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Covid 19 Emphasizes the Need to Build Research Capacity in Africa

Aboh Mercy Itohan^{1,*}, Fahd-Salako Khalid¹, Badmos Abubakar O² and Alaran Aisha J³

¹Department of Microbiology and Biotechnology, National Institute for Pharmaceutical Research and Development, Abuja, Federal Capital Territory, Nigeria.

²Faculty of Clinical Sciences, University of Ilorin, Kwara State, NIGERIA.

The COVID-19 pandemic has had a devastating impact on the African continent, driving about 26 million people into extreme poverty (international poverty line of \$1.9/day) in Sub-Saharan Africa. [1] Needless to say, it has also been very detrimental to the running of health facilities and access of the global populace to health services. [2] The pandemic is set to constrain Africa's progress towards attaining the 2030 Sustainable Development Goals, reduce government revenues and budgets on health which might subsequently lead to more deaths from diseases and hunger in coming years. [3]

The importance of research is particularly more obvious in the midst of an unprecedented pandemic affecting almost all the nations of the world. More than ever, Africa must strengthen its research framework to move with the rest of the world at a commensurate pace in dealing with the pandemic. In Africa and everywhere else, extensive research has since begun in various fields to various ends. Efforts have been driven at appraising existing medications with possible pharmacological actions of therapeutic value in managing the disease. More importantly, a lot has gone into the development of vaccines against the novel coronavirus, with a number of promising vaccine candidates being developed barely ten months since the beginning of the pandemic, a huge feat for science.^[4]

COVID-19 has revealed the inadequacies in the healthcare system as well as in research in Africa. Here we discuss the current state of research in Africa, the implications on the preparedness and response of the continent to the disease and how the pandemic further reifies the need To boost more more robust research in the continent as a measure of her capability to adequately combat the present and future health challenges she faces.

During the early days of the pandemic, the governing bodies -the Africa CDC and African Union- established the African Task Force for Novel Coronavirus (AFCOR) to oversee the preparedness and response of the continent to the global pandemic.^[5] While there have been successful outcomes and positive results from these efforts, it is worthy of note that there have been gaps in implementation of some of these measures.

Research in the African continent has long been riddled with financial constraints. There continues to be very little investment in research in Africa despite it being one of the most potent drivers of growth and development in any nation. Even in the face of a global pandemic, the apparent lack of funding continues to hinder the progress Africa would have made towards COVID-19 vaccine research. For instance, a COVID-19 vaccine candidate being developed at the African Center of Excellence for Genomics of Infectious Diseases (ACEGID), Nigeria to cater for the African demographic has completed pre-clinical trials but remains unable to commence clinical trials in Nigeria for financial reasons. [6] Although a number of other trials are

going on in the continent including the Bill and Melinda Gates-sponsored ones in South Africa, the rate of development pales in comparison to the vaccines developed in high income countries. For this reason -among other factors, access to a vaccine in Africa may remain very low, well into the first few years after the first few ones (including the Pfizer/BioNTech and Moderna candidates) receive FDA approval.^[7]

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Africa produces less than 1% of global research output.^[8] Rife with dearth of data and statistics, the continent faces a huge constraint in implementation of health programs. This paucity of information further affects research aimed towards COVID-19. Without a doubt, the disparity between the projections of the WHO regarding infection and mortality rates of COVID-19 in Africa and the actual reported figures for example warrants probes into factors that could be responsible for said dissimilarity. However, the earlier discussed endemic lack of adequate data collection and documentation framework in the continent has made it impossible to develop a logic-driven explanation of the facts with the majority of commentators resorting to unfounded theories like testing capacity, genetics, climate and age distribution,^[9] further exposing one of the numerous inadequacies that have stunted research and kept the quality of intellectual discussions about the continent at a rather low ebb.

It definitely is not all bad news for research and enthusiasts in Africa. The need for accurate information as highlighted earlier has driven due focus to research and information provision and propagation. Some of the benefits of the surge in attention to research as a means to information provision include policies that increase the quality of research and products of research. Various processes have been set in motion to increase funding to research and public health, more reputable journals now offer waivers to researchers from 'low and middle income' countries especially those in the sub-Saharan African region as every party looks to contribute to the battle against the novel coronavirus.

In a continent like Africa where the public gaze (and ultimately the focus of the polity), has not dwelled well enough on research (and in-fact, academia) to facilitate required improvements in the quality of intellectual

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³Faculty of Pharmaceutical Sciences, University of Ilorin, Kwara State, NIGERIA.

conversations in and about the continent, the COVID-19 pandemic may have initiated a chain reaction. Stakeholders are now beginning to ask important questions about the state of research and of course, endow research (especially health science research) with due responsibilities, a paradigm shift that has immediately produced desirable, albeit inadequate effects.

CONCLUSION

Research only thrives in an environment that supports, prioritizes and rewards it. A cultural and political environment that fosters research is thus requisite to tussling the factors militating against growth and development in Africa. Additionally, institutions must be provided with initiatives that accelerate and support research education in the continent, in order to fortify the human capital and capacity of such institutions to provide valuable training and research opportunities. Funding must be provided in ample amounts to support local research in order to facilitate evidence-based policy-making tailored to the needs of the continent and generate better outcomes in the fight against health challenges.

In conclusion, research in Africa sadly has long suffered severe drawbacks. The COVID-19 pandemic blazingly heralds the ominous present and probable future of research in Africa. It necessitates a need to consciously and deliberately invigorate the research framework in the continent. Only then can we effectively combat this and other health challenges that have long pulverized the continent.

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*Correspondence to:

Dr. Aboh MI,

Department of Microbiology, National Institute for Pharmaceutical Research and Development, Abuja, NIGERIA.

Email.id: mercybenaboh@gmail.com

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