

Impact of COVID-19 pandemic on healthcare delivery in Nigeria

Obinna Onwujekwe: FAS, FAMedS

Director, African Health Observatory Platform (AHOP) for Health Systems, Nigerian Center
Health Policy Research Group, College of Medicine, University of Nigeria

9th August, 2022

Introduction

- COVID-19 dealt a devastating financial blow to the Nigerian and world economy (AMS and NAS, 2020).
- It severely tested to breaking point, some seemingly strong health systems, including those in the developed, well-resourced countries of the world
- COVID-19 control efforts are hinged on:
 - public health measures, to flatten the epidemic curve and reduce the number of patients requiring emergency medical treatment; and
 - **Strengthen the health system**, to increase its capacity to treat the COVID-19 infection and its associated health problems, with little disruption to other equally important health care services.
 - **Opportunistically, strengthen the health system to achieve Universal Health Coverage and other Sustainable Development (SDG) health targets**

Nigeria and COVID-19

- As of August 7, 2022, the country had reported 261,473 confirmed cases, 3,373 active cases and 3,147 deaths (NCDC, 2022).
- Number of people tested = 5,441,162 (NCDC, 2022).
- Number of vaccine doses delivered = 56,126,494 vaccine doses have been administered (WHO, 2022).
- Nigeria's economy contracted by 6.1% year-on-year in the second quarter of 2020 (AMS and NAS, 2020).
- The pandemic however presents an opportunity to take another look at our health system
 - with a view to restructuring and strengthening it to deal with the pandemic and other future pandemics

Is the Nigeria's health system is resilient enough is to eliminate COVID-19 and function normally?

- All health systems building blocks are weak – translating to an overall weak health system
 - Low level of access to healthcare services
 - Minimal financial risk protection with insurance and other pre-payment mechanisms
- Did not achieve any health-related MDG goals
- Not primed yet to achieve the health-related SDG targets
- The Nigerian health system was not resilient

The Nigerian health system was not resilient

- **Healthcare services disrupted as a result of the COVID-19 pandemic**
 - Disruptions to essential health services (EHS) due to Covid-19 ranged from minimal to complete unofficial shutdown.
 - EHS like antenatal, post-partum, intrapartum care, family planning, vaccination services as well as non-communicable diseases were disrupted in most countries and in Nigeria specifically.

The impact of COVID-19 on health and health systems
(<https://www.oecd.org/health/covid-19.htm>)

- The pandemic has shown how vulnerabilities in health systems can have profound implications for health, economic progress, trust in governments, and social cohesion.
- Containing and mitigating the spread and infection rate of the virus continue to be essential.
- But so is strengthening the capacity of health systems to respond swiftly and effectively; and capacity to keep delivering other essential health services

Some evidence on COVID-19 and health systems

1. Okeke C et al (2022). Essential health care service disruption due to COVID-19: lessons for sustainability in Nigeria. WHO/AFRO. August 2022.
2. Wallace LJ Onwujekwe O, Ensor T and Elsey H (2022). The Role of the Private Sector in the COVID-19 Pandemic: Experiences from Four Health Systems. *Front Public Health*. 10:878225. doi: 10.3389/fpubh.2022.878225.
3. COVID-19 exposes Nigeria's wobbling healthcare system

<https://healthwise.punchng.com/covid-19-exposes-nigerias-wobbling-healthcare-system/> May 2020

(Accessed Nov 10,2021)

4. Obinna Onwujekwe, Charles Orjiakor and Prince Agwu (2020). Coronavirus: corruption in health care could get in the way of Nigeria's response. <https://theconversation.com/coronavirus-corruption-in-health-care-could-get-in-the-way-of-nigerias-response-136913>

5. Siddharth Dixit, Yewande Kofoworola Ogundehi, and Obinna Onwujekwe (2020). How well has Nigeria responded to COVID-19? <https://www.brookings.edu/blog/future-development/2020/07/02/how-well-has-nigeria-responded-to-covid-19/>

COVID-19 and the Nigerian health system: which way for health system strengthening for achieving the SDGs

- The COVID-19 pandemic confirmed how weak the Nigerian health system is and how easily essential healthcare services (EHS) can be disrupted.
- On the demand side, there was reduced demand due to fear, stigma and physical barriers to access.
- On the Supply side: supply side disruptions of goods and services and health workforce constraints
- Crowding of Essential Health Services (EHS)
- Ensuring continuity of EHS requires the strengthening of national and subnational mechanisms to support the continuous delivery of EHS during disease outbreaks.
- Adopting policies that ensure a whole-society and health systems strengthening approach would support initiatives to strengthen continuity of service delivery.

