaccine deployment generally across the countries. Respondents reported petty corruption in the form of bribes for access, especially to get ahead of the queue; fake Covid-19 certificates; preference for single dose vaccine leading to bribes and/or preferential treatment in Ethiopia; and informal arrangements for private health facilities to access the vaccine, in which private hospitals obtain vaccine doses through individual and private arrangement with government hospital staff. The preference for single dose means patients are willing to bribe to receive single dose like Johnson & Johnson. All countries seem to have anticipated possible rollout corruption following the experience associated with earlier Covid-19 procurement, like PPE, and thereby ensured more scrutiny.

We found that corruption risks differ between the initial and later stage of deployment, both in perception and manifestation. At the initial phase of the rollout, there were concerns around limited vaccine availability as Africa seemed to be at the end of the vaccine queue. That reality, coupled with the initial vaccine rollout plan that prioritised access to the vaccine by exposure to the virus e.g., for frontline

workers, age, and medical conditions, created a risk for bribe for access. However, corruption manifestation was low according to our interviews and fizzled out as more vaccines became available. In the later stage, most of the corruption risks initially anticipated did not end up materialising, and new concerns emerged around the low uptake and hesitancy.

Based on our sample countries, African vaccine access is shaping up to create limited corruption risks as there are diverse and multiple vaccine sources, including the COVAX and AVATT, independent procurement arrangements with manufacturers, and donations mainly from Europe and North America. There were also donations towards vaccines by private and philanthropic organisations and NGOs. We found limited corruption opportunity and prevalence, as most countries have relatively robust vaccination policies and strategies in place (see Table 8), and deployment followed a clear path.

This study finds that Covid-19 vaccination relies heavily on the existing routine immunisation infrastructure, and there are already considerable capacities across the focus countries due to years of ongoing immunisation against multiple diseases, especially for children. The critical vaccine rollout infrastructure already exists and is in use and is only in a few cases considered inadequate and in need of expansion. For instance, Ghana's cold chain capacity required minimal expansion to the existing cold chain infrastructure, in only 15 out of 228 districts in the country (Ministry of Health Republic of Ghana, 2021). In essence, the existence of an already available end-to-end supply and logistics system limits the corruption risks that otherwise could have cropped up.

	National Vaccination policy/	National vaccine deployment	Koy bigblights	% partial vaccinated (full
E.I. .	strategy	strategy	Key highlights	vaccination) ³
Ethiopia	Yes	Yes	Ethiopia planned to vaccinate 20 % of the population by March 2022	10.8 (30.1)
Ghana	Yes	Yes	The overall target population for the plan is 17,459,408 persons which have been segmented as the deployment will be done in a phased approach.	32.1 (22.2)
Kenya	Yes	Yes	Kenya plans to fully vaccinate 19 million adults (70% of the adult population) by end of June 2022 and the entire adult the population of 27 million people by the end of 2022. It also aims to fully vaccinate 2.9 million teenagers aged 15-17 years (50% of the population) and the entire the teenage population of 5.8 million by end of December 2022.	22.5 (16.6)
Nigeria	Yes	Yes	There are four phases in the National Deployment and Vaccination Plan (NDVP); an initial prioritisation of Healthcare Workers (HWs) and frontline workers, Phase 2: Remaining health workers and persons 50 years and above, and Phase 3: those with underlying medical conditions and Phase 4: Other target population based on disease burden	13.6 (9.7)
Senegal	Yes	Yes	Senegal is planning to vaccinate about 90% of a targeted 3.5 million people. Health workers and high-risk persons between 19 and 60 are expected to be vaccinated by the end of the year 2021.	10.7 (5.9)
South Africa	Yes	Yes	The rollout of the vaccine will take a three-phase approach that begins with vaccinating the most vulnerable groups. The target is to vaccinate 67% of the population by the end of 2021	23.5 (31.4)

There were limited variations in the pattern of corruption. Respondents reported the existence of informal channels through which health workers colluded to provide vaccines to private hospitals,

³ As of August 2022

hotels, and business organisations. At the initial stage of the rollout, vaccines were only administered in government facilities and there was no formal arrangement for private clinics. Across Africa, only governments have been importing vaccines, and the reasons included because it was subsidised and would not be profitable for private importation. This created a problem of access for individuals and organisations that may wanted private access (e.g. hotels wanting to provide a vaccination service for their clients, big business organisations for their executives). In Nigeria, there was initially no formal arrangement for private access to the vaccine through private health clinics or facilities, so private organisations with the desire or intent to mass vaccinate at their sites could not arrange this formally. The government subsequently allowed private hospitals to provide the vaccine and charge a fee. A similar arrangement exists in most other countries.

