

VOLUME 42, NUMBER 7  
July 2025

ISSN 0189 - 160X

---

# WAJM

---

**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**



[www.wajmed.com](http://www.wajmed.com)



## TABLE OF CONTENTS

|                                                                                                                                                                                                     |     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| GENERAL INFORMATION                                                                                                                                                                                 | IC  |
| INFORMATION FOR AUTHORS                                                                                                                                                                             | 1F  |
| EDITORIAL NOTE:                                                                                                                                                                                     |     |
| <b>Antioxidant Depletion in Asphyxiated Neonates, Neuropsychiatric Burden in Parkinson's Disease, and Public Health</b> .....                                                                       | 519 |
| <b>Vulnerabilities: The Need for Proactive Healthcare Delivery – G. E. Erhabor</b>                                                                                                                  |     |
| LETTER TO THE EDITOR                                                                                                                                                                                |     |
| <b>Remarks on the Correlation between the EU-TIRADS Score and the Definitive Histology of Thyroid</b> .....                                                                                         | 521 |
| <b>Nodules Operated on in Lomé</b>                                                                                                                                                                  |     |
| I. Sengul, D. Sengul                                                                                                                                                                                |     |
| ORIGINAL ARTICLES                                                                                                                                                                                   |     |
| <b>Assessing the Correlation of Protein C and Protein S Levels with Stroke Severity and Functional Outcomes in Adults with Ischaemic Stroke</b> .....                                               | 523 |
| A. O. Idowu, M. B. Fawale, R. A. Bolarinwa, A. A. Sanusi, A. Ogunmodede,<br>S. O. Lawal, O. A. Asifat, A. A. Adebawale, M. A. Komolafe                                                              |     |
| <b>Assessment of the Initial Acquisition of <i>Streptococcus mutans</i> in Infants Born to Pregnant Women Attending the Lagos University Teaching Hospital</b> .....                                | 531 |
| O. Ashaolu, O. O. Orenuga, F. A. Oredugba, F. O. Nwaokorie                                                                                                                                          |     |
| <b>Knowledge, Risk Perception and Prevention against Diphtheria among Caregivers of Children under-fives in Chikun Local Government Area, Kaduna State, Nigeria</b> .....                           | 542 |
| T. U. Okwute, I. A. Joshua, S. Kabir                                                                                                                                                                |     |
| <b>Enzymatic and Non-enzymatic Antioxidants as Related to Immediate Hospital Outcomes in Term Nigerian Babies with Perinatal Asphyxia</b> .....                                                     | 552 |
| D. K. Kuti, T. Ogundele, B. P. Kuti, A. O. Oyelami, E.A Adejuyigbe                                                                                                                                  |     |
| <b>Evaluation of Microalbuminuria Level to Determine Diabetic Nephropathy Among Type 2 Diabetic Patients in Zaria, Nigeria</b> .....                                                                | 559 |
| A. B. Dogara, I. S. Aliyu, D. S. Mshelia, H. M. Suleiman, F. A. Mahmud, M. G. Abubakar                                                                                                              |     |
| <b>Prevalence and Risk Factors of Contrast Induced Nephropathy in Maiduguri, Northeastern Nigeria</b> .....                                                                                         | 566 |
| U. Loskurima, M. M. Sulaiman, M. Lawan, A. Farate, J. Shettima, A. Mamza, A. O. Amali, A. G. Habibu,<br>M. M. Dungus, B. Bunu, A. I. Galtimari, I. K. Chiroma, A. D. Dayar, M. M. Dungus, I. Ummate |     |
| <b>Prevalence of Psychosis Spectrum Symptoms, Association with Quality of Life and Caregiver Burden in Yoruba Nigerians with Parkinson's Disease: A Matched Case Control Study</b> .....            | 571 |
| A. Ojagbemi, O. Adediran, H. Oyedapo-Ishola, T. Olojugba, O. Elugbadebo, U. Imo, A. K. Bakare, F. Taiwo                                                                                             |     |
| <b>Rubella IgG Immunity: Spatial Distribution, Euclidean Distance Analysis, Correlates and Predictors among Women of Reproductive Age, Southwest Nigeria</b> .....                                  | 581 |
| K. A. Durowade, O. I. Musa, M. A. Adeniyi, R. B. Mudashiru, T. A. Sanni,<br>A. G. Salaudeen, S. T. Suleiman, O. R. Ilori, D. B. Parakoyi                                                            |     |
| RETROSPECTIVE CROSS-SECTIONAL STUDY                                                                                                                                                                 |     |
| <b>Spectrum of Rheumatic and Musculoskeletal Diseases in a Rheumatology Clinic in Nigeria: A Report of the First 5000 Patients</b> .....                                                            | 590 |
| 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 |



