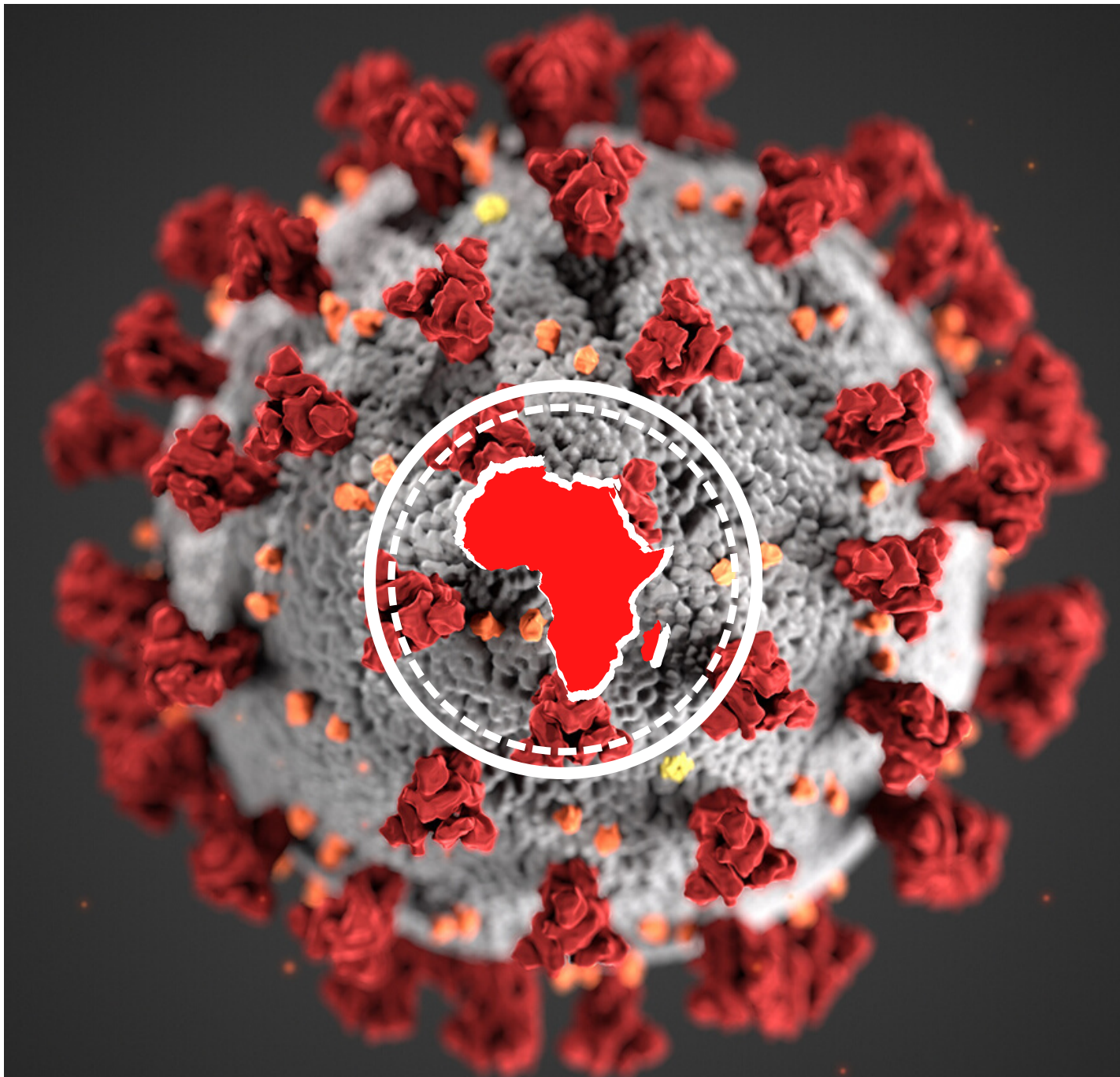


GET AFRICA



AFRICAN NEWSLETTER ON EMERGING INFECTIOUS
DISEASES & BIOSECURITY



Global Emerging Pathogens Treatment Consortium

(GET Consortium)

House 9 Ladele Close

Old Ife Road

Ibadan, Nigeria.

Published by GET Consortium, July 2020

GET AFRICA

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**GLOBAL EMERGING PATHOGENS TREATMENT CONSORTIUM
COVID-19 SPECIAL NEWSLETTER (3rd EDITION)
JUNE 2020**

You are welcome to this edition of the Global Emerging Pathogens Treatment Consortium (GET) Newsletter. You will find a number of educational materials on the COVID-19 pandemic, genetics, prevention and its control in this edition.

At this time in history, the global health threat caused by the severe acute respiratory coronavirus-2 infection further highlights concerns about biosecurity and the needed safeguards we need for the environment. This has been one of the key messages the GET Consortium had promoted knowing pandemics like this can challenge the richest of economies because of its novelty.

Education is one of the strongest ways of safeguarding the environment. People need to know and learn about the impact of the changes we make to the environment. With learning comes understanding, and with understanding comes the will to protect the environment. In this edition of the newsletter, you will find reports of a few public health education campaigns undertaken by staff of the GET Consortium on COVID-19 pandemic. This newsletter is a way to get information out there. So please feel free to share with as many of your peers and contacts as you would like to.

See you at the next edition of the GET newsletter.



Prof. Morenike Oluwatoyin Folayan (Editor in Chief)



I am pleased to welcome you to the third edition of GET newsletter, COVID-19 special. This edition is focused on the COVID-19 Pandemic and the role GET and other stakeholders are playing in containing the spread of the disease. Cases of Covid-19 first emerged in late 2019, when a mysterious illness was reported in Wuhan, China. The cause of the disease was soon confirmed to be severe acute respiratory coronavirus-2 (SARS-CoV-2), that was reported in humans for the first time. In March 2020, the World Health Organisation declared COVID-19 a public health emergency of international concern. As of 23 June 2020, COVID-19 had been reported in 213 countries and territories with over 9 million reported cases and about 480,590 deaths attributed to COVID-19.

