

VOLUME 40, NUMBER 3  
March 2023

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 – Newborn Screening for Sickle Cell Disease – G. E. Erhabor.....	237
World Hearing Day – Impaired Hearing and Noise Culture .....	238
– T.S. Ibekwe, S.O. Ayodele, Y.B. Amusa, G. E. Erhabor	
ORIGINAL ARTICLES	
A Clinico-Pathological Study of Vulvo-Vaginal Disease at a Nigerian Tertiary Health Facility .....	241
I. Emmanuel, P. O. Akpa, D. Yakubu, E. N. Yakubu, B. S. Otene, B. C. Dallang, B. K. Adedeji, B. W. Audu, T. N. Fadok, C. Amaike, A. N. Manasseh, B. M. Mandong	
Abnormalities of Kidney Function in Acute Malarial and non-Malarial Infections .....	247
O. Efuntoye, S. Ajayi, Y. Raji, B. L. Salako, A. Arije, S. Kadiri	
Accuracy of Whole Blood Cardiac Troponin I in the Diagnosis of Childhood Heart Failure at the University College Hospital, Ibadan .....	254
A. Hamza, S. I. Omokhodion	
Clients' Perception of Maternal, Newborn and Child Health Services received before and during the COVID-19 Outbreak in Nigeria's Epicenter.....	262
M. Balogun, T. Olubodun, O. Ubani, V. Yesufu, A. Sekoni, F. Ogunsola	
Decisional Conflict amongst Women Undergoing Caesarean Section in Health Facilities in Ibadan, Nigeria.....	269
A. I. Anih, O. O. Ogunbode, A. O. Okedare	
Evaluation of Primary School Health Environment in Ido/Osi Local Government Area, Ekiti State, Nigeria .....	277
E. O. Adeyemi, O. S. Olatunya, O. B. Bolaji, O. A. Lawal, W. A. Ajetunmobi, A. O. Adaje, C. E. Onyema, P. N. Omefe, O. Fayemi, S. O. Ajigbotosho, J. C. Okolugbo	
Socioeconomic Parameters and Well Being of Sickle Cell Anaemic Patients in Southwestern Nigeria .....	284
T. A. Obembe, O. O. Akinyemi, O. A. Adeyanju, T. Ilori, I. E. Okunade	
Effect of COVID-19 Pandemic on Utilization of Paediatric Health Services at the Federal Medical Centre, Asaba, Nigeria..	292
B. U. Ezeonwu, C. O. Okike, K. A. Adeniran, E. E. Omoyibo, E. Onyeka-Okite, H. I. Opara, U. C. Ajanwenyi Joseph, O. M. Uwadia, A. A. Okolo	
Acceptability of Newborn Screening for Sickle Cell Disease among Post-Partum Mothers in Abakaliki, South East Nigeria...	298
O. C. Nnachi, A. A. Umeokonkwo, H. C. Okoye, A. N. Ekwe, C. O. Akpa, A. E. Okoye	
Effect of Frequency of Antenatal Care Contacts on Maternal and Fetal Outcome in Low-Risk Pregnancies at Federal Teaching Hospital Gombe, Nigeria .....	305
A. B. Rabiu, A. U. El-Nafaty, B. Bako, M. D. Yahaya	
Missed Opportunity for Routine Childhood Vaccination in Urban and Rural Areas of Edo State, Nigeria:	
A Comparative Study .....	312
V. O. Omuemu, E. O. Ogboghodo, J. Erhunmwunsee	
Pattern of Abdominal Trauma and Treatment Outcome in a Nigerian Tertiary Hospital .....	321
E. Ray-Offor, V. Enebeli, S. E. B. Ibeanusi	
Vision-Related Quality of Life after Cataract Surgery in West Africa.....	329
I. Signes-Soler, J. Javaloy, R. Montés-Micó, G. Muñoz, R. Montalbán, A. Hernández, C. Albarrán-Diego	
Barriers and Facilitators of Isoniazid Preventive Therapy Implementation among People Living with HIV in Nigeria: A Scoping Review of the Literature.....	336
V. A. Adepoju, A. Adelekan, O. E. Adepoju, O. I. Onyezue, W. Imoyeria, A. Nkeiruka, A. B. Olofinbiyi	
Tape Rule Measurement of Foot Length as Proxy for Vernier Digital Calliper in Estimating Gestational Age among Nigerian Neonates.....	345
O. Kuponiyi, T. Ogunlesi, A. Adekanmbi, O. Akodu, M. Olowonyo	
INDEX TO VOLUME 40, NO. 3, 2023	
Author Index .....	351
Subject Index .....	352



## ORIGINAL ARTICLE

### Acceptability of Newborn Screening for Sickle Cell Disease among Post-Partum Mothers in Abakaliki, South East Nigeria

*Acceptabilité du Dépistage de la Drépanocytose chez les Mères en Post-Partum à Abakaliki, au Sud-Est du Nigeria*

**<sup>1\*</sup>O. C. Nnachi, <sup>2</sup>A. A. Umeokonkwo, <sup>3</sup>H. C. Okoye, <sup>4</sup>A. N. Ekwe, <sup>4</sup>C. O. Akpa, <sup>4</sup>A. E. Okoye**

#### ABSTRACT

**BACKGROUND:** Newborn screening (NBS) for sickle cell disease (SCD) has been shown to reduce early childhood morbidity and mortality associated with sickle cell disease (SCD) but the programme is yet to gain universal coverage in Nigeria. The study assessed the awareness and acceptability of NBS for sickle cell disease for newly delivered mothers.

