AFRICA'S LEADERSHIP IN COVID-19 VACCINE DEVELOPMENT AND ACCESS

Virtual Conference



HIGHLIGHTS FOR DAY ONE

Wednesday, 24 June 2020

SESSION I: OPENING

The meeting brought together African leaders, public health professionals, policymakers, the media, civil society, community leaders, private sector representatives,

pharmaceutical industry experts, and partners to discuss a roadmap for the development of safe, efficacious, affordable, equitable and accessible COVID-19 vaccine in Africa, with the involvement of Africans.

H.E. President Cyril Ramaphosa, Chairperson of the African Union and President of the Republic of South Africa opened the conference. He noted the need for strong partnerships, cooperation and a sense of urgency among Africans in finding a suitable vaccine against the COVID-19. He emphasized the need to manufacture vaccine in africa with raw materials sourced from africa.

He said: "Success in developing and providing access to a safe vaccine requires an innovative and collaborative approach, with significant local manufacturing in Africa. We need to support the contribution of African scientists and healthcare professionals. We need to act with urgency."

Dr Tedros Ghebreyesus, Director-General, World Health Organization, highlighted several actions taken by the WHO to support response to COVID-19 pande mic in Africa. He noted the significant disruptions to routine public health services across Africa as a result of COVID-19, including services like immunization, family planning, antenatal care, treatment for mental health disorders, malaria, and HIV.

Dr Tedros joined other leaders in calling for partnerships, cooperation and urgent actions in ensuring

affordable and equitable access to COVID-19 vaccine in Africa.

"The world needs unprecedented global collaboration and global solidarity, commitment and participation by countries to ensure that more lives are saved and to foster economic recovery globally,"

He noted the need for fair and equitable allocation



H.E. President Cyril Ramaphosa, Chairperson of the African Union and President of the Republic of South Africa



process for a vaccine, ensuring that initial supply is deployed where it is most needed within and across countries and that allocation is based on public health goals rather than the ability to pay for the vaccine. He emphasized the need for African countries to adopt Universal Health Coverage as a critical measure for solving their healthcare challenges.

"We must learn that health is not a luxury or a reward for development, it is a fundamental human right, and the best way to ensure that right for all people, is Universal Health Coverage, so that all people receive the health serv ice they need without facing financial hardships," he said.

Chairperson, African Union Commission, H.E. Moussa Faki Mahamat, emphasized the need for academics, researchers and the private sector to work together and use all available platforms for the development of COVID-19 vaccine.

In her welcome address, Commissioner for Social Affairs, Amira Elfadil Mohammed noted the need for global solidarity, cooperation, and appropriate regulation to ensure equitable access to potential COVID-19 vaccine. She reiterated the commitment of the African Union to continue partnering with GAVI and other relevant stakeholders in the development of COVID-19 vaccine.

She said: "Africa today is the least affected region, with 1.5 percent of the global COVID-19 cases and about 1 percent of deaths due to the pandemic. However, the tide is rising with some of our Member States expected to face a huge peak in the near future. Africa needs to actively engage in the research, development and evaluation of COVID-19 vaccine to ensure equitable access. It is high time for global solidarity and cooperation,"

Dr Nkengasong, Director of Africa CDC, noted in his opening presentation that the onset of COVID-19 pandemic was delayed in Africa but the number of cases and deaths is increasing rapidly every day. He said Africa must be careful and prepare for a rise in the number of cases, as already observed in Latin America after easing of lockdowns. He said the availability of a vaccine is the only solution that would allow Member States to return to a fully functional economy.

Dr Nkengasong highlighted two strategies for vaccine development and access: securing sufficient vaccine supplies and removing barriers to vaccine rollout. These he said would require mobilizing financial capital to purchase enough vaccines, ensuring appropriate distribution, and manufacturing, including, enabling technology transfer to rapidly scale-up local manufacturing capacity on the continent.