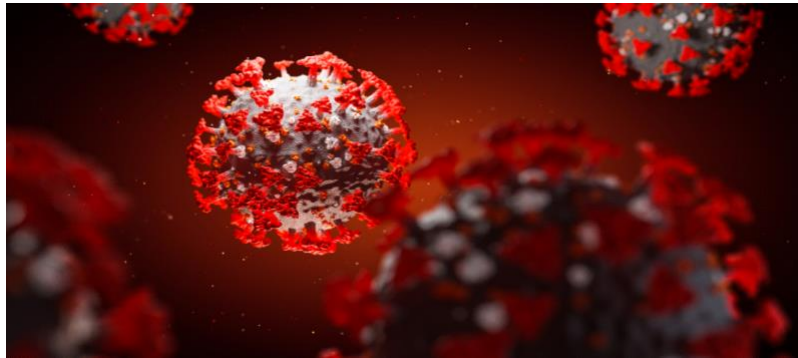
The impact of the disease has been huge. The economies of many countries have taken a bad hit, the capacity of hospitals in many countries has been stretched, and human communication and contacts were re-shaped in ways never witnessed before. COVID-19 infection has not abated in many parts of the world especially Africa. The number of infection is still on the rise. While the spread of COVID-19 continues, it is important that stakeholders at all levels take action to break the transmission; reduce the impacts of the outbreak and support control measures.

The Global Emerging Pathogens Treatment Consortium (GET) was established in August 2014 in response to the 2014-15 Ebola virus disease outbreaks in West Africa and the need to create an African-led multidisciplinary forum of experts to strengthen Africa's preparedness and resilience in tackling infectious diseases outbreaks, public health emergencies and pandemics. GET has been actively involved in preventing further transmission of COVID-19. We are involved with capacity building of health workers and COVID-19 control logistics in Lagos State, Nigeria. A member of GET is the secretary to the Emergency Operating Centre (EOC) in Lagos State. We organized workshops and trainings for health workers on Emergency preparedness, and Infection Prevention and Control. GET has shared about 7000 fliers and posters in different languages to sensitize the public on COVID-19 prevention and control measures. We also aired jingles on COVID-19 prevention and control on different radio stations in Nigeria. We look forward to continuing our collaboration with government and non-governmental organizations to prevent further spread of COVID-19 in Africa.

We thank all our donors and partners and continue to solicit their support to enable GET to achieve its aim of enhancing preparedness and resilience of African countries in tackling infectious diseases outbreaks, public health emergencies and pandemics. We look forward to receiving your continued support in the coming years. Kindly join us to meet our mandate and to serve you better.

Dr. Ayodotun Bobadoye,
(Chief Operating Officer, GET Consortium)

HISTORY OF COVID-19



Culled by **OKUNNIYI OMOWUNMI**

A novel coronavirus outbreak was first documented in Wuhan, Hubei Province, China in December 2019. As at May 15, 2020, COVID-19 has now been confirmed in six continents and in more than 190 countries. As the world's health systems funnel resources into learning about, treating, and preventing infections in humans, new information are released daily. In this two-part article series, we will first provide some history on coronaviruses to put this disease outbreak in perspective. Secondly, we will offer guidance from the best trusted sources for prevention and planning in the workplace and at home.

What are Coronaviruses?

Coronaviruses are a large family of zoonotic viruses that cause illness ranging from the common cold to severe respiratory diseases. Zoonotic means these viruses can be transmitted from animals to humans. There are several coronaviruses known to be circulating in different animal populations that have not yet infected humans. COVID-19 is the most recent to make the jump to human infection. Common signs of COVID-19 infections are similar to the common cold and include respiratory symptoms such as dry cough, fever, shortness of breath, and breathing difficulties. In more severe cases, infection can cause pneumonia, severe acute respiratory syndrome, kidney failure, and death. The COVID-19 infection is spread from one person to others via droplets produced from the respiratory system of infected people, often during coughing or sneezing. According to current data, time from exposure to onset of symptoms is usually between two and 14 days, with an average of five days.

How COVID-19 spreads

When someone who has COVID-19 coughs or exhales they release droplets of infected fluid. Most of these droplets fall on nearby surfaces and objects - such as desks, tables or telephones. People could catch COVID-19 by touching contaminated surfaces or objects and then touching their eyes, nose or mouth. If they are standing within 1 or 2 meters of a person with COVID-19 they can catch it by breathing in droplets coughed out or exhaled by them. In other words, COVID-19 spreads in a similar way to flu. Most persons infected with COVID-19 experience mild symptoms and recover. However, some go on to experience more serious illness and may require hospital care. Risk of serious illness rises with age: people over 50 seem to be more vulnerable than those under 50. People with weakened immune systems and people with conditions such as diabetes, heart and lung disease are also more vulnerable to serious illness.

How to Protect Yourself & Others from COVID-19:

- Wash your hands often with soap and water for at least 20 seconds especially after you have been in a public place, or after blowing your nose, coughing, or sneezing.
- If soap and water are not readily available, use a hand sanitizer that contains at least 60% alcohol. Cover all surfaces of your hands and rub them together until they feel dry.
- Avoid touching your eyes, nose, and mouth with unwashed hands.
- Practice social distancing; maintain distance of 1metre or 3ft between yourself and other people outside of your home.
- Cover your mouth and nose with a facemask when around others
- Always cover your mouth and nose with a disposable tissue when you cough or sneeze or use the inside of your elbow and do not spit.
- Clean and disinfect frequently touched surfaces daily. This includes tables, doorknobs, light switches, countertops, handles, desks, phones, keyboards, toilets, faucets, and sinks.
- Be alert for symptoms. Watch for fever, cough, shortness of breath, or other symptoms of COVID-19.
- When you feel any symptom, place a call to Local Health Authorities such as Nigeria Centre for Disease Control (NCDC)

COVID-19 WORKSHOP FOR HEALTH PERSONNEL & POLICY MAKERS

GET Consortium organized a one-day infectious diseases emergency preparedness workshop titled (“COVID-19: A Call For Enhanced Emergency Preparedness”).

The workshop was organized to train health personnel and policymakers from different sectors in Nigeria on preparedness and surveillance against COVID-19. The workshop was held on 11th March, 2020 at Palms 77 hotel, Agodi GRA Ibadan in Oyo state.

The Workshop was facilitated by Dr. Jide Idris, *the Ex-commissioner for Health Lagos state* and Dr. Bamidele Mutiu- *Consultant Microbiologist and Director, Lagos Biobank*.