Health Policy Research Group and AHOP (2021). Disruption of essential healthcare services from COVID-19: lessons for sustainability in Nigeria. HPRG, UNN

COVID-19 hitting Nigeria hard

- COVID-19 pandemic exposed several weaknesses of the Nigerian healthcare system (Temiloluwa, 2020), particularly access to essential health services (EHS) for non-COVID-19-related services (Abikoye, 2020).
- **UNICEF projected that an additional 950 Nigerian children might die every day from preventable causes over the next six months as the COVID-19 pandemic disrupted routine services (Eyawo et al., 2021).**
- **One of the biggest challenges confronted during the pandemic was the lack of vaccine-manufacturing capacity on the African continent.** While biotech and pharmaceutical companies do exist in Africa countries such as Nigeria, their ability to supply the continent is far from sufficient, which leaves countries reliant on global supply systems.
[\(https://www.nature.com/articles/s41591-021-01395-6.pdf\)](https://www.nature.com/articles/s41591-021-01395-6.pdf)

Crowding out of essential services (Okeke et al, 2022)

- **Disruption due to supply and demand factors:** significant disruption to Nigerian essential health care services (EHS) during the COVID-19 pandemic was caused primarily by fear and stigma associated with the disease and physical barriers to service access on the demand side, and shortages of health goods and workforce constraints on the supply side.
- **Innovative service and goods delivery helped sustainability:** mobile diagnostic units, telemedicine services, dedicated COVID-19 clinics, multi-month drug dispensing, and home delivery of medications helped mitigate EHS disruption. Embedding these practices into regular EHS provision could build health system resilience in the longer term.
- **Increased investment in health is essential:** increased government attention on health systems during the pandemic resulted in essential investment in the health workforce and health infrastructure. Maintaining and increasing investment in infrastructure and logistics for sustainable service delivery is crucial for future system strengthening.
- **Leveraging collaboration helps sustain service provision:** fostering multisectoral approaches and partnerships at the community level, across government silos, and between public and private sector actors proved successful in supporting the continuity of EHS provision. Adopting such approaches more extensively could bring system wide benefits.

Impact of crowding out of EHS (Okeke et al, 2022)

- Nigeria's already overstretched health system experienced disruption to key services, including routine immunization, family planning, antenatal and neonatal care, tuberculosis (TB), HIV/AIDS, and malaria.
- From 2019 to 2020 the initiation of TB treatment went down by 72%, planned mosquito net distribution by 75%, and the provision of maternal care services by 6%, while child mortality rose by about 18% and maternal mortality by 9%, all attributed to the lack of EHS (The Global Fund, 2020, Ahmed et al., 2020).
- The pandemic set back the pre-pandemic gains made in addressing the unmet need for family planning services and disrupted well-established and effective immunization provision.