### Prevalence of Psychosis Spectrum Symptoms, Association with Quality of Life and Caregiver Burden in Yoruba Nigerians with Parkinson's Disease: A Matched Case Control Study

*Prévalence des Symptômes du Spectre Psychotique, Association avec la Qualité de Vie et la Charge des Aidants chez les Nigériens Yoruba Atteints de la Maladie de Parkinson: Une étude Cas-Témoins Appariée*

<sup>1,2</sup>A. Ojagbemi, <sup>3</sup>O. Adediran, <sup>1</sup>H. Oyedapo-Ishola, <sup>4</sup>T. Olojugba,  
<sup>1\*</sup>O. Elugbadebo, <sup>1</sup>U. Imo, <sup>5</sup>A. K. Bakare, <sup>6</sup>F. Taiwo

#### ABSTRACT

**BACKGROUND:** Up to 60% of persons with idiopathic Parkinson's disease (PD) will develop psychosis spectrum symptoms at some point during the course of illness. These symptoms are often undetected by attending physicians but are associated with great distress to patients and their caregivers.

**OBJECTIVES:** To investigate the prevalence and association of positive psychosis symptoms with quality of life (QoL) and caregivers' burden among clinic attendees with PD at two tertiary general hospitals in South western Nigeria.

**METHOD:** A case-control study was conducted between February 2023 to June 2024. Cases (N=150) were neurology outpatients with PD. Controls (N=150) were neurologically healthy individuals matched for age, sex, education, and outpatient status. Psychosis, QoL, and caregiver burden were assessed using the Scale for the Assessment of Positive Symptoms (SAPS), PD-QoL questionnaire (PDQ-8), and Caregivers Strain Index (CSI), respectively. Adjusted odds ratios (aOR) and standardized coefficients (aCoeff.) were estimated using regression analyses. Estimates were within 95% confidence intervals (C.I.).

**RESULTS:** Psychosis symptoms were present in 28% of cases. Hallucinations were the most frequent symptom (16.7%). Cases with Psychosis were more likely to be  $\geq 60$  years (88.1%,  $p=0.020$ ), ever users of alcohol (78.6%,  $p=0.012$ ), had higher mean motor-severity scores ( $51.1 \pm 15.7$ ,  $p<0.001$ ), and probable dementia (21.4%,  $p=0.001$ ). In unconditional logistic regression analyses, cases had approximately five-point increase in the independent odds psychosis (aOR=4.92, 95% C.I.=2.20, 10.99), and two-point increase in the independent odds of requiring social support (aOR=1.95, 95% C.I.=1.19, 3.21).

**CONCLUSION:** The near five-point increase in the odds of psychosis spectrum symptoms in PD and their greater requirement for social support underscores the need for multidisciplinary approaches that include not only neurologists but psychiatrists, and social workers.

WAJM 2025; 42 (7): 571-580

**KEYWORDS:** Parkinsonism; Cognitive Decline; Neuropsychiatric symptoms; Beers criteria

#### RÉSUMÉ

**CONTEXTE:** Jusqu'à 60 % des personnes atteintes de la maladie de Parkinson idiopathique (MP) développeront des symptômes du spectre de la psychose à un moment donné au cours de la maladie. Ces symptômes ne sont souvent pas détectés par le médecin traitant, mais sont associés à une grande détresse pour les patients et leurs soignants.