The Participants at the Workshop are from the organizations and associations listed below:

- Lead city Hospital Ibadan, Polytechnic Ibadan
- Nigerian Bar Association
- DAWN Commission
- School of Nursing Eleyele Ibadan
- School of Nursing UCH Ibadan
- 2 Div. Nigerian Army Ojoo Barrack, Ibadan
- Nigerian Veterinary association Ibadan Chapter
- Kola Daisi University Health Centre
- University of Ibadan Health Services (Jaja Clinic)
- Ministry of Health in Oyo State
- Department of Nursing, University of Ibadan
- Federal School of Statistics Ibadan
- The Nigerian Police Force Ibadan
- Pharmaceutical Society of Nigeria Oyo Chapter



COULD DIFFERENCES IN METEOROLOGICAL MEASUREMENTS INFLUENCE THE SPREAD OF COVID-19?

By Bobadoye Ayodotun, Femi Oyamakin And Ifeoluwa Alabi

Many infectious diseases are perceived to be seasonal thereby showing great relationships with weather parameters. Flu typically arrives with the colder winter months, as does the norovirus vomiting bug. Others, such as typhoid, tend to peak during the summer. Measles cases drop during the summer in temperate climates, while in tropical regions they peak in the dry season. Hence, it is important to know whether we can expect similar seasonality with Covid-19. Since it first emerged in China around mid-December, the virus has spread quickly, with the number of cases now rising sharply in Europe and the US.

Many of the largest outbreaks have been in regions where the weather is cooler, leading to speculation that the disease might begin to tail off with the arrival of summer. Many experts, however, have already cautioned against banking too much on the virus dying down over the summer.

This study collected daily meteorological data (precipitation, relative humidity, maximum and minimum temperature) for 68 days (January 1-March 7) from ninety four (94) countries infected with COVID-19 from the National Aeronautics and Space Administration (NASA). Data on daily occurrence of COVID-19 was collected from the WHO daily COVID-19 report. Figure 1-3 below showed the distribution of the weather (temperature, precipitation, Relative Humidity) parameters across the 94 countries in this study. The figures show that weather parameters vary from country to country and this may influence the spread of COVID-19 in the countries.

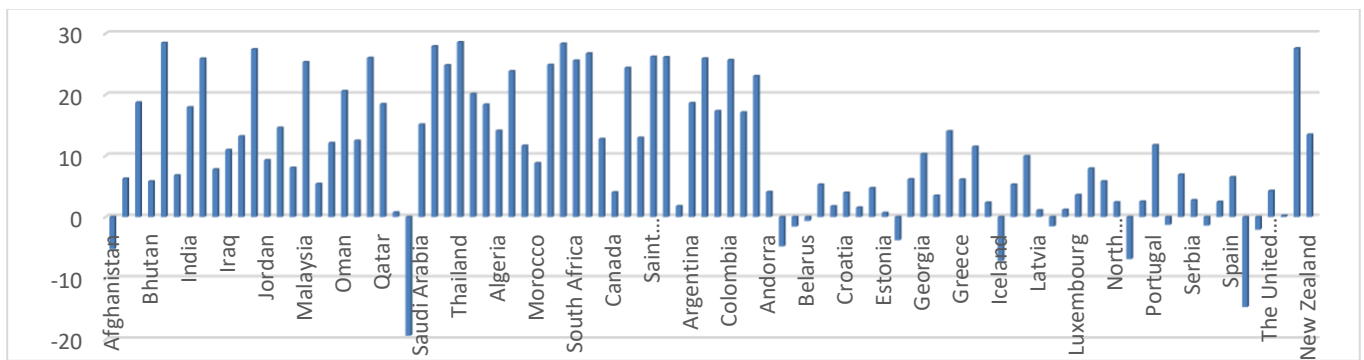


Figure 1: Average distribution of Temperature across 94 Countries with at least a case as at 7th March 2020

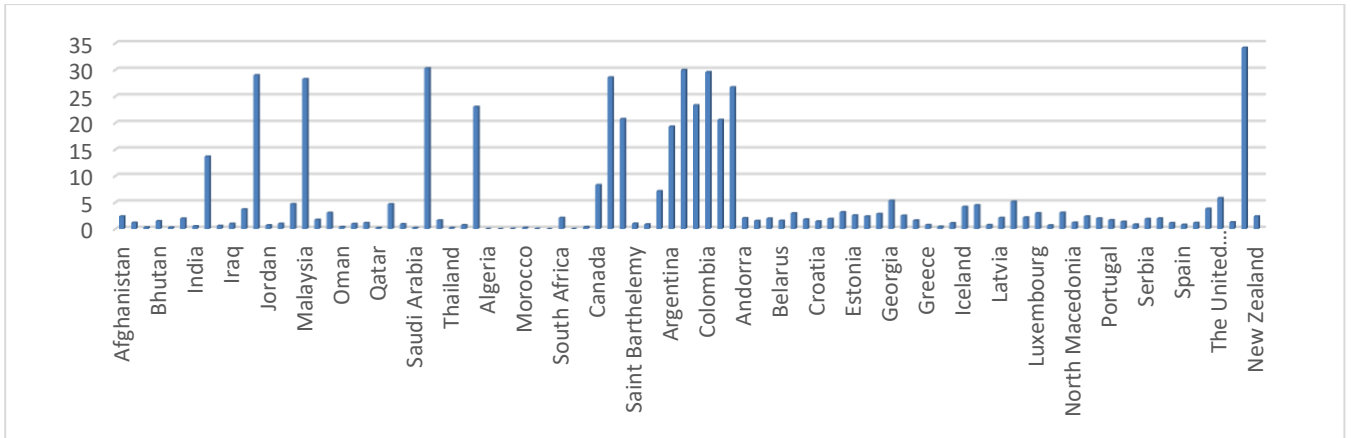


Figure 2: Average distribution of precipitation across 94 Countries with at least a case as at 7th March 2020

