Open Societies Initiative for West Africa (OSIWA)

COVID-19 Strengthening Partnerships for Accountability and Equity Report

OPEN SOCIETY Initiative for West Africa



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Abbreviations

ACT	Access to COVID-19 Tools Accelerator
AMC	Advance Market Commitment
CEPI	The Coalition for Epidemic Preparedness Innovations
COVAX	COVID-19 Vaccines Global Access
CoVDP	COVID-19 Vaccine Delivery Partnership
CSO	Civil Society Organizations
FGD	Focus Group Discussion
GAVI	Global Alliance for Vaccines and Immunisation
IAVG	Independent Allocation of Vaccines Group
ICIR	International Centre for Investigative Reporting
JAT	Joint Allocation Taskforce
KII	Key Informant Interview
NCDC	Nigeria Centre for Disease Control
NPHCDA	National Primary Health Care Development Agency
NVDP	National Vaccine Deployment Plan
PHC	Primary Health Care
SCM	Supply Chain Management
WHO	World Health Organisation



Executive Summary

The study considers how a critical element of health governance-accou ntability and equity-fared in the country and among Citizen groups, Civil Society and the government in the distribution of COVID-19 vaccines. This report is a study of the Nigerian experience, regarding crucial aspects of governance in Nigeria, post-COVID-19 pandemic. Specifically, the study considers how a critical element of health governance-accountability and equity-fared in the country and among Citizen groups, Civil Society and the government in the distribution of COVID-19 vaccines.

The study also appraises the drivers of what appears to be a hesitation to take the vaccine by citizens, which has been revealed by Olawade, et al.¹ (2022), Sato (2022)² and the American Centre for Disease Control (2022)³. Taking a qualitative 'Action Research' orientation looking to understand the impact of these issues, this study takes as given the contribution that lessons from the Civil Society space can positively impact governance processes. Utilising primary data from in-depth interviews and focus group discussions, from across the country and secondary data from journal articles and policy papers, the study assessed national

systems responsible for vaccine distribution and international efforts for vaccine provision. In addition, it examined the nature of inequity and accountability in health governance, as it concerned vaccine distribution for vulnerable groups and frontline workers; evaluated Civil Society Organisations/citizens monitoring efforts involved in managing the pandemic (relating to vaccine distribution and uptake); and interrogated norms, social values, citizen perceptions and socio-psychological contexts responsible for the challenge of vaccine hesitancy, among other things.

The study also evaluated the efforts by 'fact-checkers' in their campaign to influence the harm that misinformation on the virus and the vaccine are perpetuating. The study closed with recommendations for the various governance actors and a conclusion on potential means to reduce hesitancy and improve vaccine uptake.

¹⁻ See generally, Dlawade, D.B., Wada, O.Z., Odetayo, A., Akeju, O.O., Asaolu, F.T., and Owojori, G.O. (2022). COVID-19 Vaccine Hesitancy Among Nigerian Youths: Case study of students in Southwestern Nigeria. In the Journal of Education and Health Promotion. 2022;11:244. Published by Wolters Kluwer - Medknow. Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9514270/pdf/JEHP-11-244.pdf.

²⁻ See generally, Sato, R. (2022), COVID-19 Vaccine Hesitancy and Trust in Government in Nigeria. In the Journal of Vaccines 2022, 10, 1008. Available at: https://www.ncbi.nim.nin.gov/pmc/articles/PMC3317906/pdf/vaccines-10-01008.pdf.

³⁻ See "CDC Investigates COVID-19 Vaccine Hesitancy and Supports Vaccine Rollout in Nigeria", by the Centre for Disease Control, on August 29th, 2022. Global Health: Success Stories. United States Government. Available at: https://www.cdc.gov/global/health/stories/2022/nigeria-vaccine-rollout.html#print.

Introduction





The events of late 2019 and 2020, the world over, were grim times of panic, of lockdowns and deaths but were also a period where nations' government and governance arrangements were put to the test and exposed for their true nature. Nigeria, one of Africa's most populous countries, is a case study in democracy and civil society. With a tumultuous history and a return to democracy in 1999, the nation has had a bumpy ride towards the improvement of government service delivery and citizen participation in governance. The events of late 2019 and 2020, the world over, were grim times of panic, of lockdowns and deaths but were also a period where nations' government and governance arrangements were put to the test and exposed for their true nature. Nigeria had its fair share of challenges and learning experiences, with a surplus of the former. For one, the pandemic exposed the lack of effective

governance in the distribution of vaccines, with uptake being much slower than envisioned. The government was meant to play a specific role in managing the pandemic and the latter ought to be assessed by the government itself and Civil Society. However, there are other stakeholders that also played a role in the distribution of the vaccines, in addition to the end users of the vaccine. While the impact and influence of the government and private sector are crucial, of interest to this study, is the role of Citizens and Citizen groups in relation to the issue of accountability and equity. This means that the study takes more of a demand-side approach to the problem as defined.





Conceptual Framework

This report is sponsored by the Open Societies Initiative for West Africa (OSIWA) as part of a grant for studies into the impact of the COVID-19 pandemic on governance structures with the West African sub-region. Research on Accountability and Equity in a context that is simultaneously global and local means that concepts and variables used will straddle more than one discipline. For instance, the evaluation of global vaccine supply chains brings up issues of international relations and how the relative power of developed countries influences the manner in which vaccines are distributed among less developed ones.

Again, the interrogation of social norms of *pluralistic ignorance* in the public view that vaccines are harmful but the private view that vaccines may not be as harmful as said to be (or the reverse), stemming from social psychology. Be that as it may, the study will take as its overarching approach and methodology, *Action Research*. The latter has been described as a method that involves the subjects of research in a manner that accepts their significance and impact on the object of study. This object of study is motivated by a practical orientation towards change that sees all participants as valid collaborators in research. Reason and Bradbury describe Action Research as: "[A] family of practices of living inquiry that aims, in a great variety of ways, to link practice and ideas in the service of human flourishing. It is not so much a methodology as an orientation to inquiry that seeks to create participative communities of inquiry in which qualities of engagement, curiosity and question-posing are brought to bear on significant practical issues".4

Perhaps, more importantly, the reason why this study adopts the Action Research framework as its approach is due to the fact that the report is sponsored by the Open Societies Initiative for West Africa (OSIWA) as part of a grant for studies into the impact of the COVID-19 pandemic on governance structures with the West African sub-region.

4- See Reason, P., and Bradbury, H. (2008). Introduction. P. Reason and H. Bradbury (Eds.) In the SAGE Handbook of Action Research: Participative Enquiry and Practice (pp. 1 to 11). SAGE Publications Ltd., Los Angeles, London, New Delhi, Singapore





This study takes partnerships to mean those relationships that exist between the actors in the policy space that impact the orientation of decisions and the process of decision-making. Hence, the most pragmatic approach to studying the issue at hand that not only would ground the problem and provide solutions but also bear the mark of interactive and citizen-focused research was Action Research.

Considering the issue of improving the governance of vaccine distribution and uptake, the concepts of partnerships, accountability and equity have to be described. This ensures that the evaluations and arguments can be traced back to well-defined concepts.

This study takes *partnerships* to mean those relationships that exist between the actors in the policy space that impact the orientation of decisions and the process of decision-making. These are restricted to relationships and platforms that bring together the government, Civil Society Organizations (CSO), Citizen groups, sovereign states, and multilateral organizations.

Though there are differences in the level of influence the relationships depict, the basic assumption is that they provide a significant form of impact on governance.

This study takes its description of (health) *equity* from Braveman and Gruskin, as: "[T]he absence of systematic disparities in health (or in the major social determinants of health) between social groups who have different levels of underlying social advantage/disadvantage that is, different positions in a social hierarchy.



Inequities in health systematically put groups of people who are already socially disadvantaged at further disadvantage with respect to their health. Inequities in health systematically put groups of people who are already socially disadvantaged (for example, by virtue of being poor, female, and/or members of a disenfranchised racial, ethnic, or religious group) at further disadvantage with respect to their health".⁵

This definition highlights the social context of health and the potential for distances to be created between advantaged and less advantaged groups. This study takes *accountability* in health to be the obligation to answer questions regarding decisions and/or actions and the availability and application of sanctions for illegal or inappropriate actions and behaviour uncovered through answerability.

Research on accountability models takes the view that in situations where 'best practices' are not already mainstreamed, practitioners should instead focus on the use of: "[E]fficient and effective management of agreed-on innovative interventions (or programs or processes), including the placing of a higher premium on evaluation and modification as new information becomes available".

Yet, one could also claim that the operation of those innovative interventions and evaluation methods, could create the circumstances for 'best practices' to emerge. This is where they are able to provide feedback and system strengthening by the creation of pockets of efficiency and effectiveness.

5- See Braverman, P., and Gruskin, S. (2003). Defining Equity in Health, at p. 254. In the Journal of Epidemiology and Community Health, Vol. 57:254 to 258. Available at: https://jech.bmj.com/content/jech/97/4/254.full.pdf?htr/Version=3.

⁶⁻ See Binkerholf, D. (2003). Accountability and Health Systems: Overview, Framework, and Strategies, at p. 5. Bethesda, MD: The Partners for Health Reformplus Project, Abt Associates Inc. Available at: https://documentcloud.adobe.com/cc2d04de-710d-4142-94d3-963b66a714e5.

See the National Academy of Medicine: Institute of Sciences. (2011). For the Public's Health: The Role of Measurement in Action and Accountability, at p. 118. The National Academies Press; Washington, D.C. Available at: https://www.ncbi.nlm.nih.gov/books/NB/k209716/pdf/Bookshett, NBK209716.pdf.

Statement of the Problem



This study investigates the Nigerian experience of COVID-19 vaccine distribution specifically with regard to accountability and equity (or otherwise) of the process. The challenges in large-scale Supply Chain Management (SCM) for health services is a problem of concern the world over (World Bank, 2022)[®] and the consequences for the poor and vulnerable persons, especially in Africa, are particularly acute:

The COVID-19 pandemic brought to light the difficulty (namely corruption risks, procurement issues and inefficiency, among other things)°in providing comprehensive services in developing and developed countries.

⁸⁻ See "Tackling Health Care Supply Chain Challenges Through Innovations In Measurement", by Kathryn Andrews Ruchika Bhatia & Jigyasa Sharma, on November 17th, 2022, in 'Investing In Health', World Bank Blogs. The World Bank. Available at: https://blogs.worldbank.org/health/tackling-health-care-supply-chain-challenges-through-innovations-measurement.

See generally Meloni, S., et al. (2017). Drug Resistance Patterns Following Pharmacy Stock Shortage In Nigerian Antiretroviral Treatment Program. In the Journal of AIDS Research and Therapy, (2017) 14:58. Available at https://aidsrestherapybiomedcentral.com/counter/pdf/10.1186/s12981-017-0184-5.pdf.

¹⁰⁻ See generally the United Nations Office on Drugs and Orime (UNDOC), (2020), COVID-19 Vaccines and Corruption Risks: Preventing Corruption In the Manufacture, Allocation and Distribution of Vaccines. Policy Paper, COVID-19 Response. United Nations. Available at: https://www.unodc.org/documents/corruption/COVID-19 Policy_paper_on_COVID-19_vaccines_and_corruption_risks.pdf.



As of December 2022 only **60.7** *million* Nigerians have been vaccinated. For Nigeria, the task of not only optimising the supply chain for health services but ensuring it is accountable and equitable for poor, vulnerable and underserved groups and communities is of serious concern: as of December 2022 only 60.7 million Nigerians have been vaccinated." Government policy on vaccine supply and distribution exists¹²(questions of proper implementation of policy notwithstanding) and care is being taken to ensure that the process is done transparently.¹³

However, reports⁴ have shown that lack of accountability which enhances inequity in the distribution of vaccines is a problem. Civil Society actors⁶ have raised concerns about the ability of the country to effectively and equitably distribute vaccines.

This study intends to engage with whether or not this was achieved. The apparent swift evolution of the virus¹⁶also adds urgency to this investigation. In addition, there are issues of vaccine hesitancy among members of the public⁷ that can hamper the attainment of herd immunity that require investigation as well as an evaluation of local efforts at reducing misinformation by fact-checking organisations and the media. This aims to understand the issues above, how they interact and affect citizens (so as to recommend means and methods to address the problems, engage citizens and communities) and provide evidence for further efforts, in ensuring the post-pandemic goes to decline with key stakeholders involved.

11- See "COVID-19 Vaccination Update". The National Primary Health Care Development Agency (NPHCDA). Available at: https://nphcda.gov.ng/

12- See the Federal Ministry of Health: Department of Food and Drug Services. (September 2021). Nigeria Vaccine Policy-1st Edition, 2021 (Section Eight). Federal Government of Nigeria. Available at: https://www.health.gov.ng/doc/Nigeria-Vaccine-Policy-2021.pdf.

13- The National Primary Health Care Development Agency (NPHCDA) was recorded to have partnered with the Independent Corrupt Practices Commission (ICPC). Reports state that: "According to the NPHCDA, the ICPC's monitoring efforts will cover critical areas of theft, embezziement, service provision, advisory, and vaccine availability". See "NPHCDA partners ICPC to monitor COVID vaccine distribution", by Maryam Abdullahi, on April 12th, 2021, in the Cable (Online) Newspapers. Available at: https://www.thecable.ng/nphcda-partners-icpc-to-monitor-covid-vaccine-distribution.

14- See generally "Accountability and Corruption in Vaccine Provision At Primary Health Centres in Nigeria", by Charles Orjiakor, Prince Agwu, Aloysius Odii, Pamela Ogbozor, Obinna Onwujekwe, Eleanor Hutchinson, Martin McKee and Dina Balabanova, on May 2719, 2021, in Health Systems Global (Online), Available at: https://healthystemsglobal.org/news/accountability-and-corruption-h-vaccine-provision-at-primary-health-centres-in-nigeria-kessons-for-covid-19/.

- 15- See *COVID-19 Funds: CSDs Demand Audit, Launch Second Accountability Project In 10 African Countries", by Abbas Jimoh, on February 16th, 2022, in Daily Trust (Online) Newspapers. Available at: https://dailytrust.com/covid-19-funds-csos-demand-audit-launch-second-accountability-project-in-10-african-countries/
- 16- See "Two years later, coronavirus evolution still surprises experts. Here's why", by Priyanka Runwal, on March 11th, 2022, in 'Coronavirus Coverage: Science'. National Geographic (Online). Available at: https://www.nationalgeographic.com/science/article/two-years-into-the-pandemic-covid-19-still-surprises-experts.
- 17- See generally, Wondi, C., et al. (2022). Conspiracy Theories and Mainformation about COVID-19 in Nigeria: Implications for Vaccine Demand Generation Communications. Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8830779/pdf/main.pdf.

Methodology





The total number of Focus Group Discussants was 100 persons and the states visited were: Lagos, Enugu, Sokoto, Adamawa, Kaduna and Rivers. This study adopts a mixed-methods approach to the research questions. The data gathering was qualitative and empirical in nature, with doctrinal and desk research approaches (secondary data, i.e., journal articles, policy briefs, and critical texts, among others) to investigate how partnerships for accountability and equity can be strengthened. Qualitative (primary) data was acquired through Key Informant Interviews and Focus Group Discussions, issued to community stakeholders, across the country's geopolitical zones.

The qualitative data gathering (the Focus Group Discussion Guide and Key Informant Interview Guide are available in the appendix, below) spanned the months of August to October of 2022. The total number of Focus Group Discussants was 100 persons and the states visited were: Lagos, Enugu, Sokoto, Adamawa, Kaduna and Rivers. In the main, this has the benefit of being a source of evidence for the study but also reiterates the participatory nature of the study. The structure of the report is as follows: the first part will cover the: Executive Summary, Introduction, Conceptual Framework, Statement of the Problem, Methodology, Research Questions, Literature Review and Limitations of the Study.

The second part will treat the issues very directly and have subsections on: Examining the Interface between National Systems for Vaccine Distribution and International Efforts; Accountability and Equity in COVID-19 Vaccine Distribution: Frontline Workers and Vulnerable Groups;

Research Questions

Following the issues and scope raised in the sections above, this subsection will provide the research questions to guide the study. These questions form the basis of the enquiry.



