Cameroon Townhall for Healthcare Professionals

Meeting Minutes, September 9, 2023

Host: Cameroon Townhall for Healthcare Professionals

Date: September 9, 2023

Chair: Dr. Munoh Kenne Foma

Co-Moderators: Elvis Ndansi

Guest Speaker: Dr. Bryan Tegomoh, MD, MPH; physician and epidemiologist (co-moderator of the Town Hall, presenting in a personal capacity), Leads regional SARS-CoV-2 genomic surveillance for the US Midwest, as he described it; views were his own and not his employer's

Distinguished Guests: Dr. Samuel Ndinjiakat (Grace Gardens Hospital Ndop), A senior Cameroonian physician in the United States addressed as Professor

Title: Latest Updates on COVID-19: Emerging Variants, Surveillance and Lessons for Cameroon

---

Agenda Items:

1. Welcome by the moderator, Elvis Ndansi, and remarks by the Chair
2. Presentation by Dr. Bryan Tegomoh on COVID-19 updates and emerging variants
3. Reflections and Q&A
4. Closing remarks by the presenter and the Chair

Opening Remarks:

- Elvis Ndansi described the session as a return to COVID-19, the subject that first brought the Town Hall together, as cases were rising again in the United States.
- The Chair said about half of his cancer patients were wearing masks again and noted the political divide over masks, three years into the pandemic.
- He introduced Dr. Bryan Tegomoh, co-moderator, as someone who had followed SARS-CoV-2 genomics closely and trained African countries to identify their own variants.

Presentation Points:

Presentation by Dr. Bryan Tegomoh: "COVID-19: Latest Updates and Emerging Variants"

1. From emergency to endemicity:

Dr. Tegomoh recalled that the UK Health Security Agency and the European CDC declared a state of endemicity on April 27, 2022, when COVID-19 hospitalisation and death rates became comparable to RSV and influenza. WHO Director-General Dr. Tedros ended the Public Health Emergency of International Concern on May 5, 2023, and the United States ended its public health emergency on May 11, 2023. He stressed that COVID-19 is still circulating, with cases rising due to new immune-evasive variants and continuing concern about long COVID.

2. What the data show:

WHO dashboards showed a surge in the Western Pacific driven mainly by mainland China after restrictions were lifted abruptly in December 2022, while the Americas were under-represented because the United States had stopped reporting individual cases. Weekly hospitalisations attributable to COVID-19 in the US were rising slowly. Cameroon had reported little data since the late 2021 to early 2022 wave, so there was no good measure of the local situation. A CDC MMWR analysis showed in-hospital mortality fell from about 15% during the Delta wave to about 4.9% in the later Omicron period.

3. Wastewater surveillance:

With less testing and home antigen tests, case counts have lost meaning, and wastewater is now a main indicator in the US: SARS-CoV-2 genetic material shed in stool is measured at treatment plants and tracks rising hospital admissions. Results are affected by weather, timing and population, and methods need standardising. Wastewater can also track antimicrobial resistance genes, mpox and polio. Africa has very few wastewater treatment plants, and open dumping of waste is common in Cameroonian cities, which limits its use there.

4. Genomic surveillance is declining:

EG.5 was the predominant variant, followed by XBB.1.16 and XBB.1.5, all variants of interest. Submissions to GISAID have fallen sharply worldwide, which makes it hard to follow how the virus evolves. Genomic data are only useful for public health when produced quickly and linked to clinical and epidemiological data, and there is a large gap in bioinformatics and applied epidemiology skills.

5. BA.2.86:

BA.2.86, first reported from Denmark, carries an unusual number of spike mutations and is antigenically distant from other BA.2 descendants. About 100 sequences of BA.2.86 and its descendants had been reported when he checked that morning. Early laboratory studies from groups in China, Sweden (Karolinska Institutet), the Fred

Hutchinson Cancer Center and Boston found less immune escape than its mutation count suggested, and a manufacturer preprint showed that the monovalent XBB.1.5 booster produced strong neutralising antibodies against BA.2.86. He expected the fall booster to protect against current Omicron sub-variants.

