Global and African vaccine experts join BroadReach Group webinar to address mass vaccination roll-out concerns and solutions.

Webinar in Summary

- Mass immunizations need to be treated as a multi-year marathon, not a sprint, and vaccine hesitancy must be addressed through iterative, consultative processes with the community and the debunking of deliberate misinformation. **Dr Tim Mastro, Chief Scientist at FHI 360**
- Health authorities must share vaccine roll-out information with the public in layman’s language to increase trust and acceptance. **Dr Anban Pillay, SA Health Department**
- All countries must have national vaccine deployment plans that define all aspects of the roll-out and enable very detailed planning. **Dr Phionah Atuhebwe, World Health Organization (WHO) Africa Region**
- Vaccine hesitancy is a critical issue to solve if countries are going to achieve herd immunity, but to defeat the pandemic at scale, health authorities also need to invest in micro-planning on the ground, as well as a global control tower approach backed by digital resources and data management. **Dr Ernest Darkoh, BroadReach Co-Founder**

Cape Town, South Africa – 26 February 2021

**BroadReach Group**, a global social enterprise focused on harnessing health technology and innovation that empowers human action, brought key global and African health experts together this week to share challenges and solutions around mass immunization and the eventual achievement of herd immunity against COVID-19 on the African continent.

**Dr Tim Mastro**, Chief Science Officer at FHI 360, a respected international nonprofit human development organization, said one of the greatest challenges the world faced now was inequitable distribution of vaccines to rich and poor countries.

However, on the bright side, the pandemic had also led to great medical advances, such as the fact that at least 100 vaccines were already in development and that at least five highly effective vaccines had already made it onto the market in just a year.

> These vaccines already offer a path out of the pandemic. One of the biggest obstacles we’re running into now in the early stages of vaccine roll-out is the viral variants that are in the news daily. Vaccine hesitancy is also likely to be a substantial issue going forward.

If vaccine roll-outs were to remain unequal between poor and rich countries, the world could be heading towards the “catastrophic moral failure” predicted by the World Health Organization (WHO).
GLOBAL COVID-19 EXPERTS SEE INEQUITABLE DISTRIBUTION AND VACCINE HESITANCY AS THE KEY CHALLENGES FOR AFRICA IN 2021

Mastro said the global community needed to learn from the mistakes made 20 years ago when it began rolling out mass HIV treatment programs inequitably, as well as the advances made in ever-evolving influenza vaccinations that were now available around the world annually.

“We hope to look back on this time and say that increased investments in research have led to a greater understanding of immunity and greatly improved vaccines. If we do things right with research and investment for COVID vaccines, we could have greatly improved vaccines down the road. One vision would be that we have universal vaccines for all Corona viruses and flues – that's something vaccine science can deliver.”

But, even if all countries could get enough doses, vaccine hesitancy was still a major stumbling block in the pursuit of herd immunity. According to global IPSOS surveys, only three out of four people are willing to be vaccinated. It was for this reason that the FHI 360 had developed a simple three-step guide (available for free download) to help health authorities achieve greater public acceptance of their vaccine roll-out initiatives. The guide was already used successfully in Malawi, in association with UNICEF.

Dr Phionah Atuhebwe, an award-winning public health specialist and vaccination medical officer with WHO Africa, provided a global context on equitable access and mechanisms for mass vaccination roll-outs.

Atuhebwe said there were three ways in which African countries could access vaccines:

- The WHO and CEPI GAVI's COVAX initiative, the fastest route, pooled demand in Africa to convince manufacturers to accelerate manufacturing for the region and ensured enough supply to vaccinate about 20% of Africa's population
- The African Union's Africa Vaccine Allocation Task Team (AVATT) which has secured but not yet procured 670 million doses for Africa
- Countries signing bilateral agreements directly with vaccine manufacturers

Atuhebwe said the four greatest barriers to vaccine distribution and acceptance were:

- Equitable distribution, now being addressed by the COVAX and AVATT initiatives
- National regulations, which had to be dealt with via emergency use authorization avenues, and through all countries’ adoption of their own detailed national vaccine deployment plans which needed to include their target populations, vaccination schedules, chains of command, provisions for special import permits and indemnity agreements with manufacturers
- Targeting of populations, the first in line being health workers, some of whom also struggled with vaccine hesitancy, but who still had to protect their communities from the virus, and the second in line being the elderly who had never before been targeted for mass vaccine program and who were often off the radar of the African health authorities
- Vaccine hesitancy, fueled by local cultures and influencers such as religious and community leaders, as well as people’s mistrust of their own governments

She said vaccine roll-outs could not succeed without a high degree of “micro-planning” of every minute detail of the process in every country. If one link in the chain was broken, the process failed.
Dr Anban Pillay, Deputy Director-General of the South African National Department of Health shared the South African government’s particular procurement and implementation challenges and progress with regards to COVID vaccinations for the whole country.

