Cameroon Townhall for Healthcare Professionals

Meeting Minutes, June 18, 2022

Host: Cameroon Townhall for Healthcare Professionals

Date: June 18, 2022

Chair: Dr. Munoh Kenne Foma

Co-Moderators: Dr. Bryan Tegomoh

Guest Speaker: Dr. Samuel A. Angwafor, MD, neurologist, PhD (epilepsy epidemiology, UCL Queen Square Institute of Neurology), Neurologist and epilepsy researcher, Cameroon; founder of the nurse-led epilepsy clinic at Batibo District Hospital, North West Region

Distinguished Guests: Prof. Mathias Fobi, bariatric surgeon (originator of the Fobi pouch), Association of Cameroonian Physicians in the Americas (ACPA), Dr. Alain Lekoubou, neurologist and epileptologist in the United States, A geriatrician in the United Kingdom

Title: Epilepsy in Cameroon: How Prepared Are We?

Agenda Items:

1. Presentation by Dr. Samuel A. Angwafor on epilepsy in Cameroon
2. Reflections from invited guests
3. Discussion and Q&A
4. Vote of thanks by the Chair and closing

Opening Remarks:

- A participant introduced Dr. Samuel A. Angwafor, who presented on epilepsy in Cameroon.

Presentation Points:

Presentation by Dr. Samuel A. Angwafor: "Epilepsy in Cameroon: How Prepared Are We?"

1. What works in sub-Saharan Africa:

Dr. Angwafor presented a scoping review of epilepsy health services in sub-Saharan Africa that he carried out with colleagues in Nigeria and Canada. Most programmes were rural and run by nurses or general health workers rather than physicians, and they achieved good seizure control in about two thirds of patients, mostly with phenobarbital. Most of the funding came from external agencies, which leaves programmes exposed when funding ends.

2. Epilepsy care does not need specialists or scans to start:

He said health workers cannot excuse themselves from treating epilepsy because they lack EEG, imaging or a neurologist. The core concepts are simple, a nurse-led rural model brings care close to patients and lowers cost, and training non-physician workers takes few resources. He considered epilepsy surgery a lower priority while most of the roughly 70 percent of patients who could be controlled with medicines remain untreated.

3. A model linked to the district health service:

He proposed nurse-led epilepsy clinics at health area level that diagnose, treat and counsel, linked to a district hospital epilepsy team that secures anti-seizure medicines, with mobile clinics and home visits for hard to reach communities. At Batibo he had run an epilepsy clinic with about 100 registered patients receiving monthly treatment, and about 60 percent were seizure free on phenobarbital alone before the clinic was lost to the armed conflict.

4. Integration with onchocerciasis control:

He noted growing advocacy for integrating epilepsy care into the river blindness programme, for example by training community distributors of ivermectin to identify people with epilepsy and distribute anti-seizure medicines. He saw integration into primary health care as the route to sustainability.

5. Proposals for Cameroon:

He called for cohort and risk factor studies, particularly on neurocysticercosis and onchocerciasis, and said epilepsy will not be controlled without preventing parasitic infections. He urged training of health personnel using free International League Against Epilepsy resources, respectful engagement with traditional healers, teachers and clerics, who are often more trusted than physicians, government subsidy of anti-seizure medicines, and non-physician-led rural epilepsy clinics in endemic areas.