Literature Review





It has been recognised that social accountability (defined as answerability and enforceability) community-based efforts can promote health equity in some contexts but not in all. The strengthening of partnerships for accountability and equity presupposes an approach to assessing the health care system, that involves multiple entities, with differing degrees of interaction, influence and motivations. Because these agents are groups, institutions and firms, they interact within a social framework (this includes norms, acceptable behaviour, the political system and the legal framework).^{1®}

This means that assessments of accountability¹⁹ and equity, can take a *social* perspective.

In addition, it has been recognised that social accountability (defined as answerability and enforceability) community-based efforts can promote health equity in some contexts²⁰ but not in all.²¹ A review of the literature regarding accountability and equity in the health sector, recognises 4 to 8 stakeholders, depending on the formulation: the government; health service providers (i.e., Nurses, Doctors, Lab Technicians, etc.); insurance firms; CSOs; donor agencies; and users of health care (or citizens).²²

¹⁸⁻ See generally, Gilson, L., Lehmann, U., and Schneider, H. (2017). Practicing Governance Towards Equity in Health Systems: LMIC Perspectives and Experience. In the International Journal for Equity and Health, 16, Article number: 171. Available at: https://equityhealthi.biomedcentral.com/counter/pdf/10.1186/s12939-017-0665-0.pdf.

¹⁹ On the reason why accountability in the health sector can be approached from a social lens, Kwaga, Unezulke and Ayobamidele state that: "This is because this formulation of accountability creates and normalises a form of accountability that rests on engagement in and by the civic space and actors therein. It takes, as its central actors-i.e., those who will carry out the engagement-regular citizens, NGOs, the Media and International Institutions and the latter are the parties to elicit accountability from the government and service providers. See generally, Kwaga, V., Unezulke, L., and Ayobamidele, A. (forthcoming). Best Practices in Health Sector and Government Commitment to Healthcare. COVID-19 Transparency and Accountability Project. BuddT Foundation, Connected Development and Oxide Consultan. Niende.

See Hammonds, R., Hanefeld, J., and Ooms, G. (2019). Accountability as a Driver of Health Equity, at p. 11. The World Health Organisation (WHO)-Regional Office for Europe. Available at: https://apps.who.int/iris/bitstream/handle/10666/312282/9789289054096-eng.pdf?sequence=1&isAlowed=y.

²¹⁻ See generally, Robinson, R.S., and Adams, T. (2022). Building Social Accountability to Improve Reproductive, Maternal, Newborn and Child Health in Nigeria. In the International Journal of Equity in Health, 2022, 21: 46. Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8988322/pdf/12939_2022_Article_1643.pdf.

²²⁻ See Kwaga, V., Umezulike, L., and Ayobamidele, A. (forthcoming). Best Practices in Health Sector and Government Commitment to Healthcare, op.cit.

CSOs are an

integral part of the health service system but for them to provide meaningful input, they must improve their capacity as it relates to rigour, citizen and government interfacing and coalition building. Flowing from this and differences in contexts, service dynamics, quality of care, efficiency of health service provision and problems in the health care system; the foregoing all throw up methodological challenges for research²⁰. As the interventions and outcomes, from the relationships among these agents within their contexts are non-linear, approaches to accountability and equity must be multidisciplinary and adopt mixed methods²⁴.

Due to the context-dependent, socio-political and uncertain nature of research on accountability and equity, scholars have advocated for specific frameworks (in terms of methodology, processes and tools, among others)²⁶ for addressing the improvement of health services of which vaccine delivery is a sub-component. In the main, CSOs are an integral part of the health service system but for them to provide meaningful input, they must improve their capacity as it relates to rigour, citizen and government interfacing and coalition building. The literature on the other aspects of this study are treated more deeply in the relevant sections below.

23- See Boydell, V., McMullen, H., Cordero, J., Steyn, P., and Kiare, J. (2019). Studying Social Accountability in the Context of Health System Strengthening: Innovations and Considerations for Future Work, at p. 1. In the Journal of Health Research Policy and Systems (2019) 17:34. Available at: https://health-policy-systems.biomedcentral.com/counter/pdf/10.1186/s12961-019-0438-x.pdf?pdf=button%20sticky.

24- See generally, Craig. P., Dieppe, P., Macintyre, S., Mchie, S., Nazareth, I., and Petticrew, M. (2008). Medical Research Council Guidance. Developing and Evaluating Complex Interventions: The New Medical Research Council Guidance. BMJ. 2008;337:a1655. Available at: https://doi.org/10.1136/bmj.a1655; and also Hawe, P., Shiel, A., and Riley, T. (2004). Complex Interventions: How Out of Control can a Randomised Controlled Trial Be? BMJ. 2004;328(7455):1561-3. Available at https://doi.org/10.1136/bmj.a28.7455.1561.

25- See generally, See Danhoundo, G., Nasiri, K., and Wiktorowicz. (2018). Improving social accountability processes in the health sector in sub-Saharan Africa: A Systematic Review, at p. 497. In BMC Journal of Public Health (2018) 18:497. Available at: https://bmcpublichealth.biomedcentral.com/track/pdf/10.1186/s12889-018-5407-8.pdf.

Limitations of the Study

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Noting the various issues and their respective contexts, the study may have sacrificed depth for breadth, as a laser focus on one of the foregoing issues would have permitted richer insights and interpretations of the phenomena under consideration.

This study aimed to understand the nature of Vaccine accountability and equity as it concerned the distribution of vaccines. It also attempted to evaluate the challenges of vaccine hesitancy (which have their respective drivers) and the role of fact-checking the misinformation that was rife following the emergence of the virus and the introduction of vaccinations.

Noting the various issues and their respective contexts, the study may have sacrificed depth for breadth, as a laser focus on *one* of the foregoing issues would have permitted richer insights and interpretations of the phenomena under consideration. As it stands, the study may have more breadth than depth.

Again, the 'Action Research' methodological paradigm, though suitable for Civil Society donor-funded research, may prioritise advocacy and agenda setting over scientific rigour as opposed to *neo-positivist* paradigms.

On the matter of methodology, though the study was mainly qualitative, the number of Focus Group Discussants could have been higher, to ensure the most varied opinions, beliefs and positions were gathered; the latter would have provided a richer picture and perhaps more validity.⁵⁵

On the matter of data sources, the study may have benefitted from interviews involving government officials (especially those of the National Primary Health Care Development Agency-NPHCDA), who would have provided a unique perspective on their experiences regarding vaccine distribution and the combatting of misinformation.

26 It is difficult to say if Focus Group Discussions can ensure "validity" for qualitative research, as the latter term comes from quantitative research that tends to have its distinct worldview and epistemic orientation. For more on this debate, see Hennick, M (2014), Focus Group Discussions, at p. 176. Understanding Qualitative Research. Oxford University Press, 198 Madison Avenue, New York, NY 10016.





An Examination of the Interface between National Systems for Vaccine Distribution and International Efforts



266.38 thousand confirmed cases of COVID-19 as of December 2022 **102.29m** Vaccine doses administered as of December 2022



As of December 11th 2022, a total of 102,292,641 vaccine doses have been administered²⁷ and bearing in mind that the vaccine is meant to be taken more than once, one can have a fair picture of the progress that has been made. As of December 23rd, 2022 there had been 266,381 confirmed cases of COVID-19 with 3,155 deaths, reported to the World Health Organisation (WHO).²⁸

²⁷⁻ See "Nigeria". World Health Organisation (WHO) Global Emergency Dashboard (Online), op.cit.

²⁸⁻ See "Nigeria". World Health Organisation (WHO) Global Emergency Dashboard (Online). WHO COVID-19 Homepage. Available at: https://covid19.who.int/region/afro/country/ng.



Nigeria's framework for vaccine distribution was built upon an existing government framework (the Presidency, Secretary to the Government of the Federation and the Ministry of Health. among others), with the addition of new processes. policies and reporting lines.

It bears mentioning that Nigeria's framework for vaccine distribution was built upon an existing government framework (the Presidency, Secretary to the Government of the Federation and the Ministry of Health, among others), with the addition of new processes, policies and reporting lines.

This was complemented by donations from the Nigerian private sector, multilateral organizations and the international community. For instance, from the COVID-19 Vaccines Global Access (COVAX) facility-a collaboration between a number of international organisations.

Some of the organisations include: the Global Alliance for Vaccines and Immunisation (GAVI), the Coalition for Epidemic Preparedness Innovations (CEPI), WHO, UNICEF, and the World Bank, among others. Birthed as the vaccines pillar of the Access to COVID-19 Tools (ACT) Accelerator, "COVAX had an initial goal of making at least 2 billion doses of safe and effective COVID-19 vaccines available by the end of 2021, enough to protect high-risk individuals, including health care workers and vulnerable people".²⁹

Within COVAX is a *Facility* that, among other things, acts as the mechanism that pools together resources from high-income countries for the procurement of vaccines that would be equitably shared among participating countries-some of whom are more 'at risk'.³⁰

The principles that ensure that this sharing is done equitably are covered by the *Fair Allocation Framework*. The latter acknowledges that previous pandemics had situations where lower-income countries could not access vaccines due to delays caused by "Overwhelming demand, scarce manufacturing capacity, high costs and the lack of a global allocation mechanism".³¹

²⁹⁻ See "COVAX Facility Governance Explained", by Aurelia Nguyen, on November 13th, 2020. In 'Vaccines Work: The Science Behind COVID-19'. GAVI. Available at

³⁰⁻ Or "low coverage", which may imply low income status. See "COVAX Facility Governance Explained", by Aurelia Nguyen, op.ctt

³¹⁻ See the World Health Organisation (WHO). (2020). WHO Concept For Fair Access and Equitable Allocation of COVID-19 Health Products, at p. 5. Final working version 9 September 2020. Available a



the WHO advised that: "Once a vaccine(s) is shown to be safe and effective and authorised for use, all countries receive doses in proportion to their population size, albeit initially in reduced quantities." The principles that inform the Framework are: *Solidarity, Accountability, Transparency, Responsiveness to public health needs, Equity and Fairness, Affordability, and Collaboration and Regulatory and procurement efficiency.*³²

However, the 'fair allocation' of vaccines within countries, is to be treated differently but the WHO advised that: "[O]nce a vaccine(s) is shown to be safe and effective and authorised for use, all countries receive doses in proportion to their population size, albeit initially in reduced quantities. This will enable every country to start by immunizing the highest-priority populations. In the second phase, vaccines would continue to be deployed to all countries so that additional populations can be covered according to national priorities".3

From the foregoing quoted text, it can be observed that countries are all expected to follow the protocol that looks after specific groups. After this phase, countries are at greater liberty to determine how the vaccines would be distributed. But what does fair allocation look like? The WHO goes on to state that: "[F]air allocation of vaccines will occur where an initial proportional allocation of doses to countries until all countries reach enough quantities to cover 20% of their population; and a follow-up phase to expand coverage to other populations. If severe supply constraints persist, a weighted allocation approach would be adopted, taking account of a country's COVID threat and vulnerability."³⁴

The COVAX Facility has specific arrangements for its management and governance, with the latter consisting of the GAVI Board³⁵ COVAX Shareholders Council, Advance Market Commitment (AMC) Engagement Group and COVAX Consensus Group. The responsibility for the allocation of vaccines also has two dedicated organs, called the 'Joint Allocation Taskforce' (JAT) and the 'Independent Allocation of Vaccines Group' (IAVG)³⁶

³²⁻ The WHO states that: "The principles are grounded in the right of every human being to the enjoyment of the highest attainable standard of health without distinction of race, religion, political belief, economic or any other social condition". See the World Health Organisation (WHO). (2020), WHO Concept For Fair Access and Equitable Allocation of COVID-19 Health Products, op.cit., at pages 7 to 8.

³³⁻ Ibid, at pages 23 to 25

³⁴⁻ Ibid.

See "COVAX Facility Governance Explained", by Aurelia Nguyen, op.cit. It should be noted that the GAVI Board established an Audit and Finance Committee (AFC) to support the Board in fulfilling its oversight responsibilities in a timely manner, in respect of the Vaccine Allance's financial management; risk and control framework, including internal and at entanal audit; and adherence to appropriate standards of good practices and ethics. Also, the Board established the Market-Sensitive Decisions Committee (MSC) for provide oversight and market earlier or commercially sensitive. The MSDC is responsible for reviewing business terms of proposed agreements with manufacturers to ensure: (i) reasonableness of terms and acceptable level of reputational risks; and (i) availability of resorces to back proposed agreements.

In January of 2022, another COVID-19 Vaccine Delivery Partnership (CoVDP) was formed to support and accelerate in-country delivery in 92 AMC countries, focusing on 34 countries with the lowest coverage rates, Nigeria being one³⁷ Guided by a set of principles," the Partnership also provided for partnership with a wide range of stakeholders, of which CSOs were a part.³⁹ Observations from the data below show that there was a visible improvement in the total number of persons that were

administered doses, as a result of the initiative. The data below, shows a change in the status of Nigeria, from a country that had less than 10% vaccinated per 100 persons in February of 2022, to one that had less than 10% to 19% within a few months. However, this growth may have slowed down in the month of September. Also of note is the revision in the country's vaccine strategy, which was achieved as a result of the work of the Partnership in Nigeria.[∞]

Figure 1. (as of February 2022)



Persons fully vaccinated, per 100 population

Source: COVID-19 Delivery Partnership (CoVDP)

- ee the COVID-19 Delivery Partnership (CoVDP). (June, 2022). UNICEF Executive Board ~2022 annual session (14–17 June 2022) Item 4 (b): Update on the progress achieved through the COVID-19 Vaccine Delivery Partnership, at p. 2. The United Nations Children's Fund (UNICEF); The World Health Organisation (WHO); and GAVI. Available at: rd/media/11431/file/2022 AS-Item 4h-COV/D-19 Vaccine Delivery Partnershin-EN-2022 05 31 odf cef or cutivehos
- es are as follows: National ownership and centrality of countries to define and manage bottlenecks; One plan, one country team, one budget; One country support team dra rt team drawing in global resources to support countr acked by the Partnership and widely disseminated. Se The principles are as follows: National ownership and centrality of countries to define and manage bottlenecks; One plan, one country team, one budget; One country support team drawing in global resources to support rapidly address bottlenecks; Build on existing partner capacities and origination of the municipation and primary healthcare; Key metrics to monitor progress, tracked by the Partnership and widely dissem (COUID-19 Delwery Partnership (CoVDP). (February 2022). Update for the UNICEF Executive Board, at p. 3. The United Nations Children's Fund (UNICEF); The World Health Organisation (WHO); and GAVI. Available at: https://www.unicef.org/executiveboard/media/10176/file/2022-COVID-19_country_readiness-Chalban-PPT-EN-2022.02.21.pdf

See the COVID-19 Delivery Partnership (CoVDP). (February, 2022). Update for the UNICEF Executive Board, op.cit., at p. 4.

e the COVID-19 Delivery Partnership (CoVDP), (June, 2022), UNICEF Executive Board -2022 annual session (14–17 June 2022) Item 4 (b): Update on the progress achieved through the COVID-19 Vaccine De op.cit., at p. 4



Persons vaccinated with at least one dose of COVID-19 vaccine, per 100 population

Source: COVID-19 Delivery Partnership (CoVDP)

Figure 3. (as of September 2022)

Persons vaccinated with full primary series, per 100 people Vaccination - Persons x fully vaccinated per 100 population >=70 60 - 69 40 - 59 20 - 39 10 - 19 <10 No data / not Applicable

Source: COVID-19 Delivery Partnership (CoVDP)⁴¹

See the COVID-19 Delivery Partnership (CoVDP), (September, 2022), UNICEF Executive Board –2022 second regular session (6-8 September 2022) Item 6 (b): Update on the progress achieved through the COVID-19 Vaccine Delivery Partnership, at p. 2. The United Nations Children's Fund (UNICEF); The World Health Organisation (WHO); and CAMA, Naelable at: https://www.nicet.org/executivedown/mode/13161/16162022, SR5-tem - 0-Update, CoVID-170-Tonbare-PFF-IN-Rev-2022.08.31, pdf.

