Fidelity of implementation of national guidelines on Malaria diagnosis for children under-five years in Rivers State, Nigeria

ABSTRACT

Background: Malaria is still a disease of global public health importance and children under-five years of age are the most vulnerable to the disease. Nigeria has the greatest malaria burden worldwide contributing the highest percentage of all malaria cases and deaths. The "test and treat" strategy in the national malaria guidelines is one of the ways the country aims to control malaria transmission. However, the ineffective translation of the national malaria guidelines into clinical practice is a major barrier to achieving success. The aim of this study was to assess the fidelity of implementation of the national guidelines on malaria diagnosis for children under-five years and examine its associated moderating factors in health care facilities in Rivers State, Nigeria.

Methods: This was an analytical cross-sectional study. The study population comprised public, formal private and informal private health care facilities in Port Harcourt metropolis, Rivers State. Data were collected from 147 facilities using a questionnaire developed based on Carroll's Conceptual Framework for Implementation Fidelity. Frequency, mean and median scores for implementation fidelity and its associated factors were calculated. Univariable and multivariable analyses were used to test for associations between implementation fidelity and the measured predictors.

Results: Mean (SD) implementation fidelity score was 61% (23) and median (IQR) score was 65% (43, 85). Informal private facilities (PPMVs) had the lowest fidelity scores (47%) compared to the public (79%) and formal private facilities (69%). Only 13% of sampled health care facilities had the guidelines available but they had a much higher mean fidelity score (79%) than those who did not (59%). Intervention complexity (adjusted coefficient: -1.88 (-3.42, -0.34)), participant responsiveness (adjusted coefficient: 8.57 (4.83, 12.32)), and type of malaria diagnostic test offered at the facility ($p < 0.001$) were significantly associated with implementation fidelity of health care facilities to the malaria test and treat guidelines.

Conclusion: Fidelity of implementation to the malaria "test and treat" strategy was below the national target of 100% among sampled health care facilities in Rivers State, Nigeria. This shows that there are core elements of the guidelines that are still not fully implemented by health care facilities. There is a need for strategies to increase fidelity, especially in the informal private sector, for malaria control programme outcomes to be achieved.