The SA government’s priority was to choose vaccines that would be effective against the SA variant and prevent severe COVID that led to hospitalizations and mortality, said Pillay. His department also prioritized communicating with the public in non-science language to increase vaccine trust and acceptance.

“Stakeholder guidance is important, and we’ve tried to bring together various stakeholders in the private and public sectors, associations of professionals, labour unions and as well as civil society to engage around these issues.”

Pillay was also adamant about the importance of technology. “We have developed a data system to monitor supply, vaccine uptake and coverage, as well as monitor adverse events. None of these vaccines were approved in traditional ways, and budgeting and financing have had to be quite nimble to respond to the procurement requirements.” Pillay said the government’s vaccine data system was critical for managing timing, stock, records of who were vaccinated, electronic informed consent and recording of adverse events. It was a great improvement on their old paper-based vaccine roll-out systems.

South Africa would be vaccinating about 1.2 million health workers in Phase 1, a much larger group - including the elderly and those with co-morbidities - in Phase 2 and would embark on a truly mass vaccination program by the third quarter of 2021, Pillay said.

Dr Ernest Darkoh, co-founder of BroadReach, Schwab Foundation board member and TIME Magazine health hero, said achieving herd immunity quickly was a massive logistical feat that required pragmatic micro-planning. This entailed proper cold chain and storage management, ensuring that vaccines were handled and prepared timeously and correctly, that staff arrived early enough to prepare vaccines before patients arrived, that patients arrived on schedule, that syringes were safely disposed of, and that proper electronic records were kept along every step of the process so that roll-outs could be managed well on the macro and micro levels.

“At BroadReach we’ve been obsessed with what makes programs tick on the ground on a Monday morning at a large scale. Achieving herd immunity quickly is a massive logistical feat. If you just look at the target of the Africa Centers for Disease Control (CDC) to do 780 million vaccinations over the next 12 months, it will require 3.5 million doses a day for a single dose, or 7 million a day for a double dose. A vast number of factors have to go right for that to work.”
Darkoh therefore also believed in the importance of micro-planning. “When the vaccines arrive in pallets at the airport, that is where the real challenges begin. You need refrigeration, adequately sized storage, people lined up on schedule and staff who are at work early. Staff need to be managed carefully to avoid labor issues. If the people are not there, you lose vaccines that cost money. You need to safely dispose of syringes. You need to keep proper electronic records and supply chain because paper causes major issues. These are basic things our governments need to figure out for effective at scale roll-outs.”

Darkoh said staff needed proper training, not just medically, but also in terms of the technology used on the job. “Sites should conduct dry runs before vaccine arrival. We need countries to urgently invest in integrated digital and data solutions early on, and not when they are already in crisis mode, in the worst heat of the fire.”

Darkoh said technology plays a crucial role in stock management and visualization, the assessment of performance and daily targets, and the management of insights so that governments can plan adequately.

“Because, essentially, we’re not just developing all of these things just for COVID - we need it for all diseases. To achieve excellent large scale results, we need a global control tower approach. Then we have a global approach to a global problem, not a local approach to a global problem. COVID gives us an opportunity to improve all our public health systems – if we are going to put in all this effort it should benefit childhood vaccines, diabetes management, TB management, etc. Don’t make COVID another vertical disease program. Use it as an opportunity to improve all our healthcare systems for the long run.”

About the BroadReach Group

BroadReach Group is a group of social impact businesses focused on harnessing innovation and technology to empower human action. Through its business Vantage Health Technologies they provided training and support to thousands of healthcare workers who have performed more than six million community screenings on the Vantage cloud platform, in partnership with local health authorities during the COVID-19 pandemic.

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