The above data on Nigeria, is perhaps made more emphatic by comments from Ted Chaiban, (Global Lead Coordinator for COVID-19 Vaccine Delivery at UNICEF's COVID-19 Vaccine Delivery Partnership), who states that though the globe (as at 2023) had vaccinated about 60% of its population, less than 13% of them were from low-income countries⁴² This is likely connected to the inequity in the international distribution of the vaccine, that has high-income countries having administered 2.76 billion doses, upper-middle-income countries with 5.38 billion administered doses, lower-middle-income countries having delivered 4.76 billion doses and low-income countries having administered 263.18 million doses (see Figure 4, below).⁴³





Source: Our World In Data

¹²⁻ See Bilss, K (Host). (2023). Pandemic Planet. Centre for Strategic and International Studies. Available at: https://www.csis.org/podcasts/pandemic-planet/ted-chaiban-progress-possible-addressing-global-covid-19-vaccine-inequilies

See Mathieu, E., Ritchie, H., Rodés-Guirao, L., Appel, C., Giattino, C., Hasell, J., Macdonald, B., Dattani, S., Beltekian, D., Ortiz-Ospina, E., and Roser, M. (2020). "Coronavirus Pandemic (COVID-19)". Available at: https://ourworldin.data.org/coronavirus.



More worrisome was the finding that: "It (COVAX) was not transparent about the contracts it made with companies and the prices it paid". Combined, high-income and upper-middle-income countries account for more than 60% of total vaccines administered, as of December, 2022. This inequity in global vaccine distribution, despite the well-intentioned efforts by the COVAX Facility, may also be connected to the shortcomings of the COVAX Facility itself. Yamey, et al., (2022), highlight that the projections by the COVAX Facility, which would have richer nations pay for the vaccine through them (as opposed to directly, from the vaccine manufacturer), were too optimistic.^⁴

Also, many countries have not redeemed their pledges to donate doses to COVAX.⁴⁵ But more worrisome was the finding that: "It (COVAX) was not transparent about the contracts it made with companies and the prices it paid".46 On the extent of engagement of the very countries (and their Civil Societies), it aimed to assist in developing the COVAX mechanism, an independent review found the inclusion to be "insufficient" and the engagement to lack "meaningfulness"." Early in 2022, Amnesty International was far blunter in its comments about the inequity and noted that:



⁴⁴⁻ See Yamey, G., Garcia, P., Hassan, F., Mao, W., McDade, K., Pai, M., Saha, S., Schellekens, P., Taylor, A., and Udayakumar, K. (2022). It is Not Too Late To Achieve Global COVID-19 Vaccine Equity, at p. 2. In the BMJ 2022; 376:e070650. Available at: https://www.bmj.com/content/bmj/376/bmj-2022-070650.full.pdf.

⁴⁵⁻ See Yamey, G., et. al. It is Not Too Late To Achieve Global COVID-19 Vaccine Equity, op.cit., at p. 2.

⁴⁶⁻ Ibid

⁴⁷⁻ Ibid.



It is obvious that the major reason this state of affairs exists is due to the low level of development and income.

"The devastating consequences of collusion between corporate giants and western governments was compounded by health systems and economic and social support crumbling under the weight of decades of neglect. The result was rising poverty, inequality and food insecurity. Nowhere was this felt more clearly and cruelly than in Africa"⁴⁸It bears emphasis, that the number of African countries represented in the lower middle-income and low-income categorisation, are in Africa.

It is obvious that the major reason this state of affairs exists is due to the low level of development and income. In addition, there are specific challenges across the African sub-continent, that range from supply crunches, slow rollout of vaccines, insufficient funds, vaccine safety and hesitancy, using different vaccines, disruptions to essential health services and targeting the most at risk.⁴⁹

For the latter challenge, Nigeria was noted to have taken the important step of registering the most at-risk populations. But whether this had an appreciable impact on the total number of persons requiring vaccination (the demand across the globe, is in excess of 330 million doses, from COVAX alone)[®] will be addressed in more detail, in the sub-section below.

48- See "Sub-Saharan Africa: Millions denied vaccines, deepening inequality and human suffering from conflicts sum up 2021" by Amnesty International, on March 29th, 2022, in Amnesty International (Online) Newspage. Available at: https://www.amnesty.org/en/latest/news/2022/03/sub-saharan-africa-millions-denied-vaccines/.

49- See the World Health Organisation (WHO), Regional Office for Africa. (2021). Risks and challenges in Africa's COVID-19 vaccine rollout. The World Health Organisation (WHO). Available at: https://www.afro.who.in//news/risks-and-challenges-africas-covid-19-vaccine-rollout.

50- See "Press Statement: COVAX calls for urgent action to close vaccine equity gap", by the World Health Organisation, on May 20th, 2022. The World Health Organisation-Geneva/New York/Oslo. Available at https://www.who.int/news/item/20-05-2022-covax-calls-for-urgent-action-to-close-vaccine-equity-gap.

The Nigerian Experience



On March 1st, 2021, the Special Assistant to the Nigerian President on Digital and New media, tweeted that Nigeria's vaccine doses will be delivered in four phases[™] Phase 1 recipients will be front-line health workers and strategic leadership; Phase 2 would be individuals aged 50 years and above; Phase 3 would cover individuals aged 18 to 49 (with relevant medical conditions); and Phase 4 will be the remaining eligible population, made up of individuals ages 18 to 49 (without relevant medical conditions).

Nigeria, following Ghana's received consignment just a month before,⁵² then acquired its first shipment of 3.94 million doses of the vaccine, via the COVAX facility on March 2nd 2021⁵³ The delivery of the Oxford-developed and AstraZeneca vaccines was noted to be: "[A] landmark moment for the country and the COVAX Facility's mission to help end the acute phase of the pandemic by enabling *equitable* access to these vaccines across the world. (emphasis ours)"⁵⁴

⁵¹⁻ See Ogunlesi, T. [@toluogunlesi], (2021, March, 1), "Nigeria Vaccine Rollout Phasing" [Tweet], Twitter, Available at: https://twitter.com/toluogunlesi/status/1366448159384305669?lang-es.

⁵²⁻ See "Getting COVID-19 Shots in Arms: A Vaccine Rollout in Nigeria Like Nothing Before", by Gabriel Oke and Kenni Ndili, on August 14th, 2021, in "Thought Leadership". Nigeria Health Watch. Available at: https://nigeria/healthwatch.com/getting-covid-19-shots-in-arms-a-vaccine-rollout-in-nigeria-like-nothing-before/.

⁵³⁻ See 'Press Release. "COVID-19 vaccines shipped by COVAX arrive in Nigeria", on March 2nd, 2021. Nigeria. The United Nations Children's Fund (UNICEF). Available at https://www.unicef.org/nigeria/press-releases/covid-19-vaccines-shipped-covax-arrive-nigeria.

⁵⁴⁻ See 'Press Release. "COVID-19 vaccines shipped by COVAX arrive in Nigeria"', on March 2nd, 2021, op.cit.



The telecommunication s firm MTN was recorded to have donated **300,000** doses of the vaccine

At the time, the Nigerian government had also entered into deals with the private sector, for the provision of vaccines. The telecommunications firm MTN was recorded to have donated 300.000 thousand doses of the vaccine and other private firms were expected to participate through the African Export-Import Bank (Afrexim Bank) to ensure vaccine quality.⁵⁵ It should be noted that the Nigeria Centre for Disease Control (NCDC) is responsible for Nigeria's coronavirus response regarding testing, communication, and surveillance.

While the task of coordinating vaccination resides with the National Primary Health Care Development Agency.⁵⁶ As the distribution of vaccines was to be done in phases, guided by the National Vaccine Deployment Plan (NVDP), the federal government issued guidelines and regulations for states to adhere to, before the vaccines were rolled out. States that did not meet these requirements,⁵⁷ were not to be given the vaccine while the states and local governments that met the requirements, would be supervised by Vaccine Accountability Officers

and the latter would monitor the management, utilisation and proper disposal of the vaccine vials.⁶⁸

The NPHCDA aimed to prioritise the distribution of the vaccine according to predetermined categories, with frontline health workers, the elderly, laboratory staff, the police, strategic leaders and vulnerable populations to be vaccinated first." This was in addition to the digital registration of citizens and house-to-house registration, to ensure the efficiency and effectiveness of the process."

According to Nigeria Health Watch: "It is the job of the NPHCDA to distribute the vaccine to states, with states dealing with the cold-chain storage and distribution *to local governments.* It is then the responsibility of the local governments to distribute to Primary Health Centres (PHC)"" (emphasis ours).

The digital registration approach, however, appeared to not be properly vetted, as there were no restrictions regarding the vaccination dates available for the various population groups or for who was eligible to even register.

58- Ibid.

⁵⁵⁻ See "Nigeria: COVID-19 Vaccine Rollout Kicks Off In Africa's Most Populous Country", by Leon Usigbe, on April 6th, 2021, in Africa Renewal Newsletter (Online). United Nations Office for Africa. Available at https://www.un.org/africarenewal/magazine/april-2021/nigeria-covid-19-vaccine-rollout-kicks-africas-most-opopulous-country.

⁵⁶⁻ See "Nigeria Receives COVID-19 Vaccines Amid Confusion over Rollout", by Paul Adepoju, on March 4th, 2021, in Devex (Online): Inside Development. Available at: https://www.fevex.com/news/niaeria-receives-covid-19-vaccines-amid-confusion-over-rollout-96298.

⁵⁷⁻ The requirements, among others, were: Training, Cold storage capabilities, Availability of data-gathering tools and of transport and logistics for healthcare workers and Adequate security for vaccines. See "Nigeria: COVID-19 Vaccine Rolout Kicks Off In Africa's Most Populous Country", by Leon Usigbe, op.cit.

⁵⁹⁻ See also "Getting COVID-19 Shots in Arms: A Vaccine Rollout in Nigeria Like Nothing Before", by Gabriel Oke and Kenni Ndill, op.cit.

⁶⁰⁻ See "Nigeria: COVID-19 Vaccine Rollout Kicks Off In Africa's Most Populous Country", by Leon Usigbe, op.cit. See also "Getting COVID-19 Shots in Arms: A Vaccine Rollout in Nigeria Like Nothing Before", by Gabriel Oke and Ker Ndili, op.cit.

⁶¹⁻ See "Getting COVID-19 Shots in Arms: A Vaccine Rollout in Nigeria Like Nothing Before", by Gabriel Oke and Kenni Ndili, op.cit.

In addition, the process of registration did not provide the government with the means for verifying persons claiming to be frontline workers⁶² The government, as of March 2021 aimed to have vaccinated 70% of an estimated 200 million people by 2022 and to have begun the local production of vaccines within a year's time.

By August 9, 2021, 1.4 million people had been fully vaccinated and 2.5 million of them had received their first dose: two days later saw the arrival of the second round of Johnson and Johnson vaccines:

This number was not met without obstacles, as some states in the federation experienced logistical difficulties in handling the vaccines' cold-storage⁶⁴and end-points for vaccine warehousing.55

people had been fully vaccinated by August 2021

1.4m2.5mhad beenhad recei had received their first dose

62-See "Nigeria Receives COVID-19 Vaccines Amid Confusion over Rollout", by Paul Adepoju, op.cit

63- Ibid.

Oyadran, et al., discuss the various challenges with the supply chain, as it regards cold-storage issues. They recommend a series of reforms and improvements (some of which were implemented by the Nigerian government) for the handling of the COVID-19 vacche in Nigeria. Among others, they urge for: Recorganisation of the supply chain; increase in the storage capacity and integration of neorant technology. Training of vaccinators and technicians; Adequate Needs forecasting and the Development of mobile sessions for theraf-to-reach areas. See Oyadira, O. T., Usama, S.A., Oseba, H.E., Olivarde, S.O., and Lucaro-Prisro III, D.E. (2021). Towards effective and efficient COVID-19 vaccination in Nigeria. In the Journal of Global Health Reports. 2021;5:e2021023. Available at: https://www.joghr.org/article/21404-towards-efficient-covid-19-vaccination-in-nigeria.

See "Getting COVID-19 Shots in Arms: A Vaccine Rollout in Nigeria Like Nothing Before", by Gabriel Oke and Kenni Ndili, op.cit.



The telecommunication s firm MTN was recorded to have donated **300,000** doses of the vaccine

This was in addition to vaccine hesitancy that was ubiquitous across the country and which some states endeavored to address by advocacy and risk communications using social and traditional media and citizen engagements."

September 30th, 2021 saw the Nigerian government receive approval from the World Bank Board of Directors for a \$400 million dollar additional finance credit from the International Development Association (IDA) for the financing of safe and effective COVID-19 vaccine acquisition and deployment within the country.⁶⁷ Vaccines were still on the way and in spite of this, as of January 18th, 2022, the NPHCDA took the delivery of 3.2 million Pfizer COVID-19 vaccines donated by the United States government.®

The US representative mentioned that so far, they had provided over 24.7 million COVID-19 vaccines to Nigerians." Perhaps due to that delivery, the NPHCDA launched the SCALES 2.0 strategy, as a means to improve vaccination coverage and integrate vaccination with other Primary Health Care (PHC) services." Several months later in August 2022, SCALES 3.0⁷¹ was launched, which was: "[A]n evidence-based update that fixes the bugs in SCALES 2.0 and uses human-centred demand generation design to address low COVID-19 risk perception in the country".⁷² On August 19th, 2022 the NPHCDA again took delivery of 2.6 million Johnson & Johnson COVID-19 vaccines from the Canadian government.

By this time, the NPHCDA held that 40,700,979 of the eligible population have received the first dose, 28,659,698 persons have been fully vaccinated and 2,666,830 of the fully vaccinated persons have received their booster doses.73

However, by October 2022, the country had made little progress in the local production of the vaccine, evidenced by comments made by the President at the 2022 World First Bio Summit in Seoul. This is coming from claims by the government that they would have begun local production of vaccines within a year's time (the assertion was made in March of 2021).

66- Ibid.

72- Ibid.

⁶⁷⁻ See "Press Release: Nigeria Scales Up its COVID-19 Vaccination with New Funding for Vaccine Purchase and Deployment" by the World Bank, Washington. Press Release No: 2022/015/AFW. Available at 2021/09/30/nigeria-scales-up-its-covid-19-vaccination-with-new-funding-for-vaccine-purchase-and-deplo worldbank.org/en/news/r

See "Nigeria Receives 3.2 Million Pfizer COVID-19 Vaccines From U.S", by Akinola Ajbola, on January 18th, 2022, in Channels TV (Online) Newspage. Available at: https://www.channelstv.com/2022/01/18/nigeria-receives-3-2-million-pfizer-covid-19-vaccines-from-u-s/.

⁶⁹⁻ In addition, the US government was quoted to have provided training and instruction on COVID-19 containment and preventive measures, as well as medical equipment, logistics, cold-storage, personnel and surve among other things. See "Nigeria Receives 3.2 Million Plizer COVID-19 Vaccines From U.S", by Akinola Ajibola, op.cit

⁷⁰⁻ See "COVID-19: Nigeria Launches New Vaccination Strategies", by Edward Samuel, on August 9th, 2022, in the Voice of Nigeria (VON) "Health" (Online). Available at //von.gov.ng/covid-19-nigeria-launches-new-vaccination

This phase was reported to have taken an approach to implementation: "[That seeks to address bottlenecks in service delivery, communication, accountability, logistics, Evolutionary Metabolic Infectious Disease (EMID) coverage and supportive supervision from bottom-up and state-specific contexts". See "COVID-19: Nigeria Launches New Vaccination Strategies", by Edward Samuel, op.cit.

In addition, as the figure below shows, the government's ambitious aim to have 70% of the population vaccinated, has been far from achieved.



Figure 5.

Source: Our World in Data 74

14- See Mathieu, E., Ritchie, H., Rodés-Guirao, L., Appel, C., Giattino, C., Hasell, J., Macdonald, B., Dattani, S., Beltekian, D., Ortiz-Ospina, E., and Roser, M. "Coronavirus Pandemic (COVID-19)", op.cit

Dataphyte⁵ reported that the inability to secure enough vaccines for the eligible population, meant that Nigeria would not meet its target by the end of 2022. Data from the NPHCDA (see Figure 6 below) shows that the proportion of the population vaccinated is still below the 70% mark.

