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## TABLE OF CONTENTS

GENERAL INFORMATION	IC
INFORMATION FOR AUTHORS	1F
EDITORIAL NOTE:	
Antioxidant Depletion in Asphyxiated Neonates, Neuropsychiatric Burden in Parkinson's Disease, and Public Health .....	519
Vulnerabilities: The Need for Proactive Healthcare Delivery – <i>G. E. Erhabor</i>	
LETTER TO THE EDITOR	
Remarks on the Correlation between the EU-TIRADS Score and the Definitive Histology of Thyroid .....	521
Nodules Operated on in Lomé	
I. Sengul, D. Sengul	
ORIGINAL ARTICLES	
Assessing the Correlation of Protein C and Protein S Levels with Stroke Severity and Functional .....	523
Outcomes in Adults with Ischaemic Stroke	
A. O. Idowu, M. B. Fawale, R. A. Bolarinwa, A. A. Sanusi, A. Ogunmodede, S. O. Lawal, O. A. Asifat, A. A. Adebawale, M. A. Komolafe	
Assessment of the Initial Acquisition of <i>Streptococcus mutans</i> in Infants Born to Pregnant Women .....	531
Attending the Lagos University Teaching Hospital	
O. Ashaolu, O. O. Orenuga, F. A. Oredugba, F. O. Nwaokorie	
Knowledge, Risk Perception and Prevention against Diphtheria among Caregivers of Children .....	542
under-fives in Chikun Local Government Area, Kaduna State, Nigeria	
T. U. Okwute, I. A. Joshua, S. Kabir	
Enzymatic and Non-enzymatic Antioxidants as Related to Immediate Hospital Outcomes in Term .....	552
Nigerian Babies with Perinatal Asphyxia	
D. K. Kuti, T. Ogundele, B. P. Kuti, A. O. Oyelami, E.A Adejuyigbe	
Evaluation of Microalbuminuria Level to Determine Diabetic Nephropathy Among Type 2 .....	559
Diabetic Patients in Zaria, Nigeria	
A. B. Dogara, I. S. Aliyu, D. S. Mshelia, H. M. Suleiman, F. A. Mahmud, M. G. Abubakar	
Prevalence and Risk Factors of Contrast Induced Nephropathy in Maiduguri, Northeastern Nigeria .....	566
U. Loskurima, M. M. Sulaiman, M. Lawan, A. Farate, J. Shettima, A. Mamza, A. O. Amali, A. G. Habibu, M. M. Dungus, B. Bunu, A. I. Galtimari, I. K. Chiroma, A. D. Dayar, M. M. Dungus, I. Ummate	
Prevalence of Psychosis Spectrum Symptoms, Association with Quality of Life and Caregiver Burden .....	571
in Yoruba Nigerians with Parkinson's Disease: A Matched Case Control Study	
A. Ojagbemi, O. Adediran, H. Oyedapo-Ishola, T. Olojugba, O. Elugbadebo, U. Imo, A. K. Bakare, F. Taiwo	
Rubella IgG Immunity: Spatial Distribution, Euclidean Distance Analysis, Correlates and .....	581
Predictors among Women of Reproductive Age, Southwest Nigeria	
K. A. Durowade, O. I. Musa, M. A. Adeniyi, R. B. Mudashiru, T. A. Sanni, A. G. Salaudeen, S. T. Suleiman, O. R. Ilori, D. B. Parakoyi	
RETROSPECTIVE CROSS-SECTIONAL STUDY	
Spectrum of Rheumatic and Musculoskeletal Diseases in a Rheumatology Clinic in Nigeria: .....	590
A Report of the First 5000 Patients	
O. O. Adelowo, A. Ibrahim, E. Airenakho, O. Ojo, H. Ahmad, O. Onwualu, H. Aliyu, H. B. Olaosebikan, A. Yerima	
INDEX TO VOLUME 41, NO. 11, 2024	
Author Index .....	597
Subject Index .....	598



## FROM THE EDITOR-IN-CHIEF

### Antioxidant Depletion in Asphyxiated Neonates, Neuropsychiatric Burden in Parkinson's Disease, and Public Health Vulnerabilities: The Need for Proactive Healthcare Delivery

We welcome our readers to another edition of the West African Journal of Medicine. This issue brings together a diverse set of articles that deepen the understanding of health and disease across the lifespan, spanning the unborn child, the newborn, the adult, and the elderly.

