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EDITORIAL

CHARTING THE WAY FORWARD

I welcome this edition of the West African Journal of Medicine. I want to use this opportunity to appreciate all our contributors and the Colleges for their immense support in making our journal formidable. I want to specially acknowledge our guest editors for this edition - Prof. Christopher Alebiosu, Prof. Olufemi Adewole and Prof. George Akpede for their adept editorial contributions in this journal edition.

The editorials featured two communicable diseases and one noncommunicable disease, with particular reference to original articles published in this edition. It is no longer news that Africa remains a vulnerable hub for communicable diseases despite all efforts to reduce the trend. More so, noncommunicable diseases are rapidly on the rise further compounding the problems. Chronic kidney diseases have been on the increase globally, affecting about 10% of the world's adult population, with great challenges in the management of patients affected.^{1,2} From glomerulonephritides to hypertensionattributed kidney disease, renal physicians in developing nations have their hands full, battling a rising pandemic.² However, HIV-Nephropathy has added to this burden in recent years. More worrisome is the fact that children are now presenting with HIV-Nephropathy resulting from vertical transmission and homosexual abuse. Prof. Alebiosu, in his editorial, HIV-Associated Nephropathy, gave a synopsis of this disease and stressed the need for routine screening for HIVAN among HIV patients.

In spite of the fact that Lassa Fever has been with us for over fifty years, Sub-Saharan Africa is yet to have a firm grip on its prevention and management.³⁴ Prof. Akpede in his editorial on *Enhancement of Management of Severe Lassa fever in the Sub-Region*, noted the persistent lack of preparedness that is demonstrated whenever there is an outbreak of this disease. He stressed the need for adequate surveillance, improved diagnostic capabilities and enhanced management protocols to combat this deadly viral haemorrhagic disease.

Lung cancer was previously reported to be low in Africa. However, with improvement in detection and advancement in diagnostic technology, the continent is experiencing a rapid increase in incidence and prevalence of the disease.⁵ In his editorial on *Primary* Lung Cancers: Challenges in Developing Countries, Prof. Adewole noted with dismay the alarming increase in lung cancer deaths largely attributable to increasing exposure to risk factors, late presentation of patients and poor health infrastructure. It is germane to note that combating communicable and non-communicable diseases in this subregion requires strong political will, good health insurance coverage and investment in healthcare services and training⁶

This edition has a wide array of articles that makes it an interesting read. We are happy to have attained an effective landmark of publishing monthly. This has greatly improved our impact factor. Moving forward, we will be taking certain steps in order to maintain our standard of excellence.

1. The journal website has been upgraded to make access to manuscript submission, review and publication seamless. Gradually, we are coming to a point where authors can submit and track manuscript online. The Journal can however, still be accessed through the following media.

- *Facebook:* (https://www.facebook. com/wajmedic)
- *Twitter:* (https://www.twitter.com/ wajmedic)
- *The Blog:* (https://wajmeditor.blog spot.com)
- 2. The full text of the manuscripts would soon be made available online to interested researchers who will obtain it at a fee.
- 3. Furthermore, the Journal is expanding to accommodate current issues, clinical perspectives, conference and workshop reports, patient vignettes, medical and health news and short communications in various fields of medicine and surgery.
- 4. We wish to invite scholars to contribute to a CME column which would make the journal more functional to our junior colleagues globally.
- 5. In view of the current global economic crunch which has affected the print media, we are considering increasing our fee for submission and publication. Currently, the fees paid by authors are not able to meet with the exorbitant price of the journal production. This is being reviewed upwards to about 30% and would be reflected in our journal subsequently.

We welcome subscriptions by various institutions for the Journal. Kindly send a mail to wajmeditorinchief @gmail. com for enquires on subscription. We hope to serve you more as the year unveils and we look forward to more co-operation from our authors,

Editorial

reviewers and the Colleges. You are encouraged to keep sending in your articles for review and publication in this distinguished and vastly informative journal.

