

VOLUME 38, NUMBER 2  
FEBRUARY 2021

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.org](http://www.wajmed.org)



## TABLE OF CONTENTS

GENERAL INFORMATION	1C
INFORMATION FOR AUTHORS	1F
EDITORIAL NOTES .....	105
<b>ORIGINAL ARTICLES</b>	
<b>Arterial Oxygen Saturation and other Clinical Predictors of Survival in Patients with Covid-19: A Review of Cases in a Tertiary Care Hospital in Nigeria</b> .....	109
S. A. Ayinbuomwan, N. Mokogwu, O. A. Akoria, B. U. Okwara, C. E. Omuemu, D. E. Obaseki <b>Determinants of Outcome among Under-Five Children Hospitalized with Pneumonia at a Tertiary Health Facility in South-West Nigeria</b> .....	114
A. O. Odeyemi, A. O. Odeyemi, T. L. Musa	
<b>Self-Perceived Halitosis in La, a Suburb of Accra, Ghana</b> .....	120
D. Tormeti, P. K. Blankson, S. Atinkah, J. Sackeyfio, A. Dai-Kosi, M. Ayetey-Adamafo <b>Sensorineural Hearing Loss among Hypertensives</b> .....	125
O. R. Quadri, I. O. Gbujie, D. B. Ojji, D. F. Folorunso, F. M. Damtong, E. A. Dahilo, T. S. Ibekwe, O. G. B. Nwaorgu	
<b>Clinico-pathological Profile of Head and Neck Tumours with Intracranial Extension</b> .....	131
M. O. Udoh, D. O. Udoh	
<b>Profiles of Tuberculosis Patients: A Single-Center Experience in a Semi-Urban Tuberculosis Center in Southeast Nigeria</b> .....	137
C. U. Ufoaroh, E. N. Anyabolu, I. C. Okoye, I. S. Chinweuba	
<b>Caring for Children with Congenital Heart Diseases: Economic Burden of Pre-Surgical Management on Nigerian Families</b> .....	144
C. O. Duru, F. S. Okpokowuruk, A. D. Adesina, G. O. Worgu, F. O. Adeniji, J. M. Chinawa, I. Aliyu	
<b>Rate, Indications and Outcome of Blood Transfusion in Neonates at Federal Teaching Hospital, Gombe, Nigeria</b> .....	152
I. Jalo, E. W. Isaac, M. P. Raymond, M. Amina, R. Y. Adeniji	
<b>A Doctor's Experience from Covid-19</b> .....	158
T. Ibekwe, P. Ibekwe	
<b>Comprehensive Idiopathic Clubfoot Treatment based on the Ponseti Method: The FMC, Umuahia Experience</b> .....	162
P. I. Amaraegbulam, U. I. Oluwatosin, C. O. Udemezue, U. Egbe-Eni, A. Chuku	
<b>Indications for Removal of Orthopaedic Implants in a Nigerian Tertiary Hospital: A Review of 128 Cases</b> .....	166
D. D. Mue, W. T. Yongu, M. N. Salihu, J. N. Kortor, I. C. Elachi, J. O. Donwa	
<b>CASE REPORT</b>	
<b>Skull Base Chordoma: A Case Presentation and Review of Literature</b> .....	171
M. O. Udoh, D. E. Imasogie, D. O. Udoh	
<b>COVID-19 and Mycobacterium Tuberculosis Coinfection: A Case Report</b> .....	176
A. A. Agada, V. Kwaghe, Z. Habib, F. O. Adebayo, B. Anthony <sup>†</sup> , T. Yunusa, B. A. Ekele	
<b>Hyper-Immunoglobulin E Syndrome and Squamous Cell Carcinoma of the Lower Lip: A Case Report</b> .....	180
A. O. Akinboro, M. O. Onigbinde, S. O. Oiwoh, O. O. Afolayan, A. A. Oladeji	
<b>BRIEF COMMUNICATION</b>	
<b>The Transgender Phenomenon and its Effect on the Practice of Anatomic Pathology: A Futuristic Perspective</b> .....	185
C. A. Okolo	
<b>ERRATUM: WAJM 2021; 38(1): Pages 24–27 – OMISSION OF TABLES AND FIGURE</b> 189	
<b>Sonographic Diagnosis of Metastatic Cervical Lymph Nodes in Primary Orofacial Malignancies: Role of the Radiologist's Experience</b> .....	189
U. A. Okeke, J. B. Igashi, M. A. Hamza, S. O. Ajike, B. D. Saheeb	
<b>INDEX TO VOLUME 38, NO. 2, 2021</b>	
<b>Author Index</b> .....	194
<b>Subject Index</b> .....	195



### Determinants of Outcome among Under-Five Children Hospitalized with Pneumonia at a Tertiary Health Facility in South-West Nigeria

*Déterminants des résultats chez les enfants de moins de cinq ans hospitalisés pour une pneumonie dans un établissement de santé tertiaire du sud-ouest du Nigeria*

A. O. Odeyemi\*<sup>†</sup>, A. O. Odeyemi<sup>‡</sup>, T. L. Musa<sup>§</sup>

#### ABSTRACT

**BACKGROUND:** Pneumonia contributes largely to mortality among children particularly in developing countries. In 2018, about 15% of all deaths in children aged less than 5 years were attributed to pneumonia globally. This study aimed to identify factors at presentation that determine mortality among children less than 5 years of age hospitalized with pneumonia. **Methods:** This was a prospective observational study conducted at the Children emergency unit of Ladoke Akintola University of Technology Teaching Hospital, Osogbo, Nigeria. Subjects were consecutive children aged between 1–60 months with clinical and radiological pneumonia. Treatment outcome and determinants of mortality were studied.

