

TGHN Vaccine Open Working Group 1st meeting

COVID Hub - Minutes

Date: 10/06/20

Location: Zoom

Introduction

The ongoing establishment of 'COVID-19 working Groups' is addressing the discussion and consensus building around identified research gaps across low resource settings. All attendees of 'open workshops' have been invited to participate by completing a survey and expressing their interest in the 'COVID-19 Working Groups'.

On 10th June, The Global Health Network supported the first virtual meeting for the 'Candidate Vaccines R&D open working group'

The meeting was organised in response to questions raised in a COVID HUB workshop which highlighted the need for greater discussion of the challenges, options and ethics of COVID19 vaccine development.

The purpose of this meeting is that teams can be formed from across the globe to share ideas, gather consensus, form collaborations and seek funding. These groups can share and engage widely to support rapid research implementation during this pandemic. We can fully support the operations of these groups and so your precious time can be spent on these key discussions.

- *What types of vaccines should be tested? Which are showing the most promise?*
- *Design, Study Population and Clinical Settings? Which are the Primary Outcomes Measures?*
- *Data Management and data standards?*
- *Study management, regulation, and operational set up?*
- *Barriers to the implementation of vaccine trials*

Attendees:

Over 35 people registered to be members of this WG and 15 attended the first team meeting from 13 different countries as shown in the following map:

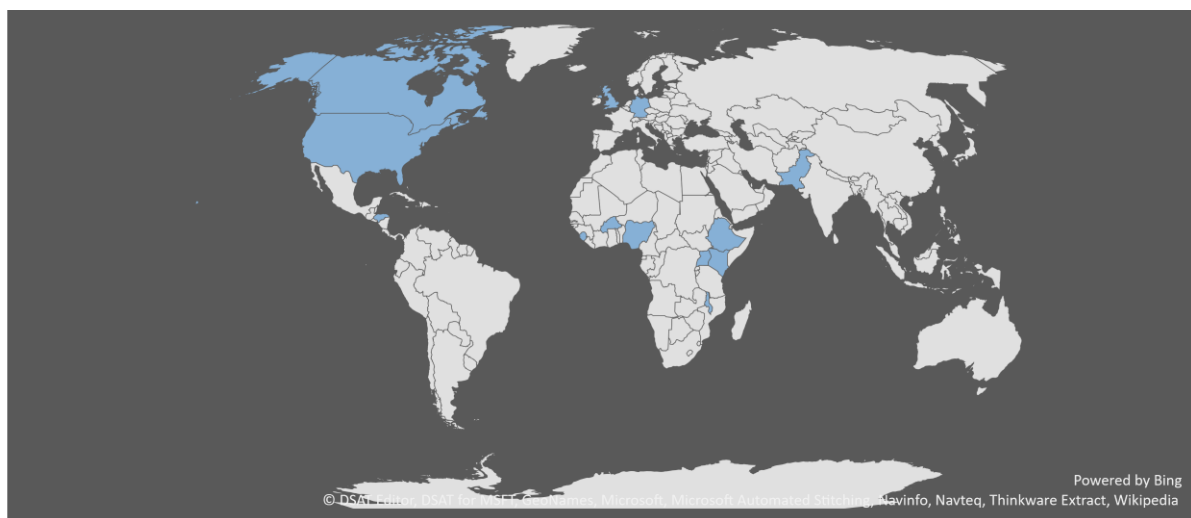


Fig 1. Location of the WG1st meeting attendees.

TGHN team	Trudie Lang, Davide Balardi, Ryan Walker, Jamie Parker, Welile Sikhondze	
Those who spoke	Patricia Beverly Aswani Madeleine MARASCIULO Issa N Ouedraogo Steve Wandiga Dr. Mathildah Chithila-Munthali	
	Ashenafi Tesema Samuel, Festus Rao, Amos Chab Abuok Jangkor, Ahamed kallon, Grace Mzumara, Kelvin Thiong'o	
Rest of Attendees	Mark tefero Ashenafi Ahamed flagbata Bongomin Luis alejandro Taremwa Javier Italia Agustin Evans Edidiong	Kivumbi Tesema Kallon Bodo Cousin inestroza Ivan mugisha Ibanez Mejia Bueso-Engelhardt Otima Tommy

Summary of comments

Three main themes emerged from the thematic analysis highlighting research priorities within the COVID-19 Disease Characterisation Open Working Group 1st meeting (Fig. 2.).

