HARNESSING THE STRENGTH OF COLLABORATION: Lessons learnt from the COVID-19 Pandemic

- A focus on low- and middle-income countries

An official side event of CPHIA 2022

THE EVENT WILL START SOON

Monday, 12 December 2022 12:00-14:00 (CAT)





Dr Nathalie Strub-Wourgaft



Dr Wilber Sabiiti



Prof. Caesar Atuire



Dr Luisa Enria



Dr Lauren Hookham



Dr Brenda Okware





COVID-19 Clinical Research Coalition

A GLOBAL RESEARCH RESPONSE TO COVID-19 DRIVEN BY THE NEEDS OF LOW RESOURCE SETTINGS

Member commitments:

- Promote open sharing of research knowledge & data
- Leverage global expertise for high-impact COVID-19 research
- Champion equitable & affordable access to COVID-19 vaccines, diagnostics & treatments



MEMBERSHIP

More than 1,000 institutional and individual members from 98 countries (75% from LMICs).



14 TOPIC-SPECIFIC WORKING AND ADVISORY GROUPS

 in ethics, data management & sharing, clinical epidemiology, etc. to address pressing needs in, and identified by, lowresource settings



COALITION OUTPUTS

- Webinars/workshops/in-person events
- Priority research questions
- Working group projects
- Op-eds, comments & articles
- Protocol repository



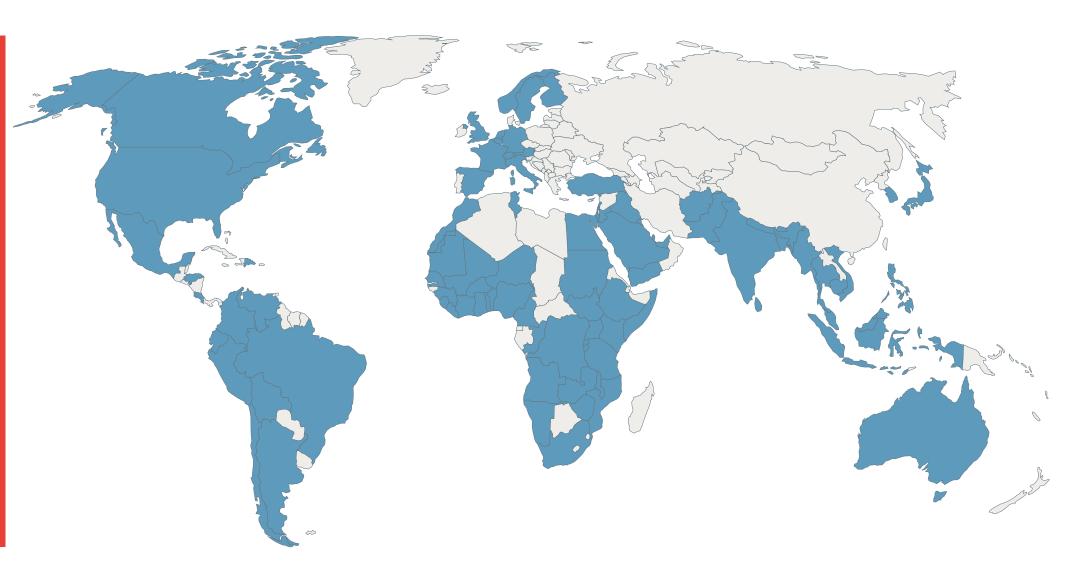


Countries where coalition members are based

BECOME A COALITION MEMBER



bit.ly/3AyL42D







MODERATOR



Dr Nathalie Strub-Wourgaft

Drugs for Neglected Diseases initiative

Switzerland

Dr Nathalie Strub-Wourgaft joined Drugs for Neglected Diseases *initiative* (DND*i*) in 2009. Since March 2020, Nathalie leads DND*i*'s response to COVID-19, as Coordinator of the ANTICOV study Consortium and one of the initiators of the COVID-19 Clinical Research Coalition. She is involved in several working groups dedicated to therapeutics for COVID, with a specific focus on LMIC needs and settings. She has been appointed as General Delegate for PANTHER (PANdemic preparedness plaTform for Health Emerging infections Response) since August 2022. She has over 30 years of experience in R&D, including serving as Clinical Development Director at Trophos, and has held many related roles within Pfizer, Lundbeck and Aspreva. Dr Strub-Wourgaft graduated as a Medical Doctor from Necker Hospital, Université René Descartes in Paris in 1983.



Dr Amina Haouala

COVID-19 Clinical Research Coalition

Switzerland

Dr Amina Haouala has over 10 years experience in public and global health. As a clinical scientist, she worked in the development of new antimalarial treatments at the University of Geneva in collaboration with the National Institute of Public Health Research of Mali, and at the product development partnership Medicines for Malaria Venture (MMV).

She was also involved in the development of new therapeutics for the treatment of cancer and infectious diseases at Debiopharm.

Dr Amina Haouala graduated as a PharmD from the University of Geneva and has a PhD in Clinical Pharmacology from the University Hospital of Lausanne.









Prof. Caesar Atuire

University of Oxford | University of Ghana

UK & Ghana

Prof. Caesar Atuire is a philosopher and health ethicist from Ghana who is currently the ethics lead for the University of Oxford's MSc in International Health and Tropical Medicine. He is also an Associate Professor of Applied Philosophy and Global Health at the University of Ghana and an affiliate instructor at the University of Washington's Department of Bioethics and Humanities.

Prof. Atuire is a member of the WHO's Covid-19 Ethics and Governance Working Group, a member of the Steering Committee of the Global Forum for Bioethics in Research, a Board Member of the International Association of Bioethics, and a member of the Covid-19 Research Coalition's Ethics Working Group.





Dr Wilber Sabiiti

University of St Andrews

UK

Dr Wilber Sabiiti is a Senior Research Scientist at the University of St Andrews specializing in translational diagnostics and antimicrobial resistance.

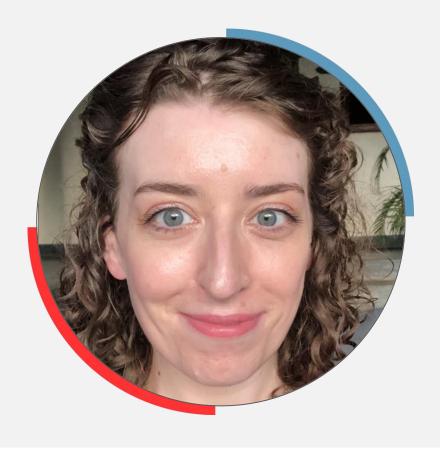
His research group uses interdisciplinary approaches to maximize uptake of diagnostic and treatment tools into policy and practice with a special focus on low- and middle- income countries.