Disruptions to maternal, neonatal, and child health

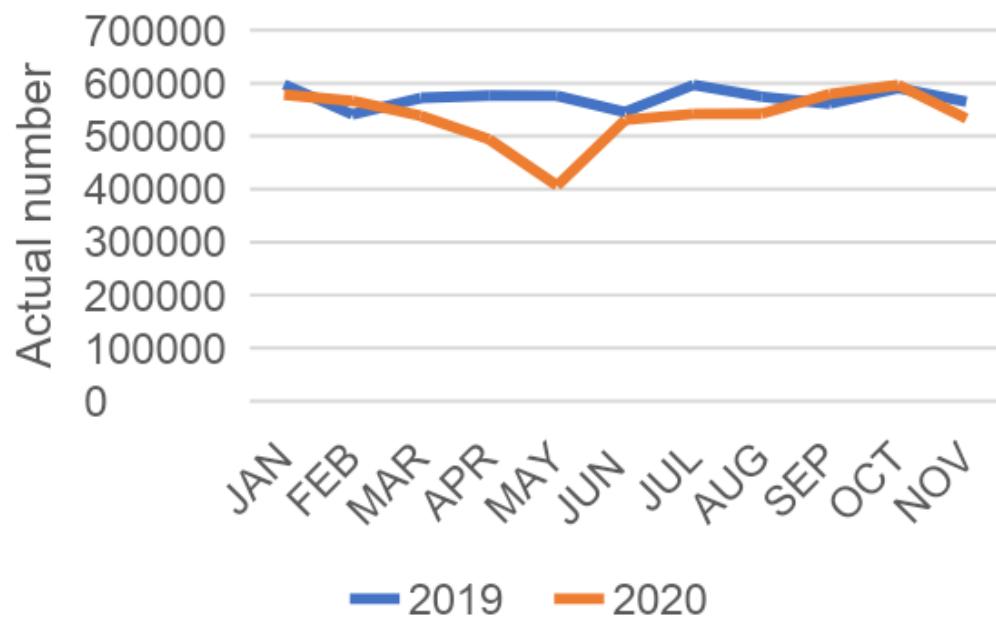
- *Increase in child and maternal mortality*
 - 18% increase in child mortality nationally attributed to the lack of EHS (The Global Fund, 2020)
 - 9% increase in maternal mortality nationally attributed to lack of EHS (The Global Fund, 2020)

Fig 1: Country performance on Penta3 immunization coverage

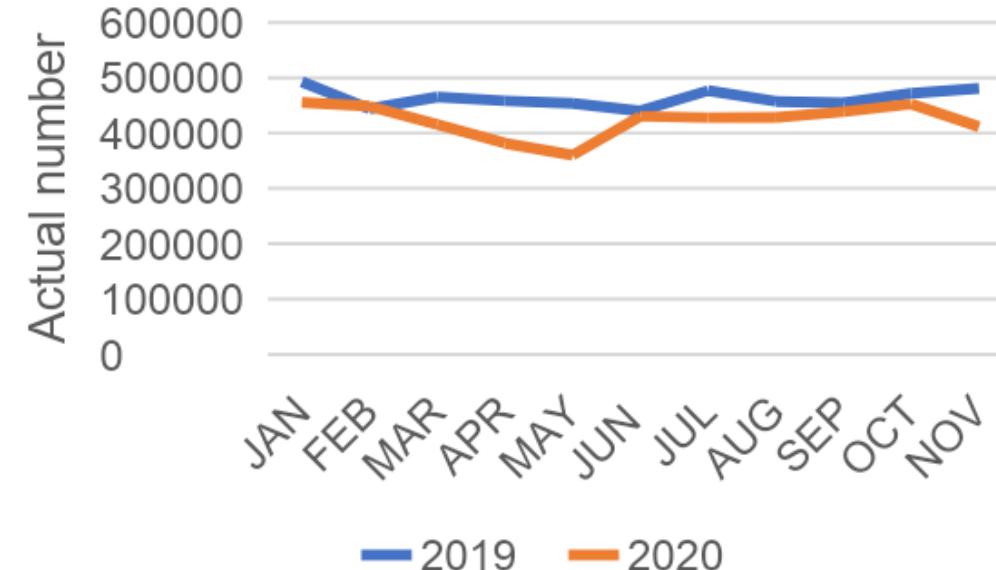
Fig 2: Country performance on fully immunized children less than 1 year

(MSDAT,2020)

