

VOLUME 41, NUMBER 5  
May 2024

ISSN 0189 - 160X

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# WAJMJ

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**WEST AFRICAN JOURNAL OF MEDICINE**

ORIGINALITY AND EXCELLENCE IN MEDICINE AND SURGERY



**OFFICIAL PUBLICATION OF**  
THE WEST AFRICAN COLLEGE OF PHYSICIANS *AND*  
WEST AFRICAN COLLEGE OF SURGEONS



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## TABLE OF CONTENTS

GENERAL INFORMATION	IC
INFORMATION FOR AUTHORS	1F
EDITORIAL NOTE:	
Energy Drinks and Their Hidden Dangers: A Call for Awareness and Regulation – <i>G. E. Erhabor</i>	491
<b>ORIGINAL ARTICLES</b>	
<b>Histopathologic Characteristics of Childhood Nephrotic Syndrome in a Tertiary Health Facility in Nigeria</b>	493
O. T. Adedoyin, M. O. Buhari, O. R. Ibrahim, O. O. Oyedepo, O. A. M. Adesiyun, A. Alege	
<b>Effect of Exercise Versus Metformin among Nigerians with Prediabetes: A Randomised Controlled Trial</b>	499
M. T. Umar, A. A. Sabir, K. B. Sada, H. Umar, A. S. Maiyaki, A. K. Jimoh, U. F. Abdullahi	
<b>Patterns of Energy Drink Consumption and Perceived Benefits Among Medical Students in a Tertiary Institution in South-Eastern Nigeria</b>	505
S. I. Ezemenahi, C. C. Ibeh, R. U. Alphonsus, E. Akalugwu, S. C. Ezemenahi, B. E. Ezemenahi, A. L. Obi Nwosu, A. N. Alabi	
<b>Diagnostic Efficiency of Point-Of-Care Lung Ultrasonography in the Diagnosis of Adult Community-Acquired Pneumonia – A Single-Centre Study in Southeastern Nigeria</b>	515
C. O. U. Eke, G. C. Mbata, P. U. Ele, E. G. Okwudire, J. U. Ugwoegbu	
<b>Comparative Evaluation of Total Antioxidant Capacity and pH of Saliva in Children with and without Early Childhood Caries</b>	524
A. Abe, F. A. Oredugba, O. O. Orenuga, A. A. Osuntoki	
<b>Prevalence and Factors Associated with Fear of Falling in the Elderly Attending a Tertiary Hospital in South-South Nigeria</b>	534
U. C. Oguzor, S. S. Uriah, C. T. Atata, A. A. Alali, P. O. Dienye	
<b>Predictors of COVID-19 Vaccine Uptake in a Tertiary Hospital Community, North Central, Nigeria</b>	542
D. A. Daniel, N. A. Akwaras, N. L. P. De-kaa, C. Nwaeze, L. T. Swende, B. O. Ornguga	
<b>Diagnostic Accuracy of Mammographic Findings in Patients 35 Years and Older Presenting with Palpable Breast Lump in University of Benin Teaching Hospital, Benin City</b>	548
S. Oriakhi, N. J. Nwashilli, C. E. Ohanaka, O. D. Osifo	
<b>Plasma Vitamin D Levels Among Nigerian Mothers and their Preterm Infants</b>	555
V. A. Ayeni, T. A. Ogunlesi, I. O. F. Dedede, O. O. Olawale, D. M. Olanrewaju	
<b>Neutrophil-Lymphocyte Ratio and High Sensitivity C-Reactive Protein as Markers of Heart Failure Severity: A Study at the University of Port-Harcourt Teaching Hospital Heart Failure Clinic</b>	562
A. O. Ajala, Sotonye Dodiya-Manuel, Boma Oyan, Jacquelin Ejituwu, Maclean Akpa	
<b>Spectrum of Skin Diseases among Inmates in a Nigerian Correctional Centre in Southern Nigeria</b>	568
O. G. Egbi, D. A. Aladeh, R. Madubuko, J. D. Okpiri, T. Ujah, M. Mamven, O. A. Adejumo, I. R. Edeki, D. S. Oyedepo, S. O. Oiwoh, V. O. Ndu, O. A. Osunbor	
<b>Oral Health Knowledge, Practices, and Dental Complaints among Pregnant Women Attending Antenatal Clinic at a Tertiary Health Institution, North Central, Nigeria</b>	575
L.T. Swende, N. A. Akwaras, B. O. Ornguga, S. I. Nwaeze, J. O. Abah, A. Ngwibete, T. Z. Swende, I. Tor- Anyiin, G. N. Rimamnunra, N. L. P De-kaa, D. A. Daniel, J. O. Obekpa, M. Ben-Ameh, C. U. Ugboaja	
<b>Rural-Urban Differences in Risk Factors for Prediabetes and Undiagnosed Diabetes Among Adult Dwellers in Selected Yoruba-Speaking Parts of Nigeria: A Glycated Haemoglobin-Based Population Screening</b>	583
W. O. Balogun, J. O. Akinyemi, I. O. Ajayi, M. A. Olamoyegun, O. B. Olopade, O. A. Bolarinwa, B. W. Alatishe-Muhammad, O. A. Salisu, G. O. Ajani, D. O. Soyoye	
<b>Pre- and Post-Prostatectomy Detrusor Wall Thickness and the Symptom Profile in Patients with Benign Prostatic Enlargement: A Prospective Review</b>	592
C. I. Onyeze, T. A. Badmus, A. A. Salako, N. S. Onyeze, C. M. Asaleye, E. A. Agbakwuru, E. A. Jeje, O. O. Olasehinde, M. C. Igbokwe, R. N. Babalola, R. A. David	
<b>Audit of School Oral Health Promotion Activities and Association with Oral Health Behaviour of Adolescents in Ibadan, Nigeria</b>	597
F. B. Lawal and G. A. Oke	
<b>The Respiratory Effects of Chronic Exposure to Gas Faring Among Residents of Some Communities in the Niger Delta Region of Nigeria</b>	606
E. M. Ekwere, I. U. Umoh, G. E. Peters, A. I. Udo, A. E. Effiong, E. J. Peters, E. A. Bandele	
<b>INDEX TO VOLUME 41, NO. 5, 2024</b>	
Author Index	613
Subject Index	614