He graduated with a BSc in Biochemistry from Makerere University, Uganda, an MSc in Molecular biology from Vrije Univerteit Brussel, Belgium and a PhD from the University of Birmingham, UK.









Dr Lauren Hookham

Makerere University | St George's University

Uganda & UK

Dr Lauren Hookham is an academic clinical fellow who splits her time between clinical work as an infectious diseases specialist in the UK and research in Uganda. Her interests include infections in pregnant women and children. She is the co-ordinator of the Coalition's Maternal, New-born & Child Health (MNCH) Working Group.





Dr Luisa Enria

London School of Hygiene & Tropical Medicine UK

Dr Luisa Enria is an Assistant Professor at the London School of Hygiene & Tropical Medicine. Her research focuses on ethnographic approaches to conflict, humanitarian interventions, and global health, particularly in West Africa.

In 2015 she was deployed as an anthropologist to support the response to the West African Ebola outbreak. Since then, her work has focused on outbreak preparedness and response, community engagement with clinical research and the politics of emergency and crisis management.

She has developed applied social science training for a range of audiences, including community health workers conducting research on vaccine hesitancy and, more recently, local experiences of COVID-19.









Dr Brenda Okware

COVID-19 Clinical Research Coalition

Uganda

Dr Brenda Okware is a physician, infectious disease clinical researcher and public health specialist from Uganda. She has over a decade's experience in the execution of quality research in sub-Saharan Africa, working in different capacities as clinical trial coordinator and investigator. Her research work has included understanding the transmission dynamics of tuberculosis, the impact of HIV co-infection on host immunity against TB and investigating efficacy of new TB drugs and TB regimens.

Dr Okware now lends her expertise to the COVID-19 Clinical Research Coalition as a Scientific Coordinator, providing scientific support to the various expert working groups.







MODERATOR

Dr Nathalie Strub-Wourgaft

Drugs for Neglected Diseases initiative (DNDi)

Switzerland



AGENDA

12:00	OPENING REMARKS: Introduction to the Coalition and the session
	Nathalie Strub-Wourgaft, Drugs for Neglected Diseases initiative Switzerland
12:05	1 - Driving collaborative research during global pandemics: the major challenges and proposed solutions for LMICs
	Amina Haouala, COVID-19 Clinical Research Coalition Switzerland
12:20	2 - Establishing interregional and global partnerships — an ethical perspective on the good, the bad and the ugly
	Caesar Atuire, University of Oxford/University of Ghana UK & Ghana
12:35	3 - Streamlining disease surveillance across Africa by building biobanking and sequencing capacity: the role of partnerships
	Wilber Sabiiti, University of St Andrews UK
12:50	4 - The importance of context-specific prevention and control strategies — an assessment of strategies like lockdown on communities; and initial evidence from a global systematic review on impact of lockdown on early pregnancy
	Lauren Hookham, Makerere University/St George's University Uganda & UK
13:05	5 - Interdisciplinary methods — bringing together epidemiology and social science approaches
	Luisa Enria, London School of Hygiene & Tropical Medicine UK
13:20	6 - Priorities for Africa: Focus areas as we pivot to pandemic preparedness
	Brenda Okware, COVID-19 Clinical Research Coalition Uganda
13:35	Q&A and discussion 📳
	All speakers. Moderated by Nathalie Strub-Wourgaft
13:55	Closing remarks
	Nathalie Strub-Wourgaft





Housekeeping announcements



Today's event is being recorded and a link to the recording will be shared soon, by email and on our website.



We offer French interpretation. Please don't forget to take a headset if you would like to make use of it.



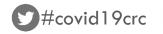
Please note down
any questions and
ask them in the Q&A
and discussion at the
end of the event.



#COVID19crc and
#CPHIA2022 to tweet
about the Coalition
and this side event.



After the event, you will be asked to fill out a **short online survey**. Many thanks in advance for providing your feedback!





DRIVING COLLABORATIVE RESEARCH **DURING GLOBAL PANDEMICS:** THE MAJOR CHALLENGES AND PROPOSED SOLUTIONS FOR LMICS



SPEAKER

Dr Amina Haouala
COVID-19 Clinical Research Coalition
Switzerland



A GLOBAL RESEARCH RESPONSE TO COVID-19 DRIVEN BY THE NEEDS OF LOW RESOURCE SETTINGS

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Main challenges in driving research during COVID-19 pandemic

1. Leveraging global expertise for high-impact COVID-19 clinical research

- Lack of funding for researchers in LMICs to conduct COVID-19 research (map)¹
- Lack of evidence-based prioritization of new drug candidates²
- Multiplication of underpowered heterogenous clinical trials with little impact²
- Lack of community-centered approaches³
- Lack of transparency on R&D funding

A living mapping review for COVID-19 funded research projects: 18-month update

Wellcome Open Research 2022, 5:209 Last updated: 08 SEP 2022

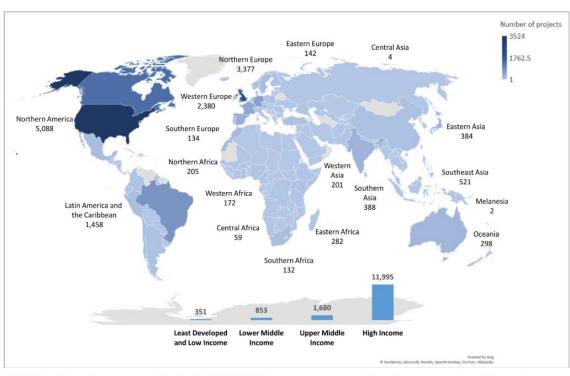


Figure 6. Location of coronavirus disease 2019 (COVID-19) research projects by country, WHO sub-region and Organisation for Economic Co-operation and Development's (OECD) Development Assistance Committee (DAC) list categories.

^{3.} GloPID-R et al. Priorities for COVID-19 research response and preparedness in low-resource settings Lancet Comments 2021





^{1.} Living Systematic Review | COVID-19 Clinical Research Coalition (covid19crc.org)

^{2.} COVID-19 Clinical Research Coalition. Global coalition to accelerate COVID-19 clinical research in resource-limited settings. Lancet Comments 2020

Main challenges in driving research during COVID-19 pandemic

2. Championing equitable and affordable access to COVID-19 tools



- Lack of affordable, available and adaptable interventions in LMICs¹
- TRIPS waiver could have helped make progress on COVID-19 vaccine equity²
- Initial donations through charity-driven initiatives like **COVAX** proved to be insufficient and not sustainable^{2,3}
- Weak healthcare system, low capacity in supply chains and manufacturing⁴
- Low representation of researchers from LMIC in ACT-A Therapeutics Partnership & other pillars

^{4.} Nicholas J White et al. Guidelines should not pool evidence from uncomplicated and severe COVID-19. Lancet Correspondence 2021



