Global health research and vaccination: Access, equity and delivery – answering your questions from our second global symposium

On 27th May 2020 a joint initiative sponsored by the UK Department for International Development, Gavi and Liverpool School of Tropical Medicine (LSTM) brought together a host of international expert speakers to dialogue about vaccine and health systems science.

The second in a series of three virtual symposia, speakers from government and academia shared the latest thinking on access, equity and delivery of health services and immunisation. This second event was held ahead of the Global Vaccine Summit 2020, hosted by the UK Government on the 4th June, which saw governments and donors surpass Gavi's replenishment target of US$7.4 billion for the next five years – pledging a total of US$8.8 billion to the organisation.

Participants joining from around the globe posed some questions online to our speakers: Dr Haja Wurie (COMAHS, ARISE Consortium), Dr Janice Cooper (Carter Centre), Dr Rachael Thompson (LSTM, COUNTDOWN Consortium) and Professor Melita Gordon (University of Liverpool).

Here our respected speakers answer those questions that time restrictions prevented them from answering during the live symposium.

COVID-19 response

- What is the strategy to ensure that Africa is not left behind should a new vaccine for COVID-19 be discovered?
    - Haja: Community involvement and participation to support access and equity; responsive health systems, adequate testing capacity, universally accessible vaccines, national investment and leadership, innovative ways of addressing context specific bottlenecks building upon community structures that work; affordability.

    - Janice: First, your country's response is led by your health care leaders and they are sitting at tables with leadership at WHO and other world bodies where they need to represent Africa's interest. Secondly, often the country needs to weigh the risk/benefits of being parts of initial trials for vaccines. We had heated conversations in our country about an Ebola vaccine. Those who are your scientists and public health practitioners together with your ethicists, your community leaders and need to be at the table to weigh the risks and benefits, to seek the national interest and to benefit from any research done.

- Ebola has taught us about the importance of contact tracing (& trust) in disease outbreaks which haven't been reflected in COVID-19 response – How can we encourage more South-North lesson learning?
    - Haja: More knowledge sharing platforms at intra and South-North level, more context specific research into action through a lesson learnt lens where possible, more South-North equitable partnerships, continued engagement at the intra and inter level through an equity, gender sensitive and inclusivity lens in support of the research into action process, capacity building.
    - Janice: I agree about more cross-country and cross-cultural learnings. I think in general the South-North learning still appears novel to most. So, when there are conferences and other opportunities for sharing these represent times to think more broadly and in more diverse ways about how to cross fertilize our ideas. I also think that small countries like Liberia and Sierra Leone are rarely privileged in global meetings to share lessons learned not only on "novel" disease outbreaks but on general issues that they confront in primary care delivery in resource-poor/constrained settings.

- What is the role of community health workers (CHWs) in managing COVID-19 outbreak in Sierra Leone? South Africa have used their experience with managing HIV for contact tracing and health promotion during the COVID-19 outbreak.
    - Haja: CHWs can help disseminate messages on preventive measures to stop community transmission of the virus, and monitor implementation at this level

- It would be interesting to learn more about the safeguarding/safety issues of the CHWs in Sierra Leone. Coronavirus is a highly contagious disease and close contact is needed to immunize children. In most low-and middle-income countries where formal health workers are lacking Personal Protective Equipment (PPE), CHWs rarely receive PPE.
    - Haja: Thank you for your question. CHWs are not tasked with giving vaccines in Sierra Leone. They encourage service users to seek services at the facility level or in the case of vaccine - mobile vaccine sites. With regards to PPE - the general message around COVID-19 is handwashing and use of face masks to slow down community transmission. As CHWs are based in their communities the same applies to them.

Equity, access and delivery of vaccines

- In Sierra Leone and Liberia, immunization is affected a lot by geographical and Human resource. Geographical because there are no roads to certain communities making them marginalized and human resource because necessary trainings are still lacking. How do you think these two will be mixed together to make the various communities challenges be met as in trust, access and uptake of health services?
    - Haja: The immunisation equity assessment showed that community ownership and leadership can help address this problem. The leadership within these communities are aware of their unique challenges and creating

a dialogue platform to address this worked wherein the tribal leaders would work with their community and the health system to ensure that vaccination is accessible through an equity lens.

