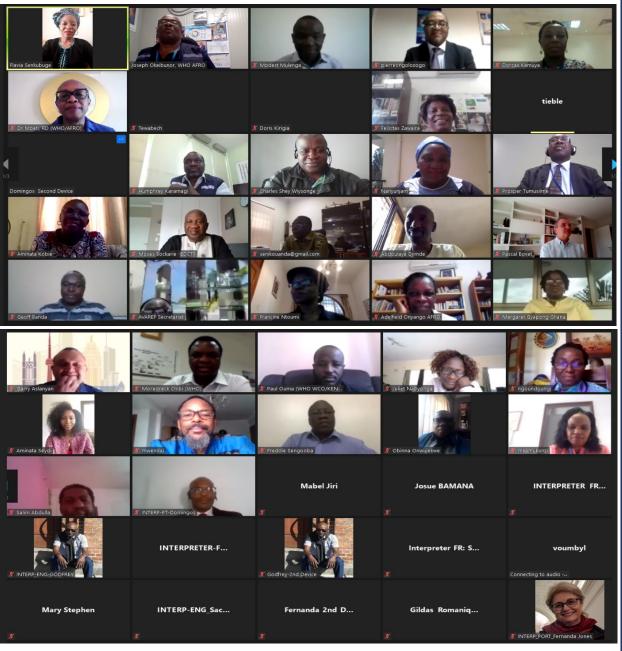
REPORT OF 34th SESSION OF THE AFRICAN ADVISORY COMMITTEE FOR HEALTH RESEARCH AND DEVELOPMENT (AACHRD) MEETING



THEME: Health Research in The Context of Covid-19

11-12, August 2020, Virtual

i. EXECUTIVE SUMMARY

The 34th session of the African Advisory Committee for Health Research and Development (AACHRD) Meeting, was held from 11 and 12 August 2020 virtually under the theme "Health Research in The Context of Covid-19". This session was attended by members of AACHRD, representatives of eight institutions working in the area of research and development, as well as WHO/HQ and AFRO staff, including the Regional Director (RD) for WHO in the African region, Team Leaders and experts from various clusters.

The expectations of the meeting included to refocus research priorities in the context of Covid-19 pandemic in the African region; explore ways of strengthening COVID-19 research and innovation capacities in Africa; and providing recommendations to the Regional Director on how WHO can maintain its leadership in research and innovations during and post COVID 19 era. The meeting was conducted through presentations by keynote speakers, plenary sessions and general discussions. It was organized in 7 sessions distributed around four themes, namely the review of key research priorities in the context of COVID-19 and identification of those relevant to the region, building COVID-19 research capacity in the Africa region, report of the sub committees of the AACHRD, and partner reflection on research in the context of COVID-19. This report presents a summary of proceedings from the above-mentioned sessions. Below are the key recommendations.

RD's Call for more Roles for the Committee in promoting Research in the Context of COVID-19 in the African Region

- The AACHRD should go beyond its advisory capacity and do more to assist WHO /AFRO as well as collaborate with other partners in shaping the research agenda and ensure the quality of ongoing research around COVID 19;
- African countries and regulatory bodies should be encouraged to actively participation in vaccine trials and put mechanisms in place to facilitate the use of vaccines once available;
- Orient research beyond the biomedical and public health spheres and address research questions touching on multiple sectors including social and economic sciences.

Research Priorities in the Context of COVID-19 for the African Region

- Develop a position paper describing the response of countries in terms of research for COVID-19 and lessons learned;
- Develop a document with clear guidance to countries on how to move research agenda forward in the region;
- Set up a joint African Review Committee, which will develop the guidelines for rapid review and support to speed up review processes;
- Put in place a mechanism for identifying topics and defining the policy questions raised by policy makers as well as develop policy briefs responding to these questions;
- Organize a deliberative dialogue with the implementors and decision makers across countries to discuss the use of existing policy briefs; and

• Set up a committee with expert reviewers to undertake regular review of the policy briefs before dissemination

Building COVID-19 Research Capacity in the African Region

- Promote multidisciplinary approach allowing equal opportunities to social and basic sciences in terms of research around COVID-19;
- Anticipate, identify and develop documents and guidelines to be used, once the vaccines are available, to avoid the delay and facilitate the acceptance by the people
- Conduct studies on COVID-19 vaccine hesitancy, or more generally studies on behavioural and social aspects of vaccine acceptance; and
- Conduct test, validate, refine and adapt existing hesitancy measurement tools and potentially develop new and shorter ones, for application in the African context.

Subcommittees of the AACHRD

- The subcommittee on workplan should include the cost implications, the responsible individuals or institutions, the partners and collaborators for each area;
- The subcommittee on research priorities should rearrange the research priorities around the Health System and Services (HSS) building blocks and Universal Health Coverage (UHC) for coherence, easier alignment and implementation;
- Include the social sciences as well as emerging and re-emerging infectious diseases among the research priorities; and
- Focus innovations and technologies on the post COVID-19 situation and other health issues, not only limiting them to emergencies.

Partner Reflection on Research in the context of COVID-19

 Conduct mapping of all organizations intervening in research in the African region and define areas of unifying efforts to avoid duplication and waste of resources for COVID-19 research management.

Venue and Agenda for the 35th AACHRD meeting

• The implementation of the 34th AACHRD recommendations will be reported in the 35th session, planned to be held in Brazzaville, June 2021.

ii. TABLE OF CONTENTS

i.	EX	KECUTIVE SUMMARY	2
ii.	TA	ABLE OF CONTENTS	4
iii		ABREVIATIONS	6
1.	OFF	ICIAL OPENING	8
	1.1	Welcome remarks and introduction of participants.	8
	1.2	Welcome remarks (including objectives)	9
	1.3	Regional Director's speech.	10
2 ID		EVIEW KEY RESEARCH PRIORITIES IN THE CONTEXT OF COVID-19 TIFY THOSE THAT ARE RELEVANT TO THE REGION	
	2.1	Update on key ongoing COVID-19 research activities.	13
	2.2	Translating COVID-19 research into policies: The use of rapid policy briefs	14
3	BU	JILDING COVID-19 RESEARCH CAPACITY IN THE AFRICA REGION	16
	3.1	COVID-19 Research Capacity in Africa, Issues; Challenges, Opportunities and	what
	shou	ld be focusing on	17
	3.2	Regional Experience; Africa Centre for Disease Control (A-CDC)	19
	3.3	Regional Experience of African Vaccine Regulatory Forum (AVAREF)	21
4	RE	EPORT OF AACHRD SUB COMMITTEES	25
	4.1	AACHRD Workplan	25
	4.2	Research Agenda.	27
	4.3	Foresight, innovation and technology.	29
5	PA	ARTNER REFLECTION ON RESEARCH IN THE CONTEXT OF COVID 19	31
	5.1	The special Programme for Research & Training in Tropical Diseases (TDR).	32
	5.2	European and Developing Countries Clinical Trials Partnership (EDCTP)	33
	5.3	Evidence Informed Policy Network (EVIPNet)	33
	5.4	Cochrane Africa Network	33
	5.5	African Academy of Sciences (AAS)	34
	5.6	Tackling Infections to Benefit Africa (TIBA)	35

5.	7	Discussion	36
6	SE	SSION RECOMMENDATIONS	36
6.	1	Session I: Opening Session	36
6.	2	Session 2: Review key research priorities in the context of COVID-19 and	identify
th	ose	are relevant to the region	36
6.	3	Session 3: Building COVID-19 research capacity in the Africa Region	37
6.	4	Report of Sub Committees of the AACHRD	37
6.	.5	Partner Reflection on Research in the context of COVID 19	38
7	CL	OSING	38
7.	1	34 th AACHRD Recommendations to the regional director	38
7.	2	Date of the 35th AACHRD	40
7.	3	Closing remarks ARD	40
8	AN	INEX	42

iii. ABREVIATIONS

AACHRD African Advisory Committee on Health Research and Development

AAS African Academy for Sciences

AESA Alliance for Accelerating Excellence in Science in Africa

AHF Africa Health Forum

AMD Advanced Market Commitments

AMR Antimicrobials Resistance

ANHRSB African National Health Research Systems Barometer

APUI WHO/AFRO Partner Institution Initiative

ARD Assistant Regional Director
AUC African Union Commission

AVAREF African Vaccine Regulatory Forum

CARN TB Central Africa Regional Network for Tuberculosis Control

COVID-19 Corona Virus Diseases 19

CTA Call to Action

CTC Clinical Trials Community
EAC East African Community

EC Ethics Committee

ECOWAS Economic Community of West African States

EDCTP European and Developing Countries Clinical Trials Partnership

EVIPNet Evidence Informed Health Policy
EVIPNet Evidence Informed Policy Network
EWARS Early Warning and Response System

GAVI Global Alliance for Vaccines and Immunization

HCW Health Care Workers

HSS Health Systems Strengthening
IASC Inter-Agency Standing Committee

ICTRP International Clinical Trials Registry Platform IGAD l'Institut Gabonais d'Appui au Développement

IVE Immunization, Vaccines and Emergency

MCH Maternal and Child Health
MDG Millennium Development Goals
MNCH Maternal Neonatal and Child Health

NEPAD New Partnership for African Development

NHRS
National Health Research System
NCD
Non-Communicable Diseases
NGS
Next Generation Sequences
NRAs
National Regulatory Authorities
NTD
Neglected Tropical Diseases

OCEAC Organisation de Coordination et de Coopération pour la lutte contre les

Grandes Endémies en Afrique Centrale

PHC Primary Health Care

RCT Randomized Controlled Trials
RECs Regional Economic Communities

R4H Research For health

RMNCAH Reproductive, Maternal, Newborn, Child and Adolescent Health

RPL Research, Publications and Library Services

RO Regional Office

SADC Southern African Development Community

SDG Sustainable Development Goals TDR Tropical Diseases Research

TIBA Tackling Infections to Benefit Africa

UN United Nations

UNECA United Nations Economic Commission for Africa
UNOPs United Nations Operations for Project Services

WARN-TB West Africa Regional Network for Tuberculosis Control

WASH Water, Sanitation and Hygiene

WHA World Health Assembly
WHO World Health Organization

WHO/AFRO World Health Organization Regional Office for Africa

1. OFFICIAL OPENING

1.1 Welcome remarks and introduction of participants.

Dr Felistas Zawaira, Assistant Reginal Director (ARD) at WHO/AFRO, introduced the meeting with a warm welcome note to all participants including AACHRD members, partners and WHO staff.

She highlighted the importance of research in driving the Region to attain Universal Health Coverage (UHC) and the Sustainable Development Goals (SDG) and acknowledged the privilege to host the 34th AACHRD meeting, which aims to promote research for development in the African Region, despite the very challenging health pandemic. She added that the pandemic is uniquely challenging, given its impact on our ways of life and living as well as the continuously unfolding realities that call for scientific evidence to guide response.

The ARD informed participants that WHO is interested in shaping the research agenda and stimulating the generation, translation and dissemination of valuable knowledge to guide our response to the COVID-19 pandemic. She added that WHO is strongly encouraged that with evidence-based decision making, policy formulation and planning, and adequate resource allocation in all our member states will see us triumphant over the pandemic.

Dr Zawaira quoted the Director General of WHO, Dr Tedros A Ghebreyesus, who urged that "we need our collective knowledge, insight and experiences to answer the questions we do not have answers to and to identify the questions we may not even realize we need to ask". She stressed that the questions around the COVID-19 pandemic have dominated our search for evidence to inform our response to the pandemic. The ARD recognized the wisdom of AACHRD and his role as the principal advisory body to the Regional Director on shaping research for the theme of this year's meeting to be "Health Research in the Context of COVID-19"

She noted that the meeting agenda has been carefully developed to address the theme. She mentioned some important items to be explored in meeting including: (1) Review key research priorities in the context of COVID-19 and identify those that are relevant to the region; (2) Building COVID-19 research capacity in the Africa Region and (3) Partner Reflection on Research in the context of COVID-19; etc. She also stressed the opportunity to exchange on how to improve partnership and unify the efforts to reach the expected results for COVID 19 research in AFRO, as the meeting was attended by different partners with diversified research expertise.