^{1.} COVID-19 Clinical Research Coalition. Global coalition to accelerate COVID-19 clinical research in resource-limited settings. Lancet Comment 2020

^{2.} Shelley Lees et al. Key social science priorities for long-term COVID-19 response BMJ Global health 2021

GloPID-R et al. Priorities for COVID-19 research response and preparedness in low-resource settings Lancet Comments 2021

Main challenges in driving research during COVID-19 pandemic

3. Promoting open sharing of research knowledge and data, and collaborative approaches

- Lack of data and knowledge sharing^{1,2}
- Lack of metrics to change the scientific community culture by supporting the value of data sharing and reusing





- Lack of global collaboration and coordination¹
- LMIC researchers are not enough included in decision-making (prejudice on lack of "worthiness" of researchers from LMIC)³
- 1. COVID-19 Clinical Research Coalition. Global coalition to accelerate COVID-19 clinical research in resource-limited settings. Lancet Comments 2020
- 2. Greg Fegan, et al. Solutions to COVID-19 data sharing The Lancet Digital Health Correspondence 2021
- 3. GloPID-R et al. Priorities for COVID-19 research response and preparedness in low-resource settings. Lancet Comments 2021



Solutions for driving research during global pandemic

1. Leveraging global expertise for high-impact COVID-19 clinical research

- Implement large, publicly-funded, sufficiently powered adaptive platform trials^{1,2}
- Prioritize high-quality research led by scientists and clinicians in resourcelimited settings to answer urgent questions of relevance in those settings^{1,3}
- Integrate patients and communities in the design and conduct of research to build trust⁴
- Involve vulnerable and under-represented groups in clinical research so that they benefit from research advances⁵
- Ensure more effective, transparent, coordinated research funding



- 1. COVID-19 Clinical Research Coalition. Global coalition to accelerate COVID-19 clinical research in resource-limited settings. Lancet Comment 2020
- 2. Nigel Stallard et al. Efficient adaptive designs for clinical trials of interventions for COVID-19. Statistics in Biopharmaceutical Research 2020
- B. GloPID-R et al. Priorities for COVID-19 research response and preparedness in low-resource settings. Lancet Comment 2021
- 4. Shelley Lees et al. Key social science priorities for long-term COVID-19 response BMJ Global Health 2021
- 5. Janet Woodcock et al. Integrating Research into Community Practice Toward Increased Diversity in Clinical Trials N Engl J Med 2021





Solutions for driving research during global pandemic

2. Championing equitable and affordable access to COVID-19 tools



- Build resilient and diverse manufacturing capacity and infrastructure and R&D in LMICs¹
- Establish a needs-driven, innovative global health research ecosystem
- Ensure that vulnerable, under-represented, resource-constrained groups benefit from research
- Make publicly-funded health tools and research data public goods, available and free of IP and secrecy restrictions
- Embed equitable access more deeply in the R&D process²
- 1. COVID-19 Clinical Research Coalition Social Science Working Group. Viewpoint: A TRIPS waiver is urgently needed to make progress on COVID-19 vaccine equity. 2021
- 2. COVID-19 Clinical Research Coalition. Global coalition to accelerate COVID-19 clinical research in resource-limited settings. Lancet Comments 2020



Solutions for driving research during global pandemic

3. Promoting open sharing of research knowledge and data, and collaborative approaches

- Develop living systematic reviews1
- Publish all data and release to the research community with creation of data repositories¹
- For funders: Facilitate data sharing by having a mandate of sharing anonymised data as a requirement for funding



A living systematic review of COVID-19 clinical trials

Based on the Living Systematic Review developed by IDDO and supported by the COVID-19 Clinical Research Coalition, you can now explore registered COVID-19 clinical trials from around the world in a frequently updated, open-access database. A visualization tool helps researchers identify ongoing trials, spot knowledge gaps to explore in future studies, and avoid duplication.

Open tool →



- Advocate for equitable partnerships to strengthen existing research institutions and researchers in LMICs
- Include researchers from LMICs in priority-setting and decision-making¹
- Increase global interdisciplinary research networks and collaborations to drive research in global pandemics²
- 1. COVID-19 Clinical Research Coalition. Global coalition to accelerate COVID-19 clinical research in resource-limited settings. Lancet Comments 2020
- 2. GloPID-R et al. Priorities for COVID-19 research response and preparedness in low-resource settings Lancet Comments 2021







ESTABLISHING INTERREGIONAL AND GLOBAL PARTNERSHIPS - AN ETHICAL PERSPECTIVE ON THE GOOD, THE BAD AND THE UGLY



SPEAKER

Prof. Caesar Atuire
University of Oxford | University of Ghana
UK & Ghana







Overview

- Establishing interregional and global partnerships an ethical perspective on the good, the bad and the ugly
- Why do we need global partnerships?
- Why are some collaborations bad and ugly?
- What are the conceptual ingredients of good partnerships?

STREAMLINING DISEASE SURVEILLANCE ACROSS AFRICA BY BUILDING BIOBANKING AND SEQUENCING CAPACITY: THE ROLE OF PARTNERSHIPS



SPEAKER

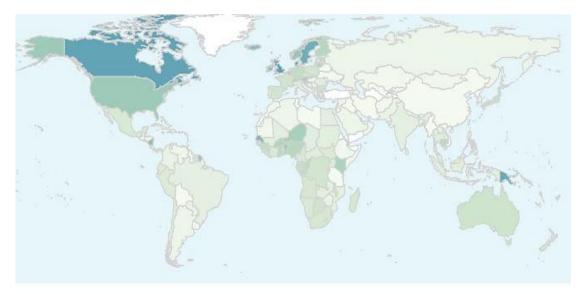
Dr Wilber Sabiiti
University of St Andrews
UK





Why biobanking and whole genome sequencing capacity?

SARS-COV-2 depositions to GSAID





Reasons for biobanking & WGS

Biobanking: Systematic preservation of biological samples for future use

- Saves time to focus on urgent diagnosis & clinical management of patients and save lives
- Critical for answering research questions unanswered at the point of diagnosis
- Development & optimisation of novel diagnostics, vaccines & therapeutics

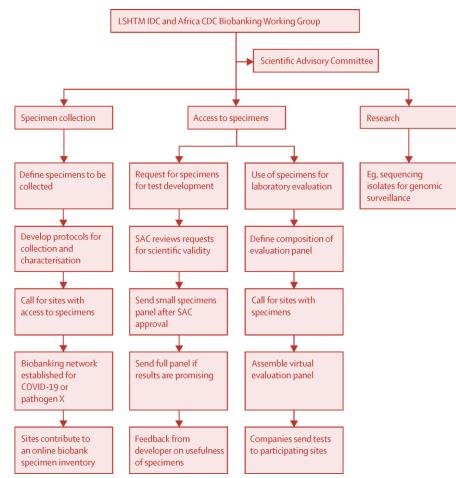
Whole genome sequencing (WGS): Comprehensive mapping of the organism's genetic information

- Early publication of the SARS-CoV-2 genome was a cornerstone for the development of diagnostics & vaccines
- Functional WGS capacity is critical for early detection of pathogens and their variants
- The earlier the detection of variants, the more accurate the tools to respond to the pandemic will be



Biobanking – what is the current capacity in Africa?

