

## INTERNATIONAL SUMMIT ON HEPATOLOGY AND NEPHROLOGY RESEARCH



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## Advances in Chronic Kidney Disease in Africa

Abstract: Africa particularly sub-Sharan Africa (SSA) faces major challenges in respect to chronic kidney disease (CKD). There is a rising prevalence due to the combined effects of hypertension, diabetes and human immunodeficiency virus (HIV) (and the interaction between them), and the effect of apolipoprotein L1 (APOL1) variants on the susceptibility to CKD. Epidemiological data on the prevalence of CKD are of low to medium quality and reliable data are urgently needed for health planning. Furthermore, there are important deficiencies in creatinine-based equations in underestimating the prevalence of CKD in Africa and evidence suggests that cystatin C based equations are more reliable. There is a changing spectrum of HIV related CKD with the greater availability of antiretroviral treatment. Major clinical trials using SGLT2 inhibitors have signalled a major advance in the treatment of CKD, especially in relation to type 2 diabetes, but the affordability, availability and relevance to the African population is not established. The importance of the effects of hypertension in pregnancy and pregnancy related acute kidney injury on CKD and the newer concept of CKD of unknown cause (CKDu) are highlighted. Hypertension remains a dominant cause of CKD in Africa and newer information suggests the most appropriate treatment to control blood pressure and thus prevent CKD is the combination of either amlodipine plus a thiazide diuretic or angiotensin converting enzyme (ACE) inhibitor.

Keywords: chronic kidney disease - Africa - advances

**Biography:** Brian Rayner is an emeritus Professor and Senior Scholar of the University of Cape Town. He received the World Hypertension League Award for Notable Achievement in Hypertension in 2014. He established the Kidney and Hypertension Research Unit, which is an active training and research centre for Nephrologists from SSA. The ISH endorsed the Division as a Regional Training Centre of Excellence. Brian Rayner's active research interests are therapy of hypertension, CKD, and lupus nephritis, and genetics of severe hypertension in blacks. He has 189 publications in peer reviewed journals. He was/is a principal investigator in 47 major international research studies.