Figure 6.



Source: National Primary Health Care Development Agency

See "Nigeria's shortage of COVID vaccine stalls voyage to hit WHO's 70% Target", by Ode Ududu, on November 4th, 2022, in Dataphyte (Online). Available at: https://www.dataphyte.com/fatest-reports/nigerias-shortage-of-covid/vaccine-stalls-voyage-to-ht-whos-70-target/.
The issues surrounding vaccine delivery and deployment in Nigeria have been identified above but the more interesting question is what to do, to amend the situation. The Tony Blair Institute for Global Change asserts that the challenge for African nations, within the continent, is not access per se but delivery and distribution⁷⁶. To address this, they propose the following approaches and methods for specific problems within the delivery and distribution component of vaccination. They state that:



To mitigate financing gaps in vaccine delivery $^{\prime\prime}$

- Donors should cover recurrent costs, not just fixed expenditures;
- Governments should identify the true cost of vaccination; and
- Donor countries and multilateral organisations need to increase funding for vaccine rollout in the form of grants.

(AND)

- To mitigate low vaccine demand⁷⁹
- Increase investment in tailored social-mobilisation campaigns;
- Integrate COVID-19 vaccination within existing health programmes; and
- Develop robust and flexible vaccination-campaign strategies.



To mitigate health-system capacity constraints (a shortage of healthcare workers)⁷⁸

- Use non-health-care workers at critical points of vaccination; and
- Immediately prioritise investment in the healthcare workforce.



To mitigate logistical complexities[®]

- Utilize a narrower range of suitable vaccines;
- Use new vaccine-storage technology for transport to vaccine outposts; and
- Use alternative vaccine-carrier methods.

- 78- Ibid.
- 79- Ibid.
- 80- Ibid.

⁷⁶⁻ See generally Bradshaw, A., Mamo, L., and Akuagwuagwu, M. (April 2022). Solve Delivery Challenges Today to Futureproof Africa's Vaccine Infrastructure. The Tony Blair Institute for Global Change. Available at: https://institute.olbai/sites/default/lies/articles/Solve-Delivery-Challenges-Today-to-Futureproof-Africa's Vaccine-Infrastructure. off.

⁷⁷⁻ See Bradshaw, A., Mamo, L., and Akuagwuagwu, M. (April 2022). Solve Delivery Challenges Today to Futureproof Africa's Vaccine Infrastructure, op.cit., at p. 4.



To mitigate datamanagement issues ⁸¹

- Use tailored data-management systems;
- Build greater political will for investment in health technology; and
- Allocate additional funding for data-entry staff.



To mitigate the lack of coordination between government stakeholders and donors⁵²

- Encourage a centrally led approach; and
- Aim for institutional capacity strengthening.



Accountability and Equity in COVID-19 Vaccine **Distribution: Frontline Workers** and Vulnerable Groups



The Nigerian federal government (at least since 2001, when the declaration was made) has never allocated up to 8% of the federal budget to health.

Efficient, timely, effective and accessible health services are a critical component of any modern democratic state. Nigeria's constitutional democracy ought not to be an exception to this, as its return to democracy in 1999 has since been unbroken. However, despite this continuous run and stable elections, the delivery of public goods and services has had challenges. Writing on the poor allocation to the health sector by the federal government, the International Centre for Investigative Reporting (ICIR), states that despite the wording of the Abuja Declaration, the Nigerian federal government (at least since 2001, when the declaration was made) has never allocated up to 8% of the federal budget to health.

Though, to be fair, the extent of the commitment is up for interpretation, as health care is not on the exclusive list of the federal government but one that is shared between the states and the federal government. However, the federal government has not been consistent in the total size of the monies allocated to health. This is even more worrying, seeing as the actual amounts allocated to recurrent and capital expenditure are very wide, with the former receiving a higher allocation than the latter.83

See "72% of Nigeria's health budget spent on salaries, running offices in 11 years", by Marcus Faturmole, on April 7th, 2022, in the International Centre for Investigative Reporting (Online) Newspage. Available at: https://www.icimigeria.org/72-of-nigerias-health-budget-spent-on-salaries-running-offices-in-11-years/.

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Year	Recurrent Allocation	Capital Allocation	Total Allocation	Total Capital Releases / CashBacked
2011	202,338,852,916	33,527,630,328	235,866,483,244	38,784,861,735
2012	224,512,036,669	60,950,219,701	285,462,256,370	37,171,222,269
2013	223,066,596,415	60,047,469,275	283,114,065,690	34,782,507,784
2014	214,943,830,225	49,517,380,725	264,461,210,950	20,472,722,764
2015	237,075,742,847	22,676,000,000	259,751,742,847	16,445,053,729
2016	221,412,548,087	28,650,342,987	250,062,891,075	28,592,592,446
2017	252,854,396,662	55,609,880,120	308,464,276,782	52,656,143,773
2018	269,965,117,887	86,485,848,198	356,450,966,085	44,499,584,275
2019	315,617,344,056	57,085,655,234	372,702,999,290	32,107,761,438
2020	363,055,206,881	51,402,884,613	414,458,091,494	149,439,626,540
2021	380,208,769,472	134,591,025,027	514,799,794,499	37,845,955,847
Total	2,905,050,442,117	640,544,336,209	3,545,594,778,327	492,798,032,599

Government Budgetary Allocation to the Health Sector-2011 to 2021

Source: International Centre for Investigative Reporting (Online)

Be this as it may, the emergence of the pandemic in December 2019, which spread to many nations of the world, tested governments. In particular, the response by governments to the virus entailed the distribution of vaccines among citizens to ensure that their health is protected and the safety of the nation is also protected. However, due to the pre-existing differences between people and the short supply of the vaccine, it meant that some groups would have to be prioritised over others. Bayati, et al.⁴ reiterate that in epidemiology and public health, certain groups (such as frontline health workers and persons over 60 years of age with special medical conditions) will have to be ranked as critical and hence would be given medical attention before the general public. This is a normal public health practice, as the WHO advised countries to carry out a "phased" distribution of the vaccine, to ensure that vulnerable groups were not compromised in the distribution.⁵⁵

84 See Bayati, M., Noroozi, R., Ghanbari-Jahromi, M., and Jalai, F. S. (2022). Inequality in the Distribution of COVID-19 Vaccine: A Systematic Review, at p. 2. In the International Journal for Equity in Health (2022) 21:122. Available at: https://equity.inenedcentral.com/counter/pdf/10.1186/s12939-022-01729-x.pdf?pdf=button%20sticky.

85- See the World Health Organisation (WHO). (2020). WHO Concept For Fair Access and Equitable Allocation of COVID-19 Health Products, op.cit., at pages 7 to 8.

Studies show that discrimination in vaccine distribution affects Low-Income countries and Lower Middle-Income countries in general ways. But, despite these guidelines, there were nations where these differences were not the only reason why distribution of the vaccine was inequitable. Bayati, et al., report several studies that showed economic and demographic/social characteristics (at the individual and in-country level, as opposed to global inequity that was treated in the previous sections) resulted in an inequitable distribution of the vaccine.⁵⁶

The "economic" differences were namely: household income, home ownership, employment, poverty, access to healthy food and residency in the deprived areas.⁶⁷ While the "demographic and social characteristics" were: sex, age, race, ethnicity,⁶⁹religion, disability, location (urban/rural) and insurance coverage.⁶⁹

Studies show that discrimination in vaccine distribution affects Low-Income countries and Lower Middle-Income countries in nuanced ways[®] Inequity and inequality in the provision of health services are not new to the continent, nor to Nigeria. Obi-Ochiabutor, et al., vividly stated that: "There is denial of access to health facilities to sick persons, conscription into poorly attended and densely populated quarantine centers, without clinically diagnosed suspicions, occasioning breaches of medical rights, among other implications".

It was therefore a surprise for many Nigerians in 2020, when the palliative measures-meant to be distributed to poor individuals and households due to the lockdown-were found to be hoarded by the government and even some politicians.[®] Prior to the distribution of the vaccine, the distribution of relief materials was already affected by corruption.

These occurrences only highlighted the general inequity and inequality in the country. Fast forward to when the vaccine was set to be safe for human use and delivered to Nigeria, the inequalities persisted but were of a different form.

86- See Bayati, M., Noroozi, R., Ghanbari-Jahromi, M., and Jalaí, F. S. Inequality in the Distribution of COVID-19 Vaccine: A Systematic Review, op.cit., at p. 1

87- Ibid.

88-This appeared to be the case for the United States in particular, where the vaccination rates of blacks, whites and Hispanics varied. See generally, Mody, A., Bradley, C., Redkar, S., Fox, B., Eshun-Wilson, I., Hatshwayo, M.G., et al. (2022). Quantifying Inequatives in COVID-19 Vaccine Distribution Over Time Social Vulnerability, Race and Ethnicity, and Location: A Population-level Analysis in St. Louis and Kansas City, Missouri. PLOS Medicine, 19(9): e1004048. Available at: https://doi.org/actional.pdf/doi.004088type=printabile.

89- See Bayati, M., Noroozi, R., Ghanbari-Jahromi, M., and Jalali, F. S. Inequality in the Distribution of COVID-19 Vaccine: A Systematic Review, op.cit.

- See generally, Ali, H., Hartner, A., et al. (2022). Vaccine Equity in Low and Middle-Income Countries: A Systematic Review and Meta-analysis. International Journal for Equity in Health (2022) 21:82. Available at: https://equityhealth.biomedcentral.com/counter/odf/10.1188/s12839-022-01678-5.odf.
- 91- See Obi-Ochiabutor, C.C., Ogbuabor, C.A., Akpangbo, E., Iyidiobi, C., and Ogbuabor, B.I. (2022). COVID-19 Pandemic, Poverty and Inequality in Africa: An Appraisal, at p. 45. In NAUJILJ 13 (1) 2022. Available at https://www.ajol.info/index.php/naujii/article/download/225870/213141.

92- See generally, "Between Hunger and the Virus" The Impact of the COVID-19 Pandemic on People Living in Poverty in Lagos, Nigeria, by Anletie Ewang, Jim Wormington and Andrew Maki, on July 28th, 2021, for Human Rights Watch and Justice & Empowerment Initiatives (JEI), Human Rights Watch (Online). Available at: https://www.hww.org/report/2021/07/28/between-hunger-and-virus/impact-covid-19-pandemic-people-living-poverty-lagos.



Studies show that discrimination in vaccine distribution affects Low-Income countries and Lower Middle-Income countries in general ways. Nigeria, though taking the cue from the WHO in prioritising certain groups over others, was still not to be spared from COVID-19 vaccine inequity, as state economic profiles and demographic characteristics were the drivers of the inequity. The inequity was evidenced in the fact that certain states did not have the financial resources to deliver the vaccines to all parts (for instance, the Ward and Council levels) of their states. Some NGOs reported (as of early 2021) that there were discrepancies in the distribution of the vaccines, with politicians and the rich having first access to the vaccine.⁴⁴

In addition, there were discrepancies in the treatment of victims of the virus in some health centres, with richer Nigerians being given priority in the distribution of oxygen and respirators[®]. But perhaps the biggest cause of inequity is the hesitancy of Nigerians to take the vaccine and this means that the challenge is not with the government per se but the willingness of Nigerians to take the vaccine.[®]

There are allegations of discrimination in the distribution and delivery of the vaccine in Nigeria but the literature on the state of affairs is very thin and relegated to Newspapers and blog sites. However, what stands out is how Vaccine Hesitancy is the real challenge, preventing full uptake by Nigerians. This issue will be evaluated further, in the subsequent section.

 See "Efforts to vaccinate 70% of Nigerians against COVID-19 intensity" by Chukwuma Muanya, on March 24th, 2022, in the Guardian (Online) Newspapers. Available at https://guardian.ng/features/health/efforts-to-vaccinate-70-of-nigerians-against-covid-19-intensity/.

94- See "Stop the Pandemic, Provide Equal Access to Vaccines" by COVID-19 Ambassadors, July 2021, In Hetactiafonds (Online), Available at: https://hetactefonds.ni/er/actia/activists-demand-vaccine-equility-in-nigeria/.

 See "How Ngeria's Rich, Powerful Get Priority Oxygen Amid Supply Shortage In COVID-19 Centres – Hospital Sources", by Sahara Reporters, on January 8th, 2021 in Sahara Reporters (Online) Ne https://saharareporters.com/2021/01/08/how-nigeria%E2%80%99s-rich-powerful-get-priority-oxygen-amid-supply-shortage-covid-19-centres-%E2%80%93.

96- See generally, Njoga, E., Mshelbwala, P. (2022). COVID-19 Vaccine Hestancy and Determinants of Acceptance among Healthcare Workers, Academics and Tertiary Students in Nigeria. Vaccines 2022, 10(4), 626. Available at https://doi.org/10.3390/vaccines10040626.

Vaccine Hesitancy in Nigeria: Context and Drivers from the Community Point of View



The literature on COVID-19 vaccine hesitancy in Nigeria has shown that the main issues causing hesitancy (the latter, a serious obstacle to improved vaccination coverage), revolve around certain specific issues, namely mistrust of government and the fear of the vaccine's side effects, the latter which was as a result of misinformation.³⁷ However, there are other factors that affect the potential and rate of vaccine uptake that range from low testing rates to poor access to health facilities, to a country's history with communicable diseases[®] to infection fatality ratios.[®] Looking more closely at the two main drivers of Vaccine Hesitancy, misinformation appears to rank high in many studies carried out in relation to the COVID-19 virus.

⁹⁷⁻ See generally, Northwarage, T., Warki, O., Neresuwem, E., Glarreveiju, S., Nucosu, N., Adamu, U., et al., (2022). COVID-19 Vaccine Hesitancy Amorget Healthcare Workers: An Assessment of Its Magnitude and Determinants During the Initial Phase of National Vaccine Deployment in Nigeria. In the Journal of Eclinical Medicine. 2022. Jul 25; 50:101499; Available at: https://doi.org/10.1016/j.eclimn.2022.101499; See Sato, R. COVID-19 Vaccine Hesitancy and Trust in Government in Nigeria, op.cit.; see Guide, D.B., Wada, D.Z., Odetayo, A., Akgu, O.O., et al. COVID-19 Vaccine Hesitancy Amorget Healthcare Vacies (Study of Students in Southwastern Nigeria, cp.cit.; see Kayoda, O.A., Biolauth, A.K., Igbalagioh, M., et al., 2022). UOVD-19 Vaccine Hesitancy Amorget Health Interventions. In the Journal of Infectious Diseases and epidemiology. 7: 205. Available at: https://doi.org/10.1016/j.eclimn.2022.101499; see Sato, R. CovID-19 Vaccine Hesitancy Amorget Health Interventions. In the Journal of Infectious Diseases and epidemiology. 7: 205. Available at: https://doi.org/10.1016/j.eclimn.2022.101497; see Sato, R. CovID-19 Vaccine Hesitancy Amorget Health Interventions. In the Journal of Infectious Diseases and epidemiology. 7: 205. Available at: https://doi.org/10.1016/j.eclimn.2022.1012/10.1016/j.eclimn.202

⁹⁸⁻ Sato, recalling Nigeria's misadventures with vaccine hesitancy, notes that: "Nigeria has a history of vaccine hesitancy. One of the most well-known incidences of vaccine hesitancy in Nigeria was the boycott of the polio vaccination campaign that occurred in northern Nigeria in 2003. The boycott lasted 16 months and this movement resulted in the spread of polio infections within the country, as well as across other neighboring countries. Nigeria was one of a few countries that had not eradicated wild polio in 2020" (emphasio usu), See 363, R.C.OVID-19 Vaccine Hesitancy and Tust in Government in Nigeria, opcid., 4p. 1.

⁹⁹⁻ See Ackah, B.B., Woo, M., Stallwood, L., Fazal, Z.A., Okpani, A., Ukah, U.V., et al. COVID-19 Vaccine Hesitancy in Africa: A Scoping Review, op.cit., at p. 1.