Biobanking – guiding principles



Peeling et al (2020) Lancet ID

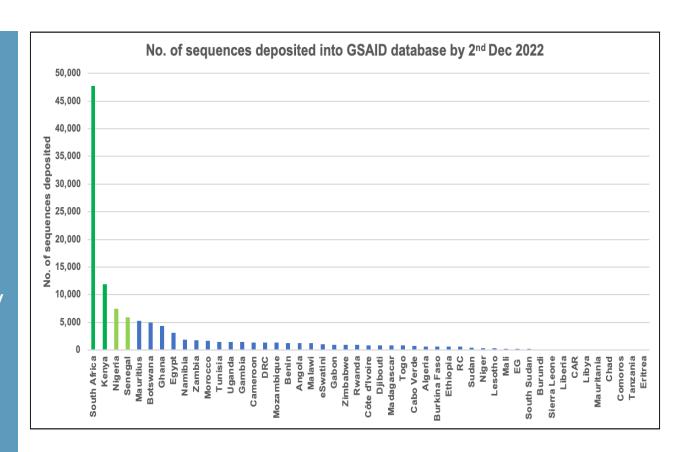
Biobanking – current capacity & gaps

- Some level of biobanking exists in almost all African countries – not clear what level?
- H3 consortium 30 African countries. Not clear if each country has an accredited biobank.
- LSHTM/Africa CDC biobanking network:
 - Biobanking guiding principles published in 2020.
 - Drawn from ZikaPLAN virtual biobank
 - Not clear whether the biobanks were established & what capacity they have?
 - o If they exist, can a map of these biobanks be made available online?



COVID-19 genomic performance in Africa – sequences deposited in GISAID database

- Only 4 countries deposited over 5000 genomes, with South Africa depositing >40K
- No genomes were submitted from Eritrea
- Means >90% of African countries have some whole genome sequencing capacity
- Which sequencing platform, Illumina or Oxford nanopore?
- What level of capacity & how is it coordinated?



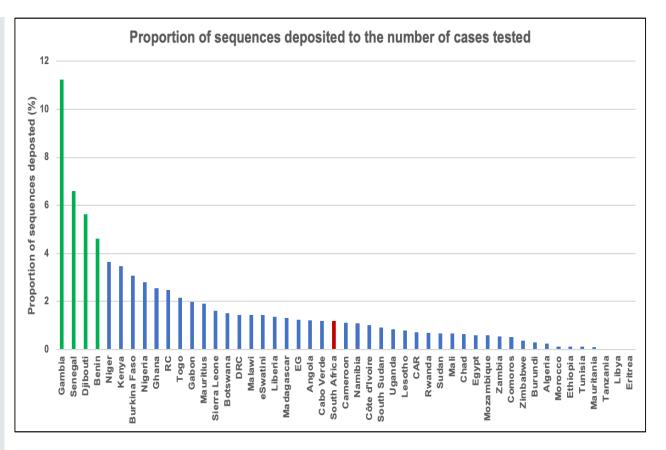
GISAID (www.gisaid.org accessed 2 Dec. 2022)





COVID-19 genomic performance in Africa — submissions as a proportion of COVID-19 cases

- Proportionally Gambia sequenced more of its COVID-19 cases, >11%
- South Africa only sequenced 1.2% of COVID-19 cases
- Could undertesting have exaggerated the sequencing proportions?
- How many samples should be sequenced to achieve optimal surveillance sensitivity?

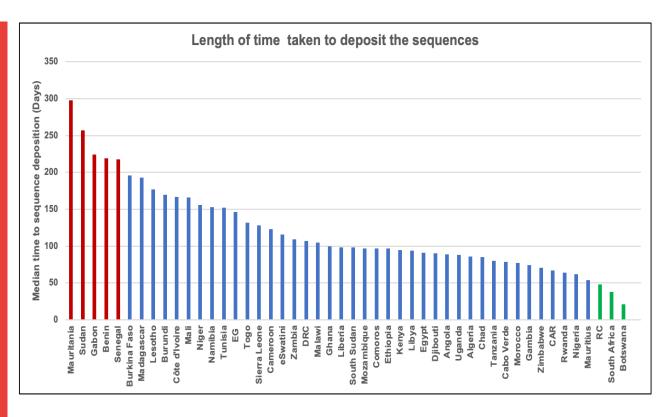


GISAID (www.gisaid.org accessed 2 Dec. 2022)



COVID-19 genomic performance in Africa — length of time taken to deposit sequences

- Only 3 countries, RC, South Africa & Botswana deposited in <50 days
- 5 countries took >200 days to deposit genomes in the database
- Why did it take so long to deposit genomes? China published the 1st genome in 11 days
- How long did it take for the sequence data to inform national COVID-19 responses?



GSAID (Accessed 2nd Dec 2022)



Opportunities & challenges - biobanking

- In most African countries there is some biobanking taking place
- Most biobanks are owned by individual institutions, research groups or principal investigators
- Little co-ordination at national and international levels
- One preservation method isn't enough for all applications e.g., blood preservation for genomic applications is different to that of immunological applications
- Specimens preserved without the target application in mind may become useless in the future
- Biobanks are energy intensive how do you maintain them in the absence of grant funding?
- How large should the biobank be and how many should a country have?
- What ethical and material transfer cover do you ask for materials to be used many years in the future: specific or general?



Opportunities & challenges – whole genome sequencing

- Sequences deposited in GISAID database indicate there is some genome sequencing capacity in most African countries
- It is not clear what genome sequencing capacities exist Illumina or Oxford Nanopore?
- It is not clear what genomic epidemiology and bioinformatics skills are present in each country.
- How many sequencing platforms should a country have? The higher the specimen load for processing, the lower the price per specimen
- Streamlined reagent procurement landscape critical for the performance of genome sequencing platforms
- Critical to streamline the ethical and material transfer landscape at national & international levels in the case of centralized genome sequencing services
- How do we deal with the results of genome sequencing? Stop penalizing those who report
- Are policy makers and the general public sensitized about how to interpret results from genome sequencing?