PROF. G. E. ERHABOR

Editor-in-Chief West African Journal of Medicine (WAJM)

REFERENCES

- Ellen F C. The impact of chronic kidney disease on global health. Nat Rev Nephrol. 2020;16:251.
- Haileamlak A. Chronic Kidney Disease is on the Rise. Ethiop J Health Sci. 2018;28(6):681–2.
- Akpede GO, Asogun DA, Okogbenin SA, Okokhere PO. Lassa fever outbreaks in Nigeria. Expert Rev Anti Infect Ther. 2018;16(9):663–6.
- 4. Woyessa AB, Maximore L, Keller D,

Dogba J, Pajibo M, Johnson K, et al. Lesson learned from the investigation and response of Lassa fever outbreak, Margibi County, Liberia, 2018: Case report. BMC Infect Dis. 2019;19 (1): 4–9.

- Gaafar R. SC17.05 Lung Cancer in Africa: Challenges and Perspectives. J Thorac Oncol. 2017;12(1):S115–6.
- Lubuzo B, Ginindza T, Hlongwana K. The barriers to initiating lung cancer care in low-and middle-income countries. Pan Afr Med J. 2020;35:1–10.

HIV ASSOCIATED NEPHROPATHY

Human immunodeficiency virus infection can lead to progressive deterioration in renal function known as HIV-associated nephropathy (HIVAN). Importantly, individuals of African ancestry are more at risk than their European descent counterparts.

There is a wide geographical variation in the prevalence of HIVassociated nephropathy ranging from 38% to 48.5% worldwide. Few publications are available about prevalence in African countries. Despite the global recommendation and use of combine active antiretroviral therapy in treating HIV-infected patients, HIVAN is a leading cause of chronic renal disease in HIV-1 positive individuals.

HIVAN was described in persons living with AIDS in 1984 but earlier named AIDS-associated nephropathy. HIV-positive cases showed similar clinic pathological features. The nephropathy is more common amongst people of African descent, largely due to polymorphism in APOL1 gene. Two APOL1 risk alleles, G1 (containing two missense mutations, rs73885319 and rs60910145) and G2 (a frameshift deletion rs71785313), at the serum resistance–associated interactingdomain-encoding region of APOL1 are associated with an increased susceptibility to developing HIVAN. Although individuals with HIVAN are predominantly males, studies have failed to show a direct correlation between gender or age and HIVAN.

Presentation is usually with low CD4 count, high viral load and massive proteinuria and renal insufficiency. Manifestations include hypoalbuminemia, with almost little or no peripheral oedema and hypertension, a very rapid progression to end-stage renal disease with normal or enlarged kidney sizes. Renal histology shows global or focal segmental glomerulosclerosis, degenerative and hypertrophic changes in visceral epithelial cells, mesangial deposits of C3, IgM and at times IgG, microcystic tubular dilatation containing plasma proteins, interstitial oedema and tubuloreticular inclusions in glomerular and peritubular endothelial cells. Significantly, collapsing glomerulopathy was not included in earlier reports until 1986. The histological lesions are however very similar to heroin-associated nephropathy or idiopathic FSGS.

Typically, there is glomerular

basement membranes collapse, with hypertrophy and hyperplasia of glomerular epithelial cells, and active tubulointerstitial disease indicated by microcytic tubular dilatation, interstitial inflammation and tubular injury. Microcystic changes are the most consistent renal findings in HIVAN and these lesions were responsible for the renal enlargement.

The estimated prevalence of HIVAN in Nigeria was estimated to be 77% and 76.7% in the age group of 21 – 40 years. Surprisingly, children with HIV are not protected against HIVAN. The prevalence of HIVAN in children in Nigeria was estimated to be 31.6% associated with high mortality. Risk factors in children include proteinuria, advanced disease, low CD4 count and the use of the combined highly active antiretroviral therapy (HAART).

The finding of HIVAN amongst children, who acquired HIV-1 through vertical transmission in the late 1980s, indicated the presence of HIV-related glomerulopathy that could evolve independently of intravenous drug use. As documented by the authors of '*HIV associated Nephropathy among Children with Renal Disease in Port*