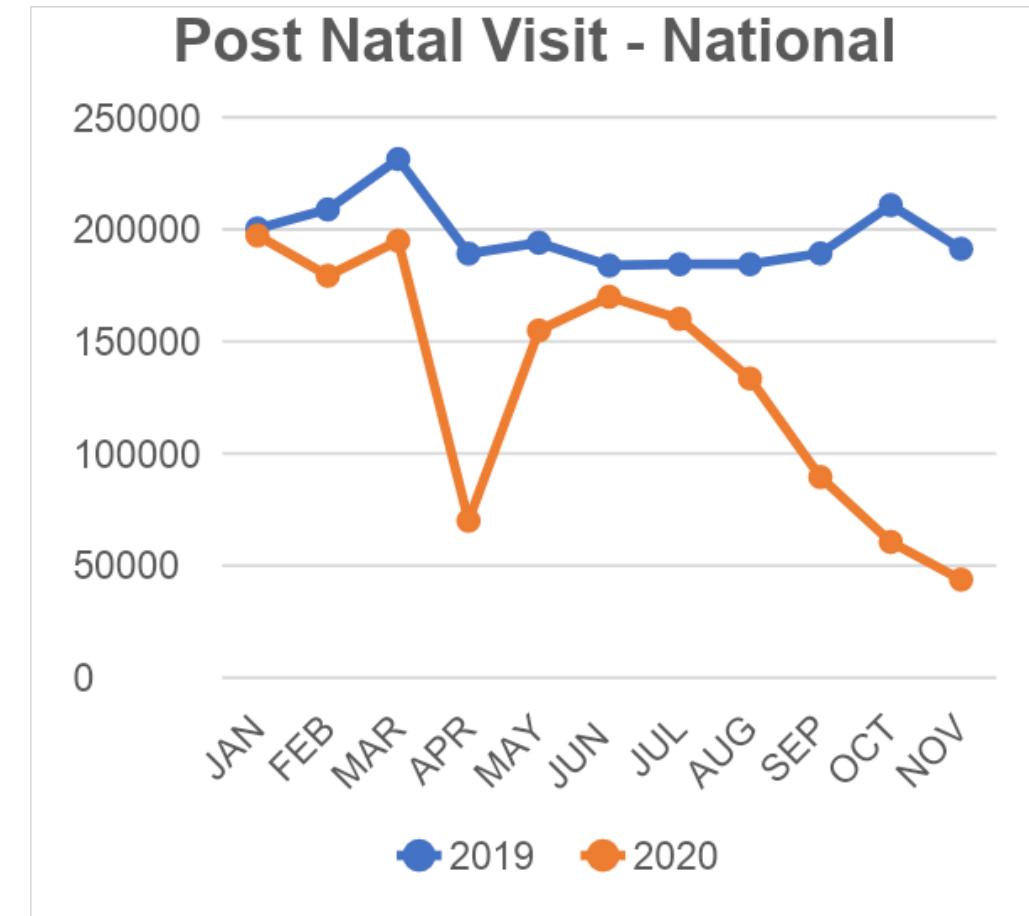
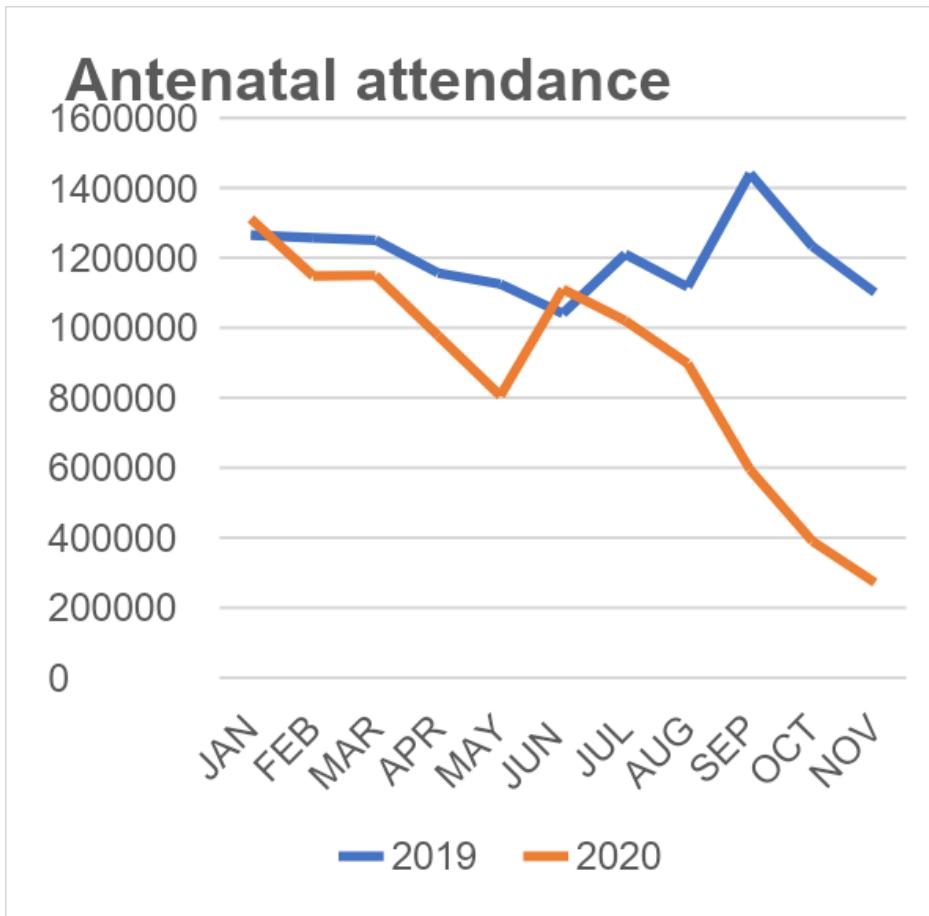
Immunization - Penta 3 given - National



