Policy Briefing:

Pandemic Preparedness in Cameroon: Lessons from COVID-19

Overview:

This policy briefing synthesizes key insights from the Cameroon Townhall for Healthcare Professionals meeting held on May 21, 2022, focusing on the theme "Pandemic Preparedness: Experiences and Lessons Learnt", with presentations by Dr. Bryan Tegomoh and Dr. Karl Gwei Njuwa Fai of Epicentre.

Context:

The session took place as Omicron subvariants spread and monkeypox appeared in countries outside Africa. Cameroon had built new capacity during COVID-19 (an Emergency Operations Center, 45 PCR laboratories and four sequencing platforms), yet its 2021 IHR self-assessment remained below regional and global averages on most capacities, and only about 1.8 million vaccine doses had been given.

Key Issues:

1. **Hidden spread:** Seroprevalence surveys showed infection far above reported cases across Africa, including 18.3 to 20.5 percent in Cameroon by mid-2021, so case counts alone misled decisions.
2. **Data not reaching decision makers:** Much of the response's data and experience in Cameroon had not been published or shared, limiting its use by policymakers and partners.
3. **Genomic and laboratory dependence:** Sequencing early in the pandemic relied on other countries, and laboratories depended on imported assays and reagents.
4. **Vaccine hesitancy and targeting:** Acceptance was 37 percent nationally, with the belief that vaccines are dangerous the main reason for refusal. The problem had shifted from supply to uptake and cold chain.
5. **Gaps in IHR capacities:** Policy and legal instruments, infection prevention and control, food safety and simulation exercises were weak points.

Discussion Highlights:

- Cameroon's Emergency Operations Center, built during Ebola preparedness, is now used for cholera, yellow fever and monkeypox.

- Screening with multiplex PCR before sequencing can cut sequencing costs by up to about 70 percent.
- Serosurvey results differ by platform, so methods need to be harmonised for comparison.
- Participants favoured vaccination targeted at older people and those with chronic disease, delivered through community engagement.

Recommendations:

- **Build preparedness into the Health Sector Strategy:** MINSANTE should integrate IHR capacity gaps from the SPAR and Joint External Evaluation into the current Health Sector Strategy 2016 to 2027, with costed actions on legal instruments, infection prevention and control and food safety. A first step is a review workshop with the Emergency Operations Center.
- **Institutionalise genomic surveillance:** The National Public Health Laboratory and partners should run a routine Cameroon genomic surveillance dashboard with Africa CDC, using multiplex PCR screening to target sequencing, and link genomic data to epidemiological line lists.
- **Publish and share response data:** MINSANTE and Epicentre should publish seroprevalence, mortality and vaccine acceptance findings, and continue scientific writing workshops. Diaspora professionals should volunteer as writing coaches through the town hall.
- **Target vaccination by risk:** The Expanded Programme on Immunization and regional delegations should focus COVID-19 vaccination and boosters on older adults and people with hypertension or diabetes, using door-to-door community strategies, and plan repeat serosurveys to guide decisions.
- **Train applied epidemiologists and test plans:** MINSANTE should expand field epidemiology training and run regular simulation exercises for outbreaks such as monkeypox and cholera, starting with one tabletop exercise per region.
- **Develop local assay and vaccine capacity:** Research institutions should develop and validate in-house assays and use African technology transfer for vaccines against malaria, diarrhoeal disease and other local priorities.

Next Steps: A Ministry of Health scientific writing workshop was scheduled for the following week, with diaspora coaching. Speakers offered laboratory and genomic collaboration to teams in Cameroon.

Conclusion: COVID-19 left Cameroon with real assets: an Emergency Operations Center, laboratory and sequencing capacity, and trained staff. Using them for the next

threat will require linking data to decisions, publishing what was learned, targeting interventions to local risk and keeping the diaspora engaged.

Prepared by the Co-Moderators, Cameroon Townhall for Healthcare Professionals, from the session of May 21, 2022. Recording: https://www.youtube.com/watch?v=epizjr9-gmg