Discussions and Q&A Session:

- **Dr. Alain Lekoubou asked whether Cameroon is going through an epidemiological transition, with more epilepsy now due to stroke, diabetes, hypertension and head injuries from motorcycle and road accidents, and warned against focusing only on infectious causes.** Dr. Angwafor agreed that people are living longer and that he sees more seizures beginning at 50 or 60, with about a third of his patients with cognitive impairment or dementia having seizures. He described the pattern in Cameroon as 'trimodal': genetic epilepsies in young children, idiopathic and preventable (parasitic) epilepsies in the middle years, and acquired causes in older adults.
- **The lead moderator asked about partnership: how diaspora colleagues could support the work through research collaboration and funding, and what the priority areas are.** Dr. Lekoubou said diaspora partners should listen first and follow the lead of those working in Cameroon, and that funding exists if partners can show they can be trusted, citing a Nigerian stroke collaboration. Dr. Angwafor named two priorities: mapping the burden of epilepsy across regions to guide resource allocation (he described families in the Batibo area where every member has epilepsy), and access to anti-seizure medicines. He said the price of phenobarbital from the regional drug supply agency had risen about tenfold, that a year of treatment once cost less than a dollar, that valproate and carbamazepine are unaffordable for many, and that donated levetiracetam often expires or runs out after patients become seizure free.
- **Prof. Mathias Fobi was invited to comment.** He said diaspora professionals should not dictate what is done and should take direction from experts in Cameroon. He explained he had joined to see how the forum runs because the ACPA is looking at how Cameroonian doctors in America can collaborate with the town hall.
- **The lead moderator asked about the management of epilepsy in pregnancy and fertility among women with epilepsy.** Dr. Angwafor acknowledged that his own experience is limited and that the problems women face, including the risks of valproate in pregnancy, fertility and delivery, are under studied. He saw a place for work with gynaecologists and paediatricians, and credited Prof. Alfred Njamnshi as a pioneer and mentor in neurology and epilepsy in Cameroon.
- **Dr. Bryan Tegomoh asked Dr. Lekoubou whether onchocerciasis and neurocysticercosis drive epilepsy in the United States and what the main causes are there.** Dr. Lekoubou described a bimodal distribution: genetic and congenital causes before age one, and dementia, stroke, tumours and head injury after 60 to 65, with head injury and stroke also important in mid life. Parasitic causes play a minor role and are seen mainly in travellers or migrants from endemic areas.

- **A geriatrician in the UK described UK practice (levetiracetam and phenytoin in older people, CT before referral to a first seizure clinic) and asked whether imaging should be part of the protocol, since some causes may be curable.** Dr. Angwafor said he orders more CT scans for headache than for epilepsy because, in the local economic context, imaging adds little to initial management: by the time neurocysticercosis causes epilepsy the cyst is usually calcified and the parasite dead. He lowers the threshold for imaging in drug resistant epilepsy, focal EEG findings or a suspected treatable structural lesion. The geriatrician agreed but stressed that lifelong anti-seizure medicines carry real side effects, particularly for children.
- **Dr. Munoh Kenne Foma asked whether mass treatment with albendazole and praziquantel could be used in endemic areas such as Batibo without first measuring prevalence.** Dr. Angwafor said there is no data on the share of epilepsy attributable to neurocysticercosis, and that antiparasitic drugs only act on active cysts, while most patients have calcified cysts. He favoured hygiene and sanitation, food and slaughterhouse inspection, and vaccination of people and pigs as more sustainable prevention.
- **Another participant commented on the imaging debate.** He said the speaker's approach follows public health logic: a CT scan costs about 75,000 to 100,000 FCFA, which many families with a person with epilepsy cannot pay while still buying medicines, so management must be driven by the resources patients actually have.

Call to Action and Closing:

- Dr. Munoh Kenne Foma gave the vote of thanks. He recalled that the town hall began during COVID-19 in New York to share experience with colleagues in Cameroon, and said 40 to 50 people still join each session, besides those watching on social media.
- He welcomed partnership with the ACPA and thanked Prof. Fobi, the volunteer moderators who meet every fortnight, and Dr. Angwafor.
- He noted that the town hall had led to research partnerships and grants, and that non-Cameroonian participants from Ghana and Gabon join and want to replicate the model.
- The lead moderator encouraged physicians abroad to join the ACPA and closed the session, inviting participants to the unrecorded parking lot.

Recording: https://www.youtube.com/watch?v=1vJ2GkwTkk8

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