The ARD welcomed and introduced, the keys institutions and partners present at the meeting in addition to the AACHRD members, to the Regional Director. Among these institutions were the

African Academy of Science (AAS); the West African Health Organization (WAHO); South African Development Community (SADC); Africa Centre for Disease Control (A-CDC), the New Partnership for African Development (NEPAD); WHO HQ /TDR; the European and Developing Countries Clinical Trial Partnerships (EDCTP); the Evidence Informed Policy Network (EVIPNet); Cochrane African Network; Tackling Infections to Benefit Africa (TIBA); and African Vaccine Regulatory Forum (AVAREF). She appreciated their presence and valued their anticipated contributions.

To conclude her remark, Dr Zawaira reiterated the goal of the 34th AACHRD meeting which is "to enhance our research strategies in response to COVID-19". She emphasized that this will no doubt enhance the ability of the WHO in supporting Member States on the use of evidence and the COVID-19 research development both within and outside the Region. She urged all participants to make good use of the opportunity to strengthen research capacity in the context of COVID-19 in our countries and wished participants very happy and fruitful deliberations.

1.2 Welcome remarks (including objectives)

Dr Flavia Senkubuge, the Chair of the AACHRD, introduced her speech with a note of thanks to the participants for the 34th session of AACHRD. Dr Flavia recalled the mandate of AACHRD, which is to advise the Regional Director in research area.

The AACHRD chair called on members to go beyond their advisory capacity and assist WHO and other partners to shape the research agenda and put the voice of African research at the forefront of COVID19 research. She put emphasis on developing a research agenda that will strengthen health systems and respond to health challenges in the region.

Dr Flavia emphasised the need for the continuity of health services in these words, "as much as we are focusing on COVID-19, we have a number of epidemics in our region. So, it is important to have a whole health system approach in our deliberations and start to carve out a post COVID-19 research agenda, that will ensure that our health systems across the region are able to withstand any other epidemic or pandemic that we may face"

The chair proceeded to explain the general objective of the meeting which is to advise the Regional Director on the core function of shaping the research agenda and stimulating the generation, translation and dissemination of valuable knowledge. She further elaborated on the three specifics objectives, namely (1) to review key research priorities in the context of COVID19 and identify those that are relevant to the region, (2) to discuss ways of supporting COVID-19 research capacity in the Africa Region and (3) to provide guidance and recommendations to the Regional Director on how WHO can maintain its leadership role in health research during and post COVID in the Region. She also enumerated the expected outcomes of the meeting to include (1) an agreement on collaborative framework which will guide engagement of stakeholders and partnership in research priorities in the context of COVID-19 pandemic in the African Region; (2) agreement on ways of strengthening COVID-19 research and innovation capacity in Africa; and (3)

recommendations on how WHO can maintain its leadership in the area of research and innovations during and post COVID 19.

Concluding her remarks, Dr Flavia recalled the commitment of AACHRD committee to work beyond the advisory capacity and support WHO AFRO in designing and implementing research in this period of COVID 19. She also thanked the Regional Director for her usual commitment and support to the AACHRD, specifically for being available for the 34th AACHRD virtual session, while in transit to South Africa.

1.3 Regional Director's speech.

The WHO/AFRO Regional Director, Dr Matshidiso Moeti, welcomed the AACHRD chair and members, the partners and all WHO staff; HQ and AFRO to the meeting. She expressed her excitement at the presence of some close partners namely the AAS; SADC A-CDC; EDCTP; EVIPNet; Cochrane African Network; TIBA and the AVAREF. She thanked everybody for accepting her invitation despite the immense challenges of COVID-19 pandemic. She recognized that everybody is repurposed for COVID, while finding time to do more for normal work, to avoid any collapse of our main mandate.

Dr Moeti congratulated the AACHRD for its position paper developed in April and appreciated the pertinent recommendations addressed to AFRO on leadership and governance of research and innovation. She added that some are easier implementable, but others require the engagement of AACHRD beyond the current advisory role of its members. She urged AACHRD members to use their capacities and networking with other institutions, to explore possibilities in moving the research agenda forward. Dr Moeti applauded the sentiment of AACHRD during this difficult time for working together, providing ideas and sharing experiences to combat the pandemic.

The Regional Director explained that the COVID19 pandemic reaffirms the importance of datadriven, evidence-informed action, which also strongly reaffirms the relevance of the AACHRD. She added that we are dealing with a new pathogen that spreads quickly and which is causing enormous health, economic and social impacts around the world. She stressed that the above consequences require multisectoral response, not only health sector, and must be guided by the growing knowledge of the disease and its impacts. Dr Moeti stressed that WHO is promoting the use of evidence, as countries respond to COVID-19 with the support of partners. This includes modelling scenarios to inform response planning, and identification of gaps and supply needs. She noted that a virtual hackathon was convened to address COVID-19 challenges with 100 top innovators, and then provided seed funding to some of the emerging innovations. She also noted the need of joint mechanism for keeping information going among clinicians on how this disease is manifesting, how it is differentiated with malaria and other diseases in the context of each country, how to treat it early before it reaches the advancing level needing the ventilators and how to generate evidence and knowledge. She added that the information needs to be shared with both public sector workers managing the pandemic and private sector players who are receiving a lot of patients at daily basis.

The Regional Director talked about the ongoing discussions in the COVID-19 response, where the governments have realized that the strong measures undertaken for COVID-19 (lockdown, physical and social distance) cannot stay in place for much longer. She noted that this is another area where evidence is needed, learning what is safe; what is feasible in all multiple sectors; not only the biomedical and public health spheres. According to her, there is need to interrogate interaction with socio economic sector and the level of vulnerability to advise governments based on real evidence.

Dr Moeti congratulated the South Africa for being the first country in the Region to embark on a vaccine trial for COVID-19, in partnership with Oxford University. She noted also that Guinea Bissau and Kenya were at various stages in their preparation to join in the vaccine trials endeavours and encouraged all the African Countries to do so. She noted ongoing collaborations with partners, like Africa CDC in establishing a sequencing laboratory network with 11 laboratories, in the WHO African Region1, are participating and analysing sequencing data. Already, five circulating COVID-19 lineages have been identified from Nigeria and South Africa, with no links to each other, and over 1000 sequences have been produced in the Region. She also informed the participants of effort to establish process of scientific validation of traditional medicines and remedies for COVID-19, through development of a master protocol for clinical trials and the establishment of oversight mechanisms, namely a "Regional Executive Advisory Committee on Traditional Medicine for COVID-19".

Dr Moeti also discussed the challenges faced WHO in General and African Region for COVID-19 management. She noted that at global level, WHO has launched a Solidarity Trial2 to ascertain whether three treatment options slow COVID-19 progression or increase survival. More than 90 countries globally have joined the Trial and over 30 African countries have expressed interest in joining. However, so far none has succeeded, due to processes of securing approvals of the protocol from the national ethics and regulatory boards, among others. She added that the WHO tried to push for the participation of countries from the African Region, in the global efforts to generate evidence to improve our response to the COVID-19. However, the efforts have yielded very little or no results due to many factors militating against the conduct of research in this part of the world. Among these factors, she highlighted the capacity to conduct these researches, low investments and funding for research, weak infrastructures and research governing bodies. To overcome these Challenges, Dr Moeti recommended to all African Countries and Partners to be engaged in any process and invest as much as possible. She requested collaboration with AVAREF, A-CDC and other stakeholders to facilitate the regulatory processes. She also recommended the African

¹ These include 3 Specialized Regional Reference and 8 Regional Reference laboratories hosted in the Democratic Republic of the Congo, Gabon, Ghana, Kenya, Nigeria, South Africa, Senegal and Uganda

² The Solidarity Trial compares 3 treatment options: remdesivir; lopinavir/ritonavir; and lopinavir/ritonavir with interferon beta; against the national standard of care for COVID-19 to ascertain if any of the drugs slow disease progression or improve survival. More than 90 countries confirmed their participation in the trial, including 31 in the African Region

governments to be engaged actively in trials and in collaboration with CDC, put in place the mechanism of vaccine use, once available.

Dr Moeti noted that the research and development on COVID-19 has been unprecedented and in the coming years, it is expected that this virus will occupy a central focus. She reinforced the need for not losing the sight of other priorities in the Region, including our overarching goal of supporting countries to attain universal health coverage. She reported that, according to the COVID-19 living NMA initiative, there were 1525 studies of treatments from the ICTRP. 851 of these trials were recruiting patients. There were 26 candidate vaccines in clinical evaluation. There were also many studies to understand the virus on going within and outside Africa.

Dr Moeti noted the rapid reporting in the media of research findings, and growing understanding among communities, from newscasters to family members, of terms like preprint, peer-review and randomized clinical trials. She stressed the need to combat the infodemic and the opportunity to capitalize on the importance of conducting quality research and its relevance in people's daily lives. It is situation needing evidence-based position of sciences and limited of sciences is challenged over the world, she added.

Due to the current context of COVID-19 and the enormous research needs, the RD requested AACHRD to go beyond the traditional mandate of advising Regional Director and move towards engaging directly in evidence generation for the response. She proposed options including working with the African Academy of Science (AAS) to take the lead on some of the priority research areas and increasing coordination of collective efforts in generating evidence to guide the COVID-19 response. She recalled the recommendations made in the AACHRD position paper, that she believed are a top priority in advancing research in the Region. These include establishing national multidisciplinary scientific and strategic advisory committees and studying the impacts of COVID-19 beyond the health sector.

Dr Moeti highlighted the need to consider the extent to which WHO being able to play leading roles in generating evidence in support of response to COVID-19 in the African Region; identify the opportunities COVID-19 holds for health research and innovation in the Region and how to leverage the contribution of partners to strengthen research and innovation capacities for COVID-19 and other health priorities in the African Region.

In conclusion, Dr Moeti thanked all the participants, again, for their presence and commitment and anticipated expectations for receiving the valuable contributions and advice on strategies for advancing research and innovation on COVID-19. The opening session was closed by an online group photo of all Participants.

2 REVIEW KEY RESEARCH PRIORITIES IN THE CONTEXT OF COVID-19 AND IDENTIFY THOSE THAT ARE RELEVANT TO THE REGION

The second session described key research priorities in the context of COVID 19. Two presentations were provided by Dr Joseph Okeibunor; who updated on key ongoing COVID-19 research activities and Dr Humphrey Karamagi who talked about translating COVID-19 research into policies: The use of rapid policy briefs.

2.1 Update on key ongoing COVID-19 research activities.

Dr Joseph Okeibunor provided update on key ongoing research activities in the African Region. He informed participants that since the declaration of pandemic, consultations with WHO/HQ and partners have resulted in the identification of priorities issues, which could be addressed by research in the context of COVID. He mentioned that two group of research questions came out from the consultations. The first group comprised of research to be driven by WHO/AFRO (Response Team Driven) while the second group is to see WHO supporting scientist and institutions to drive for AFRO (Response Team Supported). He further explained that for the first group, 6 standards protocols were developed and shared with countries. These include: (1) First Few X cases (FFX), (2) Households (HH) transmission study, (3) Risk factors assessment for Health Care Workers (HCW), (4) Environmental sampling, (5) Sero-epidemiological investigation (6) Clinical characterization of cases. He also noted the Global Solidarity Studies.

He listed research questions to be conducted in collaboration with partners to include: the Virus: natural history, transmission, and diagnostics, the Animal research on the virus origin & management measures at the animal and human interface, Infection prevention and control + HCW protection, Candidate therapeutics R&D + traditional medicines, Candidate vaccines R&D, Ethical considerations for research, Psychosocial studies and innovation studies.

Dr Joseph presented the status of operationalization of Unity Studies going on in different countries including, South Africa, Madagascar, Côte d'Ivoire, South Sudan, Ethiopia, Senegal Togo, Liberia, Sierra Leone, Kenya, CAR, Cameroon Niger and Burkina Faso. He mentioned also the partners involved. He updated on the status of operationalization of Global Solidarity Studies in Africa, noting that 31 countries were mobilized for the global initiative but unfortunately, they were not able to enrol due to various reasons. He explained that following the preliminary analysis of results from the countries in the other regions, it was recommended to revise the protocol. With a new phase of revised protocol, he expressed belief that South Africa, Mali and Kenya, which had advanced in preparation could join. However, following the revision, the countries will need to get back to the Ethics and Regularity authorities to take off.

Dr Okeibunor further gave update on the results for global solidarity trials as at 29/07/2020. According to this update the Remdesivir showed promise in shortening the time to recovery in adults hospitalized with Covid-19 and evidence of lower respiratory tract while the Chloroquine/Hydroxychloroquine and Lopinavir + Ritonavir arm were discontinued after preliminary analysis of data collected.