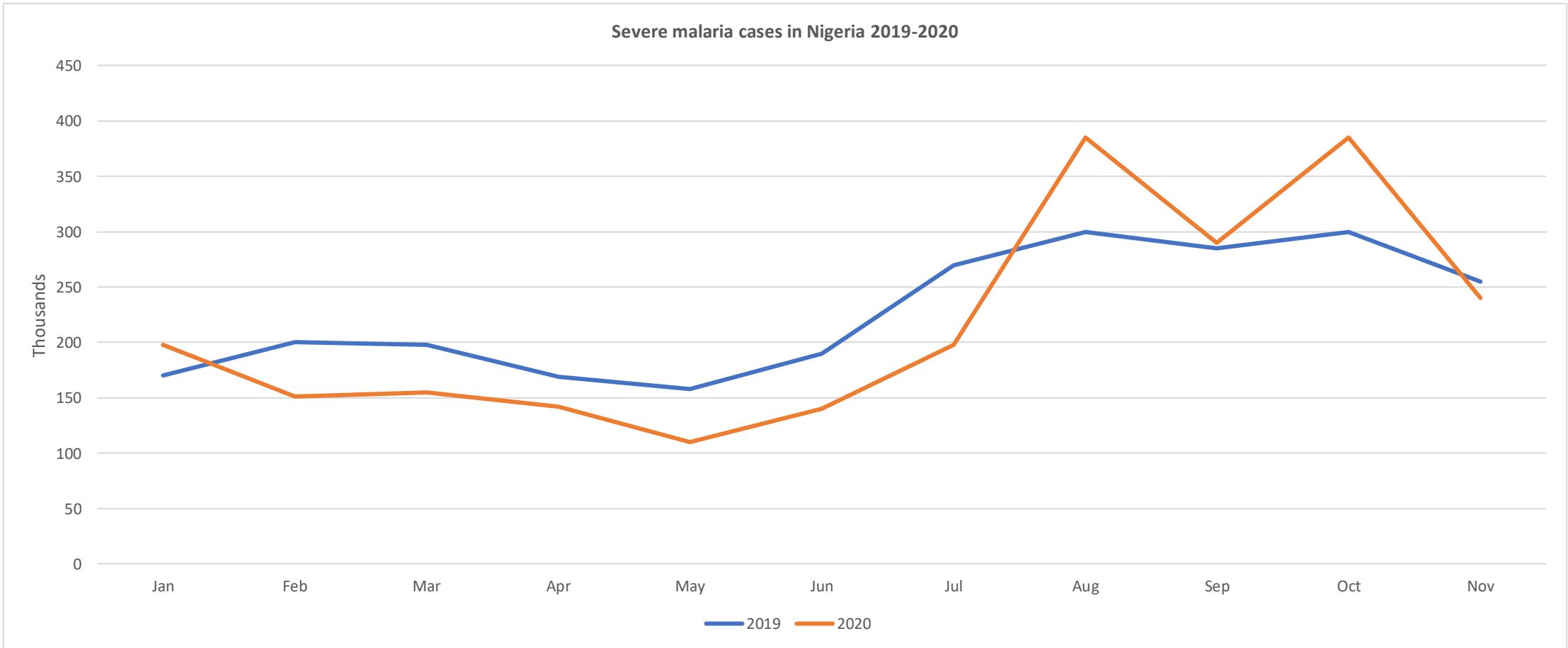
Immunization - Fully Immunized < 1 year - National



Figs 3 and 4: Antenatal attendance and post-natal visits fell drastically in 2020 compared to 2019 (MSDAT, 2020)



Health facility utilization for severe malaria cases in Nigeria during and after the lockdown period (30 March to 27 April 2020 initially, although extended in some states. (MSDAT, 2020).