There are deployment challenges that essentially mirror the existing challenges in the rollout system. Since countries deployed through the existing health infrastructure for vaccinations, the corruption risks present in this system will automatically also apply to the Covid-19 vaccine rollout. However, there is a difference between adult and childhood vaccination. Whilst most Sub-Saharan African governments are experienced with immunising children, this is less the case for the immunisation of adults. This is especially relevant as vaccinations for adults have mainly been available at an extra cost, whilst the Covid-19 vaccine is given out for free. Using the same deployment infrastructure hence can create new problems and room for under-the-table dealings.

DISCUSSION

Sub-Saharan African countries received substantial IFI funding support to implement their Covid-19 responses. The support was provided in various forms, including credits, loans, and donations. The information on these support mechanisms is generally available and open to all through the various IFIs but it is difficult to trace the adherence to transparency and accountability commitments that were put in place by the IFIs beyond that. Media information concerning the approval and release of these funds is copiously available, but a trace beyond that stage often reaches a dead-end. African bureaucracies are still not very open to sharing revenue and spending information, but parliamentary investigations and appropriation documents mention IFI as a revenue source. For instance, there was a parliamentary hearing into Covid 19 expenditure in Ghana (Ministry of Health Republic of Ghana, 2022) which provided additional procurement information to the public.

We found that there are information gaps pertaining to vaccine procurement across the countries. Contractual transparency is low, and information on key aspects like pricing are hard to source. Lack of information on key factors like pricing particularly can create pricing obfuscation, which could further enliven the perception that vaccine manufacturers may be exploiting the buyers using their higher bargaining power and discriminatory pricing.

A case can be made that Covid-19 procurements were not done with contractual openness in mind. Though the clear 'need for speed' justified the use of emergency procurement processes, there were no subsequent efforts to adhere to basic open contracting norms and publish the vaccine contracts belatedly. Efforts to access this information were further rebuffed, suggesting contractual openness was not considered important. This seems to be the case in general, beyond our sample countries, as previous reports have reported similar findings of limited openness in Covid-19 procurement (Covid 19 Transparency and Accountability Project (CTAP), 2021). Furthermore, the vaccine procurement is more obscure compared to other pillars of emergency procurement. Various countries' open procurement portals were updated with information on diagnostics, therapeutics, and health systems pillars procurements, whilst there is virtually no information on vaccine purchases. We found some information on PPE, testing materials and associated Covid-19 spending on open procurement portals, but no similar information for the vaccine. There is a similar lack of contract information on regional and pooled vaccine arrangements.

Examining some of the reasons for why there is a clear lack of adherence to open procurement standards in vaccine procurement, we first found that, most Sub-Saharan African countries obtained the majority of their vaccine stock – in total over 70% - from the pooled procurement arrangement, COVAX and AVATT (Africa Centre for Disease Control, 2022). These arrangements both have their strength and weakness. The most significant strength is how it is helping poorer countries to access vaccines at a lower price and is thereby increasing vaccine equity, since access would have been difficult otherwise as a country's wealth is the major determinant of vaccine access. These regional procurement arrangements are perhaps the best route to guarantee poorer nations sufficient vaccine access, as otherwise, they would be outpriced. However, the fact that the contracts are not publicly available is a clear lack of transparency. The consequences of this are higher corruption risks due to uncertain delivery schedules, the risk of governments overpaying for the vaccine as they cannot compare prices, and lack of opportunity for civil society to hold governments and pharmaceutical companies to account. Ideally, their full contractual information should still be available in line with relevant procurement laws.

The key findings of the study are highlighted below.

Substantial donor support

Donor support is a major part of the Covid-19 response in African countries, but the way in which the money is spent cannot be traced beyond the media announcement and press releases. Information on the various instruments deployed to help with Covid-19 is more accessible, but tracing the funding beyond that point met limited success. This is the case for all the countries included in the study.

Low contractual transparency in Covid-19 vaccine procurement

We found that there is low contractual transparency and high contractual secrecy in vaccine procurement. No country in our sample published any of their vaccine contracts, neither fully nor in a redacted form. Key aspects of contracts, like pricing or indemnification clauses, that are of high public interest, are not available. Some of the justifications for not publishing the contracts may include concerns about leakage of proprietary or vaccine engineering information, but this is a weak argument as citizens and NGOs are unlikely to be interested in vaccine proprietary information. Rather, what could be of public interest may include contract values, delivery periods and prices per dose in order to assess whether the country is overpaying for the vaccine in relation to other countries. A similar analysis from Europe and North America shows a similar lack of contract publication (Transparency International Health Initiative, 2021). Analysis from the United Kingdom (UK) identified contracts worth over 3.7 billion UK pounds whose award merits further investigation (Transparency International UK, 2021).

