

**ADHERENCE TO COARTEM[®] IN THE ROUTINE TREATMENT OF
UNCOMPLICATED MALARIA IN CHILDREN AGED BELOW FIVE
YEARS, IN NYANDO DISTRICT HOSPITAL, KENYA**

BY

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ABSTRACT

Introduction: Prompt and effective treatment is a central theme of a focused global effort to try and reduce the burden of malaria. Closely related to *prompt* and *effective* treatment is the issue of adherence. Studies show that one of the major barriers to the successful treatment of an episode of malaria is the non-adherence to drug regimens.

Overall Objective: The aim of this study was to investigate the adherence to Artemisinin Lumefantrine (Coartem[®]) in the routine treatment of uncomplicated malaria in children below the age of five years, in Nyando District Hospital, Kenya.

Specific Objectives: Specific objectives of the study were: - to determine the level of adherence to Coartem[®] in the routine treatment of uncomplicated malaria among children below the age of five years in Nyando District Hospital and to identify the potential risk factors associated with non-adherence to the drug.

Study Design: A cross sectional survey was conducted among 73 patients below the age of five years suffering from uncomplicated *P. falciparum* malaria reporting at the Nyando District Hospital and prescribed Coartem[®] during the normal out-patient department hours on 27th of April to 15th of May 2009.

Study Methods: A pre-tested questionnaire, pill count and blister pack recovery where possible was used to assess adherence on day 4. Patients were then classified according to these categories. Patients of the caretakers who had tablets remaining in the blister pack were definitely non-adherent. When the blister pack was either missing or empty, patients of the caretakers with information on all six doses were classified as either probably non-adherent when the caretaker of the patient did not report giving all doses at the correct time, on the correct day and in the correct amount, or as probably adherent when the caretaker reported giving all doses at the correct time, on the correct day and in the correct amount.

Analysis: Analysis was performed using SPSS students' version 11. The variables that were significantly associated with adherence in chi-square test ($p < 0.05$) were entered into multivariate logistic regression model to assess interactions between the determinants. Findings with a $p < 0.05$ were considered statistically significant.

Results: 9 (14.5%) patients were definitely non-adherent, 6 (9.7%) probably non-adherent and 47 (75.8%) probably adherent. Non-formal education ($p = 0.011$) and households with ≥ 4 persons ($p = 0.003$) were found to be predictors of non-adherence.

Conclusion: The 75.8% adherence level reported in this study was very encouraging.

Recommendation: However, since no previous studies have reported any association between non-adherence and household size, the researcher recommends that further studies be conducted to ascertain these findings. There is also a need of health education among the less educated caretakers, those from households with ≤ 4 persons and caretakers of female patients especially those who report fever 48 hours before the health facility visit to help bring their adherence to the drug in line with the other patients.