Beyond the Global Solidarity trials, he provided the overview of clinical trials for COVID-19 which is evolving very first. He mentioned that as of 28 July 2020, 1525 randomized controlled trials (RCTs) have been registered including 21 from 9 African Countries. He presented the list of the African countries registered, the number and area of trials by country.

Dr Joseph informed participants that the African Vaccine Regulatory Forum (AVAREF) is facilitating clinical trials in the COVID-19 pandemic. He presented the challenges identified by AVAREF including the limitation to normal interactions requiring electronic platforms for reviews, many clinical trial applications, increased burden on regulators and ethics committee etc. He also showed the response proposed by AVAREF to overcome the challenges such as; the AVAREF virtual forums, capacity building of members, providing scientific advice, expedited Joint/Assisted Reviews of CTs and Common Tools and Guidelines.

Dr Joseph informed participants that WHO is also supporting different African countries on traditional medicines trials. He mentioned as example the support given to Madagascar Covidorganics. He cited the regional steps undertaken including the meeting between WHO Director General and the President of Madagascar on 20 May 2020. In term of technical support, he mentioned the regular consultations, development of a master protocol, review of countries' protocols, establishment of a Regional Expert Advisory Committee and the Data and Monitoring and Safety Board and the launch of the Regional Advisor Expert Committee on Traditional Medicine and COVID-19: 22nd July 2020.

Dr Joseph explained the new development in COVID-19 research initiatives, including the consortium of sponsors coordinated by DNDi; Phase 3 COVID-19 clinical trial entitled "an openlabel, multicentre, randomised, adaptive study on the safety and efficacy of several therapies, including antiviral therapies, versus control in mild cases of COVID-19". He noted the objective of trial which was to identify treatment with high probability of reducing occurrence of severe cases as a proxy for hospitalization versus paracetamol. He also mentioned some countries which have been targeted in Africa Region.

Dr Joseph further enumerated actions taken to strengthen research capacity beyond COVID-19, in the framework for AFRO commitment to promote research in African Countries. He concluded on the activities planned for this year including the assessment of national health research systems.

2.2 Translating COVID-19 research into policies: The use of rapid policy briefs

Dr Karamagi Humphrey made a presentation on how to use the rapid policy briefs for translating COVID-19 research to guide policy actions on the ground. In his introduction, Dr Karamagi informed participants that with COVID-19, there are variations in qualities of evidence being generated, daily, across multiple fora and of varying methods (not only traditionally used as peer reviewed articles). Some are producing the pre-prints, news reports, peer reviewed articles and technical reports from partners etc. Unfortunately, policy makers use all the information to make decisions. Dr Karamagi explained how Data Analytics and Knowledge Management (DAK)

programme of WHO AFRO tried to collect and synthesize all these set of information to produce rapid policy brief, which are quite faster and useful for informed decisions by policy makers.

Dr Karamagi mentioned some of the rapid policy briefs developed in collaboration with Cochrane Africa as examples;

- The impact of long-distance truck drivers on the spread of the virus and measures that countries can implement to mitigate this route of spread
- Laboratory policy brief on the various testing approaches-RT PCR, Serology, RDTs and the role of sequencing of the strains circulating in Africa
- Setting up and relaxation of public health social and physical distancing measures for COVID-19
- Diagnosis and genome sequencing of coronavirus in Africa
- Research agendas to enhance prevention of epidemics and pandemics in Africa

He also illustrated on the additional rapid briefs developed by AFRO and provided the link for some as follows;

- Labour and delivery outcomes of pregnant women diagnosed with COVID-19 (https://apps.who.int/iris/bitstream/handle/10665/332500/WHO-AF-ARD-DAK-10-2020-eng.pdf)
- Safety of use of chloroquine/ hydroxychloroquine in COVID-19 case management
- Efficacy of corticosteroids in COVID-19 management (https://apps.who.int/iris/bitstream/handle/10665/332935/WHO-AF-ARD-DAK-15-2020-eng.pdf)
- Effectiveness of use of chloroquine/ hydroxychloroquine in COVID-19 case management (https://apps.who.int/iris/bitstream/handle/10665/332261/WHO-AF-ARD-DAK-03-2020-eng.pdf)
- Management of severe / critical cases of COVID-19 with non-invasive or mechanical ventilation (https://extranet.who.int/iris/restricted/bitstream/handle/10665/332340/WHO-AF-ARD-DAK-07-2020-eng.pdf)
- Labour and delivery outcomes of pregnant women diagnosed with COVID-19 (https://apps.who.int/iris/bitstream/handle/10665/332500/WHO-AF-ARD-DAK-10-2020-eng.pdf)

Dr Karamagi presented the issues encountered during the process for generating evidence through the policy briefs. The first issue highlighted was the quality of COVID-19 publications; he stressed the effect of need for evidence, scientific rigor being sacrificed for 'ground-breaking' results. He gave examples of some retracted papers; those analysed and found to be faulty(https://retractionwatch.com/retracted-coronavirus-covid-19-papers/;

https://www.tandfonline.com/doi/abs/10.1080/08989621.2020.1782203?journalCode=gacr20).

Another challenge stated was related to the dissemination of briefs to ensure that they are being used effectively by policy makers as they are receiving so much evidence from different sources.

To conclude his presentation, Dr Karamagi presented the way forward; recognizing that the policy makers need to take decisions with or without evidence, he stressed the need to produce the rapid policy briefs consolidating the existing evidence around specific policy issues. He added a need to explore the collaboration with AACHRD to produce and disseminate the policy briefs informing evidence-based decisions.

During discussions that followed these presentations, participants highlighted a need for developing the position document describing the countries response in term of research for COVID-19 and lessons learned. In the same framework, a need emerged for supporting countries to develop the research agenda, based on country needs and gaps identified as part of response to the COVID-19. To ensure the implementation of the research agenda, participants suggested to develop a document with clear guidance to countries on how to move forward the research agenda.

To address the concern around the reviews of research protocols, the participants recommended the setting up of a joint African Review Committee which will develop the guidelines for rapid review and support to speed up the review process. It was also proposed to put in place the mechanism for collaborating with African universities and other institutions intervening in research areas. It was also noted the need to develop the regional health research directory which can help to know what is being done in term of research around COVID-19 and other areas as well as the implementers.

With respect to translating COVID-19 research into policies using the rapid policy briefs, it was noted a need for putting in place a mechanism for identifying topics and defining the policy questions raised by policy makers from the ground and develop the policy brief responding to these questions. Participants stressed the importance of developing policy briefs that are meaningful and beneficial for implementers and policy makers. In term of dissemination of policy briefs, it was suggested to organize the deliberative dialogue with the implementors and decision makers across countries for conversation on the use of developed policy briefs. This could be done in complement with the approach used previously (webinars), which have been found useful also. It was further noted that the issue of the quality of policy briefs and it was stressed the need to set up of a committee with expert reviewers to undertake regular review of the policy briefs, before dissemination.

3 BUILDING COVID-19 RESEARCH CAPACITY IN THE AFRICA REGION

The third session of AACHRD meeting focused on COVID-19 Research Capacity in Africa, Issues; Challenges, Opportunities and the Regional Experience in COVID-19 Research Capacity. Three presentations were provided on behalf of African Academy of Science (AAS), Africa Centre for Disease Control (A-CDC) and the The African Vaccine Regulatory Forum (AVAREF)

3.1 COVID-19 Research Capacity in Africa, Issues; Challenges, Opportunities and what should be focusing on

Professor Tom Kariuki who provided the presentation on behalf of AAS, is the Director of Programmes at the African Academy of Sciences (AAS), where he leads the Alliance for Accelerating Excellence in Science in Africa (AESA Platform). He took participants through a presentation on COVID-19 Research Capacity in Africa: Issues, Challenges, Opportunities and what should be focusing on.

Professor Tom introduced his presentation by explaining the AAS mission, which is focusing on build people, excellence and building partnerships to shift the center of gravity for science to Africa. He informed participants that AAS is driving a lot of works and for last five years, the Scientific projects and scientists have received over USD 200M. He explained that the funds are aiming for institutional strengthening to use R&D efforts to combat the burden of diseases in the existing Africa and new centers of R&D leadership and excellence for 3Ds of products and vaccines.

Professor Kariuki further explained the areas, where the AAS has put more support, funding mentorship and partnership through AESA Platform. Some of these areas which are cutting across science, technologies innovations include; Health/life sciences i.e. Communicable diseases, NCDs, NTDs, One Health, Mental health, AMR, MNCH, Genomics, WASH, the Innovations i.e. Drug discovery, the Natural Sciences i.e. food security, renewable energy, engineering etc. and Climate Sciences. He also cited some gaps to be refined resulting in future calls/RFPs; such as the Social sciences/humanities, the transdisciplinary research Data Sciences and other health areas (Epidemic pathogens, Neurosciences, Clinical/patient-oriented research, Health Systems/Implementation Science, Bio engineering/Design, Synthetic Biology/Nanotechnology).

Professor Kariuki described the issues and gaps that are linked to the Africa context for COVID-19. Some of these issues include:

- High disease burden & epidemiological transition; over 20% disease burden,
- Informal food markets >90% food through informal markets,
- Poverty; 390M / 1.3B living in extreme poverty,
- Health system capabilities and access; PPE, Diagnostics, personnel, training, ICU and HDU facilities.
- Rural-urban ratio (~3:2) Variety of low-density rural areas and high-density urban areas,
- High youthful Demographic Dividend; Kenya's 3.1% vs. Italy's 22.8% population >65 years,
- No care homes or elderly settlements; Older members of society live within rural communities,
 - Very low mobility index in Africa; total top 5 airports in Africa

On the side of AAS academic, Professor Kariuki provided an overview of what have been done since March 2020 in term of Epidemic preparedness and global health security. He mentioned the following activities as example;

- AAS COVID-19 all hands Webinar; held on 26 March to kick start common thinking towards defining a research agenda for the COVID-19pandemic in Africa and 275 scientists attended
- COVID-19 experts in Africa; Developing a list of COVID-19 experts and researchers working on COVID-19 related research on the continent through the AAS Clinical Trials Community (CTC) programme
- Survey collating Africa's R&D priorities; Workshop brought together the African scientists in April to develop a priority list for R&D to supplement the WHO coordinated Global research Roadmap, where 844 responses completed and 17 new priorities specific for Africa identified and listed against global priorities

In term of Research & Development goals for the COVID-19 outbreak in Africa, Professor Tom talked about the 42 Priorities from WHO road map plus 17 additional potential priorities from the consultation process. These priorities are classified in different categories like, Virus natural history, transmission, and diagnostics, Clinical characterization and management; Epidemiological studies; Candidate therapeutics R&D; Animal & environmental research on the virus origin, and management measures at the human-animal interface; Infection prevention and control, including health care workers' protection; Ethical considerations for research and Integrating social sciences in the outbreak response.

Professor Kariuki further expounded the three areas to focus on in term of research in Africa; the vaccines, treatments, policy & practice. He highlighted the following key elements to take into consideration;

- Importance of high-quality, randomized treatment and vaccine trials in making scientific progress; there risks of trying experimental treatments without them.
- The Medical community which has some research-backed drug treatments; remdesivir, an antiviral drug found to shorten hospital stays and dexamethasone, a cheap, readily available steroid that seems to cut deaths of patients on ventilators by a third.
- Lack of treatment that reliably slows progression of the illness, much less a cure.

With regards to the COVID Vaccines landscapes, Professor Kariuki, explained that there are more than 200 COVID vaccine candidates. 110 are currently at exploratory, 30 at preclinical stages, 13 are in clinical development. 73% are being developed by private/industry/multinational organizations, (27%) of projects being led by academic, public sector and other non-profit organizations. He added that developers are small and/or inexperienced in large-scale vaccine manufactures with expectation of a big pharma to get fully engaged in the development process and manufacturing. He mentioned that the lead organizations of active COVID-19 vaccine candidates are distributed across 27 countries and added that there is currently little public information on vaccine development activity in Africa.

Professor Kariuki further explained that the AAS is keen to Clinical Trials Community Platform for Africa and one globally connected. He highlighted the need for collaborating with key stakeholders like A- CDC and AVAREF to improve this area. He noted that only 2% of the clinical trials conducted globally occur on the African continent. Some reasons include the lack of knowledge on the location and capabilities of existing clinical trial sites and the uncertainties associated with competency, expectations and timelines of regulatory and ethical reviews across the 55 African countries (being addressed by AVAREF). He informed participants that the CTC platform is now available (visit website www.ctc.africa) and 50 institutions have registered on the platform and he advocated for other institutions to join.