A recurring theme running through the various papers in this issue is the challenge of unseen vulnerabilities, i.e., clinical, biochemical, immunologic, and behavioural burdens that remain silent until they produce significant morbidity. Across diverse populations and disease contexts, these studies illuminate the hidden layers of risk that shape health outcomes in our environment, and the urgent need for earlier recognition, stronger surveillance, and more preventive health strategies. The reports on protein C and S levels in stroke, microalbuminuria as early diabetic nephropathy, and contrast-induced nephropathy elucidate hidden physiological threats that precede overt disease. The documentation of early *Streptococcus mutans* acquisition in infants and the review of rheumatology clinic patients highlight how early detection and long-term surveillance are essential in conditions that unfold gradually over time.

The study by Ojagbemi et al. provides insight into the often-overlooked

neuropsychiatric burden of Parkinson's disease (PD). In the case-control study across two tertiary hospitals, the authors demonstrate that psychosis spectrum symptoms are both common and clinically significant in PD. Nearly one in three patients experienced psychosis, with hallucinations being the most frequent feature. The study identifies key correlates such as older age, alcohol use, more severe motor impairment, and probable dementia. Crucially, psychosis in PD was linked to worse quality of life and greater caregiver strain, highlighting a dual burden that affects both patients and their support systems, as had been demonstrated in other climes.<sup>1,2</sup>

However, in our setting, where caregiving is informal and resources are limited, these findings carry profound implications. With PD patients showing five-fold increased odds of psychosis relative to controls, the authors make a compelling case for a more proactive, multidisciplinary approach that integrates neurology, psychiatry, and social support into routine PD care.

A similar message emerges from the work by Kuti et al., which revealed important biochemical vulnerabilities among neonates with perinatal asphyxia. In the comparative cross-sectional study of 168 newborns, the authors demonstrate that both

enzymatic and non-enzymatic antioxidants are significantly depleted in asphyxiated infants compared with healthy controls. Markers such as total antioxidant status (TAS), glutathione, glutathione peroxidase, and glutathione transferase were notably lower, reflecting increased oxidative stress at birth. Although antioxidant levels did not correlate with PA severity or mortality, the study makes a compelling observation: lower antioxidant concentrations were associated with longer hospital stays. The findings highlight an opportunity for improved prognostication and possibly targeted antioxidant-supportive strategies.

In the public health domain, Durowade et al. reveal another hidden vulnerability, i.e., a widespread rubella susceptibility among women of reproductive age. Their community-based survey, the study reports a striking 84% rubella IgG seronegativity, which indicates a widespread immunity gap. Their spatial analysis shows that this vulnerability is not localised, but rather, it is diffuse, widespread, and distributed across both urban and rural communities, which makes a potential outbreak both possible and dangerous. It is quite concerning that the findings further showed that one-third of seropositive women were pregnant. This silently places unborn children at risk of congenital rubella syndrome.

The authors' message is unmistakable: without a proactive rubella immunisation policy, this immunologic vulnerability will continue to exact a preventable toll. This highlights the need to intensify ongoing measures that will promote widespread availability and coverage of the rubella-containing vaccines across the length and breadth of the country in order to protect mothers and newborns.<sup>3</sup>

Together, these contributions paint a compelling picture showing that a substantial portion of the disease burden in our region thrives in the shadows, undetected, underestimated, or under-addressed. They remind us that our most serious threats often emerge long before overt clinical illness becomes visible.

In low- and middle-income regions, including sub-Saharan Africa, these vulnerabilities are exacerbated by limited diagnostic capacity, under-resourced surveillance systems, sociocultural delays in care-seeking, and lack of effective preventive public health policies. This edition of the journal, therefore, highlights the urgent need for a more proactive, predictive, and prevention-oriented healthcare model. This emphasises upstream action to reduce preventable disease burdens in LMICs.<sup>4</sup> In essence,

the future of healthcare delivery in our region depends on our ability to think proactively, detect early, and intervene early and holistically. As our collective scientific work continues to shed light on these hidden layers of vulnerability, we move closer to a healthcare system that is not only reactive but truly preventive.

We extend our deep appreciation to all authors whose scholarship enriches this edition. We also encourage clinicians, researchers, and public health professionals across the region to continue submitting high-quality manuscripts that advance understanding, challenge assumptions, and improve patient care. Your work remains vital to shaping the evolving landscape of medicine in West Africa. Welcome once again to this edition, and we look forward to the continued growth of our scientific community through your contributions.

#### **Professor G. E. Erhabor**

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