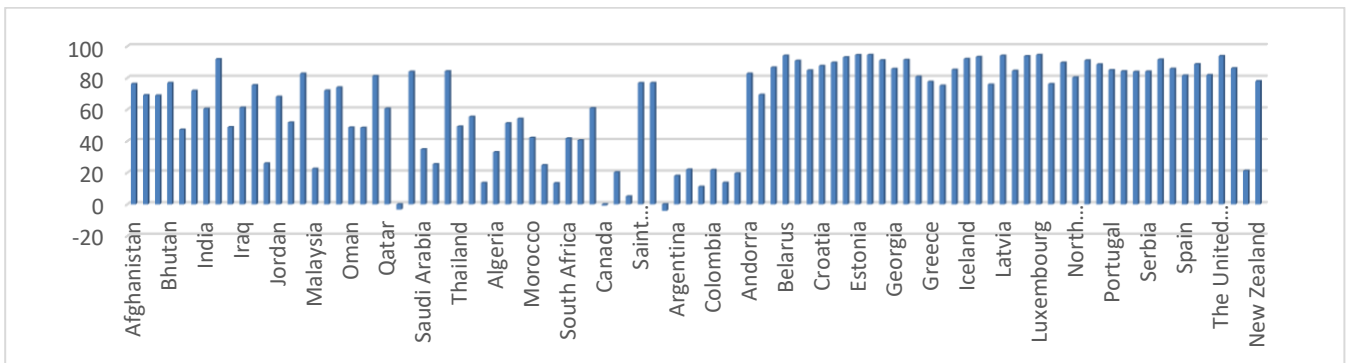


Figure 3: Average distribution of Relative Humidity across 94 Countries with at least a case as at 7th March 2020

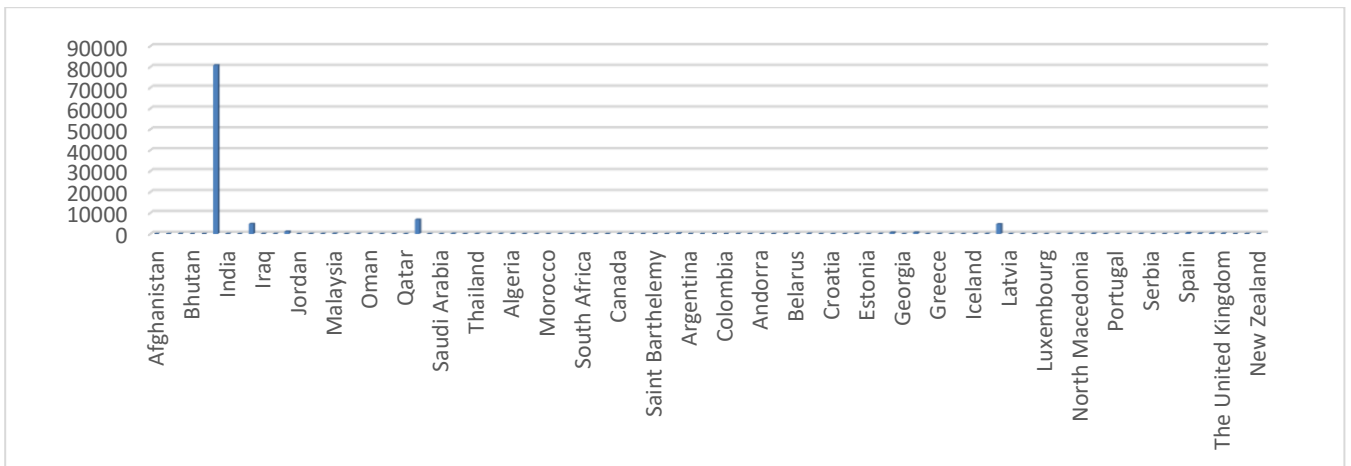


Figure 4: Distribution of Confirmed Cases across 94 Countries with at least a case as at 7th March 2020

As at March 7th 2020, 94 countries in the world have recorded at least one case of COVID-19. Hence, there were 94 valid observations and their count distributions seem quite reasonable with Europe taking the lead with 41 countries, followed by Asia with 30 countries, Africa with 9 countries, North and South America with 6 countries each and finally, Australia with 2 countries. The *unconditional* mean and variance of the confirmed cases were extremely different. Our model assumes that these values, conditioned on weather parameters, will be equal (or at least roughly so). Poisson regression was used for modelling the relationship between the weather parameters and COVID-19 cases because it has a few extensions useful

for count models. The over dispersion tests carried out suggested the use of a Negative binomial regression since it is primarily used for over-dispersed count data, that is when the conditional variance exceeds the conditional mean like the case we have in the COVID-19 data. Count outcome variables are sometimes log-transformed and analyzed using OLS regression. Many issues arise with this approach, including loss of data due to undefined values generated by taking the log of zero (which is undefined) and biased estimates. Hence, OLS was not found suitable for this analysis.

Table 1: Estimates of the Poisson Regression Model with Meteorological Variables as Predictors

Variables	Estimates	SE	Z value	P -value
Precipitation	-0.089	0.0008	-103.7	0.0016**
Relative Humidity	-0.013	0.0001	-103.7	0.0016**
Average Temperature	-0.036	0.0003	-111.2	0.0017**

Considering the p-values in the last column of Table1, which is less than 0.05. This gave an impression that the impact of the meteorological variables on the confirmed cases of COVID-19 was significant. Hence, the meteorological variables considered have impact on the count of confirmed COVID-19 cases. Cameron and Trivedi (2009) recommended using robust standard errors for the parameter estimates to control for mild violation of the distribution assumption that the variance equals the mean. We obtain the robust standard errors and calculated the p-values accordingly. Together with the p-values, we also calculated the 95% confidence interval using the parameter estimates and their robust standard errors as presented in Table 2.

Table 2: Robust Estimates, Standard Error and Confidence Intervals of the Models in Table 1

Variables	Estimates	Robust SE	P-Value
Precipitation	-0.089	0.028	0.00018**
Relative Humidity	-0.013	0.009	0.014
Average Temperature	-0.036	0.016	0.00035**

Looking at the outputs in Table 1 and 2 more closely, Deviance residuals are approximately normally distributed if the model is specified correctly, but in this study, it shows a bit of skewness since the median is not quite zero (Median = -44.97). The Poisson regression coefficients for each of the meteorological variables along with the standard errors, z-scores, p-values and 95% confidence intervals for the coefficients. The coefficient for precipitation is -0.09. This means that the expected log count for a one-unit decrease in precipitation is 0.09; and 0.01 and 0.04 for Relative humidity and Average Temperature, respectively.