Similarly, regional procurement mechanisms (COVAX & AVATT) did not publish their contracts. Hence, it seems like transparency is currently not a priority in the rollout of the Covid-19 vaccine and commercial interests are being prioritised in the process, which is why trying to push through a Freedom-of-Information-Request (FOIR) will most likely not be successful.

Expedited procurement raises corruption risk

A key feature of Covid-19 response across the countries is the expedited procurement process. Many countries enacted emergency laws or activated an emergency procurement process; some procurements were done through a specialised agency or task force. Since time is of the essence, it is reasonable to deviate from holding competitive processes that typically take longer. There was already a legal basis for this in most countries, and there was also an enactment and/or activation of emergency laws. But expedited procurement process meant that the in-built mechanisms to hinder corruption in the process were sacrificed. Investigations in Kenya revealed contract irregularities with KEMSA, as detailed below, as the medical agency flouted tender laws in the Covid-19 procurement. Table 9 below provides some similar cases across some other countries. Hence, it is evident that there is a need to develop new anti-corruption measures specifically for emergency procurement.

Corruption allegations and scandals

Corruption allegations and scandals have been a permanent feature in the pandemic. Table 9 describes how corruption scandals and allegations associated with Covid-19 compare between pre-Covid-19 and during Covid-19. Based on the KII and media information, we assessed corruption level relative to the typical perception of corruption in the countries.

	Corruption level in Covid-19	Case/example
Ethiopia	Normal	The vaccine is free, however, people bribe for access to single-shot vaccines from North America and Europe because their supply is limited. The main corruption scandals are linked to people obtaining vaccination certificates without getting vaccinated, and diversion of vaccines that come from North America and Europe in order of priority to relatives and friends. In addition, the humanitarian relief or temporary social assistance programmes were susceptible to targeting errors and corruption in Ethiopia. In July 2022, Ethiopia police arrested the head of the country's humanitarian agency, the National Disaster Risk Management Commission (NDRMC) based on allegations of corruption. It was alleged that he colluded with an NGO to sell relief food and clothing items (Africanews, 2022).

Table 9: Corruption in Covid-19

		There was only one reported case of three health workers in the capital, Accra, who stole Covid-19-vaccines. This occurred in early 2021 when the country just started the vaccine deployment priority groups.
Ghana	Normal	There was another reported case of health workers forging Covid-19 vaccine cards. Interestingly, the case was uncovered by the National Intelligence Bureau (NIB), after some intel and the culprits were investigated before the court.
Kenya	Higher	In August 2020, massive irregularities at the state-run Kenya Medical Supplies Authority (KEMSA) were revealed, including flouting procurement regulations and misusing public and donor funds earmarked for the country's COVID-19 response. Investigations revealed that KEMSA flouted several laws in the awarding of tenders worth about \$72 million.
Nigeria	Normal	There were corruption cases with Covid-19 relief items and palliatives that were hoarded by politicians. Upon discovery, the scandal led to break-ins into warehouse across many states.
Senegal	Normal	Considering all of the funds and resources that were available to the government for combatting and responding to the COVID-19 pandemic, 68% of Senegalese surveyed by the Afrobarometer say that resources intended for the pandemic response were lost to government corruption and that they did not trust their government, and were worried that politicians were using the pandemic to increase their power.
South Africa	Higher	Corruption allegations and investigation have been initiated by the SIU for more than R5billion South African Rands Covid-19 response procurements. Key government officials have been accused of corruption, including the former Minister of Health and presidential assistants, including abuse of office on Covid-19 tenders, and they were removed.

Sources: Dabang and Ukomadu, 2020; Quinot, 2021; Africanews, 2022; Aikins, 2022

Corruption risk in deployment mirrors existing corruption

We find that corruption in the vaccine deployment mirrors the existing corruption in the health system, but its prevalence is low. Sub-Saharan African countries have benefitted from having a well-established vaccination infrastructure and vaccine management system in place already. Our key informant

interviews showed that corruption practices have evolved around access to vaccines and preference for single-dose vaccines, emerging secondary markets for vaccines and the acquisition of immunisation certificates without getting vaccinated.

The latter has been identified as an issue by respondents in in Nigeria, Ethiopia and Kenya. It has been exacerbated by governments mandating proof of vaccination for access to travel, events and services. There were also reports of bribes in exchange for access to vaccination, especially at the start of the programme, and preference for single-dose vaccine types. The staff at vaccination centres was reported to be receiving bribes to facilitate quick access to the vaccine. In Ethiopia, there was a preference for single-dose, leading to bribes for access.

