Reviewer’s report

Title: State of inequality in malaria intervention coverage in Sub-Saharan African countries

Version: 0 Date: 18 Jul 2017

Reviewer: Shunmay Yeung

Reviewer’s report:

This study uses recent data from DHS/MIS and the Malaria Atlas Project from 30 countries in Sub-Saharan Africa, to examine how equitably malaria interventions are distributed within and across countries, and compares this with malaria burden. This is a very clearly written and well conducted study of a topic of significant policy relevance.

I only have a few comments mostly to the Background section which I think could be improved with a few edits, clarification and checks for accuracy, especially given the non-specialist readership.

Background

Line 66 - 70 - "Prior to 2008….Programs prioritised distribution channels……and social marketing where services were subsidised or rendered for free". Can the authors provide some evidence for this last this? I was under the impression that social marketing efforts in malaria have been fairly limited prior to 2008.

Line 70-74 - It would be helpful to be a bit more specific about what "services" when first mentioned in in the manuscript (currently the first description comes much later on). Are the authors referring to case management, distribution of ITNs, IRS, IPTp etc. Are the changes pre and post 2008, relevant to all "services"?

Line 72 - What is "the universal coverage campaign"? Who launched it? Please provide a reference.


Line 75-77 - For clarity, specify what type of monotherapy ("non artemisinin"). Emerging resistance to what?

Line 78-79 - The Global Fund financing of ACTs pre-dated the AMFM pilot by over (circa 2004 versus 2012). Suggest making this clearer
Line 79-80 - I think this gives the impression that the use of SMS technology for monitoring malaria supply chain and quality improvement is widespread whereas, is it not still fairly limited? If so, please clarify.

Line 88-91 - A more explicit reference should be made to the timing and the nature of the previous report (ref 10) so that it is much clearer what is new in this study.

Methods

Line 103 : The criteris for selection of the 30 countries should be described.

Discussion

Line 240: Should this read "These include most AMFm countries EXCEPT in Niger and Nigeria WHERE access to antimalarial medication remains substantially inequitable"?

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Unable to assess

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I recommend additional statistical review

Quality of written English
Please indicate the quality of language in the manuscript:

Acceptable

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