Role of partnerships — the COVID-19 Clinical Research Coalition (CRC)

- The Coalition has members from almost all African countries
- Over half of the members have academic affiliations with universities in Africa and overseas
- Could partner with Africa CDC to audit the existing biobanking and WGS capacity in Africa and provide a needs-based report for capacity development or coordination
- Assess capacity built by AFROSCREEN in addition to the Africa CDC Pathogen Genomics Initiative
- CRC members could translate into a network of biobanking & sequencing sites for Africa CDC
- Streamlined reagent procurement landscape critical for the performance of genome sequencing platforms
- Critical to streamline ethical and material transfer landscape at national & international levels in the case of centralized genome sequencing services
- Help develop model for maintaining background surveillance and reactivating in emergency periods

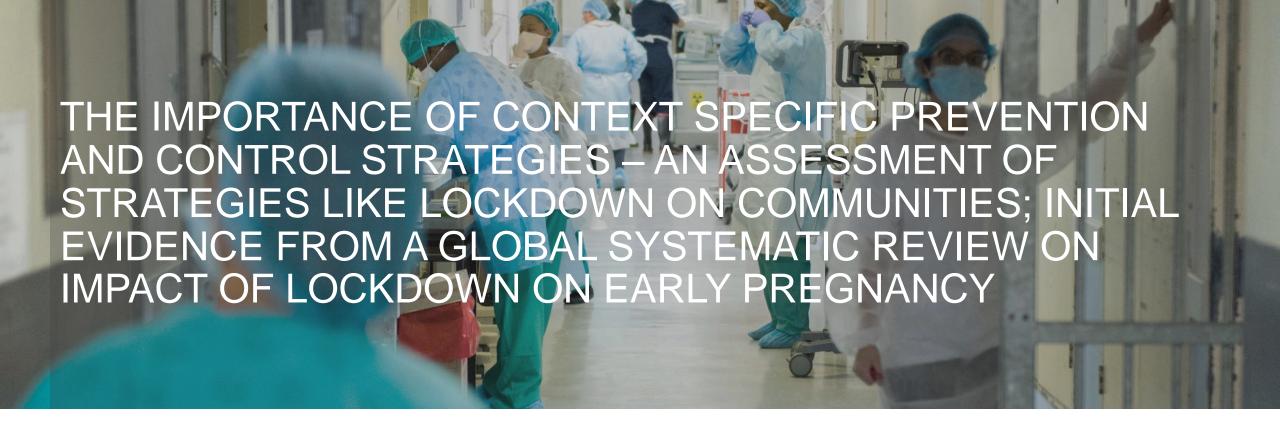


Role of partnerships — the COVID-19 Clinical Research Coalition

Thank you for listening

Virology, Immunology & Diagnostics Working Group







Dr Lauren Hookham

Makerere University | St George's University

Uganda & UK



Maternal, Newborn & Child Health (MNCH) Working Group

Chaired by

Professor Kirsty Le Doare

Professor of Global Health within the Paediatric Infectious Diseases Research Group at St. George's, University of London, based at MRC/UVRI @LSHTM Uganda

and

Dr Tanusha Ramdin

Head of Neonatology and Paediatric Intensive Care Unit at Charlotte Maxeke Johannesburg Academic Hospital

Diverse set of working group members across a variety of LMIC and HIC settings.

PLOS ONE

⑥ OPEN ACCESS
Ø PEER-REVIEWED

RESEARCH ARTICLE

Global research priorities for COVID-19 in maternal, reproductive and child health: Results of an international survey

Melanie Etti , Jackeline Alger, Sofía P. Salas, Robin Saggers, Tanusha Ramdin, Margit Endler, Kristina Gemzell-Danielsson, Tobias Alfvén, Yusuf Ahmed, Allison Callejas, Deborah Eskenazi, Asma Khalil, Kirsty Le Doare

On behalf of the Maternal, Newborn and Child Health Working Group of the COVID-19 Clinical Research Coalition 💌

Published: September 24, 2021 • https://doi.org/10.1371/journal.pone.0257516

Article Authors Metrics Media Coverage

Abstract

Introduction

Methods

Results

Discussion

Conclusion

Supporting information

Acknowledgments

Abstract

Background

The World Health Organization's "Coordinated Global Research Roadmap: 2019 Novel Coronavirus" outlined the need for research that focuses on the impact of COVID-19 on pregnant women and children. More than one year after the first reported case significant knowledge gaps remain, highlighting the need for a coordinated approach. To address this need, the Maternal, Newborn and Child Health Working Group (MNCH WG) of the COVID-19 Clinical Research Coalition conducted an international survey to identify global research priorities for COVID-19 in maternal, reproductive and child health



Research question – Have COVID-19 lockdown restrictions caused an increased rate of adolescent pregnancy?

Adolescents and young adults are likely to have been affected indirectly by the pandemic.

Lockdown restrictions have caused disruption to education and to sexual and reproductive (SRH) services across the globe. In Sierra Leone, adolescent pregnancy increased by up to 65% in some communities during the Ebola crisis. A similar trend may have occurred in some countries during the COVID-19 pandemic.

MNCH WG members felt that they had seen an increase in adolescent pregnancy rates in their individual local settings.







Why is it important?

- Early childbearing, or pregnancy and delivery during adolescence, can derail girls' otherwise healthy development into adulthood and have negative impacts on their education, livelihoods and health.
- May be forced to drop out of school, with long reaching impacts on their educational and employment opportunities.
- Social consequences stigma, rejection, violence from family members', peers and partners, early and forced marriage.





Why is it important?

Health consequences

Globally, maternal conditions are among the top causes of disability-adjusted life years (DALYs) and death among girls aged 15-19.

Neonatal outcomes may also be affected
 Higher rate of pre-term birth, low birth weight, stillbirth, mortality



Examples

- UNICEF reported a 20 per cent spike in the last 15 months in teen pregnancies, or pregnancies of 10-24-year-old girls and women, who were seeking antenatal care in Eastern Uganda
- In Malawi, 13,000 girls got pregnant and 40,000 married before their 18th birthdays during the emergency school closure, according to the Ministry of Gender, Community Development and Social Welfare

How COVID-19 has increased fertility, adolescent pregnancy and maternal deaths in East and Southern African countries

11 July 2021





RUTGERS SURVEY

 Over 30% of women surveyed in Ghana, Kenya, Uganda and Zimbabwe weren't able to access the family planning services they needed.

 Economic hardship may be leading to more transactional sex.