He noted the need to develop Africa-specific priorities, provide infrastructure, minimize administrative burdens associated with regulation, set up a vaccine regulatory working group for

the continent, develop supportive networks for rapid approval of deliveries, support countries to strengthen systems for vaccinating targeted populations, and addressing supply chain issues.

SESSION II: COVID-19 VACCINES DEVELOPMENT AND CLINICAL TRIALS

SESSION II focused on COVID-19 vaccines development and clinical trials. It featured five presentations by representatives of government, research institutes and China CDC. The presentations highlighted:

- How Africa can contribute to the development and access to COVID-19 vaccine through multiple partnerships.
- The need to characterize the epidemiology of COVID-19, ensure availability of capacity for clinical trials and vaccine manufacturing.
- The need for advocacy and to secure political support.
- The support being provided for vaccine development and the key challenges.
- Partnerships on vaccine development around the world.

The presentations also highlighted vaccine candidates that are currently in trial and some of the results observed date.

Prof Salim Abdool Karim, Chair of the South African Ministerial Advisory Committee for COVID-19, Republic of South Africa. His presentation focused on monitoring viral strains, monitoring and characterization of the epidemiology of COVID-19, clinical trials infrastructure, and getting stakeholder buy-in and support. He noted the need to characterize to help locate and identify the ideal communities where vaccine trials can be conducted. He also noted that Africa has the intellectual capability to carry out vaccine trials and is already making this contribution. He however noted the need for substantial amounts of funding, political support, community engagement, appropriate scrutiny and approval by the ethics and regulatory bodies, as well as and assessment of its vaccine manufacturing capabilities. He said South Africa is already contributing to vaccine research through multiple partnerships.

Dr Barney Graham, Deputy Director, Vaccine Research Center and Chief, Viral Pathogenesis Laboratory and Translational Science Core, USA presented an update of efforts by researchers in the



USA. He said phase one trial started in March and they are now on phase two trial, which started in on 29 May. Phase three will start in July. He presented some preliminary data from the trial on mice. He said there are no preclinical safety signals so far, there are high magnitude antibody responses and that the interim phase one clinical data show good immunogenicity.

Dr Tedros Ghebreyesus, Director-General, World Health Organization

Dr Richard Hatchett, Chief Executive Officer, Coalition for Epidemic Preparedness Innovations presented on manufacturing issues related to vaccine development. He mentioned some challenges in vaccine manufacturing, including the filling and finishing of the vaccines, and said the coalition is taking some steps to mitigate potential shortages. He said the vaccines being developed would require two doses per person and to achieve herd immunity for COVID-19 to subside about 50-70 percent of the world's population would need to be immune to the virus either through natural infection or by virtue of receiving vaccines. He said the first set of vaccines will hopefully be delivered on a large scale in the first half of 2021.

Dr Hatchett noted that the vaccine development partners are distributed in North America, Europe and Asia and no primary vaccine development currently in Africa. He however said the coalition is interested in supporting development and clinical trials in Africa.

He mentioned some important considerations for vaccine production: the yield of a vaccine production process is always uncertain and the actual dose that will be required to immunize which will be determined through clinical trials. In total we know the yield of our manufacturing processes, and the doses, that we have to give to individuals in order to immunize and we won't actually be able to calculate how much vaccine. He said the yield of the manufacturing processes and the doses are known but they cannot currently calculate how much vaccine would be needed. He however cautioned that the number of doses can change by a factor of 10 and this would be known later this year.

Prof Sarah Anyang Agbor, Commissioner for Human Resources, Science and Technology, African Union Commission, gave a presentation on the perspectives of the African Union in COVID-19 vaccine development and access in Africa.

She noted the need for Africa to exercise leadership and build strong, integrated research and development systems to unlock solutions needed to meet targets and tackle the continent's health and development challenges. She proposed the following solutions:

- Creation of innovative alliances that bring public and private stakeholders on the continental together.
- Global partnerships to support and fund the development of vaccines against infectious diseases, address Africa's health challenges, and support preparedness for pandemics.
- Development of critical human capital needed to advance public health and vaccine development on the continent.
- Paying special attention to youth and women.
- Improving scientific capacity and infrastructure and preparedness for pandemic by strengthening and building networks that can support clinical trials.