The residual deviance is the difference between the deviance of the current model and the maximum deviance of the ideal model where the predicted values are identical to the observed. The analysis performed revealed residual differences that are small, hence, the goodness of fit tests was not significant for Poisson and negative binomial regression models, indicating that the model does not fit the COVID-19 data appropriately even though the weather parameters were all significant.

Conclusions:

From the study, the followings were deduced;

1. For a one unit increase in Precipitation, Relative humidity, and Average Temperature, 0.09, 0.01 and 0.04 decrease would be observed in the number of confirmed COVID-19 cases, respectively.
2. The impact of the relative humidity to the spread cannot be ascertained to be statistically significant considering the robust estimates in table 2
3. Finally, it is expedient to note that meteorological variables alone may not explain the total variation in the confirmed cases of COVID-19.

BARRIERS TO EPIDEMIC CONTROL AT THE COMMUNITY LEVEL

By Dr. Adeola Mariam Toyé

(Physician, Writer and a Health Tech Entrepreneur)

Epidemics are a threat that has remained present even with advances in medicine and health. In Nigeria, we remember too well the toll the last Ebola outbreak took on our people and health system. The relief of its successful control is tempered by the realization that it takes just an infected person and poor surveillance at ports of entry to be in the position we were in 2014.

On a wider scale, nations around the world are employing a variety of ways to protect their citizens and prevent further spread of the Coronavirus recently renamed COVID-19. There are many factors preventing the ordinary Nigerian from fully protecting himself from epidemics. Among these are widespread poverty, lack of education, poor awareness about the spread of infectious diseases, insecurity and poor health-seeking behaviour.

Perhaps the overarching challenge many Nigerian communities face is that of infrastructure. Irregular power supply often means a lack of running water. This greatly reduces the number of times people practice handwashing. When members of a household have to go long distances in search of clean water, it is inevitable that they will minimize the use of this for hand hygiene. Many communities also lack a health centre with qualified health workers who disseminate information and conduct house-to-house checks to ensure hygiene is observed. In addition, many markets and slaughterhouses are poorly designed and so infectious waste is left lying around and may even contaminate fresh produce. Many do not have adequate bathroom facilities and thus hands used to handle faecal matter are also used to touch food for sale. Improved levels of facilities will surely help in this area. However, community-owned interventions could be used temporarily to bridge this gap by alternate sources of power and clean water supply, provision of containers at strategic places with soap for regular handwashing.

Many areas are cut off from communication channels. They may thus rely only on radio services to keep abreast of information regarding a new epidemic. This gap, unfortunately, leaves room for fake news and rumours to spread. There may also be panic and prejudice which in turn helps the epidemic to spread faster. An initiative like call centres such as that used by EpidAlert during the 2014 outbreak have been shown to provide much-needed information for communities. This equips them to take appropriate measures to protect themselves and their families. It also debunks dangerous myths, quells rumours and reduces panic and stigma often found among the uneducated public.

Poverty is a major barrier to good health. The reduced spending power of individuals in a society without adequate welfare plans for its citizens puts them at a disadvantage, this is because they need to prioritize their spending on perceived necessities like food and shelter. This often leaves little or nothing to cover the cost of personal hygiene in soap, personal provision of water, face masks, accessing care and information, a balanced diet and comfortable accommodation that is not overcrowded. These categories of people are usually left on their own and this portends doom for us all. Thus, welfare packages could be considered to help them. This borders on political will in providing adequate housing and jobs. But on the organizational level, packs containing hygiene products, free outreaches and community awareness programs are to be employed and included in prevention efforts.

Another problem that exposes people to risk during epidemics is insecurity. Entire lives are upturned, socio-economic strata are leveled, and the priority is more on safety than healthcare. The insurgency in the Northern part of the country has for years deterred efforts in healthcare provision. People fleeing conflict often leave property behind, are forced to stay in cramped displaced person camps where rates of

infection are higher as a result of a strain on the few facilities available. Handwashing and other protective measures take low precedence in their daily lives with overcrowded quarters, loss of access to credible information and the general feeling of despondency further putting them at risk. Attacks on health workers, disruption of transportation and essential services keep the people affected away from accessing healthcare services. In this regard, the responsibility lies with the security agencies to intensify efforts at securing the lives and property of citizens. Internally displaced person camps must also be included in the epidemic control strategy.

For many communities, harmful cultural practices and beliefs hold sway over proven medical information on disease spread. It is not uncommon to find handwashing and other forms of hygiene to be greeted with scorn, with the few who try to practice this being discouraged. In addition, women and children are often not included in health-seeking decisions and are thus at the mercy of male and older relatives. Female children are not given an education, making them less likely to practice safe health practices. In some cases, the male head of the household has to grant permission before medical care can be sought. Where he is unwilling and unavailable, this leads to a huge gap in care. This causes a situation where some individuals know the right thing to do but are not able to practice it. Some cultural practices around gatherings, greetings of physical touch, handling babies and so on could be a source of infection spread. Community health workers need to be deployed to these areas with adequate sensitization and involvement of the decision-makers to illustrate why it is important for these practices to be changed. These and other barriers when taken care of, make epidemic control efforts become more effective. Thus, collaboration is required across the board.

References.

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2. Parveen, S., Nasreen, S., Allen, J.V. et al. Barriers to and motivators of handwashing behavior among mothers of neonates in rural Bangladesh. BMC Public Health 18, 483 (2018). <https://doi.org/10.1186/s12889-018-5365-1>

LAGOS STATE BIOBANKING AND BIOSECURITY PROJECT

By Dr Babatunde Saka

(Executive Secretary, GET Consortium)

The second African Conference on Emerging Infectious Diseases (AFCONEID) organised by Global Emerging Pathogens Treatment Consortium (GET) was held in Lagos, Nigeria in 2015. The biggest concern at the conference centered on developing capacity of African countries to diagnose and store samples collected during medical emergencies such as Ebola. This was consequent on the experience of West African nations during the Ebola crisis where disease diagnosis was herculean and samples were inappropriately handled, lost or stolen. The discussion convinced Global Partnership Program Canada which subsequently pledged to facilitate a Biocontainment facility for Lagos State and Sierra Leone. Phase I of the Lagos State Biobanking and Biosecurity project involved the preparation, arrival, and installation of the BSL3 Biocontainment laboratory and biobank as well as the completion of 10 modules training of a selected group of personnel now known as the Lagos Biobanking Biosecurity Team or LBBT. This phase also included the handing over ceremony of the facility to the Lagos State Government by Her Excellency Julie Payette the Governor-General of Canada. His Excellency Akinwunmi Ambode was present to receive the handover.