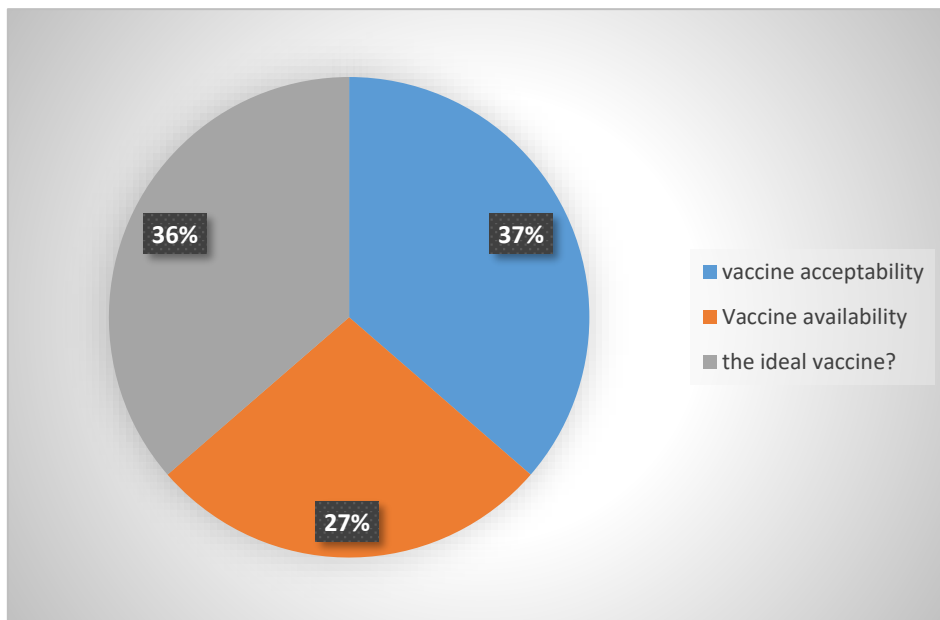


Fig 2. Three main themes for research priority within COVID-19 identified from the Vaccine Research Open Working Group 1st meeting feedback review.

Within these three topics it was then possible to categorise the questions, comments, and discussions to further specific areas (Fig. 3.).

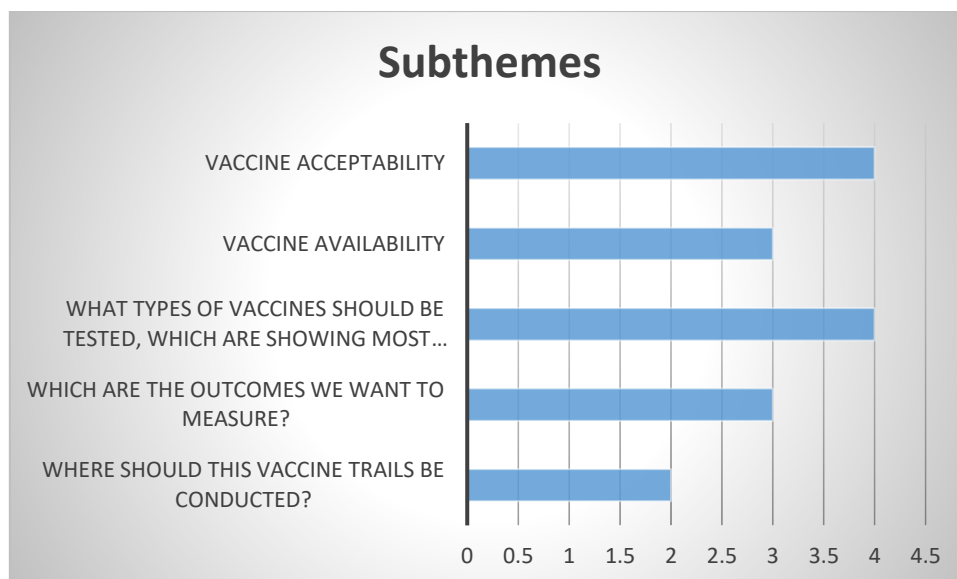


Fig. 3. Categorisation of questions, comments and discussions to specific areas.

Reviewing the discussion, comments and question we consider the following questions emerged as the priority research questions, concerns and knowledge gaps.