    - Janice: Thanks for the question and I agree with the answer from Haja. Key to these challenges are buy-in as you know. Community health workers and mid-level health care workers from the community and in the community and a lot of community education around the role immunization plays in disease prevention is needed. As you may be aware, there a lot of myths and misconceptions of disease outbreaks which suggest we need to do more work on community education - especially around disease transmission. The ability of communities to feel ownership of the facilities and programs (trust in those who are health care workers and vaccinators- if they are ancillary workers) is key so health education is not just around target mass vaccination days but continuous. Some of the strategies that have been used in Liberia include: community event-based surveillance and partners defined quality using a community participatory action approach to strengthen leadership and accountability around health and create opportunities during "normal times" to foster trust and accountability do during outbreaks and emergency you have to spend less time on that. Within the accountability framework can come tools, like community scorecards, that give voice to community on quality and quantity of services.

- How were the community health workers were moving from one area to another when movements were restricted?
    - Haja: CHWs are based within a particular community and serve that community so movement between communities was not needed.

- Despite making drugs available within health centres, are there any approaches you have considered to strengthen capacity of health centre staff to identify and diagnose Neglected Tropical Diseases (NTDs), as mostly are missed at this level due to lack of resources and capacity of staff?
    - Rachael: A first step is to include NTD training into pre-service clinical training so that that all new health workers have a basic knowledge. There is also a need to work across Ministry of Health departments, beyond the NTD department, to integrate NTD diagnosis and treatment into mainstream services at primary and secondary health facilities. Supporting front line health workers by providing health information resources and ensuring they have a reliable drug supply would help motivation. Lastly including front line health workers in the planning and management of integrated services is key so that they are able to input and feedback their experiences.

Community engagement and sustainability

- Any lessons on how you engaged the community in Malawi vaccination programmes?

- Melita: Thankyou! That's a big question, and public engagement was a huge undertaking. It's best answered by referring you to our **open-access publication** describing our approach. Two additional quite fun things to mention specifically, though:
  One is that our trial pharmacist was also a well-known local musician (John "Fire" Ndaferankhande). As well as doing vaccine quality assurance activities at the vaccination sites during the trial, he would also bring along his guitar and drums, and use traditional music, dance, and sing songs about typhoid that he wrote especially for the trial. You can see him doing this here.
  Secondly, during the vaccination campaign we spotted a cartoon that appeared in the Malawi Sunday papers about us. The cartoonist lives in the catchment area of the trial and heard all the public engagement activities. The character with the drum is the titular character of this regular cartoon strip, and is supposed to be the chief's special messenger telling the community about the disease. The joke of this cartoon is that he gets muddled and can't quite remember the name of the illness properly, and calls it "matenda a ujeni" which means "the thingummy illness". But everyone has already heard about the study so thoroughly, that it is the community themselves (represented by the man with the beard) who are the ones telling him the correct information... "It's called taifodi fiva (typhoid fever), sir!". The messenger goes on his way commenting that it is the community who are telling him about typhoid, rather than the other way around. We took this as a testament to how thorough our community engagement had been.

- Is there a long-term sustainability plan and enough commitment from the Malawi government and Department of education to sustain the intervention to be delivered in this way beyond the study, especially considering the political instability in the country?

    - Melita: Yes, and that is a direct result of Gavi's US$84M commitment to support country-level introduction. The vaccine will be provided at US$1 or less per dose. We are preparing a national introduction application to Gavi, which will be based on the premise that the vaccine will need an injection of support to cover the period of introduction. However, as the vaccine saves more and more lives, the Ministry of Health will save enough money from averted cases and averted deaths and it will gradually take over the cost of the national Expanded Programme of Immunisation (EPI) typhoid vaccine provision, on a pre-agreed schedule. In the case of typhoid, national introduction begins with a mass vaccination campaign for all children from 9 months to 15 years, followed by introduction into the national EPI programme at the age of 9 months. Gavi undertake to cover the entire cost of the initial mass vaccination campaign, which will make a dramatic impression on the national burden of disease, and which makes the introduction particularly cost-effective for the national government.

- I just wanted to ask about the community healing dialogues in Liberia. Was this sustained after the 12 weeks sessions?
    - Janice: No. We did dialogues specifically to support post-Ebola Virus Disease concerns. I suppose if they went longer than that they are more like regular meetings. From community healing dialogues though some people recognized some of their on-going mental health and psychosocial support (MHPSS) issues/or problems and some were referred and others self-referred to working with MHPSS workers in the community or at facilities.

LSTM will host a final virtual symposium on the topic of private sector partnership and accelerating the development of new tools. The date of the symposium is 17 June 2020, all are welcome.