**RESULTS:** A total of 129 subjects were studied with a male to female ratio of 1.5: 1. Thirteen subjects died, giving a case fatality rate of 10.1%. Mortality was associated with age <24 months (p= 0.001), severe wasting (p< 0.001), temperature >38.3°C (p= 0.001), grunting (p< 0.001), central cyanosis (p < 0.001), hypoxaemia (p < 0.001), loss of consciousness (p = 0.007), severe anaemia (p < 0.001), and leucopaenia (p = 0.001). Among the significant variables, temperature >38.3°C [adjusted odds ratio (OR) 34.241, 95% confidence interval (CI) 2.496 – 469.815], grunting (OR 19.444, 95% CI 1.744 – 216.725), central cyanosis (OR 43.984, 95% CI 2.001– 966.729), hypoxaemia (OR 41.883, 95% CI 1.918 – 914.495) and severe anaemia (OR 48.201, 95% CI 3.351 – 693.432) were the independent determinants of mortality.

**CONCLUSION:** Children hospitalized for pneumonia with temperature >38.3°C, grunting, cyanosis, hypoxaemia, and severe anaemia are more likely to die. Hence, they must be treated intensively. *WAJM* 2021; 38(2): 114–119.

**Keywords:** Mortality, determinants, outcome, childhood pneumonia.

#### RÉSUMÉ

**CONTEXTE:** La pneumonie contribue largement à la mortalité des enfants, en particulier dans les pays en développement. En 2018, environ 15 % de tous les décès d'enfants de moins de 5 ans étaient attribués à la pneumonie dans le monde. Cette étude visait à identifier les facteurs de présentation qui déterminent la mortalité chez les enfants de moins de 5 ans hospitalisés pour une pneumonie.

**MÉTHODES:** Il s'agissait d'une étude prospective d'observation menée à l'unité d'urgence pour enfants de l'hôpital universitaire de technologie Ladoke Akintola, à Osogbo, au Nigeria. Les sujets étaient des enfants consécutifs âgés de 1 à 60 mois atteints de pneumonie clinique et radiologique. Les résultats du traitement et les déterminants de la mortalité ont été étudiés.

**RÉSULTATS:** 129 sujets au total ont été étudiés, avec un rapport homme/femme de 1,5/1. 13 sujets sont morts, soit un taux de létalité de 10,1 %. La mortalité était associée à l'âge <24 mois (p= 0,001), à une émaciation sévère (p< 0,001), à une température >38,30C (p= 0,001), à un grognement (p< 0,001), à une cyanose centrale (p< 0,001), hypoxémie (p < 0,001), perte de conscience (p = 0,007), l'anémie sévère (p < 0,001) et la leucopénie (p = 0.001). Parmi les variables significatives, la température >38,30C [rapport de cotes ajusté (OR) 34,241, intervalle de confiance (IC) à 95% 2,496 - 469,815], le grognement (OR 19,444, 95% IC 1,744 - 216,725), la cyanose centrale (OR 43. 984, 95 % IC 2,001 - 966,729), l'hypoxémie (RC 41,883, 95 % IC 1,918 - 914,495) et l'anémie sévère (RC 48,201, 95 % IC 3,351 - 693,432) étaient les déterminants indépendants de la mortalité.

**CONCLUSION:** Les enfants hospitalisés pour une pneumonie avec une température >38,30C, un grognement, une cyanose, une hypoxémie et une anémie sévère ont plus de chances de mourir. Ils doivent donc être traités de manière intensive. *WAJM* 2021; 38(2): 114–119.

**Mots-clés:** Mortalité, déterminants, issue, pneumonie infantile.

<sup>†</sup>Pulmonology Unit, Department of Paediatrics, College of Health Sciences, Bowen University Teaching Hospital, Ogbomosho, Oyo State, Nigeria; <sup>‡</sup>Pulmonology Unit, Department of Medicine, College of Health Sciences, Bowen University Teaching Hospital, Ogbomosho, Oyo State, Nigeria; <sup>§</sup>Department of Paediatrics, Federal Medical Centre, Birnin Kebbi, Kebbi state, Nigeria.

\*Correspondence: Dr. Abimbola O. Odeyemi, Department of Paediatrics, College of Health Sciences, Bowen University/ Bowen University Teaching Hospital, Ogbomosho, Oyo-state, Nigeria. Email: abimbola.odeyemi@bowen.edu.ng bimbolaodeyemi@gmail.com

**Abbreviations:** CFR, Case Fatality Rate; SD, Standard Deviation; SpO<sub>2</sub>, Haemoglobin Oxygen Saturation; WBC, White Blood Cell Count; WHO, World Health Organisation.