Phase II of the project was developed with the intent to fully operationalize the facility via capacity building and utilization. The Lagos State Biobank (LSB) personnel were expanded and capacity building was initiated. A twenty-three modules programme was developed including the inauguration and training of the Governance Council and a sustainability plan. At the end of the schedule, it is expected that the LSB will be financially less dependent on government support and fully capable of independently initiating diagnostic research until completed. The institutionalization of the Bio hub will set LSB as the 'Go-To' facility for bioinformatics in West-Africa and serve as a template for more international participation. It was to also launch Lagos into the fourth industrial revolution of genomics. However, the election year diverted the attention of the government so much that just about 50% of the projected targets could be met leaving a shortfall in the project design.

Phase III is designed to pick the last quarter programs of phase II and fully implement the programs to ensure full functional independence and capacity to perform optimally.

The facility has also required a huge commitment by the government of Lagos State which included staffing, construction and equipping an administrative building, personnel training and consumables. The government of Lagos has risen to the calling and ensured the smooth operation of the facility.

It is inevitable that a megacity like Lagos will face numerous biosecurity threats into the future. Therefore, the State is ensuring it achieves its objective of increasing resilience and response modalities to cope with any eventuality. The BSL3 Biobank laboratory facility represents the cornerstone of such capacity to ensure rapid capacity to isolate and diagnose pathogens responsible for outbreak scenarios. It will also be in a position to process biological samples for quick dispatch to collaborators and reference laboratories in and outside of Africa for complex case scenarios, should Lagos be under siege by a high consequence pathogen of unknown origin. Protecting Lagos State from biological threats is a continuous challenge because the risk factors we face are growing in scale and complexity. Rapidly changing risk pathways, demographic growth and diversity in trade routes and population movements, climate change, advancing technology, pressure from existing and new and evolving pests/pathogens and shrinking resources are a few warning signs.

This facility, therefore, is to be deployed as the hub of biosecurity training, logistics, and expertise for the megacity which will require it to perform active and passive ongoing disease surveillance.

In the same vein, the biobanking facility beyond serving as a repository comes with enormous revenue generating potential when it becomes fully operational where it can produce reference biological material for research and development in Nigeria and beyond.

CORONAVIRUSES FROM BATS IN LAIKIPIA COUNTRY, KENYA AND THEIR IMPLICATIONS ON HUMAN AND ANIMAL HEALTH

By Dr Rimfa Gambo

(College of Animal and Veterinary Sciences, University of Nairobi)

Introduction

There is a global rise in outbreaks of coronavirus infections resulting in high morbidity and mortality rates among humans and animals. Bats that are widely distributed, have the capability of flight and are the second largest group of mammalian species are natural reservoirs of these viruses. Coronaviruses are viruses that typically affect the respiratory tract and gut of mammals and birds, causing important diseases. In animals, these viruses include the porcine epidemic diarrhoea virus (PEDv) and porcine delta-coronavirus (PDCoV) in pigs and infectious bronchitis virus (IBV) and turkey coronavirus in poultry. In humans, coronaviruses causing diseases include the common cold virus, severe acute respiratory syndrome coronavirus (SARS- CoV) and Middle East respiratory syndrome coronavirus (MERS-CoV). SARS was linked to marketplace Himalayan palm civets (*Paguma larvata*), bats¹ and raccoon dogs (*Nyctereutes procyonoides*) while MERS originated in bats. Both SARS and MERS showed similar clinical symptoms such as cough, dyspnea, and pneumonia but advanced cases of MERS appear with clinical renal failure. Outbreaks of coronaviruses spread like wild bushfire affecting people from different nationalities and colours. It is important to understand the origin of coronaviruses infecting humans and animals, for purposes of prediction and prevention of pandemic emergence in the future.

Containing epidemics from corona viruses spill over from bats can be very expensive due to the high morbidity and mortality rates. The occurrence of porcine epidemic diarrhoea in 2013 in the United States resulted in a mortality rate of about 100% in affected piglets and approximately 10% of America's pig population was lost in just a year with an estimated net annual decrease for U.S. economic welfare from \$900 million to \$1.8 billion. Severe acute respiratory syndrome coronavirus (SARS-CoV) infected 8,000 people from different continents of the world regardless of colour and race with a mortality rate of 10%. In addition to the impact of SARS-CoV on infected individuals and the global community, the economic cost of the SARS- CoV outbreak event was estimated at \$16 billion. Middle East Respiratory Syndrome Coronavirus (MERS-CoV) in Saudi-Arabia infecting more than 1,700 people with mortality rate of 35%.

Methodology

This study was carried out to determine the presence and genetic identity of coronaviruses in bats in Laikipia County, Kenya and to assess the interaction of the people with food, water, and animals at the human-wildlife-livestock interface. Samples were collected from two hundred and two (202) bats for RNA extraction. Analysis of the sequenced products with reference sequences from the GenBank showed all isolates belonged to unclassified alpha coronaviruses. The study also reveals a highly complex human-wildlife-livestock interface in Laikipia County, Kenya. The risk of disease transmission is heightened due to high human-animal interaction and high-risk food practices, such as consuming sick animals or collecting animals found dead. Although respondents were concerned about disease transmission, safe practices in water, food, and animal handling to decrease risk were not commonly used.

Managing Bats In The Homes

There are many kinds of bats that live around villages or in cities. Most bats that would live inside buildings or houses are small and usually eat insects. Normally, bats are harmless and will not bite or

scratch people if left alone. To manage bats in homes and prevent human and animal exposure to infections, the following can be done: 1 Because some bats with disease-causing organisms may appear normal, direct contact with all bats and their body fluids should always be avoided as a preventive measure. 2 Bats may be attracted to uncovered sources of water and other liquids. When bats drink from these sources, they contaminate them with their saliva, urine, or feces. To prevent bats from being drawn to liquids, water or foods in homes, such liquids should always be securely covered and the covers regularly cleaned.