**OBJECTIFS:** Étudier la prévalence et l'association des symptômes de psychose positifs avec la qualité de vie (QoL) et le fardeau des soignants parmi les participants à la clinique avec la MP dans deux hôpitaux généraux tertiaires du sud-ouest du Nigeria

**METHODES:** Une étude cas-témoins a été menée entre février 2023 et juin 2024. Les cas (N=150) étaient des patients ambulatoires en neurologie atteints de DP. Les contrôles (N=150) étaient des individus neurologiquement sains appariés à l'âge, au sexe, à l'éducation et au statut ambulateur. La psychose, la QoL et le fardeau des soignants ont été évalués à l'aide de l'échelle d'évaluation des symptômes positifs (SAPS), du questionnaire PD-QoL (PDQ-8) et de l'indice de fatigue des soignants (CSI), respectivement. Les ratios de cotes ajustés (aOR) et les coefficients standardisés (aCoeff.) ont été estimés à l'aide d'analyses de régression. Les estimations se situaient dans des intervalles de confiance de 95 % (C.I.).

**RESULTATS:** Les symptômes de psychose étaient présents dans 28 % des cas. Les hallucinations étaient le symptôme le plus fréquent (16,7 %). Les cas de psychose étaient plus susceptibles d'être âgés de  $\geq 60$  ans (88,1 %,  $p=0,020$ ), d'avoir déjà consommé de l'alcool (78,6 %,  $p=0,012$ ), d'avoir des scores moyens de sévérité motrice plus élevés ( $51,1 \pm 15,7$ ,  $p<0,001$ ), et une démence probable (21,4 %,  $p=0,001$ ). Dans les analyses de régression logistique inconditionnelle, les cas présentaient une augmentation d'environ cinq points des chances indépendantes de psychose (aOR=4,92, IC 95 % = 2,20–10,99), et une augmentation de deux points des chances indépendantes de nécessiter un soutien social (aOR=1,95, IC 95 % = 1,19–3,21).

**CONCLUSION:** L'augmentation de près de cinq points des chances de symptômes du spectre de psychose dans la MP et leur plus grand besoin de soutien social soulignent la nécessité d'approches multidisciplinaires qui incluent non seulement des neurologues, mais aussi des psychiatres et des travailleurs sociaux. WAJM 2025; 42 (7): 571-580

**MOTS-CLES:** Parkinsonisme, Déclin cognitif, Symptômes neuropsychiatriques, Critères des bières

<sup>1</sup>World Health Organization Collaborating Centre for Research and Training in Mental Health, Neuroscience, and Substance Abuse, Department of psychiatry, College of Medicine, University of Ibadan, Nigeria. <sup>2</sup>Centre for Dementia Studies, Brighton and Sussex Medical School, Brighton, UK.

<sup>3</sup>Department of Ophthalmology, College of Medicine, University of Ibadan, Nigeria. <sup>4</sup>Department of Psychiatry, University College Hospital, Ibadan Nigeria. <sup>5</sup>Department of Medicine, Federal Medical Centre, Abeokuta Nigeria. <sup>6</sup>Unit of Neurology, Department of Medicine, University College Hospital, Ibadan Nigeria.

**Corresponding Author:** Dr. Olufisayo Elugbadebo, World Health Organization Collaborating Centre for Research and Training in Mental Health, Neuroscience, and Substance Abuse, Department of Psychiatry, College of Medicine, University of Ibadan, P.M.B 5017 (G.P.O), Ibadan, Nigeria. E-mail: fisayoelu08@yahoo.com Tel no: +2348033946818

**Abbreviations - CIDI:** Composite International Diagnostic Interview; **CSI:** Caregivers Strain Index; **HIC:** High Income Countries; **ICD-11:** International Classification of Diseases, 11th Edition; **IQ-CODE:** Informant Questionnaire for Cognitive Decline in the Elderly; **LMICs:** Low- and Middle-Income Countries; **NIMH:** National Institute of Mental Health; **NINDS:** National Institute of Neurological Disorder and Stroke; **PD:** Parkinson's Disease; **PDQ-8:** Parkinson's Disease Quality of Life Questionnaire; **PS:** Psychosis Spectrum; **QoL:** Quality of Life; **SAPS:** Scale for the Assessment of Positive Symptoms; **SSA:** Sub-Saharan Africa; **UKPDS:** United Kingdom Parkinson's Disease Society; **UPDRS:** United Parkinson's Disease Rating Scale