

RUFORUM WEBINAR SERIES-2020

Universities' role in preparedness, response and monitoring of emerging and re-emerging pandemics

Webinar 3 Synthesis Report

Introduction:

With the increasing human population on the African continent, there is need to ensure food and nutrition security, therefore requiring intensification of livestock and crop production on limited arable land. The need for additional land for agriculture could result in invasion of forested ecosystems, dramatic land use and land cover changes, and the evolution and spillover of novel zoonotic diseases to human populations. This century has seen a heightened emergence of previously unknown zoonotic respiratory tract infectious diseases with epidemic potential including; Avian influenza, Severe Acute Respiratory Syndrome (SARS), Middle East Respiratory Syndrome (MERS), and most recently the Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) responsible for the COVID-19 Pandemic. With these emerging and re-emerging pandemics, most African countries will require dedicated resources, intensified surveillance mechanisms and support, and capacity building to be able to prepare, monitor and respond in a timely and appropriate manner. Universities have a key role to play as centers of innovation, research and capacity building for responding to continental bottlenecks as well as support countries that are ill-prepared to detect and contain disease outbreaks.

This report covers points of action and emerging issues from Webinar 3 organized by RUFORUM on *Universities' role in preparedness, response and monitoring of emerging and re-emerging pandemics* held on 3rd July, 2020.

The Problem:

Globally, the risk of the emerging and re-emerging infectious diseases has increased significantly in the past years owing to different factors, some of which are related to humanitarian emergencies, wars, fragile health systems, weak surveillance systems, limited laboratory diagnostic capacity and global inter-connectedness. These new and re-emerging infectious diseases cause much human suffering worldwide. The recent outbreak of the novel Corona virus (COVID-19) has raised global awareness of the devastating effect that emerging infectious diseases have on human populations and economies. Africa's preparedness capacity remains limited towards infectious disease epidemics and other potential public health emergencies. Although African universities have a critical role to play in preparedness, response and monitoring of emerging and re-emerging pandemics, they need to quickly develop the much needed capacities for the Continent.

Webinar Objectives:

The Webinar on *Universities' role in preparedness, response and monitoring of emerging and re-emerging pandemics* aimed to address:

- (i) Universities innovations in response to COVID-19 situation;

- (ii) Innovations for technical and policy response to public health emergencies;
- (iii) Capacity building needs for Africa's excellence in the new normal (diagnostics-laboratory infrastructure, molecular, clinical management, therapeutics, vaccines); and,
- (iv) Africa's collaboration and financing for health innovations in the new normal.

This Webinar was moderated by **Prof. Address Mauakowa Malata**, Vice Chancellor, Malawi University of Science and Technology, Lumbe-Malawi. The presentations and discussions were given by:

1. Dr. Raji Tajudeen, Head NPHIs and Research Division, Africa Centre for Disease Control Addis Ababa-Ethiopia
2. Prof. Jan-Ingvar Jönsson, Vice Chancellor, Linköping University-Sweden
3. Prof. Willian Bazeyo, Deputy Vice Chancellor, Makerere University, Kampala-Uganda
4. Prof. Simeon Mining, Director of Research & Professor of Immunology, Moi University Eldoret-Kenya
5. Prof. Johan Dabrosin Söderholm, Dean Faculty of Medicine and Health Sciences, Linköping University-Sweden

Key Learning and Action Points:

1. Policy response to public health emergencies

- At the continental level, there has been some quick and positive response to the COVID-19 Pandemic by the African Union. The African Ministers of Health, endorsed the *Africa Joint Continental Strategy for COVID-19*, which has subsequently been approved by the Bureau of the Assembly of the African Union Heads of State and Government. Further, to operationalise the *Strategy*, the Africa Centre for Disease Control (CDC) has developed a new Partnership to Accelerate COVID-19 Testing (PACT): Test, Trace and Treat. PACT aims to strengthen capacity to test for COVID-19 across Africa, with emphasis on countries that have only minimal capacity. The PACT is mobilizing experts, community workers, supplies and other resources to Test, Trace and Treat COVID-19 cases in a timely manner. This way, the Africa CDC is spearheading efforts to prevent transmission, death and social harm, and to minimize the impact of the COVID-19 Pandemic on the African continent. Additionally, the Africa CDC is mobilizing Member States at the continental level to ensure affordable and equitable access to COVID-19 vaccines, and guidance for mental health and psychological support.
- African universities should support the continental initiatives such as the PACT and their implementation at country level. The role of universities is to build human resources for health, research, surveillance, testing, knowledge management and synthesis, innovation and diagnostics.

2. University innovations for responding to COVID-19 and other health emergencies

- Universities are supporting their country health systems respond to the COVID-19 Pandemic by providing frontline response services such as diagnostics in the form of rapid

testing kits. Further, some universities have developed and provided personal protection equipment such as masks and face shields, automatic hand washing facilities and low cost ventilators.

- Universities still have a role to play through the provision of community training for frontline health workers using the concept of One Health. Universities should also take advantage and ensure participation of their students in the health and related fields in responding to COVID-19.
- In this spirit, African universities can learn from one another and take a leaf from others, such as Moi and Makerere Universities that actively been supporting Government efforts and realigning their resources in response to COVID-19.

3. Collaboration and financing of health innovations

- Strong collaborations should be based on the the principles of equity and fairness. In this era, collaboration and information sharing across countries and institutions is required for effective management of COVID-19 and other global crises. Collaboration between universities is relevant for building formidable research infrastructure and for responding to COVID-19 related calls and others.
- In order to provide opportunities for effective collaboration between African universities and those in other continents, such as Europe, there is a need for African Universities to develop innovative IT Solutions to support digital transformation for teaching, medicine and lifelong learning.
- The long partnerships between Moi University in Kenya with Linkoping University in Sweden, and with Indiana University of North America are evidence of strong collaborations based on the the principles of equity and fairness that other African universities could emulate.

Conclusions:

The COVID-19 Pandemic has potential to devastate the African continent at the economic and social levels. Therefore, current continental level efforts to respond to the COVID-19 Pandemic by the African Union through Africa CDC are commendable. Universities should continue supporting Governments in providing frontline response through testing, innovation, community training, resource mobilization through effective and beneficial collaborations, and knowledge generation and sharing. Universities should also support, through their Governments, the domestication and implementation of continental response efforts such as the Africa CDC's PACT, while building capacity for preparedness, response and monitoring.

RUFORUM Secretariat