Because mental sophistication and its application regarding whether information is true or false varies among humans, some will be predisposed to misinformation.

To combat misinformation, governments and media organisations have used various ' fact-checking' approaches. One would assume that the provision of credible and verifiable information on the virus and the vaccine would help to change the mind of those afraid or even the 'skeptics' among them. Unfortunately, this is often not the case, as Lee, Sun, et al., reiterate that even where wrong information (or misinformation) is rebutted with correct information, untrue beliefs persist and become resistant to change.100

Further, because mental sophistication (i.e., an evaluation of the credibility of the source, internal consistency, compatibility or conflict with existing information, etc.) and its application regarding whether information is true or false varies among humans, some will be predisposed to misinformation.¹⁰¹In fact, when misinformation is simple to assimilate.¹⁰² corresponds with existing political views and is not subject to any rigorous vetting, the information will probably be taken as truth.¹⁰³ The other potent driver of Vaccine Hesitancy in Nigeria, being mistrust in government, has been shown to strongly correlate with Vaccine hesitancy (though the paper confirms this does not imply causation)[™]Barring conceptual and theoretical issues, it is plausible that persons who do not trust their government (President, Ministers, Parliament and even Judges), would be less likely to agree to undertaking actions on the latter's insistence.

Though numerous studies have been carried out to determine the extent of vaccine hesitancy in Nigeria[™] few have considered framing the problem and data gathering, in terms of how communities and the youth can work with Civil Society to improve vaccine uptake. Hence (and due to the nature of the context and drivers of Vaccine Hesitancy), the author and his colleagues undertook qualitative primary data collection from the 6 geopolitical zones of the country.

¹⁰⁰⁻ See Lee, S.K., Sun, J., Jang, S. and Connelly, S. (2022). Misinformation of COVID-19 Vaccines and Vaccine Hesitancy, at p. 2. In Scientific Reports: 12, 13681. Available at: https://www.nature.com/articles/s41599-022-17430-6.pdf.

¹⁰¹⁻ See Lee, S.K., Sun, J., Jang, S. and Connelly, S. Misinformation of COVID-19 Vaccines and Vaccine Hesitancy, op.cit

¹⁰²⁻ See generally, Reber, R., and Schwarz, N. (1999). Effects of Perceptual Fluency on Judgments of Truth. In the Journal of Consciousness and Cognition, Volume 8, Issue 3, September 1999, Pages 338-342.

¹⁰³⁻ See Lee, S.K., Sun, J., Jang, S. and Connelly, S. Misinformation of COVID-19 Vaccines and Vaccine Hesitancy, op.cit.

¹⁰⁴⁻ See Sato, R. COVID-19 Vaccine Hesitancy and Trust in Government in Nigeria, op.cit., at p. 5.

¹⁰⁵⁻ See Ackah, B.B., Woo, M., Stallwood, L., Fazal, Z.A., Okpani, A., Ukah, U.V., et al. COVID-19 Vaccine Hesitancy in Africa: A Scoping Review, op.cit., a rapid scoping review of Vaccine Hesitancy in mainly African countries, evaluated 13 studies from Nigeria alone.

Adopting the use of Focus Groups, the discussion sessions featured a Moderator and a Note Taker. Candidate selection was random but participants had to be fluent in English and live within a 2 kilometer radius of a Primary Health Care Facility. The Note Taker introduced the event, themselves and the Moderator. The latter then took over the session and asked the questions but the Note Taker rounded up the event. The questions were asked sequentially (in nearly all the FGDs) and the Moderator encouraged all participants to speak.

From the analysis of the FGD transcripts, several issues emerge. Using a combination of 'Critical Incidents' and 'Key Concepts' approaches in the evaluation of the data, the author generally notes a confirmation of the results of several studies on Vaccine Hesitancy, which establish the primacy of misinformation, the lack of sufficient impetus to test one's own views, the nature of trust in government and the role of personal expediency in making healthcare decisions. In figure 1 below, Wonodi, Obi-Jeff, et al. provide a schematic of conspiracy theories and misinformation around the vaccine and the virus, in Nigeria. The claims identified in their work were also noted in our group discussions.

Figure 8.

The Virus

Man-made virus

- Made in the laboratory
- Biological weapon
- Transmitted by 5G

God-sent virus

- Sign of the end-times and the Anti-Christ
- Fulfilment of the scriptures
- Result of God's anger
- God's punishment for politicians

Alternative disease models

- cannot survive in Nigerian weather is not in Nigeria
- affects only those in big cities
- is a rich man's disease
- can be treated with chloroquine and quinine

The Response

Pandemic hoax Government distrust

- •COVID is not real
- Means of government to get funding and siphon money
- •No. of cases are fabricated, manipulated and inflated
- Isolation centers are photoshopped

The Vaccine

Tool for foreign domination and profiteering

COVID Vaccines:

- used to control or reduce African populations
- means to kill people
- means to implant microchips to track people
- money-making scheme for Bill Gates

Safety, efficacy and quality concerns

COVID Vaccines:

- cause infertility and paralysis
- change one's DNA and alters body metabolism
- cause bad reflection after vaccination
- in Nigeria are different from those used overseas
- in Nigeria are fake
- are not accepted in other countries

Source: See Wonodi, Obi-Jeff, Adewunmi, et al.

106- See Wonodi, C., Obi-Jeff, C., Adewumi, F., Keluo-Udeke, S.C., Gur-Arie, R., Krubiner, C., et al. (2021). Conspiracy Theories and Misinformation About COVID-19 in Nigeria: Implications for Vaccine Demand Generation Communications, at p. 2117. In the Journal of Vaccine, 40 (2022) 2114-2121. Available at: https://www.ncbi.nim.nih.gov/pmc/articles/PMC8830779/pdf/main.pdf.

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"My Mum felt sick after getting the vaccine and the same happened to me and I even had a yellow urine coloration ..." Many discussants were incredulous and sceptical of the government's intention and ability to have all Nigerians take the vaccine. The reasons were varied and ranged from religious, to global conspiracy theories of harm, to fear of negative side effects of the vaccine, to ignorance.

On hearing about the vaccine, Mayowa, from Lagos stated that: "I hesitated because I don't trust any news from Nigeria and likewise everybody in my family. But at the point where my mother wanted to process her retirement benefits from the Civil Service Commission, she was compelled to do it, though not without a lot of consultations-both physical and spiritual. My Mum felt sick after getting the vaccine and the same happened to me and I even had a yellow urine coloration ..." One discussant in the Port Harcourt session, expressed his frustration with how the purchase of the vaccines would have economic impacts and exacerbate the little resources the government had.

Three discussants, though unafraid of the vaccine, were afraid of the effect of the virus and were willing to take it; one actually trusted the government to tell its citizens the truth. One had his skepticism change to acceptance once he saw some 'prominent personalities' take the vaccine. About two discussants were skeptical about the ability of the government to vaccinate 'all' Nigerians. It should be noted that apart from the discussants that voiced their apprehension of the virus (and their willingness to take the vaccine), nearly all others were unwilling to take the vaccine for their abovementioned reasons.

Most discussants were aware that the vaccine was administered by Primary Health Care Centre (PHC) workers but only a couple of them knew who the head of the facility was. One Sokoto discussant was so familiar with the PHC head, that he had even interviewed him about the pandemic and vaccine distribution. He stated that the head of the PHC is "Committed to ensuring the health status of the community people is enhanced; it's just that the lack of modern health facility has crippled and hindered his quest to making better the health conditions of people in the community".

"I blame the Federal government and the Ministry of Health because I heard it has expired before it came in to the country". This observation is instructive, in the sense that it provides an insight into the minds of Nigerians on who's table (in their community) "the buck" stops. This may have applications for research on how Nigerians think about accountability in the health sector and who they think is responsible for how the vaccines are administered.

Discussants were also generally in agreement that the government should bear responsibility for the expiration of some of the vaccines. One discussant claimed that the government was hoarding the vaccine and that was why it expired. During the Lagos sessions, two discussants had differing views on who was responsible.

Oshokoya was of the view that citizens were the cause of the expiration because they had "refused to take the vaccine". While at that session, Vivian stated that: "I blame the Federal government and the Ministry of Health because I heard it has expired before it came in to the country".

John and Azubike in Enugu also blamed the government for the expiration, as they were primarily responsible for handling the vaccines. Another discussant mentioned that though he was not afraid of the virus (he thought it was just like malaria) he did not trust the vaccine but eventually took it to demonstrate his leadership (the latter is a Village Head in a Kaduna state local government).

In terms of their treatment at their PHC, most discussants had negative experiences, as one Port Harcourt discussant noted that Nurses had a form of a 'racket' for the issuance of Clinic cards and another experienced a level of unprofessionalism by staff of her PHC.

Others (mainly from the northern Focus Groups) were willing to escalate their ill treatment and two stated they would escalate the matter to their Village Head and one said he would escalate his ill treatment to the "State Executive Secretary". However, one discussant had such a positive experience at her PHC for vaccination, that she became somewhat of an 'evangelist' for vaccine uptake in her community.

"The CSOs have been up-and-doing in their duties; in terms of enlightenment and sensitisation. They create awareness on the need for people to be vaccinated." Going to the issue of transparency in the administration of the vaccine, most discussants were of the view that Health Care workers were not transparent. Seven discussants strongly agreed/agreed that there was transparency in the distribution and uptake of vaccines.

However, eleven of them strongly disagreed with this, citing irregularities and outright biases in the administration of the vaccine. This point is interesting at least from a regional point of view, as it was mainly persons from the northern focus groups and Lagos disagreeing with the claim that the administration of the vaccine was transparent. Could this mean that vaccine distribution was less transparent or is it a case of just the COVID-19 vaccine and not vaccines in general?

One discussant in Sokoto, said that: "It depends on the vaccination. The vaccination for Polio, for instance, could differ from that of COVID. But to be fair to the health workers, they're doing their best though their best isn't enough. Some of them lack Public Relations, and that hinders the smooth exercise of the vaccination. But generally, they're up-and-doing in discharging their duty". On CSOs and their role/community impact in sensitisation and general engagement, some of the discussants took the view that CSOs were impactful in providing sensitisation and communication on the vaccine and the virus.

One Sokoto discussant remarked that: "The CSOs have been up-and-doing in their duties; in terms of enlightenment and sensitisation. They create awareness on the need for people to be vaccinated. In the era of COVID, the CSOs have played a significant role in creating awareness to the people in my community on what they should know. Though some of the staff of CSOs know little on how to communicate in local dialects, and I suggest they work hand-in-hand with the community leaders and traditional rulers like Ward Head in a given community when discharging their duties, it will help drastically. The CSOs are Impactful".

Several discussants in Enugu claimed that they only "saw" people with COVID-19 on the "television". Another female discussant from Kaduna, Rahila, mentioned that: "CSOs were impactful in her sensitisation, advocacy and outreach. She said that some CSOs even went to locations that had no real government presence, using their own resources. She also mentioned that some religious leaders were involved with some community leaders in advocacy and sensitisation".

Faith, a Health Care worker in Rivers noted that: "CSOs were in many communities and were even using their own money for the work". The entire Lagos FG discussants were of the view that CSOs were very impactful in their interventions.

However, there were a number of discussants that believed that their impact was minimal or not present at all. This view was of different proportion in the north and south. From this perspective, there is a lot more that CSOs can do, in terms of engagement and collaboration with communities, seeing as there is an expectation for them to do so. This means that all that is required is a follow-through, in terms of action. On the issue of vaccine hesitancy, reasons for same and common misconceptions, the responses were far more elaborate. However, dominant themes include a lack of proper sensitisation from the government, fear of the vaccine's effects and the belief that 'no one had the disease in my community'.

Quincy, a discussant from Kaduna stated that: "Hesitancy existed because citizens did not care to make research about COVID-19 and this created an atmosphere of ignorance which was due to an unwillingness to engage with the 'world around them'. In my opinion, the lack of interest by citizens, was like a form of arrogance to not get information and hence to be vaccinated". Ngozi stated that she was hesitant: "[B]ecause I don't think the virus is real. From what I've seen, even in my community most people think COVID-19 is just malaria". Several discussants in Enugu claimed that they only "saw" people with COVID-19 on the "television".

Again, the entire Lagos discussants agreed that hesitancy was due to a combination of religion, politics and personal values.

Tochukwu in Kaduna said that: "During the early stage of the pandemic, vaccines were not accessible but as of now, most PHC had the vaccine. The reason for the hesitance was that there was not adequate access to the vaccines". Raphael was of the view that: "People are hesitant because they aren't seeing evidence of others actually having the disease or taking the vaccine. Most people only see COVID-19 victims on TV but not in their communities. The hesitance could also be because of how those who take the vaccine eventually complain of feeling ill afterwards". Benjamin, in Kaduna mentioned that: "I am not aware that people are hesitant about taking the vaccine at all in my community (Ungwan Maigero). In fact, he had not come across anyone who had even taken the vaccine. Most people are unwilling to take it".

Atinuke in Port Harcourt, at length, mentioned that: "[T]here was an initial bias towards the vaccine due to religious reasons (i.e., Pastors in some churches were spreading the view that the vaccine was evil and a tool of the 'end times'). Some people believed the vaccine was developed 'too fast' as there are diseases that have been in existence for decades but many had no working vaccines. I didn't have any hesitation initially but when I was told that there would have to be 'booster' shots. I became sceptical about it, due to the many shots. I think the hesitance is due to a lack of trust between the citizens and the government. People in my community were not convinced about the prevalence of the disease because there were next to no persons with COVID-19 around us. Also, there seemed to be no more news about COVID-19 on TV and the radio, so people think it has left Nigeria".

Again, the entire Lagos discussants agreed that hesitancy was due to a combination of religion, politics and personal values. Faith from Port Harcourt, took a different view and said that: "People did not want to be stigmatized because they took the vaccine and that was why they hesitated. Those who took the shots were seen to be 'carriers' of the virus (or some terrible symptom) and hence would infect others". Ishaku, in Yola, took that position that hesitancy was due to: "Lack of awareness on the importance of the vaccination. Though the Federal and State Ministries of Health have done commendably well in their enlightenment programmes, and the CSOs too have done a lot, but most residents in rural communities don't usually welcome new things without some form of hesitation. But I think, the enlightenment hasn't reached every nook and cranny. And at times, religion and societal values have hindered people from availing themselves to be vaccinated". On common misconceptions about the vaccine, Phil and Vivian in Lagos (and Ugo in Enugu) mentioned that there was the belief that the vaccine was "666 i.e., the Mark of the Beast".

The comments above align with previous qualitative research done in Nigeria on the drivers behind vaccine hesitancy. These statements have to be viewed as dependent on the perceived context and 'mind states' of Nigerians, as many of the discussants not only commented on how they felt but they also stated what was likely going through the minds of other Nigerians.



Generally, there appeared to be some lingering resentment towards the government, especially as it concerned the COVID-19 'palliative hoarding' debacle of mid-2020. On the question of whether the government played an adequate role in curbing misinformation about the virus and the vaccine and all round handling of the pandemic, discussants again had varied responses and opinions. Generally, there appeared to be some lingering resentment towards the government, especially as it concerned the COVID-19 'palliative hoarding'[®]debacle of mid-2020 (nearly all the Port Harcourt, Lagos and Enugu discussants held this view).

Nkechi from Port Harcourt, was very unsatisfied and held that: "The government has not done enough to debunk the misconceptions; there has been a lot of 'hype' but no real close-out of the misconceptions. Those who had the virus and recovered or didn't were not publicised and this was a result of poor communication [by government".

Igwefi from Kaduna suspected the government's motives for not working hard enough to debunk misconceptions around the virus and vaccine. In his view: "No, government has not done much and they have a hand in increasing figures of those affected by COVID-19 because they are interested in the relief package sent to affected countries by the WHO". Such comments provide a window into the minds of ordinary Nigerians and their level of trust in the government. Individuals are able to hold the view that their government would exploit citizen vulnerability for their personal enrichment. This would speak to the level of transparency (and accountability in some respects) of government in the administration of donated items, at the very least.