The ideal vaccine? - challenges and considerations to vaccine development.

COVID-19 finds us in a similar to Ebola and Zika, in that there are many unknowns, but the world is crying out for a vaccine ASAP. Members honed on the idea that it is unlikely to find a safe, effective, cheap, single dose COVID-19 vaccine. Thus, they asked themselves *which will we have to compromise on? If we are looking for an imperfect vaccine, what's our target?*

The following questions and ideas were raised:

What types of vaccines should be tested, which are showing most promise?

Which populations show new vaccines prioritised and aimed at?

- Those at risk: the elderly, those with underlying comorbidities etc
- I think prioritizing vaccine for the most vulnerable could be a starting point, as availability improve and cost come dawn consideration can be given to other age groups

Which are the outcomes we want to measure?

- efficacy levels
- safety measures.
- reliability
- acceptability
- immunogenicity
- Will the volume be general (between age, gender, weight etc) or specific?

Where should this vaccine trails be conducted?

- Running trials in every country is not cost effective, a better approach could be regional.
- Hospitals are basic setups from which vaccine trials can be run, as well as research institutes.

- Some areas have a high number of COVID cases, some don't: it would be wise to choose the study population from across the world with high cases of COVID and low cases
- A paper shared about equitability in research ([here](#)) – argues that Africa would be an ideal location to host a vaccine trial. *"As of 20 April 2020, there were 5 candidate vaccines in clinical evaluation and a further 71 candidate vaccines in preclinical evaluation. These candidates are being trialled in Asia, North America, and Europe. If novel candidate vaccines are not tested in African settings, the continent has to bank on efficacious vaccines developed and tested elsewhere being effective in African populations. This may turn out not to be the case."*

Population based sequencing studies, animal models, vector characterisation etc are also necessary before we take the next steps. Those making vaccines based on structural proteins need to ensure epitopes are not highly variable – choosing the right part of a protein is very important.

What will be the scalability of inoculation – availability of a future COVID-19 vaccine?

Many members of this WG were concerned not only with a safe and effective vaccine but with *"what can we do to prepare to deliver vaccines globally."* There is a need to stop running into production of a less than safe/effective vaccines and instead to look more in terms of vaccine delivery. One member of the team noticed a stark difference between levels of investment in vaccine trials between HIC's/LMIC's. Another suggested to reduce cost but show up with data which reaches the threshold of global approval. **A possible way of facing this could be at looking at health system characteristics and see which ones could facilitate vaccine implementation.**

Vaccine acceptability – the role of CE

There is a need to liaise with vaccine development organisations to ensure the community is included in the discussion. On the one hand, there are challenges related with patient recruitment. People are not willing to participate due to rumours and mistrust. Also, barriers to vaccine trial implementation can hamper the whole efforts of manufacturers if the vaccine trial is not accepted by the potential participants. Hence strong social science team and community liaison are required to counter any rumours. A member stated that *"For a successful implementation, Public awareness needs to be achieved through collaboration with Ministries of Health, local leaders, and administrative authority to ensure myths are demystified and we don't experience lots of drop outs due to Stigma"*.

Here, **add-on studies to vaccine trials could also be an important to develop.**

Call to action and next steps

Following this first meeting, there was an agreement in the need for a platform (for which TGHN will be providing – details to come) where members of the team will be able to post information on funding calls, specific resource and tool as well as a forum chat for members to form new collaborations and plan future work.

Vaccines studies are critical right now! Suggested starting points from this first call are as follows:

- 1- Sharing the report of this WG with vaccine developers may be very useful. There is a potential to influence their research priorities. Maybe **writing a position paper highlighting priority relating to vaccine development is a key thing that could come out of this WG going forward?**
- 2- **Running /interest in running a vaccine trial** and then we can introduce you to the developers: some of the members would be interested and have different background experiences (experience with Malaria and TB vaccines, have developed protocols or have patients that could be enrolled) but without protocols or sponsors. **this WG could be used as an opportunity to**

work data together (multicentred) and escape the situation of several poorly resourced, similar, weak studies being done with little amount of data. So maybe a next step could be writing up a protocol and applying for funding?

If you are involved in Vaccines R&D and you have not joined this group yet, please get in touch and share any relevant protocols, associated tools and your experience. You can get in touch here info@theglobalhealthnetwork.org or complete the survey [here](#).