Health System strengthening in Nigeria
for resilience and assured health security:
The future Nigerian Health System

Leveraging COVID-19 (AMS and NAS (2020)).

- COVID-19 presented Nigeria with an additional health challenge on top of an already high disease burden and frequent outbreaks of emerging and re-emerging infections.
- It highlighted the shortcomings in primary healthcare systems and inequitable access to services.
- It emphasised the fundamental importance of a strong primary healthcare system to absorb new shocks and to provide the foundation for an effective response to new health threats.

Key health system challenges in Nigeria (AMS and NAS, 2020)

- Inadequate resourcing of health
 - Public spending on health at less than 1% of the gross domestic product (GDP) and total health expenditure at 4% of GDP (World Bank, 2022).
 - OOPE on health is extremely high, constituting more than 72% of the total health expenditure.
 - The Federal Government of Nigeria (FGoN) and states currently allocate an average of 4.5% of its annual budget to health, falling short of the 15% that African leaders committed to in the 2020 Abuja Declaration (FGoN, 2018).
- Underfunding of primary healthcare and a lack of public confidence and Limited political commitment to health and primary healthcare
- Lack of clarity on roles and responsibilities at different levels of the system
- Human resource shortages
- Poor public financial management
- Limited absorptive capacity in the health system
- Vertical programming and silos create inefficient systems
- Lack of alignment between donors and domestic priorities
- Extensive but fragmented private sector

Some international “leveraging on pandemic/crisis” experiences to strengthen health systems (AMS and NAS, 2020)

- China’s experience during the SARS-CoV-1 outbreak shone light on the inadequacy of its primary healthcare system and triggered major new investments
 - **Public sector expenditure on healthcare in China increased almost 14-fold between the SARS outbreak in 2003 and 2018.**
- Another example of reform at a time of crisis was following the Asian financial crisis in the early 2000s, when Thailand committed itself to UHC and financial protection, and by 2015 98.5% of its population was covered by health insurance schemes.
 - It is now seen as a model for how low- and middle-income countries can achieve UHC.
 - Its GDP at the time it launched its UHC initiative is comparable to Nigeria’s current GDP.
 - **Notably, its primary healthcare infrastructure has contributed to a highly effective response to COVID-19 in Thailand.**
- In South Africa, the country in the region most affected by COVID-19, its president led active efforts to control the pandemic.
 - **The president argued that the COVID-19 pandemic has both highlighted the need for the national health insurance mechanisms and will shape its implementation**

COVID-19 blessing in disguise for Nigerian health sector – Prof Bassey, UUTH CMD

- Prof Bassey reasoned that the general lockdowns, which prevented highly placed Nigerians from embarking on medical tourism abroad, created the need to look inwards to develop the country's domestic healthcare system.
- The Federal Government released funds to the management of the hospital, Uyo, opened a modular testing laboratory and other projects that could help in combating the virus,' he stated
- Prof Bassey acknowledged the receipt of N859 million in federal funding to execute key COVID-19 intervention projects and programmes

[COVID-19 blessing in disguise for Nigerian health sector - Prof Bassey, UUTH CMD \(sunnewsonline.com\)](https://www.sunnewsonline.com/2020/05/20/covid-19-blessing-in-disguise-for-nigerian-health-sector---prof-bassey-uuth-cmd/)

Solutions

Holistically strengthening the Nigerian Health System

Weak Nigerian health system

- All the health system hardware (building blocks) and software are weak in Nigeria
- Low testing figures can be attributed to poor availability of diagnostics and the cost of tests proving a barrier to uptake.
- Management of confirmed cases of COVID-19 placed a huge burden on the Nigerian health system, which was already struggling under a double burden of both communicable and non-communicable diseases, as well as high-risk disease outbreaks such as cholera and Lassa fever (Simon, 2021).

