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## ORIGINAL ARTICLE

# Knowledge and Compliance with Malaria National Treatment Guidelines among Primary Health Care Workers in a Rural Area in Northern Nigeria

*Connaissance et Respect des Directives Nationales de Traitement du Paludisme par les Agents de Soins de Santé Primaires dans une Zone Rurale du Nord du Nigeria*

**<sup>1\*</sup>A. Oyefabi, <sup>1</sup>M. Awaje, <sup>1</sup>N. O. Usman, <sup>2</sup>J. Sunday, <sup>1</sup>S. Kure, <sup>1</sup>S. Hammad**

## ABSTRACT

**BACKGROUND:** Knowledge and compliance with malaria treatment guidelines are among the major issues affecting treatment outcome for malaria in Nigeria. Primary health care (PHC) facilities are the first point of contact with the national health system for patients with malaria and other diseases.

**OBJECTIVE:** This study assessed the knowledge and compliance with malaria National Treatment Guidelines (NTG) among PHC workers in Lere local government area of Kaduna State, North western Nigeria.

**METHODS:** This was a descriptive cross-sectional study conducted among 42 community health workers. The total population of all eligible participants was used for subject selection. Data were analysed with SPSS IBM version 25.0 and STATA/SE 12. The level of statistical significance p-value was set at  $p<0.05$ .

**RESULTS:** The mean age of the respondents was  $38.02\pm9.23$  years. Majority of the respondents were males (25; 59.5%) and community health extension workers (CHEWs) (24; 57.1%). Almost one-third (28.6%) of the PHC workers had poor knowledge of the recommendations of the NTG for malaria, while 14.3% had poor compliance with the NTG. Bivariate analysis showed a significant relationship between older age and good knowledge of the NTG ( $\chi^2=0.03$ ,  $p=0.04$ ). Multivariate analysis further revealed that the odds for poor knowledge of NTG was 40% higher among CHEWs compared to other health workers (AOR=1.40, 95% CI=0.25–7.93). The odds for good knowledge was lower by 55% among those who had practiced for <10 years compared to >10 years (OR=0.45, 95% CI=0.06–3.32).

**CONCLUSION:** Poor knowledge and compliance to malaria NTG were commoner among lower cadre (CHEWs) staff with relatively fewer years in PHC practice. There is a need for training, retraining and equitable distribution of the NTG to ensure access and also improve knowledge and utilisation of the NTG for malaria by rural PHC workers. **WAJM 2023; 40(5): 469–475.**

**Keywords:** Knowledge; Compliance; PHC workers; Guideline; Malaria.

## RÉSUMÉ

**CONTEXTE:** La connaissance et le respect des directives de traitement du paludisme sont parmi les principaux problèmes qui affectent les résultats du traitement du paludisme au Nigéria. Les établissements de soins de santé primaires (SSP) sont le premier point de contact avec le système national de santé pour les patients atteints de paludisme et d'autres maladies.

**OBJECTIF DE L'ÉTUDE:** Cette étude a évalué les connaissances et le respect des directives nationales de traitement du paludisme (NTG) parmi les travailleurs des SSP dans la zone de gouvernement local de Lere de l'État de Kaduna, dans le nord-ouest du Nigeria.

**MÉTHODES:** Il s'agit d'une étude descriptive transversale menée auprès de 42 agents de santé communautaires. La population totale de tous les participants éligibles a été utilisée pour la sélection des sujets. Les données ont été analysées avec SPSS IBM version 25.0 et STATA/SE 12. Le niveau de signification statistique a été fixé à  $p<0.05$ .

**RÉSULTATS:** L'âge moyen des personnes interrogées était de  $38,02\pm9,23$  ans. La majorité des personnes interrogées étaient des hommes (25 ; 59,5%) et des agents de vulgarisation en santé communautaire (24 ; 57,1%). Près d'un tiers (28,6 %) des agents de santé publique connaissaient mal les recommandations de la NTG pour le paludisme, tandis que 14,3 % ne respectaient pas la NTG. L'analyse bivariée a montré une relation significative entre l'âge avancé et la bonne connaissance du NTG ( $\chi^2=0,03$ ,  $p=0,04$ ). L'analyse multivariée a également révélé que la probabilité d'une mauvaise connaissance de la NTG était 40% plus élevée chez les CHEW que chez les autres agents de santé (AOR=1,40, 95% CI=0,25–7,93). La probabilité d'une bonne connaissance était inférieure de 55% chez ceux qui avaient pratiqué pendant <10 ans par rapport à >10 ans (OR=0,45, 95% CI=0,06–3,32).

**CONCLUSION:** Le manque de connaissances et d'observance des NTG sur le paludisme était plus fréquent parmi le personnel des cadres inférieurs (CHEWs) ayant relativement moins d'années de pratique dans les soins de santé primaires. Il est nécessaire de former, de recycler et de distribuer équitablement les NTG pour garantir l'accès et améliorer la connaissance et l'utilisation des NTG pour le paludisme par les travailleurs des SSP en milieu rural. **WAJM 2023; 40(5): 469–475.**

**Mots clés:** Connaissance, Observance, Personnel de soins de santé primaires, Directives, Paludisme.

<sup>1</sup>Department of Community Medicine, Kaduna State University, Kaduna State, Nigeria.

<sup>2</sup>Kaduna State Ministry of Health, Kaduna State, Nigeria.

\*Correspondence: Dr. Oyefabi Adegboyega, Department of Community Medicine, Faculty of Clinical Science, College of Medicine, Kaduna State University, Nigeria. Email: adegboyega.oyefabi@kasu.edu.ng