Reviewer’s report

Title: Predictors of antibiotics co-prescription with antimalarial for patients presenting with fever in rural Tanzania

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Reviewer: William Brieger

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One thing that struck me immediately was lack of direct reference to the current national policy, guidelines for malaria case management wherein issues like prescribing with or without parasitological testing are handled. The Ministry of Health Website is deficient in access to such documents, but one assumes the authors can find and quote from the latest versions. Below are what could be extracted from two recent articles:

Accuracy of malaria rapid diagnostic tests in community studies and their impact on treatment of malaria in an area with declining malaria burden in north-eastern Tanzania

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Malaria Journal 2011, 10:176 http://www.malariajournal.com/content/10/1/176

Tanzania changed and implemented its malaria treatment guidelines to replace sulphadoxine/pyrimethamine (SP) with artemether/lumefantrine (ALu) as first-line drug for treatment of uncomplicated malaria in January 2007 [14]. The new guidelines recommend that ALu should be prescribed to all febrile children under five years of age suspected of malaria (irrespective of laboratory results) while treatment of individual aged #5 years of age has to be based on laboratory confirmation of malaria parasites (by microscopy or RDTs) except in health facilities without diagnostic facilities. This strategy was considered to be cost-effective when using ALu and in areas with moderate malaria transmission as shown by studies conducted in other malaria endemic areas [15,16]. Based on the current WHO recommendation of treating all patients after parasitological confirmation and lack of laboratory capacity to carry out malaria diagnosis in most of the health facilities in Tanzania, the Ministry of Health and Social Welfare through the National Malaria Control Programme (NMCP) plans to introduce a new malaria diagnostic policy in the country aiming at using RDTs in places without facilities for microscopy.

Quality Assurance of Rapid Diagnostic Tests for Malaria in Routine Patient Care in Rural Tanzania

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Am J Trop Med Hyg January 2010 vol. 82 no. 1 151-155

The Tanzanian National Malaria Control Program (NMCP) wants to expand malaria diagnostic capacity to reduce inappropriate use of the first-line antimalarial, artemether-lumefantrine. Microscopy is available at hospitals and most health centers in Tanzania, but not at the most peripheral health facilities (dispensaries). The NMCP plans to distribute RDTs to dispensaries for routine malaria diagnosis. ParaHIT-f (Span Diagnostics, Surat, India), ICT Malaria Pf (ICT Diagnostics, Cape Town, South Africa), and Paracheck Pf are registered for routine use in Tanzania. The RDTs have been introduced in operational research studies on the mainland and on the islands of Zanzibar. National Integrated Management of Childhood Illness (IMCI) guidelines state that all febrile children less than 5 years of age should be treated for malaria. National guidelines for malaria treatment and diagnosis have recently been revised to advise that patients testing negative by RDT should not receive antimalarial treatment, regardless of age. Because of the lack of local experience in using RDTs and the need to ensure adherence to current malaria treatment and IMCI guidelines, we provided training in RDT use and introduced them in 12 dispensaries in a rural district in Tanzania to gain experience that would help inform national policy regarding the routine use of RDTs in peripheral health facilities.

The foregoing help us understand why children below five years of age may be given presumptive treatment for both diseases, why more peripheral facilities may do likewise - two of the main outcomes observed.

While the authors do mentioned presumptive treatment in their results, they do need to provide the policy reasons of why this may be so.

The issue of treating people for malaria even if their results were negative is a common problem, and there are published reports on reasons. commonly even when trained, health workers often do not trust the tests, but prefer their clinical judgement as a guide.

A key conclusion or discussion point should be the review of national case management guidelines.
Otherwise the manuscript is well written and easy to read and a valuable contribution to knowledge.

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that I have no competing interests