Professor Kariuki stressed the need for speedy development of vaccines with shift from a traditional paradigm of 5-10+ years to outbreak paradigm and adaptive trials of 12 to 18 months and a well-coordinated procurement supply of vaccines once available. He revealed the need for identifying which countries and which partners from Africa would be contributing and part of the Advanced Market Commitments (AMC) like what GAVI did for pneumococcal and Ebola vaccines. He anticipated the need for preparing the agreements with manufacturers so once vaccines are available will be faster and easier to access them.

To conclude his presentation, Prof Kariuki encouraged all participants to visit the website of Clinical Trials Community (www.ctc.africa) and join platform. He recalled that for strengthening the Research and Development for COVID 19, three main areas are requiring more focus; issues the vaccines, treatments, policy & practice. He promised the support and AAS readiness for collaboration.

During the discussion of the AAS presentation, participants highlighted the need to identify the opportunity and synergy available in African Region to promote multidisciplinary approach allowing equal opportunities to Social sciences and basics sciences in term of research around COVID 19. It was also noted the need for promoting the research around the Local health security and Health Systems Services instead of focusing on Global health security only.

They also reinforced the need for the systematic training of Epidemiologists on basics epidemiology principles to facilitate in dissemination of results around COVID 19. In the same framework, it was noted the need for regular training of journalist to support producing evidence-based information and reports around COVID 19, to combat the infodemic. With respect to vaccines, the need to anticipate, identify and develop the documents and guidelines to be used, once the vaccines are available, to avoid the delay and facilitate the acceptance of population, was highlighted.

3.2 Regional Experience; Africa Centre for Disease Control (A-CDC).

Professor Nicaise Ndembi, the Chief Science Advisor to A-CDC presented the role of A-CDC in the area of COVID 19 Research capacity. He introduced the presentation with a rationale for establishment of Africa CDC. He described the factors contributing to the transmission of diseases including the increase of the population with 2.5 billion by 2050, the global change and climate change, the increasing urbanization, conflicts, epidemics and mobility of peoples. He stressed that the mobility of population itself is a main contributor to the spread of diseases like COVID but also for other disease like HIV. Prof Nicaise emphasized the responsibility of every partner present in the meeting (WHO, EDCTP, AAS, etc....) to produce the data that will inform decisions about the above-mentioned factors.

Professor Nicaise described the actions undertaken by Africa CDC during the different outbreaks happened in African countries like DRC, Nigeria Madagascar etc.... He gave example of A-CDC' actions during the plague outbreak in Madagascar in October 2017 including strengthening public health emergency, management system, development of data analysis tool and financial support provided. Prof Nicaise took participants through a graph showing different epidemic and frequencies that Africa experienced over the past decade (1970-2016) at regular basis.

In terms of COVID-19, Professor Nicaise presented the trend of COVID 19 cases in 55 Member States for Africa with the percentage increase from 3-9 August 2020. He presented also the trend of COVID 19 cases by African Region (Central Africa, Eastern, Northern, Southern African Region and Southern African Region without South Africa and Western Africa Region) from 15th February to 10 August 2020. He noted that with the opening of boarders and schools, the trend presented could change with increase of the new cases.

Professor Nicaise continued the presentation with the Africa CDC Mission and Strategic Focus; he described the A-CDC mission as to strengthen Africa's capacity and institutions to detect and respond to health threats through partnerships, science, policy, and data driven interventions and programs. He went through the A-CDC five Strategic Pillars such as 1) Surveillance and diseases intelligence 2) Emergency Preparedness and Response, 3) Laboratory Systems and network 4) Information Systems and 5) National Public Health Institutes and Research.

Professor Nicaise took participant through the A-CDC structure and operation model. He mentioned the P4 laboratories available and those under development in the framework of Regional Integrated Surveillance Network. He listed the countries where these laboratories are allocated across the African Region; Western Africa (Nigeria), Central Africa (Gabon), Eastern Africa (Kenya) Southern Africa (Zambia) and Northern Africa (Egypt).

Prof Nicaise further explained how ACDC is getting the data through the Africa CDC RISLNET surveillance and Laboratory Networks constituted by the institutions/individuals working to enhance capacity of national MoHs and reference laboratories to detect, respond and prevent infectious diseases. Talking about the distribution of NGS equipment, Prof Nicaise explained that the A-CDC has the capacity for development, standardization, deployment and support of new laboratory technologies. He presented the example of SARS-CoV-2 Genomic data in Africa sequences generated in Africa, he processed with examples of data generated in Morocco, Senegal, Kenya and South Africa.

In terms of Africa COVID 19 vaccine development and access strategy, Prof Nicaise explained what have been done by A-CDC in collaboration with AAS and EDCTP. He explained that the COVID 19 vaccine is essential as it will provide strong protection for the most vulnerable populations and will allow the continent for fully return to its overall development agenda. He explained two major prongs for the Africa COVID 19 vaccine development such us securing sufficient vaccine supply and removing the barriers to vaccine roll-out. He stressed the need for community and civil society engagement in the preparation of the vaccine use.

To unlock development and distribution of a vaccine in Africa, Prof Nicaise explained that the Africa CDC will help to coordinate partners to better address the four most critical barriers;

- Clinical trial network: Designed to share info on in-progress and completed trials, develop an African specific set of trial priorities and provide infrastructure to streamline trial operation
- **Regulatory:** Stand up vaccine regulatory working group for Africa bringing together country representatives and technical experts to develop guidance indemnification of manufactures, support countries in fast-tracking regulatory approvals and to regularly monitor and report on safety concerns
- **Delivery**; Support countries to strengthen systems of vaccinating target populations by providing guidance and virtual and in country training, supplying technical experts and helping to scale up health worker capacity and promoting innovations in delivery approaches
- **Uptake**; launch a continent-wide advocacy campaign and help countries to stand up community engagement programs in countries to accelerate uptake of the vaccine and reduce misinformation.

Professor Nicaise concluded his presentation on unity purpose, quoting Kwame Nkrumah, 1953 "It is clear that we must find an African solution to our problems and that this can only be found in African unity. Divided we are weak; united Africa could become one of the greatest forces for good in the world"

3.3 Regional Experience of African Vaccine Regulatory Forum (AVAREF)

Professor Dicky Akanmori, the Regional Advisor of Vaccine Regulation for AVAREF, introduced the presentation by stressing the need for review of clinical trials, solidarity and quality of protocols. He then mentioned the objectives of the presentation, which were to explain AVAREF and its role in addressing R&D in the region, to summarize AVAREF's contribution to R&D in COVID-19 Pandemic in the Region and to identify Challenges in Ethics and Regulatory Oversight of Clinical Trials.

Professor Akanmori noted that the focus of AVAREF is to provide a One-stop Process for Clinical Trial Application, which helps to improve the Regulatory Landscape in Africa. He clarified the following processes and mechanisms used;

• Joint reviews; Providing a standardized regulatory and ethics process involving authorities from multiple countries to increase efficiency of CTA review process

- Harmonization; Working toward standardization of the regulatory processes to enhance efficiency and improve transparency
- Collaboration; Ensuring ethics committees and regulatory authorities of all member states collaborate and develop strong relationships
- Support; Providing support to all member states with a focus on building institutional / technical capacity to meet demand in Africa

Professor Akanmori further provided a summary of AVAREF Governance Structure composed by three levels; Steering Committee, Technical Coordinating Committee and Partners. He clarified the role of each level; the Steering Committee have mandate to adopt recommendations, Guidance documents and policies and Report to the AMRH. The members of the Steering Committee who are the Heads of NRAs and Chairs of Ethics Committees, are selected from the RECs – EAC, ECOWAS, IGAD, OCEAC and SADC. The Technical Coordinating Committee; Selected from Ethics Committees and regulators of RECs: EAC, ECOWAS, IGAD, OCEAC and SADC have technical role to develop tools and guidance documents and recommend strategy and workplan to Steering Committee. The third level of AVAREF is composed by the Partners who are not only providing support but also advising the AVAREF in daily work. Those partners include; AUDANEPAD (Joint Secretariat), Bill and Melinda Gates Foundation, Paul Erhlich Institute (Biologics) – Germany, US Food and Drugs Administration, European Medicines Agency, Medicines and Healthcare Products Regulatory Authority UK, CEPI and African Academy of Sciences

He proceded with the presentation on the AVAREF Contribution to COVID-19 Research and Development which was summarized in five main areas;

- **AVAREF virtual forums** for engagement of product developers, scientists, and key research centers in Africa. Discuss pipeline of projects and plans.
- Capacity building of members through weekly updates on regulatory status of product development for COVID-19
- **Providing scientific advice to** COVID sponsors and Product Development Partnerships (PDPs)
- Expedited Joint/Assisted reviews of CTs for products against COVID-19
- Common Tools and Guidelines to facilitate harmonized CTA processing

Professor Akanmori further described the AVAREF capacity building webinars conducted since May 2020 and which have attracted an average of 140 participants. He cited some of the topics explored including the Basic Virology and Targets for Vaccines and Therapeutics, AVAREF Joint Review Process and Digital Survey Findings, AVAREF Emergency Review Process, the DAC – A Tool for Efficient Protocol Review, Basic Interpretation of Measures of Association (OR, RR, HR): Distinguishing Association and Causation, Safety in Clinical Trials and Post-registration: The 3S Strategy, the Development and Manufacturing of COVID 19 Vaccines: CEPI's Pipeline and Activities, the Regulation of Clinical Trials of Herbal Medicines and Therapeutics against COVID-19: Treatments and Medicines in Clinical Trials.

Furthermore, he emphasized the AVAREF commitment and focus to accelerating Reviews of Clinical Trial Applications through an emergency process. He stressed that the commitment was considering lessons learned from Ebola and the current global pandemic; putting pressure on healthcare stakeholders to identify treatments/vaccines and the global numbers of infections increasing. For that reason, he explained that AVAREF Member States have committed to conduct review of emergency applications within 10 days for previously approved products and 15 days for novel products. To meet these timelines within a lockdown context, AVAREF, national stakeholders and developers have adjusted their ways of working, Professor Aknmori added.

Focusing on COVID-19 crisis, Professor Akanmori highlighted the need for better coordination to accelerate CTA reviews in emergency situations and minimize delays for product development. He stressed the need for inclusion of all stakeholders for joint review, which may include the experts from NRAs and/or ECs of two or more countries to review a common application. The review teams include sponsor, investigators, external experts, and other observers, allowing the NRAs and ECs to collectively engage the sponsor, discuss the candidate product and proposed trial. He added that tthrough collaboration, NRAs and ECs can validate findings with peers and external experts, improve the quality of the review, and optimize the timeline of the process.

He also enumerated the requirements to meet emergency timelines including the early scheduling of meetings and deadlines, expedited response and availability of all stakeholders along the process steps, efficient communication through digital tools (SharePoint, video conferencing, etc.), strengthened collaboration and cooperation to allow each stakeholder to meet the deadlines, adaptation of process to the emergency and remote working context(Electronic submission and electronic completion of administrative requirements, remote online meetings).

He further explained how the AVAREF accelerated review of clinical trial applications through emergency process and he mentioned the principal steps which are being followed. He explained the breakdown of the 10 Days timeline agreed by countries and how these days are allocated through the main steps.

Professor Aknmori emphasised the role and importance of AVAREF for tracking of Review progress and why the NRAs, ECs, sponsors and countries need to inform AVAREF about their progress. He showed the dashboard created to keep updating to everybody involved about the status and progress of ongoing reviews.

In conclusion of his presentation, professor Aknmori presented the challenges identified around the following thematic areas, for discussion

- **Sponsors**; Timely submissions of applications and amended protocols and late identification of local PIs
- **Participation**; Buy-in of all national stakeholders. Not all NRAs, ECs or IRBs participate in joint reviews
- **Timelines**; unclear decision-making processes, lack of urgency; non-adherence to emergency review timelines, inability to deliver decision in 2 days post-review
- Amended protocol; timely review of amended protocols, timeline without ethics clearance

• Capacity; Limited capacity of NRAs; could not participate in joint-review, additional requests post review different to what was agreed, additional fee demands to deliver expedited decision, lack of logistics- electronic submission, internet blockages etc.