However, not all the discussants believed the government were poor in combating misinformation, as Faith stated that: "The government had tried to reduce the misconceptions through official government spokespersons and famous celebrities. It was not enough but they did as well as they could". Also, Ishaku took the position that: "The government has done its best, via its Ministry of Health. The problem is that people don't change overnight, and it takes time for them to embrace new things wholeheartedly without being cautious. But to be fair, government has done its best in debunking the misconceptions through massive enlightenment programmes".

¹⁰⁷⁻ The frustration felt by Nigerians for the alegad hoarding of food and consumables (by government) meant to provide resplite following the lockdown, led to looting of these palilatives. The accusation that State governors were complicit was taken so seriously, that the Nigerian Governors Forum, issued a statement disevowing themselves and their administrations from the alegation. See "COVID-19 Palilative and its controversies: Intercogating the looting spree dimension" by Orvektika Applodo, Jeoma Thomas-Odia, Martia Demond, Ogerci Tez, Adetayo Adexow, Joshua Akade, and colleagues, on October 31st, 2020, in the Guardan (Online) Newspaper. Available at: https://guardan.ng/saturday-magazine/covid-19-palilative-and-its-controversies-intercogating-the-looting-spree-dimension/.

"The government needs to do more in terms of informing and sensitising Nigerians because 90% of the people in my community have not taken the vaccine because they don't believe the virus is real". This means that some action by the government is noticed and acknowledged but it still means that there needs to be an improvement in the quality of communicating government action.

One discussant in Lagos-Zainab remarked "People should be compelled to take the vaccine"-was of the view that personal autonomy can be violated and citizens should be forced to take the vaccine. Though this is a minority view, it underscores that a proportion of Nigerians comprehend the seriousness of the situation and have their rights superseded in the interests of public health. In the main, the trust deficit is not in the favour of the government and if improved, can certainly improve the citizen-government relationship, which has many multiplier effects on the quality of government."

In addition, the quality of administration and management of the vaccine is insufficient and this was treated by the question relating to how well the government was treating citizens. Ishaku from Adamawa, responding to how the government had treated Nigerians, said:

"The government isn't fair enough to the citizens, because the vaccines aren't made available to people and most Nigerians don't have access to the vaccines because they're out-of-reach. For now, only top government officials and prominent personalities in the country have been vaccinated. Government hasn't treated the citizens as it should in this regard". While this view is debatable, it is certain that the government has enormous responsibility in treating citizens with a level of consideration.

Atinuke said that: "The government should treat Nigerians with the regard they deserve. I mean Nigerians should be treated like sensible people, in terms of communications and advice about the virus and the vaccine". Ngozi, providing a similar perspective but homing in on the communications component of health governance, stated that: "The government needs to do more in terms of informing and sensitising Nigerians because 90% of the people in my community have not taken the vaccine because they don't believe the virus is real".

108- See generally, Mansoor, M. (2021). Citizens' Trust In Government As A Function of Good Governance and Government Agency's Provision Of Quality Information On Social Media During COVID-19. In Government Information Quarterly, 38 (2021) 101597. Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8494525/pdf/main.pdf.

"More sensitisation to grassroots communities that did not have enough advocacy and attention paid to them". In the main, the conversations and comments represented above show the minds of Nigerians on critical matters regarding the virus, misinformation around it, drivers of misinformation, and the role of CSOs, among others. However, discussants were also asked what they thought could inform and assist the response to the vaccine and the issue of Vaccine Hesitancy.

Goje, in Kaduna stated that one thing that was needed in terms of government and CSO response was that: "More sensitisation to grassroots communities that did not have enough advocacy and attention paid to them". Madu, re-echoing this sentiment, expressed that what was needed was: "More funding for sensitisation and advocacy for the vaccine and people should be engaged much more and also encouraged by people familiar with the respective communities to help sensitise people in not just formal places like hospitals but even in recreational centres like bars and lounges".

Miracle thought that though she believed the vaccine was important and she had taken hers, she was unsure that other people had strong immune systems to take it as well. She mentioned that people should be adequately warned about any risks that may occur if they are to take it.

Salvation was of the opinion that people should be able to tell others the downsides and upsides of the vaccine. He felt that the vaccine resistance levels of people were different and there should be full disclosure. Eco Okpara, taking a broader view, stated that: "I'm not unmindful of the scepticism and politicisation of the virus but there should be innovative means to get people to take the vaccine, for example, if anyone visited a hospital for any reason other than the COVID-19 vaccine, they should be asked if they would be willing to take it".

One discussant from Adamawa said: "My input? I work in [XXXX], and it's the only newspaper that's owned by government in the entire Northeast Nigeria. I've pages that I handle and I could use those pages to enlighten the readers on what they should know about the vaccines by interviewing Health Experts and Health Personnel on the field. My input is huge and massive, as a journalist". The foregoing confirms many of the findings by previous qualitative and quantitative studies in Nigeria¹⁰. The reasons for hesitancy, themselves numerous, have even been recorded to be as a result of the notion that Africans recover very fast from the virus when infected¹⁰. Hence, the virus may not be as serious or may even be a misdiagnosis¹¹.

Be that as it may, this section highlights that though there is a high level of scepticism and distrust of the government. Also, though the disinclination to take the vaccine may lie beyond what one sensitisation campaign can dispel, citizens are perfectly willing to engage with the government but they would also wish to be listened to.



109- See generally, Olavada, D.B., Wada, O.Z., Odetayo, A., Akeju, O.O., et al. COVID-19 Vaccine Hestancy Among Nigerian Youths: Case study of students in Southwestern Nigeria, op.clt.; see Kayode, O.R., Babatunde, O.A., Abiodun, A.K., Igbalajobi, M., et al.. COVID-19 Vaccine Hestancy: Maximising the Extending Roles of Community Pharmacists in Nigeria in Driving Behavioural Changes in Public Health Interventions, op.cit.

110- See Ackah, B.B., Woo, M., Stallwood, L., Fazal, Z.A., Okpani, A., Ukah, U.V., et al. COVID-19 Vaccine Hesitancy in Africa: A Scoping Review, op.cit., at p. 17.

111- One female Focus Group discussant in Port Harcourt, claimed that people in her community believed that the virus was just "malaria"



The term 'Fake News' may appear a term that has grown in popularity and usage, within the past decade or so. In fact, its usage may have been too much to the point where it became an unwieldy umbrella term¹² and fortunately scholars pushed for rigour. This study therefore adopts the following definitions:

Mis-information is when false information is shared, but no harm is meant.

Dis-information is when false information is knowingly shared to cause harm.

Mal-information is when genuine information is shared to cause harm, often by moving information designed to stay private into the public sphere.¹³

It is accepted that information (whether genuine or not) published with the intent to deceive has been around humans for centuries¹⁴. This, in and of itself is not news and means that the intentions to mislead, deceive and distort information will likely remain with us for the foreseeable future.

¹¹²⁻ Wardle and Derakhshan state that: "It's a vague and ambiguous term that spans everything from false balance (actual news that doesn't deserve our attention), propaganda (weaponized speech designed to support one party over another) and disinformatzya (information designed to sow doubt and increase mistrus lin institutions). ... the term has been used to describe a number of different phenomena over the past 15 years: news satire, news parcdy, tabrication, manipulation, advertising and propaganda". See Wards, C., and Derakhshan, H. (2017). Information Disorder: Toward an Interdiscipulinary Framework for Research and Policymaking, at pages 15 to 16. Published by the Council of Europe, F-67075 Strasbourg Cedex. Available at: https://fistdatlnews.org/wp-content/uploada/2017/1/PEMS-162317-GBR-2018-Report-de%CC%81sinformation-1_pd7/229719.

¹¹³⁻ See Wardle, C., and Derakhshan, H. Information Disorder: Toward an Interdisciplinary Framework for Research and Policymaking, op.cit., at p. 5.

¹¹⁴⁻ See "A Brief History of Fake News", by the Center for Information Technology & Society (CITS). Date retrieved 16/01/2023. Available at: https://www.cits.ucsb.edu/fake-news/brief-history.

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Misinformation is powerful because it tends to encourage certain responses that are overwhelmingly emotional and in many cases 'group oriented'. It further means that efforts to combat misinformation must be taken seriously by not only the government but the very institution with information dissemination as its primary objective-the media.

Misinformation is powerful because it tends to encourage certain responses that are overwhelmingly emotional¹¹⁵ and in many cases 'group oriented'. It is no secret that many Nigerians are unwilling to take the vaccine and that is because some of them do not trust the government. But is this related and how does it tie to misinformation?

Wardle and Derakhshan point out that for digital spaces there are tendencies for users to not only seek out information from friends they trust but that the space in which they find this information is often carefully (and often unintentionally) curated to ensure that the views depicted, tend to match the views of others within the group.

The author explained this as digital 'tribalism' and argued: "This tribal mentality partly explains why many social media users distribute dis-information when they don't necessarily trust the veracity of the information they are sharing: they would like to conform and belong to a group, and they 'perform' accordingly. The pressure to conform can become particularly strong when algorithms on social platforms suppress views opposing those of the user. Even if a user has a politically diverse circle of friends or followers, what she sees in her newsfeed or timeline does not necessarily reflect that diversity" (emphasis ours).¹¹⁶

So, how have media institutions fared post-pandemic and what are they doing to ensure that misinformation does not distort factual information and-in the context of vaccines and the virus-does not lead people to make poor decisions? These concerns are non-trivial, as debunking misinformation (which is with the aim of ensuring citizens make informed decisions, at the very least) ought to be an important goal of public policy.¹¹⁷

This is because mis-information and dis-information can lead people to make poor health decisions, which would lead to pernicious consequences for their health and the health of their communities.

¹¹⁵⁻ Van Damme and Smets (from their research involving randomised control trials) remind us that: "Human memory is not a recording device, but rather a process of (re)construction that is vulnerable to both internal and external influences". See generally Van Damme, I., and Smets, K. (2014). The Power of Emotion Versus the Power of Suggestion: Memory for Emotional Events in the Misinformation Paradigm. Emotion, 14(2), 310-320. Available at: https://doi.org/10.1037/a0034629.

¹¹⁶⁻ See Wardle, C., and Derakhshan, H. Information Disorder: Toward an Interdisciplinary Framework for Research and Policymaking, op.cit., at p. 43.

¹¹⁷⁻ See Chan, M.S., Jones, C.R., Jamieson, K.H., and Albaracin, D. (2017). Debunking: A Meta-Analysis of the Psychological Efficacy of Messages Countering Misinformation, at p. 1. In the Journal of Psychological Science 2017 28:11, 1531-1546. Available at: https://journals.sagepub.com/doi/epub/10.1177/0956797617714579.

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It can be accepted that combating misinformation is a component of infodemiology that needs to be addressed. This means that the function of fact-checking is pivotal not only to the provision of factual information but for better decision-making.

Porter and Wood's recent empirical study on the utility of fact-checking and the detectability of the effects of fact-checking, found that: "Experiments conducted simultaneously in Argentina, Nigeria, South Africa, and the United Kingdom reveal that fact-checks increase factual accuracy, decreasing belief in misinformation ... Our study makes clear that, in four diverse countries, fact checking can help mitigate the threat that misinformation poses to factual accuracy. While fact-checks improved factual accuracy more than misinformation degraded it, our results may approximate the lower boundary of misinformation's effects" (emphasis ours).¹¹⁸

This brings us to the point that a relatively unregulated internet combined with the potential for abuse requires a rethinking of how to address misinformation, especially in the context of public health. An answer to this is through infodemiology, defined as: "The science of distribution and determinants of information in an electronic medium, specifically the Internet, or in a population, with the ultimate aim to inform public health and public policy".

This is because there is a communication gulf between expert evidence and the responses of the general public (these responses are a combination of their beliefs and practices)^{1,9}Though more research is required on the structure and characteristics of this gap, it can be accepted that combatting misinformation is a component of infodemiology that needs to be addressed.

Having selected Journalists from news organisations, the author interrogated what forms of approaches and methods are adopted in counteracting misinformation in Nigeria. Below, analysis of the Key Informant Interviews is provided for insight into how fact-checkers deal with misinformation, in the context of COVID-19.

¹¹⁸⁻ See Porter, E., and Wood, T. (2021). The Global Effectiveness of Fact-checking: Evidence from Simultaneous Experiments in Argentina, Nigeria, South Africa, and the United Kingdom, at p. 5. PNAS (2021), Vol. 118 No. 37, e2104235118. Available at https://www.pnas.org/doi/pdf/10.1073/pnas.2104235118.

¹¹⁹⁻ See Lee, S.K., Sun, J., Jang, S. and Connelly, S. Misinformation of COVID-19 Vaccines and Vaccine Hesitancy, op.cit., at p. 1. See generally, Eyesenbach, G. (2009). Infodemiology and Infoveillance: Framework for an Emerging Set of Public Health Informatics Methods to Analyze Search, Communication and Publication Behavior on the Internet. In the Journal of Internet Medical Research. J Med Internet Res 2009, Vol. 11; Iss. 1- e11. Available at: https://www.jmi.org/2009/1/e11/PDF.

It can be gathered that fact-checkers have a level of self-awareness necessary for navigating the choppy waters of global and digital news. It is of note, that all the Key informants selected had internal systems and approaches for dealing with mis-information. Even the one that is a freelance Journalist has specific protocols for culling information. In addition, they all held that mis-information was a crucial factor that affects their work.

Rita, at the TheCable News stated that: "Considering the sensitivity of what journalism entails, it would be stating the obvious to say misinformation/disinformation affects my work significantly. Since journalism at TheCable involves knowledge-based reporting, misinformation/disinformation has the potential to cause crisis, clashes, and conflict, especially with the help of social media and the speed with which such information travels".

Shehu, who works with the International Centre for Investigative Reporting (ICIR) took a more personal perspective, where he mentioned that: *"It plays a significant factor in my work. As a Data Journalist, I deal with misinformation/disinformation regularly, and while I can detect false information, it has impacted my experience as a journalist".*

Frank, an independent Journalist and Newscaster understood his function in the information space, impact of his work and was of the view that: "Yes, it is a major factor. Misinformation can be a clog in the wheel of progress in any society. And as a journalist, it's my responsibility to inform the people with the right information. Unfortunately, unauthorized platforms like blog sites and social media platforms to a large extent, have become tools for disinformation. The implications of these are that it affects the authenticity and credibility of our profession and can sometimes lead to rebuttal of such piece of article put out there or broadcast".

From the above it can be gathered that fact-checkers have a level of self-awareness necessary for navigating the choppy waters of global and digital news. This is important, as communication goes beyond simply sharing information but involves a form of ritualistic negotiating of beliefs and perspectives. It can be argued that those involved in fact-checking must be self-aware enough to realise this and understand the importance of doing so.

Nigerians, regardless of their level of education may have generally shared the belief that the virus was of a 'religious pestilential' form and came from a god. On the issue of common forms of mis-information about the COVID-19 vaccine and virus, Informants provided observations that corroborate the categorisation of Wonodi, Obi-Jeff, Adewunmi, et al.¹²⁰ above. Informants were asked about what kinds of things they frequently came across.

Jesupemi, with TheCable, mentioned her observations that border on religion and the role of deities/gods in human affairs that: "Some of the COVID-19 related claims are that the virus is not real and that the virus is a punishment from God".

Frank, provided observations from the frame of education and how he believed it ought to be a factor that reduced the likelihood of holding misinformed views about the vaccine and virus. He said that: "In the context of COVID-19, there was a strong conspiracy theory that the virus was non-existence [sic] and was totally dismissed in most section [sic] of the society, even by the very educated and semi-educated Nigerians". Shehu, providing real-life examples of individuals that were involved in promoting mis-information and dis-information, stated that: *"The claims made by Pastor Chris Oyakhilome and Senator Dino Melaye at the height of COVID-19 was my fact check relating to the outbreak virus. I did the fact check in April 2020, looking at the false claim of relationship between the novel coronavirus pandemic and the 5G network".*

These evidence indicates the prevalent types of dis-information in Nigeria and gives an insight into the kind of thinking that would support these kinds of claims. Nigerians, regardless of their level of education may have generally shared the belief that the virus was of a 'religious pestilential' form and came from a god. This emphasises the role of religion and religiously motivated beliefs. It also does highlight that future attempts at curbing misinformation and disinformation should enlist the participation of religious leaders.