**MATERIALS AND METHODS:** This was a cross-sectional study conducted to assess 780 mothers admitted into the postnatal ward 0-48 hours after delivery at Alex Ekwueme Federal University Teaching Hospital, Abakaliki, Nigeria. Pre-validated questionnaires were employed for data collection and statistical analysis was performed using the United States' Center for Disease Prevention and Control (CDC) Epi Info 7.1.4 software.

**RESULTS:** Only 172 (22%) and 96 (12.2%) of the mothers were aware of NBS and comprehensive care for babies with SCD respectively. The acceptance of NBS was high, 718 (92%) among the mothers. The reasons for acceptance of NBS were to know how to take care of the baby 416 (57.9%), know the genotype status 180 (25.1%) while the motivating factors for NBS were knowledge of benefits 455 (58%) and the cost is free 205 (26.1%). The majority of the mothers 561(71.6%) agree that SCD can be ameliorated by NBS while 80 (24.6%) do not know if it can.

**CONCLUSION:** There was low awareness of NBS and comprehensive care for babies with SCD among mothers with newborns, however acceptability for NBS was high. There is a considerable need to bridge the communication gap between health workers and parents to increase their awareness. **WAJM 2023; 40(3): 298–304.**

**Keywords:** Acceptability, Awareness, Mother, Newborn screening, Sickle cell disease.

#### RÉSUMÉ

**CONTEXTE:** Il a été démontré que le dépistage néonatal de la drépanocytose réduisait la morbidité et la mortalité infantiles associées à cette maladie, mais le programme n'a pas encore atteint une couverture universelle au Nigéria. L'étude a évalué la connaissance et l'acceptabilité du NBS pour la drépanocytose chez les mères qui viennent d'accoucher.

**MATÉRIEL ET MÉTHODES:** Il s'agit d'une étude transversale menée auprès de 780 mères admises dans le service postnatal 0-48 heures après l'accouchement à l'hôpital universitaire fédéral Alex Ekwueme, à Abakaliki, au Nigéria. Des questionnaires pré-validés ont été utilisés pour la collecte des données et l'analyse statistique a été réalisée à l'aide du logiciel Epi Info 7.1.4 des Centres américains de prévention et de contrôle des maladies (CDC).

**RÉSULTATS:** Seules 172 (22%) et 96 (12,2%) des mères connaissaient le NBS et les soins complets pour les bébés atteints de SCD, respectivement. Le taux d'acceptation du NBS était élevé, 718 (92%) parmi les mères. La raison de l'acceptation du NBS était de savoir comment s'occuper du bébé 416 (57,9%) et de connaître le statut du génotype 180 (25,1%) tandis que le facteur de motivation pour le NBS était la connaissance des avantages 455 (58%) et le coût est gratuit 205 (26,1%). La plupart des mères 561 (71,6%) sont d'accord pour dire que le NBS peut améliorer le SCD, tandis que 80 (24,6%) ne savent pas si c'est le cas.

**CONCLUSION:** Les mères de nouveau-nés sont peu sensibilisées au NBS et aux soins complets pour les bébés atteints de DICS, mais l'acceptabilité du NBS est élevée. Il est nécessaire de rétablir la communication entre les professionnels de la santé et les parents afin de les sensibiliser davantage. **WAJM 2023; 40(3): 298–304.**

**Mots clés:** Dépistage Néonatal, Drépanocytose, Acceptabilité, Sensibilisation, Mère.

<sup>1</sup>Department of Haematology, Alex Ekwueme Federal University Teaching Hospital Abakaliki / Ebonyi State University, Ebonyi State, Nigeria. <sup>2</sup>Department of Paediatrics, Alex Ekwueme Federal University Teaching Hospital, Abakaliki, Ebonyi State, Nigeria.

<sup>3</sup>Department of Haematology, University of Nigeria Teaching Hospital Ituku Ozalla, Enugu State, Nigeria.

<sup>4</sup>Department of Haematology, Alex Ekwueme Federal University Teaching Hospital Abakaliki, Ebonyi State, Nigeria.

\*Correspondence: Dr. Oluomachi C Nnachi, Department of Haematology, Alex Ekwueme Federal University Teaching Hospital Abakaliki, Ebonyi State, Nigeria. Tel.: 08035442642. Email: obotican@gmail.com

Abbreviations: CDC, Centers for Disease Prevention and Control; HBSS, Haemoglobin SS; HPLC, High Performance Liquid Chromatography; MDG, Millennium Development Goal; NBS, Newborn Screening; SCA, Sickle Cell Anemia; SCD, Sickle Cell Disease.