During the discussions, clarification and recommendations were noted around the two presentations of A-CDC and AVAREF. The session started with the recognition words of the work done by A-CDC and clarification were made on how to use the A-CDC laboratories and access to data. Views were emerged on the need for studies on COVID-19 vaccine hesitancy, or more generally studies on behavioural and social aspects of vaccine acceptance. Participants noted that the hesitancy to (and campaign against) a future COVID-19 vaccine may spill over to a reluctance to vaccination in general. This would be disastrous as currently we have not get gone beyond 75% coverage for childhood vaccines; a figure which goes very low for some of these vaccines, he explained. It was suggested that the partners like EDCTP, AAS, AU/Africa CDC, WHO, could invest more on these issues.

Still on vaccine hesitancy, it was stressed the issue related to the currently tools for measuring vaccine hesitancy which were developed for and validated in high-income countries. Observing that Vaccine hesitancy is highly variable and context-specific, it was discussed whether tools validated in high-income countries are appropriate for African countries. To address this concern, it was noted a need to test, validate, refine and adapt existing hesitancy measurement tools, and potentially develop new and shorter ones, for application in the South African context. These tools need to concise and easy to administer, which will potentially facilitate usage within the context of South Africa's overstretched healthcare system.

Participants asked the questions related to the challenges to manage timeline for a lot of applications coming from different researchers. Professor Aknmori clarified that most of current applications are around clinical trials and interventions. Promoting joint assessment and submit joint application of two to three countries can facilitate the process.

Referring to the AACHRD expertise and the work of AVAREF, it was discussed the need to put in place the collaboration mechanisms for strengthening and endorsing the AVAREF work. It was also noted the need to harmonize and strengthen the AVAREF; to ensure the expedition needed by also to protect the community and peoples for not being used by scientist. It was noted an issue for the pressure to expedite review in term of research governance, especially when the project is not African driven to prevent the pressure and influence of funders and partners. For this reason, AVAREF were advised to streamline the process; right balance of speed and quality in term of reviews.

During the discussions, it was emphasised the importance of the research on the social sciences. Three elements for consideration were highlighted; 1) Sciences knowledge exchanges and communication between the experts, public and policy makers 2) The risk and adoption of New technology as no one have touched on this 3) How Social and culture are capital to impact all above.

The discussions around the Regional Experience in COVID-19 Research Capacity concluded on the observation to take into consideration the cost effective, efficiency, acceptability value for money and use of technology in the process of vaccines trials and use.

4 REPORT OF AACHRD SUB COMMITTEES

As per recommendation from the 33rd session of AACHRD, three standing committees were setup with clear mandate. The first **Committee for Workplan**, whose convener is Dr. Flavia Senkubuge was mandated to review the AACHRD roles, functioning, develop workplan for the next 2-3 years and M&E framework for the AACHRD. The second Committee for **Foresight & Innovation** whose convener is Dr. Pierre Ongolo-Zongo was tasked to develop action points for Innovation and technology based to move forward the aspirations contained in the GPW13 and the Transformation Agenda. The third **committee for Research Agenda** whose convener is Dr. Salim Abdullah was commended to develop specific action points for the research agenda, priorities and collaborative framework agenda of the AACHRD. During the 34th AACHRD, the chair of these committees has reported on their achievements in the following points:

4.1 AACHRD Workplan

Dr Flavia, the chair of workplan sub Committee started the presentation by recalling the mission of WHO/ AFRO AACHRD which is to raise the platform and foster the culture of research in the region. She explained that the AACHRD workplan was built on the five guiding strategies designed to reach the AACHRD mission. She then took participants through the activities proposed under each strategy as follows;

Strategy 1. Research & Innovation

- Consult with key stakeholders on the research and development agenda
- Identify & Partner with other Research Institutes in Africa for information sharing
- Conduct data collection, analysis and reporting on barometer 2020
- Report on COVID-19 best practice from member states (what are different countries doing)
- Identify knowledge gaps and call for innovative proposals with partners
- Identify and foster innovations

Strategy 2. Research priorities

- Establish Internal priority setting mechanisms (e.g. processes, tools)
- Develop a research agenda for the region to use for advocacy
- Galvanise for implementation of the resolution on health research funding

Strategy 3. Strengthen national health research systems

 Collaborate with WHO/HQ, NEPAD, EDCTP, African Academy Science and other partners in using the African Health Research Systems Barometer (AHRSB) as monitoring tool

- Finalise the health research priorities for WHO/Afro that will contribute to achieve sustainable development goals and universal health coverage.
- WHO/Afro through the focal points to identify 3 specific critical areas for health research in the region
- Develop a framework that will facilitate health research priorities for the Africa region.
- Conduct an annual premier African online dialogue on research
- Publish the state of African Health Research System in Africa
- Monitor and evaluate the implementation, and disseminate findings, of the regional strategy of research for Health through the Barometer (Introduce performance and quality indicator to the Barometer and Promote intra-country and regional learning and disseminate results of the barometer)
- Stimulate and foster multi-disciplinary research throughout the region (e.g. through the annual/bi-annual National health research conferences/forums, support young researchers in the region in these conferences)
- Supporting WHO country offices to convene stakeholder dialogues for health research at the country level in line with the focus, data and evidence (e.g. the African Academy of Science, academic bodies, economic bodies, AU)

Strategy 4. Leadership and Governance in Health Research

- Finalise the strategy for strengthening the use of evidence information and research for policy making in the WHO/Afro region for presentation at the 2020 regional committee meeting
- Develop a collaboration framework to guide engagement with stakeholders
- WHO AFRO to engage partners regional and economic bodies on opportunities for research as a developmental issue

Strategy 5. Harmonisation and coordination

- Support and strengthen research collaboration and synergy among African research partners.
- Adopt the global research observatory platform as a mechanism that will map the inputs and outputs of research in the region
- Develop a one stop place for research in Africa that can be accessed all e.g AACHRD website
- Develop Newsletter to inform the public the AACHRD work
- Create mentoring online platform across Africa
- Create a platform & conduct online resource material on research and development for Africa

Dr Flavia concluded her presentation inviting participants to provide advice and views on who is going to be responsible for each activity and if the AACHRD work plan should be a live document updated from time to time.

4.2 Research Agenda.

The Chair of Research Agenda Committee, Professor Salim Abdullah provided a summary of discussions on research agenda priorities. He explained that the summary of topics came from the information already available at WHO AFRO; the priorities of the different groups/ clusters, the WHO-country Office and the Ministries of Health compiled from the responses to a call for information from the WHO Regional Office and the information available online for the African countries that have done formal research priority.

Professor Salim highlighted that the summary of key topics was categorized by service areas but can be categorized by WHO AFRO new clusters. He added that the information from different countries fitted into common general topic themes. E.g development of vaccines include for Lassa, malaria etc. and covers the continuum of R&D from basic research to delivery. Professor Salim stressed that the topics were not ranked as priority was to identify the countries needs and issues need to be addressed at country level rather than ranking. Professor Salim continued by presenting the topics identified by programs and services as follows:

Reproductive and Family Health

- Burden of disease of HBV and HCV and assessing efficacy of treatment options for them
- Understanding healthy growth and malnutrition in children to scale-up strategies and interventions
- Impact of new vaccines and technologies on disease burden
- Development of innovative products and improved delivery methods for higher coverage of immunization, contraception and Sexual and Reproductive Health
- Exploring the adequacy and efficiency of the current minimum health care packages for maternal and child health
- Feasibility of integration of immunization, Family planning and reproductive health activities at the health facility settings

Communicable Diseases

- Development, trials and scale up of therapeutics, vaccine and diagnostics for major public health diseases (malaria/TB/HIV)
- Safety, proof of concept or effectiveness of existing and novel products for prevention, treatment and diagnostics of priority epidemic prone diseases, including use in non-exposed healthy individuals, rapid molecular/ multiplex and point-of-care tests m
- Assessment persistence of infectious diseases (Malaria, Cholera etc.) despite intensive interventions
- Climate change and vulnerabilities to vector borne diseases
- Antimicrobial resistance therapeutics and insecticides for disease prevention and treatment
- NTD prevalence and intervention impact for elimination

Non-Communicable Diseases:

- Development, testing and scale up of essential medicines, diagnostics and technologies for NCDs including approaches to improved access
- Incidence, determinants (incl social & economic) and interventions for emerging NCDs including occupational health, mental health, CVD and Stroke, cancers, abortions, still births, high level of obesity in school children, gender-based violence and sexual abuse, violence & injuries,
- Cost-effective approaches to deliver packages of interventions including education example broader patient education, improve adherence and strengthen self-care for NCDs
- Approaches for strengthening of NCD management at the PHC level and the implementation of the WHO Package of Essential NCDs intervention

Health Systems Services; priorities have been identified according the health system building blocs

- Development, scale up and assessment of Impact of novel health system interventions e,g easily maintained equipment
- Improving quality of care at all levels and harmonized progress assessments
- Analysis and projection of the epidemiological profile by 2030 to strengthen the human resources capacity in health
- Assessing the national market, regulation and rational management of the human resources in the health sector example the workforce accounts implementation
- Strategies for maintaining and strengthening essential health services and systems in fragile, conflict and vulnerable settings to pre-empt and prevent humanitarian disasters and reduce impact of epidemics/pandemics
- Develop and evaluate financial risk protection and sustainable financing mechanisms for access and sustainability of existing interventions: example Revolving fund and National Health Insurance Schemes
- Development and scale up of innovative health information system including electronic medical records, Community, clinical and laboratory services information and surveillance extending to hard to reach areas
- Strategies for achieving effective private sector involvement in health information management
- Novel approaches for effective governance in the health sector

Health System/ Universal Health Coverage

- Universal health coverage: services needed, indicators and data for measuring progress
- Optimization and impact of scale up of Community Health Workers and Primary Health Care strategies for UHC
- Optimization of the packages of care
- Assessing the social and health inequality and access to intervention between key populations and measures to close them
- Health Policies and Systems Research on UHC

• Synthesis and translation of research findings for UHC policy and decision making

Professor Salim closed the presentation by key points for reflection and the Next Steps. The first point was to discuss if there is a need for adding topics missed including information from national priority setting. The second point was the Sub regional refinement and country specific priorities compiled from the formal priority setting at country level with support from the regional Office. The third point was around the Mapping and dissemination of progress being made upgrade the current information of research being conducted in the region with key results or lessons from Africa and the last point was the need to explore the possibility of regional and multi-country platform trials and projects to address the priority issues of the region.

4.3 Foresight, innovation and technology.

Professor Pierre Ongolo-Zongo and Chibi Moredreck reported the work of innovation and technology committee. Professor Pierre explained the purpose of the presentation which was to trigger reflection on how AACHRD can push the innovation and technology during the COVID pandemic and after. The presentation was divided into three main components; the first one talked about definition and framework of health technology and Innovations, the second one was about the efforts of WHO/AFRO related to health innovations and the third part was about some orientations to help strategizing innovations in African Countries.

After a brief introduction, the presentation started with the definition of the term innovation according to the West, 1990 and Advisory Committee on Measuring Innovation in the 21st Century Economy, 2007. The presenter pursued with definition of Innovation in Health Care setting;

- **Healthcare innovation** ... the introduction of a new concept, idea, service, process, or product aimed at improving treatment, diagnosis, education, outreach, prevention and research, and with the long-term goals of improving quality, safety, outcomes, efficiency and costs
- Innovation in service delivery ... a novel set of behaviors, routines, and ways of working that are directed at improving health outcomes, administrative efficiency, cost effectiveness, or users' experience and that are implemented by planned and coordinated actions

Professor Ongolo-Zongo took participants through the process of Healthcare Innovation and the conceptual Framework for Innovation in Healthcare as presented by Omachonu VK& Einspruch NG, in 2010. He explained the importance of considering the interaction between patient and provider in the framework for innovation in Healthcare in several sequences like treatment, prevention or outreach strategies. In this framework, the intended benefit from innovations and technologies could be related in quality, cost safety, efficiency and outcomes. Professor Pierre clarified that the innovations in the Omachonu's framework is the social process. He continued explaining the innovation in health care multiple actors, multi-level framework for implementation outcomes and the dimensions of healthcare innovation.