## FROM THE EDITOR-IN-CHIEF

### Energy Drinks and Their Hidden Dangers: A Call for Awareness and Regulation

We are pleased to present the latest issue of the West African Journal of Medicine (WAJM), a collection of diverse and impactful research studies that address critical health issues across the region. In this issue, readers will find a range of articles that cover various aspects of medical science, from clinical studies and public health interventions to advancements in diagnostic techniques. These contributions underscore the ongoing commitment of researchers in the region to improving healthcare outcomes and shaping future clinical practices and public health policies.

In recent years, energy drinks have surged in popularity, becoming a staple for many individuals seeking a quick boost in energy, alertness, and performance. Marketed with appealing promises of enhanced mental and physical capabilities, these beverages are particularly popular among teenagers, young adults, athletes, and professionals who require prolonged periods of concentration and wakefulness.<sup>1,2</sup> Energy drinks typically contain high levels of caffeine and sugar, along with other stimulants such as taurine, guarana, and B vitamins. These ingredients are designed to provide a rapid energy boost, but their consumption comes with significant health risks, especially when ingested in large quantities or combined with other substances. Despite their widespread popularity, the health implications of regular energy drink consumption are a growing concern

among healthcare professionals and public health advocates.

The potential for adverse health effects, particularly among younger populations, cannot be overlooked. From cardiovascular issues and mental health problems to metabolic disturbances and sleep disorders, the risks associated with these beverages are substantial and multifaceted.<sup>1-3</sup> Excessive caffeine intake, particularly from energy drinks, can have several negative health effects. It can increase heart rate, raise blood pressure, and cause heart palpitations. These drinks can disrupt sleep patterns significantly, leading to long-term sleep disturbances. Their high sugar content can contribute to weight gain and increase the risk of obesity, type 2 diabetes, and metabolic disorders. Additionally, the acidic and sugary nature of energy drinks can lead to dental erosion and cavities. Caffeine dependency is another concern, as it can result in withdrawal symptoms like headaches, fatigue, and irritability when consumption is reduced. Moreover, mixing energy drinks with alcohol is an increasingly common but dangerous practice, as caffeine can mask alcohol's effects, increasing the risk of alcohol poisoning, accidents, and injuries. High caffeine consumption is also linked to mental health issues such as anxiety, nervousness, and insomnia, with energy drinks often causing jitteriness and irritability.

The study conducted by Ezemenahi et al. at Nnamdi Azikiwe University

Teaching Hospital in Nnewi, Nigeria, provides valuable insights into this phenomenon. With a striking 81.5% of surveyed medical students reporting having consumed energy drinks, the research highlights the urgency for increased awareness and educational initiatives targeting this demographic. The primary motivations for consumption among the respondents include advertisements, peer influence, and curiosity. Alarming, despite the high consumption rates, only a small fraction of students are aware of the exact caffeine content in these beverages. The perceived benefits of energy drinks, such as improved mental alertness, refreshment, and stress relief, drive their popularity. However, the research underscores a critical gap in knowledge about the potential adverse effects, including anxiety, physiological dependence, and harmful withdrawal symptoms. This gap is concerning, given the widespread consumption.

This is a call to action for public health officials and educational institutions. There is a pressing need to implement comprehensive education programs that inform students about the risks associated with energy drink consumption. Such initiatives should aim to debunk the myths perpetuated by aggressive marketing and provide healthier alternatives for coping with stress and enhancing performance. Moreover, regulatory bodies must consider stricter guidelines on the marketing and sale of energy drinks, especially within educational

environments. Limiting access and ensuring that students are well-informed about the ingredients and their potential effects can help mitigate the health risks posed by these beverages.

Other articles in this issue explored a diverse range of important topics spanning various specialities. Among them is the study by Abe et al. in Lagos, Nigeria which compared the total antioxidant capacity and pH of saliva in children with and without early childhood caries. Their findings revealed that children with early childhood caries had higher antioxidant levels and lower saliva pH, suggesting a potential link to the development of cavities. This underscores the need to educate parents and caregivers about the importance of maintaining proper oral hygiene for their wards to help regulate saliva pH and reduce the risk of cavities. In another study conducted in Owerri, Nigeria, Eke and colleagues assessed the diagnostic efficiency of lung ultrasonography (LUS) for community-acquired

pneumonia in adults. The findings showed that LUS had high sensitivity and specificity, making it an effective diagnostic tool comparable to chest radiographs.

As always, we are grateful for the contributions of our authors, reviewers, and readers, whose support is essential to the continued success of this journal. Their dedication and expertise are vital to the continued success and impact of the journal. We encourage all stakeholders to keep up the good work, and we invite researchers to continue submitting their valuable studies for publication. Together, we can continue to advance medical knowledge and improve healthcare outcomes across the region.

**Professor G. E. Erhabor**

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