120- See "Figure 1" above on page 25 of this report.

"There are also concerns around trust deficit regarding government policies, as well as poor gatekeeping by social media platforms in terms of curbing viral fake news." Informants were also asked how they thought mis-information affected the likelihood of Nigerians taking the vaccine. This question was meant to give insight into how fact-checkers view the impact of mis-information on decision-making.

Rita, discussing sources and trust levels of users of social media. among other things, stated that: "A significant proportion of the population gets information through social media platforms, where such misinformation spreads like wildfire. There are also concerns around trust deficit regarding government policies, as well as poor gatekeeping by social media platforms in terms of curbing viral fake news. As such, if claims that question the credibility of vaccines spread, people may not see the need to get vaccinated". This response shows how effective social media is in spreading misinformation and how alert fact-checkers have to be in response.

Jesupemi, terse in her response, showed the linear relationship between misinformation and decision-making, where she pointed out that: *"It affects it negatively. I've interacted with people who refused to take the vaccine or delayed doing so and the major reason was false information they had heard about it".* This, again, shows the importance of providing a filter between information and its consumers, which would help in driving down the chances of it having negative effects.

Shehu, looking at the effects, mentioned that: *"It did affect* people. I know a couple of people, because of what they read/saw online to date, didn't take vaccines. I was motivated to do those fact-checks because I was coming across many people, both offline and online, accepting false claims about COVID-19 and vaccines".

Lastly, on the Informant's challenges, weaknesses and opportunities in fact-checking, the responses were interesting and provided a picture of the mind of a fact-checker and their objective assessment of their role. Rita, stated that: "Challenge: Convincing people who prefer to depend on questionable sources for information. Weakness: How to get the accurate information to spread as far as misinformation. Opportunity: It's creating a slow, but gradually growing culture of verification before people swallow information from questionable sources hook, line, and sinker".

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In the main, fact-checkers are an indispensable part of the information age. The potentials for creating a willingness and interest in verifying information exists but fact-checkers must constantly be aware of their contribution to doing this.

Jesupemi, focusing on the challenges, mentioned that: "I would say the biggest challenge is how fast social media helps to spread misinformation". Shehu, somewhat cynically considering the challenges and weaknesses, held that: "One of the biggest challenges I have noticed in dealing with misinformation is the distance a claim can travel when it is made. While fact-checkers try their best to counter some of the claims, those fact-checks at times don't go as far as false claims. And I have personally encountered this issue".

This sobering comment ought to put the critical function of fact-checking in greater perspective. Lastly, Frank gives a broad take on the question, putting forward that: "One of the biggest challenges has been that misinformation led to an initial rejection of accurate information, especially when it is allowed to make its way first into the public space before a credible does.

Meanwhile, the weakness in dealing with misinformation largely stem

from conflicting statistics from agencies who are supposed to serve as sources of credible information. However, opportunities abound with seeking information from authorized sources on such subject, namely WHO, CDC etc". This highlights the need to not only accurately communicate government information but the fact that citizens would be aware of these discrepancies.

In the main, fact-checkers are an indispensable part of the information age. Yet, it must be understood that it is possible to create a level of capacity in the general public that can ensure that the likelihood of dissemination of dis-information is greatly reduced. Apart from providing the requisite support to fact-checkers, the Nigerian government must consider the development of a curriculum in digital literacy, that can potentially help to not only instruct citizens on literacy skills but also the appropriate means to traverse a world that appears to be more and more complex. It bears repeating that this will also ensure that citizens are equipped to make the best decisions on health matters which has positive benefits for the country.





Conclusion

The COVID-19 pandemic was an extremely trying time for Nigerians because they were confronted with a virulent disease and a health sector that left much to be desired. There are numerous groups of citizens in many developing countries around the world that are victims of circumstances, conflict, lack of opportunity and economic misfortune. Oftentimes, they are disempowered and are unable to make meaningful decisions for themselves and this has the potential to negatively impact their health, education and finances.

The COVID-19 pandemic was an extremely trying time for Nigerians because they were confronted with a virulent disease and a health sector that left much to be desired. Despite this, the government has recorded some successes, despite not reaching the intended number of Nigerian citizens as initially envisioned.

The vulnerable position in which developing countries have found themselves may be due to no fault of their own but the responsibility to emerge from such a position squarely resides with them. It is acknowledged that the global system is tilted in favour of developed countries¹²¹ but for developing countries to improve their lot, they must improve their strengths and weaknesses, in a pragmatic and timely manner.

One point of intervention, is in the nascent partnerships that exist between CSOs and citizens, CSOs and the government and all the three combined. It is seen that such partnerships-when the parties are cognisant of their context and potentials-can spell dramatic improvements. This is the case because CSOs may not have the geographical spread nor the funds but they have the trust of ordinary citizens (even though this can be improved).

On the other hand the government may have the resources (to a large extent) and the geographical spread but they lack the trust.

121- See generally, Sidiropoulos, E. (2022). Africa Aspiring to Greater Global Agency, at p. 99. In Rewiring Globalisation by Sinan Ugen, Celyan Inan, Rozlyn Engel, Tobin Hansen, Richard Youngs and Francisco Urdinanz, et al. Carnegie Endowment for International Peace Publications Department 1779 Massachusetts Avenue NW Washington, D.C. 20036. Available at: https://carnegieendowment.org/files/RewiringGlobalization_final_Revised1.pdf.

The improvement of the trust relationship, must be done at all levels and from all arms of government and involve as many stakeholders as possible. It is through a combination of the above parties, that accountability and equity in COVID-19 vaccine distribution can occur. While this may not always take the form of well-known Social Accountability models (such as: Community Scorecards, social audits, public expenditure tracking systems, information campaigns, public hearings, participatory budgeting, and social movement, among others)¹²² the aim of strengthening existing platforms or even creating new ones, is always an option.

It should be reiterated that our findings demonstrate that the Nigerian citizen is, on average, very sceptical about the policies and interventions of the government, especially relating to health and the vaccines distributed. This is as a result of the broader lack of trust in the government, that the latter has been unable to address. Daunting as it may be to restore trust, the gains for government legitimacy would be immense and the implementation of policy would be easier. The improvement of the trust relationship, must be done at all levels and from all arms of government and involve as many stakeholders as possible. This would ensure cohesion and

produce outcomes that are truly participatory. Funding is still a major challenge for the Nigerian government, both at the federal and state levels but the real difficulty, is in ensuring that state governments are able to commit to a quantum of health spending every fiscal year. Sustained engagement (over a period of years) would be required to make this happen. Fortunately, there is no dearth of manpower, network or passion on the side of CSOs in Nigeria.

But it takes more than passion or a strong network to see to the improvement of vaccine uptake, as CSOs have been observed to be minimally impactful. While this in and of itself may not be the fault of the CSOs but due to the lack of funds, CSOs are nonetheless urged to design interventions and advocacy that speaks to their strengths and finances. Where possible, programs that have limited funding can be phased and designed in a way that provides additional funding if clear targets are met. In addition, CSOs can explore collaborations with other organisations that are involved in similar work, to possibly share resources and thereby stretch their value and application.

122- See Boydell, V., McMullen, H., Cordero, J., Steyn, P., and Kiare, J. (2019). Studying Social Accountability in the Context of Health System Strengthening: Innovations and Considerations For Future Work, at p. 1. In the Journal of Health Research Policy and Systems, 17:34. Available at: https://health.policy-systems.biomedcentral.com/counter/pdf/10.1186/s12961-019-0438-x.pdf?pdf=button%20sticky

Recommendations



As early as January of 2021, the federal government had announced the release of N10 billion naira for the local production of the COVID-19 vaccine¹²³ However, more than 2 years later, the country is not producing the vaccine as envisioned. According to Martins Emeje: "[R]ight now as we speak, Nigeria does not manufacture any drugs. We import 100% of our drug needs from other countries. This is in the form of the raw materials (the active pharmaceutical ingredients) which we then compound and/or produce in capsule, tablets, injection and syrup form.

Or, we import already finished products, primarily from India, China and the United Kingdom for distribution in our health system".¹²⁴ Though such a state of affairs is undesireable but the infrastructure and investment required to manufacture vaccines is viewed by some as quite complex (know-how is needed in small molecule manufacturing, among other things), in addition to the challenge posed by manufacturing sophistication (in the form of competition) from other nations.

123- See "FG releases N10bn to support local production of COVID-19 vaccine", by the Cable, on January 18th 2021, in the Cable (Online) Newspapers. Available at: https://www.thecable.org/ig-releases-n10bn-to-support-local-production-of-covid-19-vaccine.

124- See "What can Nigeria do to boost local production of vaccines?", by Royal Ibeh, on July 15th 2021, in 'Stories from the Community'. Vaccines Work (Online). Available at: https://www.gail.org/vaccineswork/what-can-nigeria-do-boost-local-production-vaccines. This means that despite the need for a local production capacity, it should be pragmatic and conscious of local conditions and perhaps simply build on them. The Conclusions section below, elaborates more on this and other critical issues.

Nigeria Must Think and Behave Differently About the Global Vaccine Supply Chain

The global vaccine supply chain is obviously skewed in favour of rich countries or, in the very least, those that have the infrastructure to manufacture vaccines. This means that poor or low-income countries will struggle to meet their vaccine requirements. Relying on the goodwill of developed nations for vaccine supply cannot be a policy of any responsible government. Though the country has a relatively robust Vaccine Policy (Nigeria Vaccine Policy, 2021)¹²⁵, there has been no significant effort at local production of vaccines, for over 2 decades.¹²⁶

However, this should be distinguished from local product manufacturing, which Nigeria already doe¹²⁷. Yet, Nigeria does not lack the human capital (the technical know how), nor the political commitments but lacks critical infrastructure, among other things. Nigeria's position is representative of the broader continent, as McKinsey highlights the very real demand for various vaccines-Diptheria, Tetanus and Pertusis, for instance-on the continent. Vaccine sales on the continent make up 25% of the total global market (worth \$33 billion dollars) and the total continental demand is 25% of total volumes¹²⁸. The Guardian reports that: *"With roughly 30% local production capacity alongside heavy dependence on the importation of critical raw materials, mainly active pharmaceutical ingredients (APIs) and machinery inputs as well as competition from a poorly regulated market, indices point to the nation's inability to manage emergencies*"¹²⁹



¹²⁵⁻ See generally, the Federal Ministry of Health: Department of Food and Drug Services. Nigeria Vaccine Policy (September, 2021), 1st Edition. Available at: https://www.health.gov.ng/doc/Ngeria-Vaccine-Policy-2021.pdf

¹²⁶⁻ See the Federal Ministry of Health: Department of Food and Drug Services. Nigeria Vaccine Policy (September, 2021), op.cit., at p. 12.

¹²⁷⁻ McKinsey notes that: "In sub-Saharan Africa, only Kerya, Nigeria, and South Africa have a relatively sizable industry, with dozens of companies that produce for their local markets and, in some cases, for export to neighboring countries. Local producers also play in a limited range of the value chain. Almost all of them are drug-product manufacturers—that is, they purchase active phermaceutical ingredients (APIs) from other manufacturers and formulate them into finished plays, creams, capsules, and other finished drugs. Up to a hundred manufacturers in sub-Saharan Africa are limited to packaging: purchasing plils and other finished drugs in buik and repackaging them into consumer-facing packs. Only three—two in South Africa, and one in Ghana—are producing APIs, and none have significant R8D activity". See "Should sub-Saharan Africa make its own drugs?", by Michael Conway, Tania Holt, Adam Sabow and Irene Yuan Sun, on January 10th, 2019, in "Jubic and Social Sector", McKinsey and Company (Online), Available at: https://www.mckinsey.com/industries/public-and-social-sector/our-insights/should-sub-saharan-africa-make-its-own-drugs.

¹²⁸⁻ See "Africa Needs Vaccines. What Would it Take to Make them Here?", by Andrea Gennari, Tania Hoit, Emma Jordi and Leah Kaplow, on April 21st 2021, in "Life Sciences", McKinsey and Company (Online). Available at https://www.mckinsey.com/industries/life-sciences/our-insights/africa-needs-vaccines-what-would-it-take-to-make-them-here.

¹²⁹⁻ See "What would it take for Nigeria, others to manufacture vaccines?", by Femi Adekoya, on July 29th 2021, in the Guardain (Online) Newspapers. Available at: https://guardain.org/business-services/industry/what-would-it-take-for-nigeria-others-to-manufacture-vaccines/.



African countries are urged to explore context-specific forms (or combinations of these models) of production that take into consideration their own peculiarities. In addition to the raw materials, Nigeria requires the supporting infrastructure, such as cheap and reliable energy and logistic infrastructure to support the production of vaccines. There has been some notable allocation of funding via Central Bank of Nigeria (CBN) interventions (claimed to be nearly **N4 billion naira** between 2020 and 2021)[®] but it remains to be seen if this financing is being monitored, evaluated and seen to be impactful.

However, for the country to cease being taken as a "bystander", in global vaccine delivery, it must take active steps at improving its doing business climate for the local production of vaccines. Government policy should steer away from government-centric models and aim to provide the environment for the private sector to manufacture. African countries are urged to explore context-specific forms (or combinations of these models) of production that take into consideration their own peculiarities³¹. Some examples of such manufacturing and distribution frameworks are: Downstream; Expanding routine; Platform leapfrog; Adjacency; and Outbreak.¹³²

Improve Coordination between the States and the Federal Government

Flowing from the above and more specifically, states and the federal government are urged to improve the logistical coordination of vaccine delivery and supply chain management. Clear lines of reporting must precede adequate budgeting and early release of funds for cold storage, transportation, personnel payments and communications, among other things. The ability of the government to adequately plan for the management of vaccines and their delivery, will go a long way to seeing that the funds are used effectively and citizens are provided with vaccines.

¹³⁰⁻ See "What would it take for Nigeria, others to manufacture vaccines?", by Ferni Adekoya, in the Guardain (Online) Newspapers, op.cit.

¹³¹⁻ McKinsey advances critical foundations of a viable vaccine manufacturing and distribution, to be: Lack of a clear agenda or coordination across efforts; Pestricted access to finance; Weak regulatory environments; Challenging demand dynamics; and Limited local talent. See "Africa Needs Vaccines. What Would it Take to Make them Here?", by Andrea Gennari, Tania Hoit and colleagues, op.cit.



An often under-considered responsibility for health, falls on the Local Governments, since the PHCs are administratively domiciled within LGs. The synergy required by the state and federal governments, should also include the local government, as PHCs are located in the local governments and there is much gain to be made from government collaboration and information sharing, regarding health care at the level of the PHC. In addition, the synergy between Local and State governments in the management and administration of healthcare must be adopted. An often under-considered responsibility for health, falls on the Local Governments, since the PHCs are administratively domiciled within LGs. The LGs are the government closest to the people in rural areas and the latter often tend to be underserved in terms of health care. However, this will be difficult, as nearly all the LGs in the federation battle with control of their allocations by their state governments.

A Premium Must be Placed on Targeted Communication and Information Dissemination

In terms of information sharing and dissemination, there is a huge part for the government to play, in terms of the communication of its policies and actions, especially where they are of a public health concern. Few aspects of government are as personal and intimate as health decisions. This could mean that the extent of engagement by the government must take into consideration that Nigerian citizens (due to their experiences with government service provision and as the evidence outlined above portrays) are generally sceptical about government action.

While this may appear as an obstacle, it should be reiterated that some discussants were willing to take the vaccine where they saw the elites and government officials take the vaccine. This may be evidence that some 'top-down' approaches have the potential to elicit positive responses. There is also the critical role of CSOs in their programmatic and advocacy efforts and how CSOs must constantly ensure that their efforts are the product of rigorous research and strategic visioning, despite the fact that many of them are donor-dependent.

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Fact-checkers require support, not just in terms of resources for their work but also in the constant use and 'sharing' of their information. This also means that CSOs have to fundamentally rethink the nature and purpose of their interventions, as a means to ensure they are properly situated in effective, efficient and impactful positions. The acknowledgement that various stakeholders are key to ensuring that public health messaging is taken seriously by citizens is key to achieving healthier societies.