Professor Ongolo-Zongo explained how Innovation spread, the process of complex social and interactive. He stressed the need for collaboration and communication and knowledge translation exchange between stakeholders and interested parts. He then presented the following seven steps needed for supporting the spread of innovations and technologies for health;

- Formal mechanisms to find sound innovations that should be disseminated
- Find and support innovators
- Invest in early adopters
- Make early adopter activity observable
- Trust and enable reinvention
- Create slack (including resources) for change
- Lead by example

Dr Moredreck Chibi continued the presentation with the initiatives undertaken at WHO/ AFRO to create an enabling environment of technology and innovations in African Countries. He explained how the innovation is key differentiating feature that defines long-term sustainable impact and a transformative approach to accelerate attainment of global targets, for instance Universal Health Coverage and Sustainable Development Goals. Dr Chibi explained that if the innovations is appropriately managed, can reduce the inequity gaps in accessing essential services and offer the opportunity to 'leapfrog' the current health systems, due to lower sunk costs related to existing infrastructure.

Dr Chibi explained more the strategic imperative that WHO will step up its focus on innovation by playing a key role in shaping the innovation agenda by facilitating scaling of evidence based high-impact health innovations to serve the vulnerable communities. These strategies are grouped onto three areas;

- Fostering development of innovations: organize or shape innovation challenge calls matched to specific health-related needs and gaps
- Scaling up innovations: leveraging close relationships with governments, WHO catalyzing scaling up of high impact health innovations
- Amplifying innovations: communicate successes and lessons learned as key to the further scaling up and sustainability of innovations

Dr Moredreck took participants through the innovation journey undertaken by WHO Afro starting with a Launching of the first WHO Innovation Challenge, where more than 2500 innovations across the continent have received and 30 best profiled selected for exhibition at the 2nd AHF. Other keys events included the Expert Consultation meeting to develop the innovation and technology strategy, institutionalization of innovation work, a MoU signed with AAS, Regional Strategy for scaling innovations, launched WHO hackathon for COVID-19, launched WHO Marketplace platform for COVID-19.

In conclusion on technology and innovation, Professor Piere stressed the importance of building the health system to enable the technology and innovations working in the health care system. He then concluded on the four keys activities proposed as way forward of this committee; 1) Evidence synthesis on national health innovation systems, 2) Country context mapping(context - content, stakeholders, process, governance and management, policies and strategies, innovation systems, incentives, risk management) 3) Operational research for integration of innovations and 4) Foresight workshop to elaborate scenarios of health innovation systems across Africa (AFRO senior staff - Key regional partners e.g. economic bodies, health organizations, charities and academies of sciences).

During the discussion of the AACHRD workplan, it was noted the need to add the cost implication and clarify responsible (Individual or institutions) and if possible, partners and collaborators for each area.

On the research agenda, participants suggested the reorganizing the priority around the HHS building block and UHC for coherence and easier alignment and implementation. It was noted a missing issue of emerging and remerging infectious diseases in research priorities. The need to include the Social Sciences among the research priorities was pointed out.

The issue of implementation of research priorities was highlighted. It was noted that the priorities on the research agenda are never implemented as planned and there is no a systematic approach to follow up the implementation in the country. During the discussion session, participants noted the need to identify a list of priorities addressing clearly research questions and the AACHRD could intervene in pushing for implementation of these priorities. It was also strengthened the need to clarify how the implementation will be done at AFRO and country levels. The discussions emphasised the need for thinking outside of box and identify within the committee who will be doing what and what will be the role of AFRO and countries in term of moving forward of the plan to implementation.

It was also highlighted the need to agree on the ideal scenarios to push the research on region and what approach should be used. As the lack of funds has been identified as the main challenge to implement the research agenda, it was proposed to share it with partners and ask their commitment for technical and financial support for one or more priorities.

The discussions around the innovations and technologies focused on the idea for considering the Post COVID 19 situation and suggested for not limiting the technology and innovations on the emergency's situation but also tackle the other health issues. It was recommended to take into considerations the local innovations and technologies.

5 PARTNER REFLECTION ON RESEARCH IN THE CONTEXT OF COVID 19.

The firth session was animated by the experiences from different partners, through the presentation, the keynote remarks and discussions. Five presentations were provided by TDR, EDCTP, Cochrane Africa Network, African Academy of Sciences and TIBA. AUDA- NEPAD has shared the presentation but was not able to present due to the technical issues. Below is the summary from different keynote speakers.

5.1 The special Programme for Research & Training in Tropical Diseases (TDR)

Dr Aslanyan Garry, the Manager of TDR/Partnerships and Governance at WHO/HQ provided the overview of TDR works, the focus areas and keys achievements. He informed participants that the main purpose of TDR is to build the science of solutions and its work is focusing on the three main areas; Research capacity strengthening, Research for implementation and Global engagement.

Referring to the 2019 Annual Report, Dr Aslanyan Garry provided the key achievements for each three areas. In the area of Strengthening research capacity, he mentioned the Impact of efforts to strengthen country preparedness for disease outbreaks. TDR's developed the Early Warning and Response System (EWARS) for Dengue Outbreaks (+ Zika and chikungunya) disseminated through in-country workshops and TDR expert meetings. Based on this guideline Mexico has incorporated EWARS into national surveillance platform and Colombia, India, Sri Lanka and Thailand have piloted EWARS ahead of integrating into national surveillance systems.

Dr Garry explained further the contributions of TDR to the COVID-19 response effort. He revealed that the TDR continued to focus on its core programmers but was adapting them where useful to the COVID-19 response. He mentioned some activities specific to COVID including:

- Tracking involvement of TDR trainees and fellows in the COVID-19 response.
- Joining the COVID-19 Clinical Research Coalition, which aims to accelerate research on COVID-19 in resource-limited settings. TDR already involved in data sharing working group.
- Developing a customized training course on Good Clinical Practices for research teams in all
 hospitals participating in the WHO SOLIDARITY trial on COVID-19 treatments; Available
 in English, French, Spanish and Portuguese and already used in 6 countries.
- Leveraging WARN/CARN-TB research networks in 27 countries to assess the impact of COVID-19 on TB care and control and conduct of implementation research projects to minimize its impact on TB control in West and Central Africa; SDF funding of \$100 000.

Dr Garry provided a summary on the surveys determining use of TDR training for COVID-19 response and provided the link for details: https://f1000research.com/articles/9-583/v1

Dr Garry described the support provided by TDR to TB programmes in West and Central Africa to mitigate the impact of COVID-19 on TB control including;

- Build on TDR engagement with WARN-TB and CARN-TB
- Call for proposals in collaboration with key regional TB partners
- 11 country-led Implementation research projects selected
- Evaluation of a variety of new and innovative approaches to ensure continuity of TB services
- Digital technologies are tested to overcome issues of access considering quarantine-related restrictions
- Enhancement of community engagement

• Lessons learned will inform the development of national and regional contingency plans

5.2 European and Developing Countries Clinical Trials Partnership (EDCTP)

Professor Moses Bockarie, Director of International Cooperation and Head of Africa Office provided remarks on the WHO-AFRO/EDCTP Joint activities on health research in Africa.

He started with a recent collaborating agreement between WHO- EDCTP signed in June 2020 with the objective to provide a framework of cooperation and understanding, and to facilitate collaboration between the Parties to further their shared goals and objectives in the subject of research. He mentioned the work areas of this MOU including;

- Strengthening of national health research systems, regulatory systems optimisation and technical expertise development in areasof clinical trials research and product development
- Establishing a platform that fosters policy translation and collaborative capacity development activities between WHO and EDCTP supported research institutions and national disease control programmes; and
- Developing leadership to support appropriate ownership of the clinical research and product development agenda, focusing on Sub-Saharan Africa;

Other important activities highlighted by professor Moses include the EDCTP-WHO kick off meeting on Development and strengthening of the national health research systems in Sub Saharan Africa, held in 2018; Accra/Ghana and the Consultative meeting for development of roadmap to further strengthen the National Health Research Systems (NHRS) in Africa.

Professor Moses highlighted the key recommendations and actions from each meeting including the roadmap for strengthening NHRS in EDCTP participating States. He also provided the action points and commitment for each partner including WHO, EDCTP, Strategic Partners; AU, TIBA, AUDA-NEPAD, BMGF and Regional Economic Communities (RECs).

5.3 Evidence Informed Policy Network (EVIPNet)

Professor Ongolo- Zongo briefed the participants the ongoing EVIPINet activities in countries around providing information to decision makers for evidence-based decisions. He mentioned a new networking very active African Evidence Network based in South Africa trying to bring together the scientist from different background including, social science, economics, Health, management, social worker etc. Professor Ongolo- Zongo informed participants that EVIPINET is developing strategy papers to be presented to the next Regional Committee next year, on how to strengthen the knowledge translation at regional level.

5.4 Cochrane Africa Network

Professor Charles Shey Wiysonge, provided an overview of Cochrane Africa Network. He started by describing the context, with the Chalmers 2003 quote "Professional good intentions and plausible theories are insufficient for selecting policies and practices for protecting, promoting, and restoring health". "We will serve the public more responsibly and ethically when research

designed to reduce the likelihood that we will be misled by bias and the play of chance has become an expected element of professional and policy making practice, not an optional add-on."

Based on his research results, Professor Wiysonge developed the importance of Systematic Reviews leading to identification of areas where evidence is lacking, thereby assisting researchers and research funders to chart methodical paths for future primary research. Systematic reviews have an inherent ability to minimise bias and chance in the assessment of existing research as well as provide a means for policy makers to access all available evidence on key questions in a judicious manner. He added that according to Chalmers 2005, Systematic reviews help to ensure that patients and the public benefit from health research and that research and healthcare resources are used efficiently.

Professor Wiysonge noted that the Cochrane in Africa exists to ensure that better healthcare decisions are made. Cochrane Africa is part of the global independent Cochrane network of institutions, researchers, professionals, patients, caregivers, and people interested in health care. He added that Cochrane produce systematic reviews that summarize the best available evidence generated through research to inform decisions about health care. He went on to provide the historical background of Cochrane in Africa, starting from 2007 and described its guiding principles such as; Each country is unique, prioritizing to ensure relevance, Collaboration, avoiding unnecessary duplication, one step at a time and build sustainability.

Professor Wiysonge summarized the Cochrane Africa work on COVID-19 in following main activities; Rapid reviews for MoH and other national and subnational government departments, Rapid reviews for WHO and other organizations, Publications in African (and non-African) journals and other activities. He further explained the three main strategies used for knowledge translation such as 1) Push strategies: producing and disseminating synthesized evidence 2) Pull strategies: producing evidence in response to demand from decision makers 3) Knowledge exchange: on-going dialogue between researchers and decision makers. He strengthened the idea of developing the policy briefs which are addressing the decisions makers concerns. Other COVID-related work he mentioned include the learning and support initiatives, two clinical trial registries, developed to meet WHO standards and establishment of core outcomes for research evaluating COVID-19 interventions.

Professor Wiysonge concluded his presentation by a quote of Harold Hart, J Chem Doc 1968 "Science consists in the creation of simplicity out of complexity"; summarizing the mandate and the work of Cochrane.

5.5 African Academy of Sciences (AAS)

Professor Moses Alobo took participants through the journey of Africa Academy of Sciences in developing priorities for research and development, focusing on the COVID 19, the lessons learned out of this process and the way forward.

Professor Moses informed that the AAS started in 2018 and talked about the ongoing work under African health initiative developing the research priorities around 15 different areas of sciences in Africa. He reminded that AAS is for all sciences including health. He Mentioned some areas of

research focused on including the MCH, climate change, data management, COVID, plan to do the epidemic preparedness, food security and Nutrition survey. Two reports have been produced under COVID 19 preparedness, one of them was converted in publication in BMJ. This report was based on WHO global research roadmap.

In term of the lessons learned; Professor Moses cited the nine areas defined by WHO as important and the AAS find relevant to push countries and regional bodies to promote the ownership for implementation. As the second lesson learned, he mentioned the change of research priorities agenda due to COVID 19. The third lesson was related to need for reinforcing the monitoring of ongoing research. The Fourth lesson was that the research should not only cover the effects of COVID 19 but also focus on the Health System services, as many issues are being emerging and affecting the other health services. He noted the need of establishing the scientific body to continue consolidating data for evidence-based decisions. As way forward, professor Moses said that the AAS will continue to work on global initiatives, he cited as example a research road map for COVID 19 recovery, accelerating UHC, fundraising for public policies and engagement and continue connecting with local regional and global bodies around research. Professor Moses highlighted the AAS focus on Clinical Trials Community data base as explained by Professor Kariuki. He also mentioned that the AAS will continue developing multidisciplinary work package for AAS experts' groups, including social economic and humanities.