...it is difficult to get single-use vaccines from [North] America and Europe. This opens a window of opportunities for corruption and unnecessary kickbacks to get those vaccines. Even though the government commands private hospitals to provide the vaccine free of charge to their clients, you know that they are profitmaking institutions, and it is hard to follow the government's rule of free charge.... (R2E)

Some of the respondents mentioned that they were aware of solicitation of bribes (monetary bribes, inducement, extortion etc.) in exchange for the vaccine, especially at the initial stage of the rollout.

Private sector access is poor in most African countries which constitutes another corruption risk. Vaccine procurement is conducted at the national level, and in most of the countries, the government acts as the sole distributor. However, there is a lack of clarity on how private hospitals get the Covid-19 vaccine from the government, which was particularly obscure at the start of the rollout. This opened a window of opportunities through the creation of informal channels.

Sub-Saharan African countries have substantial experience in vaccination and immunisation, especially for childhood vaccines. This experience has proven very useful as the existing deployment infrastructure was adapted, ranging from cold chain storage, vaccine logistics, and vaccine distribution to Primary Health Centres to the administration process itself. Without this experience and infrastructure, there would have been a huge capacity gap, and most African countries would have a more pronounced vaccination struggle.

CONCLUSION

This report is based on analyses of the nature of the Covid-19 vaccine procurement and deployment in Ethiopia, Ghana, Kenya, Nigeria, Senegal, and South Africa. The impact of Covid-19 is largely being measured in terms of deaths and infections. This study shows that fiscal and procurement transparency is also a casualty of the pandemic. The continent received substantial funding support from the IFIs, but the extent of fiscal transparency is low in that the allocation and spending are difficult to trace beyond the media. There is a low prevalence of corruption in the deployment, and the real struggle is in getting more people to get the vaccine. Though Sub-Saharan Africa has seen comparatively limited Covid-19 deaths and infections, the low contractual transparency for Covid-19 vaccine procurement is concerning especially given its reputation as a continent with a high prevalence of corruption.

Complete eradication of corruption is aspirational, especially in developing countries where corruption plays a functional role in solving day-to-day problems. There have been significant pushbacks from anticorruption movements in recent decades with countries designing and implementing tools to aid fiscal transparency. Public procurement is one of the areas with significant implementation of tools toward procurement transparency. The contractual secrecy surrounding the Covid-19 vaccine procurement that has been reported in this study is reversing this gain. The nascent procurement norm was bypassed in practice and law, based largely on the argument for a speedy response to the crisis. This suggests that the procurement reform is not robust to crisis and procurement transparency is seen as easily expendable in emergencies.

Transparency and accountability are important elements in building public trust, and in this case could also help in promoting vaccine uptake. Accountability and transparency should not be an added victim in crisis and emergencies, and crisis procurement should equally emphasise accountability.

RECOMMENDATIONS

Procurement systems need to be robust to crisis and crisis response: Findings from this study highlight the weaknesses of national procurement laws and systems, especially concerning accountability and transparency regulations. The process and corruption checks should not be made expendable in emergencies, and crisis procurement must not 'eat transparency for lunch'. There needs to be increased awareness and advocacy surrounding the upkeep of contractual transparency during public health emergencies.

Corruption risk assessment and crisis procurement: In order to effectively build on the learnings from this pandemic, a standardised procedure for emergency procurement needs to be developed. This can include incorporating corruption risk assessments and mitigation strategies into procurement practices for emergency responses.

Sector specific anti-corruption strategy and targeted intervention: Most African countries have anticorruption strategies, but they are often generic and not sensitive to sectoral nuances which makes them ineffective and toothless (Sotola and Pillay, 2022). Evidence suggests that corruption spaces are different by sector, so, curbing the space requires targeted efforts (Hutchinson *et al.*, 2020; Sotola and Pillay, 2022).

Global pandemic preparedness incorporating anti-corruption: The Covid-19 pandemic is amplifying existing deficits in global health governance. This work has shown a corruption dimension of this deficit at the country and regional levels. Kohler (2021) observed that this deficit is leading to collective loss and is in need of Mutual Collective Accountability (MCA) (Kohler, 2021). The conversations on global pandemic preparedness and the Pandemic Preparedness Treaty that is currently underway need to take the corruption risks in emergency responses into account and make clear provisions for an adherence to transparency and accountability standards.

