Policy Briefing:

Young-Onset Diabetes in Cameroon: Diagnosing and Treating a Possible New Subtype

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Overview:

This brief draws on a session of the Cameroon Town Hall for Healthcare Professionals held on August 1, 2026. Dr. Jean Claude Njabou Katte presented results of the YODA study showing that most young Cameroonians and other Africans diagnosed with type 1 diabetes lack the autoimmune and genetic markers of type 1 disease, suggesting a distinct, non-autoimmune, insulin-deficient form of diabetes.

Context:

Young people with type 1 diabetes in Cameroon die at rates far above those in high-income countries (about 33 per 1,000 in a published Cameroonian analysis, as stated), with hypoglycaemia a leading cause in African cohorts. In the YODA study most young people with clinically diagnosed type 1 diabetes were islet-autoantibody negative, including 61% of those diagnosed within a year, and their genetic profile differed from classic type 1 (study data). Antibody thresholds in Africans differ from manufacturer thresholds. Antibody tests and monogenic testing are not routinely available, and insulin analogues are only now becoming available through donor programmes.

Key Issues:

1. **Misclassification:** A clinical label of type 1 diabetes may cover several diseases, including monogenic forms that respond to tablets.
2. **Imported reference values:** Antibody and other laboratory thresholds from European populations misclassify African patients.
3. **High mortality:** Young people with diabetes die from hypoglycaemia and limited access to care.
4. **Unknown cause:** The cause of non-autoimmune insulin-deficient diabetes is not known; infections, drugs and environmental exposures are candidates.
5. **Limited access to technology:** Analogue insulins, glucose monitoring and genetic testing remain scarce.

Discussion Highlights:

- Dr. Katte: if you can afford only one antibody test in Africa, use GAD.

- Dr. Katte: one girl with HNF1A diabetes moved from insulin injections to tablets after genetic diagnosis.
- Dr. Foma: reference values must come from our own populations.
- Dr. Katte: research matters only if it stops children dying of diabetes.

Recommendations:

- **Protect young people living with diabetes:** MINSANTE, with the National Diabetes Programme and partners, should guarantee free insulin, glucose meters and strips, and hypoglycaemia education for every child and young adult with diabetes, and record deaths and their causes in paediatric diabetes clinics.
- **Use African reference thresholds:** Laboratories and researchers should adopt African-derived thresholds for islet autoantibodies and validate other reference ranges in Cameroonian populations, with support from the National Public Health Laboratory and universities.
- **Offer targeted diagnostic testing:** Referral diabetes clinics should introduce GAD antibody testing and C-peptide for young people with new diabetes and refer antibody-negative patients with preserved C-peptide for monogenic testing through research partnerships.
- **Support the PANDA cohort and data sharing:** MINSANTE and the University of Yaoundé I should support recruitment to PANDA in all regions, ethical frameworks for pancreatic tissue donation, and an open data resource, so that causes and prevention can be identified.
- **Build domestic funding for research:** Government and private sector leaders in Cameroon should fund diabetes research and reference range studies, with tax incentives for donations.

Next Steps: The town hall will follow the PANDA study and invite Dr. Katte to report results, and will hold its next session on autism.

Conclusion: The YODA findings suggest that many young Africans labelled with type 1 diabetes have a different disease. Getting the diagnosis right, using African reference values and keeping these children alive are the immediate priorities while research looks for the cause.

Prepared by the Co-Moderators, Cameroon Townhall for Healthcare Professionals, from the session of August 1, 2026. Recording to follow.