5.6 Tackling Infections to Benefit Africa (TIBA)

Professor Geoffrey Banda introduced the presentation by explaining the TIBA which is research unit of Edinburgh University with main purpose for strengthening the national health research systems in African Countries. He mentioned that TIBA is collaborating with nine Universities from Ghana, Sudan, Uganda Rwanda, Tanzania, Kenya, South Africa, Zimbabwe and Botswana. He clarified that TIBA has Committed to spend 8% of its gain in the Africa through the African partners.

In term of COVID 19 research, Professor Banda explained that TIBA is supporting four following areas;

- COVID-19 Diagnosis; Whole genome sequencing (supported in Ghana, Kenya and Rwanda)
- Capacity Building; Genome sequencing in East Africa, Voluntary recruitment of students, Oxygen provision for fight Covid-19, Ethics of intervention trials during emergencies, Mitigation strategies across 9 countries
- SARS-CoV-2 Genome Reports to WHO-AFRO
- Covid-19 Weekly Situation Report to WHO AFRO

Professor Banda presented the TIBA reflection on the Neglected *Covid-19* Research Areas grouped around the following points; decolonising Health Systems, Non-Pharmaceutical Interventions and Appropriateness, Technology/Innovation (Vaccines) adoption when dealing with unsettled science, Acceptable Trade-offs: Risks, Economy, Livelihoods, Social Cohesion;

Unintended Consequences, Local Pharmaceutical Production and Local Health Security. These neglected Covid 19 research areas brought participants into discussions with the other topics presented by partners.

5.7 Discussion

During the discussions for Partner Reflection on Research in the context of COVID the idea for promoting the Local solutions in term of technologies ad innovations was reinforced. It was clarified that innovations can be product, process institutional and there is no need to wait for the external arm to confirm some innovations.

The discussion around matching the work of partners and research agenda priorities was remerged. It was proposed to find out mechanisms for partners contribution for one or more priorities presented, either financially or collaborating models. Based on priorities identified, it was proposed to identify the areas for joint efforts between AACHRD and partners.

It was noted an issue of duplication of efforts basing on the COVID response. The discussions came up with the proposal for mapping all organizations intervening in research area at African region and define areas of unifying efforts.

Another point took participants' attention during the discussions, was the idea of decolonisation health system, research; Africa leadership which was clarified by Professor Geoffrey Banda.

6 SESSION RECOMMENDATIONS

6.1 Session I: Opening Session

- In the context of COVID 19, the AACHRD, is required to go beyond the advisory capacity and do more to assist WHO/AFRO and collaborate with other partners in term of shaping the research agenda and ensure the quality of ongoing research around COVID 19.
- Encourage participation of African countries and community in vaccine trials, put in place the mechanism of vaccines uses once available and in collaboration with CDC, encourage regulatory bodies and governments to be engaged actively in trials,
- Based on the current situation around the COVID 19 and consequences related to its'
 preventive measures (Lockdown, physical and social distance), it was recommended to
 orient research beyond the biomedical and public health spheres and address research
 questions touching multiple sectors including social economic status, and advise
 government based on the evidence.

6.2 Session 2: Review key research priorities in the context of COVID-19 and identify those are relevant to the region

• Developing the position document describing the countries response in term of research for COVID 19 and lessons learned, support countries to develop the research agenda based

- on country needs and gaps identified as part of response to the COVID 19 and develop a document to inform countries how to move forward the agenda.
- Set up a joint African Review Committee which will develop the guidelines for rapid review and support to speed up the review process
- Put in place the mechanism for collaborating with African Universities and other institutions
- Develop regional hearth research directory which will help to know what is being done in term of research around COVID 19 and other areas as well as the implementers
- Put in place the mechanism for identifying topics and defining the policy questions raised by policy makers from the ground and develop the policy brief responding to the questions raised
- In additional to the webinars for policy briefs dissemination, it was recommended to organize the deliberative dialogue with the implementors and decision makers across countries for conversation on the use of developed policy briefs
- Set up of committee with expert reviewers to undertake regular review of the policy briefs before dissemination, to ensure the quality of policy Briefs;

6.3 Session 3: Building COVID-19 research capacity in the Africa Region

- Promote multidisciplinary approach, allowing equal opportunities to Social sciences and basics sciences in term of research around COVID 19
- Promote research around the Local health security instead of focusing on Global health security and Health Systems
- Put in place the systematic training of Epidemiologists on basics epidemiology principles to facilitate in dissemination of results and organize regular training of journalist to support producing evidence-based information and reports around COVID 19
- Anticipate identifying and developing the documents and guidelines to be used once the vaccines are available to avoid the delay for use.
- It was noted a need for studies on COVID-19 vaccine hesitancy, or more generally studies on behavioural and social aspects of vaccine acceptance.
- It was recommended to conduct test, validate, refine and adapt existing hesitancy measurement tools, and potentially develop new and shorter ones, for application in the African context
- Take into consideration the Cost effective, efficiency, acceptability value for money and use of technology in the process of vaccines trials and use

6.4 Report of Sub Committees of the AACHRD

• For the AACHRD work plan it was recommended to include the cost implication and clarify responsible (Individual or institutions) and if possible, partners and collaborators for each area.

- Rearrange the research priorities around the HHS building blocks and UHC for coherence purpose and easier alignment and implementation.
- Include the Social Sciences among the research priorities and the emerging and remerging infectious diseases.
- Share the research agenda with partners and ask their commitment for technical and financial support for one or more priorities.
- In term of innovations and technologies, it was recommended to focus on the Post COVID 19 situation and other health issues not only limiting to emergencies.

6.5 Partner Reflection on Research in the context of COVID 19

- Promote the Local solutions in term of technologies ad innovations for health systems and services issues management
- Identify the areas for joint efforts between AACHRD and developing partners.
- Conduct mapping of all organizations intervening in research area at African region and define areas of unifying efforts.

7 CLOSING

7.1 34th AACHRD Recommendations to the regional director

The following were presented by the AACHRD secretary Dr Kamuya as recommendations from the 34th AACHRD to the Regional Director. The meeting recognised that:

- The WHO's second core function was: "shaping the research agenda and stimulating the generation, translation and dissemination of valuable knowledge."
- The aim of the 2016-2025 African research for health strategy which is: "to foster the development of a functional Health Research Systems (NHRS) that generates scientific knowledge for developing technologies, systems and services needed to achieve Universal Health Coverage (UHC)".
- The WHO/AFRO resolution: "at least 2% of national health expenditure and at least 5% external aid for health projects and programmes aimed at NHRS strengthening...".
- Health research contributes to evidence-based policies and to interventions that are costeffective, affordable and implementable. The following recommendations were made:

RECOMMENDATION 1: (Leadership and governance in health research)

WHO/ AFRO to raise platform and foster the culture of research and innovation in the region.

Action Point- recommendation 1

- Establish a journal for health research in Africa.
- Develop a collaboration framework to guide engagement with stakeholders.

- Develop guidance document on access options should a vaccine be available.
- Finalise the strategy for strengthening the use of evidence information and research for policy making in the WHO/Afro region for presentation at the 2021 regional committee meeting.
- Orient research beyond the biomedical and public health areas spheres and address research questions in multiple sectors including social economic status, social sciences/ground realities and advise government based on the evidence.

RECOMMENDATION 2: (Strengthen National Health Research Systems)

Strengthen COVID-19 research capacity in Africa.

> Action Point- recommendation 2

- Develop COVID-19 research agenda for Africa.
- Develop a regional health research directory.
- Develop report on COVID-19 best practice describing the countries response in term of research for COVID 19 and lessons learned.
- Set up a joint African Review Committee which will develop the guidelines for rapid ethics review and support to speed up the review process and put in place the mechanism for collaborating with African Universities.
- Develop policy briefs and set up a committee with expert reviewers to undertake regular review of the policy briefs before dissemination.
 - > Set up mechanism for identifying topics and defining the policy questions raised by policy makers from the ground.
 - ➤ Deliberative dialogue should be held with the implementors and decision makers across countries for conversation on the use of developed policy briefs.
- Endorse and strengthen work of AVAREF

RECOMMENDATION 3: (Promote Innovation and technology)

Advance and promote innovation and technology in the region.

> Action Point- recommendation 3

- Develop and conduct health technology and innovation assessment.
- Promote indigenous innovations and technology from the region.
- Develop a strategy paper that calls on governments to support an innovations and technology agenda that also addresses issues of Intellectual Property Rights.

7.2 Date of the 35th AACHRD

Progress of the recommendations and action points will be reviewed at the 35th AACHRD meeting which will be held in June 2021 in Brazzaville.

7.3 Closing remarks ARD

Dr Zawaira Felicitas, Assistant Regional Director officially closed the meeting on behalf of Dr Moeti, the Regional Director. She introduced her speech by deep appreciation and gratitude of the WHO AFRO RD, who would very much have wanted to be present to receive the 34th AACHRD recommendations first-hand. She recalled that RD was continuing her journey to South Africa and could not connect to hear the deliberations on the recommendations and closing of that very important meeting. Dr Zawaira informed participants that RD have called at the end of work of previous day, to be briefed on the proceedings of AACHRD meeting on the key issues listed on the agenda.

ARD transmitted the RD's acknowledgement to the Chair and AACHRD members for finding the time to think through the shaping of research and innovations to stimulate the generation, translation and dissemination of valuable knowledge in the battle against the unprecedented COVID-19 pandemic in the Region. Dr Zawaira informed participants that from the updates shared with Dr Moeti, she was convinced that this body has really made a difference and demonstrated that this meeting will help to tackle the current challenges head on. Dr Zawaira also transmitted the RD's thanks to the partners for their contributions to the success of the 34th AACHRD meeting. The difficulty faced by all this year in the context of COVID-19 was very much appreciated, she added.

Dr Zawaira explained that due to the impact of the COVID-19 pandemic, everybody has been constrained to hold the 34th session meeting virtually, for the first time ever. She recognizes without doubt would have exerted unnecessary pressure on all, recognizing that people are now split in roles as they respond to the COVID-19 pandemic and their traditional functions. She added that the AFRO is sharing the same experiences, and this may have affected preparations for this meeting.

The ARD made a special note of the information packed and stimulating presentations by the AACHRD members and partners, as well as the deep and illuminating discussions of issues around health research in general and indeed health research in the context of COVID-19. She said that the 34th AACHRD session covered issues around building capacities for health research, research governance, regulatory approvals and knowledge translations among others. She also noted everyone frank discussions on building new collaborations and strengthening existing networks to deliver on our research mandate to the Member States. She further noted the great demand for positioning social science research to explore several behavioural issues that challenge effectiveness of the technologies and interventions put forward to enhance health in the Region. She promised to share the recommendations of the 33rd session of AACHD with executive management as well as with WHO Country Offices and partners.

In line with the request, conveyed in the Regional Director's remarks the day before, ARD emphasized that the submission of the recommendations of this meeting should not mark the end of the AACHRD work with the WHO AFRO, as we respond to this pandemic. She recalled that the Regional Director made it clear that AACHRD should now move beyond the traditional role to begin to facilitate and even act to ensure research in the Region responds to COVID-19 pandemic. Dr Zawaira presented her expectations for continuing working together and requested all participants to positively answer on the WHO call, on behalf of the citizens of African Region

The ARD concluded her remarks with sincerely thanks for the time spent in AACHRD meeting as well as the enthusiasm, despite the COVID-19 challenges and wished everybody to keep safe.

8 ANNEX

Annex 1: Agenda for the 34^{th} session of the African Advisory Committee for Health Research and Development (AACHRD) Meeting

Expectations from the meeting

- 1. To refocus Regional research priorities in the context of Covid-19 pandemic in the African Region;
- 2. Agreement on ways of strengthening COVID-19 research and innovation capacity in Africa;
- 3. Provide Recommendations to the Regional Director on how WHO can maintain its leadership n the area of research and innovations during and post covid 19.