I feel that things are out of my hands



The epidemiological picture regarding teenage pregnancies is not clear

Early reports of a significant pandemic-related spike in adolescent pregnancies may not be reliable

Good quality data are needed



Methodology

Literature review encompassing both quantitative and qualitative data

- Country level data, when available, to be analyzed alongside COVID stringency index
- Review of databases included PubMed/MEDLINE / EMBASE / Web of Science/ CINAHL / DHS / WHO database – COVID-19 Global literature on coronavirus disease / Literatura Latinoamericana y deng I Caribe en Ciencias de la Salud (LILACS)
- Team able to include data in English, French and Spanish
- Full protocol available via Prospero (ID number 308354)







International prospective register of systematic reviews



A living systematic review of the impact of COVID-19 pandemic on adolescent pregnancy rates ((girls aged 10-19)

Lauren Hookham, Kirsty Le Doare, Tanusha Ramdin, Jackeline Alger, Sofia Salas, Valériane Leroy, Sweta Shanbhag, Tobias Alfvén, Fihadi Miskeen, Kristina Gemzell Danielsson, Mandana Arabi, Yusuf

Lauren Hookham, Kirsty Le Doare, Tanusha Ramdin, Jackeline Alger, Sofia Salas, Valériane Leroy, Sweta Shanbhag, Tobias Alfvén, Elhadi Miskeen. Kristina Gemzell Danielsson, Mandana Arabi, Yusuf Ahmed. A living systematic review of the impact of COVID-19 pandemic on adolescent pregnancy rates ((girls aged 10-19). PROSPERO 2022 CRD42022308354 Available from: https://www.crd.york.ac.uk/prospero/display_record.php? ID=CRD42022308354

Review question (1 change

To examine the relationship between lockdown restrictions imposed secondary to the COVID-19 pandemic and the rate of adolescent pregnancy across the globe.



Methods - review of the literature

Literature reviews commenced in April 2022.

Lit review 1: 3977 articles required screening

Included: 6

Data extraction complete

Lit review 2: 5369 articles required screening

Included: 99

Data extraction ongoing



Country level data

Review of World Bank, UNICEF, DHS and WHO datasets

Review of data available from countries themselves (i.e., from MoH reports)

Sub-teams for each WHO region

Commenced in April 2022



Results, quantitative data – 2 papers with original data on adolescent pregnancy

Kenya:

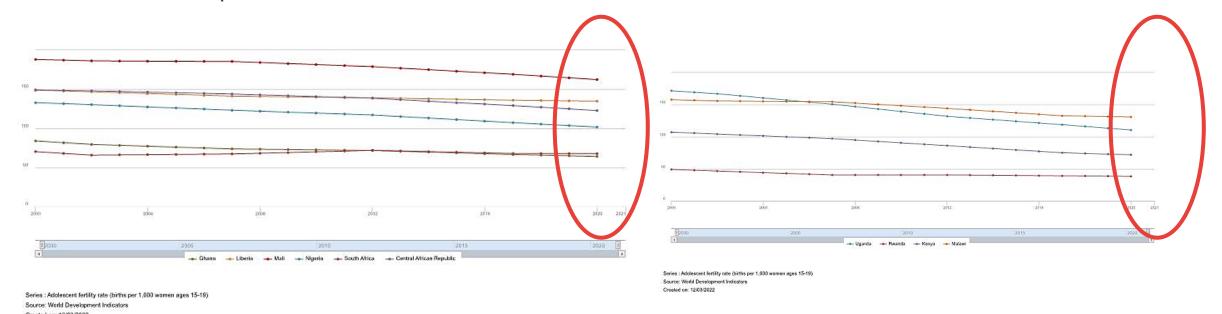
- Rural Western Kenya (Zulaika G, Bulbarelli M, Nyothach E, et al, 2022)
 Adolescents who remained out of secondary school for 6 months due to lockdown had 2x the risk of pregnancy and 3x the risk of dropping out of school when compared with girls prior to the outbreak.
- National DHS data (Shikuku et al, medRxiv 2020)
- Steady rise in number of pregnancies in the 15-19 years group during the COVID-19 period compared to the pre-COVID period



Analysis – 2021 country level data on adolescent fertility rate not widely available

e.g., in Ghana, Liberia, Mali, Nigeria, South Africa, Central African Republic...

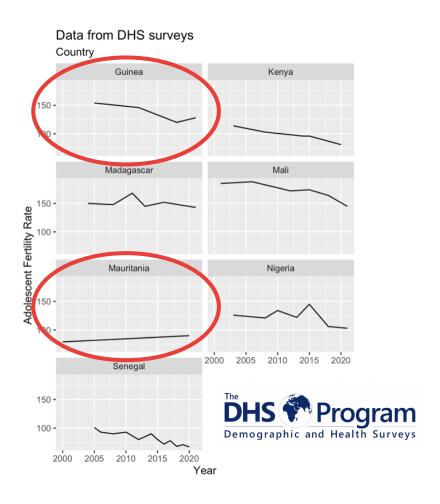
...and Uganda, Rwanda, Kenya, and Malawi



We see a reassuring downward trend in the adolescent fertility rate, year on year, but we are missing key data: 2021!



DHS data



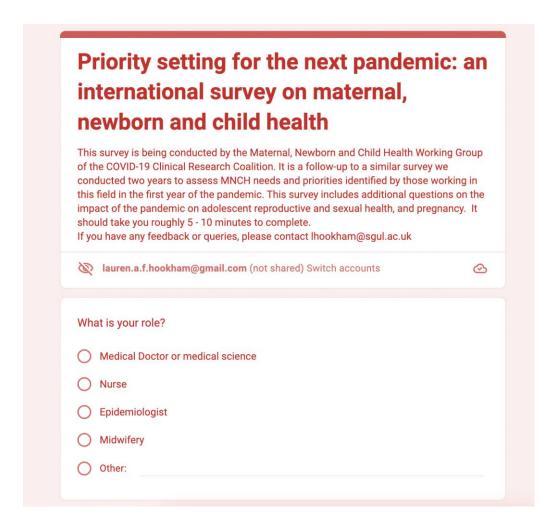
Country level data for 2021 not available

- This will be the critical year for analysis
- No requests for data made directly to relevant government departments have so far been successful
- DHIS2 data or equivalent health management systems (HMIS) exist.
- Need open and accessible data

Next steps - survey

Apparent that country level data is lagging behind, but still an urgent need to understand which countries and communities may have been affected.

Developed a survey as an update to "Pandemic priorities"



We need your help

Need to hear from those working in MNCH or associated specialties in low- and middle- income countries.

Survey is currently open.

Currently 40 responses received to date.

40% from Africa (largest cohort so far)

Takes just 5-10 minutes to complete.