What can Nigeria do? Leveraging COVID-19

- COVID-19 could provide a catalyst to achieve transformative change (AMS, 2020)
- Ensure and assure resilience – everyday and to shocks
- Holistically strengthen the health system hardware (10 Nigerian building blocks) and softwares
 1. Governance and leadership
 2. Service delivery
 3. Financing
 4. Human Resources for Health
 5. Health Information Systems
 6. Community Participation
 7. Partnerships
 8. Research
 9. Supply of critical resources
 10. Infrastructure

Leveraging COVID-19 from lessons and evidence (Okeke et al, 2022)

- Evidence suggests that adopting policies that strengthen the whole society and health system may facilitate the continuity of EHS service delivery. Areas of focus might include:
- **Investing in health workers:** reviewing and strengthening the training and support measures for health workers could help maintain and expand a healthy, motivated, well-compensated, professionally trained, and well-equipped workforce to continue to deliver EHS during and beyond health emergencies.
- **Balancing pandemic containment and health service access:** avoiding blanket lockdowns and coordinating pandemic containment measures with strategies to enable continued access to EHS can help prevent deterrents to health care usage and support the sustainability of services.
- **Cultivating community engagement:** investing resources in community engagement and deploying CHWs to support both public health communication efforts and EHS delivery have proved demonstrably effective.
- **Building public trust:** proactive investment in public health communication efforts to build trust and confidence in the health response to pandemics has been shown to encourage continued use of services and adherence to containment measures.

Leveraging COVID-19 from lessons and evidence (Okeke et al, 2022)

- **Responsive service delivery:** sustaining and embedding innovations in responsive, flexible service delivery through mobile clinics, integrated community vaccination and testing programmes, and telemedicine could help sustain EHS and build system resilience.
- **Addressing health supplies' constraints:** supply chain disruption and limited access to health commodities had a significant impact on the sustainability of EHS provision. Providing support to cover transportation, power, equipment, and communication costs where they impact health service delivery may mitigate disruptions to accessibility. Formalizing innovations in drug provision, such as multi-month drug dispensing or home delivery approaches, could contribute to building supply chain resilience.
- **Prioritizing health funding:** increased government investment in health during the COVID-19 pandemic was essential in EHS continuity. Diversifying budgetary allocation across the various tiers of government would reduce reliance on the federal government. Improving the adequacy and targeting of existing human, finance, and infrastructural health resources could also support continuity of EHS access.
- **Fostering multisectoral approaches and partnerships:** multisectoral approaches, working across government silos, and uniting diverse actors across sectors, proved crucial in the COVID-19 pandemic response. Leveraging engagement with non-state actors and private sector stakeholders – such as CACOVID – in both service provision and the design of innovative funding mechanisms, offers potential to reduce out of pocket expenditure (OOPE) and increase service sustainability in the short and long term.

Creating a resilient Nigerian health system

Health system resilience in response to COVID-19

- In the past five years ‘resilience’ has been increasingly applied in health policy and systems research to refer to the **need for distressed health systems (micro or macro) to “bounce back” from shocks.** (Topp et al, 2016)
- Often implicit in this discourse, **is the assumption that such systems were ‘there’ in the first place, or at the very least, that with a concerted effort they can get there** (Topp et al, 2016).
- Fragile health systems can become overwhelmed during public health crises, further exacerbating the human, economic, and political toll (Nuzzo et al, 2019).

What is everyday resilience? (RESYST 2016)

- **Everyday resilience is the ability of health systems to continue to deliver (optimal) services in the face of constant challenge and strain.**
- Everyday resilience derives from the combination of absorptive, adaptive and transformative strategies that actors in systems adopt in responding to health system shocks

Everyday resilience strategies:

- **Absorptive strategies** seek to neutralise low intensity or transient challenges, and return the system to its previous state with minimal or no effect on its functionality.
- **Adaptive strategies** are used when challenges are of a higher intensity and are likely to exhaust the system's absorptive strategy; resilient organisations respond by making limited adjustments (adapting) in order to continue to function.
- **Transformative strategies:** when shocks to the system are greater and persist, they may require the system to transform into an entirely new state through significant functional and structural changes. Béné et al., 2012

Lancet Nigeria Commission: Investing in health and the future of the nation (LNC, 2022)

Given Nigeria's young population, prevention should be at the heart of health policy

- Political leadership should operationalise a Health in All Policies approach with effective implementation
- Multi-sectoral actions for health have incredibly high benefit to cost ratios