Policy Recommendations

1. Detailed genome analysis is recommended to characterize the coronaviruses present in bat samples and to determine their implication on human health.
2. The government at the county and national levels in Kenya should adopt One Health approach to address emerging infectious and zoonotic diseases.
3. The government should promote proper sanitation and disinfecting of hands, especially when a human comes in physical contact with a wild animal such as bats.

FIGHTING A GLOBAL PANDEMIC STARTS WITH THE LOCAL: A NEED FOR LOCALISED RISK COMMUNICATION

By Dr Tom Rausch

(Queen Mary University of London)

SARS-CoV-2 stretches across nations; it is affecting everyone. Yet, we cannot make the mistake to think that one response to the virus fits all contexts. While global guidelines are important to drive a coordinated and collaborative approach against the pandemic, it is crucial to adapt risk communication to the local socio-cultural contexts.

Successful risk communication during pandemics aims to ‘achieve behavioural results’ (WHO 2012: 9) that mitigate the negative effects of health risks. It addresses rumours and beliefs that are counter-productive, and it reassures people that may be impacted by a hazard. It entails a communication that is founded in not just an understanding of the nature of a risk or virus and how to address it, but also in an active listening to all involved stake-holders (expert and lay) and an understanding of people’s perceptions and other aspects that may impact adoption of a desired behaviour.

Erving Goffman (1963: 193) explains that the ‘behaviour of an individual in a situation is guided by social values’, which needs to be taken into account when designing risk communication campaigns. An individual’s interpretation of risk is ‘never fully objective or knowable outside of belief systems and moral positions’ that shape the local context (Lupton 2013: 43). Risk communicators need to be informed about ‘what values people bring to a decision and how the decision process itself impacts the response to risk messages (Dietz 2013: 14082).

During the Ebola Outbreak in 2014, many Western outbreak respondents came into the region to lead the measures against the virus. While the outbreak was eventually brought under control, a range of mistakes were made that slowed down the efforts due to lack of consideration of the local socio-cultural backdrop and a ‘long-standing suspicions of Western interests of medical interventions, and in some rural areas, limited engagement with Western medical practices’ (Falade and Coultas 2017: 1).

A health system ‘must demonstrate cultural competence’ and outbreak response risk management hinges on measures developing the public’s trust’ (WHO 2012: 6). However, the risk communicator is often ‘not well known or closely linked to the risk bearer (or past experience has planted seeds of distrust)’ (Kasperson 2014: 1236), which in some cases, has led to a long-term erosion of public trust in institutions and a lack of confidence in decision-makers (Tuler and Kasperson 2014). Specifically, populations or sections of a population that have been neglected by the health care system in the past are likely to hold feelings of distrust, and if members of vulnerable communities have no trust in authorities leading the outbreak response, they are unlikely to follow behavioural guidance or adopt necessary changes (Brody and Avery 2009: 46). Risk communicators need to be able to adapt to the needs and value systems of the local people in order to (re-)establish the necessary trust. The personal and social context of the patient or person at risk needs to be considered both in doctor-patient interactions and when developing risk communication campaigns.

Effective risk communication during the SARS-CoV-2 response requires the inclusion of socio-cultural experts who are able to consult on traditions and values. We cannot adopt a one-size-fits-all approach across countries or even continents. There is a need for intermediary voices between the institutional leaders and the local population. On the one hand, this intermediary voice must be able to align itself with the hegemonic institutions such as the WHO, the United Nations or the Africa Centres for Disease Control and Prevention; it has to take onboard global guidelines and measures. On the other hand, this intermediary voice needs to be in a position to construct solidarity with the local population, signal a shared socio-cultural background and overcome a potential distrust in institutional and scientific leaders.

Socio-cultural and scientific experts such as local health NGOs play a vital role in carrying out international health work (WHO 1987) and can act as crucial contributors to the communication loop during diseases outbreaks and in the general communication around health risks. They are in a position to combine scientific expertise and their local insider standing in order to provide outbreak response and communication campaigns adapted to the values and traditions of the community.

On the one hand, it is critical that national and international stakeholders are aware of and draw on this type of asset. On the other hand, it is crucial that the local health workers embrace this double-sided expert standing and emphasise it in their communication strategies when leading public health campaigns.

Building rapport and trust with the local community is a critical requirement for effective outbreak response and it is crucial that risk communicators act in ways that merit the trust of risk bearers (Kasperson 2014). This can be embraced and achieved by adopting certain linguistic strategies. For example, Pierre Bourdieu (1991: 68) describes the ‘strategy of condescension’ which ‘consists of deriving profit from the objective relation of power between the languages that confront one another in practice, namely, the hierarchy of the languages and of those who speak them’. His idea is based on the understanding that language can be viewed in economic terms: some languages/dialects/accents may be more ‘valuable’ in certain situations than others. The strategy explains that there are situations where we may derive profit from choosing a language/dialect/accent that is not the established choice. If a risk communicator aims to address a community that primarily uses Creole, s/he may benefit from speaking Creole even though English may be the national language and the ‘language of science’. This allows fostering solidarity between the speaker and the listeners as the speaker is able to appeal to his/her audience through the use of the shared non-legitimate language practice and through the explicit rejection of the hegemonic language choice which may hold a certain stigma in a given community.

Furthermore, researchers have found that communication supported by personal experiences rather than solely being based on reasoning or opinion holds a higher persuasive effect (De Fina and Georgakopoulou 2011). This means that risk communicators can and should draw on the cultural background that they have in common with the community that they are addressing. For example, the inclusion of personal experiences and ‘short stories’ as a means to share ‘true accounts’ with the target audience has been found to create ‘an aura of trustworthiness’ (De Fina and Georgakopoulou 2011: 139). It allows the communicator to build trust and rapport, which is crucial to the adoption of risk-mitigating behaviours.

Effective outbreak response and risk communication requires carefully prioritised and culturally sensitive initiatives. At the 3rd African Conference on Emerging Infectious Diseases & Biosecurity, the Honourable Commissioner for Health for Lagos State, Professor Akin Abayomi, described the role of localised risk communicators as follows: “We are scientists and policy-makers, but we are people who come from and are embedded in cultures and communities. We exist for each other.” He thus highlights the importance to remember that fighting a global pandemic starts with the local.