If you are interested, please:

- Scan this QR code or
- Follow this link: bit.ly/3iwf0Yk or
- Contact me: lhookham@sgul.ac.uk







Summary

- A lot of literature and reports saying what the impact of the pandemic *might* be
- Little data at present to state what has actually happened
- 2021 data eagerly awaited

If you have access to data you would like to share, or you would like to be involved in the project, please contact me:

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Thanks to MNCH Working Group members

Kirsty Le Doare, Tanusha Ramdin, Jackeline Alger, Sofia Salas, Helen Rees, Robin Saggers, Lisa Noguchi, Kristina Gemzell-Danielsson, Margit Endler, Tobias Alfven, Yusuf Ahmed, Deborah Eskenazi, Allison Callejas, Ghulam Mustafa, Debra Jackson, Guan Wang, Stembile Mugore, Sawsan Abuhammad, Valeriane Leroy, Elhadi Miskeen, Mandana Arabi, Nkwan Jacob Gobte, Michael Enwere, Melanie Etti, Ana L. Chinchilla, Gisella Vallecillo, Leslie Abimbola, Sweta Shanbhag, Elaine Tan Su Yin, Madelon Finkel, Rozane Elmasri, Stephanie Shih, Shreya Suresh, Edmund Chung, Nurat Wamaya, Amy Ng, Zofia Przypasniak, Yi Lun Khaw, Linnuel Pregil, Matyl Kassouf, Zadok Maingi, Rawnaq Behnam, Jowery Namulondo, Jean Paul Ndayizeye, Christina Ricci, Atalay Goshu, Sasha Baumann, Murundo Simwa, Marian Murunga, Reuben Kughong, Fatimah Odusote, Nirvana Lakha, Sowjenya Ravimani, Natalie Bishop, Carolina Bustillo, Heriberto Rodriguez, Lucas Guimaraes Abreu, Eduardo Núñez, Yasmin Beltrán, Cárcamo, Lola Okunromade, Safa Elhassan, Cerisa Obern, Claudette Hewitt, Wei Yan Lim







SPEAKER

Dr Luisa Enria **London School of Hygiene & Tropical Medicine** UK





Outline

- 1. Social science & epidemiology: histories of productive collaboration
- 2. Areas for current and future collaboration
- 3. Challenges and opportunities



Social science & epidemiology: Fruitful ground for collaboration



- Historically fruitful ground: social epidemiology and anthropology of/in global health
- Ebola epidemics and the growing role of social science: humanizing humanitarian interventions
- Movements towards institutionalization of social science networks in outbreak response
- COVID-19: some opportunities but also some steps back

Areas of collaboration

- Social experiences and consequences of pandemics
 - E.g., redesigning burial protocols; impact of quarantines on livelihoods
- Political economies of crisis and mapping power
- Community response and preparedness structures
- Medical research and community engagement
- Localizing models: contextualizing contact patterns and participatory modelling
- Indigenous knowledge of illness and disease
- Community-based surveillance and social models of risk
- Zoonotic disease and more than human health
- "Studying up": global health and collaborations



Challenges



- No longer a question of whether but how to integrate
- Moving out of 'silos' and beyond the 'acceptability' frame
- 'Cultures of evidence' and epistemological challenges
- Operationalization and its limits
- Structural challenges and funding inertia

Opportunities

- Moving towards trans-disciplinarity and meaningful co-production
- Co-creation of research protocols and production of scientific knowledge
- Re-imagining response as a social and political process
- Diversifying public health curricula
- New Public Health Order: Institutionalizing contextual, communitybased and locally led approaches
- A case study (with Dr Alhaji N'Jai, COMAHS): Redesigning communitybased surveillance models leveraging indigenous knowledge



Acknowledgements

Thank you to the COVID-19 Clinical Research Coalition Social Science Working Group

&

UKRI Future Leaders Fellowship MR/T040521/1





PRIORITIES FOR AFRICA: FOCUS AREAS AS WE PIVOT TO PANDEMIC PREPAREDNESS



SPEAKER

Dr Brenda Okware
COVID-19 Clinical Research Coalition
Uganda

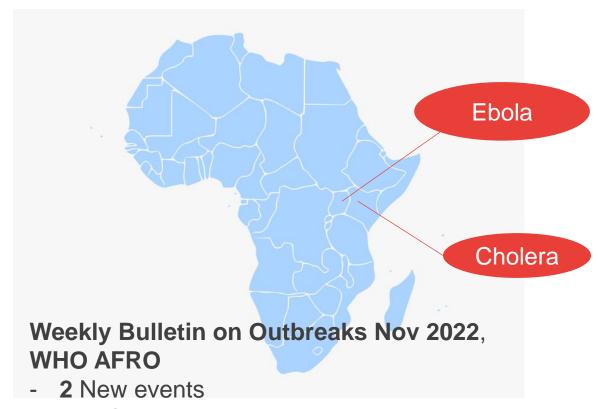






Recent outbreaks in Africa

- **Globally** June 2021 July 2022
 - 701 public health emergencies/threats reported
 - 67% occurred in African region
- In Africa
 - 130 new public health threats / emergencies (June 2021 – July 2022)
 - 86 % were infectious diseases
 - Cholera 16%; Measles 11%; Mpox 7%; Yellow fever 7%; Anthrax 6%



- **151** Ongoing events
- **132** Outbreaks
- **21** Humanitarian crises

Source: Annual Report of the Regional Director on the work of WHO in the African Region 2021-2022







The Ebola virus since 1976

covid19crc.org | \$\mathbf{y}\#\covid19crc | \$\text{Slide 2/9}\$

Number of outbreaks over the decades: 38 outbreaks in 11 countries

6 Outbreaks 14 Outbreaks 7 countries 4 countries - Uganda, DRC - Gabon - Guinea, Liberia Cote d'Ivoire - Sierra Leone - DRC - Nigeria - South Africa - Mali - 2 virus types 3 virus types EBOV, EBOV, TAFV SUDV, Bundibugyo 2000s 2010s 1970s 1990s 2020s 5 countries - Uganda - Gabon 2 countries: 3 countries - DRC - Republic of Congo - DRC - South Sudan - South Sudan - Uganda - DRC - Guinea - 2 virus types - 3 virus types EBOV, EBOV, SUDV. - 2 virus types SUDV, Bundibugyo EBOV, SUDV 4 Outbreaks 10 Outbreaks 4 Outbreaks

Source: https://www.cdc.gov/vhf/ebola/history/distribution-map.html. Accessed 02 Dec 2022

Lessons learnt from past outbreaks

- Engagement with **local leadership** is key
- Understand the **community context and coexisting priorities**, including climaterelated events (droughts, food insecurity, natural disasters)
- Cross-disciplinary approach is needed: unity in diversity of expertise
- Manage the message
- Outbreaks are here to stay
 - Human-animal interface is crucial factor
 - 63% increase in number of zoonotic outbreaks in past 10 years



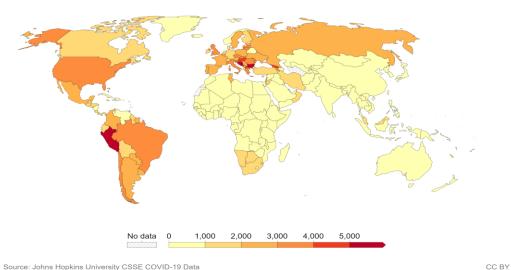
The COVID experience in Africa



COVID-19 'cold spot'. (Part 1)

Cumulative confirmed COVID-19 deaths per million people, Dec 3, 2022 Due to varying protocols and challenges in the attribution of the cause of death, the number of confirmed deaths may not accurately represent the true number of deaths caused by COVID-19.