Because information is mediated not only as discrete data but through the lens of influence, status and trust, citizens will listen to a variety of information sources and where the government recognises this and partners with very 'visible' stakeholders, the dissemination of information will likely happen at faster rates.

Support for the Growing Role of Fact-Chekers

Fact-checkers require support, not just in terms of resources for their work but also in the constant use and 'sharing' of their information. It should be noted at this point that not all media organisations provide fact-checking as part of their offering and not all fact-checking organisations publish news. For instance 'Dubawa¹³³ is "Nigeria's first indigenous independent verification and fact-checking project" and though they are an affiliate of the Centre for Journalism Innovation and Development (formerly the Premium Times Centre for Investigative Journalism), they are primarily focused on combatting misinformation. Organisations such as Dubawa have identified the changed nature of communication and realised that there is role for the Media to play, for the betterment of society.

In any case, for Nigeria, the role played by Fact-checkers and the media more generally, require a transformation of the way scientific information is communicated.

133- See Project Dubawa. Credibility Coalition (Online). Available at: https://credibilitycoalition.org/credcatalog/project/dubawa/.



The media must take, as its own responsibility, the initiative to carefully curate and craft communication on issues that considers users of information and their likely biases. The idea being, that the more people reached, the more informed people would be but this only assuming viewers of the information are able interact with information and news with a level of disinterestedness and detachment, which often rare.

Despite the fact that Nigeria's literacy rate has seen marked improvement³⁴, because epidemiological issues tend to be complex and require multidisciplinary approaches, communicating the messages relating to disease, drugs, hygeine and healthy practices must be delivered in simple ways.

The media must take, as its own responsibility, the initiative to carefully curate and craft communication on issues that considers users of information and their likely biases. Wardle and Derakshan argue for a suite of policy actions that media organisations in general can take up. These actions are as follows: Collaboration with other Media/Fact-checking organisations; Agree policies on strategic silence; Ensure strong ethical standards across all media; Debunk sources as well as content; Produce more news literacy segments and features; Tell stories about the scale and threat posed by information disorder; Focus on improving the quality of headlines; Don't disseminate fabricated content. As with policy suggestions in general, this advice should take context into account and with a well-considered amount of strategy, Fact-checkers will have an increasing level of impact on citizenry.

134- See "Nigeria's non-literacy population now stands at 31%, says FG", by Joseph Erunke, on September 7th, 2022, in the Vanguard (Online) Newspapers. Available a https://www.vanguardngr.com/2022/09/nigerias-non-literacy-population-now-stands-at-31-says-fg/.




Appendix 1

COVID-19: Strengthening Partnerships for Equity & Accountability Focus Group Discussion Guide

In pursuance of implementing the OSIWA COVID-19: Strengthening Partnerships for Equity & Accountability Project, this guide has been developed to provide intended questions for the respondents and instruction for the prospective discussant supervisors. Due to the nature of the evidence sought and the demographics of the respondents, the Focus Group Discussion (FGD) format has been chosen. This format shall have the purposeful selection of communities in Nigeria that have a Primary Health Care (PHC) centre within a 2 km2 radius and have had COVID-19 vaccines distributed in their community. As noted, the project aims to unpack the nature and consequences of vaccine distribution in Nigeria and specific challenges of accountability and inequity in local distribution.

Research on Health Facility Committees (HFC), as platforms to improve Social accountability between health providers and users, in the context of PHC in West Africa, suggests (see Lodentein, Mafuta, et al; 2017) that: "HFCs can generate responsiveness and improved community-health centre linkages at the local level".¹³⁵ However, there are challenges with the operationalisation of HFCs on improving feedback mechanisms, payment of wages for HFC members and the development of means to avoid the repression of marginalised voices¹³⁶. This means that care must be taken to not only investigate the drivers behind vaccine hesitancy but understand how relationships between communities and health service providers (i.e., personnel and structures) function. This is with the goal of suggesting and recommending the creation of platforms for organically-grown citizen awareness and engagement with vaccine issues, inequity and accountability issues, as they evolve.

¹³⁵⁻ See Lodenstein, E., Matuta, E., Kpatchavi, A. C., Servais, J., Dieleman, M., Broerse, J. E., Barry, A. A., Mambu, T. M., and Toonen, J. (2017). Social Accountability in Primary Health Care in West and Central Africa: Exploring the Role of Health Facility Committees, at p. 13. BMC Health Services Research, 17:403.

¹³⁶⁻ See Lodenstein, E., Mafuta, E., et al. Social Accountability in Primary Health Care in West and Central Africa: Exploring the Role of Health Facility Committees, op.cit., at p. 12.

The data gathered will primarily be from the perspective of citizens, who are the most affected group but arguably may have the least, in terms of influence or voice. To appraise the governance, normative environment and social psychology of citizens, citizens groups and community health workers should be included-which also adds a nuanced perspective to the data.

The selection criteria of the respondents can be as broad as feasible but should start from those above 18 (as consent would be sought from them directly, as opposed to seeking permission from a guardian). Because the vaccine is meant for the entire population (minus infants and pre-adolescent children), participants can be chosen at random and should have an equal number of men and women. Where the supervisors are able, the FGD should be discussed in an urban (or peri-urban) area and a rural area.

Supervisor Guidelines

FGD is a discussion group that gives a qualitative approach to gaining an in-depth understanding of social issues. The method aims to obtain data from a purposely selected group of individuals rather than from a statistically representative sample of a broader population. The method helps to gather people's opinions, ideas, and beliefs on a certain topic. While surveys or questionnaires can be useful, they cannot capture what a person is thinking or feeling. Supervisors must ensure to seek the consent of Participants beforehand and inform them that their identities will be kept strictly confidential.

Focus group discussions include a variety of perspectives and foster communication among people with slightly different backgrounds. In a good focus group discussion, participants comment on what other participants say, either expanding on a topic or expressing a difference of opinion.

Guide for FGD Supervisors

Provide sufficient Context: Respondents may have had some previous interaction with program evaluators, program implementers and the research or advocacy teams of CSOs and development organisations. This means that some may come with cynicism but others may be optimistic about the session and its intended purpose. In general, there may be a range of beliefs, opinions and views about the session. This is why an effort should be made to gingerly explain that the purpose of the session is to not only get information directly from those involved but that the evidence used is meant to influence the study of equity and accountability for COVID-19 and also for healthcare more broadly.

Supervisors are encouraged to begin talking about the discussion with participants as they arrive at the venue. This has the benefit of 'breaking the ice' and providing some insight into how the participants think. However, Supervisors should avoid politics and religion.

Provide a 2-minute oral summary of the discussion at the end of the session in order to reliably capture what has been said and provide an additional layer of legitimacy to the discussion.

10 Most Important Things To Note

- The values, beliefs and opinions of participants should be respected.
- Give room for the participants to ask questions for clarification.
- 3 The discussion shouldn't be stretched more than the allotted time.
- Participants should be allowed to express their views.
- 5 Participants should be called back when they digress from the main subject of discussion.
- 6 The
- There should be ground rules (respect for other persons, no abusive language, etc.) to guide the participants.



Personal experiences shared by participants which will be of importance to the research should be noted.

8 Keep eye contact with participants throughout the discussion to read their emotions, so as to know if they're holding back in their response (Some participants might not fully express their opinion due to discrimination that such opinion may birth). In this case, the Supervisor can see such participants personally after they air their opinion.



10 Participants shouldn't over-speak, intervene and snatch others' chance to speak.

List of Questions

Tell us your name and what you think of the quality of health care in your community (Opening question).

- Can you describe when you first heard that the government wanted every Nigerian to take the COVID-19 vaccine?
- 3

Do you know who is responsible for providing vaccines?

- When 1 million vaccines were said to have expired sometime last year, who do you think was responsible for it?
- Do you know the overall head of the Primary Healthcare Centre (PHC) in your community?
- 6

When you have a problem with how you were treated at your PHC, who do you report this to? Can you tell us about your experience with this, if it has happened to you before and if nothing happened after you complained, why do you think nothing was done? Do you think Health workers are transparent enough in vaccine administration? (Strongly agree; agree; neutral; disagree; strongly disagree)

If you could talk to the head of your PHC about the poor administration of the vaccine, what would you say?

- How impactful have Civil Society Organisations (CSO) been in your community, in relation to COVID-19? (Very impactful; impactful; minimally impactful; not impactful; neutral)
- 10 What do you think is the major cause of citizen hesitance in taking the vaccine?
- Do you think that religion, politics or personal values are part of the reason for the hesitance? (Strongly agree; agree; neutral; disagree; strongly disagree)
- Which of the common misconceptions in your area is the major cause of hesitancy? (Please rank responses in relation to their frequency). What is your own view on taking/not taking the vaccine? Would you be willing to change your mind?
 - Do you think the government has played an effective role in debunking the misconceptions and misinformation around the vaccine and COVID-19 in general?
- 14

13

- Have you come across any person who has developed some negative symptoms you've seen or heard of about the vaccine?
- 15
- How do you think your input can help in improving the acceptance of the vaccine?
- 16

What is your view on how the government has treated citizens in all of this?



In all that we have discussed, what are the 3 most important things to you? (Ending question).

Appendix 2

OSIWA COVID-19: Strengthening Partnerships for Equity & Accountability Study Fact-Checkers Key Informant Interview Guide

In pursuance of implementing the OSIWA COVID-19: Strengthening Partnerships for Equity & Accountability Project, this guide has been developed to provide intended questions for the respondent and instruction for the Interviewer. Due to the nature of the evidence sought and the function of Fact Checkers, the In-depth and semi-structured Interview format (and methodology. has been chosen. This format shall have the purposeful selection of organisations that have publicly dedicated to providing fact-checks to misinformation on the COVID-19 vaccine in Nigeria. As noted, the project aims to unpack the nature and consequences of vaccine distribution in Nigeria and specific challenges of accountability and inequity in local distribution. In particular, the project aims to study the drivers of vaccine hesitancy among Nigerians to understand why a state of affairs persists.

It is evident that misinformation about health issues-especially those that affect nations and the globe-can have extremely harmful effects. This means that the critical threshold of immune persons needed to keep populations alive (the required 'Herd Immunity')^{sr} will be severely compromised because some of them simply refuse to take the vaccines. Lee et al. (2022), highlight this point in their US study, when they state that: *"Due to the high level of uncertainty caused by the pandemic and the relatively fast speed of vaccine development compared to other types of traditional vaccines, the public naturally sought out information to address their vaccine concerns and guide critical decision-making such as whether to get vaccinated or not.*

137- See the World Health Organisation (Online). "Coronavirus disease (COVID-19): Herd immunity, lockdowns and COVID-19". WHO Newsroom: Q&A, on the 31st of December, 2020. Available at: https://www.who.int/news-room/questions-and-answers/item/herd-immunity-lockdowns-and-covid-19. However, separating relevant and valid information from false and distorted misinformation about COVID-19 vaccines is difficult when a vast amount of material is being conveyed through media outlets and websites of varying reliability and accuracy¹³⁶(emphasis ours). The problem with misinformation is not a new one but appears to have created a swell during the COVID-19 emergence and the post-pandemic period. Research by the Council of Europe (2017) stated that research on misinformation (in addition to disinformation and a neologism, "mal-information") must understand that communication is not simply the sharing and receiving of information but the articulation of beliefs and perceptions about the world that people hold in common¹³⁰. This means that the data, media and information consumed by citizens (who themselves are active participants in the creation of "narratives" about global issues) form their epistemic and ontological foundation of reality.

The above implications are non-trivial, as people construct their reality through constant interaction with the information they come across. This means that efforts at ensuring the incidences of misinformation are reduced or more practically, checked, must be carried out by institutions and organisations familiar with the terrain and possessing some level of credibility. These institutions range from those that have relatively high levels of credibility, such as well-known print and traditional media (at least indirectly) to those with lower credibility, such as government agencies.¹⁴ Hence, individuals from 4 types of media organisations are being interviewed, to get a sense of how they combat misinformation/disinformation, specifically as it relates to COVID-19.

¹³⁸⁻ See Lee, K.S., Sun, J., Jang, S., and Connelly, S. (2022). Misinformation of COVID-19 Vaccines and Vaccine Hesitancy, at p. 1. Journal of Scientific Reports: Nature Portfolio, 12: 13681. Available at:

https://www.nature.com/articles/s41598-022-17430-6.pdf.

¹³⁹⁻ See Claire Wardle, C., and Derakhshan, H. (2017). Information Disorder: Toward an Interdisciplinary Framework for Research and Policymaking, at p. 7. Council of Europe. Published by the Council of Europe F-67075 Strasbourg Cedex. Available at: https://lirstdraftnews.org/wp-content/uploads/2017/11/PREMS-162317-GBR-2018-Report-de/kCC%81sinformation-1.pdf?x29719.

¹⁴⁰⁻ This view is tentative and exists only because these news outlets, as compared to online (often unverifiable) sources, tend to be more credible. However, this can be rebutted. See generally, Majerczak, P., and Strzelecki, A. (2022). Trust, Media Credibility Social Ties, and the Intention to Share towards Information Verification in an Age of Fake News. In the Journal of Behav. Sci. 2022, 12, 51. Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8869166/pdf/behavsci-12-00051.pdf.

¹⁴¹⁻ See generally, Sato, R. (2022). COVID-19 Vaccine Hesitancy and Trust in Government in Nigeria. In the Journal of Vaccines 2022, 10, 1008. Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9317906/pdt/vaccines-10-01008.pdf.

Interviewer Guidelines

The fundamental nature of interviewing, as a means to elicit information and knowledge was put very glibly by Brinkmann, who mentioned the foundation of why humans have conversations and talk to each other. Specifically, he pointed out that: "Unsurprisingly, conversations are therefore a rich and indispensable source of knowledge about personal and social aspects of our lives. In a philosophical sense, all human research is conversational, since we are linguistic creatures and language is best understood in the context of the conversation (Mulhall, 2007)^{1,47}. The interview is a means to construct the experience of the interviewee's perspective but also to share with the interviewer, one way of viewing the world. Such methods of data collection are indispensable in qualitative research, as they provide outlets for respondents to tell their stories in the words and expressions that they are comfortable and familiar with.

Proposed List of Questions

- Can you please introduce yourself (name, position, organisation)?
- As an organisation that deals with the public, do you have a standard process for verifying and fact-checking information?
- 3^Mtir
- Misinformation/disinformation has been of great concern in recent times, do you think it is a factor in your work and how does it affect you?
- 4
- In the context of the COVID-19 pandemic, what are the common forms of misinformation you come across and actively try to dispel?



How do you think misinformation affects the likelihood of citizens taking the vaccine?



What are your biggest challenges, weaknesses and opportunities in dealing with misinformation?

142- See Brinkerman, S. (2013). Qualitative Interviewing, at p. 3. Oxford University Press. 198 Madison Avenue, New York, NY 10016.

Proposed Letter to Interviewee

Dear Sir/Madam,

Thank you for your time and for agreeing to take part in this interview. This interview and the questions that follow form primary data for a donor-funded study the BudgIT Foundation is carrying out on COVID-19 Vaccine Distribution, Vaccine Hesitancy and the Challenges of Misinformation about the vaccine, among other things. This is based on the fact that media organisations play a critical role in not only providing information but ensuring that it is of the highest quality.

To provide some context, the study seeks to understand the nature of vaccine distribution in Nigeria (noting both the internal and external factors) and the challenges of accountability and inequity; investigate and understand the drivers behind vaccine hesitancy; and provide platforms for organically-grown citizen awareness and engagement with vaccine issues, at various levels. This entails the appraisal of the governance, normative environment and social psychology of Nigerian citizens. This aligns with the global move to include social and behavioural data in the drive to contain and ultimately quell the pandemic. The report will be a publicly available document.

The highest standards of data integrity will be maintained and you may choose to be anonymous but we would like to reference your organisation. If you may also elect that your organisation be anonymous.

Once again thank you for your participation.

Warm regards,

OPEN SOCIETY Initiative for **West Africa**