6. Long COVID and prevention:

He cited a Nature study showing that vaccination lowered the risk of post-acute sequelae such as fatigue, brain fog, breathing difficulties and muscle pain. Preventing infection remains the best approach, using the layered 'Swiss cheese' model of masks, staying home when sick, testing, vaccination and treatment, which also applies to RSV and influenza.

7. Diagnosis and treatment:

Diagnostic algorithms (IDSA) have not changed; antigen and PCR tests still work because they target conserved regions. There is no clear antibody threshold that defines protection. No monoclonal antibody works against current variants. Nirmatrelvir/ritonavir (Paxlovid) within five days remains the standard for non-severe disease in those at risk, and dexamethasone is effective for hospitalised patients needing oxygen but not for those who do not. Molnupiravir may accelerate viral mutation and is now a last resort. Paxlovid remains expensive and largely unavailable in Cameroon and Africa.

Discussions and Q&A Session:

- **The Chair noted that new therapeutics are still unavailable in most of Africa and that court-released documents showed South Africa paid more for COVID-19 vaccines than richer countries. How can Africa avoid this in future?** Dr. Tegomoh said technology transfer, for example for mRNA platforms, matters, but Africa must build its own expertise in vaccines and therapeutics, which requires political ownership by African Union member states. Elvis Ndansi added that procurement through third parties, because of complex government payment processes, adds cost, and that local manufacturing and African-discovered molecules are needed.
- **A participant asked how long the virus survives in wastewater.** Dr. Tegomoh explained that wastewater testing measures viral nucleic acid by PCR, not live virus. Live virus has occasionally been isolated from stool, and people with immune suppression can shed virus for long periods.
- **The Chair asked whether wastewater or soil sampling could work in Cameroon, where most homes use pit toilets or individual septic systems.** Dr. Tegomoh said Cameroon lacks the linked sewer networks that make community sampling possible, and that funding for wastewater analytics in Africa will be hard to use

without treatment plants. Progress depends on sanitation investment under the SDGs and government ownership.

- **Dr. Samuel Ndinjiakat asked whether the US ever reached herd immunity, and whether there is an antibody titre that proves immunity.** Dr. Tegomoh said neither can be defined for a virus that keeps evolving to escape immunity. Higher neutralising antibody levels correlate with protection and wane over time, but no clear correlate of protection exists. The UK and European CDC declared endemicity based on hospitalisation and death levels, not a herd immunity threshold. He expected yearly boosters, as for influenza.
- **Elvis Ndansi asked whether rapid and home tests are still accurate against new variants.** Dr. Tegomoh said they are, because they target conserved parts of the virus. The bigger question is the value of counting cases when, by a CDC estimate, about 95% of the US population has some immunity.
- **The Chair asked whether a new Greek-letter variant is expected, whether patients should get vaccinated now or wait for the new booster, and whether hospital admission testing could support surveillance.** Dr. Tegomoh said BA.2.86 sits within the BA.2 lineage and he did not expect it to be named a variant of concern unless it changed hospitalisation patterns. He expected the ACIP to recommend the XBB.1.5 booster for people 65 and over and those with underlying conditions. Hospital samples often have very low viral loads (cycle thresholds above 30 to 35) and fail sequencing, so wastewater, nursing home testing and hospitalisations due to COVID-19 are better indicators.

Call to Action and Closing:

- Dr. Tegomoh noted the Africa CDC's new epidemic service for training field epidemiologists and said Cameroon has sequencing machines but lacks bioinformatics capacity. He concluded that Africa needs African solutions to African problems.
- The Chair reminded participants that dexamethasone, the most effective drug for severe COVID-19, is cheap and available, and listed gains from the pandemic in Cameroon: more medical oxygen and oxygen plants, ICU capacity, and PCR machines that can be used for other work.
- Elvis Ndansi closed the session and announced the next meeting in a fortnight.

Next Meeting

In a fortnight (Sep 23, 2023).

Recording: https://www.youtube.com/watch?v=Lyr92v39Ck4

Submitted by: Co-Moderators, Cameroon Townhall for Healthcare Professionals