• Developing capacity in science, technology, innovation, and intelligence forecasting for future pandemics.

Dr Xiao-Ping Dong, Director, Center for Global Public Health, China CDC, China, made a presentation on COVID-19 trials in China. He said there are currently five different vaccines undergoing trials in China. He said phase one clinical trials started in the middle of March and phase two started at the beginning of May and is being conducted in partnership with scientists in Canada. Dr Dong said preliminary results for phase one and phase two show that the vaccines are very good, safe, tolerated and have shown high positive rate of neutralizing the antibody.

He said without phase three clinical trial it would be difficult to decide on production and to know the relationship between the immunology the index and disease protection. He said there is a possibility of doing the trials in different countries including in Africa.

SESSION III: ACCESS AND EQUITY OF POTENTIAL COVID-19 **SESSION III** focused on access and equity of potential COVID-19 vaccines. The three presentations featured vaccines manufacturing in Africa, gender and access to COVID-19 vaccines, and reflections of vaccine trials in Africa, lessons from Ebola.

In her presentation, Prof Senait Fisseha, Chief Advisor to the WHO Director-General and Director of International Programs, Susan Thompson Buffett, Foundation, USA, noted that the health burdens on women and girls increase disproportionately during periods of crisis such as COVID-19. She recommended that women be equitably represented at every stage of vaccine development, from clinical trials to community delivery.

To ensure equitable access, she said there must be an inclusive approach to discovering and distributing life-saving tools, and that gender equity and justice must be prominent and cross-cutting in COVID-19 vaccine framework and roadmap.

Prof. Fisseha recommended that women and girls should be first in line for vaccines and that vaccines must be free at the point of delivery. She emphasized the need to listen to everyone by

meaningfully engaging communities and ensuring that women fully understand their rights and options, and that they can make informed decision.

She concluded by saying vaccine development should not be the end goal, but a runway for health system strengthening and un iversal health coverage in Africa.

Prof Amadou Sall, Director, Institut Pasteur de Dakar, Senegal, made a presentation on the experience of Senegal in vaccines production, particularly the yellow fever



Commissioner for Social Affairs, Amira Elfadil Mohammed



vaccine. The presentation highlighted the need for vaccine manufacturing in Africa, drawing lessons from Senegal, including capacity development, regular investments and regulatory and policy support. He highlighted the critical strategies in vaccine manufacturing in Africa and how to scale-up for this manufacturing.

Prof Daniel Bausch, Director, UK Public Health Rapid Support Team, UK,

presented lessons from Ebola vaccine development. He noted the mistrust and reluctance among local communities to accept vaccination particularly in areas where there's civil unrest. He advised that vaccine planning should be long-term and said the challenge is not only to have a vaccine that is safe efficacious and free but also we must consider the challenges with regulatory processes and infrastructure

Other issues include the availability of skilled healthcare workforce to administer, monitor and document the use of the vaccine, communicating to receive feedback from communities and build trust, and the need for Africa-specific roadmap in vaccine development. He emphasized the critical need to engage local communities in vaccine development and the need for social, political and cultural engagement.

SPECIAL SESSION I: COVID-19 VACCINES MINISTERIAL PANEL – SOUTH AFRICA, ZAMBIA, EGYPT, MOROCCO, TOGO, MALI, CAMEROON, GABON, KENYA, ETHIOPIA **SPECIAL SESSION I** featured general discussion by health ministers or their representatives on how Africa can contribute to the development and access to COVID-19 vaccine. Some of the issues raised include the need to monitor and identify the various strains

of COVID-19 to identify strains that are unique to Africa, examining the study population, examining areas of vulnerability at the country level, the need for community understanding and buy-in, strengthening partnerships, and continuous collaboration at the technical level.