

Baseline characteristics in people with type 2 diabetes in Sub-Saharan Africa: Results from the iCaReMe global registry

Elliot K. Tannor¹, Ifeoma I. Ulasi², Sedeshan S. Govender³, Jemima H.S. Kamano⁴, Amam C. Mbakwem⁵, Ahmed Reja⁶, Marlin J. McKay⁷, Angela Murphy⁸, Haroon Mia⁹, Hussein M.A. Bagha¹⁰, [Kuvén Naidu](#)¹¹

¹Department of Medicine, School of Medicine and Dentistry, Kwame Nkrumah University of Science and Technology (Knust), Kumasi, Ghana

²Department of Medicine, College of Medicine, University of Nigeria, Nsukka, Nigeria.

³Netcare uMhlanga Hospital, Durban, South Africa

⁴Moi University, Moi, Kenya

⁵Department of Medicine, Lagos University Teaching Hospital, Lagos, Nigeria

⁶Department of Internal Medicine, School of Health Sciences, Addis Ababa University, Addis Ababa, Ethiopia

⁷Goldman Medical Centre, Roodepoort, South Africa

⁸Sunward Park Medical Centre, Boksburg, South Africa

⁹Busamed Gateway Private Hospital, Durban, South Africa

¹⁰MP Shah Hospital, Nairobi, Kenya

¹¹East Rand Physicians, Benoni, South Africa

Abstract

Background: Hypertension (HTN) and type 2 diabetes (T2D) are the most common risk factors for heart- and kidney-related complications, increasing the risk of heart failure (HF) and chronic kidney disease (CKD), both of which are associated with a higher risk of cardiovascular death. Although sub-Saharan Africa bears a disproportionately high burden of cardiometabolic diseases, there is a scarcity of real-world data on patients' characteristics, risk factors, and management practices.

Methods: The iCaReMe Global Registry (NCT03549754) is a prospective registry collecting data from routine clinical practice in patients with T2D, HTN, HF, and/or CKD. In this report, we included data of T2D patients enrolled between February 2019 and April 2024 from five countries (Kenya, South Africa, Ghana, Ethiopia, and Nigeria).

Results: Overall, 1462 adults (mean [SD] age of 58.98 [12.38] years, 53.8% females) with T2D were enrolled. In patients with available data, 80.4% had HTN, 12.4% had CKD confirmed by UACR or measured GFR, and 10.3% had both HTN and CKD. When patients were categorized according to their computed eGFR, stage 3-5 CKD were reported in 27.8% of patients with available eGFR data (N=811).

The prescribed medications at baseline included anti-diabetic therapies (97.9%), anti-hypertensive therapies (73.2%), anti-lipidemic therapies (59.4%), anti-platelet therapies (15.3%), anti-HF therapies (3.3%), and cardiac therapies (0.96%).

Conclusion: The initial findings suggest that eGFR-based screening may identify a larger proportion of patients with advanced kidney disease. Additionally, most T2D patients were on anti-hypertensive and anti-lipidemic medications. These findings underscore the importance of comprehensive screening and improved therapeutic strategies to prevent the progression of CKD in T2D patients in this region.