Defying predictions of disaster, Africa's

coronavirus response is receiving praise



The problem with predicting coronavirus apocalypse in Africa

Claims that Africa will be hit the worst by the pandemic ignore African epidemiological know-how and action.



The COVID experience in Africa

Factors unique to Africa

- Demographics: a young population
- Differences in case identification and mortality detection capacity
- Role of natural infection in immunity?
- Preexisting immunity from other coronavirus species?
- Past outbreak experience
- Low-resource settings
- 12 million cases (2.2% of global cases) and 0.25 million deaths (4% of global deaths)

- Leadership was key catalytic that propelled the response
- Inequities in innovations:
 - Diagnostics
 - Vaccines
 - Only 5% of 14.3 billion doses globally
 - Therapeutics
 - Minority of clinical trials in the region
 - Low access to new therapeutics

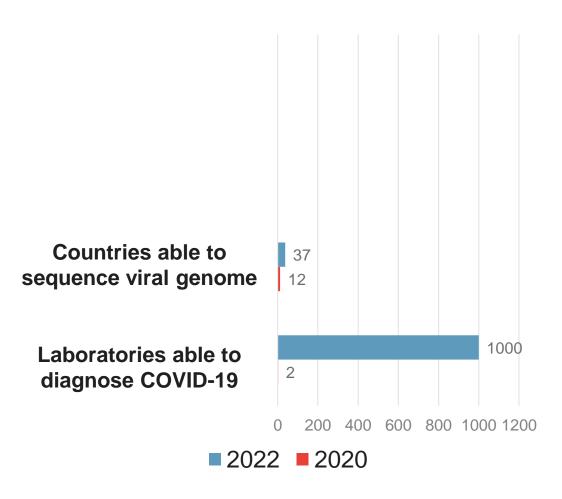


Leverage capacity built during COVID-19 pandemic

Positive responses and outcomes

- Strong national leadership led the response
- Rapid repurposing of outbreak mechanisms and infrastructure
- Improved surveillance and data collection
 framework across the region
- Strengthened partnerships and regional & global collaboration
- Improved human and infrastructural capacity
- Improved research: seroprevalence and operational
- Involvement of CSO
- Boost to local supply chain mechanisms locally manufactured medical supplies
- Diagnostics : Ag RDTs→ cost, speed, scaleup of testing

Laboratory capacity and capability





Pandemic preparedness priorities

Goal – to prevent, prepare for, detect and respond to a new disease outbreak

POLITICAL WILL + FINANCING

Building strong and resilient health systems Establishing surveillance systems

Coordination of preparedness efforts

Strengthen supply chain infrastructure

RELEVANT TO THE LOCAL CONTEXT = QUALITY DATA GENERATION



Pandemic preparedness considerations

- Understand local context: socio-political, cultural, ongoing health priorities
- Strive to ensure continuity of care
- Involve all key stakeholders
- Use locally generated evidence
- Ensure national pandemic preparedness plans include research
- Prepare pandemic-specific resource mobilization plans

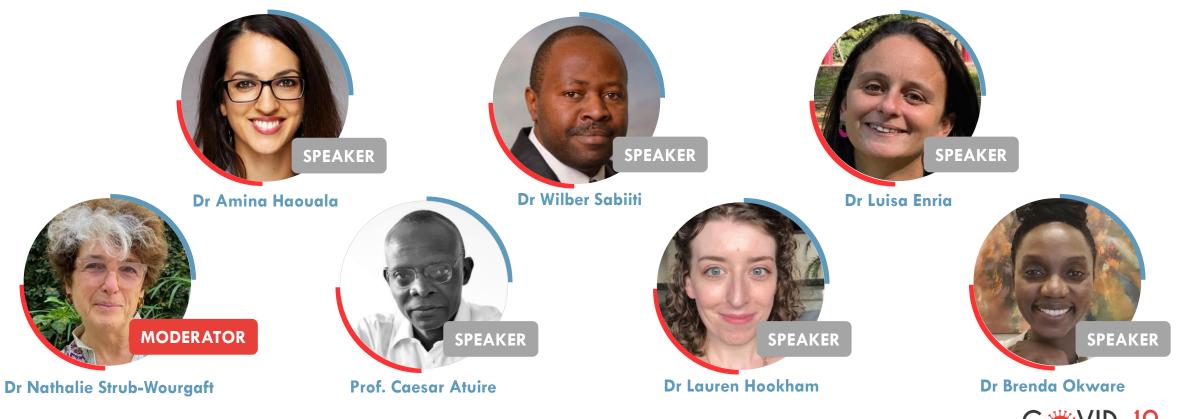


Conclusions

- Prevent, prepare for and detect outbreaks
 - Maintain high index of suspicion
- We need context-specific solutions owned and derived by African scientists
 - Local policy informed by locally generated evidence
- A disease threat anywhere is a disease threat everywhere
 - Mutually beneficial partnerships



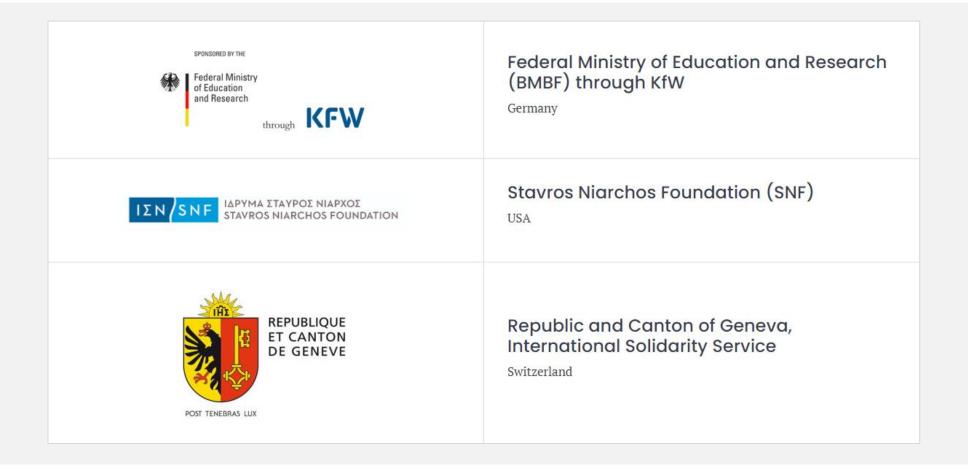
DISCUSSION AND Q&A





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How to connect & feedback survey



