P0769 | **ESTABLISHING AN AFRICAN NETWORK FOR CHRONIC KIDNEY DISEASE EPIDEMIOLOGY: THE CKD-AFRICA COLLABORATION**

Cindy George[1], Mark Woodward[2], Ikechi Okpechi[3], Andre Kengne[1]

[1]South African Medical Research Council, Non-Communicable Diseases Research Unit, Cape Town, South Africa, [2]University of Oxford, The George Institute for Global Health, Oxford, United Kingdom and [3]University of Cape Town, Division of Nephrology and Hypertension, Cape Town, South Africa

Background and Aims: Chronic kidney disease (CKD) is a global public health problem, disproportionately affecting individuals of African ancestry. Unfortunately, due to the lack of data in various African countries or the limitations of available data, the true magnitude of CKD on the continent is still unknown. Although there has been an increase in the number of reports on CKD prevalence in recent years, up to now there has been no coordinated effort to provide reliable estimates to adequately support the health service and policy solutions to address the adverse consequences of CKD in Africa. The Chronic Kidney Disease in Africa Collaboration (CKD-AFRICA Collaboration), which is an initiative of the South African Medical Research Council, seeks to address this issue by collating data, at individual participant data (IPD) level, from existing African studies. Thus, the main aims for establishing this platform are, (1) to utilize the available data from all relevant prevalence studies of CKD, to provide an updated and comprehensive synthesis on the burden of CKD in Africa, and (2) to bring together active investigators in the field of CKD epidemiology and prevention, by providing a platform to plan, in a more coordinated way, future observational and interventional studies on CKD across the continent.

Method: To establish the CKD-AFRICA Collaboration as a continental resource, a stepwise approach was utilized, which included, 1) the identification of data sources through various systematic literature searches and contacting health agencies to access publicly available population-based measurement surveys; 2) establishing a database platform, by inviting active CKD research groups to contribute data on CKD at IPD level; 3) data processing and quality control and 4) piloting the consortium, by using the data from existing studies to determine the prevalence of CKD in the African adult population, by two-stage IPD meta-analysis.

Results: Through extensive systematic literature searches, 134 potential collaborators were identified. These included studies conducted in general adult populations and high-risk sub-populations, such as those with HIV/AIDS, hypertension and diabetes. Of those identified, 101 principal investigators (PIs) were contacted, via email, to gauge their interest in collaborating in the consortium, as 33 PIs lacked contact information. Of the 101 PIs, 42 responded positively to the call and have agreed to participate in the consortium, spanning 12 African countries, namely Ghana, Kenya, Nigeria, Burundi, Cameroon, Maputo, Sudan, South Africa, Egypt, Uganda, Senegal and Tanzania (Figure 1). To date, the consortium has potential access to 27,346 IPD, with 11,810 IPD already received.

Conclusion: The strength of this Consortium has far-reaching potential for Africa. Indeed, by harnessing IPD from numerous African studies, important research questions can be explored, and by connecting active CKD researchers, this platform could aid a more coordinated way of developing future observational and interventional studies on CKD in Africa. The research obtained from this collaboration will therefore permit the exploration in understanding the diversity of clinical manifestations of CKD in Africa.
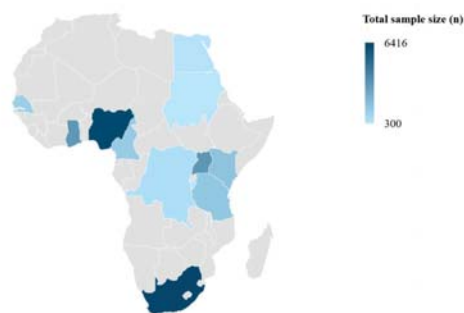

Figure 1: Distribution of African countries agreeing to participate in the consortium. The IPD ranges from 300 participants to 6,416 participants. The 12 shaded countries represent those for which IPD is available. The shading from light blue to dark blue represents the increasing number of IPD available per country, thus the darkest blue shading represents the countries with the most available IPD.