Dr Tom Rausch received his Ph.D. in Applied Linguistics from Queen Mary University of London. He specializes in health and risk communication strategies during public health emergencies and humanitarian crisis in socio-culturally diverse contexts. His further research interests include intercultural communication, organizational communication and the public learning and understanding of science.
E-mail: t.rausch@qmul.ac.uk, Twitter: [@tomjrausch](https://twitter.com/tomjrausch)

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HIGHLIGHTS OF COVID-19 INTERVENTION ACTIVITIES BY GET CONSORTIUM

The Global Emerging Pathogens Treatment Consortium (GET) has a comprehensive programme targeted at reducing the spread of COVID-19 in Africa.

Our intervention on COVID-19 started in March 2020 and it is focused on the following areas:

- **Logistics support to Government:** Dr. Babatunde Saka, the Executive Secretary of GET is the secretary to the emergency operating centre in Lagos state
- **Capacity building:** GET Consortium organized a one-day infectious diseases emergency preparedness workshop titled (“**COVID-19: A CALL FOR ENHANCED EMERGENCY PREPAREDNESS**”).
- **COVID-19 Sensitization/Awareness:** GET has done the following to create awareness on COVID-19:
 - i. Production and distribution of Ten Thousand (10,000) flyers and posters in English and local languages in Nigeria.
 - ii. Production of radio jingles in three languages- English, Pidgin and Yoruba
 - iii. Formation of Civil Society Organizations against COVID-19 (CAC) in Nigeria.

- **COVID-19 Webinars:** GET secretariat has organized four webinar series from May till date.

Recorded webinars are available on GET Africa YouTube Channel.

- i. Impact and Response to COVID-19 in Africa
 - ii. COVID-19: Communication Strategies, Public Understanding & Impact of Fake News- <https://youtu.be/IvWamgKyg6U>
 - iii. COVID-19 – Balancing the tripod of pandemics: https://youtu.be/Ax_iLYsvCQ4
 - iv. COVID-19: Perspectives africaines- Essais cliniques, développement de vaccin & désinformation: <https://youtu.be/EOa6-uWoue4>
 - v. COVID-19 Survivors Chat:
 - vi. Future of Africa Post COVID-19: Economy, Environment & Health: <https://youtu.be/R4-PYt1L07E>
 - vii. COVID-19 Vaccine Development Landscape: How Involved is Africa?: <https://youtu.be/7ZYHINqSh8s>
- **COVID-19 Survivors’ Chat Series:** It is a platform for COVID-19 survivors from different countries to share their experience with the aim to raise awareness and stop stigmatization of the people affected.
 - **GET COVID-19 Projects**
 - (i) **One Man, One Mask Project:** GET Consortium is producing thousands of facemasks for free distribution.
 - (ii) **Love First Responder Family (LFRF) Project:** This project was designed by GET Consortium to appreciate First Responders’ families.

Research: GET is currently conducting research on the COVID-19 disease incident in Nigeria, the research titles are stated below:

- (i) Virus going viral: Understanding social media influence on public perception and response to the COVID-19 disease in Nigeria.

- (ii) Modelling COVID-19 transmission for effective control and management in Nigeria.
- Creation of COVID-19 information tab on GET website-<https://www.getafrica.org/about-covid-19/>

PHOTO FEASTS FROM THE SENSITIZATION PROGRAMMES











WHAT IS SOCIAL DISTANCING?

SOCIAL DISTANCING MEANS AVOIDING CLOSE CONTACT WITH OTHERS TO PREVENT THE SPREAD OF COVID-19 AND CAN INCLUDE:



Avoiding non-essential trips in the community



Postponing or canceling gatherings



Working from home, where possible



Conducting meetings virtually



Keeping kids away from group gatherings



Avoiding visits to long-term care homes and other care settings

KEEP A DISTANCE OF 6 FEET FROM OTHERS WHEN GOING FOR WALKS OF SHOPPING FOR GROCERIES

 @getconsortium

GRANT OPPORTUNITIES

- Africa Research Excellence Fund (AREF) Research Development Fellowships 2020 for early-career Researchers (£38,000 Award)- This is launched to support African researchers who are working on important challenges for human health in Africa.
<https://www.opportunitiesforafricans.com/aref-research-development-fellowships-2020/>
Deadline: September, 2020.
- **Francis H. Brown African Scholarship Fund 2020 for East African researchers (\$25,000):** The purpose of the Francis H, Brown African Scholarship Fund is to expand human knowledge and scientific interest in earth sciences and botany related to human origins by providing financial assistance to East Africans researchers and students pursuing research in these areas.
<https://www.opportunitiesforafricans.com/francis-h-brown-african-scholarship-fund-2020/>
Deadline: July, 2020
- **Global Challenges Local Solutions** – European Grant Competition 2020 for SDG-related projects (up to 15.000\$): Global Challenges Local Solutions grantmaking program supports European Community Foundations and associations, implementing SDG-related projects on the local level.
Deadline: July, 2020
- **Call for Applications: Cambridge-Africa ALBORADA Research Fund 2020 (up to £20,000)-** The Fund supports pairs of researchers (post-doctoral level and above) from the University of Cambridge or an affiliated institution and sub-Saharan African institutions, across all disciplines, to initiate and/or strengthen research collaborations
Deadline: September, 2020.
- **National Research Foundation COVID-19 Africa Rapid Grant Fund 2020:** The Rapid Grant Fund seeks to contribute to the African regional and continental response to the COVID-19 pandemic.
<https://opportunitydesk.org/2020/05/23/national-research-foundation-covid-19-africa-rapid-grant-fund-2020/>
Deadline: July,2020.
- **Global Giving Accelerator Program** – September 2020 for Nonprofits: The GlobalGiving Accelerator is an opportunity for you and your organization to build skills, access tools, and grow your base of supporters to achieve crowdfunding success.
<https://opportunitydesk.org/2020/05/21/globalgiving-accelerator-program-september-2020/>
Deadline: July, 2020
- **Merck Foundation Research Grants Program 2020 for Scientists Worldwide (up to 500,000 EUR)-** In 2020, Merck Foundation are offering a series of research grants to stimulate innovative research in challenging areas of future importance.
<https://opportunitydesk.org/2020/04/28/merck-foundation-research-grants-program-2020/>
Deadline: August, 2020.

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