



SDI Review Form 1.6

Journal Name:	International Journal of TROPICAL DISEASE & Health
Manuscript Number:	2014_IJTDH_13191
Title of the Manuscript:	Spatial Modelling of Fever Prevalence and Suspected Malaria Cases among Children in Ethiopia
Type of the Article	Original Research Article

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound.

To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)



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PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Compulsory REVISION comments	• The EDHS survey is only representative at regional level. This is because the sample size is very small to give estimates below the regional level. How can you aggregate the datafile at wereda level? The wereda information is not included in the datafile. This information is only available in the raw data. But, the raw data is not available for the public. Because of this, explanations has to be included in the third paragraph of the introduction section, how the wereda information is included in the datafile. • Number of cluster: is it 624 or 647? Please check. Because in the 2011 EDHS report, the total cluster is reported as 624. • <u>Under variables considered in the survey:</u> could you please explain how the rates calculated? Because the value in the dataset is not given in rates. In the second paragraph, you mentioned: "all rates and percentages were calculated at district level" please explain how these values calculated at district/wereda level. • To perform the spatial analysis, the spatial correlation structure is important. Could you please explain about the type of covariance structure used in the analysis? What is the random effect used in the analysis? Please explain clearly about the model used. • For this kind of survey, there might be confounding effects. Could you please explain how the confounding effects have been handled in the analysis? • Have you thought of including interaction effects? Could you please included interaction effects for the	Woreda is to mean "District" where children reside. Since DHS data is available at Woreda level, the aggregate is made by calculating rates and percentages. [for example, percentage of households having access to piped water in a given Woreda (district) can be calculated by taking the ration of total number of households included in the survey to those responding "Yes" for piped water in that specific Woreda] Here we considered bi-variate spatial correlation which may exist between the two childhood morbidities and the results revealed a significant bi-variate correlation between childhood fever and suspected malaria among children



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	three models and see the result • Under discussion section: paragraph three, what does W_FEVER and W_MALARIS_S mean? Please write in full name • The discussion and conclusion part has to be rewritten again. Please explain your result in relation to the previous studies in the area. • Please explain what gaps of the literature this study is covering • What are the limitations of this study?	W_FEVER and W_MALARIS stands for weighted fever and suspected malaria prevalence, that is, the effect of neighbourhood Woreda's on the on prevalence of specific Woreda (Spatial effect). Limitation: Our analysis for suspected malaria prevalence is based on the reported malaria drug intake rate which may induce more false positive results, as compared to medical data.
Minor REVISION comments		
Optional/General comments	• Please edit the language	