Health in All Policies (HiAP)

http://www.health-inequalities.eu/HEALTHEQUITY/EN/policies/health_in_all_policies/#Definition

Definition

- HiAP is a policy strategy, which targets the key social determinants of health through integrated policy response across relevant policy areas with the ultimate goal of supporting health equity.
- The HiAP approach is closely related to concepts such as ‘inter-sectoral action for health’, ‘healthy public policy’ and ‘whole-of-government approach’.
- It implies mainstreaming health in all sectors, similar to how gender has been mainstreamed into everything

HiAP: Mainstreaming of Health in all sectors

- Health is influenced by social, environmental and economic factors, which lay beyond the realm of the health sector.
- Integrating health considerations into a broader range of related policy areas, such as employment, education and social policy is a panacea.
- Health policies and strategies should be addressed at all levels of governance, including global, national, regional and local levels.
- ***FMOH and partners to develop the policy instruments to implement Health in all policies (HiAP) and take action on the social determinants of health (One Health)***

Leverage the strengths of Nigeria's vibrant private sector (LNC, 2022)

- Public sector provision of PHC must be the focus, but the private sector can and should be leveraged for certain tasks: – E.g. CACOVID, donated supplies; facilitated vaccine rollout through logistics and IT support; and provided storage facilities nationwide for food and medical equipment
- Invest in a coherent state supported and private sector-led approaches to increase local production of vaccines, medicines, and other health products and services
- Develop capacity for strategic financing and contracting of services to the private health secto

Conclusion

- The impact of COVID-19 on Nigeria's health system revealed gaps in EHS, but it also highlighted innovations for health system strengthening (HSS).
- Transformative strategies should be the epi-centre of HSS for the Nigerian health system to be able to achieve the SDG targets, especially UHC
- HSS will involve an overall reform with emphasis on grass root health care provision and delivery
- **Transformative strategies:** when shocks to the system are greater and persist, they may require the system to transform into an entirely new state through significant functional and structural changes (Béné et al., 2012)
- The end point will be to re-build the Nigerian health system so that it can be resilient enough to control and eliminate COVID-19 and similar pandemics, whilst optimally taking care of other health conditions

Thank you for listening

References

- Abubakar I, Dalglish SL, Angell B **Obinna Onwujekwe** et al (2022). The Lancet Nigeria Commission: investing in health and the future of the nation. *The Lancet*. 11:S0140-6736(21)02488-0. [https://doi.org/10.1016/S0140-6736\(21\)02488-0](https://doi.org/10.1016/S0140-6736(21)02488-0)
- AMS and NAS (2020). Understanding the context of health coverage in Nigeria and progress towards universal health coverage. The Academy of Medical Sciences and the Nigerian Academy of Science, Virtual meeting 2–3 September 2020
- AFHEA. Toward universal health coverage in Africa: Key issues. AfHEA 2nd Conference – 2011. Palm Beach Hotel, Saly – Sénégal: 15th - 17th March 2011
- Béné C, Wood RG, Newsham A, Davies M (2012) Resilience: new utopia or new tyranny? Reflection about the potentials and limits of the concept of resilience in relation to vulnerability reduction programmes. IDS Working Paper. Brighton
- National Bureau of Statistics (2006). www.nigerianstat.gov.ng
- Nuzzo, J.B., Meyer, D., Snyder, M. et al. What makes health systems resilient against infectious disease outbreaks and natural hazards? Results from a scoping review. *BMC Public Health* **19**, 1310 (2019). <https://doi.org/10.1186/s12889-019-7707-z>
- RESYST key findings sheet (2016). What is everyday health system resilience and how might it be nurtured? Resilient and Responsive Health Systems (RESYST) Consortium, LSHTM
- *Stephanie M. Topp, Walter Flores, Veena Sriram & Kerry Scott* (2016). CRITIQUING THE CONCEPT OF RESILIENCE IN HEALTH SYSTEMS. *Power in Health Systems (SHPeS TWG) Thematic Leads*
- [Nigeria: WHO Coronavirus Disease \(COVID-19\) Dashboard With Vaccination Data | WHO Coronavirus \(COVID-19\) Dashboard With Vaccination Data](https://covid19.who.int/WHO-COVID-19-global-data.csv)