Contractual transparency is beyond legal reform: There have recently been procurement reforms in many African countries. These procurement laws come with an obligation to make procurement more transparent and accountable, with governments being obligated to publish the contracts and only include redactions if strictly necessary and legally justified. However, a norm is yet to evolve on the expectation of transparency. The reforms are mostly in the form of changes to the procurement laws and processes, but the lack of transparency in vaccine procurement shows that this has not yet thoroughly translated into practice.

Collective action for procurement actors: There are often multiple different actors with differing roles involved in procurements. The lack of publication of the vaccine contracts may be linked to the nature of

the vaccine market and the behaviour of vaccine manufacturers. Vaccine manufacturers have higher bargaining powers, and there is a need for a system or framework to ensure companies are not singly focused on maximising their profits. Collective action may be a way to keep pharmaceutical companies in check, especially those with huge bargaining powers, to ensure that the vaccine is first and foremost treated as a public good which underlies public interests.

Consistent vaccine availability will reduce deployment corruption: Currently, we are observing a reduced corruption prevalence in the vaccine deployment. This can be linked to many factors, including detailed preparation for the rollout and increased availability of the vaccine. Some public management lessons therefrom include that detailed preparation is important, and a reliable, consistent supply of medical solutions is vital to curb demand-driven corruption.

Data limitation: The secondary data used in this report comes from multiple sources/portals/dashboards created and maintained by third-party organisations. While we ensure to source only from credible, well known public health or research organisations, the changing nature of Covid-19 pandemic may also affect the data.

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Appendix 1

Covid Vaccine procurement arrangement in selected Africa countries

	Ethiopia			Ghana	
Vaccine Arrangement	Inclusion	Volume	Vaccine Arrangement	Inclusion	Volume
COVAX	Yes	40,197,630	COVAX	Yes	23,199,860
AVATT	Yes	2,035, 200	AVATT	Yes	6,180,600
Bilateral	No info	16,900,000	Bilateral	Yes	2,688,000
Total		59,132,830	Total		32,068,460
	Kenya			Nigeria	
Vaccine			Vaccine		
Arrangement	Inclusion	Volume	Arrangement	Inclusion	Volume
COVAX	Yes	25,733,250	COVAX	Yes	84,600,000
AVATT	yes	1804800	AVATT	Yes	21,600,000
Bilateral	yes	7,524,550	Bilateral	yes	970,000
Total		35,062,600	Total		107,170,000
-					
	Senegal			South Africa	
Vaccine			Vaccine		
Arrangement	inclusion	Volume	Arrangement	inclusion	Volume
COVAX	yes	4,958,158	COVAX	Yes	9,269,910
AVATT	yes	550,800	AVATT	No	
Bilateral	yes	535,000	Bilateral	yes	42,900,000
Total		6,043,958	Total		52,169,910

Source: This data is from multiple portals and dashboards. (Africa Centre for Disease Control, 2022; Launch & Scale Speedometer, 2022)

Appendix 2

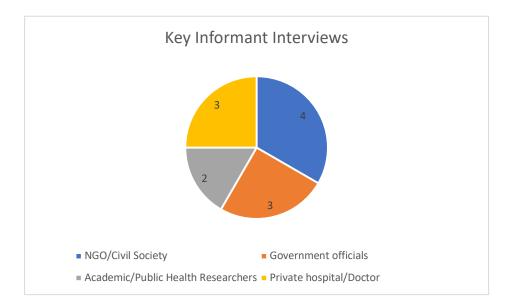
Source	Information Provided	URL
COVID-19 Market Dashboard	Provide information on COVID-19 vaccine and therapeutics markets	https://www.unicef.org/supply/covid- 19-market-dashboard
Africa CDC COVID-19 Vaccine Dashboard	Provide information on vaccine coverage, supply, utilisation, policy and targets	https://africacdc.org/covid-19- vaccination/
Launch & Scale Speedometer	The site tracks vaccine purchases by countries. The site is maintained by Duke Global Health Innovation Centre, USA	https://launchandscalefaster.org/covid -19/vaccinepurchases
IMF-WHO COVID-19 VACCINE TRACKER	It is a joint database by the IMF and WHO tracking vaccine doses secured by countries and channels	https://www.imf.org/en/Topics/imf- and-covid19/IMF-WHO-COVID-19- Vaccine-Tracker

Appendix 3

Openness and availability of vaccine procurement contracts

	Emergency procurement process	procurement contract available	Extent that contract info is available
Ethiopia	yes	No	partial
Ghana	yes	No	partial
Kenya	yes	No	partial
Nigeria	yes	No	partial
Senegal	yes	No	partial
South Africa	yes	No	partial

Appendix 4





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