Time	DAY ONE (09:30-14:00)	
	Session 1	Presenters
	Opening Session	
09.30-10.15	1. Welcome remarks and introduction of participants	ARD
	2. Welcome remarks (including objectives)	Chair, AACHRD
	3. Regional Director's speech	RD
	Session 2	
	Review key research priorities in the context of COVID-	
	19 and identify those that are relevant to the region	
10:15-11:45	1. Update on key ongoing COVID-19 research activities ³	J. Okeibunor
	2. Translating COVID-19 research into policies: The use	H. Karamagi
	of rapid policy briefs	
	Discussion (30mins)	
11:45-12:00	Health Break	
	Session 3	
	Building COVID-19 research capacity in the Africa	
	Region	
12:00-12:15	COVID-19 Research Capacity in Africa, Issues;	T. Kairuki
	Challenges, Opportunities and what should we be focusing	(African
	on?	Academy of
	Discussion (30 mins)	Science)
12:45-14:00	Regional Experience in COVID-19 Research Capacity:	
	West African Health Organization (WAHO)	I. Sombie
	2. South African Development Community (SADC)	W. Amisi

³ AFRO Research Priorities; Small Grants Scheme, Assessment of NHRS

	3. Africa Centre for Disease Control (A-CDC)	N. Ndembi
	4. AVAREF	D. Akanmori
	Discussion (30 mins)	
	DAY TWO (09:30-14:00)	
	Session 4	
	Report of Sub Committees of the AACHRD	
09:30-11:00	1. Workplan	F. Senkubuge
	2. Research agenda	A. Salim
	3. Foresight, innovation and technology	P. Ongolo-Zogo
	Discussion (45 mins)	
	Session 5	
	Partner Reflection on Research in the context of	
	COVID-19	
11:00-11:15	Health Break	
11:15-12:15	1. AUDA- NEPAD	J. Byaruhanga
	2. TDR	G. Aslanyan
	3. EDCTP	M. Bockarie
	4. EVIPNet	P. Ongolo-Zogo
	5. Cochrane Africa Network	C. Wiysonge
	6. African Academy of sciences	M. Alobo
	7. TIBA	G. Banda
	Clarification (30 mins)	
12:15-13:00	Session 6	
	Recommendations to the Regional Director on how WHO	
	can maintain its leadership role in health research during	
	and post COVID-19 in the Region.	
	Summary Recommendations (10 mins)	Secretariat
	Clarification and Discussion (30 mins)	
	Session 7	
	Closing	
13:00-13:30	Venue and agenda for 35th AACHRD meeting	Chair
	Closing remarks	RD

Annex 2: List of participants;

No	Name	Title	Country	Status/Ro le/Titles	E mails			
	AACHD Members							
1	Flavia Senkubuge	Faculty of Health Sciences Room 6-7 Level 6, HW Snyman Building University of Pretoria, Private Bag X20 Hatfield 0028, South Africa	South Africa	AACHRD Chair	flavia.senkubuge@up.ac.z			
2	Abdoulaye Djimdé	Abdoulaye Djimdé Head, Molecular Epidemiology and Drug Resistance Unit	Mali	AACHRD Vice Chair	adjimde@icermali.org			
3	Dorcas Kamuya	Dorcas Kamuya KEMRI-Wellcome Trust Research Programme, Health Systems and Research Ethics	Kenya	AACHRD Secretary	DKamuya@kemri- wellcome.org			
4	Pierre Ongolo	Pierre Ongolo Center for the Development of Best Practices in Health, Yaoundé Central Hospital, Faculty of Medicine and Biomedical Sciences	Cameroon	AACHRD Deputy Secretary	Pc.ongolo@gmail.com			
5	Salim Abdulla	Salim Abdulla Ifakara Health Institute	Tanzania	AACHRD Member	sabdulla@ihi.or.tz			
6	Modeste Mulenga	Modeste Mulenga Tropical Diseases Research Centre	Zambia	AACHRD Member	mulengam@tdrc.org.zam			
7	Jean de Dieu Rakotomanga	Jean de Dieu Rakotomanga Ministry of Health, Madagascar (Secretary General)	Madagascar	AACHRD Member	rktjdm@yahoo.fr			
8	Tewabech Bishaw	Tewabech Bishaw President	Ethiopia	AACHRD Member	bishawtewabech@yahoo.c om			

		Ethiopian Public Health Association			
9	Seni Kouanda	Seni Kouanda Head, Biomedical and Public Health Research Institute of Health Sciences, Burkina Faso	Burkina Faso	AACHRD Member	skouanda@irss.bf sekouanda@iasp-bf.org senikouanda@gmail.com
10	Pascal Bovet	Pascal Bovet Ministry of Health, Seychelles	Seychelles	AACHRD Member	bovet.pascal@gmail.com
11	Margaret Gyapong	Margaret Gyapong Director Institute of Health Research University of Health and Allied Sciences, Ho Ghana	Ghana	AACHRD Member	mgyapong@uhas.edu.gh
12	Onwujekwe, Obinna	Onwujekwe Obinna Department of Pharmacology and Therapeutics College of Medicine, University of Nigeria Enugu Campus, old UNTH Road, 400001 Enugu, Nigeria	Nigeria	AACHRD Member	onwujekwe@yahoo.co.uk
13	Freddie Ssengooba	Freddie Ssengooba Associate Professor, Makerere University School of Public Health	Uganda	AACHRD Member	sengooba@musph.ac.ug
14	Augustino Ting Mayai	Augustino Ting Mayai School of Public Service, University of Juba	South Sudan	AACHRD Member	augustino.ting@gmail.com
15	Fatou Sow Sarr	Fatou Sow Sarr Institut Fondamental Afrique Noire, Cheikh Anta Diop University	Senegal	AACHRD Member	fsarrsow@gmail.com
16	Charles Wiysonge	Centre for Evidence Based Health Care, Stellenbosch University, South Africa	Cameroon	AACHRD Member	charles.wiysonge@mrc.ac.

17	Francine Ntoumi	Francine Ntoumi Faculté des Sciences et Techniques Université Marien Ngouabi Brazzaville, république du Congo	Congo	AACHRD Member	fntoumi@fcrm-congo.com
		Develop	ment Partners		
18	Moses Bockarie PhD FRCP (Edin)	Director of International Cooperation (Africa) and Head of Africa Office European & Developing Countries Clinical Trials Partnership (EDCTP) Medical Research Council, P.O. Box 19070, Francie van Zyl Street, Tygerberg, Cape Town, South Africa	South Africa	EDCTP	bockarie@edctp.org
19	Isiaka Sombie	Dr SOMBIE ISSIAKA, MD, PhD Professionnal Officer of Research, OOAS/WAHO 01 BP 153 Bobo-Dioulasso 01	Burkina Faso	WAHO	sombie_issiaka@yahoo.co m
20	Byaruhanga Janet	Dr Byaruhanga Janet Senior Programme Officer, Public Health at NEPAD Planning and Coordinating Agency	Ethiopia	NEPAD	JanetB@nepad.org
21	Geoffrey Banda	G.33 Old Surgeons' Hall High School Yards Edinburgh, UK EH1 1LZ	Zimbabwe	TIBA	Geoffrey.Banda@ed.ac.uk
22	Aslanyan Garry	Manager, partnerships and governance, TDR Special Programme for Research & Training in Tropical Diseases (TDR)	Switzerland	TDR	aslanyang@who.int
23	Moses Alobo	Programme Manager for Grand Challenges Africa, African Academy of Sciences	Kenya	AAS	m.alobo@aasciences.africa

24	Tom Kariuki	Tom Kariuki Director of Programmes, African Academy of Science	Kenya	AAS	t.kariuki@aasciences.africa
25	Nicaise Nedmbi	Nicaise Nedmbi Senior Sceintific Advisor	Ethiopia	A-CDC	nndembi@ihvnigeria.org"
26	Charles Wiysonge	Centre for Evidence Based Health Care, Stellenbosch University, South Africa	South Africa	Cochrane Africa	wiysonge@yahoo.com
		WHO	/Secratariat		
27	Moeti, Matshidiso Rebecca	Regional Director	WHO/AFRO	Secretariat	moetim@who.int
28	Felicitas Zawaira	Assistant Regional Director	WHO/AFRO	Secretariat	zawairaf@who.int
29	Francis Kasolo	Cordinator			kasololof@who.int
30	Humphrey Karamagi	Senior Technical Officer, DAK/ARD	WHO/AFRO	Secretariat	karamagih@who,int
31	Joseph Okeibunor	Scientist, RDI/ARD	WHO/AFRO	Secretariat	okeibunorj@who.int
32	Jean Claude Nshimirimana	Knowledge Management Officer	WHO/AFRO	Secretariat	-
33	Mecthilde Kamukunzi	Technical Officer ISD- PHC/ARD	WHO/AFRO	Secretariat	mkamukunzi@who.int
34	Doris Kirigia	Technical Officer, ARD	WHO/AFRO	Secretariat	kirigiad@who.int
35	Mary STEPHEN	Technical Officer (Risk Assessment)	WHO/AFRO	Secretariat	stephenm@who.int
36	Aminata Kobie	Technical Officer, HPD	WHO/AFRO	Secretariat	kobiea@who.int
37	Moredreck Chibi	Programme Officer, RDI/ARD	WHO/AFRO	Secretariat	chibim@who.int
38	Prosper Tumusiime	Team Leader, Team Leader, ULU/ <u>ULC</u>	WHO/AFRO	Secretariat	tumusiimep@who.it
39	Juliet Nabyonga	Medicical Officer, ULC/HFI	WHO/AFRO	Secretariat	nyabyongaj@who.int
40	Ngoungoung J.	Risk Communications Officer, EPR/EMP	WHO/AFRO	Secretariat	drotib@who.int
41	Ossy Kasilo	Technical Officer, ULC/MIM	WHO/AFRO	Secretariat	kasiloo@who.int

42	JB Nikiema	Regional Adviser,	WHO/AEDO	C	
	D (1.1	ULC/MIM	WHO/AFRO	Secretariat	nikiemaj@who.int
42	Bartholomew	T. 1 ' 1000			
43	Dicky	Technical Officer,	WHO /A EDO		
	Akamori	UCN/VPD	WHO/AFRO	Secretariat	nikiemaj@who.int
44	Jason	Medicical Officer,	MATO (A ED O		
4.5	Mwenda	UCN/VPD	WHO/AFRO	Secretariat	mwendaj@who.int
45	Diadie Maiga	Technical Officer, IVD	WHO/AFRO	Secretariat	maigad@who.int
46	Adelheid	Technical Officer	MATO (A ED O		
	Onyango	Nutrition, UHP/NUT	WHO/AFRO	Secretariat	onyangoa@who.int
47	Leocadye				
	Voumby	AA/ARD	WHO/AFRO	Secretariat	voumbyl@who.int
48	Ngomo				
	Kanohas	AA/DAK	WHO/AFRO	Secretariat	ngomoj@who.int
49	Tru	Case Management & IPC			
77	Mochache	Officer/HSE/EPR	WHO/AFRO	Secretariat	traoret@who.int
50		Technical Officer			
30	Tieble Traore	(Emergency Preparedness)	WHO/AFRO	Secretariat	oumap@who.int
51		Information Management			
31	Paul Ouma	Officer, HSE/EPR	WHO/AFRO	Secretariat	
52	Mabele July		WHO/AFRO		
53	Isabelle		WHO/AFRO		_
		Regional Adviser			
54	Nanyunja	(Emergency Risk			
	Miriam	Management), EPR/EMP	WHO/AFRO		<u>Nanyunja</u>
55	Elisabeth				
	Kouavi	TIP Officer	WHO/AFRO	Secretariat	kouavie@who.int
56	Roberta FOX				robertafox68@gmail.com
30	Roberta POX	Interpreter	WHO/AFRO	Secretariat	100ertarox08@gman.com
57	Sache NGWA				g.ngwasache@gmail.com
37	Sacile NOWA	Interpreter	WHO/AFRO	Secretariat	g.ngwasache@gman.com
58	Godfrey				glmukasa@gmail.com
30	MUKASA	Interpreter	WHO/AFRO	Secretariat	giiiukasa@giiiaii.coiii
50	Saidina				saidina.douraza@isit-
59	DOURAZA	Interpreter	WHO/AFRO	Secretariat	paris.eu
	Nicholas				
60	NIANDOUIL				nnianduillet@gmail.com
	LET	Interpreter	WHO/AFRO	Secretariat	<u> </u>
<i>C</i> 1	Cana DALLI				1-11:00.6
61	Serge DALLI	Interpreter	WHO/AFRO	Secretariat	sergedalli90@gmail.com

62	Neves AFONSO	Interpreter	WHO/AFRO	Secretariat	nevesafonso@yahoo.co.uk
63	JONES Fernanda	Interpreter	WHO/AFRO	Secretariat	jonesfernanda@gmail.com
64	Domingos CARVALHO	Interpreter	WHO/AFRO	Secretariat	teiginho7@gmail.com